

# NEUE ENTOMOLOGISCHE NACHRICHTEN

aus dem Entomologischen Museum  
Dr. Ulf Eitschberger

Beiträge zur Ökologie, Faunistik  
und Systematik von Lepidopteren

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STOYAN VL. BESHKOV

An Annotated Systematic and Synonymic Checklist  
of the Noctuidae of Bulgaria  
(Insecta, Lepidoptera, Noctuidae)

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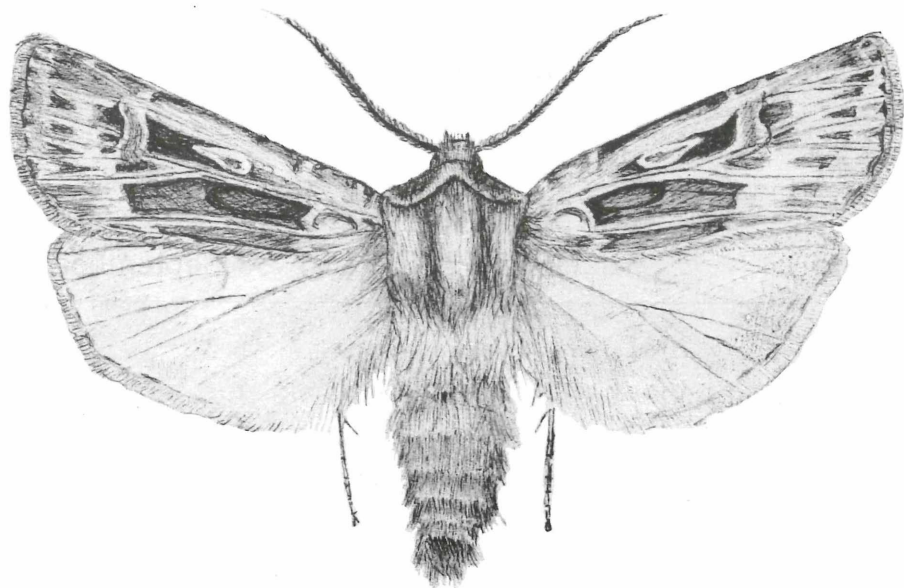
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*Agrotis fatidica fatidica* (HÜBNER, [1824]), ♂.

Bulgaria, Rila Mts, Mussala chalet, 2400 m, 28.VIII.1987, leg. et coll. S. BESHKOV (D. VASSILEV del.).

# An Annotated Systematic and Synonymic Checklist of the Noctuidae of Bulgaria

(Insecta: Lepidoptera: Noctuidae)

by

STOYAN VL. BESHKOV

**Abstract:** In this list are included all the names of the Noctuids moths reported in the literature for Bulgaria which have been used in articles published abroad and in Bulgaria since 1835 by both Bulgarian and foreign authors. Also included are the other groups, previously known as subfamilies of the Noctuidae which, according to KARSHOLT & RAZOWSKI (1996), are now recognized as distinct families, as well as one new recognized (YELA, 1997) subfamily of the Noctuidae. For each of the species are given all the synonyms and incorrect subsequent spellings used in the literature for Bulgaria and adjacent territories, or presented as valid names in the most frequently used reference books. All wrongly reported taxa for Bulgaria are also included, with critical comments. For the most interesting and rare species, the source of the first record for Bulgaria is given, as well as some more detailed information about their distribution, phenology, historical view on their finding in Bulgaria, and current taxonomic status. Many critical notes are given for hitherto wrongly understood reports, or misunderstandings concerning the taxa, as well as the toponyms. The author has made an attempt to correct the data existing in the old as well as in the recent literature for Bulgaria, and to update the faunistic records in accordance with the recent achievements of taxonomy. For this reason, almost all available collections in Bulgaria have been checked and many taxa are critically examined in order to establish with certainty which are indeed present in Bulgaria. In the list are included also some expected but hitherto still unrecorded species for Bulgaria with their synonyms, using the recent literature for the neighbouring countries. Some of the species wrongly reported from the neighbouring territories are also included, with critical comments.

## Introduction

The first scientific data on the Lepidoptera species for Bulgaria can be found in the articles of FRIVALDSZKY (1835, 1837). Some Noctuidae species are described therein, but these articles give very little information on the fauna of Bulgaria, which has long been "terra incognita" to the lepidopterist. At the time of FRIVALDSZKY, Bulgaria was under Turkish rule, and most of the localities are given as "Balkany". The first article published by a Bulgarian, and in a Bulgarian journal, is that of KOWATSCHEW (1894), in which only one species of Noctuidae (*Plusia chrysis* L.) is reported. The first lists of Bulgarian Lepidoptera were by BACHMETJEV (1902) and REBEL (1903). These articles are not just lists, they are both full catalogues giving all localities known at that time. The source of much of their data is the unpublished manuscript of HRISTO PIGULEV. Unfortunately, neither BACHMETJEV nor REBEL were able to examine the collection of PIGULEV, but the material collected by HABERHAUER who, like PIGULEV, lived in the town of Sliven, was critically examined by REBEL and all data are included in his "Studien" (REBEL, 1903). Also, part of the material collected by JOHANN and LUDMILLA HABERHAUER was published by J. LEDERER (1863). BACHMETJEV (1902) had not seen the material of HABERHAUER, and for his article he quoted all data from the unpublished manuscript of PIGULEV. However, in the "Addenda" BACHMETJEV (1902) also quoted the data included in the article of LEDERER (1863). After the death of PIGULEV in 1904, his collection turned out to be very poor. According to BACHMETJEV (see also in BURESCH, 1912: 22) many species were recorded by PIGULEV "on suggestion" and he was unable to send for examination some species he had been asked for by both BACHMETJEV and REBEL. In 1906, BURESCH visited

Sliven town but was unable to find the collection of PIGULEV. Part of the HABERHAUER collection, however, is now in the National Museum of Natural History in Sofia (BURESCH, 1912: 22). According to BURESCH (1912: 22, 1914b: 117) and to BURESCH & TULESCHKOW (1932: 70), most of the data of PIGULEV are doubtful and valueless, in need of confirmation, mostly because " of the absence of voucher specimens in the Royal Entomological Station " in Sofia. The present author believes that most data of PIGULEV are acceptable, because subsequently almost all his records have been confirmed. There are very few mistakes, and these are simply due to the fact that the only reference book available to him for determination was HOFMANN's Atlas. The history of entomological research in Bulgaria up to the early 1920's is described in detail by BURESCH (1924a) and a short history of the first steps can be found also in BACHMETJEV (1902), BURESCH (1912) and BURESCH (1924c). BURESCH (1924a) sees the periods of entomological research in Bulgaria as follows: 1. Research up to the emancipation from the Turkish yoke; 2. Research following emancipation from the Turkish rule, which he divided into the following periods: 1. A transitional period with two subperiods: research by foreign scientists and research by the Bulgarian entomologists, and 2. The New Era of entomological research in Bulgaria. This last period is a consequence of the intensive support given by the Bulgarian kings, H. M. FERDINAND I., and his son, H. M. BORIS III. In this period were founded the Royal Entomological Institutions: in 1889, the Royal Museum of Natural History (now the National Museum of Natural History), the State Experimental Agricultural Stations (the first one in 1891), and the Bulgarian Entomological Society "Svetulka" in 1898 in Sliven town.

If we have to divide the research on the Bulgarian Noctuidae into periods, they will be as follows: research before REBEL; research at the time of REBEL; research between REBEL's period and that of GANEV and the Hungarian scientists RONKAY, VARGA, MÉSZÁROS, HERCZIG, SZEŐKE and SZABÓKY in the 1980's, and research since then up to the present time. During the last period the "Bulgarian Lepidopterological Society" was founded, the first and only Bulgarian society dedicated entirely to research on and protection of Lepidoptera. However, the last period has become again a period of stagnation. At present in Bulgaria there is only one light trap, one generator and only one entomologist is still active in collecting and studying Noctuidae.

Going through the history of research of the Bulgarian Lepidoptera by Bulgarian specialists, it is just impossible not to overlook the long period of time between 1934–1943 when only a few articles concerning Bulgarian Noctuidae were published. The period up to 1933 is notable for its very intensive research and at that time a lot of articles were published by our lepidopterologists, both in Bulgarian journals and abroad. The subsequent stagnation can be explained by the death of Prof. HANS REBEL (1861–1940), who had visited Bulgaria several times and always kindly consulted our specialists and determined material from Bulgaria. Another, longer period of stagnation was between 1944 and 1963, during the first decades of Communist dictatorship. No more than five articles were published in this period, all of them in Bulgaria. At that time DRENOWSKI, BURESCH and TULESCHKOW, although still alive and in good health, only published a few articles. The situation between 1964 and 1980 was much better and many papers by our specialists were written, but like the others published after 1944, all of them appeared in Bulgaria and in Bulgarian language, with the exception of CAPUSE & DOGOF [sic!] (1969). During the time between 1954–1980, very many species have been found new for Bulgaria, due to the fact, that the collectors in this period used intensively electricity for collecting with light. Moreover, in that time and ahead, there were better traveling facilities for the collectors; In the time before, with small exceptions, most of the moths material originated from the Kings residences and near surroundings. Another peak of the increase of new species of Bulgarian Noctuidae is after 1967. This peak is a result of full-year collecting, including the cold period—late autumn, winter and early spring. This time ALEXANDER SLIVOV (born 1936) was very active and published many articles and many taxa new for Bulgaria in the period 1967–1984. After 1984 he was not so active and he published no further taxa new for Bulgaria in the very few articles he later edited. His collection is a very important one, with material originating mostly from Iskarski Prolom Gorge, Kresna Gorge, Belassitza, Pirin, Rila, Rhodopi, Strandzha and Vitosha Mts, Black Sea Coast, as well as from Northern Bulgaria (e.g. Loudogorie), where we have a lack of data. At present, his collection is in the Institute of Zoology,



Bulgarian Academy of Sciences (Sofia). However, some of the material in his collection seems to be given wrong collecting data, sometimes they sound not absolutely believable and sometime there are discrepancies between the text published in his articles and the labelled specimens. The present author thinks, this data are not a result of unconsciousness; if there are really some small mistakes, they probably seem to be the results of a little bit careless mislabeling, due to the fact, that his material was labeled [and probably spread] by the technical staff of the Institute. This is necessary to have in mind, when using the material from his collection, or the data from his articles. However, some of the data which seemed unbelievable before, now are confirmed by the present author. And let not forget, that Bulgaria has always been a country of the unexpected surprises, which is proven by the last findings, mentioned down here in the text. Below, all possible mistakes are pointed and commented under each taxon for the reason, that these errors will not to be repeated and multiplied in future anymore.

The period after 1980 up to the present time is characterized by very intensive research, and hundreds of new species for Bulgaria were reported in more than 50 articles dealing with the Noctuidae, written by our specialists. Here one cannot refrain from mentioning the name of JULIUS GANEV (born 1947) who was extremely active during the late 1970's and the 1980's and published many articles concerning Bulgarian Noctuidae in the period during 1980–1987. During that time he collected very energetically, mostly in SW Bulgaria and in the Central Rhodopi Mountains, and discovered and published dozens of new species for Bulgaria. He was the first one to go collecting actively with light during all seasons throughout the year. His collection is, and for a long time will be, one of the largest and most important ones in the country. In the time of Communist dictatorship he was the first one to re-establish connections with foreign scientists, and found a way to obtain for himself recent contemporary literature, without having to rely on the governmental institutions. He also showed that it was possible to work without money and without pay, and that the absence of good working conditions was just an excuse for the people not wanting to work!

The period when foreign lepidopterologists most intensively visited the country and studied the Bulgarian fauna before the time of the Communism was from 1929 to 1937, when many articles were published. Very few articles dealing with Bulgarian Noctuidae appeared before then, all of them between 1835 and 1916. From 1937 until 1944, the beginning of Communist dictatorship, not a single article on Bulgarian Noctuidae was published, neither was anything published during that regime up to 1960! There is only a single article (PINKER, 1945) in which only one Noctuidae species from Bulgaria is mentioned. Between 1960 and 1972 very few articles were written by foreign lepidopterologists, but between 1982 and 1991 much was written on Bulgarian Noctuidae, almost all by specialists from other communist countries. At that time it was difficult for such people to travel outside the Iron Curtain, and Bulgaria was the most "exotic" country they could visit. With the return of democracy, the interest in Bulgaria vanished, because foreign specialists were then able to collect in even more "exotic" countries. Presently most of those lepidopterists who used to work in Bulgaria collect mainly in the Near East.

In the above-mentioned monograph of BACHMETJEV (1902), which is the first general work for Bulgaria, 306 Noctuidae species are recorded, only one of which (*Colocasias coryli*) is now placed in another family. Only seven species from the family Nolidae (three from the subfamily Chloephorinae and its tribus Sarrothripini and Benini, and four from the subfamily Nolinae) are reported. In that catalogue for each reported species are given all known localities within the former boundaries of the country, with the source of the data, both published and unpublished, as well as information on the flight period, abundance, etc. As it was mentioned above, the source of many of those data is the unpublished manuscript of HRISTO PIGULEV and thus several mistakes were repeated. These are due not only to personal errors made by these two pioneers of Bulgarian entomology but mostly because of lack of any previous knowledge of the fauna of the Balkans and especially of Bulgaria, which up to that time was almost completely unknown. And let us not forget either that at that time knowledge of taxonomy and faunistics were also much less advanced, even in European countries which had never been under Turkish rule.

REBEL examined all available material of Bulgarian Lepidoptera and critically omitted records in the literature for species which he considered doubtful and specimens which he had not been possible to see and verify. As a result of his criticism, the number of acceptable records of Bulgarian Noctuidae was reduced to 247 in his "Studien" (REBEL, 1903). One of these species, *C. coryli*, is no longer placed in the family Noctuidae. From the subfamily Chloephorinae of the family Nolidae and its tribus Sarrothripini and Benini he included 4 species, the same as for the subfamily Nolinae. The structure of his work is very similar to that of BACHMETJEV, but the critical comments and the biological data are more detailed.

In their monograph "Die horizontale Verbreitung der Schmetterlinge (Lepidoptera) in Bulgarien" BURESCH & TULESCHKOW (1932, 1935, 1943) accepted 412 Noctuidae species as proven to occur in Bulgaria. This number included the taxa Pantheidae and Dilobinae but excluded the subfamilies Chloephorinae (with its tribus Sarrothripini and Benini, numbering a total of five species) and Nolinae (numbering nine species) of the family Nolidae. The latter are treated as belonging to distinct families in that monograph (BURESCH & TULESCHKOW, 1943). Therefore in the above-mentioned monograph, the total number of Noctuidae species according to the present arrangement of the family, is 411. In this work, as in the previously quoted monographs, for each reported species are given all known localities in the country with the source of the data, both published and unpublished, as well as some additional information. Although this work is already rather old, it is still one of the most important works dealing with the Bulgarian Noctuidae.

TURNER (1964) gives 468 Noctuidae species as known for "Jugoslavisch Mazedonien". This includes also all the species of Pantheidae, Dilobinae and subfamily Chloephorinae of the family Nolidae known for the country. For all those species the known localities in the Republic of Macedonia are given, as well as the known localities from the other parts (Greek and Bulgarian) of the large geographical region of Macedonia. For the Bulgarian part, many records can be found from Mt. Alibotush [Slavyanka], Kresna Gorge, Mt. Pirin, etc.

In his list of Albanian Noctuidae HEINICKE (1965), using the same systematics as TURNER (1964), indicates also the occurrence of the Albanian species in the other Balkan countries, including Bulgaria. In that article 216 species are listed for Bulgaria which also occur in Albania, and the total number of the Bulgarian Noctuidae is given as 469 species. For most of the mentioned species the known localities in the country are given and the literature sources are quoted.

In the list of GANEV (1982a), 579 species of Noctuidae are listed for Bulgaria in accordance with the systematics of BOURSIN. In this list are included the family Pantheidae and the subfamily Chloephorinae of the family Nolidae, but the subfamily Dilobinae is not included. According to GANEV (1982a) the number of recorded Bulgarian Noctuidae is expected to rise to about 620 species. In this list only very few localities, synonyms and subspecific names are given, and there are no critical comments. For a long time this list was very useful, but the large amount of recent data makes it somewhat outdated.

GANEV (1984c) in his "Catalogue of the Bulgarian Bombyces and Sphinges" lists 11 species belonging to the subfamily Nolinae of the family Nolidae as occurring in Bulgaria. For all these species, all currently known localities in the country are given.

In HACKER (1989), using the updated systematics of BOURSIN, 621 Noctuidae species are reported as known for Bulgaria (see also in the Addenda there). Moreover, two new species for the Bulgarian fauna are reported there, *Hypertrocon tenuialis* and *Mesapamea didyma*. Literature sources are given for all species, comprising almost all articles dealing with Bulgarian Noctuidae, published in Bulgaria as well as abroad. Although HERMANN HACKER has never been in Bulgaria and has not had the opportunity to critically examine all doubtful reports for Bulgaria, very few mistakes and omissions can be found in his book. For ten years this was the publication with the most complete information dealing with Bulgarian Noctuidae. It also contains a complete list of all Balkan Noctuidae, giving infor-

mation on the Noctuid fauna of the different countries (at that time) in the region. However, the book is very expensive and in limited edition, which makes it inaccessible for lepidopterists from the Balkan countries.

Another list of the Noctuidae of the Balkans, also in accordance with BOURSIN, can be found in HACKER (1990). All 770 Noctuidae species known from the Balkan Peninsula at the time are listed. Although this is presently the best and most complete list for this region, it deals with the Balkan Noctuidae as a whole, and does not give information for the different countries, as does his previous book. It does not provide detailed information on the Noctuidae species inhabiting Bulgaria.

NOWACKI & FIBIGER (1996) wrongly included for Bulgaria in their list about 70 Noctuidae species which have either never been collected or reported from Bulgaria, or were reported erroneously, due to mis-identification. In the same list (NOWACKI & FIBIGER, 1996) about 40 verified Bulgarian Noctuid species are excluded from the Bulgarian fauna. Although this list is very useful for Europe as a whole, the numerous errors in the case of Bulgaria make it hardly useful for this country. It seems that the list for Bulgaria was prepared intuitively, with a limited reference and without any personal consultation with a person familiar with the Bulgarian fauna. In the following text, all those wrongly reported species are commented upon and the missing species are added. In this article FIBIGER only co-operated concerning the generic and species list and only briefly commented distributional notes to single species in the list, he takes no responsibility for the actual number of species in the different countries (FIBIGER, pers. comm. 12.VII.2000).

It is necessary to mention here, that in the literature for Noctuidae published in Bulgaria there is only a single genital illustration. In the literature, published by Bulgarians abroad, up to 1995 there is no one illustration of Noctuidae genitalia! Almost the same is the situation with illustrations of the moths. Very few illustrations, all of them monochrome, can be found in the literature published by Bulgarians in Bulgaria and abroad. In the foreign literature, dealing with Bulgarian Noctuidae, published by foreigners, there are also very few illustrations, both of genitalia and of moths. All this was a reason, why some of the data published ago, could not be accepted, or only with doubts. This makes it impossible to check the correct identity of the published material, if it is not presented in museums or available in collections with easy access.

This *Annotated Systematic and Synonymic Checklist* is a result of more than 15 years of research by the present author on Balkan Noctuidae. Each year he has collected in Bulgaria between 40–60 nights in different parts of the country. However, only since the last five years he used parallel collecting on generator, light trap and sugaring, which has never been done by Bulgarian collectors before. In the synonymic list are included only the synonyms used in the literature for Bulgaria, or given as a valid name in the most commonly used reference books. All incorrect subsequent spellings of taxa and incorrect authors' names from articles concerning Bulgarian Noctuidae are also included. Names that were found typed on labels in the collection of the National Museum of Natural History, Sofia, but which have never been published, are not included in the synonymy but are mentioned in the text. The names which are unavailable according to the "International Code of Zoological Nomenclature, 3<sup>rd</sup> ed. (1985)" are given for reference only. The purpose for including such a large list of synonyms is that every name ever published with reference to Bulgarian Noctuidae, whether correct or not, can be found in a single publication and is related to the name currently in use for the taxon in question. During the preparation of this article, the author has observed the rules of the International Code of Zoological Nomenclature (1985). For most of the "problematic" taxa their first record from the country is given, as are all their known localities. A wealth of new data are reported here for the first time, most of them from the collection of the author as well as from the other collections of the National Museum of Natural History (Sofia) and several private collections, both in the country and abroad, containing Bulgarian material. An attempt is made to correct all mistakes and doubtful records, having critically examined the material available in the National Museum of Natural History, Sofia, and some other important and large collections in Bulgaria. For this purpose thousands of genital preparations have

been made, hundreds of them with everted vesica for most of the problematic taxa, or previously doubtfully identified and published taxa. All interesting new data and results concerning problematic or rare taxa are included and commented in the list.

At present, the number of the Noctuidae species, recognized in this book to occur in Bulgaria, in accordance with the classification of NOWACKI & FIBIGER in: KARSHOLT & RAZOWSKI (1996), is 668. However, their number, together with the other families, previously known as subfamilies of Noctuidae, recently recognized as distinct families (according to KARSHOLT & RAZOWSKI, 1996) or newly recognized as subfamilies of Noctuidae, increases to 694.

Unfortunately, we miss one of the larger and most important Bulgarian collections, that of ALEXANDER K. DRENOVSKI (1879–1967). It was a private one, originating mainly from the high mountains of Bulgaria, including SW Macedonia. His collection was build up during decades of years and most of the material was published in Bulgaria and abroad. DRENOVSKI was in close connection with H. REBEL and the problematic material was critically examined by him. Moreover, DRENOVSKI was one of the best and the most active Bulgarian lepidopterologists in the first four decades of the century. He was not from the people closely connected to the Royal Household, relied only on himself and always worked alone, for a small charge from the Ministry of Education. His excellent knowledge on the Bulgarian fauna was the reason for BURESCH & TULESCHKOW (1932, 1935, 1943), who also have not seen his collection, to accept all data published by him as correct. The not so good relationship between DRENOVSKI and Dr. Iw. BURESCH was the reason for him to move (present or sold?) his collection to the Natural History Museum in Skopje (Prof. Dr. Iw. BONDEV, after Prof. B. KITANOV, pers. comm.). The exact time of the movement is not clear, but it should be in the period during 1941–1945, when Dr. Kr. TULESCHKOW was director of that museum. At present, no one, neither in Sofia, nor in Skopje, can give any information about the DRENOVSKI collection. The present author tried to find his collection in the Skopje Museum, and he was answered, that it was completely destroyed (unconfirmed information) by the Skopje earthquake in 1963 (and probably also the flooding in 1962 there).

The original intention was to make this list a very short one, containing only species whose presence in Bulgaria is proven, and giving only the currently used names of the taxa. However, the accumulation of numerous mistakes and omissions in the literature during the years, and their repetition in more recent articles made this impossible. The idea of making this an illustrated list of all our Noctuids was also considered, with colour illustrations of all the adults and illustrations of genitalia, including everted vesicae of males for all taxa mentioned in the list. This would have made the list larger and more expensive, but also much more informative; it is hoped that sometime in the future it will be possible to produce such a reference. However, it was necessary here to illustrate most of the problems discussed in the text and some specimens from some private collections with their genitals to submit in evidence. Another reason for deferring such a definitive publication was that it would take time to prepare, and meanwhile there was an urgent need to correct the old mistakes and omissions concerning Bulgarian Noctuidae before they are quoted again and again. It is hoped that the present publication will prove valuable for students of Bulgarian and Balkanian Noctuidae and give a new overview of this subject. Moreover, most interesting data for Bulgarian Noctuidae can be find here within a single publication, revised and corrected, together with many new ones. The author believes that the readers will find this very useful, because of the difficult access to foreign literature for Bulgarians, and to Bulgarian literature for foreigners.

Of course, many taxonomic, faunistic and other problems concerning Bulgarian Noctuidae still remain unsolved. Many mistakes and omissions will probably be found in this list as well. It is evident that such an article cannot solve all existing problems, both faunistic and taxonomic, but an attempt has been made to draw attention to these in the hope that they may be resolved in the future. This will be the aim of future investigations on the part of the author. Therefore, all critical notes, data and advice that may advance the knowledge of Bulgarian Noctuidae will be gratefully accepted by the author.



The classification used here follows mostly that used by NOWACKI & FIBIGER (1996) in KARSHOLT & RAZOWSKI (eds.): *The Lepidoptera of Europe*. For several large genera the classification here follows the most recent taxonomic revisions available. This is why the classification here does not always agree exactly with that in KARSHOLT & RAZOWSKI. Recently an alternative classification has been proposed by Dr. HERBERT BECK (BECK, 1996) which deals only with European taxa, a circumstance rendering it perhaps somewhat artificial. It appears that using the fauna of a region as small and unclearly definable as "Europe" for building up a general classification while omitting the interconnected faunas of neighbouring regions can lead to certain omissions and mistakes. The relationships between different taxa cannot always be understood very correctly because the region lacks some of the components found in other parts of the world. In such classifications it is sometimes difficult to find the correct place for non-European taxa. Maybe this is the reason why BOURSIN included in his work the fauna of Asia Minor and other neighbouring regions outside Europe. Probably the absence of such links in the classification proposed by BECK is the reason so many subgeneric taxa are described there. Although BECK's system is still not widely accepted, many progressive ideas can be found there. His classification is based mainly on larval characters, which makes it easier to recognize the origin and relationship between the different taxa. However, the phenomena of convergence and divergence often obscure the true relationships in both larval and imaginal systematics. Only by combining the recent advances in the understanding of both larval and imaginal features of Noctuidae worldwide, a reliable and stable system can be achieved. Moreover, contemporary taxonomy, which recently developed very rapidly but only on the basis of the imaginal structure, is almost settled and in the future should rely more and more on the study of immature stages for solving the key problems. BECK (1999) published the first two volumes of his book "Die Larven der Europäischen Noctuidae. Revision der Systematik der Noctuidae". The next two volumes of this book will follow very soon<sup>1</sup>. Although the present author has never seen any volume of this book, he thinks, this book may relate to changes in the contemporary systematic and can induce further research to take attention to all stages of Noctuids all over the world. Because of the lack of fossiles, the studies of the larvae can help for understanding the evolution and the phylogeny, which is the way for building up a scientifically well supported system. The classification of NOWACKI & FIBIGER (1996) however is based on worldwide taxa of Noctuoidea by KITCHING & RAWLINS in: KRISTENSEN, N. P. (ed.), *Handbook of Zoology*, Berlin, 1998 (FIBIGER, pers. comm. 12.VII.2000). This is the reason why this most advanced classification is used here.

In the references are included only publications quoted in the text. They present new faunistic and taxonomic data for Bulgaria and the adjacent territories, new synonyms, and wrong or updated information for the country. Several taxonomic revisions are also included, together with classifications and reference books which do not contain data referring particularly to Bulgaria, but which have been used to help solving some of the problems discussed here. In any case the references section is not a full bibliography for Bulgarian Noctuidae; such a bibliography would be much more extensive. The authors' names and the titles of the articles written in Cyrillic (in Bulgarian or other Slav languages) are quoted as they appear in the original Latin summaries they contain. This is the reason, why one and the same personal name is spelled there in different ways.

1 Vols. III (colour pictured atlas) and IV (short descriptions) are now available (since May 2000) from the author Dr. HERBERT BECK, Max-Planck-Str. 17, D-55124 Mainz, Germany [editor's note].

## List of the taxa

Family Noctuidae LATREILLE, 1809

Subfamily Acronictinae HEINEMANN, 1859

Genus *Oxicesta* HÜBNER, [1819]

= *Oxicestra* (incorrect subsequent spelling)

= *Clidia* BOISDUVAL, 1837

= *Oxycesta* AGASSIZ, [1847]

### 1. *Oxicesta geographica geographica* (FABRICIUS, 1787)\*

= *geografica* (incorrect subsequent spelling)

\* *Oxicesta geographica* is known in Bulgaria only from the eastern part of the country: N Black Sea Coast: East of Shablensko Ezero Lake, Roussalka Resort, Albena Resort, Balchik and Varna town and its surroundings, from the district of Svishtov town (KARNOSCHITZKY, 1954: 172), and from E Stara Planina Mts: Sliven town and with doubts from Kotel town. Sometimes abundant in the districts around Balchik town. Caterpillars are reported on *Euphorbia* on the sandy soils east of Shablensko Ezero Lake (KARNOSCHITZKY, 1954: 172). The species is reported in two broods—April to May and June to July (KARNOSCHITZKY, 1954: 172).

Genus *Eogena* GUENÉE, 1852

*Eogena contaminei contaminei* (EVERSMANN, 1847)\*

\* *Eogena contaminei* is a species which may be expected in Bulgaria. Known from the Romanian part of the Dobrogea (HACKER, 1989: 215).

Genus *Moma* HÜBNER, [1820]

= *Diphthera* STEPHENS, 1850\*

\* *Diphthera* STEPHENS, 1850 is an unjustified emendation of *Diphthera* HÜBNER, [1809] auct. (see POOLE, 1989: 321).

### 2. *Moma alpium alpium* (OSBECK, 1778)\*

= *orion* (ESPER, [1787])

\* The first report of *Moma alpium* from Bulgaria was by BACHMETJEV (1902: 429) for Sliven town, following the unpublished manuscript of H. FIGULEV. According to REBEL (1903: 208) this report is doubtful. The next report is that of larvae, collected on *Castanea vesca* near Berkovitza town, NW Bulgaria, imagines emerged in Sofia (BURESCH & TULESCHKOW, 1932: 71). Later, reported from Krasimir village near Dalgopol, Provadia district, ZLATARSKI leg. (BURESCH, 1940: 247). Also known from the N Black Sea Coast, Varna, 30.IV.1933, N. KARNOSCHITZKY leg., in collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia; Strandzha Mts (SLIVOV, 1978a: 43); Zemen Gorge, Skakavitza Railway Station and Rhodopi Mts, Devin town (GANEV, 1982b: 165); Stara Planina Mts, Haydushka Pessen Chalet (GANEV, 1984a: 41); Kokalyane near Sofia and Lozenska Planina Mts, above German village, 1000 m (BESHKOV & GASHTAROV, in press); SW Bulgaria: Belassitza Mts, Belassitza Chalet (GANEV, 1985b: 89); S Black Sea Coast, Arkoutino near Primorsko (BESHKOV, NOWACKI & PALK, 1999: 176); Strandzha Mts: "Katchul" near Gramatikovo village, 03.–07.VI.1998, 1 ♂ (N. KODZHABASHEV leg., in coll. BESHKOV); Rila

Mts, Kostenetz, 02.VII.1955, and Sredna Gora Mts, Banya Resort near Panagurishte, 03.VI.1973, S. BOCHAROV leg., in coll. of the National Museum of Natural History, Sofia; SW Bulgaria, Kresna Gorge, 28.V.1980, 1 ♂, LOUKOV leg., in coll. H. LOUKOV in the National Museum of Natural History, Sofia.

Genus ***Acronicta*** OCHSENHEIMER, 1816

- = *Acronista* (incorrect subsequent spelling)
- = *Acronycta* (incorrect subsequent spelling)
- = *Triaena* HÜBNER, 1818
- = *Jocheaera* HÜBNER, [1820]
- = *Pharetra* HÜBNER, [1820] nec BOLTEN, 1798
- = *Arctomyscis* HÜBNER, [1820]
- = *Apatele* HÜBNER, [1822]
- = *Chamaepora* WARREN, 1909

Subgenus ***Acronicta*** OCHSENHEIMER, 1816

**3. *Acronicta alni alni* (LINNAEUS, 1767)\***

\* *Acronicta alni* was reported for the first time in Bulgaria from Sliven town, "Tcherkovnata Kouria", (as *Agelastica alni*), February (!), 03.1898 by H. PIGULEV (1899: 14). BACHMETJEV (1902: 429), following another, but unpublished work (manuscript) of H. PIGULEV, also reported it from Sliven. Subsequently REBEL (1903: 209) and BURESCH & TULESCHKOW (1932: 70, 73) considered the reports of both PIGULEV and BACHMETJEV to require confirmation. In the collection of the National Museum of Natural History, Sofia, there is a single specimen of *Acronicta alni* with a printed label [labelled subsequently by BURESCH] "Sliven, HABERHAUER" Next, and considered to be the first true report for Bulgaria was VIHOĐCEVSKY (1958: 358–359), who reported and illustrated one larva from "Katchul" near Gramatikovo village in Strandzha Mts, collected on *Acer campestre*. This record was confirmed recently when a single female specimen was found in the same locality, 03.–07.VI.1998, collected at a lamp (N. KODZHABASHEV leg., in coll. BESHKOV). Recently also found several times in Troyanska Stara Planina Mts, Dermenkaya Chalet, 1530 m, VI.–VII. (BESHKOV, 1995a: 207) and Strandzha Mts, "Trakiyski Lager", 27.IV.1990, B. PETROV leg., in coll. BESHKOV (BESHKOV, 1995a: 207).

**4. *Acronicta cuspis cuspis* (HÜBNER, [1813])\***

\* *Acronicta cuspis* is known in Bulgaria from two localities only: SW Bulgaria, "Rupite" near the Volcanic Hill of Kozhouh, Petrich district as a new species for Bulgaria (GANEV, 1983c: 116; GANEV, 1984b: 134) and Strandzha Mts, "Trakiyski Lager", 27.IV.1990, B. PETROV leg., in coll. BESHKOV (BESHKOV, 1995a: 207).

**5. *Acronicta tridens tridens* ([DENIS & SCHIFFERMÜLLER], 1775)**

**6. *Acronicta psi psi* (LINNAEUS, 1758)**

- = var. *suffusa* TUTT, 1891

**7. *Acronicta aceris aceris* (LINNAEUS, 1758)**

- = *candelisequa* sensu ESPER, 1798, nec ([DENIS & SCHIFFERMÜLLER], 1775)

**8. *Acronicta leporina leporina* (LINNAEUS, 1758)**

- = *bradyporina* (HÜBNER, [1813])
- = var. *leporella* STAUDINGER, 1888

Subgenus *Subacronicta* KOZHANTSHIKOV, 1950

**9. *Acronicta megacephala megacephala* ([DENIS & SCHIFFERMÜLLER], 1775)**

Subgenus *Hyboma* HÜBNER, [1820]

**10. *Acronicta strigosa strigosa* ([DENIS & SCHIFFERMÜLLER], 1775)\***

= var. *bryophiloides* HORMUZAKI, 1891

\* BACHMETJEV (1902: 429), following the unpublished manuscript of H. PIGULEV, reported *Acronicta strigosa* from Sliven town. REBEL (1903: 209) recorded two "typical" specimens from Sliven in the National Museum of Natural History in Sofia. These, and several additional specimens from Sliven are still present there, and are correctly identified. DRENOWSKI (1930a: 13), probably following the above mentioned articles of BACHMETJEV and of REBEL, reported *Acronicta strigosa* from Stara Planina Mts, but without exact localities. At present *Acronicta strigosa* is known also from Yambol town (GANEV, 1982b: 165); from "Bakadzika" near Tarnava village, Yambol region (leg. and in coll. P. PETKOV, S. BESHKOV det.); W Rhodopi Mts, "Kastrakly" near Borino village (SLIVOV, 1984: 61); Sofia, Pavlovo suburb (GOGOV & LOUKOV, 1964: 152, wrongly placed in the family Lasiocampidae); Strandzha Mts, Gramatikovo village (SLIVOV, 1978a: 43). Several specimens taken recently close to Valevtzi village near Sevlievo town, D. VASSILEV leg., in coll. S. BESHKOV (BESHKOV & GASHTAROV, in press). In NOWACKI & FIBIGER (1996: 251) *Acronicta strigosa* is wrongly omitted from the Bulgarian fauna.

Subgenus *Viminia* CHAPMAN, 1890

= *Euviminia* BECK, 1996

= *Aneuviminia* BECK, 1996

= *Paraviminia* BECK, 1996

**11. *Acronicta auricoma auricoma* ([DENIS & SCHIFFERMÜLLER], 1775)**

**12. *Acronicta euphorbiae euphorbiae* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *euphorbia* (incorrect subsequent spelling)

= *euphrasiae* (BRAHM, 1791)

*Acronicta cinerea cinerea* (HUFNAGEL, 1766)\*

\* *Acronicta cinerea* (HUFNAGEL, 1766) has never been reported from Bulgaria, and is incorrectly included by NOWACKI & FIBIGER (1996: 251), probably "on suggestion". It is also included by ZECEVIC (1996: 78) in the list of Serbian Lepidoptera. The status of *A. cinerea* as a distinct species is questionable.

**13. *Acronicta orientalis orientalis* MANN, 1862**

= *orientalis galvagnii* SCHAWERDA, 1916\*

= *orientalis gilvagnii* (incorrect subsequent spelling)

\* SLIVOV (1988b: 131, 134) reported the taxon *Apatele orientalis galvagnii* (as *gilvagnii*) SCHAW. as a new taxon for Bulgaria from SW Bulgaria, Belassitza Mts, low forest zone. In fact, the taxon *Acronicta orientalis galvagnii* SCHAWERDA, 1916 (type locality: Herzegovina, Mostar) was reported from Bulgaria long before by THURNER (1938: 142) and is also included in GANEV (1984b: 134) and in the list of GANEV (1982a: 152), as well in SLIVOV (1979: 40) as *Apatele orientalis galvagnii* SCHAW. *Acronicta orientalis*



MANN was reported as a new species for Bulgaria from Sliven town (REBEL, 1916: 38). Widely distributed in the arid zones of S Bulgaria, as well as at the N Black Sea Coast. In mountains, known up to about 1000 m altitude. Reported from W Rhodopi Mts, "Kastrakly" near Borino village as "the larvae on a different *Quercus* species" (SLIVOV & NESTOROVA, 1985: 135). However, in the collection of AL. SLIVOV, all specimens determined by him as *Acronicta orientalis*, including those from "Kastrakly", in fact belong to *Acronicta euphorbiae*. In Rhodopi Mts known also from "Mina Persenk" Mine and from Tchepelare town (GANEV, 1980: 79). Also recorded from Vitosha Mts, "Bounkera", [730 m] and Prekolnitsa village, Kyustendil Region (GANEV, 1980: 79).

**14a. *Acronicta rumicis rumicis* (LINNAEUS, 1758)\***

= *rumina* (incorrect subsequent spelling)

= *salicis* CURTIS, 1826

\* According to HACKER (1989: 222) the population of Southern Europe belongs to ssp. *pallida* ROTHSCHILD, 1920. In Hacker (1990: 190–191) both taxa—*Acronicta rumicis rumicis* LINNAEUS and *Acronicta rumicis pallida* ROTHSCHILD—are given for the Balkan Peninsula. *Acronicta rumicis pallida* ROTHSCHILD, 1920 is described from Northern Africa (Algeria) on the basis of the ground colour of the wings. It is known from the Near East as well. Careful examination of Bulgarian specimens of this variable species shows that probably both taxa also occur in Bulgaria; however, it seems likely that *pallida* ROTHSCHILD is really only a southern, or thermophilous form of *A. rumicis rumicis* LINNAEUS. This question is still open. The species reported by MARKOVITCH (1900: 43 [35]) from the districts of Razgrad town as *Agrotis rumina* should belong to *Acronicta rumicis* (LINNAEUS).

**14b. *Acronicta rumicis pallida* (ROTHSCHILD, 1920)\***

\* See under *Acronicta rumicis rumicis* (LINNAEUS, 1758).

Genus *Craniophora* SNELLEN, 1867

**15. *Craniophora ligustri ligustri* ([DENIS & SCHIFFERMÜLLER], 1775)**

**16. *Craniophora pontica pontica* (STAUDINGER, 1879)\***

\* SLIVOV (1979: 40) reported *Craniophora pontica* as a new species for Bulgaria from Kresna Gorge, Stara Kresna Railway Station. Many other localities, all of them at low altitudes up to 600 m (Sofia, Lozenetz, S. BESHKOV leg.), have been found since for this species, which is not seldom in Bulgaria. The highest published locality is W Stara Planina Mts, Petrohan Pass, 1400 m alt., 11.VIII.1979, single female specimen, SHIRKOV leg. (SLIVOV, 1984: 61).

Genus *Simyra* OCHSENHEIMER, 1816

= *Simira* (incorrect subsequent spelling)

= *Arsilonche* LEDERER, 1857

= *Parasimyra* BECK, 1996

**17. *Simyra nervosa nervosa* ([DENIS & SCHIFFERMÜLLER], 1775)\***

= *nervosa* F. (incorrect subsequent spelling and author's name)

= *nervosa argentacea* HERRICH-SCHÄFFER, 1848 auct.\*\*

\* *S. nervosa nervosa* is widespread and frequent in Bulgaria and in the past this taxon has been mis-called *S. n. argentacea*. See also under the last one.

\*\* *Simyra nervosa* f. *argentacea* HERRICH-SCHÄFFER, 1848 has been reported from Slivno [Sliven], Samakow [Samokov] and Tirnova [Veliko Tarnovo] towns (REBEL, 1903: 210; BACHMETJEV, 1910a: 283; BURESCH & TULESCHKOW, 1932: 76), Preobrazhenski Manastir monastery near Tarnovo town in N Bulgaria (TULESCHKOW, 1930a: 32, 1930b: 139) and the Black Sea Coast: Balchik and Varna towns, Byala village and Ahtopol town (SLIVOV, 1976 [1977]: 68), as well as from Nessebar town (SOFFNER, 1961: 240). The present author examined a single specimen (gen. prep. 1./06.IV.1993, S. BESHKOV) from the collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, labelled "Varna, 23.V. 1943, KARNOSCHITZKY leg." and determined as a female *Simyra nervosa argentacea*. It turned out that the examined specimen is a greasy male of *Simyra nervosa nervosa*, a species widely distributed in the country! According to BURESCH & TULESCHKOW (1932: 76) " in Bulgaria occurs mainly var. *argentacea* H.-S." *Simyra nervosa argentacea* is an eastern subspecies, which has never been found in Bulgaria, or anywhere on the Balkan Peninsula.

#### 18. *Simyra albovenosa albovenosa* (GOEZE, 1781)

- = *venosa* (BORKHAUSEN, 1792), nec GEOFFROY in FROURCROY, 1785
- = ab. *albida* AURIVILLIUS, 1880

#### 19. *Simyra dentinosa dentinosa* FREYER, 1839

- = *dentinosa* f. *argentacea* HBN. (incorrect combination, sensu SLIVOV, 1976 [1977])\*

\* SLIVOV (1976 [1977]: 68), misquoting SOFFNER (1961) used the name "*Simyra dentinosa* f. *argentacea* HBN." but in SOFFNER (1961: 240), as well as in REBEL (1903: 210) the combination is *Simyra nervosa* ab. *argentacea* Hb. *Simyra dentinosa* is not a rare species in Bulgaria, but it is easier to find its larvae on *Euphorbia* in late April to early June, than to collect the adults. It flies by day, but also comes to light. The first report of *Simyra dentinosa* for Bulgaria was by LEDERER (1863: 25) from Sliven and Varna towns.

### Subfamily Bryophilinae GUENÉE, 1852

#### Genus *Cryphia* HÜBNER, 1818

- = *Griphia* (incorrect subsequent spelling)

#### Subgenus *Cryphia* HÜBNER, 1818

- = *Euthales* HÜBNER, [1820]
- = *Bryophila* TREITSCHKE, 1825
- = *Bryoleuca* HAMPSON, 1908
- = *Bryopsis* BOURSIN, 1970
- = *Transbryoleuca* BECK, 1996

#### 20. *Cryphia receptricula receptricula* (HÜBNER, [1803])\*

- = *strigula* BORKHAUSEN, 1792, nec THUNBERG, 1792 (preoccupied), nec ([DENIS & SCHIFFERMÜLLER], 1775), auct.

\* *Cryphia receptricula* is a very rare species in Bulgaria. Probably some reports for it in the past are incorrect, due to misidentification. The only authentic specimens of *Cryphia receptricula* from Bulgaria, seen by the present author, are in the collection of the National Museum of Natural History, Sofia, from the following localities: [Svilengrad town, Tschorbadzhiev leg.], 29.VII., 1 ♂, gen. prep. 1./11.XII. 1998, S. BESHKOV (gen. figs 1, 2), and another male specimen with the same data, but 04.VIII., genitalia

checked; N Bulgaria, Obratzov Tchiflik, Russe Region, 17.VII., P. TSCHORBADJIEW leg., 1 ♂, genitalia checked; Sofia, 12.VIII.1923, genitalia checked by J. GANEV, confirmed by the present author.

## 21. *Cryphia fraudatricula fraudatricula* (HÜBNER, [1803])\*

\* The only reports of *Cryphia fraudatricula* (HÜBNER) from Bulgaria are from Bouzovgrad village near Kazanlak town, Central Bulgaria, 26.VI.1948, two specimens [three specimens in coll. of BOCAROV in National Museum of Natural History, Sofia: 1 ♂ and 2 ♀♀] (BOCAROV, 1959: 58); from NW Bulgaria, Belogradchik town, 14.VI.1973, 1 ♀ (SLIVOV, 1984: 61) and from Enina village near Kazanlak town, Stara Zagora Region, 19.VI.1979, 1 ♂ (SLIVOV, 1984: 61). The present author found another male specimen in the collection of the National Museum of Natural History, Sofia, from N Bulgaria, Obratzov Tchiflik, Russe Region, 15.V.1937, P. TSCHORBADJIEW leg.

## 22. *Cryphia algae algae* (FABRICIUS, 1775)\*

= *alge* (incorrect subsequent spelling)

= *caligrapha* (BORKHAUSEN, 1792)\*\*

= *mendacula* (HÜBNER, [1813])

\* *Cryphia algae algae* is a common species in Bulgaria, known from many localities all over the country. However, probably some earlier reports of *Cryphia algae* refer to *Cryphia ochsi* BRSN. (and possibly also to *Cryphia receptricula*), due to misidentification.

\*\* *Bryophila algae* FABR., ab. *caligrapha* BKH. was reported as a new form for Bulgaria from Varna town (GOGOV & LOUKOV, 1964:152). Probably some reports of *Cryphia algae* in the past refer to misidentifications of *Cryphia ochsi* BRSN, or possibly *Cryphia receptricula*.

## 23. *Cryphia ochsi ochsi* BOURSIN, 1940\*

\* *Cryphia ochsi* was reported as a new species for Bulgaria from Blagoevgrad [= Gorna Dzhumaya] town (GANEV, 1983: 91). In the previous year the same author recorded it from Ossogovo Mts, Istiban-ya village (GANEV, 1982c: 96), which is in Republic of Macedonia, outside the present political borders of Bulgaria. Widely distributed up to 1000 m altitude in S Bulgaria, recently found in N Bulgaria, Black Sea Coast, the districts of Balchik town (BESHKOV, 1997: 160). Probably some earlier reports of *Cryphia algae* refer to *Cryphia ochsi* BRSN. (and possibly also to *Cryphia receptricula*), due to misidentification.

Subgenus *Bryoleuca* HAMPSON, 1908

= *Transbryoleuca* BECK, 1996

## 24. *Cryphia ereptricula ereptricula* (TREITSCHKE, 1825)\*

\* The first report for *Cryphia ereptricula ereptricula* (TREITSCHKE, 1825) for Bulgaria is by MARKOWITSCH (1909a: 19) from Razgrad town as *Bryophila ravula* var. *ereptricula* Tr., confirmed by H. REBEL. There are many other records of this not uncommon Bulgarian species under this and other names.

## 25. *Cryphia tephrocharis tephrocharis* BOURSIN, 1953\*

\* GANEV (1983a: 87) reported *Cryphia tephrocharis* BOURSIN as a new species for Bulgaria from SW Bulgaria, Kresna Gorge. The same year and from the same place it was recorded by GYULAI (1983: 206). In fact, the first publication which included this species was the article by GANEV (1982b: 165), in which *C. tephrocharis* BOURSIN is reported from SW Bulgaria, Volcanic Hill "Kozhouh", Petrich district. Some other reports follow later from S Bulgaria and from the Black Sea Coast. Probably in the past confused with *Cryphia rectilinea rectilinea* (WARREN, 1909) due to misidentification.

**26. *Cryphia rectilinea rectilinea* (WARREN, 1909)**= *ravula* (HÜBNER, [1813]) auct.\*= *vandalusia* (DUPONCHEL, 1842), auct.\*\*

\* The atlantico-mediterranean species *Cryphia ravula* HÜBNER, [1813] is wrongly reported for Bulgaria in several articles in the old literature, as well as in the near past, because of confusion with the closely related taxa *Cryphia rectilinea* (WARREN, 1909) and *Cryphia tephrocharis* BOURSIN, 1953. In NOWACKI & FIBIGER (1996: 252) *Cryphia ravula* (HÜBNER, [1813]) is wrongly included for Bulgaria. In the recent literature for the neighbouring territories there are also reports of *Cryphia ravula* from Serbia, Zemun (HADZISTEVIC, 1969: 60), from Timocka Krajina, Zajecar (ZECEVIC & RADOVANOVIC, 1974: 116), and from Croatia, Knin (CARNELUTTI, 1994: 215), which also seem to be doubtful. Probably some of the specimens reported in the past as *Cryphia rectilinea* (WARREN, 1909) belong to *Cryphia tephrocharis*, due to misidentification.

\*\* *Bryophila ravula* Hb. v. *vandalusia* DUP. (det. REBEL) has been recorded from Maronia (Greece, W Trakia) (BURESCH & ILTSCHIEW, 1921: 78). *Cryphia vandalusia* (DUPONCHEL, 1842) is a separate species, which does not occur in the Balkans: It is an atlantico-mediterranean species (DUFAY, 1978), known from the Eastern Pyrenees, France, Corsica, Northern Italy and questionably from Sardinia.

**27. *Cryphia seladona* (CHRISTOPH, 1885) ssp. *burgeffi* (DRAUDT, 1931)\***= *seladna* (incorrect subsequent spelling)

\* The first report for *Cryphia seladona* from Bulgaria was by GANEV (1984a: 41). Some other localities are given subsequently from SW Bulgaria, Struma Valley and adjacent slopes of the mountains, and from SE Bulgaria (Sakar Mts and E Rhodopi Mts) (BESHKOV, 1993: 370). Other unpublished localities are: Karandila near Sliven town, 1000 m altitude, 16.VII.1969, 2 ♀♀, leg. and in coll. AL. SLIVOV, and Vitosha Mts, Bistritza village, 05.IX.1975, also leg. and in coll. AL. SLIVOV.

**28. *Cryphia raptricula raptricula* ([DENIS & SCHIFFERMÜLLER], 1775)**= *divisa* (ESPER, [1791])= *palliola* (BORKHAUSEN, 1792)= *deceptricula* (HÜBNER, [1803])= *carbonis* (FREYER, 1849), nec WAGNER, 1931= ab. *striata* (STAUDINGER, 1879)= f. *badimaculata*, TUTT= *provincialis* CLT.***Cryphia orthogramma orthogramma* BOURSIN, 1954\***

\* *Cryphia orthogramma* BOURSIN was reported from Serbia, Timocka Krajina, Sokolovica (ZECEVIC & RADOVANOVIC, 1974: 117). It is also included in the list of Serbian Lepidoptera by ZECEVIC (1996: 77). The locality mentioned above is very close to the Bulgarian/Yugoslavian border, and if this report is correct, *Cryphia orthogramma* can be expected in Bulgaria as well. However, it seems likely to be wrong, and the result of a misidentification.

**29. *Cryphia petrea* (GUENÉE, 1852) ssp. *contristans* (LEDERER, 1857)\***

\* There is only a single report for *Cryphia petrea contristans* from the country: SW Bulgaria, near Krupnik town, 16.VIII.1988 (LEHMANN, 1990: 129). In NOWACKI & FIBIGER (1996: 252) *Cryphia petrea* (GUENÉE, 1852) is wrongly omitted for Bulgaria.



**30. *Cryphia petricolor petricolor* (LEDERER, 1870)\***

\* TULESCHKOV (1936: 206) reported *Bryophila petricolor* Lb. as a new species for Europe from SW Bulgaria, Belassitza Mts, SE from Petrich town, a single specimen taken at an altitude of 1000 m, 22.VII. 1932. The same data can be found also in TULESCHKOV (1939: 177). According to SLIVOV (1988: 137), the reports by TULESCHKOV for Belassitza Mts are wrong, but he gives no explanation or evidence for his opinion. The present author has never seen specimens of *Cryphia petricolor* originating from Bulgaria. Its presence in the country needs confirmation. In NOWACKI & FIBIGER (1996: 252) *Cryphia petricolor* (LEDERER, 1870) is not included for Bulgaria.

**Subgenus *Bryophila* TREITSCHKE, 1825*****Cryphia maeonis maeonis* (LEDERER, 1865)\***

\* *Cryphia maeonis* (LEDERER) was reported from Aton (Sveta Gora Atonska, N Greece) (BURESCH & ILTSCHKEW, 1921: 78; BURESCH & TULESCHKOW, 1932: 107) (det. REBEL). It could possibly be found in Bulgaria as well.

**31. *Cryphia domestica domestica* (HUFNAGEL, 1766)\***

= *perla* ([DENIS & SCHIFFERMÜLLER], 1775)

= *distincta* TUTT, nec CHRISTOPH, 1887\*\*

\* *Cryphia domestica* is a very rare species in Bulgaria, known in the country from the following localities: "Bulgaria" without exact locality (STAUDINGER & REBEL, 1901; BACHMETJEV, 1902: 460); Sliven (REBEL, 1903: 216; SPULER, 1908: 356); Lovetch town (ILTSCHKEV, 1915: 192) and Aytos town (ILTCHEFF, 1923: 51), as *Briophila perla* ab. *distincta* TUTT; Stara Planina Mts without exact locality (DRENOWSKI, 1930a: 15), as *Bryophila perla* F., probably following the previous report of REBEL for Sliven; W Rhodopi Mts, Momtchilovtzi near Smolyan town, 1250 m altitude (SLIVOV, 1984: 61); Stara Planina Mts, "Byalata Reka" near Kalofer town (SLIVOV, 1984: 61); SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station (SLIVOV, 1984: 61); Sandanski town (SLIVOV, 1984: 61). The present author has never seen a specimen of this species from Bulgaria, but there is no doubt that it occurs in the country.

\*\* *Briophila perla* ab. *distincta* TUTT was recorded from Lovetch town (ILTSCHKEV, 1915: 192) and from Aytos town (ILTCHEFF, 1923: 51). *Cryphia distincta* (CHRISTOPH, 1887) is a species of its own, which has never been found in Bulgaria, nor in Europe.

**Subgenus *Bryopsis* BOURSIN, 1970****32. *Cryphia muralis muralis* (FORSTER, 1771)\***

= *viridior* SCHAWERDA, 1932

\* Probably many of the specimens reported in the Bulgarian literature as *Cryphia muralis* (FORSTER, 1771) have been misidentifications of *Cryphia amasina* (DRAUDT, 1931). *Cryphia muralis* (FORSTER) seems to be rarer in Bulgaria than *Cryphia amasina* (DRAUDT). The two species can be distinguished with certainty only by observing the differences in the genitalia. In some faunistical articles the two taxa are said to be sympatric. However, without examination of the genitalia of many specimens, these literature data cannot be accepted as correct.

**33. *Cryphia amasina amasina* (DRAUDT, 1931)\***

\* *Cryphia amasina* was reported quite recently as a new species for Europe from the Republic of Macedonia, Katlanovo near Skopje, Vardar Valley (DUFAY, 1973: 185). Its distribution pattern on the Balkan Peninsula and in Bulgaria is not yet clear. The first report for *Cryphia amasina* from Bulgaria was by

GANEV (1984a: 41). A widely distributed species in S Bulgaria. In N Bulgaria known from the Black Sea Coast, Priseltzi village near Obzor (BESHKOV, 1992: 50) and Sushevo village near Koubrat town, Razgrad Region, 06.–18.VIII.1991, leg. and in coll. I. STOYTCHEV (BESHKOV, in press). Recently found at the N Black Sea Coast, the districts of Balchik town (BESHKOV, 1997: 160). Maybe many of the specimens reported in the past as *Cryphia muralis* (FORSTER, 1771) refer to *Cryphia amasina* (DRAUDT, 1931) due to misidentification. See also under the previous species.

Subfamily Herminiinae HERRICH-SCHÄFFER, 1845

Genus *Orectis* LEDERER, 1857

**34. *Orectis proboscidata proboscidata* (HERRICH-SCHÄFFER, [1851])**

= *massiliensis* MILLIÈRE, 1863, auct.

= *barteli* TURATI, 1907

\* The first report for *Orectis proboscidata* from Bulgaria was by BACHMETJEV (1902: 443), following the unpublished manuscript of H. PIGULEV, who reported it from Sliven town, July to August. According to REBEL (1903: 242) the report of BACHMETJEV (1902: 443) is doubtful. The present author has collected this species above Sliven town (below Vratnik Pass, 380 m altitude) (BESHKOV & NOWACKI, 1998: 48) and he therefore believes that the reports of PIGULEV and of BACHMETJEV are correct. *Orectis proboscidata* was again reported as a new species for Bulgaria by DRENOWSKY (1909d: 42) from Central Stara Planina Mts, above Kalofer town, 700 m altitude. At present, *Orectis proboscidata proboscidata* (HERRICH-SCHÄFFER, [1851]) is known from several additional localities in Bulgaria (up to 1500 m altitude—DRENOWSKY, 1925: 118), and has been taken both at light and at sugar.

Genus *Idia* HÜBNER, [1813]

= *Epizeuxis* HÜBNER, [1818]

= *Epiceuxis* (incorrect subsequent spelling)

**35. *Idia calvaria calvaria* ([DENIS & SCHIFFERMÜLLER], 1775)**

Genus *Simplicia* GUENÉE, 1854

**36. *Simplicia rectalis rectalis* (EVERSMANN, 1842)\***

\* The first reports of *Simplicia rectalis* for Bulgaria were by BACHMETJEV (1902: 443), following the unpublished manuscript of H. PIGULEV, and REBEL (1903: 241), following the data of HABERHAUER from Sliven town. In Sliven also collected by TSCHORBADJIEV, 16.VIII.1910 (BURESCH & TULESCHKOW, 1935: 161). Known also from the Black Sea Coast, Bourgass town (TSCHORBADJIEV, 1915: 35). Reported from Stara Planina Mts without details of locality/ies by DRENOWSKI (1930a: 20), who probably followed the previous reports for Sliven. Recent localities: Zemen Gorge, Skakavitza Railway Station (GANEV, 1982b: 167; GANEV, 1983b: 94); Kresna Gorge (Mészáros et al., 1984b: 201) as well as a specimen in the collection of H. LOUKOV in the National Museum of Natural History, Sofia, and Kresna Gorge, Stara Kresna Railway Station, 28.–29.IX.1976 at light (SLIVOV, 1979: 41); Vitosha Mts, “Bounkera”, [730 m altitude] (GANEV, 1980: 80; GANEV, 1985d: 59); Krasno Selo [suburb of Sofia town], 22.VI.1943, single specimen in coll. National Museum of Natural History, Sofia; Sofia town and Sofia, Zapaden Park, large series in the collection of S. BOCHAROV in the National Museum of Natural History, Sofia, N Bulgaria, Dalgodeltzi village (GANEV, 1995b: 91); Novo Konomladi village in SW Bulgaria, Petrich district in June at sugar,

leg. and in coll. V. GASHTAROV (BESHKOV & GASHTAROV, in press); SW Bulgaria, S Pirin Mts, Liljanovo village above Sandanski town, 500 m altitude, 28.V.-23.VI.1982 (EICHLER, HACKER & SPEIDEL, 1996: 264, and J. GELBRECHT, pers. comm.); SW Bulgaria, Ograzhden Mts, Sestrino village, 650 m, 06.VI.1984 and 11.VII.1983, and Belogradchik town in NW Bulgaria, 06.VII.1986, J. GANEV leg., in the collection of GANEV in the National Museum of Natural History, Sofia.

Genus *Paracolax* HÜBNER, [1825]

**37. *Paracolax tristalis tristalis* (FABRICIUS, 1794)**

= *glauconalis* auct., nec LINNAEUS, 1758, nec [DENIS & SCHIFFERMÜLLER], 1775

= *glauconaria* (incorrect subsequent spelling)

= *derivalis* (HÜBNER, 1796)

Genus *Nodaria* GUENÉE, 1854

**38. *Nodaria nodosalis nodosalis* (HERRICH-SCHÄFFER, [1851])\***

\* The only known locality of *Nodaria nodosalis* in Bulgaria is Liljanovo village above Sandanski town, 500 m altitude, S. Pirin Mts, 1.-30.VI.1984, single specimen (EICHLER, HACKER & SPEIDEL, 1996: 264). In the Balkan Peninsula the species is known also from Croatia, Dalmatia, Herzegowina, Albania and Greece (HACKER, 1989: 405).

Genus *Macrochilo* HÜBNER, [1825]

**39. *Macrochilo cribrumalis cribrumalis* (HÜBNER, 1793)\***

\* The only known localities of *Macrochilo cribrumalis* in Bulgaria are as follows: SW Bulgaria, "Rupite" near Volcanic Hill of Kozhouh, Petrich district, 06.VII.1991, 1 ♂, leg. and in coll. V. GASHTAROV (BESHKOV, 1993: 376; BESHKOV, 1998: 241; BESHKOV & GASHTAROV, in press); S Bulgaria, Black Sea Coast, "Arkoutino" lake, 20.VIII.1997, S. BESHKOV, M. & K. BESHKOV leg., 1 ♂ at light (BESHKOV & RADEV, in press); NE Bulgaria, N Black Sea Coast, SE side of Dourankoulak Lake, near Vaklino village, 04.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg., 2 ♂♂ at light (pl. 1, fig. 1).

Genus *Herminia* LATREILLE, 1802

**40. *Herminia tarsicrinalis tarsicrinalis* (KNOCH, 1782)**

Genus *Quaramia* BERIO, 1989

**41. *Quaramia grisealis grisealis* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *nemoralis* (FABRICIUS, 1775), nec SCOPOLI, 1763

= gen. aest. *aestivalis* SPULER, 1907

= *grizealis* (incorrect subsequent spelling)

Genus *Hypetrocon* BERIO, 1989**42. *Hypetrocon tenuialis tenuialis* (REBEL, 1899)\***

\* The only known locality of *Herminia tenuialis* (REBEL, 1899) in Bulgaria is S Black Sea Coast, Arkoutino, coll. VARGA (HACKER, 1989: 405). Very likely to be found in other places in the country, because its range extends from Central Europe to Amurland.

Genus *Polypogon* SCHRANK, 1802

= *Pechipogon* AGASSIZ, [1847]

= *Microphtha* BERIO, 1989

= *Gryphopogon* BECK, 1996

**43. *Polypogon tentacularia tentacularia* (LINNAEUS, 1758)**

= *tentacularis* ([DENIS & SCHIFFERMÜLLER], 1775)

= f. *modestalis* HEIDEMANN\*

= var. *carpathica* HORMUZAKI, 1894\*\*

\* BACHMETJEW (1902: 443), following the unpublished manuscript of H. PIGULEV, and REBEL (1903: 242), using the material of HABERHAUER, reported *tentacularia* L. for the first time for Bulgaria from Sliven town, June to August. The reports of MANN (1866) and BACHMETJEW (1902: 443) for Dobrogea follow the record of VON MALINOVSKY for Tulchea, Danube Delta. However, *Polypogon tentacularia* is a species, widely distributed and not rare in NE Bulgaria: Dobrogea, the valley of the "Souhata Reka" river (Dryanovetz village Dobrich (= Tolbouhin) Region, 100 m alt., 05.VI.1999 as well as near Golesh village, Silistra Region, 06.VI.1999), in Loudogorsko Plato near Samouil village, Razgrad Region, 450 m, 07.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg.), in the districts of Popovo Town (S. BESHKOV, N. DILCHEV & M. MARINOV leg.), as well as in the Danube Plain, "Kalimok" near Nova Tcherana village, Toutran district (D. VASSILEV leg.). REBEL (1903: 242), using the material of HABERHAUER, reported var. *modestalis* from Rila Mts. The next report for Bulgaria, as *Herminia tentacularia* L. var. *modestalis* HEYD., was by MARKOWITSCH (1909a: 23) from the districts of Razgrad town. Reported as *Herminia tentacularia* var. *modestalis* from Rila Mts, "Tcham Kuria" [Borovetz Resort] (BURESCH, 1915: 85); Stara Planina Mts, Rila Mts, Rhodopi Mts and Razgrad town (DRENOWSKI, 1928a: 27, 58). Some other reports can also be found in the old literature. In the same article of DRENOWSKI (1928a: 100, 105) the taxon *modestalis* in Bulgaria is recorded from Rila Mts only at an altitude of 1350–1800 m. According to BURESCH & TULESCHKOW (1935: 164) in high parts of the mountains *tentacularia* is represented by var. *carpathica* HORM. *Polypogon tentacularia* is not a very rare species in Bulgaria, known from many localities and at different altitudes. Flies by day and also comes to light.

\*\* *Polypogon tentacularia* var. *carpathica* HORMUZAKI is reported from Rila Mts: below Markudzhik Top, 1800 m (DRENOWSKI, 1909c: 77) and up to 1600 m (DRENOWSKI, 1909a: 16; DRENOWSKI, 1910a: 84); Stara Planina Mts, Rila Mts and Rhodopi Mts (DRENOWSKI, 1928a: 27, 58); Ossogovo Mts at an altitude of 1300–1500 m as *Herminia tentacularia* var. *carpathica* HORM. (DRENOWSKI, 1928a: 55; DRENOWSKI, 1930b: 47; THURNER, 1964: 141), and some other reports in the old literature. In an article by DRENOWSKI (1928a: 105) the taxon *carpathica* in Bulgaria is reported as known from Ossogovo Mts and Rila Mts only, at an altitude of 1350–1800 m.

**44. *Polypogon plumigeralis plumigeralis* (HÜBNER, [1825])\***

= *crinalis* (TREITSCHKE, 1829)\*\*

= *barbalis* (CLERCK, 1759), auct.

\* *Polypogon plumigeralis* (= *Microphtha crinalis* (TREITSCHKE, 1829)) is the species from this group previously known as *Pechipogon plumigeralis* HÜBNER, [1825] and *Polypogon crinalis* (TREITSCHKE, 1829); it is proven to occur in Bulgaria. At present, all data for *crinalis* TREITSCHKE, 1829 for Bulgaria must be

extrapolated for it. All the specimens examined by the present author (genitalia checked of more than twenty male specimens from Bulgaria and Albania) correspond exactly to *Polypogon plumigeralis plumigeralis* (HÜBNER, [1825]), as it is figured in YELA, HONEY & RONKAY (1997: 193).

\*\* In the old literature (e.g. REBEL, 1903; BURESCH & TULESCHKOW, 1935; ZUKOWSKY, 1935), *crinalis* Tr. (current synonym of *plumigeralis*—and misidentification of *Pechipogo simplicicornis*) is given as the species present in Bulgaria. In NOWACKI & FIBIGER (1996: 332), *crinalis* (TREITSCHKE, 1829) is given as a synonym of *plumigeralis* (HÜBNER, [1825]), a species included there as a part of the Bulgarian fauna. The male genitalia illustrated in CALLE (1982), BERIO (1991), KLUITSCHKO (1978) as *P. plumigeralis* in fact are those of *Pechipogo simplicicornis* (ZERNY, 1935). The genitalia illustrated in RÁKOSY (1996b) as *Polypogon crinalis* are indeed *Pechipogo simplicicornis*, a species, which has never been found in Bulgaria. Correctly illustrated genitalia of both *Pechipogo simplicicornis* and *Polypogon plumigeralis* can be found in YELA, HONEY & RONKAY (1997).

*Polypogon gryphalis gryphalis* (HERRICH-SCHÄFFER, 1851)\*

\* *Polypogon gryphalis* (HERRICH-SCHÄFFER) has never been reported for Bulgaria, and it is wrongly included for this country in the list of NOWACKI & FIBIGER (1996: 253).

Genus *Pechipogo* HÜBNER, [1825]

= *Microphtha* BERIO, 1989, auct.

#### 45. *Pechipogo strigilata strigilata* (LINNAEUS, 1758)

= *barbalis barbalis* (CLERCK, 1759)

= *pectalis* (HÜBNER, 1796)

= *pectinalis* HBR. (incorrect spelling and author's name)

*Pechipogo simplicicornis simplicicornis* (ZERNY, 1935)\*

= *plumigeralis plumigeralis* HÜBNER, [1825] auct.

= *crinalis crinalis* (TREITSCHKE, 1829)\*\*

\* Examination of the genitalia of more than 20 male specimens from Bulgaria and Albania has indicated that *Polypogon plumigeralis* (HÜBNER, [1825]) has been correctly reported from Bulgaria in accordance with the recent literature (YELA, HONEY & RONKAY, 1997). All reports for Bulgaria under the names *crinalis* TREITSCHKE and *plumigeralis* (HÜBNER), must be accepted as correct, concerning in fact *Polypogon plumigeralis*, not *Pechipogo simplicicornis* (ZERNY, 1935). The last one has never been found in Bulgaria.

\*\* The male genitalia illustrated in CALLE (1982), BERIO (1991), KLUITSCHKO (1978) as *P. plumigeralis* correspond in fact to *Pechipogo simplicicornis simplicicornis* (ZERNY, 1935). The genitalia illustrated in RÁKOSY (1996b) as *Polypogon crinalis* are indeed *Pechipogo simplicicornis*, a species, which has never been found in Bulgaria. Correctly illustrated genitalia of both *Pechipogo simplicicornis* and *Polypogon plumigeralis* can be found in YELA, HONEY & RONKAY (1997). See also under the previous species. *Pechipogo plumigeralis* (HÜBNER, [1825]) is included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 253), in which *crinalis* (TREITSCHKE, 1829) is given as its synonym. These names are at the same time synonyms of *Pechipogo simplicicornis*. The genitalia of the two taxa are quite different.

Genus *Zanclognatha* LEDERER, 1857

= *Treitschkendia* BERIO, 1989

= *Zellerminia* BECK, 1996

#### 46. *Zanclognatha lunalis lunalis* (SCOPOLI, 1763)

= *tarsipumalis* (HÜBNER, 1796)

**47. *Zanclognatha zelleralis zelleralis* (Wocke, 1850)**= *tarsicristalis* (HERRICH-SCHÄFFER, 1851)**48. *Zanclognatha tarsipennalis tarsipennalis* (TREITSCHKE, 1835)**= f. *bidentalis* (HEINEMANN, 1859)

Subfamily Strepsimaninae MEYRICK, 1933

= *Hypenodinae* FORBES, 1954Genus *Hypenodes* DOUBLEDAY, 1850= *Schrankia* HERRICH-SCHÄFFER, [1851] nec HÜBNER, [1809]**49. *Hypenodes anatolica anatolica* SCHWINGENSCHUSS, 1938\***= *nigritalis* RONKAY, 1984\*\*

\* So far *Hypenodes anatolica* is known in Bulgaria from two localities only: SW Bulgaria, Melnik town as *Hypenodes nigritalis* (RONKAY, 1984: 205–207) (type locality of *H. nigritalis* RONKAY) and the Volcanic Hill “Kozhouh” near Petrich town, SW Bulgaria (GANEV, pers. comm.) (pl. 16, fig. 1). The few records of *Hypenodes anatolica* in Bulgaria are probably due to its having been overlooked on account of its very small size and inconspicuous appearance.

\*\* *nigritalis* RONKAY, 1984 is a junior synonym of *Hypenodes anatolica* SCHWINGENSCHUSS, 1938 (NOWACKI & FIBIGER, 1996: 332). Type locality of *H. nigritalis* is SW Bulgaria, Melnik town (RONKAY, 1984: 205–207).

*Hypenodes humidalis humidalis* DOUBLEDAY, 1850\*= *turfosalis* WOCKE, 1850

\* *Hypenodes humidalis* has never been found in Bulgaria. NOWACKI & FIBIGER (1996: 253) wrongly included it for the Bulgarian fauna.

**50. *Hypenodes orientalis orientalis* STAUDINGER, 1901\***= *nesiota* REBEL, 1916

\* *Hypenodes orientalis* in Bulgaria is known only from the S Black Sea Coast, Primorsko (GANEV, 1987a: 103).

Genus *Schrankia* HÜBNER, [1809]= *Hypenodes* GUENÉE, 1854, nec DOUBLEDAY, 1850**51. *Schrankia costaestrigalis costaestrigalis* (STEPHENS, 1834)\***= *hartigi* BERIO, 1991

\* GANEV (1983a: 87) reported *Schrankia costaestrigalis* as a new species for Bulgaria from “Kozhouh” near Petrich town in SW Bulgaria. Recently found in several other localities in the country. Not a rare species in the second half of September at the Black Sea Coast: Arkoutino near Primorsko and the district of Shabla and Dourankoulak: Shablensko Ezero (pl. 13, fig. 2), Ezeretzko Ezero and Dourankoulashko Ezero lakes. The flight period in SW Bulgaria extends to the end of October.

**52. *Schranksia taenialis taenialis* (HÜBNER, [1800–1809])\***= *albistrigalis* (HÜBNER, [1809])

\* TSCHORBADJIEV (1925: 42) reported *Schranksia taenialis* (as *Hypenodes taenialis* Hb.) as a new species for Bulgaria from the districts of Sliven town. DRENOWSKI (1928b: 18) reported *Schranksia taenialis* from Strandzha Mts [Bosna Mts], Papia Top near Tzaravo town (= Vassiliko/or Mitchurin), 200 m altitude, and from Sliven town. BURESCH & TULESCHKOW (1935: 168) accepted *S. taenialis* as a species wrongly reported for Bulgaria. More recently (SLIVOV, 1967: 134—as a new species for Bulgaria) and SLIVOV (1968: 173) reported it from Iskarski Prolom Gorge, Lakatnik Railway Station. Other known localities of the species in Bulgaria are: Black Sea Coast, Varna town (SLIVOV, 1976 [1977]: 75); Strandzha Mts and Black Sea Coast, Malko Tarnovo town, Gramatikovo village, Ahtopol town (SLIVOV, 1978a: 42); Black Sea Coast, Slantchev Bryag near Nessebar town (LEVY, 1968: 111); Rhodopi Mts, Loukovitza [Motel] near Assenovgrad (GANEV, 1984a: 42); SW Bulgaria, Volcanic Hill “Kozhouh”, Petrich district (GANEV, 1982b: 167; GANEV, 1984b: 136); Kostenetz town, Kresna Gorge and Strandzha Mts: Gramatikovo village (GANEV, 1985b: 91); W Rhodopi Mts: Teshel Youth Chalet, Devin district (BESHKOV, 1995a: 206); SW Bulgaria: S. Pirin Mts, near Sandanski town (BUSSE & OCKRUCK, 1991: 20) and Liljanovo village above Sandanski town, 500 m altitude (EICHLER, HACKER & SPEIDEL, 1996: 264; HACKER, 1996a: 259 and J. GELBRECHT, pers. comm.); Lyulin Mts: “Sveti Kral” monastery, Sofia Region, 19.VI.1951, S. BOCHAROV leg., in coll. National Museum of Natural History, Sofia, (gen. prep. 19 [J. GANEV]); “Sveta Troitza” monastery near Veliko Tarnovo town, 275 m altitude, 14.VIII.1998, S. BESHKOV, M. & K. BESHKOV leg., 3 ♂♂ and 1 ♀ at light trap; Tcherni Bryag village near Antonovo, Veliko Tarnovo region, 450 m, 17.IX.1999, S. BESHKOV & S. ABADJIEV leg., 2 ♂♂ at a light trap; Central Stara Planina Mts: Etropole Monastery, 16.VII.1981, a specimen in the collection of H. Loukov in the National Museum of Natural History, Sofia; W Stara Planina Mts: near Varbovo village, 02.IX.1998, S. BESHKOV, D. VASSILEV & G. STOYANOV leg., 1 ♂ at a light trap; NE Bulgaria: near Samouil village, Razgrad Region, 450 m, 07.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg., 2 ♀♀ at sugaring.

## Subfamily Catocalinae GUENÉE, 1837

Genus *Catocala* SCHRANK, 1802= *Hemigeometra* HAWORTH, 1809= *Ephesia* HÜBNER, 1818= *Mormonia* HÜBNER, [1823]= *Astiotes* HÜBNER, [1823]= *Simplicata* BECK, 1996= *Bihymena* BECK, 1996Subgenus *Mormonia* HÜBNER, [1823]**53. *Catocala sponsa sponsa* (LINNAEUS, 1767)****54. *Catocala dilecta dilecta* (HÜBNER, [1808])\***= *dilectata* (incorrect subsequent spelling)

\* The first reports of *Catocala dilecta* for Bulgaria are from Sliven town (BACHMETJEV, 1902: 442), following the unpublished data of H. FIGULEV and REBEL (1903: 239), who examined specimens from Sliven (“Kirchenwald, HABERHAUER leg.”). The specimens from Sliven are in the collection of the National Museum of Natural History, Sofia. Known also from the Black Sea Coast, the districts of Bourgas town (TSCHORBADJIEV, 1915: 35) and Balchik (CARADJA, 1930: 46). There are very few other known localities in Bulgaria for this species, which is rare in the country.

Subgenus *Catocala* SCHRANK, 1802

- = *Hemigeometra* HAWORTH, 1809
- = *Optocala* BECK, 1996
- = *Puercala* BECK, 1996
- = *Promonia* BECK, 1996
- = *Metocala* BECK, 1996
- = *Reticcala* BECK, 1996
- = *Convercala* BECK, 1996
- = *Bihymena* BECK, 1996

55. *Catocala fraxini fraxini* (LINNAEUS, 1758)56. *Catocala nupta nupta* (LINNAEUS, 1767)*Catocala adultera adultera* MÉNÉTRIÉS, 1856\*

\* *Catocala adultera* has never been found in Bulgaria, nor on the Balkan Peninsula. In the entomological literature on the Balkans, there is a single incorrect report of it from Serbia, Vojvodina as a not rare species in August (PETRIK & JOVANIC, 1952: 14). It is also wrongly included in the list of Serbian Lepidoptera by ZEČEVIĆ (1996: 82).

57. *Catocala elocata elocata* (ESPER, [1787])\*

- = *elocata* ab. *meridionalis* SCHULTZ, 1909

\* See under *Catocala puerpera puerpera* (GIORNA, 1791).

58. *Catocala puerpera puerpera* (GIORNA, 1791)

- = var. *orientalis* STAUDINGER, 1877\*
- = ab. *genetrix* SCHULTZ, 1906

\* The specimen reported by DRENOWSKY (1907: 19) as *Catocala puerpera* GIORNA var. *orientalis* STGR. from Vitosha Mts, Knyazhevo is a small specimen of *Catocala elocata* (see BURESCH, 1915: 84).

59. *Catocala promissa promissa* ([DENIS & SCHIFFERMÜLLER], 1775)60. *Catocala electa electa* (VIEWEG, 1790)

- = *electa meridionalis* SPULER, 1908

61. *Catocala conjuncta conjuncta* (ESPER, [1787])62. *Catocala lupina lupina* (HERRICH-SCHÄFFER, [1851])63. *Catocala conversa conversa* (ESPER, [1787])

- = *agamos* (HÜBNER, [1813])

64. *Catocala nymphagoga nymphagoga* (ESPER, [1787])



*Catocala brandti* HACKER & KAUTT, 1999 ssp. *schraideri* HABELER & HACKER, 1999\*

\* *Catocala brandti schraideri* is described from Greece, Igoumenitsa (HACKER, 1999: 431). Its occurrence in Bulgaria seems possible.

**65. *Catocala hymenaea hymenaea* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *hymeneae* (incorrect subsequent spelling)

= *hymenaea* L. (incorrect author's name)

= *posthuma* (HÜBNER, [1809–1813])

Subgenus *Ephesia* HÜBNER, 1818

= *Simplicata* BECK, 1996

= *Divercala* BECK, 1996

**66. *Catocala fulminea fulminea* (SCOPOLI, 1763)\***

= *paranympha* (LINNAEUS, 1767)

= *paranympha* (incorrect subsequent spelling)

\* The first reports of *Catocala fulminea* for Bulgaria were by BURESCH (1909a: 26) for Sofia and by MARKOWITSCH (1909a: 23, 1909b: 26) (as *Catocala paranympha* L.) from the districts of Razgrad town. Many other localities for this species, which is not rare in Bulgaria, have been found recently, all in the lowlands.

**67. *Catocala nymphaea nymphaea* (ESPER, [1787])\***

= *nymphaeata* (incorrect subsequent spelling)

\* The first reports of *Catocala nymphaea* in Bulgaria were by TULESCHKOW (1932b: 29, 1932c: 111) from Alibotoush Mts (Petrovo village). At present *Catocala nymphaea* is known from several other localities in the country, sometimes locally abundant both at light and sugar. Known mainly from low altitudes, but lately found at an altitude of 1800 m (S. Pirin Mts, below "Orelyak" top, 05.VI.2000, S. BESHKOV & K. SOICHIRO leg.) together with mountain species such as *Lygephila viciae*, *Mniotype adusta*, *Apamea illyria*, *Hada plebeja*, *Papestra biren*, *Mythimna andereggi pseudocomma* and *Agrotis cinerea*.

**68. *Catocala disjuncta disjuncta* (GEYER, [1828])\***

= *separata* (FREYER, 1846) auct.

= *anthracita* THIERRY-MIEG, 1889

= var. *luctuosa* (STAUDINGER, 1901) auct.

\* For the differences between *Catocala disjuncta* and *Catocala separata* see HACKER (1998). Probably some of the reports of *Catocala (Ephesia) disjuncta* in Bulgaria refer to the closely related *Catocala separata* (FREYER), a species recently discovered in Bulgaria. See also under *Catocala separata* (FRR.).

**69. *Catocala separata separata* (FREYER, 1846)\***

= var. *luctuosa* (STAUDINGER, 1901)

\* Recently *Catocala separata* (Type locality: Greek islands) has been recognized as a bona species (see HACKER, 1998a: 204; HACKER & TALHOUK, 1998: 376). Its distribution on the Balkan Peninsula is not yet clear. From the neighbouring territories (of Bulgaria) it is known from the Republic of Macedonia, Doyransko Ezero Lake, Stari Doyran (HACKER, 1998a: 204). In the collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, there is 1 ♂ of *Catocala separata* from the Republic of Macedonia, Gevgeli, 01.VII.1944, ZLATARSKY leg., and three specimens from Greece, "Athena, Pentelicon, 29.VI.1909" The only Bulgarian material the present author has seen (unpublished) is from SW Bulgaria, Volcanic Hill of Kozhouh near Petrich town, 10.VI.1983, J. GANEV leg., in coll. National Museum of Natural History, Sofia. It is very likely to be discovered in other parts of S Bulgaria.

**70. *Catocala eutychea eutychea* (TREITSCHKE, 1835)\***

\* The first reports for *Catocala eutychea* (TREITSCHKE) in Bulgaria are from Alibotoush [= Slavyanka] Mts (TULESCHKOW, 1929: 158, 1930a: 33). There are many other records of this species, which is locally abundant in Bulgaria. In NOWACKI & FIBIGER (1996: 254) *Catocala eutychea* (TREITSCHKE) is wrongly not included for the Bulgarian fauna.

**71. *Catocala diversa diversa* (GEYER, [1828])**

Genus *Minucia* MOORE, [1885]

**72. *Minucia lunaris lunaris* ([DENIS & SCHIFFERMÜLLER], 1775)**

Genus *Clytie* HÜBNER, [1823]  
= *Pseudophia* GUENÉE, 1852

**73. *Clytie syriaca syriaca* (BUGNION, 1837)\*  
= *siriaca* (incorrect subsequent spelling)**

\* The first reports for *Clytie syriaca* (BUGNION, 1837) from Bulgaria were by TULESCHKOW (1931a: 27, 1932c: 110) from Kresna Gorge in SW Bulgaria. There are many other records for this species which is not rare, and locally abundant, in both South and North Bulgaria.

***Clytie illunaris illunaris* (HÜBNER, [1813])\***

\* *Clytie illunaris* (HÜBNER, [1813]) was reported close to the present Bulgarian border from "Dede-Agach" (= Alexandropolis) in N Greece (BURESCH & ILTSCHEV, 1921: 79). This report is not confirmed and it is considered here as wrong, due to misidentification. *Clytie illunaris* is also wrongly included in the list of Serbian Lepidoptera by ZEČEVIĆ (1996: 82). *Clytie illunaris* is an atlantico-mediterranean species, which has never been found in Bulgaria, nor in the Balkan Peninsula.

Genus *Ophiusa* OCHSENHEIMER, 1816  
= *Anua* WALKER, 1858

**74. *Ophiusa tirhaca tirhaca* (CRAMER, 1777)\***

\* The first report of *Ophiusa tirhaca* (as *Pseudophia*) for Bulgaria was by BURESCH (1915: 83): two larvae on *Cystus vilosus*, originating from S France, in the Botanical Garden of Sofia, pupated and emerged there. The same information is given in BURESCH & TULESCHKOW (1935: 150). All other reports for Sofia and Vitosha Mts follow these data. According to SLIVOV (1990: 187) "this species is wrongly reported for Vitosha Mts: it had been bred in The Botanical Garden in Sofia on an ornamental plant, introduced from S France". These specimens are in the National Museum of Natural History, Sofia. The only authentic specimens from Bulgaria are those from Troyanska Stara Planina Mts, the upper station of the Sopot lift, 1400 m altitude, 11.VII.1994, one forewing [probably eaten by a bat] of a female specimen (BESHKOV & VASSILEV, 1996: 138) and Sofia town 09.VII.1973, S. BOCHAROV leg. in his home, single specimen in the collection of BOCHAROV in the National Museum of Natural History, Sofia. The present author thinks that *Ophiusa tirhaca* is not a native species to Bulgaria. The larvae are polyphagous on various shrubs, bushes and trees, but the species cannot survive the Bulgarian winter. It seems to be a migrant species in Bulgaria, which might occur anywhere in the country.

Genus *Dysgonia* HÜBNER, [1823]

= *Prodotis* JOHN, 1910 auct.

**75. *Dysgonia algira algira* (LINNAEUS, 1767)\***

= *ajgira* (incorrect subsequent spelling)

= *algira europea* SCHAWERDA, 1912

\* *Dysgonia algira* is one of the most common moth species in Bulgaria, known everywhere in the country. It is another species wrongly not included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 255).

**76. *Dysgonia torrida torrida* (GUENÉE, 1852)\***

\* So far, *Dysgonia torrida* is known in Bulgaria only from the southwestern part of the country and from the S Black Sea Coast as follows: SW Bulgaria: Melnik town, 400 m altitude, 05.VII.1960, S. BOCHAROV leg., several specimens in the collection of BOCHAROV in the National Museum of Natural History, Sofia; Sandanski town, 16.VII.1985, one specimen on a lamp in the town Park together with *D. algira* (F. FRANKE, pers. comm. 04.II.1999); Kresna Gorge, Peyo Yavorov Railway Station (leg. and in coll. I. STOYTCHEV, S. BESHKOV det.) (BESHKOV, 1993: 376; BESHKOW, 1998: 241) and Novo Konopladi village, also in SW Bulgaria (leg. and in coll. V. GASHTAROV, S. BESHKOV det.) (BESHKOV & GASHTAROV, in press), genitalia of both specimens (Kresna and Novo Konopladi) checked by the present author. With doubt for Pirin Mts, Liljanovo village (J. GELBRECHT, pers. comm.), genitalia not checked; S Black Sea Coast: Lozenetz village, Bourgass Region, 04.VIII.1999, S. LAZAROV leg. 1 ♀. A paleosubtropic species, in the Balkan Peninsula known also from Albania (BESHKOV & MISJA, 1995: 351, 357; BESHKOV, 1995b: 375, 380, 387), Greece, Croatia and Montenegro. All previously known localities in Europe are close to the sea coasts. Peyo Yavorov Railway Station seems to be the European locality most remote from the sea coast.

Genus *Grammodes* GUENÉE, 1852

**77. *Grammodes bifasciata bifasciata* (PETAGNA, 1787)\***

= *geometrica* auct., nec FABRICIUS, 1775

\* BACHMETJEV (1902: 442), following the unpublished manuscript of H. FIGULEV reported *Grammodes bifasciata* from Sliven town, June to July. According to REBEL (1903: 238) and to BURESCH & TULESCHKOW (1932: 71, 1935: 148), this record is probably doubtful. BURESCH & TULESCHKOW (1935: 148) stated that it could be found in the district of Petrich and Smolyan towns in S Bulgaria. The next record for Bulgaria is by KARNOSCHITZKY (1954: 183): Black Sea Coast near Varna [= Stalin] town. Many other localities of this paleosubtropic species have been found subsequently, all of them in S Bulgaria. It has two extended generations from late spring to autumn and comes both to lamps and sugaring. The present author found several specimens in the collection of J. GANEV in the National Museum of Natural History, Sofia, in a box with material from SW Bulgaria: "Kozuh" and "Sestrino". These specimens are among others with the label: "Belogradchik [NW Bulgaria], 22.9. [1982]". The presence in the series of such species as *Anticlea badiata*, which flies in early spring and *Agrotis biconica*, suggests wrongly given locality and collecting time, due to exchanged labels. These data must therefore be discounted.

Genus *Prodotis* JOHN, 1910

= *Grammodes* GUENÉE, 1852, auct.

**78. *Prodotis stolidia stolidia* (FABRICIUS, 1775)**

= *stelida* (incorrect subsequent spelling)

= *Eulidia stupida* (HERRICH-SCHÄFFER, 1851)

= ab. *incompleta* BURESCH, 1915, nomen oblitum, syn. nov.\*

\* The taxon *Leucanitis stolidus* ab. *incompleta* is described in BURESCH (1915: 82–83) as follows: “ one specimen without inner light transversal line on the forewings ” Type locality: Bulgaria, Elidere in Rhodopi Mts.

Genus *Drasteria* HÜBNER, 1818

= *Leucanitis* GUENÉE, 1852

= *Syneda* GUENÉE, 1852

= *Aleucanitis* WARREN, 1913

#### 79. *Drasteria cailino cailino* (LEFEBVRE, 1827)

= *caylino* (incorrect subsequent spelling)

= *gentilis* FRIVALDSZKY, 1837 (nec STAUDINGER, 1897) nomen oblitum, **syn. nov.\***

\* This name was first published by FRIVALDSZKY (1837: 172, Tab. VII, 2) as *Ophiusa gentilis* (type locality: Karlova) [Central Bulgaria, Karlovo town]. A hitherto misunderstood synonym, originating from Bulgaria. The name *gentilis* STAUDINGER, 1897 is a synonym of *Clytie terrulenta* (CHRISTOPH, 1893) and a homonym of *gentilis* FRIVALDSZKY, 1837. *Drasteria cailino* has recently been reported several times, new for Bulgaria, from Alibotoush [= Slavyanka] Mts by TULESCHKOW (1931a: 27; 1931b: 195) and by DRENOWSKI (1931a: 17; 1931b: 59) at an altitude of 1450–1700 m. Many other reports, mostly from low altitudes follow subsequently for this species, which is not rare in Bulgaria.

#### 80. *Drasteria caucasica caucasica* (KOLENATI, 1846)\*

\* At present, the variable sexual dimorphic species *Drasteria caucasica* (pl. 1, fig. 2; col. pl. I, fig. 1) is known in Bulgaria only from the N Black Sea Coast: Krapetz village (GANEV & BESHKOW, 1987: 117), Shablenska Touzla Lake near Cape Shabla and Shablensko Ezero Lake (BESHKOW, 1992: 54) in two (or more?) generations, from the first half of May to the first half of August. Wrongly not mentioned for the Bulgarian fauna in NOWACKI & FIBIGER (1996: 255).

Genus *Lygephila* BILLBERG, 1820

= *Asticta* HÜBNER, [1823]

= *Toxocampa* GUENÉE, 1841

= *Eccrita* LEDERER, 1857

= *Craccaphila* BECK, 1996

#### 81. *Lygephila lusoria lusoria* (LINNAEUS, 1758)\*

\* The first report of *Lygephila lusoria* (LINNAEUS) for Bulgaria was by BACHMETJEV (1902: 443) for Sliven town, May to June, following the unpublished manuscript of H. FIGULEV. REBEL (1903: 240) also reported *Lygephila lusoria* from Sliven (“Kirchenwald, HABERHAUER leg.” and wrongly determined as *Eccrita ludicra* Hb. by him—HABERHAUER). The reports of MANN (1866) and of BACHMETJEV (1902: 443) for Dobrogea follow the record of VON MALINOVSKY for Tulchea, Danube Delta. Reported from Stara Planina Mts without specific locality by DRENOWSKI (1930a: 20), who probably quoted the above data for Sliven. Recently reported from Kresna [Gorge] in SW Bulgaria (Mészáros et al., 1984b: 201). The present author found one specimen of *Lygephila lusoria* in the collection of the National Museum of Natural History (Sofia) with the label “Vrana près Sofia, Ses A. R. les Princes BORIS et CYRILLE, VI.1915” This is the only Bulgarian *Lygephila lusoria* specimen the present author has seen.

*Lygephila ludicra ludicra* (HÜBNER, 1790)\*

\* *Lygephila ludicra* is another species which might possibly be found in Bulgaria (see also under *Lygephila lusoria* (LINNAEUS, 1758)). However, there is at present no record and *Lygephila ludicra* is wrongly included for the Bulgarian fauna in NOWACKI & FIBIGER (1996: 255).

**82. *Lygephila pastinum pastinum* (TREITSCHKE, 1826)\***

\* DRENOWSKI (1931a: 16) reported *Toxocampa pastinum* Tr. from Alibotoush [= Slavyanka] Mts as a new species for Bulgaria. However, in his next articles DRENOWSKI did not include it for the fauna of Alibotoush Mts, nor for the Bulgarian fauna. NESTOROVA-KVARTIRNIKOVA (1972) reported *Lygephila pastinum* as a new species for Bulgaria from Vitosha Mts. NESTOROVA (1974: 229) reported *Lygephila pastinum* from Vitosha Mts, BAN Chalet, 1450 m, May, June and August. *L. pastinum* is included for Bulgaria in the list of GANEV (1992a: 159). The source of this information is probably the data of NESTOROVA. *Lygephila pastinum* is also included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 255), probably following the article of GANEV mentioned above. The only definite specimens, all males, of *Lygephila pastinum* from Bulgaria, seen by the present author are from the localities as follows: Rhodopi Mts, above Trigrad village, 1220 m, 20.VII.1998, (pl. 1, fig. 3) S. BESHKOV & S. ABADJIEV leg., in coll. S. BESHKOV (genitalia checked); Rhodopi Mts, Orpheus Chalet near Borino, 11.VII.1979, 1 ♂, leg., det. and in coll. AL. SLIVOV (pl. 1, fig. 4); the third specimen, ♂, also in coll. AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia) is also from Orpheus Chalet, but from 14.VII.1979 (pl. 1, fig. 5). The last one is wrongly determined by him as *Lygephila lusoria* L. However, it is a true *Lygephila pastinum* specimen (genitalia checked by the present author).

**83. *Lygephila viciae viciae* (HÜBNER, [1822])****84. *Lygephila craccae craccae* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *Toxocampa craccae* F. (incorrect subsequent spelling and author's name in BURESCH, 1915)

**85. *Lygephila procax procax* (HÜBNER, [1813])**

= *limosa* (TREITSCHKE, 1826)

Genus *Tathorhynchus* HAMPSON, 1894

*Tathorhynchus exsiccata exsiccata* (LEDERER, 1855)

\* *Tathorhynchus exsiccata* (LEDERER, 1855) is a possible addition to the fauna of Bulgaria. On the Balkan Peninsula known from Serbia (ZECEVIC, 1996: 65), Dalmatia, Republic of Macedonia (Ohrid town) and from Greece.

Genus *Apopestes* HÜBNER, [1823]

= *Spintherops* BOISDUVAL, 1840

**86. *Apopestes spectrum spectrum* (ESPER, [1787])**

Genus *Autophila* HÜBNER, [1823]

= *Apopestes* HÜBNER, [1823], auct.

= *Spintherops* BOISDUVAL, 1840

= *Cheirophanes* BOURSIN, 1955

**87. *Autophila dilucida dilucida* (HÜBNER, [1808])\***

= *dilucidea* (incorrect subsequent spelling)

= var. *praeclara* (SCHAWERDA, 1918)

\* Probably some of the specimens reported in the past as *Autophila dilucida* (HÜBNER) belong to *Autophila limbata* (STAUDINGER) and conversely, due to misidentification. The taxon *Autophila dilucida* ssp. *argentea* (CARADJA, 1930), described from Bulgaria, Black Sea Coast, Balchik, is a subspecies of *Autophila asiatica* (STAUDINGER, 1888). The first report of *A. dilucida* for Bulgaria was by BURESCH (1939: 146) from "Temnata Douпка" Cave near Lakatnik Railway Station, 15.VII.1925 at 35 m under ground. Many other localities have been recorded more recently for this not very rare species in Bulgaria.

#### 88. *Autophila limbata limbata* (STAUDINGER, 1871)\*

\* The first record of *Autophila limbata* (STAUDINGER) for Bulgaria was by ZUKOWSKY (1935: 5) from Kresna [= Salihaga] town. Later, (SKALSKI, 1971: 216; SKALSKI, 1972: 92), it was again reported as a new species for Bulgaria from Temnata and Razhiskata Douпки Caves in Iskarski Prolom Gorge near Lakatnik railway station. Many others records follow after that (SLIVOV, 1978a: 40; GYULAI, 1983: 206; GANEV, 1985b: 91; BESHKOV & PETROV, 1996: 445) and some others. Probably some of the specimens reported in the past as *Autophila dilucida* belong to *Autophila limbata* and conversely, due to misidentification.

*Autophila libanotica* (STAUDINGER, 1901) ssp. *osthelderi* BOURSIN, 1940\*

\* *Autophila libanotica osthelderi* has been reported from near Bulgaria—Greece, Drama, Phalakron Mts above Volas, 1700 m (FIBIGER, 1992b: 297–298)—, and it might be expected in Bulgaria as well.

#### 89. *Autophila asiatica* (STAUDINGER, 1888) ssp. *argentea* (CARADJA, 1930)\*

= *Autophila dilucida argentea* (CARADJA, 1930), auct.\*\*

\* In the original description by CARADJA (1930: 46), this taxon is described as *Apopestes dilucida* ssp. *argentea* from the Black Sea Coast, Balchik (then occupied by Romania), mid-July, 1929–1931, 9 ♂♂ and 8 ♀♀ (see also in POPESCU-GORJ, 1964: 182, pl. XIV: 53–54). The type locality of the taxon *argentea* CARADJA, 1930, is in Bulgaria. The present author has found a single female specimen in the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia) with the label: "Kubrat, L.S. Seslav, 2.–3.06.1976, leg. AL. SLIVOV" [Seslav hunting reserve near Koubrat town, Razgrad region, NE Bulgaria] (col. pl. I, fig. 2). Underneath this specimen is very distinctive; It is whitish with wide blackish outer margins and it looks like *Dichagyris melanura*. To be sure for the correct identification the genitalia of this specimen were examined (gen. prep. 1./31.XII.1999, S. BESHKOV) (gen. fig. 4) and compared with the genitalia of *Autophila dilucida* (gen. fig. 3). *Autophila asiatica* (STAUDINGER) is a species wrongly not included for Bulgaria in NOWACKI & FIBIGER (1996: 256).

\*\* Described from Bulgaria, Black Sea Coast, "Silberküste", Balchik (CARADJA, 1930: 46) as *Apopestes dilucida* ssp. *argentea*. In POPESCU-GORJ (1964: 182, pl. XIV: 53–54) ssp. *argentea* CARADJA, 1930 is transferred from *dilucida* (HÜBNER, [1808]) to *asiatica* (STAUDINGER, 1888). See also under *Autophila dilucida*.

Subgenus *Cheirophanes* BOURSIN, 1955

#### 90. *Autophila ligaminosa ligaminosa* (EVERSMANN, 1851)\*

= *cataphanes* (HÜBNER, [1809–1813]), auct.

= *catafanes* (incorrect subsequent spelling)

= *calaphanes* (incorrect subsequent spelling)

= *cotaphanes* (incorrect subsequent spelling)

\* *Spintherops calaphanes* Hb. was reported for the first time for Bulgaria from Sofia, 800 m altitude by BACHMETJEV (1902: 442), following a communication of AL. DRENOWSKI. According to REBEL (1903: 240)

this report is doubtful. Later, reported from Sliven town, H. PIGULEV leg. (BACHMETJEV, 1910a: 285). The first reports for *Apopestes cataphanes* var. *ligaminosa* for Bulgaria were by DRJANOVSKY (1906: 99, 108) for Vitosha Mts and by DRENOWSKY (1907: 19) for Sofia town. Later, DRENOWSKI (1931b: 59; 1934a: 76) reported it from Alibotoush [= Slavyanka] Mts at an altitude of 1000–1500 m as *Apopestes cataphanes ligaminosa* Ev. Recently *Autophila ligaminosa* was proven for Alibotoush [= Slavyanka] Mts, between “Livada” and Goleshovo village, 1500 m, 15.VII.1998, S. BESHKOV & S. ABADJIEV leg., single female specimen in coll BESHKOV, genitalia checked (gen. fig. 136). The species reported as *Apopestes cataphanes* from “Peshtera” Cave near Belovo Railway Station (BURESCH & TULESCHKOW, 1935: 158; GUÉRGUIEV & BERON, 1962: 342) should belong to *Autophila ligaminosa* (EVERSMANN) according to BESHKOV & PETROV (1996: 446). The present author found this specimen in the collections of the National Museum of Natural History, Sofia, labelled “Belovo Railway Station, in the cave near the marble-quarr, 16.VII.1924, D. ILCHEV leg.”, hand written in Cyrillic and with a label “*Apopestes cataphanes*”. Another identification label “*Autophila limbata* STGR., ♀, BOURSIN det.” shows that this specimen is neither *A. ligaminosa* nor *A. cataphanes*. According to BURESCH (1939: 156) “from the revision made by Dr. CH. BOURSIN in Natural History Museum (Paris) it turns out that the species reported in BURESCH & TULESCHKOW (1935) as *Apopestes cataphanes* Hb. belongs to two species: *Apopestes ligaminosa* Ev. and *Apopestes limbata* STGR. The first one, according to the new systematics is a distinct species, not a variety, known in Kresna Gorge and near Sveti Vrach [Sandanski town]. The species *Cataphanes* according to Dr. BOURSIN does not occur in Bulgaria nor on the Balkan Peninsula” *Autophila ligaminosa* is known also from SW Bulgaria, Sandanski (as Sweti Wratsch) town (REISSER & ZÜLLICH, 1934: 14), Melnik town (BESHKOW, 1992: 54; GOATER, 1996: 271, 284); Rozhen Monastery (BESHKOW, 1992: 54); Kresna Gorge (MÉSZÁROS et al., 1984b: 201) and Kresna Gorge, Stara Kresna Railway Station (BESHKOW, 1992: 54); S Pirin Mts, above Goleshovo village, Starshelitzka Cave 1000–1100 m altitude (BESHKOV, 1995a: 207); Salievata Peshtera Cave near Gospodintzi village, Gotze Delchev district (BESHKOV, 1995a: 207); Aramiiska Douпка Cave near Levounovo village, Petrich district (BESHKOV & PETROV, 1996: 445). Reported with a question mark in Slivov (1990: 195) from Vitosha Mts, Boyana. All reports of *Apopestes cataphanes* Hb. in the Bulgarian literature have to be referred to *Autophila* (*Cheirophanes*) *ligaminosa ligaminosa* (EVERSMANN, 1851). According to HACKER (1990) “*Autophila cataphanes* (HÜBNER, [1809–1813]) is an atlantico-mediterranean species inhabiting neither the Balkans nor the Near East. This name is often given to other species of this group in the old literature” (see also BESHKOV & PETROV, 1996: 446). *Autophila ligaminosa* is another species wrongly excluded for the Bulgarian fauna in NOWACKI & FIBIGER (1996: 256).

#### 91. *Autophila anaphanes anaphanes* (BOURSIN, 1940)\*

\* Recent reports for *Autophila anaphanes* from Bulgaria are from SW Bulgaria, Sandanski town (FRANKE, 1989: 147; LEHMANN, 1990: 131); SW Bulgaria, Liljanovo village above Sandanski town (J. GELBRECHT, pers. comm.); Vitosha Mts, “Bulchata Skala”, 1500 m (SLIVOV, 1990: 195). Reported in the past from some other localities in SW Bulgaria where *Autophila ligaminosa* (EVERSMANN) is a common species, but the two have not been reported together in the same articles. It seems that in Bulgaria *Autophila anaphanes* (BOURSIN) is either a very rare species or has been confused with *A. ligaminosa*, due to misidentification. The present author has never seen Bulgarian specimens of *A. anaphanes*.

#### *Autophila cataphanes cataphanes* (HÜBNER, [1809–1813])\*

\* All reports for *Autophila cataphanes* from Bulgaria (and for the Balkan Peninsula as well) must be referred to *A. ligaminosa* (or possible to *A. anaphanes*). *Autophila cataphanes* has never been found in Bulgaria. According to HACKER (1990) “*Autophila cataphanes* (HÜBNER, [1809–1813]) is an atlantico-mediterranean species inhabiting neither the Balkans nor the Near East. This name is often given to other species of this group in the old literature” (see also BESHKOV & PETROV, 1996: 446) and here under *A. ligaminosa* (EVERSMANN).

Genus *Exophila* GUENÉE, 1841

= *Exophyla* (incorrect subsequent spelling)

**92. *Exophila rectangularis rectangularis* (GEYER, [1828])**

Genus *Catephia* OCHSENHEIMER, 1816

**93. *Catephia alchymista alchymista* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *alchimista* (incorrect subsequent spelling)

Genus *Aedia* HÜBNER, [1823]

= *Anophia* GUENÉE, 1852

**94. *Aedia funesta funesta* (ESPER, [1786])**

**95. *Aedia leucomelas leucomelas* (LINNAEUS, 1758)**

Genus *Tyta* BILLBERG, 1820

= *Acontia* OCHSENHEIMER, 1816, auct.

**Genus (?)\***

\* This genus should be placed somewhere around the genus *Aedia* HÜBNER, [1823], but its name is still unknown for the present author.

**96. Species (?)\***

\* A single female specimen from SW Bulgaria, Kroupnik [Kresna Gorge between Kresna town and Kroupnik village, ~250 m alt.], 02.VII.1957, D. Gogov leg., has been found in the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences, Sofia (pl. 12, figs 2, 3). Initially this specimen was determined by SLIVOV as *Oncocnemis confusa* FRÉ. Subsequent an identification label "keine *confusa*" has been added by a foreign, german speaking specialist. This specimen still remains undetermined and is very possibly still undescribed. Its appearance and genitalia (gen. fig. 135) primarily suggested that it should belong to the tribe Oncocnemidini, but the venation of the wings (venae M2 of the hindwing is present) subsequently showed that it belongs to a genus of the Quadrifinae. The true genus it is belonging to is probably not yet described. Very possibly this species belongs to a genus related to the genus *Aedia* and its allied taxa. The female genitalia does not fit to the genera the present author is familiar with. M. FIBIGER (conversation at XIIth SEL Congress and pers. comm. 12.VII.2000) informed the present author that he knows this species from Yemen (E Africa). The Bulgarian specimen is also known to him from a picture received from W. HEINICKE (who examined the specimen of SLIVOV and labelled it "keine *confusa*"). According to FIBIGER the occurrence in Bulgaria must surely be due to human transportation. Solving this problem will be an aim of the present author for the near future and any ideas and suggestions are greatly appreciated. The name of the genus and the species will be known soon.

**97. *Tyta luctuosa luctuosa* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *luctuosa* ESPER (incorrect author's name)

= *lustuosa* ESPER (incorrect subsequent spelling and author's name)

= *luctuosa* var. *ochracea* (TUTT, 1892)

= ab. *angustifascia* (WARREN, 1913)



Genus *Callistege* HÜBNER, [1823]

= *Euclidimera* HAMPSON, 1913

98a. *Callistege mi mi* (CLERCK, 1759)

= var. *ochrea* (TUTT, 1892)

98b. *Callistege mi elzei* DE FREINA, 1976\*

\* The type locality of *Callistege mi elzei* DE FREINA is the Bulgarian S Black Sea Coast (DE FREINA, 1976: 99). Recently *Callistege mi elzei* has been collected by the present author in several other localities in the country as follows: E Rhodopi Mts, Yazovir Ivaylovgrad Reservoir, Arda Chalet near Dabovetz village, 27.IV.1990 (col. pl. I, figs 3, 4); SW Bulgaria, Ograzhden Mts, below Markovi Kladentzi Top, 1350–1400 m altitude, 27.V.1996; Lozenska Planina Mts, above German village, Sofia Region, 1000 m, 24.V.1997 (BESHKOV & GASHTAROV, in press). *Callistege mi mi* (pl. 1, figs 6, 7) inhabits mostly the mountains at an altitude up to 2000 m and has never been found in a lowland temperate area in the south. However, it seems that *elzei* DE FREINA is probably only an ecological form of *Callistege mi* (CLERCK).

Genus *Euclidia* OCHSENHEIMER, 1816

= *Ectypa* BILLBERG, 1820

= *Ephesia* HÜBNER, 1818, auct.

99. *Euclidia glyphica glyphica* (LINNAEUS, 1758)

= *gliphica* (incorrect subsequent spelling)

= ab. *tristicula* SCHULTZ, 1908

Genus *Gonospileia* HÜBNER, [1823]

= *Euclidiana* RÁKOSY, 1985

100. *Gonospileia triquetra triquetra* ([DENIS & SCHIFFERMÜLLER], 1775)

= *triquestra* F. (incorrect subsequent spelling and author's name)

Genus *Laspeyria* GERMAR, 1810

101. *Laspeyria flexula flexula* ([DENIS & SCHIFFERMÜLLER], 1775)

Genus *Zethes* RAMBUR, 1833

102. *Zethes insularis insularis* RAMBUR, 1833\*

= *insularia* (incorrect subsequent spelling)

\* The first report of *Zethes insularis* (as *insularia*) for Bulgaria was by BURESCH (1909b: 32) from Rhodopi Mts, Batchkovski Manastir monastery. There are some other more recent records from SW Bulgaria, E Rhodopi Mts and the southern slopes of W Rhodopi Mts, but it is a rare species in the country. It comes both to light and sugar.

Genus *Arytrura* JOHN, 1912

*Arytrura musculus musculus* (MÉNÉTRIÉS, 1859)\*

\* *Arytrura musculus* is known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 66, 465, map 73). It is likely to occur in the Bulgarian part of the Dobrogea or at the N Black Sea Coast.

Subfamily Calpinae GUENÉE, 1841

= Ophiderinae GUENÉE, 1852

= Scoliopteryginae SPULER, 1908

Genus *Scoliopteryx* GERMAR, 1810

103. *Scoliopteryx libatrix libatrix* (LINNAEUS, 1758)

= *salictaria* (PODA, 1761)

= *f. suffusa* TUTT, 1892

Genus *Calyptra* OCHSENHEIMER, 1816

= *Calpe* TREITSCHKE, 1825

104. *Calyptra thalictri thalictri* (BORKHAUSEN, 1790)

= *capucina* (ESPER, [1789])

Subfamily Hypeninae HERRICH-SCHÄFFER, 1845

= Rivulinae GROTE, 1895

Genus *Zekelita* WALKER, 1863

= *Rhynchodontodes* WARREN, 1913

Subgenus *Rhynchodontodes* WARREN, 1913

105. *Zekelita antiqualis antiqualis* (HÜBNER, [1813])

Subgenus *Ravalita* LÖDL & MAYERL, 1997

*Zekelita ravalis ravalis* (HERRICH-SCHÄFFER, 1851)\*

= *revolutalis* (ZELLER, 1852) sensu auct.\*\*

\* In CARADJA (1932: 39) *Zekelita ravalis* is reported as "*Hypena ravalis* HS." from "Balchik 19 und 20 July 1 Männlich und Weibliche, eine pontische Art.". In the same article *Zekelita antiqualis* (HÜBNER) is reported on the same page, which suggests that there was no confusion of names and that *antiqualis* was identified correctly. The other report of *Zekelita* (as *Rhynchodontodes*) *ravalis* from the Balkans was by WILTSHIRE (see HACKER, 1990: 522), which seems doubtful. The correct identity of the specimens from Balchik, except for proven *antiqualis* HÜBNER is not clear: authentic *Z. ravalis* (HERRICH-SCHÄFFER,

1851) or *Z. ravalis* (STAUDINGER, 1878). Both are Eastern species, known from S Russia and the Near East. According to HACKER (1990: 521–522) “In the older literature all those very similar species are commonly referred to as ‘*ravalis*’ Almost all those records actually refer to *R. revolutalis* ZELLER” According to FIBIGER & HACKER (1991: 22) *Z. ravalis* (HERRICH-SCHÄFFER, 1851) is a common species in Asiatic Turkey, but in Europe it is known only from Greece, Island of Samos. However, the above mentioned record must be referred to *Z. revolutalis*, which is another good species. *Z. ravalis* is known in Europe only from SE Russia (FIBIGER, pers. comm. 12.VII.2000). It seems most likely that the specimens of CARADJA from Balchik are also *Z. ravalis*. The present author has collected in the districts of Balchik for many years, but the only species from this group he has found is the true *Zekelita antiqualis antiqualis* (HÜBNER), which is sometimes abundant there. The presence of *Zekelita ravalis* in Bulgaria is still questionable. For the taxonomy and synonymy of the genus *Zekelita* see in LÖDL & MAYERL (1997a; 1997b) and in MAYERL & LÖDL (1997).

\*\* *Z. revolutalis* is another good species. In Europe it is known only from the Island of Samos. It is common in Turkey (FIBIGER, pers. comm. 12.VII.2000).

#### Genus *Hypena* SCHRANK, 1802

- = *Hypaena* (incorrect subsequent spelling)
- = *Bomolocha* HÜBNER, [1825]
- = *Ophiuche* HÜBNER, [1825]
- = *Dichromia* GUENÉE, 1854
- = *Rostrypena* BECK, 1996
- = *Obesypena* BECK, 1996

#### Subgenus *Hypena* SCHRANK, 1802

##### 106. *Hypena proboscidalis proboscidalis* (LINNAEUS, 1758)

- = *proboscidalis* H.-S. (incorrect author's name)
- = var. *brunnea* TUTT, 1892

##### 107. *Hypena rostralis rostralis* (LINNAEUS, 1758)

- = *palpalis* (FABRICIUS, 1775), nec *palpalis* (HÜBNER, 1796)
- = var. *variegata* TUTT, 1892
- = *radiatalis* (HÜBNER, 1796)

##### 108. *Hypena obesalis obesalis* TREITSCHKE, 1829\*

- = *crassalis* (HÜBNER, 1796), preoccupied, nec FABRICIUS, 1787

\* *Hypena obesalis* is not a rare species in Bulgaria, most common in the mountains up to 2400 m altitude (Rila Mts, Mussala Chalet, S. BESHKOV leg.), but it also occurs in temperate areas at low altitude (Kresna Gorge) (MÉSZÁROS et al., 1984b: 201). Found hibernating in caves as well (BESHKOV & PETROV, 1996: 441).

##### 109. *Hypena obsitalis obsitalis* (HÜBNER, [1813])\*

\* The only report of *Hypena obsitalis* for Bulgaria is from SW Bulgaria, near Sandanski town (BUSSE & OCKRUCK, 1991: 20). On the same page in this article also the taxon *palpalis* HÜBNER is reported, which suggests that misidentification or confusion of the names is unlikely. Known from several localities in N Greece, near the Bulgarian/Greece border.

##### 110. *Hypena palpalis palpalis* (HÜBNER, 1796)

- = *extensalis* GUENÉE, 1854

**111. *Hypena munitalis munitalis* MANN, 1861\***

= *minitalis* (incorrect subsequent spelling)

\* The first report of *Hypena munitalis* MANN for Bulgaria was by LEDERER (1863: 40) for the "high mountains". According to BACHMETJEV (1902: 457), the record of LEDERER (1863) is for the Black Sea Coast, Varna town. BACHMETJEV (1902: 443), following the unpublished manuscript of H. PIGULEV reported *munitalis* from Sliven town. REBEL (1903: 242) reported *munitalis* from "Gök Dagh, 800 m." [= Sinite Kamani above Sliven town], where it has been taken since then on several occasions. There are specimens from Sliven in the collection of the National Museum of Natural History, Sofia. Also reported from Alibotoush [= Slavyanka] Mts, 1450–1500 m altitude (DRENOWSKI, 1931b: 59), from Alibotoush [= Slavyanka] Mts up to 1400 m. altitude (DRENOWSKI, 1934a: 76) and from E Rhodopi Mts: Kardzhali town and Mandritza village (TULESCHKOV & SLIVOV, 1975: 141). A single specimen with the label "Pirin Mts, Yane Sandansky Chalet, 1200 m, 29.VII.1969" is present in the coll. of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences.

*Hypena lividalis lividalis* (HÜBNER, 1796)

\* *Hypena lividalis* (HÜBNER, 1796) is known from Albania, former Yugoslavia and from Greece and probably will occur in Bulgaria. However, the only report for Bulgaria (NOWACKI & FIBIGER, 1996: 257) seems to be unsubstantiated.

Subgenus *Bomolocha* HÜBNER, [1825]*Hypena crassalis crassalis* (FABRICIUS, 1787)\*

= *fontis* (THUNBERG, 1788)

\* BACHMETJEV (1902: 443), following the unpublished manuscript of H. PIGULEV reported *Hypena crassalis crassalis* (FABRICIUS) from Sliven town, May to June (as *Bomolocha fontis* THUNB.). This is the only record of this species in Bulgaria, and REBEL (1903: 242), as well as BURESCH & TULESCHKOW (1932: 71, 1935: 165) regard it as doubtful. The present author, although he has never seen this mountain species in Bulgaria, thinks that the record of BACHMETJEV (1902: 443) is likely to be correct, for the reason that it would be impossible to mistake such a distinctive species as *Hypena crassalis*. However, so far there is no other report for the country. It is included for Bulgaria in NOWACKI & FIBIGER (1996: 257). The source of their data is unclear for the present author. The presence of *Hypena crassalis* in Bulgaria still requires confirmation.

Genus *Phytometra* HAWORTH, 1809

= *Prothymia* HÜBNER, [1823]

= *Prothymnia* (incorrect subsequent spelling)

**112. *Phytometra viridaria viridaria* (CLERCK, 1759)**

= *viridarie* (incorrect subsequent spelling)

= *laccata* (SCOPOLI, 1763)

= *aenea* ([DENIS & SCHIFFERMÜLLER], 1775)

= *aenea* HÜBNER (incorrect author's name)

= *aenea* HAW. (incorrect author's name)

= *viridaria* var. *fusca* (TUTT, 1892)

= *viridaria* ab. *pusca* TUTT (incorrect subsequent spelling)

= *viridaria* ab. *suffusa* (TUTT, 1892)

= ab. *modesta* CARAD.\*

\* *Prothymnia viridaria* CL. ab. *modesta* CARAD. was reported from Sliven by REBEL (1903: 235) and from Balchik by CARADJA (1930: 46).

*Phytometra amata* (BUTLER, 1878)\*

\* *Phytometra amata* is a species recently found in Europe, collected in the Balkan Peninsula, Slovenia (KÜHNE, 1997). Its origin there is unclear, but if it forms a stable native breeding population, it may be expected in other parts of the Balkan Peninsula.

Genus *Rivula* GUENÉE, [1845]

113. *Rivula sericealis sericealis* (SCOPOLI, 1763)

= *munda* (HUFNAGEL, 1766), nec [DENIS & SCHIFFERMÜLLER], 1775

Genus *Raparna* MOORE, 1882

114. *Raparna conicephala conicephala* (STAUDINGER, 1870)\*

= *fumicollis* (ROGENHOFFER, 1873)

= *fimicollis* (incorrect subsequent spelling)

\* The first, probably doubtful record of *Raparna conicephala* from Bulgaria is from "South Balkan" [Balkan Peninsula or Balkan, Stara Planina Mts?] (STAUDINGER & REBEL, 1901; BURESCH & TULESCHKOW, 1935: 134). Known from Sandanski [= Sveti Vrach] town in SW Bulgaria, 300 m, as "*Prothymnia conicephala* STGR. und deren ab. *fumicollis* RGHFR." (REISSER & ZÜLLICH, 1934: 14); SW Bulgaria, Kresna [Gorge] (MÉSZÁROS et al., 1984b: 201) and S Pirin Mts, Liljanovo village above Sandanski town, 500 m altitude, 30.VI.–29.VII.1989 (EICHLER, HACKER & SPEIDEL, 1996: 264); Slavyanka [= Alibotoush] Mts [Petrovo village] (BESHKOV, 1993: 377; BESHKOW, 1998: 241) and Trivoditzi village, Pazardzhik Region (BESHKOV & GASHTAROV, in press).

Genus *Parascotia* HÜBNER, [1825]

= *Boletobia* BOISDUVAL, 1840

115. *Parascotia fuliginaria fuliginaria* (LINNAEUS, 1761)

= *fuliginaria* (incorrect subsequent spelling)

Genus *Colobochyla* HÜBNER, [1825]

= *Madopa* STEPHENS, 1829

116. *Colobochyla salicalis salicalis* ([DENIS & SCHIFFERMÜLLER], 1775)\*

= *salicalis* (incorrect subsequent spelling)

\* TULESCHKOW (1930b: 146) reported *Colobochyla salicalis* as a new species for Bulgaria from Preobrazhenski Manastir monastery, the district of Tarnovo town in N Bulgaria. There are now many other records from all over the country.

Genus *Zebeeba* KIRBY, 1892

= *Hypena* SCHRANK, 1802 auct.

= *Nycteola* HERRICH-SCHÄFFER, [1851], preoccupied

**117. *Zebeeba falsalis falsalis* (HERRICH-SCHÄFFER, 1839)\***

\* The only report of *Zebeeba falsalis* (HERRICH-SCHÄFFER) in Bulgaria is from E Rhodopi Mts, Siv Kladenetz village, 22.–23.V.1994, one specimen (BESHKOV, 1995a: 207). Probably occurs in SW Bulgaria, too.

Subfamily Euteliinae GROTE, 1882

Genus *Eutelia* HÜBNER, [1823]

= *Eurhipia* BOISDUVAL, 1829

= *Adoraria* BECK, 1996

**118. *Eutelia adulatrix adulatrix* (HÜBNER, [1813])****119. *Eutelia adoratrix adoratrix* (STAUDINGER, 1892)\***

\* The first report of *Eutelia adoratrix* (STAUDINGER) for Bulgaria is from SW Bulgaria, Melnik town (MÉSZÁROS, RONKAY, HERCZIG, SZEÓKE & SZABÓKY, 1984b: 200). Known also from SW Bulgaria, Belassitza Mts, Belassitza Chalet, 06.VI.1995, GASHTAROV & RADEV leg. (BESHKOV & RADEV, in press), and from SW Bulgaria, S Pirin Mts, Liljanovo village above Sandanski town, 500 m altitude, 30.V.–29.VI.1988 (EICHLER, HACKER & SPEIDEL, 1996: 265). *Eutelia adoratrix* (STAUDINGER) is another species wrongly excluded from the Bulgarian fauna by NOWACKI & FIBIGER (1996: 258).

Subfamily Plusiinae BOISDUVAL, 1829

Genus *Euchalcia* HÜBNER, [1821]

= *Pareuchalcia* BECK, 1991

**120. *Euchalcia variabilis* (PILLER, 1783) ssp. *fuscolivacea* VARGA & RONKAY, 1984\***

\* *Euchalcia variabilis fuscolivacea* is known from several localities in the Rila Mts (type locality) (VARGA & RONKAY, 1984: 205) at an altitude of 2200–2260 m, and recently from some other localities in the Rila Mts at an altitude between 1600–2400 m. Known also from the Pirin Mts, Banderitza Chalet, 1500 m altitude (REISSER & ZÜLLICH, 1934: 14; BURESCH & TULESCHKOW, 1935: 139), who reported it as the nominate *variabilis* PILLER, 1783, and from Peyo Yavorov Chalet, 1800 m (unpublished, leg. and in coll. AL. SLIVOV). Found recently also in the Central Stara Planina Mts, Levski Chalet, 1400 m altitude (BESHKOV & GASHTAROV leg.) (BESHKOV & GASHTAROV, in press).

**121. *Euchalcia modestoides modestoides* POOLE, 1989\***

= *modesta* HÜBNER, 1786 preoccupied.\*\*

= *medesta* (incorrect spelling)

= *viridis* (STAUDINGER, 1901), auct.\*\*\*

\* *Euchalcia modestoides* POOLE, 1989: objective replacement name for *Phalaena Noctua modesta* HÜBNER, 1786, a junior primary homonym of *Phalaena modesta* CRAMER, 1777 (see POOLE, 1989: 396). The first reports for Bulgaria are by MARKOWITSCH (1909a: 22) for Mussa Baba-Teke [= Samuil Railway Station], Razgrad Region and MARKOWITSCH (1909b: 26) for the same locality, but incorrectly given as "Razgrad". Some other localities, in mountains up to 1800 m altitude as well as from the Black Sea Coast, have been reported since for this species, which is rare in Bulgaria.

\*\* For *modesta* HÜBNER, 1786 see POOLE (1989: 396; 1314) and under *Euchalcia modestoides*.

\*\*\* See under *Euchalcia viridis* (STAUDINGER, 1901).

*Euchalcia viridis* (STAUDINGER, 1901)\*

\* *Euchalcia modesta* ab. *viridis* STGR. is reported from Macedonia, Ohrid (TURNER, 1938: 159). *E. viridis* is a species of its own, known from Turkey only and has never been found in the Balkan Peninsula, nor in Europe. The above mentioned report of TURNER refers to *Euchalcia modestoides modestoides* POOLE.

*Euchalcia chlorocharis chlorocharis* (DUFAY, 1961)\*

\* *Euchalcia chlorocharis* (DUFAY, 1961) is a Balkan endemic species, at present known only from Albania (P. TZVETKOV leg., S. BESHKOV det.), Republic of Macedonia and Greece. It may possibly be discovered in Bulgaria, too. The reports for *Euchalcia paulina* (STAUDINGER, 1892) for the Republic of Macedonia, wrongly considered by KOSTROWICKI (1961: 420, 415, fig. 21) as concerning *Euchalcia emichi* (ROGENHOFER & MANN, 1873) refer to *E. chlorocharis* (see also in DUFAY, 1968: 115, 123, 126). See also under *E. paulina* and *E. emichi*.

*Euchalcia paulina* (STAUDINGER, 1892)\*

\* *E. paulina* is known only from SE Turkey and Palestine and has never been found in the Balkan Peninsula, nor in Europe. However, it is reported for Macedonia (Petrina Planina Mts near Ohrid town) as a species new for Europe by TURNER (1938: 159). This report is wrong, due to misidentification and it refers to *E. chlorocharis*. See also under the last one and in DUFAY (1968: 115, 123, 126).

*Euchalcia emichi* (ROGENHOFER & MANN, 1873)\*

\* *E. emichi* is an eastern species, which has never been found in the Balkan Peninsula, nor in Europe. The report of KOSTROWICKI (1961: 420, 415, fig. 21) for it from the Republic of Macedonia refers to *E. chlorocharis* (see also in DUFAY, 1968: 115, 123, 126 and under *E. chlorocharis*).

**122. *Euchalcia consona consona* (FABRICIUS, 1787)\***

\* The first report for *Euchalcia consona* (FABRICIUS, 1787) from Bulgaria was by LEDERER (1863: 26) for Sliven town (also BACHMETJEV, 1902: 457 and REBEL, 1903: 237). The next record, also for Sliven town, was by BACHMETJEV (1902: 438), following the unpublished manuscript of H. PIGULEV. The specimen from Sliven is in the collection of the National Museum of Natural History, Sofia. Some other localities have been discovered subsequently in other parts of the country, mainly at low altitudes, both in South and North Bulgaria.

Genus *Polychrysis* HÜBNER, [1821]**123. *Polychrysis moneta moneta* (FABRICIUS, 1787)\***

\* KOWATSCHEW (1898: 27) recorded *Polychrysis moneta* from Vetovo, Russe Region. BACHMETJEV (1902: 438), following the unpublished manuscript of H. PIGULEV, reported it from Sliven town. According to REBEL (1903: 237) and to BURESCH & TULESCHKOW (1935: 139) both those records are doubtful. However, according to BACHMETJEV (1910a: 285) there is one specimen from Russe town in the collection of KOWATSCHEW. Mr AL. SLIVOV (pers. comm. 09.XI.1999) informed the present author for specimens of *P. moneta* in his collection, collected by PETKOV near Boynitza village (Vidin Region) and near Belogradchik Town, both in NW Bulgaria. The present author has seen these specimens in the collection SLIVOV and indeed they both belong to *Polychrysis moneta*. They are the only specimens from this species labeled from Bulgaria, seen by the present author.

Genus *Lamprotes* REICHENBACH, 1817

**124. *Lamprotes c-aureum c-aureum* (KNOCH, 1781)\***

\* A single specimen of *Lamprotes c-aureum* (KNOCH) from Vidrare village, Botevgrad district, 28.VII. 1989 has been seen by the present author in the collection of J. GANEV. Another known locality is the district of Razgrad town, 10.VI.1996, R. RADEV leg. (BESHKOV & RADEV, in press). Known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 86, 479, map 158), and very likely to occur in the Bulgarian part of the Dobrogea or at the N Black Sea Coast.

Genus *Panchrysia* HÜBNER, [1821]

**125. *Panchrysia aurea aurea* (HÜBNER, [1803])\***

= *deaurata* ESPER, [1787], nec GOEZE, 1781

= *chryson* BORKHAUSEN, 1792 nec ESPER, [1789]

\* The first report for *Panchrysia aurea* (HÜBNER, [1803]) from Bulgaria was by BACHMETJEV (1902: 433) for Kotel town, following unpublished data of H. PIGULEV. According to REBEL (1903: 237) the data for Kotel are wrong, although the present author has seen a specimen of *Panchrysia aurea* (HÜBNER, [1803]), collected above Sliven town (not far away from Kotel) (BESHKOV & NOWACKI, 1998: 49). In this region of the country also known from Preobrazhenski Manastir monastery, the districts of Veliko Tarnovo town, 28.VII.1929, KR. TULESCHKOW leg. (TULESCHKOW, 1930b: 145; 1932b: 29). *Panchrysia aurea* (HÜBNER, [1803]) is known in Bulgaria from the mountains (up to 1650 m altitude) as well as from the sea coast. It is not uncommon near Balchik town, N Black Sea Coast (BESCHKOW, 1990: 75; BESHKOV, NOWACKI & PALKA, 1999: 177).

*Panchrysia v-argenteum v-argenteum* (ESPER, [1798])\*

\* *Panchrysia v-argenteum v-argenteum* (ESPER) has never been found in Bulgaria, and is wrongly included for the Bulgarian fauna in NOWACKI & FIBIGER (1996: 258). From Greece, Mt Olympus, the subspecies *Panchrysia v-argenteum pantheon* VARGA & RONKAY, 1984 is described, an endemic subspecies in the Balkan Peninsula, which also has never been found in Bulgaria.

Genus *Diachrysia* HÜBNER, [1821]

= *Chrychrysia* BECK, 1996

= *Zosichrysia* BECK, 1996

**126. *Diachrysia chrysitis chrysitis* (LINNAEUS, 1758)**

= *chrisitis* (incorrect subsequent spelling)

= var. *juncta* (TUTT, 1892)

= *aurea* (HUENE, SCHULTZ, 1907)

= ab. *disjunctaurea* (SPULER, 1908)?

= *chrysitis* ab. *disjuncta scintillans* (LEMPKE, 1934)

= f. *scintillans* SCHTZ. (incorrect author's name)

**127. *Diachrysia tutti tutti* (KOSTROWICKI, 1961)\***

\* SUBCHEV (1995: 265) reported *Diachrysia chrysitis* and *Diachrysia tutti* as sympatric species from Sofia town and from Ivancha village, Veliko Tarnovo Region in N Bulgaria. According to him, both species have been separated from each other on the basis of species-specific pheromones as well as by the wing pattern, as illustrated in PRIESNER (1985). Further investigation of this complex of species in Bul-



garia is necessary. According to REZBANYAI-RESER (1985) both species form mixed populations in many places. *Diachrysia tutti* is known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 479, map 162), and is likely to occur in the Bulgarian part of the Dobrogea or at the N Black Sea Coast.

#### 128. *Diachrysia nadeja nadeja* (OBERTHÜR, 1880)\*

\* In Bulgaria, *Diachrysia nadeja* (OBERTHÜR) is known only from: NW Bulgaria, Vidin town (WEIDLICH, 1984: 183); from NE Bulgaria, N Black Sea Coast, Dourankoulak Lake, 08.VI.1996, leg. and in coll. of R. RADEV (BESHKOV & RADEV, in press); idem, SE side of Dourankoulak Lake, near Vakilino village, 04.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg., 1 ♂ (pl. 1, figs 10, 11) at light; from Danube Plain, "Kalimok" near Nova Tcherana village, Toutrakan district, 08.VI.1994, D. VASSILEV leg., two specimens in coll. S. BESHKOV; as well as from Varna town, also Black Sea Coast, 10.VI.1934, KARNOSCHITZKY leg., in coll. National Museum of Natural History, Sofia. Known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 87, 480, map 163). It is another species wrongly not included for Bulgaria in NOWACKI & FIBIGER (1996: 258).

#### 129. *Diachrysia zosimi zosimi* (HÜBNER, [1822])\*

\* The first record of *Diachrysia zosimi* (HÜBNER) for Bulgaria was by KARNOSCHITZKY (1954: 183) from the Black Sea Coast, Devin River near Varna town (27.VI.1939) and from Varna town (11.VIII.1942). The present author has seen these specimens from the collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, and they are correctly named. In the collection of KARNOSCHITZKY there is another specimen from Devnya, Varna Region, 28.V.1939. The report of BACHMETJEV (1902: 438) for Dobrogea follows that of VON MALINOVSKY for Tulchea, Danube Delta. *Diachrysia zosimi* is wrongly not included for Bulgaria in NOWACKI & FIBIGER (1996: 258).

#### 130a. *Diachrysia chryson chryson* (ESPER, [1789])\*

\* *Diachrysia chryson chryson* (ESPER) (pl. 1, figs 12, 13) is a rare species in Bulgaria, known from very few localities. The report of BACHMETJEV (1902: 439) for *Diachrysia chryson* from Dobrogea follows the record of VON MALINOVSKY for Tulchea, Danube Delta, from where the taxon *Diachrysia chryson deltaica* RAKOSY, 1996 was recently described. The last one occurs also in Bulgaria. See also under the next taxon here.

#### 130b. *Diachrysia chryson deltaica* RAKOSY, 1996\*

\* *Diachrysia chryson deltaica* RAKOSY, a taxon known only from the type locality (Danube Delta) was recently discovered in Bulgaria: NE Bulgaria, N Black Sea Coast, SE side of Dourankoulak Lake, near Vakilino village, 04.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg., 2 ♂♂ at light, both in coll. S. BESHKOV (pl. 1, figs 14, 15), and the same locality, but 19.IX.1999, S. BESHKOV & S. ABADJIEV leg., 1 ♂. These specimens differ from the other Bulgarian and European material examined by the present author and correspond well to the original description of RAKOSY (1996a).

Genus *Macdunnoughia* KOSTROWICKI, 1961

#### 131. *Macdunnoughia confusa confusa* (STEPHENS, 1850)

= *circumflexa* (ESPER, [1787], nec LINNAEUS, 1767

= *gutta* (GUENÉE, 1852)

Genus *Plusia* OCHSENHEIMER, 1816

= *Chrysaspidia* HÜBNER, [1821]

**132. *Plusia festucae festucae* (LINNAEUS, 1758)\***

\* The first report of *Plusia festucae* (LINNAEUS) (pl. 1, fig. 16) for Bulgaria was by LEDERER (1863: 26) for Varna town. There are many other records, some of which, reported in the past as *Plusia festucae*, were probably misidentified and belong to the closely related taxon *Plusia putnami gracilis* (LEMPKE, 1966).

**133. *Plusia putnami* (GROTE, 1873) ssp. *gracilis* (LEMPKE, 1966)\***

\* SLIVOV (1973: 45) recorded *Plusia putnami gracilis* as a new species for the Balkan Peninsula from W Rhodopi Mts, Yazovir Vassil Kolarov (the present name is "Gollyam Beglik") Reservoir, 1600 m altitude (see also in TULESCHKOV & SLIVOV, 1975: 140). Known also from SW Bulgaria, Kresna Gorge (GANEV, 1982b: 167); Rhodopi Mts "Fichtenzone" (GANEV, 1984/3: 130), Kyustendil town (GANEV, 1985b: 91), Central Rhodopi Mts, Beglika Resort, Teshel, and Tchairski Ezera Lakes (pl. 1, fig. 17) (BESHKOV & GASH-TAROV, in press). Probably some of the specimens reported in the past as *Plusia festucae* belong to *Plusia putnami gracilis*, having been misidentified.

Genus *Autographa* HÜBNER, [1821]

= *Plusia* OCHSENHEIMER, 1816 auct.

**134. *Autographa gamma gamma* (LINNAEUS, 1758)**

= *gamma* var. *rufescens* (TUTT, 1892)

= var. *rufescens* TUFF. (incorrect author's name)

= *gamma* var. *pallida* (TUTT, 1892)

**135. *Autographa pulchrina pulchrina* (HAWORTH, 1809)\***

= *interrogationis* (ESPER, [1787]), nec LINNAEUS, 1758

= *v-aureum* (GUENÉE, 1852)

\* Male and female genitalia of many specimens of *Autographa pulchrina* (HAWORTH) from high altitudes in Bulgaria have been examined by the present author to ascertain that in Bulgaria we have only authentic *Autographa pulchrina*. *Autographa buraetica* (STAUDINGER, 1892) has not been found among the examined material.

**136. *Autographa jota jota* (LINNAEUS, 1758)**

= *jota* (incorrect subsequent spelling)

= *iota* (incorrect subsequent spelling)

= *percontationis* (OCHSENHEIMER, 1816)

**137. *Autographa bractea bractea* ([DENIS & SCHIFFERMÜLLER], 1775)\***

\* In Bulgaria *Autographa bractea* is known with certainty only from Pirin Mts, 2060 m altitude, 26.VII. 1969 and 03.VIII.1970 [Vihren Chalet, 1950 m altitude] (GYULAI & VARGA, 1974: 211), from where it is reported as a migrant species. It is reported also from Pirin Mts. with a single specimen, but without given locality (HACKER, 1989: 362), probably following the previous report. In HEINICKE & NAUMANN (1982: 50) for the range of the species is mentioned "südbulgarische Gebirge". Also in KOSTROWICKI (1961: 424) on the distribution map of the species (fig. 24) Bulgaria is included. The source of both these data is unclear for the present author, but the report of GYULAI & VARGA (1974) confirms the pres-

ence of *Autographa bractea* in Bulgaria. The only specimen of *Autographa bractea* from Bulgaria the present author has seen is from W Stara Planina Mts, "Sveti Nikola" Belogradtchik district, 04.VII. 1963, K. TOULESHKOV leg., in the collection of AL. SLIVOV in the Institute of Zoology, Sofia.

### Genus *Plusidia* BUTLER, 1879

#### *Plusidia cheiranthi cheiranthi* (TAUSCHER, 1809)\*

\* *Plusidia cheiranthi* is wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 259). It is known in the Balkan Peninsula from Slovenia, Kraina and the Republic of Macedonia (HACKER, 1989: 364) and from Romania, Bucharest and Timisoara (RÁKOSY, 1996b: 89), but has never been reported from Bulgaria. However, its presence there is quite possible.

### Genus *Cornutiplusia* KOSTROWICKI, 1961

#### 138. *Cornutiplusia circumflexa circumflexa* (LINNAEUS, 1787)\* = *graphica* (FREYER, 1851)

\* The first report of *Cornutiplusia circumflexa* (LINNAEUS) for Bulgaria was by BACHMETJEV (1902: 429), following the unpublished data of H. PIGULEV for Sliven and Plovdiv towns. According to REBEL (1903: 237) and to BURESCH & TULESCHKOW (1932: 71; 1935: 143) this record is doubtful, but the present author sees absolutely no reason for doubt. BOCAROV (1959: 65) found *Cornutiplusia circumflexa* in Sofia and reported it as a new species for Bulgaria, and recently this migrant species has been recorded from many other parts of the country from the Black Sea Coast up to about 2000 m altitude in the mountains (Pirin Mts, Vihren Chalet—wrongly given in some articles as 2060 m altitude) (GYULAI & VARGA, 1974: 211; VARGA & SLIVOV, 1976 [1977]: 184; GYULAI, 1983: 208). Maybe in the past mistaken for *Autographa gamma* L.

### Genus *Syngrapha* HÜBNER, [1821]

#### Subgenus *Syngrapha* HÜBNER, [1821]

#### 139. *Syngrapha devergens* (HÜBNER, [1813]) ssp. *rilaeacacuminum* VARGA & RONKAY, 1982\* = *divergens* HBN. (incorrect subsequent spelling), nec FABRICIUS, 1787 = *hochenwarthi* (HOCHENWARTH, 1785), auct.

\* *Syngrapha devergens* (HÜBNER, [1813]) was reported as a new species for Bulgaria from Rila Mts, "Bitsch bor" [= Bitchebor] (REBEL, 1916: 39). In DRENOWSKY (1910a: 177) and in DRENOWSKY (1925: 118) it is reported at an altitude of 2200–2500 m as a very rare species. The populations from Rila Mts (type locality) and Pirin Mts have been described as *Syngrapha devergens rilaeacacuminum* VARGA & RONKAY (VARGA & RONKAY, 1982: 149–155). In Rila Mts *Syngrapha devergens rilaeacacuminum* (pl. 1, figs 18; pl. 2, fig. 1) it is not rare, inhabiting erosion spots in the meadows below rocky areas at an altitude of 2500–2700 m and flying almost always together with the butterfly *Erebia gorge pirinica* BURESCH, 1918. In the collection of the National Museum of Natural History, Sofia, there is a single specimen from an altitude of 2000 m (Rila Mts, above Kostenetz, 23.VII.1939, TULESCHKOW leg.). *Syngrapha devergens* is known also from Ossogovo Mts at an altitude of 1900–2250 m (DRENOWSKI, 1928a: 10, 87; DRENOWSKI, 1930b: 25), the second quoted by GANEV (1983d: 71). It is uncertain to which subspecies the population from Ossogovo Mts belongs. In KOSTROWICKI (1961) on pp. 438–439, map 31 for the Balkan Peninsula, "Macedonia", the species *hochenwarthi* (HOCHENWARTH) is mentioned and marked, instead of *devergens* (HÜBNER). *S. hochenwarthi* is a species of its own, which has

never been found in Bulgaria nor in the Balkan Peninsula. All Bulgarian data refer to *S. devergens rilaeacacuminum*.

Genus *Palaeographa* KLUTSCHKO, 1983

**140. *Palaeographa interrogationis interrogationis* (LINNAEUS, 1758)**

Genus *Thysanoplusia* ICHINOSE, 1973

**141. *Thysanoplusia orichalcea orichalcea* (FABRICIUS, 1775)\***

\* In Bulgaria *Thysanoplusia orichalcea* (FABRICIUS) is known only from a single male specimen, taken at sugar in SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 28.–30.IX.1976 (SLIVOV, 1984: 63).

**142. *Thysanoplusia daubei daubei* (BOISDUVAL, 1840)\***

\* In Bulgaria *Thysanoplusia daubei* (BOISDUVAL) is known only from the N Black Sea Coast, Varna town, 05.X.1935, N. KARNOSCHITZKY leg., 1 ♀ in the collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia (pl. 2, fig. 2), originally wrongly determined as *Trichoplusia ni*.

Genus *Trichoplusia* McDUNNOUGH, 1944

**143. *Trichoplusia ni ni* (HÜBNER, [1803])**

Genus *Ctenoplusia* DUFAY, 1970

**144. *Ctenoplusia accentifera accentifera* LEFEBVRE, 1827\***

\* In Bulgaria *Ctenoplusia accentifera* LEFEBVRE is known only from Rhodopi Mts, the camp site below Trigrad village, Devin district, 800 m altitude, 26.VI.1995, R. RADEV leg., one specimen at light (BESHKOV & RADEV, in press).

Genus *Chrysodeixis* HÜBNER, [1821]

**145. *Chrysodeixis chalcites chalcites* (ESPER, [1789])**

= *chalcitis* (incorrect subsequent spelling)

= *chalcytes* (incorrect subsequent spelling)

Genus *Abrostola* OCHSENHEIMER, 1816

= *Asclepistola* BECK, 1991

= *Trigeminostola* BECK, 1991

**146. *Abrostola tripartita tripartita* (HUFNAGEL, 1766)\***

= *triplasia* auct., nec LINNAEUS, 1758

= *urticae* (HÜBNER, [1817])

\* *Abrostola tripartita* (HUFNAGEL, 1766)—see MIKKOLA & HONEY (1993: 161).

**147. *Abrostola clarissa clarissa* (STAUDINGER, 1900)\***

\* The only known locality of *Abrostola clarissa* (STAUDINGER) in Bulgaria is the Black Sea Coast, Tzarevo (= Mitchurin, = Vassiliko) town, 01.VII.1972, Z. LASTUVKA leg., one male specimen in coll. of S. BESHKOV (col. pl. I, fig. 5), received from and determined by M. FIBIGER. This is the only sure known European specimen. Previously it was included for Europe only by HARTIG & HEINICKE (1973: 202), the source of these data being unclear to the present author. *Abrostola clarissa* is a species lately not listed for Europe neither by FIBIGER & HACKER (1991), nor by NOWACKI & FIBIGER (1996) or by BECK (1996).

**148. *Abrostola triplasia triplasia* (LINNAEUS, 1758)\***

= *trigemina* (WERNEBURG, 1864)

\* *Abrostola triplasia triplasia* (LINNAEUS, 1758): a senior subjective synonym of *Abrostola trigemina* (WERNEBURG, 1864): see MIKKOLA & HONEY (1993: 161).

**149. *Abrostola agnorista agnorista* DUFAY, 1956\***

\* In Bulgaria *Abrostola agnorista* is known from W Bulgaria, Zemen Gorge, Skakavitza Railway Station (GANEV, 1982b: 167—first record for Bulgaria; GANEV, 1983e: 91; GANEV, 1983b: 94); Ossogovo Mts at an altitude of 500–700 m (GANEV, 1983d: 70); SW Bulgaria, “Rupite” near Volcanic Hill of Kozhouh, Petrich district (GANEV, 1982b: 167; GANEV, 1984b: 135); Black Sea Coast, Druzha Resort near Varna town (BESCHKOV, 1992: 53); Kresna Gorge (GYULAI, 1983: 208; MÉSZÁROS et al., 1984b: 200) and Kresna Gorge, Stara Kresna Railway Station and E Rhodopi Mts, Byalo Pole (= Belopolyane) village, Ivaylovgrad district (GOATER, 1996: 270, 273, 284); SW Bulgaria, S Pirin Mts, Liljanovo village above Sandanski town, 500 m altitude (EICHLER, HACKER & SPEIDEL, 1996: 266). Probably some of the specimens reported in the past as other *Abrostola* species have been misidentifications of *Abrostola agnorista* DUFAY.

**150. *Abrostola asclepiadis asclepiadis* ([DENIS & SCHIFFERMÜLLER], 1775)**

Subfamily Acontiinae GUENÉE, 1837

Genus *Emmelia* HÜBNER, [1821]

= *Agrophila* BOISDUVAL, 1840

**151. *Emmelia trabealis trabealis* (SCOPOLI, 1763)**

= var. *nigra* (ERSCHOFF in FEDTSHENKO, 1874)

Genus *Acontia* OCHSENHEIMER, 1816

= *Uracontia* BECK, 1996

**152. *Acontia lucida lucida* (HUFNAGEL, 1766)**

= *albicolis* (FABRICIUS, 1781)\*

= *albicollis* (incorrect subsequent spelling)

= *albicolon* F. (incorrect subsequent spelling)

= var. *lugens* ALPHÉRAKY, 1889

= *insolatrix* (HÜBNER, [1819–1822])\*\*

\* Probably most records for *Acontia melanura* (TAUSCHER, 1809) (= *titania* sensu auct. nec ESPEr, [1798]) from Bulgaria refer to *Acontia lucida* ab. *albicolis* FABR. (pl. 2, figs 3, 4) which is not a very rare

form in Bulgaria (see below). They both can be distinguished very easily and surely from each other and from the third Bulgarian species, *A. titania* (ESPER, [1798]) (= *urania* FRIVALDSKY, 1835), by the underside wing-pattern (pl. 2, figs 4, 8). The first reports for *Acontia lucida* ab. *albicolis* for Bulgaria were by MARKOWITSCH (1909a: 21; 1909b: 26) from Razgrad town and by DRENOWSKI (1909c: 36) from Central Stara Planina Mts, above Kalofer town.

\*\* *Acontia lucida* ab. *insolatrix* in Bulgaria is reported from: Black Sea Coast, Balchik (CARADJA, 1930: 16; ZUKOWSKI, 1937: 574; POPESCU-GORJ, 1964: 197); Slavyanka [= Alibotoush] Mts (DRENOWSKI, 1931a: 17; DRENOWSKI, 1931b: 59). There are some other more recent records.

### 153. *Acontia titania titania* (ESPER, [1798])\*

= *urania* FRIVALDSKY, 1835\*\*

\* For the synonymy between *titania* ESPER and *urania* FRIVALDSKY see in HACKER (1998b: 465) and in FIBIGER & HACKER (1998: 11).

\*\* The synonym *Acontia urania* FRIVALDSKY (pl. 2, figs 5, 6) originates from Bulgaria (then part of Turkey) [type locality: Sliven town] (FRIVALDSKY, 1835: 274, T. VII., 10). Subsequently redescribed by FRIVALDSKY (1837: 92) in Latin from "Balkani montosis". *Acontia titania titania* (ESPER, [1798]) (= *urania* FRIVALDSKY, 1835) is a species not very rare, but local in Bulgaria, known both from the southern and northern parts of the country, sometimes abundant (near Balchik town) (BESCHKOW, 1990: 75). In North Bulgaria it occurs at the Srebarna Lake, Silistra Region (BESHKOV, 1998b: 82) and in the South Dobrudzha (Dobrogea), Souhata Reka River, near Golesh village, Silistra Region (06.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg.). Flies by day and also comes to light.

### 154. *Acontia melanura melanura* (TAUSCHER, 1809)\*

= *titania* sensu auct. nec ESPER, [1798]\*\*

\* For the synonymy see in HACKER (1998b: 465) and in FIBIGER & HACKER (1998: 12).

\*\* The first reports of *Acontia melanura* (TAUSCHER, 1809) (as *titania* ESPER) for Bulgaria, Sliven town were by LEDERER (1863: 27) and by BACHMETJEW (1902: 457). BACHMETJEW (1902: 440), following the unpublished manuscript of H. PIGULEV, and REBEL (1903: 234), following BACHMETJEW (1902: 457), reported it again from Sliven town. For Bulgaria it is also included in SPULER (1908: 286), who probably quoted the reports mentioned above. Reported for the districts of Svilengrad town (TSCHORBADJIEV, 1928: 178) and from Stara Planina Mts, without exact locality (DRENOWSKI, 1930a: 19), probably following the above mentioned reports for Sliven. According to BURESCH & TULESCHKOW (1935: 128) *melanura* (TAUSCHER, 1809) (= *titania* sensu auct. nec ESPER, [1798]) is "registered in Bulgaria only from Sliven and Svilengrad. However, in the coll. of the Entomological Station there is no voucher specimen of this species. All checked specimens, determined as *Acontia titania* [*melanura* TAUSCHER], turned out to belong to *Acontia lucida* ab. *albicolis* F.". Probably most records for *A. melanura* (TAUSCHER, 1809) (as *titania* sensu auct. nec ESPER, [1798]) from Bulgaria are misidentifications with *Acontia lucida* ab. *albicolis* FABR. which is a form not very rare in Bulgaria (see also under the last one). *A. melanura* (TAUSCHER, 1809) is also included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 260) (as *titania* ESPER). The present author has seen a single specimen of *A. melanura* simply labelled "Bulgar." in the collection of the National Museum of Natural History, Sofia. It is very possible that this specimen is not of Bulgarian origin. Last time *Acontia melanura* is proven as a part of the Bulgarian fauna from NE Bulgaria, South Dobrudzha (Dobrogea), Souhata Reka River, "Divi Boy" near Golesh village, Silistra Region (06.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg., 1 ♂ at 160 W MVL) (pl. 2, figs 7, 8). *Acontia melanura* is known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 80, 475, map 134), and is likely to be found also at the N Black Sea Coast.

Genus *Pseudozarba* WARREN, 1914

**155. *Pseudozarba bipartita bipartita* (HERRICH-SCHÄFFER, 1850)\***

\* The first and only report of *Pseudozarba bipartita* (HERRICH-SCHÄFFER, 1850) in Bulgaria is by GANEV (1982a: 145) for SW Bulgaria, Kresna Gorge (LUKOV leg.). *Pseudozarba bipartita* (pl. 2, fig. 9) is a species wrongly not included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 260).

Genus *Ozarba* WALKER, 1865

= *Acontiola* STAUDINGER, (1900) 1899

*Ozarba moldavicola moldavicola* (HERRICH-SCHÄFFER, 1851)\*

= *moldavica* (incorrect subsequent spelling)

\* BACHMETJEV (1902: 440), following the unpublished manuscript of H. PIGULEV, reported *Ozarba moldavicola* from Provadia town, May to June. According to REBEL (1903: 234) and to BURESCH & TULESCHKOW (1932: 71, 1935: 129) this report is doubtful. Next, also doubtful, is the record by MARKOVITCH (1904: 231) for the districts of Razgrad town. These are the only, both unconfirmed, reports for this species in Bulgaria. The present author has never seen a Bulgarian specimen. However, *Ozarba moldavicola* (HERRICH-SCHÄFFER) is known from Montenegro, Albania, Greece and Romania and, though likely to occur in Bulgaria, but its presence being unconfirmed, it is wrongly included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 260).

*Ozarba lascivalis lascivalis* (LEDERER, 1855)\*

\* *Ozarba lascivalis* (LEDERER) has never been reported from Bulgaria, but it could occur here. In Europe it is known only from Greece and Albania. It is another species wrongly included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 260).

Genus *Phyllophila* GUENÉE, 1852

**156. *Phyllophila obliterata obliterata* (RAMBUR, 1833)\***

= *wimmeri* TREITSCHKE, 1835

= *Wimmeri* FREYER (incorrect author's name)

\* *Phyllophila obliterata* (RAMBUR) is another very variable and common, locally abundant species in Bulgaria, wrongly not included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 260). The first report for Bulgaria is from the second half of the last century (LEDERER, 1963: 27).

Subfamily Eustrotiinae GROTE, 1882

(nec Eustrotiinae FRANCLEMONT & TODD, 1983, nec Jaspidiinae AUBERT, 1952, nec Erastrinae HAMPSON, 1902, nec Acontiinae GUENÉE, 1837, auct.)

Genus *Protodeltote* UEDA, 1984

= *Lithacodia* auct., nec HÜBNER, [1818]

**157. *Protodeltote pygarga pygarga* (HUFNAGEL, 1766)**

= *fasciana* auct., nec LINNAEUS, 1761

= *ployeri* (HOCHENWARTH, 1785)

Genus *Deltote* REICHENBACH, 1817= *Lithacodia* HÜBNER, [1818]= *Eustrotia* HÜBNER, [1821]= *Erastria* OCHSENHEIMER, 1816\*

\* Junior homonym of *Erastria* HÜBNER, [1813]. The objective replacement name is *Eustrotia* HÜBNER, [1821] (see in POOLE, 1989: 368).

*Deltote deceptor deceptor* (SCOPOLI, 1763)\*

\* *Deltote deceptor* (SCOPOLI) is another species which is wrongly included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 260). Known from the Romanian part of the Dobrogea, very near to the Bulgarian/Romanian border (RÁKOSY, 1996b: 81, 475, map 138), and considered likely to occur in the Bulgarian part of the Dobrogea or at the N Black Sea Coast, but until now there is no authentic record for Bulgaria. It is also reported from Serbia (ZECEVIC, 1996: 79).

158. *Deltote uncula uncula* (CLERCK, 1759)\*

\* DRJANOVSKY (1906: 99) listed *Lithacodia uncula* (CLERCK) for Vitosha Mts. However, this data are from the material of Iw. BURESCH, who collected it in "Palais Vrana" near Sofia, 10.VI.1905 (DRENOWSKY, 1907: 18; BURESCH & TULESCHKOW, 1935: 132–133). This rare species has been recorded also from Varna town at the Black Sea Coast (BURESCH & TULESCHKOW, 1935: 133), also three specimens from the same locality (Varna, 14.V.1950, 25.V.1950) in the collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, and Kostinbrod town, Sofia Region (J. GANEV, pers. comm.). The present author has seen specimens (unpublished) in the collection AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences from the following localities: SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station; Stara Planina Mts, Etropole Monastery; Iskarski Prolom Gorge, Tcherepish railway station; NE Bulgaria, "Palamara" near Ispirich, Shoumen region. Known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 81, 476, map 139). It will probably be found in other parts of Bulgaria, too.

159. *Deltote bankiana bankiana* (FABRICIUS, 1775)= *olivana* ([DENIS & SCHIFFERMÜLLER], 1775)= *olivina* (incorrect subsequent spelling) ([DENIS & SCHIFFERMÜLLER], 1775)= *argentina* (HÜBNER, [1787])Genus *Pseudeustrotia* WARREN, 1913= *Deltote* auct., nec REICHENBACH, 1817160. *Pseudeustrotia candidula candidula* ([DENIS & SCHIFFERMÜLLER], 1775)\*= *candidulana* (incorrect subsequent spelling)= *candicula* (incorrect subsequent spelling)= *pusilla* VIEWEG, 1790

\* *Pseudeustrotia candidula* was first reported by MARKOWITSCH (1909a: 21) from Krivnya village [= Senovo town], Razgrad Region. The previous reports given by MANN (1866) and by BACHMETJEV (1902: 441) for Dobrogea as *Erastria pusilla* VIEW. follow the record of VON MALINOVSKY for Tulchea, Danube Delta. The specimen reported by GANEV (1984a: 42) from Boinitzia village, Vidin Region as *Deltote candidula* DENIS & SCHIFFERMÜLLER is in fact *Deltote bankiana* (FABRICIUS, 1775) (GANEV, pers. comm.). Not rare, but a local species in Bulgaria, known from many localities.



Genus *Coccidiphaga* SPULER, 1907*Coccidiphaga scitula scitula* (RAMBUR, 1833) \*

\* *Coccidiphaga scitula* (RAMBUR) is another species wrongly included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 260). It has never been found in this country.

Genus *Odice* HÜBNER, [1823]

= *Melipotis* HÜBNER, [1818], auct.

161. *Odice arcuinna arcuinna* (HÜBNER, 1790)\*

= *arcuina* (incorrect subsequent spelling)

= *arcuinna* Hb. (incorrect author's name)

= *argillacea* (TAUSCHER, 1809)

\* The first report of *Odice arcuinna* (as "*Thal. arcuinna* Hb.") for Bulgaria was by PIGULEV (1900: 46 [38]) from Razgrad town, probably quoting the record of MARKOWITCH (1900: 43 [35]) for "*Talpochares arcuina* var. *kuelekan*" BACHMETJEW (1902: 440) following the unpublished manuscript of H. PIGULEV reported *arcuinna* from Sliven and Samokov towns. Probably mistaken with another species, for example with *Odice suava* Hb. (also the opinion of REBEL, 1903: 234, and of BURESCH & TULESCHKOW, 1932: 71, 1935: 129), a species, which is not mentioned by BACHMETJEW (1902) in his main list, but mentioned in the addenda. Known from Svilengrad town in SE Bulgaria (GANEV, 1984a: 42) as a new species for Bulgaria; SE Bulgaria, Sakar Mts, Driptchevo village (D. KIRIAKOV, pers. comm.); Rhodopi Mts, Loukovitza Motel above Assenovgrad town (GANEV & BESCHKOW, 1987: 117); Sakar Mts, above Dossiteevo village (pl. 2, figs 10, 11) and from Bessaparskite Ridove Hills, above Isperihovo village, Pazardzhik Region (BESHKOW, 1992: 53). Recently found in SW Bulgaria as well: "Gradishteto" below Paril village, between South Pirin and Alibotoush Mts, 700 m, S. BESHKOV & S. ABADJIEV leg., in coll. S. BESHKOV (pl. 2, figs 12, 13). Probably some of the specimens reported in the past as *suava* (HÜBNER) were misidentified and actually belong to *arcuinna* (HÜBNER). However, both species cannot be confused for each other taking into account the underside pattern of the wings: in *O. suava* (pl. 2, fig. 15) the lines are almost parallel to each other.

162. *Odice suava suava* (HÜBNER, [1813])\*

= *suavis* (incorrect subsequent spelling)

\* The first report of *suava* HÜBNER, [1813] (pl. 2, fig. 14, 15) for Bulgaria was by LEDERER (1863: 27) from Varna town. Many other records follow afterward for this species. It is not rare in Bulgaria, but probably some of the specimens reported in the past as *suava* (HÜBNER) belong to *arcuinna* (HÜBNER), due to misidentification (see also under the last one).

*Odice kuelekana kuelekana* (STAUDINGER, 1871)\*

= *kuelekan* (incorrect subsequent spelling)

\* In the past, *Odice kuelekana* (STAUDINGER, 1871) has been wrongly reported from Bulgaria. MARKOWITCH (1900: 43 [35]) (as *Talpochares arcuina* var. *kuelekan*), and BACHMETJEW (1902: 440), following MARKOWITCH (1900), recorded it from Razgrad town as "*Talpochares arcuinna* var. *kuelekana* (?) Stgr." The same data are given in YURKEVICH (1904: 302). *Odice kuelekana* (STAUDINGER, 1871) has never been found in Bulgaria, nor in any other part of Europe. Probably mistaken with *Odice suava* Hb. (see above), the opinion of REBEL (1903: 234) and of BURESCH & TULESCHKOW (1932: 71, 1935: 129), or possibly with *Odice arcuinna*.

Genus *Calymma* HÜBNER, [1823]

163. *Calymma communimacula communimacula* ([DENIS & SCHIFFERMÜLLER], 1775)\*

\* The first report of *Calymma communimacula* ([DENIS & SCHIFFERMÜLLER]) for Bulgaria (as *Anthophila communimacula*) is from the end of the last century from Sliven town (PIGULEV, 1899: 14). There are numerous other subsequent records from many parts of Bulgaria, where it is not rare.

Genus *Eublemma* HÜBNER, [1821]

- = *Porphyria* HÜBNER, [1821]
- = *Trothisa* HÜBNER, [1821]
- = *Eromene* HÜBNER, [1821]
- = *Thalpochares* LEDERER, 1853
- = *Parvablemma* BECK, 1996
- = *Roseoblemma* BECK, 1996

164a. *Eublemma minutata minutata* (FABRICIUS, 1794)\*

- = *noctualis* (HÜBNER, 1796)
- = *paula* (HÜBNER, [1809])

\* *Eublemma minutata* in Bulgaria was published from only one locality: S Black Sea Coast, Slantchev Bryag near Nessebar town (LEVY, 1968: 110). This report (as *Porphyria noctualis* Hb.) must be referred to the undescribed subspecies of *Eublemma minutata* mentioned below. The present author has found a single male specimen of the nominate *Eublemma minutata minutata* (FABRICIUS, 1794) (pl. 2, fig. 16) in the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia) with the label: "Belasiza 1-5.7.1980 leg. SLIVOV" [SW Bulgaria, Belasitza Mts].

164b. *Eublemma minutata* ssp. (under description)\*

\* This new, undescribed subspecies of *Eublemma minutata* has been found recently in E Bulgaria, "Pobitite Kamani" near Varna town, Black Sea Coast surroundings (pl. 15, fig. 1), 21.VIII.1997, 1 ♂, S. BESHKOV, M. & K. BESHKOVI leg., gen. prep. 1./24.XI.1997, S. BESHKOV; idem, 08.VIII.1998, more than 20 specimens, most of them at a light trap (pl. 2, fig. 18; pl. 3, fig. 1; col. pl. I, figs 6, 7); Idem, 18.IX.1999, S. BESHKOV & S. ABADJIEV leg., single specimen at a light trap (col. pl. I, fig. 8). The specimen from September differs from the rest of the specimens in appearance and resembles in wing pattern the West European *Eublemma minutata*. That the population belongs to an undescribed subspecies of *Eublemma minutata* was confirmed by MICHAEL FIBIGER (Søro, DK, pers. comm. 04.XII.1998). An attempt was made to find the possible first generation in May to June of this new taxon, unfortunately without success, because of bad weather conditions. Dr. H. BECK (pers. comm. 09.VI.2000) supposes that this subspecies of *minutata* has only one generation just as the nominate subspecies in Central Europe. Since the larva only feeds between green leaves (and is optimally adapted to them) of the ventral shoots of *Helichrysum arenarium*, it is impossible to have a second generation with larvae feeding in the same manner. The hints of two generations in literature result from occasionally late collected adults (still in August). BASTIAN (in EBERT (ed.), 1997: 559-566) reflects on this subject in detail. The report of LEVY (1968: 110) for the S Black Sea Coast, Slantchev Bryag near Nessebar town (as *Porphyria noctualis* Hb.) must be referred to this undescribed subspecies of *Eublemma minutata* mentioned here. A description of this taxon is about to be published (S. BESHKOV, in press).

165. *Eublemma viridula viridula* (GUENÉE, 1841)\*

- = *caprearum* DRAUDT, 1933

\* The present author has found a single female specimen of *Eublemma viridula* (pl. 3, fig. 2) in the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia) with the label: "Belasiza 22.6.1975 leg. A. SLIVOV" [SW Bulgaria, Belasitza Mts]. *Eublemma viridula* (GUENÉE, 1841)

has never been before reported from this country. It was wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 261) without any authentic source.

*Eublemma pulchralis pulchralis* (VILLERS, 1789)  
= *candidana* (FABRICIUS, 1794)\*

\* *Eublemma pulchralis* (VILLERS, 1789) is another species which can be expected in Bulgaria. On the Balkan Peninsula it is known from Greece, former Yugoslavia and the European part of Turkey (NOWACKI & FIBIGER, 1996: 261).

*Eublemma ochreola ochreola* (STAUDINGER, 1900)\*  
= *thurneri* ZERNY, 1936

\* *Eublemma ochreola* (STAUDINGER) is a Macedonian endemic species, known from the Republic of Macedonia and from the Greek part of Macedonia (HACKER, 1989: 329). It will probably be found to occur also in Bulgarian Macedonia. For the synonymy of *ochreola* STAUDINGER–*thurneri* ZERNY see in HACKER (1999: 441).

**166. *Eublemma ostrina ostrina* (HÜBNER, [1808])\***  
= *carthami* (HERRICH-SCHÄFFER, 1845)  
= *porphyria* (FREYER, 1848)  
= *porphyralis* (incorrect subsequent spelling)  
= *ostrina aestivalis* (GUENÉE, 1852)

\* *Eublemma ostrina* (HÜBNER) is a polymorphic and very variable species, which exhibits extremely great differences in coloration and size between the different broods.

*Eublemma porphyria porphyria* (FREYER, 1845)\*

\* *Eublemma porphyria* (FREYER) is wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 261). This species has never been found in this country.

**167. *Eublemma parva parva* (HÜBNER, [1808])**

*Eublemma pannonica pannonica* (FREYER, 1840)\*

\* *Eublemma pannonica* (FREYER) is also wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 261). It is another species which has never been found in Bulgaria.

**168. *Eublemma rosea rosea* (HÜBNER, 1790)\***  
= *rosea* nec GEOFFROY, 1785  
= *rosina* (HÜBNER, [1803])  
= var. *schernhammeri* (RÜHL, 1890)

\* The first report of *Eublemma rosea* (HÜBNER) from Bulgaria was by REBEL (1903: 235) for Sliven town. DRENOWSKI (1931b: 59), DRENOWSKI (1934a: 76) and TULESCHKOW (1931b: 195) reported it from Alibotush [= Slavyanka] Mts at an altitude of 750–1500 m (as *Micra rosea* Hb.). SLIVOV (1988b: 135) reported a single specimen from SW Bulgaria, Belassitza Mts, low forest zone, 23.VII.1979, as *Porphyria rosea* HbN. Reported from Stara Planina Mts without exact locality by DRENOWSKI (1930a: 19), probably following the record of REBEL (1903: 235) for Sliven. The reports of MANN (1866) and of BACHMETJEV (1902: 441) for the Dobrogea follow that of VON MALINOVSKY for Tulchea, Danube Delta.

**169. *Eublemma amoena amoena* (HÜBNER, 1803)**  
= *respersa* (HÜBNER, 1790), sensu auct., nec ([DENIS & SCHIFFERMÜLLER], 1775)  
= *grata* (TREITSCHKE, 1826)

- 170. *Eublemma purpurina purpurina* ([DENIS & SCHIFFERMÜLLER], 1775) nec (ESPER, [1804])**  
 = *purpurina* var. *secunda* (STAUDINGER, 1901)  
 = *purpurina* Hb. (incorrect author's name)

*Eublemma parallela parallela* (FREYER, 1842)\*  
 = *paraella* (incorrect subsequent spelling)

\* *Eublemma parallela* (FREYER) is wrongly reported for Bulgaria by SALAY (1910: 165) (see HACKER, 1989: 332). It has never been found in this country, but has been reported from Serbia: Deliblatski Pesak, Belgrade districts (TOMIC, MIHAJLOVIC & GLAVENDEKIC, 1994: 493; ZECEVIC, 1996: 79).

*Eublemma ragusana ragusana* (FREYER, 1844)\*

\* *Eublemma ragusana* (FREYER) is wrongly included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 261). It has never been found in Bulgaria. However, on the Balkan Peninsula *Eublemma ragusana* is known from S Albania (HEINICKE, 1965: 579), Dalmatia (type locality: Dubrovnik) and Greece (HACKER, 1989: 333) and it is not impossible to be found in Bulgaria as well.

Genus *Glossodice* BERIO, 1991

- 171. *Glossodice polygramma polygramma* (DUPONCHEL, [1842])\***  
 = *polugramma* (incorrect subsequent spelling)  
 = *polygramma* (BOISDUVAL, 1840) nomen nudum  
 = *polygramma* var. *pudorina* (STAUDINGER, 1889)  
 = f. *podurina* (incorrect subsequent spelling)  
 = *argillacea* EVERSMANN, 1844

\* The first report of *polygramma* DUP. for Bulgaria was by DRENOWSKI (1930f: 24) from Alibotoush (Slavyanka) Mts. In the same time TULESCHKOW (1930a: 32) reported "*Micra polygramma*" as a new species for Bulgaria from Preobrazhenski Manastir monastery, the districts of Tarnovo town. In TULESCHKOW (1930b: 144) *Glossodice polygramma* is again reported as a new species for Bulgaria, also from Preobrazhenski Manastir monastery, the districts of Tarnovo town in N Bulgaria and from Kresna Gorge and Belassitza Mts in SW Bulgaria. It is a common species in Bulgaria, now known from many localities from sea level up to 1600 m altitude in the mountains.

Genus *Rhypagla* NYE, 1975  
 = *Glaphyra* GUENÉE, 1841 (homonym), nec NEWMANN, 1840

*Rhypagla lacernaria lacernaria* (HÜBNER, [1813])\*  
 = *phlomidis* (GUENÉE, 1852)

\* *Rhypagla lacernaria* (HÜBNER, [1813]) is to be expected in Bulgaria, but has yet to be found. Known from Dalmatia, the Republic of Macedonia, Greece (TURNER, 1964: 126; HACKER, 1989: 325) and Albania (BESHKOV & MISJA, 1995: 353; BESHKOV, 1995b: 386), but it is wrongly included for the Bulgarian fauna in NOWACKI & FIBIGER (1996: 261).

Genus *Metachrostis* HÜBNER, [1820]

- 172. *Metachrostis velox velox* (HÜBNER, [1813])\***  
 = *velocissima* TURATI, 1926

\* The first report of *Metachrostis velox* (HÜBNER) for Bulgaria (as "Bulgarien", without exact locality) was by CARADJA (1896: 49), a record considered by REBEL (1903: 234) to be doubtful. GANEV (1983a: 87) reported it as new for Bulgaria from "Kozhouh" near Petrich town in SW Bulgaria, but in fact it had been already reported for Bulgaria by LEVY (1968: 107) from the Black Sea Coast, Arkoutino near Primorsko. Recently found in some more localities in SW Bulgaria, e. g. Melnik town (GOATER, 1996: 283) and Kresna Gorge.

*Metachrostis velocior velocior* (STAUDINGER, 1892)\*

\* *Metachrostis velocior* (STAUDINGER) is another species wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 262). It has never been found in this country.

### 173. *Metachrostis dardouini dardouini* (BOISDUVAL, 1840)\*

\* The first reports of *dardouini* BOISDUVAL, 1840 for Bulgaria were by LEDERER (1863: 27) and by BACHMETJEV (1902: 457) from Sliven town. BACHMETJEV (1902: 440), following the unpublished manuscript of H. PIGULEV, also reported *Metachrostis dardouini* from Sliven, Belovo and Samokov towns, May to June. The same data can also be found in REBEL (1903: 234). According to BURESCH & TULESCHKOW (1935: 129) the localities Belovo and Samokov are doubtful. The reports of MANN (1866) and of BACHMETJEV (1902: 440) for the Dobrogea follow that of VON MALINOVSKY for Tulchea, Danube Delta. Reported from Stara Planina Mts and Rila Mts without details of localities by DRENOWSKI (1930a: 51), who probably followed the records for Sliven, Belovo and Samokov. Known from the Republic of Serbia, Zaetchar-Vrashka Tchouka, very close to the Bulgarian/Yugoslavian border (ZECEVIC, 1993: 27).

Genus *Trisateles* TAMS, 1939

### 174. *Trisateles emortualis emortualis* ([DENIS & SCHIFFERMÜLLER], 1775)\*

\* *Trisateles emortualis* ([DENIS & SCHIFFERMÜLLER]) is wrongly not included for Bulgaria in NOWACKI & FIBIGER (1996: 262). It is not a rare species in Bulgaria.

Subfamily Bagisarinae CRUMB, 1956

Genus *Xanthodes* GUENÉE, 1852

*Xanthodes albago albago* FABRICIUS, 1794\*  
= *malvae* ESPER, [1804]

\* BACHMETJEV (1902: 440) reported *Xanthodes albago albago* FABRICIUS (as *Xanthodes malvae*) from Sliven town, and quoting the unpublished manuscript of H. PIGULEV, reported it also from Belovo town. According to REBEL (1903: 234) and to BURESCH & TULESCHKOW (1932: 71, 1935: 127) these reports cannot be confirmed due to the absence of voucher specimens. However, the locality Sliven town is not given "sensu PIGULEV", where it is mentioned in BURESCH & TULESCHKOW (1935: 127), but is apparently a personal record of BACHMETJEV. The present author believes it impossible for such a distinctive species as *Xanthodes albago* to be mistaken for another one, and is inclined to accept the records, however, with some doubt.

## Subfamily Cuculliinae HERRICH-SCHÄFFER, 1850\*

\* The systematic order of the Subfamily Cuculliinae follows RONKAY & RONKAY (1994; 1995: Cuculliinae I–II. Noctuidae Europeae, vols 6–7).

## Tribus Cuculliini HERRICH-SCHÄFFER, 1850

Genus *Cucullia* SCHRANK, 1802

= *Cuculia* (incorrect subsequent spelling)

= *Cheligalea* HAMPSON, 1906

*Cucullia argentina argentina* (FABRICIUS, 1787)\*

\* *Cucullia argentina* (FABRICIUS) has never been found in Bulgaria. It is wrongly included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 253).

175. *Cucullia scopariae scopariae* DORFMEISTER, 1853\*

\* The first report of *Cucullia scopariae* DORFMEISTER for Bulgaria was by TULESCHKOW (1931a: 28) from N Bulgaria, "Roman" Railway Station, July, 1917, D. LITSCEW leg., but was incorrectly identified: the specimen is in the collection of the National Museum of Natural History, Sofia, and it is a male of *Cucullia artemisiae* (gen. prep. 2./14.XII.1998, S. BESHKOV, male genitalia with everted vesica). Subsequently, however, there have been correct records for *Cucullia scopariae* from Bulgaria. The first correct reports are those of GANEV & BOCHAROV (1982: 104) for a single female specimen from SW Bulgaria, Kresna [gorge], 28.VIII.1980 and of GANEV (1982b: 164) for SW Bulgaria, "Kozhouh" near Petrich town and W Bulgaria, Zemen Gorge, Skakavitza Railway Station, both collected at the beginning of September. There are very few other localities for this rare in Bulgaria species.

*Cucullia fraudatrix fraudatrix* EVERSMAHN, 1837\*

\* *Cucullia fraudatrix* EVERSMAHN has never been found in Bulgaria, and is wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 262). Known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 92, 483, map 186), and considered very likely to occur in the Bulgarian part of the Dobrogea or at the N Black Sea Coast.

176. *Cucullia formosa formosa* ROGENHOFER, 1860\*

\* *Cucullia formosa* ROGENHOFER was reported from Shoumen town by BACHMETJEV (1902: 438), following the unpublished manuscript of H. PIGULEV. The same data are given in YURKEVICH (1904: 302). According to REBEL (1903: 231) the report of BACHMETJEV is doubtful, and probably this material had been misidentified for *Cucullia absynthii* (L.). The only definite locality of *Cucullia formosa* in Bulgaria is Alibotoush [= Slavyanka] Mts, 1000–1500 m altitude (DRENOWSKI, 1931a: 17; DRENOWSKI, 1931b: 59; DRENOWSKI, 1934a: 76; BURESCH & TULESCHKOW, 1935: 121).

177. *Cucullia absynthii absynthii* (LINNAEUS, 1761)

= *absynthii* (incorrect subsequent spelling)

= *absynthi* (incorrect subsequent spelling)

*Cucullia argentea argentea* (HUFNAGEL, 1766)\*

\* *Cucullia argentea* (HUFNAGEL, 1766) has never been found in Bulgaria, and it is wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 262). It is very likely to be discovered in NE Bulgaria: it is known from the Romanian part of the Dobrogea and its foodplants (*Artemisia* spp.) are common in Bulgaria.

**178. *Cucullia artemisiae artemisiae* (HUFNAGEL, 1766)\***

\* *Cucullia artemisiae* (HUFNAGEL) was reported from Sliven town by BACHMETJEV (1902: 438), following the unpublished manuscript of H. PIGULEV. According to REBEL (1903: 231) this report is doubtful and was probably a mistake for *Cucullia absynthii* (L.). *Cucullia artemisiae* has been reported also from the Black Sea Coast, near Varna town, larvae collected by KARNOSCHITZKY on *Artemisia austriaca* JACQ. in July to August, pupated and emerged in August. Also moths had been collected in that place at light (KARNOSCHITZKY, 1954: 182). The present author found two specimens in the collection of KARNOSCHITZKY in the National Natural History Museum, Sofia, from Varna, 10.VIII.1939 and 31.VI.1936, identified as *Cucullia artemisiae*. Both are in fact *Cucullia santonici* (HÜBNER, [1813]). SLIVOV (1976 [1977]: 65), following KARNOSCHITZKY, also reported *artemisiae* from Varna town. In the collection of KARNOSCHITZKY in the National Natural History Museum, Sofia, there is a specimen bred on *Artemisia austriaca*, the larva collected in Varna on July 24, 1949, which was determined as *Cucullia artemisiae*, and subsequently redetermined [by SLIVOV], correctly, as *Cucullia santonici*. Another specimen from the collection of KARNOSCHITZKY in the National Natural History Museum, Sofia, determined as "*Cucullia artemisiae* ab." with labels: "ex caterpillar, 19.VIII.1940, Varna" and with another label "caterpillar like *C. absynthii*, but without red spots, only with silver-whitish" is also *Cucullia santonici*. The specimen reported as *Cucullia scopariae* by TULESCHKOW (1931a: 28) from N Bulgaria, "Roman" Railway Station, July, 1917, D. ILTSCHEW leg., is a male of *Cucullia artemisiae* (gen. prep. 2./14.XII.1998, S. BESHKOV, male genitalia with everted vesica), which seems to be the only authentic Bulgarian specimen of *Cucullia artemisiae*.

*Cucullia mixta* FREYER, 1841 ssp. *lorica* RONKAY & RONKAY, 1987\*

\* *Cucullia mixta* FREYER has never been found in Bulgaria, and it is wrongly included for the Bulgarian fauna by NOWACKI & FIBIGER (1996: 262). The European race belongs to the subspecies *Cucullia mixta lorica* RONKAY & RONKAY, 1987, known from Hungary and Romania.

**179. *Cucullia xeranthemi xeranthemi* BOISDUVAL, 1840\***

\* BACHMETJEV (1902: 438), following the unpublished manuscript of H. PIGULEV, reported *Cucullia xeranthemi* BOISDUVAL from Samokov town. According to REBEL (1903: 231) and to BURESCH & TULESCHKOW (1932: 71, 1935: 121) this record is doubtful. Known however from the Black Sea Coast, Varna town, 01.VI.1936 (SLIVOV, 1976 [1977]: 65; 1979: 39) and from SW Bulgaria, Stara Kresna Railway Station (SLIVOV, 1984: 59). The reports of MANN (1866) and BACHMETJEV (1902: 438) for the Dobrogea follow the record of VON MALINOVSKY for Tulchea, Danube Delta.

**180. *Cucullia lactucae lactucae* ([DENIS & SCHIFFERMÜLLER], 1775)\***

\* *Cucullia lactucae* ([DENIS & SCHIFFERMÜLLER]) is a rare species, in Bulgaria known mostly from the mountains at an altitude up to 1530 m (BESHKOV & VASSILEV, 1995: 198), but single specimens, examined by the present author, have been collected in Kresna Gorge in SW Bulgaria at an altitude of 200 m, as well as in Sofia town (10.VI.1926, Entomological Station), 1 ♀ in coll. National Museum of Natural History, Sofia, gen. prep. 4./14.XII.1998, S. BESHKOV. Known also from Belasitzta Mts, Belasitzta Chalet (GANEV, 1984a: 40) and "middle forest zone" (SLIVOV, 1988b: 133) and Pirin Mts, Liljanovo village (J. GELBRECHT, pers. comm.), which are near the edge of its range. There is a single report (MARKOWITSCH, 1909a: 21) for NE Bulgaria, Razgrad town, 27.IV.1908, where *Cucullia lactucae* is reported as a new species for Bulgaria. In the collection of MARKOWITSCH in the National Museum of

Natural History, Sofia, one of the specimens identified as *Cucullia lactucae* was *Cucullia umbratica*. However, this specimen has two labels—one, original, handwritten: "Sofia, 20.V.1915" and one additional, printed [BURESCH labelled]: "ex coll. A. MARKOWITSCH, N. Bulg., Razgrad". The other specimen, male, from the MARKOWITSCH collection in the National Museum of Natural History, Sofia, identified as *Cucullia lactucae* really belongs to this species. However, the everted vesica (gen. prep. 1./15.XI.1999, S. BESHKOV) shows some important differences: it has only one cornutus, the basal one, situated basally on the main tube; the second diverticulum and its cornutus are absent (gen. fig. 5). Probably this is only an exception, though just possibly a new taxon, and examination of some more specimens from Bulgaria, which is on the edge of the range of the species, is necessary to solve this taxonomic problem.

**181. *Cucullia fraterna fraterna* BUTLER, 1878\* nec TREITSCHKE, 1835**

\* *Cucullia fraterna* BUTLER in Bulgaria is known from a single locality only: NE Bulgaria, Danube River, "Kalimok" Experimental Station near Nova Tcherana village, Tutrakan district, 20 ♂♂ and 1 ♀ between 13.V.–03.VIII.1994, D. VASSILEV leg. (BESHKOV & VASSILEV, 1995: 195–200). The specimens from Kalimok (pl. 3, fig. 5) probably belong to a hitherto undescribed subspecies of *C. fraterna* BUTLER. The type locality of the nominate *Cucullia fraterna fraterna* is Japan.

**182. *Cucullia lucifuga lucifuga* ([DENIS & SCHIFFERMÜLLER], 1775)\***

= *lucifuga* (incorrect subsequent spelling)

= *lucifuga* Hb. (incorrect subsequent spelling and author's name)

= *lucifug* Hb. (incorrect subsequent spelling and author's name)

\* The reports of MANN (1866) and BACHMETJEV (1902: 438) of *Cucullia lucifuga* ([DENIS & SCHIFFERMÜLLER]) from the Dobrogea follow the record of VON MALINOVSKY for Tulchea, Danube Delta. In Bulgaria *Cucullia lucifuga* is reported from Alibotoush [Slavyanka] Planina Mts up to 1400 m altitude (DRENOWSKI, 1931a: 18; 1934a: 76) and 1500 m altitude (DRENOWSKI, 1931b: 59); Vitosha Mts: Bosnek village (NESTOROVA, 1974: 229; SLIVOV, 1990: 193), Knyazhevo (DRENOVSKY, 1931a: 19; NESTOROVA, 1974: 229; SLIVOV, 1990: 193) and BAN Chalet (SLIVOV, 1990: 193). Probably some of these localities are incorrect, due to misidentification. The only definite specimen the present author has seen is from NW Bulgaria, W Stara Planina Mts, "Yavor" Chalet above Tchiprovtsi town, 950 m altitude, 27.VI.1998, S. BESHKOV, B. PETROV & G. STOYANOV leg., gen. prep. 1./08.VII.1998, S. BESHKOV, male genitalia with everted vesica. In the everted vesica there is a small difference from those illustrated and described in RONKAY & RONKAY (1994): the specimen from "Yavor" Chalet has a single, very long and thin cornutus (gen. fig. 6).

**183. *Cucullia umbratica umbratica* (LINNAEUS, 1758)**

= *mubratice* (incorrect subsequent spelling)

= *albida* SPULER, 1908

= ab. *obscura* BURESCH, 1915 nomen oblitum, **syn. nov.\***

\* *Cucullia umbratica* ab. *obscura* BURESCH was described from Bulgaria, Vrana near Sofia, and its original description is as follows: "one very dark specimen with nearly black hindwings, 23.IV.1911" (BURESCH, 1915: 81).

**184. *Cucullia biornata biornata* FISCHER VON WALDHEIM, 1840\***

\* *Cucullia biornata* FISCHER VON WALDHEIM is known in Bulgaria only from the N Black Sea Coast, Varna town, 18.VIII.1943, 1 ♂ in KARNOSCHITZKY's collection in the National Museum of Natural History, Sofia (RONKAY & GANEV, 1985: 146). Another specimen with the same data as above, wrongly determined in the KARNOSCHITZKY collection in the National Museum of Natural History, Sofia, as



"*Cuculia umbratica albida* SPULER", is in fact also a male of *Cucullia biornata* (gen. prep. 1./14.XII. 1998, S. BESHKOV, male genitalia with everted vesica).

#### 185. *Cucullia balsamitae balsamitae* BOISDUVAL, 1840\*

\* *Cucullia balsamitae* is reported here as a new species for Bulgaria and for the Balkan Peninsula. Previously, most closely to Bulgaria it was known from Serbia: Deliblatski Pesak, Belgrade districts (TOMIC, MIHAJLOVIC & GLAVENDEKIC, 1994: 492) and from Banat in Romania (RÁKOSY, 1996b: 485, map 198). In Bulgaria it is known from a single male specimen (pl. 12, fig. 1), found on a lamp in the group of "Pobitite Kamani" above Sluntchevo village, Varna region, 14.V.2000, S. BESHKOV & D. TCHOBANOV leg., in coll. S. BESHKOV. This locality is an open sandy area with limestone at an altitude of about 80 m and is situated not far away from the Black Sea Coast. *Cucullia balsamitae* is there synchronic and syntopic with *Brachodes appendiculata* (ESPER, 1783), *Scopula immistaria beshkovi* GELBRECHT & HAUSMANN, 1997, *Colonsideridis turbida* (ESPER, [1790]) and *Heliothis maritima bulgarica* (DRAUDT, 1938). Until now, it is the southernmost locality of this species in Europe and it seems to be one of the most southern localities within the range of this species. There is no doubt about the correct identification of the specimen, its genitalia, including the everted vesica have been checked and are illustrated here (gen. figs. 131, 132). *Cucullia balsamitae* BOISDUVAL can be expected in other parts of North Bulgaria as well, it cannot form a stable isolated population in such a small spot only there in the whole country.

#### *Cucullia campanulae campanulae* FREYER, 1831\*

\* SLIVOV (1990: 193) reported *Cucullia campanulae* FREYER from Vitosha Mts, BAN Chalet and Bosnek village, following the report of NESTOROVA-KVARTIRNIKOVA (1972) (Ph.D. thesis), who reported *Cucullia campanulae* from there as a new species for Bulgaria. This is the only record of *Cucullia campanulae* from Bulgaria, and cannot be accepted: in NESTOROVA (Ph.D. thesis) *Cucullia lactucae* is not mentioned as a species present in Sofia and in Vitosha Mts, but instead there is included *Cucullia campanulae*, a species which is not known to occur in Bulgaria, and a misidentification is strongly suspected. No specimen of *C. campanulae* was found in the collection of NESTOROVA-KVARTIRNIKOVA. This species is wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 262). Known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 486, map 199), it might possibly be found to occur in the Bulgarian part of Dobrogea, too.

#### *Cucullia santolinae* RAMBUR, 1834\*

\* *Cucullia santolinae* on the Balkan Peninsula is present in Slovenia, the Peninsula of Istria (PINKER, 1965). It is a Holo-Mediterranean species with a range from Morocco, Iberian Peninsula through Corsica, S France, Switzerland and Italy to Palestine and the Caucasus, with interruption on the Balkan Peninsula, east of Istria. Perhaps, it might be found in other parts on the Balkans, including Bulgaria. It is an early spring species with a flight period from February to May (RONKAY & RONKAY, 1994) and it can be easily confused with other species from this or from other groups. Probably, overlooking is the reason that it is not reported from Bulgaria.

#### *Cucullia calendulae calendulae* TREITSCHKE, 1835\*

= *wredowi* COSTA, 1836

= *chamomillae* auct.

\* *Cucullia calendulae* TREITSCHKE, 1835 should be expected in SW Bulgaria. It is present in the Republic of Macedonia and Greece, near to the border to Bulgaria. The flight period is throughout the winter, from October to May. The present author has examined many specimens taken in early spring from this group in Bulgaria (genitalia with everted vesica checked), but not a single *calendulae* TREITSCHKE was found: they all were *C. chamomillae* ([DENIS & SCHIFFERMÜLLER], 1775).

**186. *Cucullia chamomillae chamomillae* ([DENIS & SCHIFFERMÜLLER], 1775)\***= *chamomillae* (incorrect subsequent spelling)

\* The first reports for *Cucullia chamomillae* ([DENIS & SCHIFFERMÜLLER], from Bulgaria were by TULESCHKOW (1931a: 28; 1932c: 109) from Belassitza Mts (without exactly locality), from Belassitza Mts above Petrich town, from General Todorov railway station, all in SW Bulgaria, and also from the Black Sea Coast, Varna and Bourgass towns, previously wrongly determined from there as *Cucullia umbratica*. Many other records follow after that for this species, which is common in Bulgaria.

**187. *Cucullia santonici santonici* (HÜBNER, [1813])****188. *Cucullia tanacetii tanacetii* ([DENIS & SCHIFFERMÜLLER], 1775)***Cucullia dracunculi dracunculi* (HÜBNER, [1813])\*

\* *Cucullia dracunculi* (HÜBNER) has never been found in Bulgaria, but its occurrence in the country seems very possible. Recently it has been reported from Romania, Dobrogea, Macin (KOVÁCS & KOVÁCS, 1997: 163) and from Serbia (D. VAJGAND, pers. comm. 01.VI.2000), and it can be expected in the Bulgarian part of the Dobrogea or somewhere else in N Bulgaria as well.

**189. *Cucullia asteris asteris* ([DENIS & SCHIFFERMÜLLER], 1775)\***

\* The first record for *Cucullia asteris* ([DENIS & SCHIFFERMÜLLER]) from Bulgaria was by KARNOSCHITZKY (1954: 181) from the Black Sea Coast, Shablensko Ezero Lake (22.IX.1942, larva, emerged on 10.VI.1943) and Varnensko Ezero Lake (03.X.1943, larva). Both larvae were collected on *Aster tripolium*. These localities are also given in SLIVOV (1976 [1977]: 65). In Bulgaria known from two other localities as follows: W Rhodopi Mts, "Kastrakly" ["Orpheus" Chalet, 1100 m] near Borino village (SLIVOV, 1984: 59; SLIVOV & NESTOROVA, 1985: 133); "Pobitite Kamani" near Varna town, Black Sea Coast surroundings, 21.VIII.1997, S. BESHKOV, M. & K. BESHKOVI leg. at 160W MVL and 25W black lamps, a single male specimen (BESHKOV & RADEV, in press).

Genus *Shargacucullia* RONKAY & RONKAY, 1994

\* In CARNELUTTI & MICHELI (1958: 75) for Crna Gora (Montenegro), Sutorman, there is a report for caterpillars under the name "*Cucullia balkanica* DREN." This name is given between the species *Cucullia verbasci* and *Cucullia blattariae*, which suggests, that it should concern a *Shargacucullia* taxon. As far as the present author knows, such a name for a *Cucullia* (s.l.) species has never been published by DRENOWSKY, nor by anybody else.

Subgenus *Shargacucullia* RONKAY & RONKAY, 1994**190. *Shargacucullia blattariae blattariae* (ESPER, [1790])\***= *caninae* sensu auct., nec RAMBUR, 1833\*\*= *minogenica* REBEL, 1916= *eugeniae* BECK, 1989

\* Many records for *Shargacucullia blattariae* exist for the country, from low altitudes (from the Black Sea Coast under the name *Cucullia caninae*) (SLIVOV, 1976 [1977]: 65) up to 2100 m in the mountains (GYULAI, 1983: 205), some of them probably doubtful however, because of misidentification. However, *Shargacucullia blattariae* is a species, which has never been found on the Black Sea Coast. The only sure Bulgarian material of *S. blattariae* the present author has seen is from the SW part of the country.

\*\* The first report of *caninae* Rb. for Bulgaria was by LEDERER (1863: 26) of a single larva, but was probably a misidentification. Later, SLIVOV (1976 [1977]: 65) reported *Cucullia caninae* from several places at the Black Sea Coast: Varna, Bourgass and Ahtopol towns. These records of SLIVOV must refer to *Shargacucullia gozmanyi* RONKAY & RONKAY, 1994 which occurs on the N Black Sea Coast, or to another *Shargacucullia* spec., possibly *S. scrophulariae* or *S. lychnitis*. ABADJIEV (1999: 634; 2000: 602), following GYULAI (1983: 205), wrongly reported "*Cuculia caninae* (RAMBUR, 1833)" for Rila Mts. However, in the above mentioned article of GYULAI for Rila Mts, Vodnja Cal, 1800 m alt. *Shargacucullia blattariae* (ESPER) is reported.

#### 191. *Shargacucullia scrophulariae scrophulariae* ([DENIS & SCHIFFERMÜLLER], 1775)\*

\* The specimen reported by NESTOROWA (1970: 118) from Vitosha Mts as a female of *Cucullia scrophulariae*, and later quoted by SLIVOV (1990: 193) belongs to another species, *Shargacucullia verbasci* (LINNAEUS, 1758), genitalia checked by S. BESHKOV. *Shargacucullia scrophulariae* has been reported from several localities in Bulgaria, but the present author thinks that in most cases it has been confused with other *Shargacucullia* species, due to misidentification. See also under *Shargacucullia lychnitis*. The only sure *Shargacucullia scrophulariae* specimens the present author has seen originated from SE Bulgaria: Dossiteevo village, Sakar Mts. and Radnevo town, Stara Zagora Region.

#### 192. *Shargacucullia gozmanyi gozmanyi* RONKAY & RONKAY, 1994\*

= *blattariae eugeniae* auct.

\* *Shargacucullia gozmanyi* RONKAY & RONKAY, 1994 is included for Bulgaria in NOWACKI & FIBIGER (1996: 263) with a question mark. However, in the literature it has already been reported from Bulgaria, from Kresna Gorge (RONKAY & RONKAY, 1994: pl. 6, fig. 44). In Bulgaria known also from the N Black Sea Coast, Albena Resort, VI.1984 (larva) (J. GELBRECHT, pers. comm.). Recently collected in Resseletz village near Tcherven Bryag town, Pleven Region, 12.V.1995, N. KODZHABASHEV leg., coll. I. SOYTCHEV, S. BESHKOV det.: gen. prep. 2./04.II.1997, S. BESHKOV, male genitalia with everted vesica (BESHKOV & GASHTAROV, in press) and again in Kresna Gorge, Stara Kresna Railway Station, 28.V.1988, leg. and in coll. S. BESHKOV. See also under *Shargacucullia lychnitis*. *Shargacucullia gozmanyi* is also known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 96, 487, map 206).

#### 193. *Shargacucullia lanceolata lanceolata* (VILLERS, 1789)\*

= *thapsiphaga* (TREITSCHKE, 1826)

= *tapsiphaga* (incorrect spelling)

= *thapsifaga* (incorrect subsequent spelling)

= *anceps* (STAUDINGER, 1881), sensu auct.

\* The first report of *Shargacucullia lanceolata* (VILLERS, 1789) (as *thapsiphaga* TREITSCHKE) for Bulgaria was by TULESCHKOW (1931a: 28; 1931b: 194) from Alibotoush [= Slavjanka] Mts in SW Bulgaria, 1800 m altitude. There are many subsequent records, some of them doubtful because of confusion with other *Shargacucullia* spp. *Shargacucullia anceps* (STAUDINGER, 1881) has never been found in Bulgaria or Europe.

#### 194. *Shargacucullia lychnitis lychnitis* (RAMBUR, 1833)\*

\* SLIVOV (1979: 39) reported *lychnitis* RAMBUR as a new species for Bulgaria from Kokalyane village near Sofia, "Katchul" near Gramatikovo village in Strandzha Mts, "Yundola" and Polkovnik Serafimovo village in Rhodopi Mts. There are many other subsequent records, though most of them are possible misidentifications: some of them perhaps refer to *Shargacucullia scrophulariae* ([DENIS & SCHIFFERMÜLLER], 1775), or the recently described species *Shargacucullia gozmanyi* RONKAY & RONKAY, 1994. The only true *Shargacucullia lychnitis* specimens the present author has seen originated from: Bessa-

parските Ridove Hills, near Byaga village, Pazardzhik Region; Rhodopi Mts, "Loukovitza" motel above Assenovgrad town; from W Stara Planina Mts, Dobarchin village, Svoje districts; from NE Bulgaria, South Dobrudzha (Dobrogea), Souhata Reka River, near Golesh village, Silistra Region, 06.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg.; from NE Bulgaria, N Black Sea Coast, SE side of Douran-loulak Lake, near Vakilino village, 04.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg.; and from Loudogorsko Plato near Samouil village, Razgrad Region, 450 m, 07.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg.

### 195. *Shargacucullia verbasci verbasci* (LINNAEUS, 1758)

Subgenus *Prenanthcucullia* BECK, 1996

### 196. *Shargacucullia prenanthis prenanthis* (BOISDUVAL, 1840)\*

\* In BURESCH & TULESCHKOW (1932: 71; 1935: 118) *S. prenanthis* (BOISDUVAL) is given as a doubtful species for Bulgaria: it was reported from Rousse town by DRENOWSKY (1910b: 60), KOWATSCHEW leg., but the collected specimens are not in the Royal Entomological Station in Sofia. VIHODCEVSKIJ (1970: 57) confirmed *S. prenanthis* BOISDUVAL for Bulgaria from Ovtchari village, Kyustendil Region. NESTOROVA-KVARTIRNIKOVA (1972) again reported *S. prenanthis* as a new species for Bulgaria from Vitosha Mts. At the present time, *Shargacucullia prenanthis* is known mostly from the mountains up to 1800–1900 m altitude: Pirin Mts, Begovitza Chalet (HERCZIG, SZABÓKY & SZEÓKE, 1988: 123) and Jane Sandanski Chalet (LEHMANN, 1990: 129); Ossogovo Mts at an altitude of 1400–1700 m [Ossogovo Chalet] (GANEV, 1983d: 66); Vitosha Mts, Aleko Chalet; Troyanska Stara Planina Mts, Dermentkaya Chalet, 1530 m (BESHKOV & GASHTAROV, in press), but a few single specimens have been collected at low altitudes, e. g. in Kresna Gorge in SW Bulgaria (GANEV, 1982b: 164 and a specimen collected there by the present author) in an arid area at an altitude of about 200 m. In the mountains the flight period extends to the end of June. Recently reported from Belassitza Mts (SLIVOV, 1988b: 133) and Paril village (BESHKOV, 1995a: 210), both very close to the Bulgarian/Greece border. This is the southernmost locality of the known range of the species in Europe, though it might possibly be discovered in Greece as well.

Genus *Calocucullia* RONKAY & RONKAY, 1987

### 197. *Calocucullia celsiae celsiae* (HERRICH-SCHÄFFER, 1850)\*

= *celsia* H.-S. (incorrect subsequent spelling), nec LINNAEUS, 1758

\* *Calocucullia celsiae* (HERRICH-SCHÄFFER) was bred in the last century by J. HABERHAUER in Sliven town on *Hesperis desertorum* VEL. The larva is described by REBEL (1903: 230) and the description is rewritten in SPULER (1908: 364). BURESCH (1914a: 46) wrongly placed *C. celsiae* (Sliven town, HABERHAUER leg.) in the list of the species of which larvae are unknown or little known. Recorded from several localities in S Bulgaria and from Iskarski Prolom Gorge, Eliseyna–Lakatnik (GYULAI, 1983: 205). In North Bulgaria known from Resseletz village, Pleven Region, N. KODZHABASHEV leg., in coll. BESHKOV (BESHKOV & GASHTAROV, in press).

Genus *Calophasia* STEPHENS, 1829

### 198. *Calophasia lunula lunula* (HUFNAGEL, 1766)

= *linariae* [DENIS & SCHIFFERMÜLLER], 1775

**199. *Calophasia platyptera platyptera* (ESPER, [1788])\***

\* The reports by MANN (1866) and by BACHMETJEW (1902: 437) of *Calophasia platyptera* (ESPER) from the Dobrogea cite the record of VON MALINOVSKY for Tulchea, Danube Delta. The first report for Bulgaria was by SOFFNER (1962: 156) from the Black Sea Coast, Nessebar town. Later, GANEV (1983a: 87) again reported *Calophasia platyptera* as a new species for Bulgaria, also from the Black Sea Coast, Ahtopol town. Now known from several more localities, all of them at the S Black Sea Coast.

**200. *Calophasia barthae barthae* WAGNER, 1929\***

\* *Calophasia barthae* WAGNER is recorded from SW Bulgaria, Melnik (MÉSZÁROS et al. 1984a: 68) and from Melnik and Rozhen as a new species for Europe (HERCZIG, MÉSZÁROS & SZEÓKE, 1984: 230). Known from some other localities in SW Bulgaria and from Sakar Mts in SE Bulgaria (GANEV, 1984b: 133; GANEV, 1987a: 102 and others).

**201. *Calophasia opalina opalina* (ESPER, [1794])**

- = *casta* (BORKHAUSEN, 1793), nec PALLAS, 1767
- = *costa* (incorrect subsequent spelling)
- = *castra* (incorrect subsequent spelling)
- = *biroi* AIGNER, 1901

Genus *Pamparama* RONKAY & RONKAY, 1995

***Pamparama acuta acuta* (FREYER, [1837])\***

\* The type locality of *Pamparama acuta* is in Turkey, "Constantinople" [= Istanbul], but it is not clear in which part of the town it is—in the European, or in the Asiatic one. For European Turkey it is reported also by SPULER (1908: 203). In RONKAY & RONKAY (1995: 28) on the distribution map of the species the whole European part of Turkey is marked. In Europe *Pamparama acuta* is known also from Greece, the Island of Samos (RONKAY & RONKAY, 1995: 28). Its occurrence in Bulgaria is doubtful, but possible.

Genus *Behounekia* HACKER, 1990

**202. *Behounekia freyeri freyeri* (FRIVALDSZKY, 1835)\***

\* *Behounekia freyeri* (FRIVALDSZKY) was described from Bulgaria (then part of Turkey) [south slopes of Stara Planina Mts] [type locality: Sliven town] (FRIVALDSZKY, 1835: 273, T. VII., 9). REBEL (1903: 229) and BURESCH & TULESCHKOW (1932: 71) wrongly supposed this species to be known with certainty in Bulgaria and Europe. In BURESCH & TULESCHKOW (1935: 116) it is given again as unconfirmed for Bulgaria, known only from Macedonia and "Turkey". Taking into account the data of FRIVALDSZKY's expeditions, it is clear that his material came from Bulgaria, at that time part of Turkey. FRIVALDSZKY (1837: 92) redescribed *Xylina freyeri* in Latin, and under "Habitat" he gives "Balkani montosis". POOLE (1989: 192) correctly gives "Balkans" as the type locality, but "Hungary" is given instead of Bulgaria. SLIVOV (1979: 39) reported *freyeri* again as a new species for Bulgaria from "Byalata Reka" above Aytos town [about 80 km from the type locality], 06.V.1974, 2 ♂♂ at light (examined by the present author), which is the second one and the last locality of this very rare species in Bulgaria.

Genus *Omphalophana* HAMPSON, 1906**203. *Omphalophana antirrhinii antirrhinii* (HÜBNER, [1803])**= *anthirrhini* (incorrect subsequent spelling)= *antirhini* (incorrect subsequent spelling)= *antirrhini* (incorrect subsequent spelling)= *antirrhina* (incorrect subsequent spelling)*Omphalophana serrata serrata* (TREITSCHKE, 1835)\*

\* *Omphalophana serrata* Tr. was reported from Kitchevo, Republic of Macedonia (PETERSSON, 1990: 76), but probably this record is incorrect and is a misidentification of *Omphalophana anatolica* (LEDERER). *Omphalophana serrata* (TREITSCHKE, 1835) is an atlantico-mediterranean species, which has never been found in the Balkan Peninsula.

**204. *Omphalophana anatolica anatolica* (LEDERER, 1857)\***= *anatolia* (incorrect subsequent spelling)= *serrata* sensu FREYER, nec TREITSCHKE, 1835

\* *Omphalophana anatolica* (LEDERER) was reported as a new species for Bulgaria by TULESCHKOW (1931a: 28) from Belassitza Mts above Petrich town and from General Todorov village, both in SW Bulgaria. Again reported as new to Bulgaria by TULESCHKOW (1932c: 108) from Kresna Gorge, Gara Pirin (Sali Aga) [Kresna town], from Belassitza Mts above Petrich town and from General Todorov railway station. There are some other recent records from localities in SW Bulgaria and other parts of the country, most of them unpublished.

## Tribus Oncocnemidini FORBES &amp; FRANCLEMONT, 1954\*

\* The genera *Stilbia* and *Praestilbia* will be moved to Oncocnemidini in the next volume of Noctuidae Europaeae (FIBIGER, pers. comm. 12.VII.2000).

Genus *Oncocnemis* LEDERER, 1853**205. *Oncocnemis confusa* (FREYER, [1839]) ssp. *michaelorum* BESHKOV, 1997\***= *michaelii* BESHKOV (incorrect subsequent spelling)\*\*

\* *Oncocnemis confusa michaelorum* is known only from the type locality, Bulgarian N Black Sea Coast, between Balchik town and Touzlata. Collecting data of the type material are as follows: 10.VIII.1996, S. BESHKOV & J. NOWACKI leg. and 23. and 25.VIII.1996, S. BESHKOV, M. & K. BESHKOVI leg. (BESHKOV, 1997). *O. confusa michaelorum* is similar to *Oncocnemis confusa confusa* (FREYER, [1839]), but is easily distinguished from it and the other *Oncocnemis* species by external appearance and genitalia (cornuti fields and terminal cornutus of the everted vesica). Very local, known only from the type locality, the rocky slopes near the sea coast. Variable, but only two different variations from the type material are known, without any intermediate forms. Both differ strongly from the other known *Oncocnemis* species. Prior to these records, there was a single doubtful report for Sliven town by BACHMETJEV (1902: 433), following unpublished data of H. PIGULEV, who reported it as a species not rare in Sliven. According to REBEL (1903: 218) and to BURESCH & TULESCHKOW (1932: 71, 112) the data for Sliven are wrong. The night after the first finding of *O. confusa michaelorum* near Balchik town, the present author and J. NOWACKI collected above Sliven town, but failed to find *Oncocnemis confusa* there (see also BESHKOV & NOWACKI, 1998: 49). Recently (22.–23.VIII.1997) *Oncocnemis confusa michaelorum* has been collected again in the type locality by the present author, 12 ♂♂ and 4 ♀♀, both at a lamp and a light trap (col. pl. I, fig. 9), and on 09.–10.VIII.1998, 1 ♀ and 9 ♂♂, flying between 21.30 and 01.10 local time. A single specimen from Balchik was also collected by AL. SLIVOV (in coll. of AL. SLIVOV in the

Inst. Zool., Bulg. Acad. Scienc.) some time ago, but remained undetermined. Recently *Oncocnemis confusa* has been found in several places in the Ukraine: Dnepropetrovsk, Dnepropetrovskaya, Homutovskaya, Artemovskaya and Streletzkaya Steppes reserves (BUDASKIN & KLUTSHKO, 1990: 76; KLYUCHKO, 1993: 39). South Russian specimens of *Oncocnemis confusa* are darker (f. *rufescens* STAUDINGER, 1871 from Sarepta [= Krasnoarmeisk] is reddish), those from Turkey are more reddish and pale (H. HACKER, pers. comm. 15.X.1996). *Oncocnemis confusa persica* EBERT, 1978 from N Iran is smaller, ground colour of the forewings is yellow-greyish with slight reddish tint, without dark-grey coloration and the crosslines are less contrasting (EBERT, 1978: 199–200). According to RONKAY & RONKAY (1995: 47–48) “the taxonomic status of *O. confusa persica* EBERT is dubious, as specimens displaying transitional features can often be found in the south-east and east Turkish and Armenian populations”

\*\* Incorrect subsequent spelling in BESHKOV & NOWACKI (1998). This misspelling was used in the manuscript before publishing the original description with the correct name.

Genus *Calliergis* HÜBNER, [1821]

= *Lithocampa* GUENÉE, 1852

## 206. *Calliergis ramosa ramosa* (ESPER, [1786])

Genus *Epimecia* GUENÉE, 1839

## 207. *Epimecia ustula ustula* (FREYER, 1835)\*

= *ustulata* Hb. (incorrect subsequent spelling and author's name)

\* *Epimecia ustula* (FREYER) was first reported in Bulgaria from Sliven town (LEDERER, 1863: 26; BACHMETJEV, 1902: 437; REBEL, 1903: 229). Reported also from the districts of Razgrad town, “Golemiyat Yug” (MARKOWITSCH, 1909a: 4, 21). Reported by DRENOWSKI (1930a: 18) from Stara Planina Mts without exact locality (probably following the previous report from Sliven town), and from Razgrad town. In the collection of the National Museum of Natural History, Sofia, there is a single specimen of *Ulochlæna hirta* from Gara Stambolovo Railway Station [Bodrovo village], which had been wrongly determined as *Epimecia ustula*. The only specimen of *E. ustula* from Bulgaria, which the present author has seen, is a specimen in the collection of J. GANEV from NW Bulgaria, Yazovir Smirneniski Reservoir, Mihaylovgrad [= Kutlovitza, = Montana town] Region, 30.VI.1990.

Genus *Teinoptera* CALBERLA, 1891\*

= *Copiphana* HAMPSON, 1906

\* For the synonymy of *Teinoptera* CALBERLA/*Copiphana* HAMPSON see HACKER (1998a: 191).

## 208. *Teinoptera olivina olivina* (HERRICH-SCHÄFFER, 1852)

= *olivana* (incorrect subsequent spelling), nec ([DENIS & SCHIFFERMÜLLER], 1775)

*Teinoptera olivina deliblatica* (RONKAY & RONKAY, 1995)\*

\* *Teinoptera olivina deliblatica* is marked on the distribution map for the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 489, map 219). *T. olivina deliblatica* is described from Northern Serbia, Deliblat. The population in the Dobrogea, as well as all Bulgarian populations should belong to the nominate *Teinoptera olivina olivina*, which is not rare in Bulgaria.

## 209. *Teinoptera lunaki lunaki* (BOURSIN, 1940)\*

= *Teinoptera oliva* (STAUDINGER, 1895), auct.

\* The first report of *Teinoptera lunaki* (BOURSIN) from Bulgaria (as *Cleophana oliva* STGR.) was by TULESCHKOW (1934: 222; 1936: 206) from Kresna Gorge, Gara Pirin [= Kresna town] in SW Bulgaria,

29.VI.1932. Next, but not the last report for Bulgaria was by THURNER (1964: 91): "Im Museum Skopje steckt die Art von der *Alibotus* pl. (Bulg. Mazedonien) von TULESCHKOV erhalten" Recently reported from SW Bulgaria, near Sandanski town (BUSSE & OCKRUCK, 1991: 19) and S Pirin Mts, Liljanovo village above Sandanski town, 500 m altitude, 28.V.–23.VI.1982 (EICHLER, HACKER & SPEIDEL, 1996: 266). *Teinoptera lunaki* (BOURSIN, 1940) is a Balkan endemic species of which there are three subspecies (see RONKAY & RONKAY, 1995). The present author has seen only a single specimen from Bulgaria, Kresna Gorge in the collection of J. GANEV. This worn specimen is just impossible to identify on a subspecific level. The present author has never seen another specimen originating from Bulgaria, but he has collected it (nominote subspecies) in the Republic of Macedonia, Stobi near Kavadartzi. There is no doubt that the nominote subspecies occurs also in Bulgaria. The closely related species *Teinoptera oliva* (STAUDINGER, 1895), known from Asia Minor and SE Transcaucasia, according to RONKAY & RONKAY (1995: 80) may occur in S Balkans and/or in the Aegean region.

Genus *Cleonymia* BERIO, 1966

= *Cleophana* auct., nec BOISDUVAL, 1840

Subgenus *Serryvania* BERIO, 1980

= *Ronkayana* FIBIGER & HACKER, 1991, nomen nudum

## 210. *Cleonymia opposita opposita* (LEDERER, 1870)\*

\* *Cleonymia opposita* (LEDERER) (pl. 3, fig. 6) was reported from "Bulgaria" without details of locality (STAUDINGER & REBEL, 1901; BACHMETJEV, 1902: 461). The report of DRENOWSKI (1930a: 18) from Stara Planina Mts, also without exact locality, probably follows those of REBEL (1903: 229) and of BURESCH (1914a: 46) for Sliven town. BINDER (1933: 349), also recorded it from Sliven town. Known also from Kroupnik village near Kresna Gorge (DRENOWSKI, 1920: 6; DRENOWSKI, 1921a: 136; BURESCH & TULESCHKOW, 1935: 117) and from Kresna Gorge (THURNER, 1964: 92), probably quoting the sources given above.

Genus *Amephana* HAMPSON, 1906

Subgenus *Trigonephra* BERIO, 1980

## 211. *Amephana dalmatica dalmatica* (REBEL, 1919)\*

- = *aurita* FABRICIUS, 1787, sensu auct.
- = *aurita* Y. (incorrect author's name)
- = *dejeani* DUPONCHEL, 1827, sensu auct.
- = *dejani* (incorrect subsequent spelling)
- = *dejanii* (incorrect subsequent spelling)

\* The taxon *dalmatica* REBEL, 1919 is described as a subspecies of *dejeani*. POOLE (1989: 70) erroneously synonymized *dalmatica* REBEL with *aurita* FABRICIUS. In fact, the specific differences between *dalmatica* REBEL and *aurita* FABRICIUS are relatively large (see in RONKAY & RONKAY, 1995: 98–99). *Amephana dalmatica* is known in Bulgaria from Belassitza Mts above Petrich town (BURESCH & TULESCHKOW, 1935: 117); Belassitza Mts, Eleshnitsa [= Belassitza] village (DRENOWSKI, 1921a: 135; BURESCH & TULESCHKOW, 1935: 117); SW Bulgaria, "Rupite" near Volcanic Hill of Kozhouh, Petrich district (as *Amephana dejeani* DUPONCHEL) (GANEV, 1984b: 133); Zemen gorge, Skakavitza railway station in W Bulgaria, J. GANEV leg. (HACKER, 1989); Sakar Mts, Driptchevo village (GANEV, 1987a: 102); E Rhodopi Mts, Momina Skala Chalet near Madzharovo town and Siv Kladenetz village, Ivaylovgrad



district (BESHKOV, 1995a: 210). Reported by DRENOWSKI (1930a: 18) from Pirin and Alibotoush [Slavyanka] Mts without details of localities; from Alibotoush [Slavyanka] Mts known from Petrovo village (ZUKOWSKY, 1935: 46), from the Gorge of Petrovska Reka River (TULESCHKOW, 1929: 157), and Alibotoush [Slavyanka] Mts, again without exact localities (TULESCHKOW, 1930a: 33). The locality "Ograzhden Planina, near Novo Selo" given in BURESCH & ILTSCHEW (1921: 79) is now in the Republic of Macedonia. All reports of *aurita* FABRICIUS, 1787 and *dejeani* DUPONCHEL, 1827 from Bulgaria (and the Balkan Peninsula) refer to *Amephana dalmatica dalmatica* (REBEL).

Genus *Omia* HÜBNER, [1821]

*Omia cymbalariae cymbalariae* (HÜBNER, [1809])\*

\* *Omia cymbalariae* (HÜBNER) is another species which might be expected in Bulgaria. Known from the adjacent territories of the Republic of Macedonia, Montenegro (Durmitor Mts), Bosnia & Herzegovina and Slovenia (CARNELUTTI, VASIC, TOMIC, ZECEVIC & KRANJCEV, 1991: 106), as well as from Romania (Herkulesbad district) (RÁKOSY, 1996b: 100).

Subfamily Amphipyridae GUENÉE, 1838

Genus *Pyrois* HÜBNER, [1820]

= *Adpyramidcampa* BECK, 1991

212. *Pyrois cinnamomea cinnamomea* (GOEZE, 1781)\*

\* *Pyrois cinnamomea* (GOEZE) is known from the following localities in Bulgaria: SW Bulgaria, Kresna Gorge, larvae on *Populus* spp. (GOGOV, 1963: 240) and Peyo Yavorov Railway Station, 13.III.1986, S. BESHKOV leg. one dead dry specimen; Rhodopi Mts, Elidere River near Marko Nikolovo Railway Station (pupae in the ground under a poplar tree) (GOGOV, 1963: 240); Rhodopi Mts, "River Kritchim, 15.XI.1939", one specimen in coll. of the National Museum of Natural History, Sofia; Pirin Mts, Pirin village and Kresna Gorge (GYULAI, 1983: 206); "Roupite" near General Todorov, Petrich district in SW Bulgaria and Black Sea Coast, Obzor village (SLIVOV, 1984: 62); S Black Sea Coast, Sinemoretz village, 16.X.1994, 1 ♀ at sugar (BESHKOV, 1995a: 210); E Rhodopi Mts, Byalo Pole (= Belopolyane) village, Ivaylovgrad district (S. BESHKOV & I. STOYTCHEV leg.) and SW Bulgaria, Petrich district, Novo Konomladi village, 24.VII.1992, ex pupa, V. GASHTAROV leg. (BESHKOV & GASHTAROV, in press).

213. *Pyrois effusa effusa* (BOISDUVAL, [1828])\*

= var. *sciaphila* STAUDINGER, 1781

\* The first report of *Pyrois effusa* (BOISDUVAL) for Bulgaria (as *Amphipyra effusa* B.?) was by ILTSCHEW (1913: 90, 103) from Sredna Gora Mts, Stambolovo [Bodrovo] village. According to BURESCH & TULESCHKOW (1932: 71, 134) this report requires confirmation because the collected material is missing from the Royal Entomological Station in Sofia. Since that time, there have been numerous other records for this species, which is not very rare in Bulgaria. *Pyrois effusa* is on the wing from late May to June and after a summer aestivation (see BESHKOV & PETROV, 1996: 446), often in a caves or galleries, flies again from late October to early December.

Genus *Amphipyra* OCHSENHEIMER, 1816

= *Pyramidcampa* BECK, 1991

= *Adamphipyra* BECK, 1991

= *Tetrapyra* BECK, 1991

= *Antiamphipyra* BECK, 1991

= *Anpyramida* BECK, 1996

**214. *Amphipyra pyramidea pyramidea* (LINNAEUS, 1758)\***

= f. *pallida* LAMB.

= *pyramidae* (incorrect subsequent spelling)

= *pyramidea cuprior* FLETCHER, 1968\*\*

\* *Amphipyra pyramidea* (LINNAEUS) is widely distributed in the country. Closely related to *Amphipyra berbera* RUNGS and confused with it until recently. The true pattern of the distribution of both taxa in Bulgaria is still not clear.

\*\* *A. pyramidea cuprior* FLETCHER, 1968 is described from Calabria, Sicily, Bulgaria, Turkey and Syria. A synonym of the nominate *A. p. pyramidea* L.

**215. *Amphipyra berbera* RUNGS, 1949 ssp. *svenssoni* FLETCHER, 1968\***

= *berbera swenssoni* (incorrect subsequent spelling)

\* *Amphipyra berbera svenssoni* FLETCHER is also widely distributed in the country from sea level up to an altitude of 2200 m in the mountains. Only recently separated from the closely related *Amphipyra pyramidea* (LINNAEUS). The true distribution of both taxa in Bulgaria still has to be worked out. The first report for Bulgaria is that of BOURSIN (1969), the next one that of GANEV & BOCHAROV (1982: 104). Some other other records followed afterwards.

***Amphipyra perflua perflua* (FABRICIUS 1787)\***

\* *Amphipyra perflua* (FABRICIUS) is another species for which there is no evidence of its occurrence in Bulgaria, and it is wrongly included for the country in NOWACKI & FIBIGER (1996: 265). However, its occurrence in Bulgaria seems possible, as it is recorded from the neighbouring territory of Serbia, Timocka Krajina, Petrovo Selo, Ploche (ZECEVIC, 1983: 44).

**216. *Amphipyra livida livida* ([DENIS & SCHIFFERMÜLLER], 1775)**

**217. *Amphipyra tragopogonis tragopogonis* (CLERCK, 1759)**

**218. *Amphipyra tetra tetra* (FABRICIUS, 1787)\***

\* The first report of *Amphipyra tetra* (FABRICIUS) in Bulgaria was by KARNOSCHITZKY (1954: 178) from the districts of Varna town, Black Sea Coast. Known also from Ograzhden Mts, Sestrino village (GANEV, 1987b: 9) and Sakar Mts, above Dossiteevo village (BESHKOV, 1992: 51). This species, considered to be very local and rare in the past because of its weak attraction to artificial light, has been collected recently in Kresna Gorge and in several places in the E Rhodopi Mts in large numbers at sugar (BESHKOV, 1995a: 211). Another published locality is E Rhodopi Mts, Studen Kladenetz village, single specimen at sugar (GOATER, 1996: 282). At light and at sugar collected in Alibotoush [= Slavyanka] Mts, between "Livada" and Goleshovo village, 1500 m, 15.VII.1998, S. BESHKOV & S. ABADJIEV leg. and 02.IX.1999, S. BESHKOV & D. VASSILEV leg., in coll. BESHKOV. Known also from S Pirin Mts, between Popovi Livadi and the crossroad to Pirin village, 1050 m, 06.VI.2000, S. BESHKOV & K. SOICHIRO leg. at lamp.

**219. *Amphipyra micans micans* (LEDERER, 1857)**

***Amphipyra submicans submicans* KUZNETZOV, 1958\***

= *molybdea* CHRISTOPH, 1867, nec HAMPSON, 1908

\* There is only one unpublished and unconfirmed record of *Amphipyra submicans* KUZNETZOV in Bulgaria: Black Sea Coast, Kranevo near Varna, 01.–14.VIII.1991, THOMAS DRECHSEL leg., single specimen (T. DRECHSEL, pers. comm. June, 1996). The specimen has not been examined by the present author.

**220. *Amphipyra stix stix* HERRICH-SCHÄFFER, 1850\***= *styx* (incorrect subsequent spelling)

\* In Bulgaria *Amphipyra stix* HERRICH-SCHÄFFER is known from SW Bulgaria, Kresna Gorge (GYULAI, 1983: 206); SW Bulgaria, Ograzhden Mts, Sestrino village (GANEV, 1987b: 9); near Sandanski town (FRANKE, 1989: 144); Maleshevska Planina Mts between Vulkovo and Lebnitza villages (LEHMANN, 1990: 129); SW Bulgaria, S Pirin Mts, Liljanovo village above Sandanski town, 500 m altitude (EICHLER, HACKER & SPEIDEL, 1996: 266); Melnik town, 30.VII.1997, S. BESHKOV & M. MARINOV leg.; SE Bulgaria, Sakar Mts, above Dossiteevo village and S Black Sea Coast near Sinemoretz village (BESHKOV, 1992: 51); Resseletz village near Tcherven Bryag town, Pleven Region in N Bulgaria, S. BESHKOV leg. (BESHKOV & GASHTAROV, in press).

## Subfamily Psaphidinae GROTE, 1895

Genus *Asteroscopus* BOISDUVAL, 1828**221. *Asteroscopus sphinx sphinx* (HUFNAGEL, 1766)\***

\* Some of the localities given for *Asteroscopus sphinx* (HUFNAGEL) are mingled with those of *B. nubeculosa* (see also under *B. nubeculosa*) and also in the past probably with *Asteroscopus syriaca decipulae* KOVACS. The first report of *Asteroscopus sphinx* (as *Brachionycha Sphinx*) for Bulgaria and for the Balkan Peninsula as a whole is that of REBEL (1903: 218) from Sliven town, 1. July [1897] (sic!) HABERHAUER bred on *Centaurea* (!), single small male specimen. However, this report is wrong and it concerns *Asteroscopus syriaca decipulae*. See also in REBEL (1916: 38) and under *Asteroscopus syriaca* here. The first correct report for *Asteroscopus sphinx* in Bulgaria is that of BURESCH (1924b: 20) for Tryavna town, 18.X.1923. Many other records follow afterward for this species, which is not rare in Bulgaria.

**222. *Asteroscopus syriaca* WARREN, 1910 ssp. *decipulae* KOVACS, 1966\***= *syriacus* (incorrect subsequent spelling)= *Brachionycha decipulae* KOVACS, 1966\*\*

\* The first report for Bulgaria and Europe of *Asteroscopus syriaca* was by REBEL (1916: 38) from Sliven town, 1. July 1897 (sic!) HABERHAUER bred on *Centaurea* (!), single male specimen in Naturhist. Hofmus. Wien, H. ZERNY det. In BURESCH & TULESCHKOW (1932: 116) this report is regarded as doubtful. The flight period of *A. syriaca* (WARREN) begins in late autumn; moreover the foodplant(s) are broadleaved trees, not *Centaurea* which according to BURESCH & TULESCHKOW (1932: 116) was stated to be the foodplant in HABERHAUER's communication to REBEL. The specimen reported as *Brachionycha Sphinx* in REBEL (1903: 218) from Sliven town, 1. July [1897] (sic!) HABERHAUER bred on *Centaurea* (!), single small male specimen was subsequently recognized as *syriaca*. See also under *A. sphinx*. *Asteroscopus syriaca decipulae* KOVACS, 1966 is a little bit variable, now known from several places in SW Bulgaria (pl. 3, fig. 8), E Rhodopi Mts (pl. 3, fig. 7), Sakar Mts, Bessaparskite Ridove Hills, Hissara and Sliven towns (BESHKOV, 1993: 375; BESHKOV, 1998: 240); Sredna Gora Mts, Banya Resort near Panagurishte, 17.X.1973 and 28.X.1970, S. BOCHAROV leg., in coll. National Museum of Natural History, Sofia; Stara Zagora town, 07.XII.1999 (leg. and in coll. P. PETKOV, S. BESHKOV det.); S Black Sea Coast, Pomorie town (I. IVANOV leg., in coll. AL. SLIVOV); W Rhodopi Mts, Tsepinska Reka River, 30.X.1957, D. GOGOV leg., in coll. AL. SLIVOV. In some of the localities mentioned above, *Asteroscopus syriaca* is sometimes abundant. It is on the wing from the second half of October to early January.

\*\* *decipulae* KOVACS, 1966 is at present regarded subspecies of *A. syriaca* WARREN (RONKAY & VARGA, 1986: 150–152).

Genus *Brachionycha* HÜBNER, [1819]

**223. *Brachionycha nubeculosa nubeculosa* (ESPER, [1785])\***

\* VIHODCEVSKI & GOGOV (1963: 231) wrongly reported *Brachionycha nubeculosa* from Vitosha Mts "Shantzata", 21.IX.1957. This record must refer to *Asteroscopus sphinx* (HUFNAGEL, 1766). The same mistake is made by TULESCHKOV & SLIVOV (1975: 134), who reported *A. sphinx* for Rhodopi Mts as "often up to 1600 m altitude during the middle of September to the middle of May". SLIVOV (1988b: 133) reported *Asteroscopus sphinx* from SW Bulgaria, Belassitza Mts, "low, middle and upper forest zones" from March to April. In his list for Vitosha Mts SLIVOV (1990: 193) included *B. nubeculosa* for Vitosha Mts following the reports of NESTOROVA and VIHODCEVSKI & GOGOV (1963: 231). It is possible that *B. nubeculosa* has never been found in Vitosha Mts. Phenologically *B. nubeculosa* and *A. sphinx* are strongly separated, *A. sphinx* flying in late autumn, *B. nubeculosa* in early spring (March to April). Previously there was only a single, also doubtful, report of *B. nubeculosa* in Bulgaria: one larva found in Arabakonashki Prohod Pass in 1915, but the imago did not emerge (BURESCH & TULESCHKOW, 1932: 115). In the last decades the occurrence of *B. nubeculosa* in Bulgaria has been positively confirmed from several localities. The first correct report for this rare in Bulgaria species is that of GANEV (1982b: 164) for W Bulgaria, Zemen Gorge, Skakavitza Railway Station, March to April. Several other localities were established afterwards, all in West and Southwest Bulgaria.

Genus *Valerietta* DRAUDT, 1938

= *Crypsedra* sensu auct.

**224a. *Valerietta niphopasta niphopasta* (HAMPSON, 1906)\***

\* *Valerietta niphopasta niphopasta* (HAMPSON, 1906) is also known from Bulgaria. The specimen in the collection of A. SLIVOV labelled "Spirka Kresna, 25–27.V.1976, leg. AL. SLIVOV" and determined and illustrated by him as "*Grypsedra niphopasta bulgarica*" (SLIVOV, 1984: 61) belongs to *Valerietta niphopasta niphopasta* (HAMPSON, 1906) (pl. 3, figs 9, 10). The structure of the genitalia including the everted vesica (gen. prep. 2./09.III.1995, S. BESHKOV) and the external characteristics show that this is so. For more detailed information see BESHKOV & SLIVOV (in press). In Turkey *Valerietta niphopasta* has two generations—the first one in May to June and the second one in August to September (HACKER, 1996b: 278).

**224b. *Valerietta bulgarica bulgarica* (DRENOVSKY, 1953)\***

= *niphopasta* sensu auct., nec HAMPSON, 1906

\* *Crypsedra niphopasta bulgarica* DRENOVSKY, 1953 was described from Vitosha Mts, Dragalevski Manastir monastery, 930 m altitude. HACKER (1989: 183) mentioned the taxon *Valerietta niphopasta bulgarica* (DRENOVSKY, 1955) [sic!], following the previous reports of DRENOVSKY (1953) for Vitosha, and that of SLIVOV (1984: 61) for Kresna Gorge, and for the first time mentioned one new locality, "Arkoutino". Later, from "Arkoutino" (03.VIII.1973) HREBLAY (1992) designed the neotype of *bulgarica* (the type of DRENOVSKY has disappeared) and considered it to be a bona species. At present Vitosha and Arkoutino remain the only known localities for *Valerietta bulgarica bulgarica* (DRENOVSKY, 1953) (BESHKOV & SLIVOV, in press). Recently (08.VI.1998) two male specimens of *Valerietta bulgarica* were collected again in Arkoutino (pl. 3, figs 11–13; col. pl. I, fig. 10; gen. figs 137, 138) (BESHKOV, NOWACKI & PALKA, 1999: 179). The present author spent a couple of nights in Vitosha Mts, near Dragalevski Manastir monastery, the type locality of *Valerietta bulgarica* (DRENOVSKY, 1953), in late May, but no one *Valerietta* specimen was found there. *Valerietta bulgarica* (DRENOVSKY, 1953) has also two generations (BESHKOV, NOWACKI & PALKA, 1999: 179), as does the closely related taxon *Valerietta niphopasta niphopasta* (HAMPSON).

Genus *Lamprosticta* HÜBNER, [1820]  
= *Chariptera* GUENÉE, 1852

225. *Lamprosticta culta culta* ([DENIS & SCHIFFERMÜLLER], 1775)  
= *viridana* (WALCH, 1779)

Subfamily Dilobinae AURIVILLIUS, 1889

Genus *Diloba* BOISDUVAL, 1840

226. *Diloba caeruleocephala caeruleocephala* (LINNAEUS, 1758)  
= f. *separata* SCHTZ.

Subfamily Condicinae POOLE, 1995

Genus *Condica* WALKER, 1856  
= *Platysenta* GROTE, 1874

*Condica viscosa viscosa* (FREYER, 1831)\*

\* *Condica viscosa* (FREYER) has never been found in Bulgaria. It is another species wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 266).

Subfamily Stirriinae GROTE, 1882\*

\* The genera *Apaustis* and *Haemerosia* should be moved here from the subfamily Hadeninae (FIBIGER, pers. comm. 12.VII.2000).

Genus *Panemeria* HÜBNER, [1823]  
= *Heliaca* HERRICH-SCHÄFFER, [1851]

227. *Panemeria tenebrata tenebrata* (SCOPOLI, 1763)\*  
= *jocosa* ZELLER, 1847

\* At the present time the only definite localities of *Panemeria tenebrata* (SCOPOLI, 1763) in Bulgaria are the Black Sea Coast, Varna [= Stalin] town, 08.V.1955, N. KARNOSCHITZKY leg., 1 ♂ in coll. National Museum of Natural History, Sofia, gen. prep. S. BESHKOV, male genitalia with everted vesica; idem, 20.IV.1997, 2 ♀♀, 19.IV.1952, 1 ♀, 29.IV.1944, 1 ♂ (genitalia of all specimens checked); S Black Sea Coast, [Rossen village] (= Mehmetchkoj), Bourgas Region, 24.IV.1926, P. TSCHORBADJIEV leg., 1 ♀ in coll. National Museum of Natural History, Sofia, genitalia checked; Sliven town, 18.IV.1913, P. TSCHORBADJIEV leg., 1 ♂ in coll. National Museum of Natural History, Sofia, gen. prep. 4./22.VI.1998, S. BESHKOV, male genitalia with everted vesica; SW Bulgaria, Kroupnik near Kresna Gorge, 25.IV.1918, D. ILCHEV leg., 1 ♂ (gen. prep. 5./22.VI.1998, S. BESHKOV, male genitalia with everted vesica) (gen. figs 7, 8) and 1 ♀ (gen. prep. 6./22.VI.1998, S. BESHKOV) (gen. fig. 9); Kresna town, 04.V.1928, Kr. TULESHKOV leg., 2 ♀♀ (gen. prep. 7./22.VI.1998, S. BESHKOV) (gen. fig. 10); Kresna Gorge, Sheitan Dere, 24.IV.1918, D. ILCHEV leg., 1 ♂ (genitalia checked); "Kresna Defile", 08.V.1923, BURESCH leg., 1 ♀ (genitalia checked), all specimens from the collections of the National Museum of Natural History, Sofia. The specimens from the collection of the present author, examined by him, all originated from SW Bulgaria (Ograzhden Mts

and Kresna Gorge) and belong to *Panemeria tenebromorpha* RÁKOSY, HENTSCHOLEK & HUBER, 1996. In SW Bulgaria (Kresna Gorge) *Panemeria tenebrata* is sympatric with *Panemeria tenebromorpha*.

## 228. *Panemeria tenebromorpha tenebromorpha* RÁKOSY, HENTSCHOLEK & HUBER, 1996\*

\* *Panemeria tenebromorpha* RÁKOSY, HENTSCHOLEK & HUBER, 1996, previously known only from the type locality (Greece, Askion Mts, 900–1000 m) has been found in several localities in Bulgaria as follows: Ograzhden Mts, Lebnitzia village, 18.IV.1986, 1 ♀ (GANEV leg., gen. prep. 1./06.II.1998, S. BESHKOV, in coll. S. BESHKOV) (pl. 3, fig. 15); Kresna Gorge, Peyo Yavorov Railway Station, 200 m altitude, 20.IV.1990, 1 ♀ (pl. 3, fig. 16) (gen. prep. 2./06.II.1998, BESHKOV), Idem, 05.V.1990, 1 ♂ (gen. prep. 3./06.II.1998, S. BESHKOV, genitalia with everted vesica); SW Bulgaria, "Roupite" near Petrich town, 100 m alt., 24.IV.1991, 1 ♂, V. GASHTAROV leg. (pl. 3, fig. 17); Lozenska Planina Mts, Germanski Manastir monastery, Sofia Region, 01.VII.1906 (in coll. National Museum of Natural History, Sofia; Beledye Han near Kostinbrod, Sofia Region, 04.VI.1967, S. BOCHAROV leg., in coll. of BOCHAROV in the National Museum of Natural History, Sofia, 1 ♀, gen. prep. 1./15.I.1999, S. BESHKOV (gen. fig. 11); E Rhodopi Mts, above Dishlik Dere between Oreshari and Dolno Tcherkovishte villages, 350 m, 04.V.2000, 1 ♂, leg. and coll. S. BESHKOV. In appearance and genital features the specimens from Bulgaria correspond exactly to the original description. The range of *Panemeria tenebromorpha* is not yet clear, but it is probably a Balkan endemic species, while *Panemeria tenebrata* is a northwestern species. However, the type locality of *Panemeria tenebrata* (SCOPOLI) is near the southern part of the Balkan Peninsula (Slovenia, "Carniola"), where the presence of *Panemeria tenebromorpha* is also very possible.

Genus *Aegle* HÜBNER, [1823]

= *Metoponia* GUENÉE, 1852

## 229. *Aegle kaekeritziana kaekeritziana* (HÜBNER, [1796–1799])

= *flava* (HÜBNER, [1809])

= *koekeritziana* (incorrect subsequent spelling)

= *koeckeritziana* (incorrect subsequent spelling)

= f. *subfumata* STAUDINGER, 1892, auct.\*

\* See under *Metaegle pallida*.

## 230. *Aegle semicana semicana* (ESPER, [1798])\*

= *vespertalis* (HÜBNER, [1811–1813])

\* For the synonymy between *semicana/vespertalis* see in HACKER (1998a: 201; 1998b: 462). The name *semicana* (ESPER, [1798]) was incorrectly offered by POOLE (1989: 119) to replace the name *phragmitidis* HÜBNER, [1803] from the genus *Arenostola* due to misidentification. *Aegle semicana* (pl. 3, fig. 18) was reported as new to Bulgaria (as *vespertalis*) from the districts of Svilengrad town, Yuskudar [Shtit village] (TŠHORBÁDJIEW, 1928a: 178; 1928b: 22). There are many subsequent records in Bulgaria of this sometimes abundant species.

Genus *Metaegle* HAMPSON, 1908

## *Metaegle pallida pallida* (STAUDINGER, 1892)\*

\* The type locality of *subfumata* (STAUDINGER, 1892): Dalmatia, Turkey, Hadijin, is the only previous report for *M. pallida/subfumata* in Europe. The type locality of *pallida* STAUDINGER is Turkey, Mardin. For both taxa see also HACKER (1990: 501) and HACKER (1998). Probably *subfumata* (STAUDINGER, 1892) is a distinct species, neither a subspecies of *pallida* nor a synonym. The specimen from SW Bulgaria, Paril Col, Paril village, 900 m altitude, 28.VII.1995, leg. and in coll. V. GASHTAROV (figs 151, 152) (see under

## Subfamily Stirriinae GROTE, 1882\*

the next taxon) shows some differences on a specific level (also the opinion of MICHAEL FIBIGER, pers. comm. 04.XII.1998) with Turkish ones (figs 153, 154) in the structure and shape of the frons.

**231. *Metaegle pallida* var. *subfumata* (STAUDINGER, 1892)\***

\* Recently a single male specimen of *Metaegle pallida* (STAUDINGER) was collected in SW Bulgaria, Paril Col, Paril village, 900 m altitude, 28.VII.1995, leg. and in coll., V. GASHTAROV, gen. prep. 4./28.IX.1997, S. BESHKOV (BESHKOV & GASHTAROV, in press) (pl. 4, fig. 2; pl. 12, fig. 11). As far as the present author knows, until this finding the only certain report for *Metaegle pallida* in Europe was the type material of *pallida* var. *subfumata* STAUDINGER, 1892 from Dalmatia. There is another record, by TSCHORBADJIEV (1915: 4, 34) as "*Metoponia koekeritziana* Hb. var. *subfumata* STGR. together with *Metoponia koekeritziana*" from the Black Sea Coast, Bourgass town, and later SLIVOV (1976 [1977]: 72) reported "*Aegle koekeritziana* f. *subfumata* STGR." from the Black Sea Coast, Varna town, Banya village, Bourgass and Sozopol towns. The specimens of SLIVOV from Banya village, checked by the present author, are *Aegle kaekeritziana* (HÜBNER), the specimens from the other localities mentioned there must belong also to *Aegle kaekeritziana*. In the collection of SLIVOV no one *M. pallida/subfumata* specimen was found. In the collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, the specimens determined as *Metoponia koekeritziana subfumata* from Varna town are also *Aegle kaekeritziana* Hb. In the collection of TSCHORBADJIEV in the National Museum of Natural History, Sofia, no specimens of *M. subfumata* STGR. were found. The present author regards the records of TSCHORBADJIEV and SLIVOV as very likely misidentifications. In NOWACKI & FIBIGER (1996: 266) *M. pallida* in Europe is stated to occur in Turkey only. The source of this data is unclear to the present author and he considers it to be a mistake. The specimen from Bulgaria shows some specific differences (also the opinion of MICHAEL FIBIGER, pers. comm. 04.XII.1998) from Turkish ones in the structure and shape of the frons (figs 151–154), but the genitalia are identical with the Turkish specimens. A careful examination of the type material of Turkish *pallida* and Dalmatian *subfumata* is needed.

Genus *Megalodes* GUENÉE, 1852*Megalodes eximia eximia* (FREYER, 1845)\*

\* In Europe *Megalodes eximia* is known from Greece and European Turkey (NOWACKI & FIBIGER, 1996: 266) and can be expected near the bordering areas of S Bulgaria as well.

Genus *Mycteroplus* HERRICH-SCHÄFFER, [1850]**232. *Mycteroplus puniceago puniceago* (BOISDUVAL, 1840)\***

\* The first reports of *Mycteroplus puniceago* (BOISDUVAL) from Bulgaria were by BURESCH (1926b: 160, 163, 165; 1930a: 217) as an abundant species in Euksinograd, Varna district. Known from the N Black Sea Coast, Balchik, Albena Resort, Euksinograd and Varna town. The flight period is from the middle of August to the beginning of October (SLIVOV, 1976 [1977]: 69). The reports of MANN (1866) and BACHMETJEV (1902: 434) for the Dobrogea follow the record of VON MALINOVSKY for Tulchea, Danube Delta. However, in the Dobrogea it is known from Dobritch [= Tolbouhin] town (BURESCH & TULESCHKOW, 1935: 126). Near Balchik (Belija Bryag camping site) *Mycteroplus puniceago* is not a rare species—in a short period of time the present author together with BARRY GOATER collected 29 specimens resting under lamps around buildings (BESHKOV & GOATER, in press; GOATER, 1996: 274, 283). The present author has found specimens in the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia) with labels "Palamara", Shoumen region, 29.IX.1966, "Tzar Kroum" [Han Kròum village, Shoumen districts], 04.X.1972, "Karandila" above Sliven town [1000 m alt.], 11.–16.X.1970, and Strandzha Mts, Katchul near Grammatikovo village, 21.–22.IX.1985.

## Subfamily Heliiothinae BOISDUVAL, 1828\*

\* *Janthinea* should be moved here from subfamily Hadeninae (FIBIGER, pers. comm. 12.VII.2000).

Genus *Schinia* HÜBNER, [1818]

= *Melicleptria* HÜBNER, [1823]

= *Protoschinia* HARDWICK, 1970

233. *Schinia cardui cardui* (HÜBNER, 1790)\*

\* The first record of *Schinia cardui* (HÜBNER) for Bulgaria was by KARNOSCHITZKY (1954: 182): Black Sea Coast at Varna [= Stalin] town, on *Marrubium* spec. The present author checked several times the whole collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, but could not find any specimen of *Schinia cardui*. However, *Schinia cognata* is known from this region ("Dakilitas [Pobitite Kamani near Varna town], 11.VI.1968, Lampa, leg. AL. SLIVOV"). The report of BACHMETJEV (1902: 439) for the Dobrogea follows the record of VON MALINOVSKY for Tulchea, Danube Delta. SLIVOV (1984: 63) recorded a single male of this heliophilous species, taken at light in "Roupite" near General Todorov village, Petrich district, 07.-09.VII.1978 [Hsisto Loukov leg.]. This specimen, examined by the present author, is a female of *Schinia cognata*. In that area *Schinia cognata* is not a very rare species, flying by day. The present author has seen three specimens of *Schinia cardui* in the collection of AL. SLIVOV with labels from SW Bulgaria, Kresna Gorge, from NE Bulgaria, Dobritch [= Tolbouhin] town and from Stara Planina Mts, Teteven town.

234. *Schinia cognata cognata* (FREYER, 1833)\*

\* BACHMETJEV (1902: 439), following the unpublished data of H. PIGULEV and REBEL (1903: 232), following BACHMETJEV (1902: 439) reported *Schinia cognata* (FREYER) from Sliven town and the species was recorded from here also by BINDER (1933: 349). The report of BACHMETJEV (1902: 439) for the Dobrogea follows that of VON MALINOVSKY for Tulchea, Danube Delta. Known also from the Black Sea Coast, "Dakilitas [Pobitite Kamani near Varna town], 11.VI.1968, Lampa, leg. AL. SLIVOV". Very possibly, this heliophilous species has never been collected at light. From the mountains known from Central Stara Planina Mts (DRENOWSKI, 1930f: 22), however without given exact locality and altitude. SLIVOV (1984: 63) recorded a single male of *Schinia cardui*, taken at a lamp in "Roupite" near General Todorov village, Petrich district, 07.-09.VII.1978 [Hsisto Loukov leg.]. This specimen was examined by the present author and found to be a female of *Schinia cognata*. There are very few other records from other parts of the country, but *Schinia cognata* is not a rare species in SW Bulgaria, the districts of Novo Konopladi village (pl. 4, fig. 3) (V. GASHTAROV, pers. comm.).

235. *Schinia scutosa scutosa* ([DENIS & SCHIFFERMÜLLER], 1775)

= *scutosus* (incorrect subsequent spelling)

Genus *Stenoecia* WARREN, 1911\*

\* For the systematic position of the genus *Stenoecia* WARREN, 1911 see FIBIGER & HACKER (1991: 43). Probably this genus does not belong to the Heliiothinae, but to Zoenobinae.

*Stenoecia dos dos* (FREYER, 1838)\*

\* The occurrence of *Stenoecia dos* (FREYER) in Southeast or in Southwest Bulgaria seems very possible. It is known from Turkey, "Constantinopol" (= Istanbul, European Turkey (?)) and from Asia Minor. Not long ago it was reported from the Republic of Macedonia, too (Derven Pass, district of Prilep town) (VON MENTZER, 1981b: 140). In Asia Minor (Cappadocia), where it is not a rare species, it flies by day and visits the flowers of *Silene* spp. (A. KALLIES, pers. comm., also observed there by J. GELBRECHT, T. DRECHSEL, B. SCHACHT and the present author) (col. pl. II, fig. 14).



Genus *Pyrocleptria* HAMPSON, 1903*Pyrocleptria cora cora* (EVERSMANN, 1837)\*

\* *Pyrocleptria cora* (EVERSMANN) is another species wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 267). It has never been found in this country.

Genus *Heliothis* OCHSENHEIMER, 1816

= *Cloridea* DUNCAN & WESTWOOD, 1841

= *Nubiothis* BECK, 1996

= *Peltothis* BECK, 1996

236. *Heliothis viriplaca viriplaca* (HUFNAGEL, 1766)

= *dipsacea* (LINNAEUS, 1767)

= *dipsaceae* (incorrect subsequent spelling)

= *dipsaceus* (incorrect subsequent spelling)

237. *Heliothis maritima* DE GRASLIN, 1855 ssp. *bulgarica* (DRAUDT, 1938)\*

\* The type locality of ssp. *bulgarica* DRAUDT is Bulgaria, Svishtov town. That of the nominate subspecies is France. SOFFNER (1962: 156) wrongly reported *Heliothis maritima* as new for Bulgaria from the Black Sea Coast, Nessebar, despite the type locality of *bulgarica* (DRAUDT) being in Bulgaria and the fact that it had already been reported from the Black Sea Coast, Zlatni Pyasatzi, Varna Region (FRIESE, 1960: 87). Now *Heliothis maritima bulgarica* is known from a lot of other localities in the country, locally (the districts of Balchik town) abundant.

*Heliothis ononis ononis* ([DENIS & SCHIFFERMÜLLER], 1775)\*

\* *Heliothis ononis* ([DENIS & SCHIFFERMÜLLER]) has been reported in the past from Sofia (BACHMETJEV, 1897: 199; 1898: 38; 1902: 439) and from Vidin towns (BACHMETJEV, 1902: 439, following the unpublished data of H. PIGULEV). REBEL (1903: 232) and BURESCH & TULESCHKOW (1932: 71) considered these records to be doubtful. According to them, it is a mistake for *Heliothis viriplaca*. REBEL (1903: 232), following BACHMETJEV (1902: 439) quoted the localities given there (Sofia and Vidin) and wrongly quoted one additional locality, Varna town. According to BURESCH & TULESCHKOW (1935: 123) the locality Varna seems to be correct, but that is not so. In BURESCH & TULESCHKOW (1935: 123) the quoted pages of BACHMETJEV (1902) are wrongly given. The present author has never seen this species in Bulgaria. *Heliothis ononis* is known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 492, map 239). Known also from former Yugoslavia, Serbia, Croatia, Dalmatia, Slavonija, Slovenija (CARNELUTTI, VASIC, TOMIC, ZECEVIC & KRANJCEV, 1991: 112) and the Upper Kupa Valley in Croatia (MLADINOV, 1977a: 81) and has been collected both at light and by day. It therefore seems likely that it could occur in the Bulgarian part of the Dobrogea, at the N Black Sea Coast or in Northern Bulgaria. There is a doubtful report for the Republic of Macedonia, Bitola town (TURNER, 1964: 123). *Heliothis ononis* is also wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 267).

238. *Heliothis peltigera peltigera* ([DENIS & SCHIFFERMÜLLER], 1775)

= *peltiger* (incorrect subsequent spelling)

239. *Heliothis nubigera nubigera* HERRICH-SCHÄFFER, 1851\*

= *nubigera minutier* TURNER, 1938

\* The first reports for *Heliothis nubigera* HERRICH-SCHÄFFER from Bulgaria were by TULESCHKOW (1931a: 26, 1932c: 110) from Kresna Gorge [Kresna town] in SW Bulgaria and by BURESCH & TULESCHKOW (1935: 125) for Strandzha Mts, Staro Rezovo village. Some other records follow after that from several

other localities. In certain years it is not rare, but there can be a period of years when it is found nowhere in the country, suggesting that it is a migratory species in Bulgaria.

Genus *Helicoverpa* HARDWICK, 1965

240. *Helicoverpa armigera armigera* (HÜBNER, [1808])

= *armiger* (incorrect subsequent spelling)

= *obsoleta* sensu auct., nec FABRICIUS, 1775, nec FABRICIUS, 1793

= *ab. rufa* WARREN, 1914

Genus *Pyrrhia* HÜBNER, [1821]

= *Helivictoria* BECK, 1996

= *Calocharia* BECK, 1996

241. *Pyrrhia umbra umbra* (HUFNAGEL, 1766)

= *marginata* (FABRICIUS, 1775)

242. *Pyrrhia purpurina purpurina* (ESPER, [1804])\*

= *purpura* (HÜBNER, [1814–1817])

= *purpurites* (TREITSCHKE, 1826)

\* In Bulgaria *Pyrrhia purpurina* (ESPER) is known for sure from three localities only: SE Bulgaria, Sakar Mts "Radinchevo" above Dossiteevo village, Harmanli district, 400 m altitude, 31.V.1986, 1 ♀, leg. and in coll. BESHKOV (col. pl. I, fig. 18) (BESHKOV & GASHTAROV, in press), SW Bulgaria, Kresna Gorge (unpublished, leg. and in coll. AL. SLIVOV), N Black Sea Coast, Balchik town, 19.V.1996, single female specimen, leg. and in coll. R. RADEV (BESHKOV & RADEV, in press). Before this, there was only a single, doubtful report for Bulgaria: BACHMETJEV (1902: 440), following the unpublished data of H. PIGULEV, reported this species from T. Seimen [Simeonovgrad town]. The other report of BACHMETJEV (1902: 439) for the Dobrogea follows that of VON MALINOVSKY for Tulchea, Danube Delta. The report of BACHMETJEV (1902: 440), according to REBEL (1903: 233) and BURESCH & TULESCHKOW (1932: 71) cannot be accepted because there is no voucher specimen. In REBEL (1903: 233) and in BURESCH & TULESCHKOW (1935: 127) the locality is mentioned as "Slivno – BACHM., Fn., p. 440, Nr. 633 (Slivno, sec. PIGULEV)". However, *Pyrrhia purpurina* has never been reported from Sliven town. It seems that REBEL (1903: 233) and BURESCH & TULESCHKOW (1935: 127) have confused the locality "T. Seimen" [= Simeonovgrad town] with Sliven town.

243. *Pyrrhia victorina victorina* (SODOFFSKY, 1849)\*

= *victoria* (incorrect subsequent spelling)

\* *Pyrrhia victorina* (SODOFFSKY) is known from several localities in S Bulgaria. From N Bulgaria it is known from the Black Sea Coast, Balchik (CARADJA, 1930: 46; POPESCU-GORJ, 1964: 194). In the mountains (Alibotoush [Slavyanka] Planina Mts) it occurs up to 1400–1700 m altitude (DRENOWSKI, 1934a: 76; TULESCHKOW, 1931b: 195; BURESCH & TULESCHKOW, 1935: 127).

244. *Pyrrhia treitschkei treitschkei* (FRIVALDSKY, 1835)\*

= *treitschkii* (incorrect subsequent spelling)

= *taurica* (HERRICH-SCHÄFFER, 1851), nec STAUDINGER, 1879, auct.

\* *Pyrrhia treitschkei* (FRIVALDSKY) was described from Bulgaria (then part of Turkey) (type locality: Sliven town) (FRIVALDSKY, 1835: 273, T. VII., 8) and redescribed by FRIVALDSKY (1837: 91–92) in Latin from "Balkani montosis" Sliven is also given as a locality by LEDERER (1863: 27), when he described the larva, and by BACHMETJEV (1902: 440, following the unpublished manuscript of H. PIGULEV). The larval

host plant, *Scutellaria peregrina* L., was reported for the first time by REBEL (1903: 233), also for Sliven, in August. A very local and rare species, known from SW Bulgaria and the Black Sea Coast (Nessebar) (SOFFNER, 1961: 240), Kresna Gorge and Kresna [= Sali-Aga] town (BURESCH & TULESCHKOW, 1935: 127; ZUKOWSKY, 1935: 5), Volcanic Hill "Kozhouh", Petrich district (GANEV, 1984b: 135). In Sliven, towards the end of the last and the beginning of this century, it was collected in large numbers and bred on *Scutellaria peregrina* L. by J. HABERHAUER. Recently found in Rhodopi Mts at an altitude of 1420 m (Martziganitza Chalet, R. RADEV leg., RADEV, pers. comm.).

Genus *Periphanes* HÜBNER, [1821]  
= *Chariclea* CURTIS, 1825

**245. *Periphanes delphinii delphinii* (LINNAEUS, 1758)**  
= *darollesi* (OBERTHÜR, 1876)

Genus *Chazaria* MOORE, 1881  
= *Rhodocleptria* HAMPSON, 1903

**246. *Chazaria incarnata incarnata* (FREYER, 1838)**  
= *incarnana* (incorrect subsequent spelling)  
= *boisduvalii* (BOISDUVAL, 1840)  
= *Boisduvalii* RB. (incorrect author's name)

Genus *Aedophron* LEDERER, 1857

**247. *Aedophron rhodites rhodites* (EVERSMANN, 1851)\***

\* In Bulgaria *Aedophron rhodites* (EVERSMANN) is known from two localities only, Black Sea Coast, Euxinograd near Varna town (THURNER, 1964: 125) and SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 12.VII.1975, single female at a lamp (SLIVOV, 1984: 63).

*Aedophron phlebophora phlebophora* (LEDERER, 1858)\*

\* In Europe, *Aedophron phlebophora* (LEDERER) is known only from the European part of Turkey, Peninsula of Gelibolu (HACKER, 1983: 45). The species could very possibly be found in Bulgaria as well, in E Rhodopi, Strandzha or Sakar mountains.

Subfamily Hadeninae GUENÉE, 1852

Genus *Apaustis* HÜBNER, [1823]\*

\* The systematic position of *Apaustis* here is doubtful. It should be included into the Stirriinae (FIBIGER, pers. comm. 12.VII.2000).

**248. *Apaustis rupicola rupicola* ([DENIS & SCHIFFERMÜLLER], 1775)\***  
= *theophila* (STAUDINGER, 1866)\*\*

\* According to FIBIGER & HACKER (1998: 26) *Apaustis rupicola* (pl. 4, figs 4–7) and *Apaustis theophila* (pl. 4, figs 8–11) are conspecific. In some localities in SW Bulgaria they were reported as sympatric. In the mountains (Alibotoush Mts in SW Bulgaria) *Apaustis rupicola* is known at an altitude up to 1500 m (DRENOWSKI, 1934b: 180; FIBIGER & HACKER, 1998: 26) as well as from an altitude of about 100 m in arid areas. Locally not a rare species, flying by day and visiting *Thymus* flowers.

\*\* The first report for *Apaustis theophila* (STAUDINGER) from Bulgaria was by GOGOV (1963: 240) from Maleshevska Planina Mts above "Osman Tcheshma" in Kresna Gorge. In Kresna Gorge known also from Stara Kresna Railway Station (pl. 4, fig. 8) (BESHKOW, 1992: 53); Recently reported in some more localities in SW Bulgaria: Volcanic Hill "Kozhouh" and "Roupite" near Petrich town (pl. 4, figs 9, 10) (BESHKOV, NOWACKI & PALKO, 1999: 180), Novo Konopladi village (pl. 4, fig. 11) Melnik town and Lilyanovo village. For comments on the status of *Apaustis theophila* as a synonym of *Apaustis rupicola* see in FIBIGER & HACKER (1998: 26).

#### Genus *Janthinea* GUENÉE, 1852\*

\* The systematic position of *Janthinea* here is doubtful. It should be included into Heliothinae (FIBIGER, pers. comm. 12.VII.2000).

#### 249. *Janthinea friwaldskii friwaldskii* (DUPONCHEL, 1835)\*

- = *frivaldskyi* TREITSCHKE (incorrect subsequent spelling and author's name sensu FRIVALDSZKY (1837)
- = *viola* FREYER, 1836
- = *frivaldskyi* (incorrect subsequent spelling)

\* *Janthinea friwaldskii* (DUPONCHEL) was described from Bulgaria (then part of Turkey) "Turkey, in the Balkan Mountains" (POOLE, 1989: 557) from material obtained by the collectors of FRIVALDSZKY. Taking into account the dates of FRIVALDSZKY's expeditions, it is clear that the origin of his material is from the Balkan Peninsula, Bulgaria, at that time under Turkish rule, not from Asiatic Turkey, "? Tura" as it is mentioned in STAUDINGER & REBEL (1901: 221). The locality "Balkany" is also mentioned in FRIVALDSZKY (1837: 173). More recently, several localities in S Bulgaria are given by different authors: near Kritchim town, 22.V.1921 (BURESCH, 1932: 22; TULESCHKOW, 1932c: 109; BURESCH & TULESCHKOW, 1935: 123); E Rhodopi Mts, Ivaylovgrad town (SLIVOV, 1984: 63); E Rhodopi Mts, Kroumovgrad, 11.VI.1989 [1969], leg. and in coll. AL. SLIVOV; Strandzha Mts, Gramatikovo village, 28.-29.V.1973, leg. and in coll. AL. SLIVOV. Numerous specimens are known from SW Bulgaria, Kresna Gorge—9 ♂♂ and 6 ♀♀ on one day (22.VI.1969) (CAPUSE & DOGOF [sic!] [GOGOV], 1969: 81).

#### Genus *Elaphria* HÜBNER, [1818]\*

The correct systematic position of this genus is still problematic (FIBIGER, pers. comm. 12.VII.2000).

#### 250. *Elaphria venustula venustula* (HÜBNER, 1790)\*

\* *Elaphria venustula* (HÜBNER) is not a rare species in Bulgaria. It was first reported by CARADJA (1932: 39) from the Black Sea Coast, Balchik town. Later, KARNOSCHITZKY (1954: 182) again reported it as a new species for Bulgaria from the districts of Varna [= Stalin] town, Black Sea Coast. Many other records follow after that. Maybe the limited localities given in the past are due to confusion with some similar Microlepidoptera species.

#### Genus *Haemerosia* BOISDUVAL, 1840\*

The systematic position of the genus *Haemerosia* here is doubtful. It should be included into the Stirriinae (FIBIGER, pers. comm. 12.VII.2000).

#### 251. *Haemerosia renalis renalis* (HÜBNER, [1813])\*

\* The first reports for *Haemerosia renalis* (HÜBNER) from Bulgaria were of larvae from Sliven town (PIGULEV, 1899: 14; BACHMETJEV, 1902: 441), and again, on *Silene* species from Sliven (REBEL, 1903: 236). A specimen from Sliven is in the collection of the National Museum of Natural History, Sofia. There are some other records, but it is a rare species in Bulgaria.

**252. *Haemerosia vassilininei vassilininei* (BANG-HAAS, 1912)\***  
 = *vassilininei* (incorrect subsequent spelling)

\* *Haemerosia vassilininei* (BANG-HAAS) was recorded from Yambol town in SE Bulgaria as a new species for Europe (RONKAY & GANEV, 1985). Known also from Sakar Mts in SE Bulgaria, D. KIRIAKOV leg. two specimens (D. KIRIAKOV, pers. comm.).

Genus ***Mesotrosta*** LEDERER, 1857

***Mesotrosta signalis signalis* (TREITSCHKE, 1829)\***

\* According to REBEL (1903: 236) and to BURESCH & TULESCHKOW (1935: 134) *Mesotrosta signalis* (TREITSCHKE, 1829) has been collected in large numbers near "Ak Palanka" (= Byala Palanka, about 35 km west from the Bulgarian/Yugoslavian border) by the collector HILF and probably will be found to occur in Bulgaria. Perhaps, based upon the above mentioned report of REBEL (1903), SPULER (1908: 366) mentioned *signalis* Tr. for West Bulgaria. However, it has not yet been discovered within the present political boundaries of Bulgaria. *Mesotrosta signalis* is wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 268) and in RÁKOSY (1996b: 108).

Genus ***Acosmetia*** STEPHENS, 1829

***Acosmetia caliginosa caliginosa* (HÜBNER, [1813])\***

\* *Acosmetia caliginosa* (HÜBNER) has never been found in Bulgaria. However it is known from Serbia: Deliblatski Pesak, Belgrade districts (TOMIC, MIHAJLOVIC & GLAVENDEKIC, 1994: 492; ZECEVIC, 1996: 70) and from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 109, 495, map 254). It could possibly occur in the Bulgarian part of the Dobrogea or at the N Black Sea Coast.

Genus ***Stilbia*** STEPHENS, 1829\*

\* In the next volume of Noctuidae Europaeae this genus will be moved to the tribus Oncocnemidini (FIBIGER, pers. comm. 12.VII.2000).

***Stilbia anomala anomala* (HAWORTH, 1812)\***

\* *Stilbia anomala* was reported by BACHMETJEV (1902: 435) from Sliven town, September, following the unpublished data of H. FIGULEV, but according to REBEL (1903: 222) and BURESCH & TULESCHKOW (1932: 71, 128) this is incorrect. The present author also has never seen this species in Bulgaria.

Genus ***Praestilbia*** STAUDINGER, 1892\*

= *Paraestilbia* (incorrect subsequent spelling)

\* In the next volume of Noctuidae Europaeae this genus will be moved to the tribus Oncocnemidini (FIBIGER, pers. comm. 12.VII.2000).

**253. *Praestilbia armeniaca armeniaca* STAUDINGER, 1892\***  
 = *armeniaca* (incorrect subsequent spelling)

\* *Praestilbia armeniaca* STAUDINGER is a sexual dimorphic (pl. 4, figs 12, 13), frequent, sometimes abundant species, reported for the first time in Bulgaria by SLIVOV & LUKOV (1976 [1977]: 239) from Kresna Gorge, Stara Kresna Railway Station. Now known in Bulgaria from the Black Sea Coast at Sozopol (B. MÜLLER leg., coll. J. GELBRECHT) (GELBRECHT, pers. comm.), from Strandzha Mts, "Katchul"

near Gramatikovo village (unpublished, leg. and in coll. AL. SLIVOV), from SW Bulgaria, from Zemen Gorge, from E Rhodopi, from Sakar Mts, sometimes locally abundant.

Genus *Caradrina* OCHSENHEIMER, 1816

**254. *Caradrina morpheus morpheus* (HUFNAGEL, 1766)**

Genus *Platyperigea* SMITH, 1894

*Platyperigea albina albina* (EVERSMANN, 1848)\*

\* *Platyperigea albina* (EVERSMANN) has never been found in Bulgaria, but its occurrence in the country seems possible. Known from the Romanian part of the Dobrogea (RÁKOSY, 1996b: 110, 495, map 258).

**255. *Platyperigea terrea terrea* (FREYER, 1840)\***

\* *Platyperigea terrea* (FREYER) was reported as new to Bulgaria from W Bulgaria, Kyustendil town (GANEV, 1981: 79). Except for this locality, known only from Zemen Gorge, Skakavitza Railway Station (GANEV, 1982b: 166; GANEV, 1983b: 93) and from Rhodopi Mts: Mine Persenk (GANEV, 1984a: 41) and Loukovitza river, 250 m (KOLEV, 1993: 44), all in S Bulgaria. Known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 110, 496, map 259) and probably occurring in N Bulgaria as well.

**256. *Platyperigea aspersa aspersa* (RAMBUR, 1834)**

**257. *Platyperigea kadenii kadenii* (FREYER, 1836)**

= *kadeni* (incorrect subsequent spelling)

= *kadenii* (incorrect subsequent spelling)

*Platyperigea syriaca syriaca* (STAUDINGER, 1892)\*

\* HACKER (1989: 298), following pers. comm. of J. GANEV, reported *Platyperigea syriaca* (STAUDINGER) for Bulgaria. This is the only report for the country and appears to be doubtful: GANEV was asked by the present author for the source of the data sent to HACKER, and the answer was that such a taxon is completely unknown to him and the data quoted by HACKER must refer to *Eremodrina vicina* (STAUDINGER, 1870). Probably following HACKER's report, NOWACKI & FIBIGER (1996: 268) included *Platyperigea syriaca* for Bulgaria. However, this species should be excluded as a Bulgarian one.

Genus *Paradrina* BOURSIN, 1937

**258. *Paradrina selini selini* (BOISDUVAL, 1840)\***

= *telekii* DIOSZEGHY, 1935

\* *Paradrina selini* (BOISDUVAL) has been reported in Bulgaria from the Black Sea Coast, Balchik (CARADJA, 1931: 317; SLIVOV, 1976 [1977]: 71); W Bulgaria, Zemen Gorge, Skakavitza Railway Station (GANEV, 1983b: 93); Ossogovo Mts at an altitude of 1400–1700 m (GANEV, 1983d: 69); Rila Mts, Golyamo Belovo village (BURESCH & TULESCHKOW, 1932: 129), Vodnija Tchal, 1800 m (GYULAI, 1983: 207); SW Bulgaria, "Rupite" near Volcanic Hill Kozhouh, Petrich district (GANEV, 1984b: 135); Belassitza Mts, low forest zone (SLIVOV, 1988b: 135); Rozhenski Manastir monastery (GROSSER, 1982: 222); Pirin Mts below Vihren Top, 2000 m (KALLIES, 1990: 94) and Spano Pole, 1800 m (REISSER & ZÜLLICH, 1934: 14); Rila Mts "G. Dimitrov" Resort above Kostenetz town (BOCAROV, 1959: 61); Alibotoush [= Slavyanka] Mts (DREN-

OWSKI, 1931a: 18; 1931b: 58; 1932b: 39; 1933: 17; TULESCHKOW, 1931b: 194); W Stara Planina Mts under Martinova Tchuka Top, 1500 m (TULESCHKOW, 1932a: 309); Belogradtschik town (MÉSZÁROS et al., 1984b: 199); SW Bulgaria, S. Pirin Mts, Liljanovo village above Sandanski town, 500 m (EICHLER, HACKER & SPEIDEL, 1996: 266); Dragalevtzi village, Sofia Region, 700 m, 1 ♂, S. BESHKOV leg. (gen. prep. 6./22.XI.1991, S. BESHKOV, gen. figs 139–141). Probably in the past confused with *Paradrina suscianja* VON MENTZER, 1981, with *Paradrina wulschlegeli schwingenschussi* (BOURSIN, 1936) and with other species from other genera. Therefore, some of the above mentioned localities are wrongly given, due to misidentification. For example, single specimens in the collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, from Varna town, determined by him as *Caradrina selini*, in fact belongs to *Athetis furvula*.

#### 259. *Paradrina suscianja suscianja* VON MENTZER, 1981\*

\* *Paradrina suscianja* VON MENTZER was recorded new for Bulgaria from SW Bulgaria, Kresna Gorge (GANEV, 1982b: 166). The present author examined the genitalia of this specimen, a male, and they match well the original description of VON MENTZER (1981a). Known also from Stara Planina Mts, Etropole Monastery (GANEV, 1985b: 90); Kyustendil town (GANEV, 1985b: 90); Pirin Mts, Yane Sandanski Chalet, 1300 m (L. LEHMANN, pers. comm.) and Lijanovo village near Sandanski town (F. FRANKE, pers. comm.). Recently the present author has found it in many other (unpublished) localities as follows: Central Stara Planina Mts, Dermenkaya Chalet, 1530 m alt. (gen. figs 142, 144); Rhodopi Mts, Dedovo village, Plovdiv Region, 11.VIII.1982, BOCHAROV leg., in coll. BOCHAROV in the National Museum of Natural History, Sofia; above Trigrad village, 1200–1300 m and above Yagodina village, 1270 m (pl. 4, fig. 14); Alibotoush [= Slavyanka] Mts, between “Livada” and Goleshovo village, 1500 m, 15.VII.1998; Rila Mts, Kirilova [= Partizanska] Polyana, 1600 m alt. (gen. fig. 143); Rila Mts, Kostenetz, ex coll. BOCHAROV in the National Museum of Natural History, Sofia; Pirin Mts, above Bansko town, 1200 m; Belassitza Mts, Belassitza Chalet, 630 m, P. MITOV & OG. ILIEV leg.; Rhodopi Mts, Rozhen Pass, 30.VII.1982, J. GANEV leg.; Rila Mts, Beli Iskar Reservoir, 1500 m, I. STOYTCHEV leg. (gen. figs 12, 13); Ograzhden Mts, Markovi Kladentzi Chalet, 1500 m, 15.VII.1984, J. GANEV leg., in the collection of GANEV in the National Museum of Natural History, Sofia. It seems that the Balkan endemic species *Paradrina suscianja* is one not so rare in Bulgaria. The very limited number of the published localities are probably due to confusion with other *Paradrina* species, and possible with species from some other genera.

#### 260. *Paradrina clavipalpis clavipalpis* (SCOPOLI, 1763)

- = *grisea* (HUFNAGEL, 1766)
- = 4 *punctata* (FABRICIUS, 1775)
- = *quadripunctata* (incorrect subsequent spelling) (FABRICIUS, 1775)
- = *quadripuncta* (incorrect subsequent spelling)
- = *quadripunctaria* (incorrect subsequent spelling)
- = *cubicularis* ([DENIS & SCHIFFERMÜLLER], 1775)
- = *leucoptera* (THUNBERG, 1791)
- = *fuscornis* (RAMBUR, 1832), auct.
- = *laciniosa* (DONZEL, 1847), auct., nec CHRISTOPH, nec ZELLER\*

\* *laciniosa* (DONZEL, 1847) is a synonym of *Platyperigea germainii* (DUPONCHEL, 1835), a species which has never been found in Bulgaria.

#### 261. *Paradrina wulschlegeli* (PÜNGELER, 1903) ssp. *schwingenschussi* (BOURSIN, 1936)\*

- = *hispanica* MABILLE, 1906

\* Probably the species listed as “*Caradrina spec.?*” in REISSER & ZÜLLICH (1934: 14) from Pirin Mts, Spano Pole belongs to *Paradrina wulschlegeli schwingenschussi* (BOURSIN). In VARGA (1975) *Paradrina wulschlegeli* is marked on p. 25, map 14 for SW Bulgaria [Rila and Pirin Mts]. In Bulgaria known mostly from the mountains at altitudes of 1400–1750 m: Pirin Mts (TURNER, 1938: 152; 1964: 121);

Pirin Mts, Begovitza Chalet, 1750 m (LEHMANN, 1990: 130); Ossogovo Mts at altitude 1400–1700 m (GANEV, 1983e: 91; 1983d: 69); Troyanska Stara Planina Mts, Dermenkaya chalet, 1530 m alt. (gen. figs 148–150), Vitoshka and Plana mountains (ex coll. BESHKOV). A single male specimen (gen. prep. 3./07.VII.1998, S. BESHKOV, genitalia with everted vesica) was taken at the Black Sea Coast, near Touzlata, between Balchik and Kavarna, 09.VI.1998, NOWACKI, BESHKOV & PALKO leg. (BESHKOV, NOWACKI & PALKO, 1999: 180). This specimen has a completely different appearance from specimens of other populations of *Paradrina wulschlegeli schwingenschussi*, but in genital features, including everted vesica (gen. fig. 14), it corresponds exactly to the specimens from Turkey (gen. fig. 15), and Bulgaria examined by the present author. From the Bulgarian *Paradrina* species, *Paradrina wulschlegeli schwingenschussi* is the only one with just a single subbasal diverticulum, which is abundantly covered by elongated fine spines. The other *Paradrina* species have two subbasal diverticula, but they are always less covered by spines. On the valval features (gen. figs 148, 149), *P. w. schwingenschussi* has longer clasper than other Bulgarian *Paradrina* species (gen. figs 139, 140, 142, 143, 145, 146).

*Paradrina noctivaga noctivaga* (BELLIER, 1863)\*

\* *Paradrina noctivaga* (BELLIER) is an atlantico-mediterranean species, which has never been found in Bulgaria. However, there is a single strange report for the Balkan Peninsula, Serbia, [Kosovo, Vito-mirizta-Pech, 23.III.1973, 2 specimens] (ZECEVIC, 1996: 71, following VULEVIC, 1988). This report seems doubtful and needs confirmation.

## 262. *Paradrina flavirena flavirena* (GUENÉE, 1852)\*

= *flavigena* (incorrect subsequent spelling)

= *jacobsi* sensu auct. nec ROTHSCILD, 1914

\* SLIVOV (1979: 40) reported *Paradrina flavirena* as new to Bulgaria from Kresna Gorge, Stara Kresna Railway Station and Belassitza Mts, Belassitza Chalet, both in SW Bulgaria. Subsequently this common, at least bivoltine species, has been recorded from very many other localities in the country.

Genus *Eremodrina* BOURSIN, 1937

## 263. *Eremodrina vicina vicina* (STAUDINGER, 1870)\*

\* The first report for *Eremodrina vicina* (STAUDINGER, 1870) for Bulgaria was by GANEV (1982a: 145), SW Bulgaria, Kresna Gorge (LUKOV leg., det. E. DE LAEVER). The other known localities in Bulgaria are: SW Bulgaria, Ograzhden Mts, Sestrino village (GANEV, 1987b: 9); Kresna Gorge, Peyo Yavorov Railway Station and Krupnik (LEHMANN, 1990: 130).

## 264a. *Eremodrina pertinax pertinax* (STAUDINGER, 1879)\*

\* *Eremodrina pertinax pertinax* (STAUDINGER) is known in Bulgaria only from Kresna Gorge (without details of locality) (GYULAI, 1983: 207) and Kresna Gorge, Stara Kresna Railway Station, 08.VII.1995, S. BESHKOV leg. one female specimen (pl. 4, fig. 15).

## 264b. *Eremodrina pertinax argentea* (CARADJA, 1930)\*

\* *Eremodrina pertinax argentea* (CARADJA) is known from the type locality only and the region around: Black Sea Coast, Balchik (CARADJA, 1930: 46) from where it was reported as a new species for Europe (as *Caradrina pertinax*) (see also in CARADJA, 1931: 317; CARADJA, 1932: 39; POPESCU-GORJ, 1964: 192, pl. XV: 59; SLIVOV, 1976 [1977]: 71). Recently two male specimens were caught by the present author at a 15W light trap between Balchik town and Touzlata (pl. 15, fig. 2), 22 and 23.VIII.1997 (pl. 4, fig. 16). Other specimens were found in the collection of the National Museum of Natural History, Sofia, also from the Black Sea Coast, Euxinograd near Varna, 12.IX.1925, 1 ♀, and two other, but 20.IX.1925 and 17.VIII.1935 (Dr. Iw. BURESCH leg.). *Eremodrina pertinax argentea* differs slightly in appearance from



the nominate subspecies in the colour of the wings: *Eremodrina pertinax argentea* (CARADJA, 1930) is more silvery-whitish without the grey or grey-brownish scales of the nominate subspecies. Even so, *Eremodrina pertinax argentea* (CARADJA, 1930) is probably not a good subspecies and its taxonomic status needs revision.

**265. *Eremodrina gilva gilva* (DONZEL, 1837)\***

\* *Eremodrina gilva* (DONZEL) is known in Bulgaria from a single locality only: Rila Mts, Vodnija Tchal, 1800 m altitude in July to August (GYULAI, 1983: 207).

Genus *Hoplodrina* BOURSIN, 1937

**266. *Hoplodrina octogenaria octogenaria* (GOEZE, 1781)\***

= *alsines* BRAHM, 1791

\* There are two other *Hoplodrina* species in Turkey and in the Near East, *Hoplodrina levis* (STAUDINGER, 1888) and *Hoplodrina pfeifferi* (BOURSIN, 1932), which may also occur in the Balkan Peninsula. A careful study of this group on the Balkans is necessary.

**267. *Hoplodrina blanda blanda* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *taraxaci* (HÜBNER, [1809–1813])

= *blenda* (incorrect subsequent spelling)

**268. *Hoplodrina superstes superstes* (OCHSENHEIMER, 1816)**

**269. *Hoplodrina respersa respersa* ([DENIS & SCHIFFERMÜLLER], 1775)**

**270. *Hoplodrina ambigua ambigua* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *ambiguata* (incorrect subsequent spelling)

Genus *Charanyca* BILLBERG, 1820

= *Meristis* HÜBNER, [1821]

= *Grammesia* STEPHENS, 1829

**271. *Charanyca trigrammica trigrammica* (HUFNAGEL, 1766)**

= *trigramica* (incorrect subsequent spelling)

= *trichogrammica* HFN. (incorrect subsequent spelling and author's name)

= *bilinea* (HÜBNER, [1803])

Genus *Atypha* HÜBNER, [1821]

**272. *Atypha pulmonaris pulmonaris* (ESPER, [1790])\***

\* SLIVOV (1973: 45) reported *Atypha pulmonaris* as new to Bulgaria from Karandila above Sliven town. However, the first report for *Atypha pulmonaris* (ESPER, [1790]) (as *Caradrina pulmonaris* ESP.) was by BACHMETJEV (1902: 435), following the unpublished data of H. PIGULEV for Sliven and [Veliko] Tarnovo towns, but according to REBEL (1903: 222) and BURESCH & TULESCHKOW (1932: 71, 131) this is incorrect. Many other localities are now known; it is not a rare species in the mountains. The present author has collected specimens at altitudes of 180–1400 m in the arid zone of the E Rhodopi Mts.

Genus *Spodoptera* GUENÉE, 1852

= *Laphygma* GUENÉE, 1852

= *Prodenia* GUENÉE, 1852

**273. *Spodoptera exigua exigua* (HÜBNER, [1808])**

*Spodoptera cilium latebrosa* (LEDERER, 1855)\*

\* *Spodoptera cilium* (GUENÉE, 1852) has never been found in Bulgaria. GANEV (1984a: 41) reported the species from Strandzha Mts, Malko Tarnovo town, 04.VIII.1983, 1 ♀ (E. VON MENTZER det., J. GANEV pers. comm.), but later GANEV (1985b: 85) corrected the mistake and recognized the specimen he called *Spodoptera cilium* had been wrongly determined. It is in fact *Spodoptera exigua* HBN. Probably following this incorrect record, NOWACKI & FIBIGER (1996: 269) included *Spodoptera cilium* in the Bulgarian fauna.

Genus *Sesamia* GUENÉE, 1852

**274. *Sesamia nonagrioides nonagrioides* (LEFEBVRE, 1827)\***

= *Sesamia vuteria* sensu auct., nec STOLL, 1783

\* The localities in Bulgaria of *Sesamia nonagrioides* (LEFEBVRE) and *Sesamia cretica* LEDERER have probably been confused in the past, due to misidentification. The ♂♂ of these two closely related species can be separated from each other very easily by examining the antennae. In *S. nonagrioides* they are short and strongly bipectinate with longer lamellae on the inner side, 1/3 longer than lamellae on the other side and the base of the segment. In *S. cretica* the male antennae are not pectinate, much longer, thin, slightly serrate and ciliate (BESHKOV, 1995b: 392). *Sesamia nonagrioides* was reported new to Bulgaria from Koulata village in SW Bulgaria (PINKER confirmed) (GANEV, 1983e: 91). There have been very few further reports. In several places both species, *Sesamia nonagrioides* (LEFEBVRE) and *Sesamia cretica* LEDERER, are syntopic.

**275. *Sesamia cretica cretica* LEDERER, 1857\***

= ab. *rufescens* SCHAWERDA, 1916

\* The first report of *Sesamia cretica* LEDERER from Bulgaria was by TULESCHKOW (1931a: 28, 1932c: 107) from Kresna Gorge, Gara Pirin, (Sali Aga) [Kresna town], 20.V.1929. TSCHORBADJIEV (1936: 164) reported *Sesamia cretica* LED. as a pest of *Sorgum vulgare saccharatum* in E Rhodopi Mts, Kardzhali Region. Other localities given in the old literature are Gorna Dzhumaya [= Blagoevgrad town], Smolyan, Ivaylovgrad, Haskovo, Svilengrad, Nova Zagora and Borissovgrad [Parvomay town, Plovdiv Region] (POPOV, 1939: 171), and there are further records of this not so rare species in Bulgaria in the recent literature. However, it seems very possible, that parts of the above mentioned localities refer to *Sesamia nonagrioides*, due to misidentification. In several places both species *Sesamia nonagrioides* and *Sesamia cretica* are syntopic (see above).

Genus *Pseudoxestia* BOURSIN, 1953

**276. *Pseudoxestia apfelbecki apfelbecki* (REBEL, 1901)\***

= *apfelbecki* (incorrect subsequent spelling)

\* The first record of *Pseudoxestia apfelbecki* for Bulgaria (as *Hiptelia apfelbecki* RBL.) was by ZÜLLICH (1929: 49; 1936: 54) from Rila Mts [1300 m altitude] above Rilski Manastir monastery. TULESCHKOW (1932b: 29, 1932c: 108) also reported it as a new species for Bulgaria from Belassitza Mts, above Petrich town. This species is now known from several other places in SW Bulgaria, also in arid areas at

low altitudes, e.g. Kresna Gorge, 200 m (05.VI.1975, S. BOCHAROV leg., 21.VI.1980 and 01.VI.1977, H. Loukov leg., all in coll. National Museum of Natural History, Sofia, and 27.V.1995, 1 ♂, S. BESHKOV leg.). Known also from Zemen Gorge, Rila Mts; Iskarski Prolom Gorge by Lukovo village (BOCAROV, 1959: 62; SLIVOV, 1968: 169); Lyulin Mts (BOCAROV, 1959: 62); Vitosha Mts, "Boukera", 730 m (GANEV, 1981: 79; SLIVOV, 1990: 196); Rhodopi Mts above Peshtera town (BESHKOV, 1992: 52) and Lozenska Planina Mts above German village, 1000 m altitude (pl. 4, fig. 17), collected there both at lamps and at sugar, S. BESHKOV & S. ABADJIEV leg. (BESHKOV & GASHTAROV, in press). Previously thought to be a Balkan endemic species, it has been found recently in Central Italy and Sicily (HACKER, 1989: 289).

Genus *Chilodes* HERRICH-SCHÄFFER, [1849]

**277. *Chilodes maritima maritima* (TAUSCHER, 1806)\***

= *maritimus* (incorrect subsequent spelling)

\* *Chilodes maritima* TAUSCHER was reported as a new genus and a new species for Bulgaria by GANEV (1983a: 87) from "Kozhouh" near Petrich town in SW Bulgaria and from the Black Sea Coast, Euksinograd near Varna town in two generations. Known also from Atanasovsko Ezero Lake near Bourgass town (pl. 4, fig. 18) (BESHKOV & GASHTAROV, in press).

Genus *Athetis* HÜBNER, [1821]

= *Hydrillula* TAMS, 1938

= *Hydrilla* (incorrect subsequent spelling)

**278. *Athetis gluteosa gluteosa* (TREITSCHKE, 1835)**

= *glutteosa* (incorrect subsequent spelling)

= *kittri* REBEL, 1913, nec SCHAWERDA, 1914

**279. *Athetis furvula furvula* (HÜBNER, [1808])\***

= *lenta* (TREITSCHKE, 1825)

\* The first report of *Athetis furvula* (HÜBNER) for Bulgaria was by TULESCHKOW (1931a: 28; 1932c: 108) from Preobrazhenski Manastir monastery near Veliko Tarnovo town. *Athetis furvula* (pl. 5, fig. 1) is known also from NE Bulgaria, Black Sea Coast: Euksinograd (BURESCH & TULESCHKOW, 1932: 131), Krapetz village (GANEV & BESHKOV, 1987: 117) and Varna town (see under *Paradrina selini*), and recently found in more, still unpublished localities in NE Bulgaria.

**280. *Athetis pallustris pallustris* (HÜBNER, [1808])**

= *palustris* (incorrect subsequent spelling)

Genus *Proxenus* HERRICH-SCHÄFFER, 1845

**281. *Proxenus hospes hospes* (FREYER, 1831)\***

\* *Proxenus hospes* (FREYER) was reported from SW Bulgaria, Volcanic Hill of Kozhouh near Petrich town as a new species for the Bulgarian fauna (GANEV, 1982b: 166, also GANEV, 1984b: 135). Confirmed for this locality ("Roupite") by BESHKOV, NOWACKI & PALKA (1999: 180). Known also from SW Bulgaria, Kresna [Gorge] (MÉSZÁROS et al., 1984b: 199); Ibid., 30.–31.V.1977, leg. and in coll. AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences, Sofia (confirmed by the present author); SW Bulgaria, S. Pirin Mts, Liljanovo village above Sandanski town, 500 m altitude (EICHLER, HACKER & SPEIDEL, 1996: 266), from Ograzhden Mts, Sestrino village, 650 m, 11.V.1983, 06.VI.1984, 07.VIII.1986, J. GANEV leg., in the collection of GANEV in the National Museum of Natural History, Sofia, Ograzhden

Mts, below Tchurichene village, 670 m, 05.IX.1999, S. BESHKOV & D. VASSILEV leg., in coll. S. BESHKOV, from Alibotoush Mts, 31.VII.1930, K. TOULESCHKOW leg., in coll. National Museum of Natural History, Sofia, from SW Bulgaria, Rozhenski Manastir, Meknik districts, 600 m, 04.VI.2000 (S. BESHKOV & K. SOICHIRO leg.) and from Strandzha Mts, "Kachoul" near Gramatikovo village (leg. and in coll. AL. SLIVOV). Flies from May to the middle of September.

**282. *Proxenus lepigone lepigone* (MÖSCHLER, 1860)\***

\* In Bulgaria *Proxenus lepigone* (MÖSCHLER) is known only from the N Black Sea Coast: Cape Shabla, 11.V.1985 (BESHKOV, 1992: 52), Kranevo village, VII.1987 (J. GELBRECHT, pers. comm.), Dourankoulak Lake, 24.VIII.1995, R. RADEV leg. (BESHKOV & RADEV, in press), SBA (Beliya Bryag) camp site near Touz-lata, between Balchik and Kavarna, 22.-27.VII.1992, S. BESHKOV leg., single female specimen (pl. 5, fig. 2), gen. prep. 2./3.X.1997, S. BESHKOV (BESHKOV & RADEV, in press). It is another species wrongly excluded for Bulgaria by NOWACKI & FIBIGER (1996: 270).

Genus *Dypterygia* STEPHENS, 1829

**283. *Dypterygia scabriuscula scabriuscula* (LINNAEUS, 1758)**

= *dypterygia* (HUFNAGEL, 1766)

Genus *Rusina* STEPHENS, 1829

= *Stygiostola* HAMPSON, 1908

**284. *Rusina tristis tristis* (RETZIUS, 1783)**

= *ferruginea* (ESPER, [1785])

= *umbratica* (GOEZE, 1781)

= *tenebrosa* (HÜBNER, [1800-1803])

= *tenebriosa* (incorrect subsequent spelling)

Genus *Anthracia* HÜBNER, [1823]

**285. *Anthracia eriopoda eriopoda* (HERRICH-SCHÄFFER, [1851])**

Genus *Mormo* OCHSENHEIMER, 1816

= *Mania* TREITSCHKE, 1825

**286. *Mormo maura maura* (LINNAEUS, 1758)**

= ab. *striata* TUTT

Genus *Polyphaenis* BOISDUVAL, 1840

**287. *Polyphaenis viridis viridis* (VILLERS, 1789)**

= *sericata* (ESPER, [1787])

= *sericina* (ESPER, 1790)

= *albibasis* WARREN, 1911

**288. *Polyphaenis subsericata subsericata* HERRICH-SCHÄFFER, [1861]\***

\* The first reports of *Polyphaenis subsericata* HERRICH-SCHÄFFER in Europe were from Bulgaria, Black Sea Coast, Euxinograd near Varna town (BURESCH, 1930a: 217; BURESCH, 1931: 12) and from Veliko Tarnovo town in N Bulgaria (TULESCHKOW, 1930b: 141; BURESCH, 1930b: 18). However, this species had been already included for Bulgaria in the list of DRENOWSKI (1929a: 69). From the N Black Sea Coast known also from Balchik (ZUKOWSKY, 1937: 574), and there are now many other records of this species from S Bulgaria.

Genus *Thalophila* HÜBNER, [1820]

**289. *Thalophila matura matura* (HUFNAGEL, 1766)**

= *texta* (ESPER, [1787])

Genus *Oxytripia* STAUDINGER, 1871

= *Oxytripa* (incorrect subsequent spelling)

*Oxytripia orbiculosa orbiculosa* (ESPER, 1800)\*

\* The nominate *O. orbiculosa* is unknown from Bulgaria yet. However, its occurrence in SW or W Bulgaria seems possible. On the Balkan Peninsula it is known from Greece, Croatia and Albania.

**290. *Oxytripia orbiculosa noctivolans* (PINKER, 1980)\***

\* There is single specimen (♂) of *Oxytripia orbiculosa* (ESPER) taken in Bulgaria, Black Sea Coast, "Silberküste", Balchik, 07.XI.1931 (CARADJA, 1932: 38), also POPESCU-GORJ (1964: 194), but with wrongly given year of collecting as 1930. These records were apparently overlooked by NOWACKI & FIBIGER (1996: 270), who did not include *Oxytripia orbiculosa* for Bulgaria. According to RAKOSY (1996a: 225 and 1996b: 116) the population in the Dobrogea belongs to ssp. *noctivolans* (PINKER, 1980). To this subspecies, without doubt belongs the specimen from Balchik. Having in mind the illustration in POPESCU-GORJ (1964, pl. XVII, fig. 65), there should be illustrated that certain specimen from Balchik; in the text there (p. 194) the specimen from Balchik is a ♂, the illustrated one is also a ♂. However, as locality of the specimen illustrated on the plate "Tecuci" is given, but from the text on p. 194 it is clear, that the specimen from "Tecuci" is a ♀. For both these subspecies (*O. orbiculosa noctivolans* and *O. orbiculosa orbiculosa*) see in HACKER (1990: 339).

Genus *Trachea* OCHSENHEIMER, 1816

**291. *Trachea atriplicis atriplicis* (LINNAEUS, 1758)**

Genus *Euplexia* STEPHENS, 1829

**292. *Euplexia lucipara lucipara* (LINNAEUS, 1758)**

Genus *Phlogophora* TREITSCHKE, 1825

= *Brotolomia* LEDERER, 1857

= *Habryntis* LEDERER, 1857

**293. *Phlogophora meticulosa meticulosa* (LINNAEUS, 1758)**= *meticulosa* (incorrect subsequent spelling)**294. *Phlogophora scita scita* (HÜBNER, 1790)\***

\* *Phlogophora scita* (HÜBNER) is a fairly common mountain species in Bulgaria, known at altitudes up to 1800 m, but a single specimen has also been found in a warm arid place, "Kresna defile" [200 m altitude], 10.VIII.1978, H. Loukov leg., 1 ♀ in the collection of Loukov in the National Museum of Natural History, Sofia.

Genus *Hyppa* DUPONCHEL, [1845]**295. *Hyppa rectilinea rectilinea* (ESPER, [1788])\***

\* The first report of *Hyppa rectilinea* (ESPER) for Bulgaria was by SOFFNER (1962: 156) from Rila Mts, Borovetz Resort. Later, it was again reported as a new species for the Balkan Peninsula (and for Bulgaria) by NESTOROVA-KVARTIRNIKOVA (1972) from Vitosha Mts. For a third time reported as a new species for Bulgaria and for the Balkan Peninsula by SLIVOV (1973) from W Rhodopi Mts: Smolyanski Ezera Chalet, 1560 m altitude and Studenetz Chalet, 1800 m altitude. Many other records from other parts of the country follow after that for this species, which is not very rare in Bulgaria. The present author has collected specimens at altitudes of 700–1800 m.

Genus *Auchmis* HÜBNER, [1821]= *Rhizogramma* LEDERER, 1857**296a. *Auchmis detersa detersa* (ESPER, [1791])\***= *comma* ([DENIS & SCHIFFERMÜLLER], 1775), nec LINNAEUS, 1758

\* BACHMETJEV (1902: 434), following unpublished data of PIGULEV, reported *Rhizogramma detersa* ESP. from Sliven and from Gabrovo towns. In REBEL (1903: 219) only Sliven is mentioned as a known locality. Known from Stara Planina Mts without exact locality and from Gorno Ezerovo [= Mugres] village near Bourgass town (TSCHORBADJIEV, 1915: 30; DRENOWSKY, 1930a: 16). Reported also from: "Karandila" above Sliven town [1000 m alt.] (SLIVOV, 1972: 58); from Sliven (BURESCH & TULESCHKOW, 1932: 118); from the Black Sea Coast, Nessebar town (as *Auchmis detersa argentea* CARADJA) (SLIVOV, 1972: 58) and from W Bulgaria, Zemen Gorge, Skakavitza Railway Station, 25.VIII.1994, I. STOYTCHEV leg. at sugar (BESHKOV, 1995a: 211). In the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia) there are specimens from Etropole Town, 20.VIII.1979 and from Teteven Town, 14.VIII.1969. The report from Varna by SLIVOV (1976 [1977]: 69) probably refers to *Auchmis detersa argentea* (see under that taxon).

**296b. *Auchmis detersa argentea* (CARADJA, 1932)\***

\* *Auchmis detersa argentea* (CARADJA, 1932) was described from Bulgaria, Black Sea Coast, "Silberküste", Balchik (CARADJA, 1932: 39), and illustrated in monochrome photographs in POPESCU-GORU (1964: 186, pl. XV: 60). Later, SLIVOV (1976 [1977]: 69) used the name *argentea* for all specimens from the Black Sea Coast: Varna, Nessebar and Bourgass. Recently collected again in Balchik town, 07.VI.1996, R. RADEV leg. (pl. 5, fig. 3), gen. prep. 3./03.X.1997, S. BESHKOV, ♂, genitalia with everted vesica (BESHKOV & RADEV, in press). In the collection of KARNOSCHITZKY in the National Natural History Museum, Sofia, there is one specimen, collected in Gebedje [Beloslav town, Varna Region] at 20.VI.1957. Another specimen in the collection of KARNOSCHITZKY, identified as "*Rhizogramma detersa* Esp.", from Varna town, is in fact *Scotochrosta pulla*. The present author has collected 4 ♂♂ and 1 ♀ both at lamp

and at sugaring in "Pobitite Kamani" Varna region, 15.V.2000. Probably *Auchmis detersa argentea* (CARADJA, 1932) is not distinct from *Auchmis detersa detersa* (ESPER, [1787]).

Genus *Actinotia* HÜBNER, [1821]  
= *Radinotia* BECK, 1996

**297. *Actinotia polyodon polyodon* (CLERCK, 1759)**

**298. *Actinotia radiosa radiosa* (ESPER, [1804])**  
= *Actinotia ramosa* ESP. (incorrect subsequent spelling in SIVOV, 1990: 191)

Genus *Chloantha* BOISDUVAL, RAMBUR & GRASLIN, [1836]  
= *Cloantha* (incorrect subsequent spelling)

**299. *Chloantha hyperici hyperici* ([DENIS & SCHIFFERMÜLLER], 1775)**  
= *hiperici* (incorrect subsequent spelling)  
= var. *dilutior* F. WAGNER, 1909\*  
= ab. *siegenfeldi* SCHAWERDA, 1916\*\*

\* Type locality: Dalmatia, Zara; South Kraina, Wippach; Istria, Görz.

\*\* Type locality: Herzegovina, Mostar.

Genus *Calloplistria* HÜBNER, [1821]  
= *Calopistria* (incorrect subsequent spelling)  
= *Eriopus* TREITSCHKE, 1825

**300. *Calloplistria juvenina juvenina* (STOLL, 1782)**  
= *purpureofasciata* (PILLER & MITTERBACHER, 1783)  
= *purpurofasciata* (incorrect subsequent spelling)

Genus *Methorasa* MOORE, 1881

**301. *Methorasa latreillei latreillei* (DUPONCHEL, 1827)\***  
= *Latreillei* (incorrect subsequent spelling)

\* *Methorasa latreillei* (DUPONCHEL) was reported for the first time in Bulgaria by SIVOV & LUKOV (1976 [1977]: 239), as *Calopistria latreillei* DUP. The previous reports of MANN (1866) and BACHMETJEV (1902: 434) for the Dobrogea follow the record of von MALINOVSKY for Tulchea, Danube Delta. It is not a rare species in Bulgaria, and it is bivoltine at least; there are many other records for the country, from late April to late November.

Genus *Eucarta* LEDERER, 1857  
= *Telesilla* HERRICH-SCHÄFFER, 1856 (homonym), nec REICHENBACH, 1852  
= *Callogonia* HAMPSON, 1908  
= *Goonallica* NYE, 1975

**302. *Eucarta amethystina amethystina* (HÜBNER, [1800–1803])\***= *amethystina* (incorrect subsequent spelling)= *amethytina* (incorrect subsequent spelling)

\* *Eucarta amethystina* (HÜBNER, [1800–1803]) is reported in the literature for Bulgaria from “Northern Parts of the Balkan Peninsula” without locality (STAUDINGER & REBEL, 1901; BACHMETJEV, 1902: 461), but according to BURESCH & TULESCHKOW (1932: 71) these reports are unacceptable, because of the absence of voucher specimens in the Royal Entomological Station, Sofia. These are the only published reports for this species in Bulgaria, but probably on the strength of them, NOWACKI & FIBIGER (1996: 271) included *Eucarta amethystina* for Bulgaria. The species is mentioned for Bulgaria with a question mark by HACKER (1989: 246). Recently, two specimens without locality have been found in the collection of BOCHAROV in the National Museum of Natural History, Sofia. On the labels is written “unknown locality” and the name of the collector is illegible. The labels are written in Cyrillic, which suggests that the specimens are probably from Bulgaria. Recently *Eucarta amethystina* (HÜBNER) has been found in N Greece, Kerkini Lake, Serres (HACKER, 1996a: 253). Known also from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 119, 502, map 297), as well as from Serbia: [Deliblatski Pesak, Belgrade districts] (VASIC, 1969: 207; 1975: 21; ZECEVIC, 1996: 66, after VASIC, 1969: 207), Fruska Gora Mts, Srem, in the vicinity of Novi Sad (VASIC & JODAL, 1976: 122), Sombor, not rare, in two generations: 24.V.–18.VI., 15.VII.–23.VIII. (D. VAJGAND, pers. comm.) and from the upper Kupa valley (MLADINOV, 1977a: 80). It is reported also from Albania, Goricë (Korcë), 10.IX. 1972 (MISJA, 1976: 85) All this suggests that *Eucarta amethystina* could well occur in Bulgaria.

**303. *Eucarta virgo virgo* (TREITSCHKE, 1835)\***

\* The first reports of *Eucarta virgo* (TREITSCHKE) for Bulgaria, i.e. “Bulgarien” without exact locality (CARADJA, 1896: 45) and “Ostrumelien sec. HABERHAUER”, according to REBEL (1903: 236) and BURESCH & TULESCHKOW (1932: 71) need confirmation. This species is now known in Bulgaria from Dalgopol village, Varna Region (GANEV & BOCHAROV, 1982: 105) where it was recorded as a new genus and a new species for Bulgaria; from the Danube Plain, “Kalimok” Research Station near Nova Tcherana village, Tutrakan district in large numbers (BESHKOV & VASSILEV, 1995: 198) and from W Rhodopi Mts, “Kastarakly” near Borino village, 1100 m altitude, 12.–15.VII.1975 (SLIVOV, 1984: 62; SLIVOV & NESTOROVA, 1985: 133). The report of *Eucarta virgo* (Tr.) by SLIVOV (1984: 62) and by SLIVOV & NESTOROVA (1985: 133) was questioned by the present author: Mr SLIVOV was asked for a loan of the specimen and his answer was that this data was based upon information given to him by Mrs NESTOROVA, and he has never seen an *Eucarta* specimen. The present author examined the collection of Mrs NESTOROVA and could not find any *Eucarta* specimen there. Mrs NESTOROVA is not a specialist on Noctuidae, and it is considered very possible the specimen concerned belongs to another genus.

**Genus *Ipimorpha* HÜBNER, [1821]****Subgenus *Ipimorpha* HÜBNER, [1821]**= *Plastenis* BOISDUVAL, 1840= *Plasthenis* (incorrect subsequent spelling)= *Retusia* BECK, 1996**304. *Ipimorpha retusa retusa* (LINNAEUS, 1761)**= *gracilis* (HAWORTH, 1809)**305. *Ipimorpha subtusa subtusa* ([DENIS & SCHIFFERMÜLLER], 1775)**



Genus *Enargia* HÜBNER, [1821]

**306. *Enargia paleacea paleacea* (ESPER, [1788])\***

= *fulvago* sensu ([DENIS & SCHIFFERMÜLLER], 1775) nec CLERCK, 1759, nec LINNAEUS, 1761, nec ESPEr, [1791]

\* The first report of *Enargia paleacea* (ESPER) for Bulgaria was by BOCAROV (1959: 63) from Rila Mts, Rilski Manastir monastery, 1100 m altitude. Recently found in several other localities in the country at altitudes between 350–2250 m.

**307. *Enargia abluta abluta* (HÜBNER, [1808])\***

= *imbuta* BOISDUVAL, 1840

\* The only definite record for *Enargia abluta* (HÜBNER) in Bulgaria is: NW Bulgaria, Boinitza village, Vidin Region (GANEV, 1987a: 103). Before this, there was a single doubtful report for Sliven, [Veliko] Tarnovo and Samokov towns (BACHMETJEV, 1902: 436), following unpublished data of H. PIGULEV. The same data are included in YURKEVICH (1904: 302). According to REBEL (1903: 225) and BURESCH & TULESCHKOW (1932: 71, 138) the record is incorrect. It is possible that *Enargia abluta* (HÜBNER, [1808]) has been confused with another species such as *Atethmia centrago* HAWORTH, which is not mentioned in the main part of the monograph of BACHMETJEV (1902), because the date given (September) does not match the flight period of *Enargia abluta* (HÜBNER, [1808]).

Genus *Parastichtis* HÜBNER, [1821]

= *Dyschorista* LEDERER, 1857

= *Fissipunctia* BECK, 1991

**308. *Parastichtis suspecta suspecta* (HÜBNER, [1817])**

**309. *Parastichtis ypsilon ypsilon* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *ipsilon* (incorrect subsequent spelling), nec HUFNAGEL, 1766

= *fissipuncta* (HAWORTH, 1809)

= *fissipunctata* (incorrect subsequent spelling)

= f. *conjuncta* (WARREN, 1914)

Genus *Mesogona* BOISDUVAL, 1840

= *Oxogona* BECK, 1996

**310. *Mesogona acetosellae acetosellae* ([DENIS & SCHIFFERMÜLLER], 1775)**

**311. *Mesogona oxalina oxalina* (HÜBNER, [1813])\***

\* BOCAROV (1959: 61) reported *Mesogona oxalina* (HÜBNER) as a new species for Bulgaria from Ostrov village near Oryahovo town, Danube Plain. Many other localities are now known for this not uncommon Bulgarian species.

Genus *Dicycla* GUENÉE, 1852

**312. *Dicycla oo oo* (LINNAEUS, 1758)**

= *ferruginago* (HÜBNER, [1800–1803])

= *renago* (HAWORTH, 1809)

= *sulphurea* STAUDINGER

Genus *Cosmia* OCHSENHEIMER, 1816

= *Calymnia* HÜBNER, [1821]

Subgenus *Cosmia* OCHSENHEIMER, 1816

313. *Cosmia diffinis diffinis* (LINNAEUS, 1767)

= f. *confinis* HERRICH-SCHÄFFER, [1849], auct.

314. *Cosmia confinis confinis* HERRICH-SCHÄFFER, [1849]\*

= *rhodopsis* BOURSIN, 1962

= *rhodopensis* (incorrect subsequent spelling)

= *rhodopsis phaioopsis* BOURSIN, 1962

\* For the synonyms of *Cosmia confinis confinis* HERRICH-SCHÄFFER, [1849], given afore, see VON MENTZER (1981b: 138–139).

315. *Cosmia affinis affinis* (LINNAEUS, 1767)

= *confinis* HERRICH-SCHÄFFER, [1849] auct.

316. *Cosmia pyralina pyralina* ([DENIS & SCHIFFERMÜLLER], 1775)

Subgenus *Calymnia* HÜBNER, [1821]

317. *Cosmia trapezina trapezina* (LINNAEUS, 1758)

= *trepezina* (incorrect subsequent spelling)

= f. *conspersa* WARREN, 1911

= f. *ochrea* TUTT

= ab. *ochracea* TUTT

= ab. *rufa* TUTT

Tribus Xylenini GUENÉE, 1837

Genus *Atethmia* HÜBNER, [1821]

= *Cirroedia* GUENÉE, 1839

= *Cirrroidia* AGASSIZ, [1847]

= *Cirroedia* (incorrect subsequent spelling)

Subgenus *Cirroedia* GUENÉE, 1839

318. *Atethmia centrargo centrargo* (HAWORTH, 1809)

= *xerampelina* (HÜBNER, [1809]) auct. (preoccupied), nec ESPER, [1794]

= var. *unicolor* (STAUDINGER, 1881)\*

= var. *rubens* (STAUDINGER, 1901)\*\*

= ab. *rufina* (STAUDINGER) (incorrect subsequent spelling sensu REBEL, 1901)\*\*\*

\* In POOLE (1989: 130) var. *unicolor* STAUDINGER, 1881 is given as a synonym of *Atethmia ambusta* ([DENIS & SCHIFFERMÜLLER], 1775) (= *xerampelina* (ESPER, [1794])), incorrectly used for *xerampelina* (HÜBNER, [1809]) in REBEL (1903: 226).

\*\* In POOLE (1989: 130) var. *rubens* STAUDINGER, 1901 is given as a synonym of *Atethmia ambusta* ([DENIS & SCHIFFERMÜLLER], 1775) (= *xerampelina* (ESPER, [1794])), incorrectly used for *xerampelina* (HÜBNER, [1809]) in REBEL (1903: 226) as ab. *rufina* (STAUDINGER) (incorrect subsequent spelling).

\*\*\* *rufina* STAUDINGER is an incorrect subsequent spelling of var. *rubens* STAUDINGER, 1901, a synonym of *Atethmia ambusta* ([DENIS & SCHIFFERMÜLLER], 1775) (= *xerampelina* (ESPER, [1794])), incorrectly used for *xerampelina* (HÜBNER, [1809]) in REBEL (1903: 226).

Subgenus *Atethmia* HÜBNER, [1821]

**319. *Atethmia ambusta ambusta* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *xerampelina* (ESPER, [1794])

Genus *Xanthia* OCHSENHEIMER, 1816

= *Cirrhia* HÜBNER, [1821]

= *Tiliacea* TUTT, 1896

= *Aurxanthia* BECK, 1991

= *Helladica* HACKER & FIBIGER, 1991

Subgenus *Xanthia* OCHSENHEIMER, 1816

**320. *Xanthia togata togata* (ESPER, [1788])**

= *tagota* (incorrect subsequent spelling)

= *lutea* (STRÖM, 1783), nec STOLL, 1781

= *flavago* (FABRICIUS, 1787), nec [DENIS & SCHIFFERMÜLLER], 1775

Subgenus *Aurxanthia* BECK, 1991

**321. *Xanthia aurago aurago* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *fucata* (ESPER, [1788])

= *fuscata* (incorrect subsequent spelling)

Subgenus *Cirrhia* HÜBNER, [1821]

**322. *Xanthia sulphurago sulphurago* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *sulphurago* F. (incorrect author's name)

= *ochrago* (FABRICIUS, 1791)

**323. *Xanthia icteritia icteritia* (HUFNAGEL, 1766)**

= *inceritia* (incorrect subsequent spelling)

= *fulvago* LINNAEUS, 1761, nec CLERCK, 1759, nec ([DENIS & SCHIFFERMÜLLER], 1775)

= *cerago* ([DENIS & SCHIFFERMÜLLER], 1775)

= *cerago* Hb. (incorrect author's name)

= *flavescens* (ESPER, [1788]) (pl. 5, fig. 4).

**324. *Xanthia gilvago gilvago* ([DENIS & SCHIFFERMÜLLER], 1775)\***

\* *Xanthia gilvago* ([DENIS & SCHIFFERMÜLLER]) was reported for first time for Bulgaria from Sofia town (BACHMETJEV, 1897: 198; 1898: 38; 1902: 437). The next record for Bulgaria is probably that of KARNO-SCHITZKY (1954: 178) as "*Xanthia erythrago* WARREN (= *palleago* Hb. = *gilvago* ab. I HAMPs.)" from Varna town. Probably *palleago* HÜBNER is a synonym of *gilvago* D. & S., not of *ocellaris* BRKH., and *erythrago* WARREN, 1911 is a synonym of *palleago* HbN. *Xanthia gilvago* is not a rare species in Bulgaria, known from many places.

**325. *Xanthia ocellaris ocellaris* (BORKHAUSEN, 1792)**

= *palleago* (HÜBNER, [1800–1803])\*

= f. *carneago* WARR. (sensu POPESCU-GORJ, 1964: 178)\*\*

\* GOGOV (1963: 240) reported *Xanthia ocellaris* BRKH. ab. *palleago* Hb. as a new species and a new form for Bulgaria from Sofia, Pavlovo suburb. *Xanthia ocellaris* (BORKHAUSEN) is a common species in Bulgaria, known from many localities.

\*\* In POOLE (1989: 235) *carneago* GUENÉE, 1852 is given as a valid species—*Chabuata carneago* GUENÉE, 1852 from S America.

Subgenus *Tiliacea* TUTT, 1896

**326. *Xanthia citrago citrago* (LINNAEUS, 1758)**

Subgenus *Helladica* HACKER & FIBIGER, 1991

**327. *Xanthia cypreago* (HAMPSON, 1906) ssp. *christiani* FIBIGER, 1992\***

= *gilvago* ab. *innodata* FAILLA-TEDALDI, 1890

\* *Xanthia cypreago* is known from several localities in Bulgaria as follows: Rhodopi Mts, Loukovitza River near Assenovgrad town, first record for Bulgaria (GANEV, 1983c: 116); Rhodopi, "Eichenzone" (GANEV, 1984/3: 128); SE Bulgaria, Sakar Mts, Driptchevo village (GANEV, 1987a: 102); Sakar Mts, above Dossitevo village, SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station (BESHKOV, 1992: 50); E Rhodopi Mts, above Momtchilgrad town, Svezhest Chalet above Kroumovgrad town, between Konush and Trakietz, Studen Kladenetz village, Momina Skala Chalet near Madzharovo town, between Kaloiantzi and Gnjazdovo village (BESHKOV, 1995a: 211) and some more localities in the E Rhodopi Mts, up to 600 m altitude, sometimes locally abundant both at light and sugar. FIBIGER (1992a: 382–383) described two subspecies of *cypreago* (HAMPSON): *cypreago christiani* (from Sicily, Dalmatia, Continental Greece, Republic of Macedonia, S Bulgaria) and *cypreago ulriki* FIBIGER, 1992 from Crete. Our *Xanthia cypreago* (pl. 5, figs 5–10) in the E Rhodopi Mts is abundant and so variable, that it is difficult to find two identical specimens. It flies from the second half of September to the second half of November, depending on the locality and the year. Following FIBIGER (1992a: 382–383 and pers. comm, 12.VII.2000), our population is recognized as *Xanthia cypreago christiani* FIBIGER, 1992.

Genus *Agrochola* HÜBNER, [1821]

= *Anchoscelis* GUENÉE, 1839

= *Leptologia* L. B. PROUT, 1901

= *Sunira* FRANCLEMONT, 1950

= *Agrolitha* BERIO, 1980

= *Prophenista* BERIO, 1980

= *Alpichola* RONKAY, 1984

- = *Frivaldskyola* RONKAY, 1984
- = *Osthelderichola* BECK, 1991
- = *Humichola* BECK, 1991
- = *Thurnerichola* BECK, 1991
- = *Pseudanchoscelis* BECK, 1991
- = *Rufachola* BECK, 1991

Subgenus ***Agrochola*** HÜBNER, [1821]

**328. *Agrochola lychnidis lychnidis* ([DENIS & SCHIFFERMÜLLER], 1775)**

- = *serina* (ESPER, [1791])
- = *lychnitis* (incorrect subsequent spelling), nec RAMBUR, 1833
- = *pistacina* ([DENIS & SCHIFFERMÜLLER], 1775)
- = *pistacina* F. (incorrect author's name)
- = *ferruginea* ESPER, [1785]) auct., nec [DENIS & SCHIFFERMÜLLER], 1775
- = *rubetra* (ESPER, [1791])
- = *ruberta* (incorrect subsequent spelling)
- = *canaria* (ESPER, [1791])
- = *ferrea* HAWORTH, 1809
- = ab. *coerulescens* (CALBERLA, 1884)
- = ab. *resina* OBERTHÜR (sensu THURNER, 1938)

Subgenus ***Sunira*** FRANCLEMONT, 1950

**329. *Agrochola circellaris circellaris* (HUFNAGEL, 1766)**

- = *circellaris* (incorrect subsequent spelling)
- = *ferruginea* ([DENIS & SCHIFFERMÜLLER], 1775), nec ESPER, [1785])\*
- = *rubecula* (ESPER, [1791])

\* "*Orthosia circellaris* HUFN. ab. *ferruginea* Esp." was reported as a new form for Bulgaria by GOGOV & LOUKOV (1964: 153) from Gorna Banya near Sofia.

Subgenus ***Alpichola*** RONKAY, 1984

*Agrochola lactiflora lactiflora* (DRAUDT, 1934)\*

\* *Agrochola lactiflora* (DRAUDT, 1934) (= *wautieri* DUFAY, 1975) might possibly occur in Bulgaria (also the opinion of HACKER, 1989: 200): it is recorded from the neighbouring territories of the Republic of Macedonia and Greece.

**330. *Agrochola gratiosa gratiosa* (STAUDINGER, 1882)\***

\* *Agrochola gratiosa* (STAUDINGER) was reported by RONKAY & MÉSZÁROS (1982: 147) and by MÉSZÁROS et al. (1984a: 70) as a new species for Europe from SW Bulgaria, Melnik and Kresna; idem, (GYULAI, 1983: 206). Other known localities are SW Bulgaria, "Rupite" near Volcanic Hill Kozhouh, Petrich district (GANEV, 1984b: 134); SW Bulgaria, Ograzhden Mts, Sestrino village, Lebnitza village, Tchurichene village (GANEV, 1987b: 8); Melnik and Rozhen (GOATER, 1996: 271, 282); E Rhodopi Mts, Svezhest Chalet above Kroumovgrad town and Momina Skala Chalet near Madzharovo town (BESHKOV, 1995a: 211).

Subgenus *Leptologia* L. B. PROUT, 1901

331. *Agrochola lota lota* (CLERCK, 1759)

332. *Agrochola macilenta macilenta* (HÜBNER, [1809])

Subgenus *Anchoscelis* GUENÉE, 1839

= *Thurnerichola* BECK, 1991

333. *Agrochola nitida nitida* ([DENIS & SCHIFFERMÜLLER], 1775)

= *uitida* (incorrect subsequent spelling)

*Agrochola pistacinoides pistacinoides* (D'AUBUISSON, 1867)\*

= *dujardini* DUFAY, 1975

\* *Agrochola pistacinoides* (D'AUBUISSON) has never been found in Bulgaria, and is wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 272). However, it must occur there. FIBIGER (pers. comm. 12.VII. 2000) recorded it in Greece, close to the Bulgarian border.

334. *Agrochola deleta deleta* (STAUDINGER, 1882)\*

\* In Bulgaria *Agrochola deleta* (STAUDINGER) is known only from SE Bulgaria, Sakar Mts, Driptchevo village (GANEV, 1987a: 102); Sakar Mts, above Dossiteevo village (BESHKOV, 1992: 49); E Rhodopi Mts, Siv Kladenetz village (BESHKOV, 1995a: 211).

335. *Agrochola thurneri thurneri* BOURSIN, 1953\*

= *deleta* (STAUDINGER, 1882), sensu auct.

\* In Bulgaria *Agrochola thurneri* BOURSIN is known only from W Bulgaria, Zemen Gorge, Skakavitza Railway Station as a new species for Bulgaria (GANEV & BESHKOV, 1987: 116) and from SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station (BESHKOV, 1992: 49).

Subgenus *Pseudanchoscelis* BECK, 1991\*

\* All subgenera of BECK and BERIO have no taxonomic value according to FIBIGER (pers. comm. 12.VII. 2000). They are used here because they are still not synonymized.

336. *Agrochola kindermannii kindermannii* (FISCHER VON RÖSLERSTAMM, [1837])

= *Kindermanni* F. (incorrect subsequent spelling and author's name)

= *pauli* STAUDINGER, 1891 auct.

= *wolfschlaegeri* BOURSIN, 1953\*

= *wolfschlägeri* (incorrect subsequent spelling)

= *wolfschlagerei* (incorrect subsequent spelling)

\* HACKER (1996a: 311–314) correctly recognized *Agrochola wolfschlaegeri* BOURSIN, 1953 as a synonym of *Agrochola kindermannii* (FISCHER VON RÖSLERSTAMM, [1837]), and not even a subspecies of *A. kindermannii*. In the past, *Agrochola wolfschlaegeri* was considered as a Balkan endemic species (mainly "Macedonian" endemic), whereas the range of *A. kindermannii* was S Italy, Dalmatia and the Near East. The correct type locality of *Agrochola kindermannii* is "Fiume" (present name: Rijeka), situated in Croatia near the peninsula of Istria. For more details see HACKER (1996b: 311–314). *Agrochola*

*kindermannii* (as *A. wolfschlaegeri* BOURSIN, 1953) is known from many localities, collected both at light and sugar, in the lowlands of SW Bulgaria, as well as from Alibotoush (Slavyanka) Mts (TURNER, 1956: 238; TURNER, 1964: 102; RONKAY & MÉSZÁROS, 1982: 150), Zemen Gorge, Skakavitza Railway Station (GANEV, 1982b: 165; GANEV, 1983b: 92) and from E Bulgaria, Sliven town (REBEL, 1903: 226) as *Orthosia Kindermannii*-Fr. The present author examined the genitalia of three male specimens from E Bulgaria, Stara Planina Mts, Karandila above Sliven town, 1000 m alt., 01.-04.XI.1970, leg. and in coll. AL. SLIVOV, and confirmed their identity as *Agrochola kindermannii*. It is now clear that the specimens from S Italy (Sicily) belong to ssp. *Agrochola kindermannii sicula* BISCHOF & BITTERMANN, 1996, those from the Balkans to *Agrochola kindermannii kindermannii* (FISCHER VON RÖSLERSTAMM, [1837]) (or to *Agrochola kindermannii wolfschlaegeri* BOURSIN, 1953 in the Central Balkan Peninsula?) (see BISCHOF & BITTERMANN, 1996: 483), and those from the Near East to *Agrochola consueta* HERRICH-SCHÄFFER, [1852]. It is not impossible for the last species to be present in Bulgaria. The type locality of *Agrochola consueta* is "Constantinopel" [Istanbul] (HACKER, 1996b: 314). Both *Agrochola kindermannii* and *Agrochola consueta* are similar in appearance, but show some important differences in genitalia, including the everted vesica. Illustrations of the male and female genitalia of both taxa, including the everted vesica can be found in BISCHOF & BITTERMANN (1996). Male genitalia with valval tips and aedoeagi with everted vesicas of *Agrochola kindermannii* (gen. figs 16, 17, 20, 21) and *Agrochola consueta* (gen. figs 18, 19, 22, 23) are illustrated here as well.

*Agrochola consueta consueta* HERRICH-SCHÄFFER, [1852]\*

\* *Agrochola consueta* HERRICH-SCHÄFFER is a species which might occur in Bulgaria. Its type locality is "Constantinopel" [Istanbul] (HACKER, 1996b: 314). See also in HACKER (1996b: 311-314), and under *Agrochola kindermannii kindermannii* (FISCHER VON RÖSLERSTAMM, [1837]).

### 337. *Agrochola rupicapra rupicapra* (STAUDINGER, 1879)

= *rupicapra kresnaensis* RONKAY & MÉSZÁROS, 1982\*

\* In Bulgaria *Agrochola rupicapra* (as ssp. *kresnaensis*) is known from SW Bulgaria only, Kresna Gorge (type locality) (RONKAY & MÉSZÁROS, 1982: 148; MÉSZÁROS et al., 1984a: 70); SW Bulgaria, "Rupite" near Volcanic Hill Kozhuh, Petrich district (GANEV, 1984b: 134); SW Bulgaria [Kresna] HERCZIG & SZABÓKY (1984: 107). According to HACKER (1990: 181) ssp. *kresnaensis* RONKAY & MÉSZÁROS, 1982 is a synonym of the nominate species. *Agrochola rupicapra rupicapra* (STAUDINGER, 1879) (type locality: Asia Minor, Taurus Mts) is known from Turkey and SU Transcaucasia (HACKER, 1990: 180) and shows no important differences, neither genital nor external, from our population. The present author has examined the male genitalia, including everted vesica, of seven specimens from the type locality of ssp. *kresnaensis* (gen. figs 24, 26, 28, 32, 33) and from Asia Minor (districts of Antalia and Alania towns) (gen. figs 25, 27, 29, 30, 31). The differences between the nominate subspecies and ssp. *kresnaensis* mentioned in RONKAY & MÉSZÁROS (1982) could not be confirmed. The genitalia showed some variability in the shape of the ventral margin and in the clasper (the most important feature distinguishing the two taxa) and in the everted vesica: in some specimens the preapical cornutus is single, surrounded with many small teeth, in other specimens there are several equal cornuti. This was found in both the nominate subspecies and ssp. *kresnaensis*, and for this reason here *Agrochola rupicapra kresnaensis* is regarded as a synonym of *Agrochola rupicapra rupicapra* (STAUDINGER, 1879).

Subgenus *Rufachola* BECK, 1991

### 338. *Agrochola helvola helvola* (LINNAEUS, 1758)

= *fulvago* (CLERCK, 1759)

= *punica* (BORKHAUSEN, 1792)

= *pallescens* (WARREN, 1911), auct.\*

\* *Agrochola helvola pallescens* (WARREN, 1911) was reported from the Black Sea Coast, Varna town (SLIVOV, 1976 [1977]: 67). The taxon *pallescens* (WARREN, 1911) was described from Central Turkey (Amasia). At present it is known also from Armenia, W Siberia, W Turkestan, but has never been found in Bulgaria, nor in the Balkan Peninsula.

Subgenus *Osthelderichola* BECK, 1991

### 339. *Agrochola osthelderi osthelderi* BOURSIN, 1951\*

\* *Agrochola osthelderi* was reported and illustrated as a new species for Europe from SW Bulgaria, Kresna Gorge (GANEV & HACKER, 1984). In Bulgaria, known also from "Rupite" near the Volcanic Hill of Kozhouh near Petrich (V. GASHTAROV, pers. comm.); Kresna Gorge, Stara Kresna Railway Station (BESHKOV, 1992: 48); E Rhodopi Mts, Studen Kladenetz village, 1 ♀ at sugar (BESHKOV, 1995a: 211) and Momina Skala Chalet near Madzharovo town, at sugar (BESHKOV, 1995a: 211; GOATER, 1996: 273, 282; BESHKOV & GOATER, in press), "Trakiyski Pantheon" near Madzharovo town, one found dead in a lamp shade (S. BESHKOV & B. GOATER leg.).

Genus *Propenistra* BERIO, 1980

### 340. *Agrochola laevis laevis* (HÜBNER, [1803])

Subgenus *Agrolitha* BERIO, 1980

### 341. *Agrochola litura litura* (LINNAEUS, 1758)

- = *Initra* (incorrect subsequent spelling)
- = *meridionalis* (STAUDINGER, 1871), auct.
- = *ornatrix* (GEYER in HÜBNER, [1834])
- = var. *borealis* (SPARRE-SCHNEIDER, 1882)

Subgenus *Humichola* BECK, 1991

### 342. *Agrochola humilis humilis* ([DENIS & SCHIFFERMÜLLER], 1775)

Subgenus *Frivaldskyola* RONKAY, 1984

### *Agrochola mansueta mansueta* (HERRICH-SCHÄFFER, 1850)\*

\* *Agrochola (Frivaldskyola) mansueta* (HERRICH-SCHÄFFER, 1850) (gen. figs 34–36) could possibly be discovered in SE Bulgaria. It is known from NE Greece.



Genus *Omphaloscelis* HAMPSON, 1906*Omphaloscelis lunosa lunosa* (HAWORTH, 1809)\*

\* *Omphaloscelis lunosa* (HAWORTH) is an atlantico-mediterranean species, which has never been found in Bulgaria. However, there is a single strange report for the Balkan Peninsula, Serbia (ZECEVIC, 1996: 75), which requires confirmation.

Genus *Spudaea* SNELLEN, 1867*Spudaea ruticilla ruticilla* (ESPER, [1791])\*

\* *Spudaea ruticilla* is wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 273) instead of *Spudaea pontica* KLUTSHKO.

**343. *Spudaea pontica pontica* KLUTSHKO, 1968\***

= *ruticilla* (ESPER, [1791]), auct.

= *ruticella* (incorrect subsequent spelling)

= *ruticella* f. *castanea* WARREN, 1911 auct., nec ESPER, [1798]), homonym of *castanea* (*Dyrzela*) WARREN, 1913, auct.

\* *Spudaea pontica* KLUTSHKO is known in Bulgaria from SW Bulgaria, Ograzhden Mts, Sestrino village (GANEV, 1987b: 8); SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station (GANEV & BESCHKOV, 1987: 117); E Rhodopi Mts: Yazovir Studen Kladenetz Dam, Sredna Arda Railway Station and Sakar Mts above Dossiteevo village, 7 specimens at sugar and one at light (BESHKOV, 1995a: 211). ZLATANOV (1971: 80) reported *Orthosia ruticilla* ESP. as a harmful species on the oaks (*Quercus* spp.) all over Bulgaria. Probably he had in mind another species (*Orthosia* spec.), which is evident from his illustration (p. 81, fig. 30). DRENOWSKI ([1938]: 8) and DRENOWSKI (1939: 162) reported "*Spudea* (*Orthosia*) *ruticella* ESP. ab. *castanea* WARR." from Rila Mts, Dolna Banya village, VIII.–[IX].1936. What species DRENOWSKI had is not clear, but taking into account the flight period, it is clear that it was not *Spudaea ruticilla/pontica*: perhaps he had *Xestia castanea*. *Spudaea ruticella* f. *castanea* WARREN is only a form of *Spudaea ruticilla ruticilla* (ESPER, [1791]), homonym of *castanea* (*Xestia*) (ESPER, [1798]) auct., and *castanea* (*Dyrzela*) WARREN, 1913, auct. *Spudaea pontica* is wrongly not included for Bulgaria in NOWACKI & FIBIGER (1996: 273).

Genus *Eupsilia* HÜBNER, [1821]

= *Scopelosoma* CURTIS, 1837

= *Mecoptera* GUENÉE, 1837

= *Dichagramma* GROTE, 1864

**344. *Eupsilia transversa transversa* (HUFNAGEL, 1766)**

= *satellitica* (LINNAEUS, 1767)

= *satelita* (incorrect subsequent spelling)

= *satellitium* (incorrect subsequent spelling)

= *satelitium* (incorrect subsequent spelling)

= ab. *brunnea* (LAMPA, 1885)

= ab. *albipuncta* (?) sensu TSCHORBADJIEV, 1919

Genus *Jodia* HÜBNER, 1818  
 = *Xantholeuca* STEPHENS, 1831  
 = *Hoporina* BLANCHARD, 1840

**345. *Jodia croceago croceago* ([DENIS & SCHIFFERMÜLLER], 1775)**  
 = *fulvago* (ESPER, [1791])  
 = var. *corsica* MABILLE, 1867

Genus *Conistra* HÜBNER, [1821]  
 = *Orrhodia* HÜBNER, [1821]  
 = *Dasycompa* GUENÉE, 1837

Subgenus *Conistra* HÜBNER, [1821]

**346. *Conistra vaccinii vaccinii* (LINNAEUS, 1761)**  
 = *spadicea* ([DENIS & SCHIFFERMÜLLER], 1775)  
 = *mixta* STAUDINGER

**347. *Conistra ligula ligula* (ESPER, [1791])**  
 = *subspadiceana* (STAUDINGER, 1888), auct.  
 = *subspadicea* (incorrect subsequent spelling)\*

\* REBEL (1903: 227) reported from Sliven town ab. *subspadicea* STGR. (incorrect subsequent spelling of *Conistra subspadiceana* STAUDINGER, 1888), a distinct species, known from Russian Central Asia, which has never been found in Bulgaria, nor in Europe.

**348. *Conistra rubiginosa rubiginosa* (SCOPOLI, 1763)**  
 = *vau punctatum* (ESPER, [1786])  
 = *vaupunctatum* (incorrect subsequent spelling)  
 = *vau-punctatum* (incorrect subsequent spelling)

**349. *Conistra veronicae veronicae* (HÜBNER, [1813])**  
 = ab. *conspicua* WARREN, 1914\*  
 = f. *obscura* SPULER, 1908  
 = *camastra* DE LAEVER, 1979

\* *Conistra veronicae* ab. *conspicua* WARREN was reported by KARNOSCHITZKY (1954: 179) for the districts of Varna town, Black Sea Coast. *Conistra veronicae veronicae* (HÜBNER) is not a rare species in Bulgaria, known from very many localities everywhere in the country.

*Conistra intricata intricata* (BOISDUVAL, 1829)\*

\* *Conistra intricata* (BOISDUVAL) is another species to be expected in Bulgaria. However, not one *Conistra intricata* has been found amongst all examined material of this group from Bulgaria. Examination of male (including everted vesica) and female genitalia of many specimens has shown that in Bulgaria from this group, so far only *Conistra veronicae* is known to occur.

Subgenus *Dasycampa* GUENÉE, 1837

**350. *Conistra rubiginea rubiginea* ([DENIS & SCHIFFERMÜLLER], 1775)\***

- = *tigerina* (ESPER, [1788])
- = *pulverea* (HÜBNER, [1803])
- = ab. *feereunicolor* OBERTHÜR
- = ab. *albipunctata* THURNER, 1938
- = var. *bulgarica* KARNOSCHITZKY, 1954
- = var. *bulgarica* CARN. (incorrect author's name)
- = ab. *subtigerina* KARNOSCHITZKY, 1954
- = ab. *fumosa* KARNOSCHITZKY, 1954
- = ab. *subcompleta* KARNOSCHITZKY, 1954

\* Many forms of *Conistra rubiginea* have been reported and described from Bulgaria, all without any taxonomic value: var. *bulgarica* KARNOSCHITZKY, 1954: 179 (type locality: Black Sea Coast, Varna); ab. *albipunctata* THURNER, 1938: 155 (type locality: Macedonia, Petrina Planina (Galitchitza) Mts, Ohrid Region); ab. *subtigerina* KARNOSCHITZKY, 1954: 181 (type locality: Black Sea Coast, Varna); ab. *fumosa* KARNOSCHITZKY, 1954: 181 (type locality: Black Sea Coast, Varna); ab. *subcompleta* KARNOSCHITZKY, 1954: 181 (type locality: Black Sea Coast, Varna).

**351. *Conistra erythrocephala erythrocephala* ([DENIS & SCHIFFERMÜLLER], 1775)**

- = *erythrocephala* f. *glabra* ([DENIS & SCHIFFERMÜLLER], 1775)
- = *erythrocephala impunctata* (SPULER, 1908)

Subgenus *Piperina* HREBLAY, 1992

**352. *Conistra torrida torrida* (LEDERER, 1857)**

Subgenus *Orrhodiella* SPULER, 1907

***Conistra ragusae ragusae* (FAILLA-TEDALDI, 1890)\***

\* *Conistra ragusae* was reported as a new species for Bulgaria from the Black Sea Coast, Bourgas town (GANEV, 1985a: 130). Probably this specimen belongs to the following subspecies.

**353. *Conistra ragusae* (FAILLA-TEDALDI, 1890) ssp. *macedonica* (PINKER, 1956)\***

\* *Conistra ragusae macedonica* (PINKER) is known in Bulgaria from E Rhodopi Mts, Studen Kladenetz Dam, Kroyatzki Hunt Chalet, 24.XII.1989 (BESHKOV, 1995a: 211). Recently collected in E Rhodopi Mts, Momina Skala Chalet near Madzharovo town, 30.X.1997 at sugar (S. BESHKOV & B. GOATER leg.) (pl. 5, fig. 11) and near Odrintzi village, Ivaylovgrad district, 160 m, 30.XI.1996, 1 ♀ with normally developed wings (pl. 5, fig. 12), S. BESHKOV leg. (gen. prep. 6./13.II.1998, S. BESHKOV). Another locality: Black Sea Coast, Varna town, 17.XI.1940, 19.I.1948, 10.XII.1949, 17.XII.1949, 15.XI.1950, 19.XI.1950, N. KARNOSCHITZKY leg., a large series of 31 specimens in the coll. of N. KARNOSCHITZKY in the National Museum of Natural History, Sofia, with the label "*Taeniocampa pulverulenta* Esp." (BESHKOV & GASHTAROV, in press). The highest locality in Bulgaria, *Conistra ragusae macedonica* is known from, is Stara Planina Mts, "Karandila" above Sliven Town, 1000 m alt., 01.XI.1970, AL. SLIVOV leg. (two specimens in the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences, Sofia, wrongly determined as *Conistra ligula*). In Bulgaria *Conistra ragusae macedonica* comes both to light and sugar, even so at snowy weather with almost negative temperature.

Genus *Orbona* HÜBNER, [1821]

**354. *Orbona fragariae fragariae* (VIEWEG, 1790)\***

\* *Orbona fragariae* (VIEWEG) is known in Bulgaria from the Black Sea Coast near Varna town and from the districts of Provadia town (KARNOSCHITZKY, 1954: 179).

Tribus Episemini GUENÉE, 1852\*

\* Tribus Episemini should be moved to the beginning of the Hadeninae here (FIBIGER, pers. comm. 12.VII.2000).

Genus *Episema* OCHSENHEIMER, 1816

**355. *Episema glaucina glaucina* (ESPER, 1789)**

= *dentimacula* (HÜBNER, 1790)\*

= *unicolor* DUPONCHEL, 1835

\* *Dentimacula* HÜBNER was reported as a new form for Bulgaria (*Episema glaucina* Esp. f. *dentimacula* Hb.) from the Black Sea Coast, Varna town (GOGOV & LOUKOV, 1964: 152). Later, SLIVOV (1972: 56) reported again "*Episema glaucina* Esp. var. *dentimacula* HbN." as new for Bulgaria from Iskarski Prolom Gorge, Romtcha Railway Station. "*Episema trimacula-dentimacula* Hb." was reported by BURESCH (1928: 15) from the Black Sea Coast, Euksinograd near Varna town. In POPESCU-GORJ (1964: 173) *Episema glaucina* Esp. f. *dentimacula* Hb. was reported from Balchik. DRENOWSKI (1930a: 15) reported *Episema glaucina* Esp. var. *dentimacula* Hb. from Vitosha Mts and from Stara Planina Mts. In fact, the first report for *Episema glaucina* ab. *dentimacula* Hb. from Bulgaria was by REBEL (1903: 218) from Sliven town.

**356. *Episema tersa tersa* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *trimacula* ([DENIS & SCHIFFERMÜLLER], 1775)\*

= *glaucina* ab. *tersina* STAUDINGER, 1781\*\*

\* SLIVOV (1968: 165) reported from Iskarski Prolom Gorge, Lakatnik Railway Station and Rebrovo village "*Derthisa trimacula* HbN. (*Episema glaucina* Esp.)" It is not clear which species he had in mind, *Episema glaucina* Esp. or *E. tersa* (= *trimacula* D. & S.). Later, SLIVOV (1984: 59) recognized *trimacula* as a synonym of *tersa*. *Episema tersa* is not a rare species in Bulgaria, known from many localities.

\*\* SLIVOV (1974: 181) wrongly reported *glaucina* ab. *tersina* STAUDINGER, 1781 as a form of *Episema glaucina* Esp. The same taxon, f. *tersina* STGR., was reported from the Black Sea Coast, Balchik as a form of *Episema glaucina* Esp. (CARADJA, 1932: 38; POPESCU-GORJ, 1964: 173) and from Veliko Tarnovo town (TULESCHKOW, 1930a: 34, 1930b: 141; BURESCH & TULESCHKOW, 1932: 112). In fact, the first report for *Episema glaucina* ab. *tersina* STGR. was by REBEL (1903: 218) from Sliven town. The specimen from Sliven is in the collection in the National Museum of Natural History, Sofia.

**357. *Episema lederi lederi* CHRISTOPH, 1885\***

= *sareptana* ALPHÉRAKY, 1897

= *amasina* (HAMPSON, 1906), auct.

\* The first report of *Episema lederi* for Bulgaria and for Europe (as *Episema sareptana* ALPH.) was by TSCHORBADJIEV (1915: 30) from the Black Sea Coast, Bourgass town, 06.X.1910. REBEL (1916: 38) again reported the specimen of TSCHORBADJIEV as new for Bulgaria. ILTCHIEFF (1923: 51) reported it yet again as new to Bulgaria from Aytos and Bourgass towns. Again reported under the same name as new for Bulgaria (and Europe) from the Black Sea Coast, Euksinograd (BURESCH, 1926a: 15; BURESCH, 1930a:

217). The report of THURNER (1938: 149) for *Episema amasina* WGR. as a new species for Europe from Macedonia (Ohrid) probably refers to *Episema tersa trimacula* HÜBNER (THURNER, 1964: 93). Known in E Bulgaria, Euksinograd, Varna, Bourgass, Aytos, as well as from Melnik town in SW Bulgaria (SLIVOV, 1984: 59 as *E. sareptana*). Known also from NE Bulgaria, Seslav hunting reserve near Koubrat town, Razgrad region (unpublished, leg. and in coll. AL. SLIVOV). A large series from Varna town is in the collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia). Recently found in E Rhodopi Mts, Byalo Pole (= Belopolyane) (pl. 5, fig. 13) and Studen Kladenetz villages (BESHKOV & GOATER, in press; GOATER, 1996: 272, 273, 282). In DRENOWSKI (1930a: 15) it is reported as *Episema sareptana* ALPH. from Stara Planina Mts without exact locality (probably following the report of ILTCHEFF (1923) for Aytos town) and from Bourgass town (probably following ILTCHEFF, 1923, who reported the data of Tschorbadjiev, 1915: 30). Known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 131, 510, Map 344).

**358. *Episema korsakovi korsakovi* (CHRISTOPH, 1885)\***

= *praenulata* (CHRISTOPH, 1885)

= ab. *unicolor-brunea* WAGNER

\* The first report of *Episema korsakovi* (CHRISTOPH) for Europe and Bulgaria was by DRENOWSKI (1931a: 15) from Simitli town in SW Bulgaria. There are now many other records.

Genus *Cleoceris* BOISDUVAL, [1836]

**359. *Cleoceris scoriacea scoriacea* (ESPER, 1789)\***

\* TULESCHKOW (1930b: 141) and BURESCH (1930b: 18) reported *Cleoceris scoriacea* (ESPER, [1789]) as a new species for Bulgaria from the districts of Veliko Tarnovo town in N Bulgaria. This is also the only locality given in BURESCH & TULESCHKOW (1932: 113). However, this species had already been claimed for Bulgaria in the list of DRENOWSKI (1929a: 69). Now *C. scoriacea* is known from some more localities in different parts of the country, from low altitudes of about 140 m in the arid area in E Rhodopi Mts, up to 1550 m in Stara Planina Mts, Petrochan Pass. Known also from the Black Sea Coast, Ahtopol town (SLIVOV, 1978a: 39). The species is not uncommon in Bulgaria. The flight period is from the beginning of August in the mountains, to the beginning of October in the temperate lowland areas.

Genus *Ulochlaena* LEDERER, 1857

**360. *Ulochlaena hirta hirta* (HÜBNER, [1813])\***

\* SLIVOV (1974: 181, 192) reported *Ulochlaena hirta* as an "autumn-spring species, which spends winter in an adult stage. The flight begins in the end of August and the beginning of September and ends in the second half of April. Oviposition starts in the spring and the larval stage lasts to the beginning of June. The summer spends as a pupa". *Ulochlaena hirta* is a late autumn species with a flight period from October to December. Females are wingless and lay eggs also in late autumn. What SLIVOV had in mind when he reported the observations given above is not clear, but there is no doubt that it refers to another species, not to *Ulochlaena hirta*.

Genus *Dasyptolia* GUENÉE, 1852

**361a. *Dasyptolia templi* (THUNBERG, 1792) ssp. *vecchिमontium* RONKAY & VARGA, 1985\***

= *alpina* ROGENHOFER, 1866

= *banghaasi* TURATI, 1909

\* The first report for *Dasypolia templi* (which subspecies is unknown) from Bulgaria is that of MUCHE (1963: 177), who reported it from the Black Sea Coast, Nessebar. According to SLIVOV (1976 [1977]: 66) this record is doubtful, because "this boreoalpine species occurs only in the high parts of the mountains of Balkan Peninsula". The specimen reported as "*Dasypolia templi* (THUNBERG, 1792) ssp.?" by MÉSZÁROS et al. (1984a: 68) from NW Bulgaria, Belogradchik town [700 m altitude], 28.X.1980 was designated subsequently as the holotype of *Dasypolia templi vecchimontium* RONKAY & VARGA, 1985. The paratypes, 3 ♂♂, also originated from Bulgaria: Vitosha Mts, 02.X.1961, leg. et coll. VARTIAN (RONKAY & VARGA, 1985: 88). Recently one male specimen (Gen. prep. 1./18.X.1999, S. BESHKOV, male genitalia with everted vesica) (gen. figs 40–42) has been collected in the Iskar Valley, 2 km south of Passarel village, between Sofia and Samokov towns, ~ 700 m, 13.X.1999, S. BESHKOV, B. PETROV & VL. BESHKOV leg. at lamp (col. pl. II, figs 1, 2). This specimen (in coll. S. BESHKOV) corresponds exactly concerning colour, wing pattern and genitalia (gen. prep. with everted vesica 1./18.X.1999, S. BESHKOV) with the primary source, but differs considerably in size (wingspan 42 mm) (ssp. *vecchimontium* is large with a wingspan of 48–49 mm). The genitalia differ well from those of the nominate *D. templi* from Scandinavia (gen. figs 37–39), mainly in the shape and the length of the clasper. The specimen reported from "Morovitza" Cave near to Glozhene village, Teteven district, 900–1000 m altitude, 01.XI.1993 (BESHKOV & PETROV, 1996: 446) probably also belongs to ssp. *vecchimontium*; it is reported from a single forewing found under a colony of bats and a sure identification on a subspecific level is impossible. BESHKOV (1993: 370, 1998: 238) wrongly recognized all Bulgarian populations, including those from Kresna and Nessebar as belonging to ssp. *vecchimontium*, which he also wrongly accepted as a Balkan endemic subspecies, occurring in Macedonia only. At present, *D. templi vecchimontium* is known only from Bulgaria. From the Bulgarian part of Macedonia (Kresna Gorge) another subspecies is described below. The taxa *alpina* ROGENHOFER, 1866, *banghaasi* TURATI, 1909 and *calabrolucana* HARTIG, 1971 should be regarded as valid subspecies of *Dasypolia templi* (THUNBERG, 1792). Another subspecies has been described from Baile Herculane, Banat, Romania—*Dasypolia templi koenigi* RONKAY & VARGA, 1986. This race differs well from our population in NW Bulgaria. For the differences between the subspecies of *Dasypolia templi* see in RONKAY & VARGA (1985; 1986).

### 361b. *Dasypolia templi macedonica* BESHKOV, subspec. nov.\*

\* *Dasypolia templi* (not having in mind ssp. *vecchimontium*) had been found in a locality of very low altitude in SW Bulgaria: Kresna Gorge, Stara Kresna Railway Station, [200 m altitude], 30.IX.1976, AL. SLIVOV & F. MAYER leg., one male specimen (SLIVOV, 1984: 59 as *Dasypolia templi alpina* ROGENH.). This specimen has not been found for examination by the present author. Another specimen from the collection of AL. SLIVOV, ♂, also from Stara Kresna Railway Station, but from 08.–10.XI.1978 has been examined by the present author and it shows some external and internal differences with regard to *D. templi alpina*, *D. templi vecchimontium*, the nominate *D. templi templi* from Scandinavia and the other described subspecies of *D. templi*, known to the present author. Although there is not enough material of this very rare Bulgarian taxon, the differences found are good enough to describe it here as a distinct subspecies:

#### *Dasypolia templi macedonica* subspec. nov.

Description: a very large subspecies, with elongated forewings, the wingspan is 50 mm. Both forewings and hindwings in one and the same colour, not contrasting each other (col. pl. II, figs 3, 4) as it is in the nominate *D. templi* (col. pl. II, figs 5, 6). Ground colour ochreous-greenish with darker median area of the forewings. Orbicular and reniform stigmas white with eccentric black spot. Terminal area of the forewings with hardly visible ochreous spots between the venae. Hindwing upperside with a little bit darker postmedian area. Discal spot dark with white centre. Underside of the forewings with a dark reniform stigma. Hindwing underside with discal spot as on the upper surface. Postmedian fascia slightly contrasting. *Dasypolia templi macedonica* subspec. nov. is similar to the southern, large, with almost unicolored fore- and hindwings equipped subspecies of *D. templi*—*banghaasi*, *calabrolucana*, *koenigi* and probably *armeniaca* RONKAY & VARGA, 1985.

Male genitalia: Genital armature (gen. fig. 43) (Gen. prep. 1./20.X.1999, S. BESHKOV, male genitalia with everted vesica) similar to the other taxa of this species group. In *Dasypolia templi macedonica* subsp. nov. the valve are elongated in the distal parts, the valval tip is narrow with almost parallel costal and ventral margins. Costal process is wide, situated more distally from the valval tip. Clasper is pointed upward, nearly perpendicularly to the costal margin. Clavus is pointed. Juxta is semirhomboidal with short finger-like extension. Everted vesica (gen. figs 44, 45) shows no important differences from *Dasypolia templi templi* (gen. figs 38, 39) and from *Dasypolia templi vecchिमontium* (gen. figs 41, 42).

Holotype ♂ (col. pl. II, figs 3, 4): SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 08.–10.XI.1978, leg. and in coll. AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia). The genital slide is deposited also in the same collection. The holotype is bearing three labels: the first one with the locality on white paper, the second one with the number of the genital slide on a blue paper, and the third one with the name of the taxon and designation "Holotype" on a red paper.

Locus typicus: SW Bulgaria, Struma Valley, Kresna Gorge, Stara Kresna Railway Station, 200 m alt. (20–25 km south of Gorna Dzumaya (= Blagoevgrad) town).

Distribution: At the moment known only from the type locality.

Etymology: The new taxon is named after the geographical region Macedonia, still politically divided into several countries, where is the type locality.

### 362. *Dasypolia ferdinandi* RÜHL, 1892

*Dasypolia ferdinandi petrovi* BESHKOV, subsp. nov.\*

\* Very recently (06.XI.1999), a taxon closely related to *Dasypolia ferdinandi ferdinandi* has been found in Bulgaria in the E Rhodopi Mts, below Egrek village, Kroumovgrad district, 600 m, very close to the Bulgarian/Greece borderline (S. BESHKOV, B. PETROV & D. VASSILEV leg., single male specimen at lamp). This specimen (in coll. S. BESHKOV) differs considerably in appearance and genitalia from the nominate *Dasypolia ferdinandi ferdinandi* (col. pl. II, figs 9, 10) from the Alps and without any doubt is representing an undescribed taxon. It is described here as a new subspecies. The range of *Dasypolia ferdinandi* is to the west (nominate species and ssp. *haroldi* RUNGS, 1950 from Marokko) and to the east (several other subspecies) of Bulgaria.

#### *Dasypolia ferdinandi petrovi* subsp. nov.

Description and differential diagnosis: wingspan 43 mm. Antenna bipectinated like in the nominate subspecies. Head and thorax grey-greenish. Forewings upperside (col. pl. II, fig. 7) with dark olive-greenish coloration with large areas of yellow-orange scales and well developed crosslines and terminal area. Orbicular and reniform stigmas well visible, both white, the last one with a black centre. Fringes yellow orange with 2–3 dark belts. Hindwings whitish with yellow-greenish tint. Venae dark, discal spot and postmedian fascia present, dark, the last one a little bit sinuate. Underside forewings (col. pl. II, fig. 8) yellowish with dark scales. Venae dark. Postmedian fascia visible, dark. Reniform stigma present as a dark spot. Hindwing underside with the same coloration as the forewings, venae, postmedian fascia and discal spot present, all of them dark.

The wingspan of *Dasypolia ferdinandi ferdinandi* from the Alps (Wallis) (named after the Bulgarian King FERDINAND I.) is 34–38 mm, according to REZBANYAI-RESER (1987: 39). According to BERIO (1985: 520) it is 40 mm. Nominate *Dasypolia ferdinandi* RÜHL from the Balkan Peninsula, Croatia (Dubrovnik) have a wing length of 16 mm (MLADINOV, 1975: 49). Other closely related taxa from this species group are *Dasypolia esseri* FIBIGER, 1992 (wingspan 34–42 mm) which is an endemic species of Crete, *Dasypolia ferdinandi dichroa* RONKAY & VARGA, 1985, known from Central Anatolia (wingspan 41 mm) and *Dasypolia ferdinandi transcaucasica* RONKAY & VARGA, 1985 (wingspan 30–33 mm), known from Armenia, East Turkey and Central Anatolia. *Dasypolia ferdinandi petrovi* subsp. nov. is a very contrasting one, with well developed, and visible green-greyish coloured terminal area and wing pattern of the forewings, and in appearance it resembles more likely the nominate *Dasypolia templi* (THUNBERG). Its

dark olive-greenish coloration with areas of yellow-orange scales and well developed crosslines and terminal area can easily separate *Dasypolia ferdinandi petrovi* subsp. nov. from the nominate *D. ferdinandi ferdinandi* and *D. esseri*. From the other subspecies of *D. ferdinandi* it can be easily distinguished by the genitalia. In appearance *Dasypolia ferdinandi petrovi* subsp. nov. seems to be most similar to *Dasypolia ferdinandi dichroa* RONKAY & VARGA, 1985. However, the last one differs considerably in genitalia. According to HACKER (1988) it is a distinct species.

Male genitalia (gen. figs 49–51) (gen. prep. with everted vesica 1./10.XI.1999, S. BESHKOV): genital armature larger, more massive than in the nominate *D. ferdinandi ferdinandi* (gen. fig. 46). Costal margin of valve hollowed like that of *D. esseri*, or more, strongly sclerotised. Juxta wide with long finger-like extension. Clasper c-curved (in *D. esseri* it is s-curved). Clavus rounded. Ampula large, also rounded. Valvae at all very wide, the valval tip wider than in all the other taxa of this species group. Everted vesica similar to that of *D. ferdinandi ferdinandi* (gen. figs 47, 48) but the diverticula are smaller. Basal placca with several small teeth, similar to that of the nominate species. The tip of the aedoeagus is more sclerotised in *Dasypolia ferdinandi petrovi* subsp. nov.

Holotype ♂ (col. pl. II, figs 7, 8): Bulgaria, East Rhodopi Mts, below Egrek village, Kroumovgrad district, 600 m, very close to the Bulgarian/Greece borderline, 06.XI.1999, S. BESHKOV, B. PETROV & D. VASSILEV leg. The holotype with the genital slide is in coll. S. BESHKOV in the National Museum of Natural History, Sofia. The holotype is bearing three labels: the first one with the locality on white paper, the second one with the number of the genital slide on a blue paper, and the third one with the name of the taxon and the designation "Holotype" on a red paper.

Locus typicus: (pl. 13, fig. 1). Bulgaria, E Rhodopi Mts, below Egrek village, Kroumovgrad district, 600 m, very close to the Bulgarian/Greece borderline, limestone area near oak forest.

Distribution: At the moment known only from the type locality.

Etymology: The new taxon is dedicated to my travelling-colleague and friend BOYAN PETROV, one of the collectors of the new subspecies.

Genus *Brachylomia* HAMPSON, 1906

= *Iteophaga* BOURSIN, 1965

= *Bombycia* (?)

### 363. *Brachylomia viminalis viminalis* (FABRICIUS, 1777)

Genus *Aporophyla* GUENÉE, 1841

Subgenus *Aporophyla* GUENÉE, 1841

### 364. *Aporophyla australis australis* (BOISDUVAL, 1829)

= *orientalis* HERRICH-SCHÄFFER, 1850\*

\* The taxon *Aporophyla australis orientalis*, reported as a new subspecies for Bulgaria by SLIVOV (1988b: 133) is a synonym of *Aporophyla australis australis* (BOISDUVAL, 1829). *Aporophyla australis orientalis* has been reported also from Vitosha Mts (Boyana and Vladaya villages) in SLIVOV (1990: 194). *Aporophyla australis* (BOISDUVAL) is a common autumn species in S Bulgaria, locally abundant, and comes both to light and to sugar.



Subgenus *Phylapora* BERIO, 1980

**365. *Aporophyla lutulenta lutulenta* ([DENIS & SCHIFFERMÜLLER], 1775)\***

\* *Aporophyla lutulenta* ([DENIS & SCHIFFERMÜLLER]) was reported as a new species for Bulgaria by GOGOV & LOUKOV (1964) from Iskarski Prolom Gorge, Zverino Railway Station. There are now many other records of this species, which is quite common and variable in Bulgaria.

**366. *Aporophyla nigra nigra* (HAWORTH, 1809)**

**367. *Aporophyla canescens canescens* (DUPONCHEL, 1826)\***

\* The first report of *Aporophyla canescens* (DUPONCHEL) for Bulgaria was by BOCAROV (1959: 59) as *Polia canescens*. One of the most common *Aporophyla* (*Phylapora*) species in Bulgaria. In the literature for Bulgaria known mostly under the name *Polymixis canescens*.

Genus *Lithomoia* HÜBNER, [1821]

= *Lithomosia* (incorrect subsequent spelling)

**368. *Lithomoia solidaginis solidaginis* (HÜBNER, [1803])\***

\* The first reports for "*Calocampa solidaginis*" for Bulgaria were by BURESCH (1909a: 26) for Sofia and by BURESCH (1914a: 86; 1915: 81) for Vrana near Sofia, 25.IX.1908. In BURESCH & TULESCHKOW (1935: 115) one further locality is given, The Botanical Garden in Sofia. They suggest that a larva had probably been introduced there with mountain plants. All other reports for Sofia follow this finding. In some articles (e.g. DRENOWSKI, 1930: 18) these data were applied to Vitosha Mts as well. According to SLIVOV (1990: 187; 194), "this species is wrongly reported for Vitosha Mts: it had been bred in The Botanical Garden in Sofia [and in Varna as well] on decorative plants, introduced from S France" The present author has seen this specimen in the National Museum of Natural History, Sofia, and it is a genuine female individual of *Lithomoia solidaginis*. It is considered more likely that the specimen was a native or brought in as a larva with mountain vegetation, than to have been introduced from S France with decorative plants. However, the presence of *Lithomoia solidaginis* in Bulgaria still requires confirmation.

Genus *Lithophane* HÜBNER, [1821]

= *Graptolitha* HÜBNER, [1821]

= *Prolitha* BERIO, 1980

Subgenus *Lithophane* HÜBNER, [1821]

**369. *Lithophane semibrunnea semibrunnea* (HAWORTH, 1809)\***

\* *Lithophane semibrunnea* (HAWORTH) has been recorded from "Bulgaria" without exact locality (STAUDINGER & REBEL, 1901; BACHMETJEV, 1902: 461). For Bulgaria reported from Sliven (REBEL, 1903: 228; BURESCH & TULESCHKOW, 1935: 113; GOGOV, 1966: 65), from Lyulin Mts above "Tchernia Koss" (GOGOV, 1966: 65) and from E Rhodopi Mts, the bridge on the Arda River between Oreshari and Dolno Tcherkovishte villages, 1 ♂ taken at sugar (B. GOATER & S. BESHKOV leg.) (pl. 5, fig. 14). Known also from "Bakadzika" near Tarnava village, Yambol region (1 ♀, leg. and in coll. P. PETKOV, S. BESHKOV det.).

**370. *Lithophane socia socia* (HUFNAGEL, 1766)\***= *hepatica* (CLERCK, 1759)= *petrificata* ([DENIS & SCHIFFERMÜLLER], 1775)

\* *Lithophane hepaticawrongly* was accepted by MIKKOLA (1993: 143) as the correct name of *Lithophane socia*. GANEV (1980: 79) reported it as a new species for Bulgaria (SLIVOV det.) from Vitosha Mts, "Bounkera", [730 m]. The same data are given in GANEV (1985d: 56). Known also from Stara Planina Mts, Etropole Monastery (GANEV, 1984a: 40) and Zemen Gorge, Skakavitsa Railway Station (GANEV & BESHKOV, 1987: 116).

**371. *Lithophane ledereri ledereri* (STAUDINGER, 1892)\***

\* *Lithophane ledereri* (STAUDINGER) has been recorded from SW Bulgaria, Kresna and Melnik town (HERCZIG & SZABÓKY, 1984: 107; MÉSZÁROS, RONKAY, HERCZIG, SZEÓKE & SZABÓKY, 1986: 70). Collected at lamp by BESHKOV in Kresna Gorge, Stara Kresna Railway Station (21.IV.1995, 1 ♀ at a lamp) (col. pl. I, fig. 11. Recently found in Belassitza Mts Belassitza Chalet, April 1995, also in SW Bulgaria. (I. STOYTCHEV, pers. comm.). A new, unpublished locality is E Rhodopi Mts, the bridge on the Byala Reka River near Meden Bouk village, Ivaylovgrad district, 05.XI.1999, 1 ♀ at sugar, S. BESHKOV, B. PETROV & D. VASSILEV leg., in coll. S. BESHKOV.

**372. *Lithophane ornitopus ornitopus* (HUFNAGEL, 1766)**= *ornitopus* ROTT. (incorrect author's name)**373. *Lithophane furcifera furcifera* (HUFNAGEL, 1766)\***

\* The first report for *Lithophane furcifera* (HUFNAGEL) for Bulgaria was by BOCAROV (1959: 64) from Razlog town. SLIVOV (1979: 40), in quoting this reference, wrongly gave "Razgrad", instead of "Razlog". Razgrad has therefore to be omitted as a locality. Rare species in Bulgaria, known from very few other places in the country.

***Lithophane lamda lamda* (FABRICIUS, 1787)\***

\* *Lithophane lamda* (FABRICIUS) has never been found in Bulgaria. It is another species wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 275).

**Subgenus *Prolitha* BERIO, 1980*****Lithophane leautieri leautieri* (BOISDUVAL, 1829)\***= *lapidea* (HÜBNER, [1808]), auct.

\* *Lithophane leautieri* (BOISDUVAL) is unknown in Bulgaria. Wrongly reported from Zemen Gorge, Skakavitsa Railway Station (GANEV, 1983b: 92) instead of *Lithophane lapidea* HBN. For further details see BESHKOV (1996b). It is wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 275).

**374. *Lithophane lapidea lapidea* (HÜBNER, [1808])\***= *lapidae* (incorrect subsequent spelling)= var. *cupressivora* STAUDINGER, 1871= *leautieri* (BOISDUVAL, 1829) auct.

\* BACHMETJEV (1902: 437), following STAUDINGER & REBEL (1901), reported *Lithophane lapidea lapidea* (HÜBNER, [1808]) (as *Xylina lapidea* Hb. var. *cupressivora*) from N Bulgaria without mentioning the locality. According to REBEL (1903: 228) and to BURESCH & TULESCHKOW (1932: 71) the locality mentioned

in STAUDINGER & REBEL (1901) "Balc. s." is in Dalmatia. According to BURESCH & TULESCHKOW (1935: 114) the source of the data quoted by BACHMETJEV (1902: 437) is CARADJA. *Lithophane lapidea* is recorded from Zemen gorge, Skakavitza railway station in W Bulgaria (GANEV, 1981: 79, as a new species for Bulgaria; GANEV, 1983b: 92, as *leautieri* Bsdv.); Banja village, Pazardzhik Region (GANEV & BOCHAROV, 1982: 104); Kresna gorge in SW Bulgaria (MÉSZÁROS, RONKAY, HERCZIG, SZEÓKE & SZABÓKY, 1984a: 69; BESHKOV, 1996b: 96; V. GASHTAROV, pers. comm.); "Rupite" in SW Bulgaria (leg. and in coll. GASHTAROV) (BESHKOV & GASHTAROV, in press); Novo Konomladi village in SW Bulgaria (V. GASHTAROV, pers. comm.). GANEV (1982a) in his List of Bulgarian Noctuidae reported *L. leautieri* Bsdv. as occurring in Bulgaria, while *L. lapidea* Hbn. is given as a synonym. For more details see BESHKOV (1996b).

### 375. *Lithophane merckii merckii* (RAMBUR, 1832)\*

= *merckii* (incorrect subsequent spelling)

\* The first report for *Lithophane merckii* (RAMBUR) in Bulgaria was by REBEL (1903: 228) for Sliven town and the second by BURESCH & TULESCHKOW (1935: 114) for Varna town [Black Sea Coast], IX.1919, MAEUR NEIKOFF leg. In the collections of the National Museum of Natural History, Sofia, there is a single specimen, the same one which was reported from Varna, labelled: "VIII.-IX.1919, Palais Vrana près Sophia, MAEUR NEIKOFF" The correct locality is thus taken to be Vrana near Sofia, because the specimen is labelled with this locality and it is known that MAEUR NEIKOFF was collecting there at that time. A few further localities for *Lithophane merckii* in the country have been discovered since, all of them in S Bulgaria (SW Bulgaria and E Rhodopi Mts.), collected there both at lamps and sugar in late autumn and in early spring. From E Bulgaria known also from Gradetz village near Kotel Town (BESHKOV & RADEV, in press).

Genus *Scotochrosta* LEDERER, 1857

### 376. *Scotochrosta pulla pulla* ([DENIS & SCHIFFERMÜLLER], 1775)\*

\* MÉSZÁROS et al. (1984a: 69) reported "*Scotochrosta pulla* (DENIS & SCHIFFERMÜLLER, 1775) ssp." from SW Bulgaria, Kresna and Melnik. As far as the present author knows, this material has not been recognized or described as a distinct subspecies and he finds it hard to believe that our *Scotochrosta pulla* is subspecifically distinct. *Scotochrosta pulla* is a species not uncommon in Bulgaria.

Genus *Xylena* OCHSENHEIMER, 1816

= *Xylina* TREITSCHKE, 1826

= *Calocampa* STEPHENS, 1829

= *Monoxylena* BECK, 1996

### 377. *Xylena vetusta vetusta* (HÜBNER, [1813])\*

\* *Xylena vetusta* (HÜBNER) is a very rare and local species in Bulgaria, which occurs in the mountains up to 2200 m altitude, as well as at the Black Sea Coast, Varna and Bourgass towns. BACHMETJEV (1902: 437), following the unpublished manuscript of H. PIGULEV, reported it from Sliven and Kotel towns. Both localities, Sliven (leg. HABERHAUER) and Kotel (leg. PIGULEV) are also given by REBEL (1903: 228). In BURESCH & TULESCHKOW (1935: 114) one more locality is added: Vitosha Mts, Knyazhevo, and this is quoted by SLIVOV (1990: 194). Known also from SW Bulgaria, Belassitza Mts, "low forest zone" (SLIVOV, 1988b: 133); Kyustendil town (GANEV, 1985b: 88); Rila Mts, Malyovitsa Chalet, [2000 m altitude] (BESHKOV, 1992: 48); Kurilo village near Sofia, April to May, S. BOCHAROV leg., in coll. National Museum of Natural History, Sofia.

### 378. *Xylena exsoleta exsoleta* (LINNAEUS, 1758)

= *exsoleta* (incorrect subsequent spelling)

**379. *Xylena lunifera lunifera* (WARREN, 1910)\***

\* In Bulgaria, *Xylena lunifera* (WARREN) has been recorded as follows: NW Bulgaria, Belogradchik town (MÉSZÁROS, 1982: 110; MÉSZÁROS et al., 1984a: 69); Pirdop town (GANEV & BESHKOV, 1987: 116); Bessaparskite Ridove Hills near Byaga village and Iskarski Prolom Gorge above Gubislav village in the district of Lakatnik Railway Station (BESHKOV, 1992: 48); SW Bulgaria, [Kresna and/or Melnik] (HERCZIG & SZABÓKY, 1984: 107); Kresna Gorge, Stara Kresna Railway Station (BESHKOV, 1995a: 212; 1996d: 529); Rhodopi Mts, near Kritchim (KOLEV, 1993: 44); E Rhodopi Mts, Svezhest Chalet above Kroumovgrad town (BESHKOV, 1995a: 212) and Momina Skala Chalet near Madzharovo town at sugar (B. GOATER & S. BESHKOV leg.); S. Black Sea Coast, Sinemoretz village, 16.X.1994, 1 ♀ (BESHKOV, 1995a: 212). BESHKOV (1996d: 529) considered *Xylena lunifera* to be an expansive migrant species in Bulgaria (probable dismigrator). This is due to the fact, that in Bulgaria (as well as in Europe) it is known only from several years and almost all of the many already collected specimens have been collected in autumn. There are years without any collected specimen, but there are years, when in the same place and time it is not rare. Dr. JÖRG GELBRECHT (pers. comm.) found its larvae, which resemble those of *Shargacullia* spp., in Pirin Mts at an altitude of about 1500 m on *Verbascum* spec. in June and bred them successfully.

**Genus *Evisa* REISSER, 1930**

*Evisa schawerdae* REISSER, 1930, nec KRÜGER, 1914, ssp. *balcanica* HACKER, 1989\*  
= *schawerdae* (an unjustified emendation)\*\*

\* *Evisa schawerdae* REISSER, 1930 could well occur in Bulgaria. It is known from the neighbouring territories of the Republic of Macedonia (pl. 5, fig. 15), Dalmatia and Greece (ssp. *balcanica* HACKER, 1989).

\*\* For the nomenclature of *Evisa schawerdae* REISSER, 1930 see in STEINER (1991).

**Genus *Xylocampa* GUENÉE, 1837**

*Xylocampa areola areola* ESPER, [1789]\*

= ab. *deficiens* TURNER, 1945, auct. (? synonym of *mustapha* OBERTHÜR, 1920)

\* *Xylocampa areola* ESPER is shown by NOWACKI (1994: 110) on the distribution map (map 53) for the Bulgarian Black Sea Coast. The origin of his data is unclear to the present author who has never seen a specimen of this species from Bulgaria. NOWACKI (pers. comm. VIII.1996) says he has forgotten the source of those data. Most likely the primary source of this data is the article of TURNER (1945: 217), where a new taxon from Bulgaria is described—*areola* ab. *deficiens* TURNER, 1945. See also under *Xylocampa mustapha* (OBERTHÜR). The present author finds it hard to believe that the atlantico-mediterranean species *Xylocampa areola* really occurs in Bulgaria: it is more likely that the data refer to the Ponto-Mediterranean species *Xylocampa mustapha*. For both species see HACKER (1986: 46–47). *Xylocampa areola* is also wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 275).

**380. *Xylocampa mustapha* (OBERTHÜR, 1920) ssp. *helthitica* KOBES & PINKER, 1976\***

= ab. *deficiens* TURNER, 1945, comb. nov.

\* *Xylocampa mustapha* (OBERTHÜR, 1920) was first reported for Bulgaria by PARENZAN (1982b: 138) and marked there on fig. 9. for Northern and Eastern Bulgaria. According to PARENZAN (1982b: 138), the source of this data is TURNER (1945) (see also under *Xylocampa areola*). In this article on the other hand, there is, on p. 217 one new taxon described from Bulgaria—*areola* ab. *deficiens*. The original description is as follow: "I have two Bulgarian examples with the whole of the usual white or whitish ground very pale grey in one and darker grey in the other. In both the deep black bar is absent from

the base, but its continuation remains and bends upwards to the costa forming (in) the darker two 'bags' in which the orbicular and reniform stigmata are suspended, respectively. The latter has a somewhat similar development, but with the orbicular only in a 'bag'. This developed marking is deep black in both. The rest of the black markings in both examples are two blotches on outer margin. In fact the black area gives the appearance of a fascia extending only half across the wing with the lighter orbicular and reniform lying in it." The original description of *mustapha* OBERTHÜR, 1920 is: "the markings largely obliterated and the ground colour of the wings is deep grey". The present author has never seen any *Xylocampa* species in Bulgaria. Although both taxa can be distinguished from each other by genitalia, the above description fits better to *Xylocampa mustapha*. The nominate *mustapha* is described from Algeria, the Italian population is described as ssp. *italica* PARENZAN, 1982 and that from Turkey is described as ssp. *helthitica* KOBES & PINKER, 1976. Our population must belong to the last one. *Xylocampa mustapha* is not included for Bulgaria in NOWACKI & FIBIGER (1996: 275).

Genus *Meganephria* HÜBNER, [1821]

### 381. *Meganephria bimaculosa bimaculosa* (LINNAEUS, 1767)

Genus *Allophyes* TAMS, 1942

= *Miselia* BOISDUVAL, 1829 nec OCHSENHEIMER, 1816

### 382. *Allophyes oxyacanthae oxyacanthae* (LINNAEUS, 1758)\*

= *oxyacanthae* (incorrect subsequent spelling)

\* The genus *Allophyes* TAMS contains several species in the mediterranean region of Europe and in the Near East. An examination of the male genitalia, including everted vesicas of specimens from SE Bulgaria (gen. figs 52, 53) shows, that we have only *Allophyes oxyacanthae*, a species widely distributed in the country, sometimes locally abundant both at light and sugar. In Turkey *Allophyes asiatica* (STAUDINGER, 1892) (gen. figs 54–56) widely occurs. In Europe it is known only from Greece, the Island of Samos (FIBIGER & HACKER, 1991: 57), but it is not found in Bulgaria, as well as *Allophyes oxyacanthae* is not found in Turkey. The last one has to be found in European Turkey. Its localities in Bulgaria, very close to the border to Turkey, strongly suggest this. For the synonyms of *Allophyes oxyacanthae* see in FIBIGER & HACKER (1998: 27).

Genus *Rileyiana* MOUCHA & CHVALA, 1963

### 383. *Rileyiana fovea fovea* (TREITSCHKE, 1825)\*

\* The first report of *Rileyiana fovea* (TREITSCHKE) for Bulgaria was by KARNOSCHITZKY (1954: 176) from the districts of Varna town, Black Sea Coast and from "Marin-Tepe, D. Tchiflik [= Georgi Traykov town, Varna Region], 22.XI.1953, N. KARNOSCHITZKY leg." In the collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, there is a large series of *R. fovea* from Varna town. Known also from Zemen Gorge, Skakavitza Railway Station (GANEV, 1982b: 164; 1983b: 92) and from Strandzha Mts, Gramatikovo and Zvezdetz (SLIVOV, 1978a: 43). Recently found in Stara Planina Mts, Vetren village (MÉSZÁROS et al., 1984a: 69); Kresna Gorge, 23.IX.1981, J. GANEV leg., in coll. H. LOUKOV in the National Museum of Natural History, Sofia; Stara Kresna Railway Station, 17.XI.1996 and in E Rhodopi Mts, Siv Kladenetz village, 30.XI.1996 (BESHKOV & GASHTAROV, in press); "Trakiyski Pantheon" near Madzharovo town and Momina Skala Chalet near Madzharovo town, several specimens at sugar (pl. 5, fig. 16) (B. GOATER & S. BESHKOV leg.) and Stara Planina Mts, "Karandila" above Sliven town [1000 m alt.] (15.X. 1973, 1 ♀, leg. and in coll. AL. SLIVOV). It seems that *Rileyiana fovea* comes much more frequently to

sugar than to light, arriving before dark. According to ZLATANOV (1971: 90) the moths fly from July to October and in Bulgaria they occur mainly in the eastern part of the country. In the same article the preimaginal stages are described and illustrated, as well as the biology of the moth, the larvae of which feed on *Quercus conferta*, *Q. pedunculata*, *Q. sessiliflora* and *Q. cerris*. We cannot accept as correct such an early flight period for this late autumn-early winter species. Maybe ZLATANOV confused *Rileyiana fovea* with another noctuid species.

Genus *Valeria* STEPHENS, 1829

**384. *Valeria oleagina oleagina* ([DENIS & SCHIFFERMÜLLER], 1775)**

Genus *Dryobota* LEDERER, 1857

**385. *Dryobota labecula labecula* (ESPER, [1788])\***

\* Recently *Dryobota labecula* (ESPER) has been found for the first time in Bulgaria, SW Bulgaria, Volcanic Hill of Kozhouh near Petrich town, 23.X.1997, single male specimen at sugar, S. BESHKOV & B. GOATER leg., in coll. BESHKOV (BESHKOV & GOATER, in press) (pl. 5, fig. 17).

Genus *Dichonia* HÜBNER, [1821]

= *Gripesia* TAMS, 1939

Subgenus *Dichonia* HÜBNER, [1821]

**386. *Dichonia convergens convergens* ([DENIS & SCHIFFERMÜLLER], 1775)**

**387. *Dichonia aeruginea aeruginea* (HÜBNER, [1808])**

= *aeruginae* (incorrect subsequent spelling)

= *mioleuca* (GEYER in HÜBNER, [1828])

Subgenus *Gripesia* TAMS, 1939

**388. *Dichonia aprilina aprilina* (LINNAEUS, 1758)**

= f. *warnecki* WOLTER, 1969

**389. *Dichonia pinkeri pinkeri* (KOBES, 1973)\***

\* *Dichonia pinkeri* (KOBES) was reported from SW Bulgaria, Kresna as new for Europe (MÉSZÁROS & SZABÓKY, 1983: 194; RONKAY & MÉSZÁROS, 1982: 147); idem (MÉSZÁROS et al., 1984a: 69). Seems to be a very rare species in Bulgaria. The present author has never seen a Bulgarian specimen, although he has dissected many ♂♂ and some ♀♀ of this group from S Bulgaria, including from Kresna Gorge, all of which have turned out to be *D. aprilina*.

Genus *Dryobotodes* WARREN, 1911

= *Dichonioxa* BERIO, 1980

= *Roborbotodes* BECK, 1991

Subgenus *Dryobotodes* WARREN, 1911

= *Monobotodes* BECK, 1991

**390. *Dryobotodes eremita eremita* (FABRICIUS, 1775)**

= *protea* ([DENIS & SCHIFFERMÜLLER], 1775)

= *probea* BKH. (sensu DRENOWSKI, 1930a: 16—*Dryobara probea* BKH.), incorrect subsequent spelling

**391. *Dryobotodes monochroma monochroma* (ESPER, [1790])\***

\* *Dryobotodes monochroma* ESP. was reported new for Bulgaria from Vitosha Mts, “Bounkera” (GANEV, 1981: 79). The only authentic *Dryobotodes monochroma* (ESPER) specimens the present author has seen are from the Black Sea Coast, Varna, KARNOSCHITZKY leg., 29.IX.1940 (gen. prep. 2./16.XII.1998) and 08.IX.1939 (gen. prep. 1./16.XII.1998), S. BESHKOV, male genitalia with everted vesica (gen. figs 57, 58), both in coll. KARNOSCHITZKY in the National Museum of Natural History, Sofia, the first one determined as “*convergens*”, the second one as “*protea*”; Stara Planina Mts, Bozhentzite village, Gabrovo Region, 550 m, 15.VIII.1998, S. BESHKOV leg. (gen. prep. 3./16.XII.1998, S. BESHKOV, male genitalia with everted vesica; E Rhodopi Mts, Momina Skala Chalet near Madzharovo town, 01.IX.1992, S. BESHKOV leg., one male specimen (pl. 5, fig. 18), and the same locality, on 22.IX.1994, 2 ♀♀, S. BESHKOV & V. TCHIKOLOVETZ leg. The genital armature of the male specimen is illustrated in BESHKOV (1995a: 207, fig. 4, gen. prep. 5./1.X.1992, BESHKOV). Probably some of the specimens reported in the past from Bulgaria as *Dryobotodes monochroma* are *D. servadeii*. The two species show some differences in appearance and in genitalia, most important of which are the shape of the valvae and harpae, the tip of the aedeagus and the everted vesica (gen. figs 57–60). Genitalia of both sexes are illustrated and discussed by PARENZAN (1982a).

**392. *Dryobotodes servadeii servadeii* PARENZAN, 1982\***

\* *Dryobotodes servadeii* PARENZAN (col. pl. I, fig. 12) is known in Bulgaria with certainty from three localities only: W Bulgaria, Zemen gorge, Skakavitza Railway Station, 07.IX.1984, S. BESHKOV leg., in coll. BESHKOV, 2 ♂♂, gen. preps 1.–2./17.IX.1997, S. BESHKOV, male genitalia with everted vesica (BESHKOV & RADEV, in press) and three other males (genitalia with everted vesica of one of them checked by the present author) from the same locality, 01.IX.1980, in coll. J. GANEV in the National Museum of Natural History, Sofia (gen. figs 59, 60). Another specimen is in the collection of HERMANN HACKER (Staffelstein, Germany) from S Pirin Mts, Melnik-Rhozhnen, 24.–25.IX.1981, P. GYULAI leg. and another in the collection of J. GANEV from SW Bulgaria, Kresna Gorge, 08.X.1981, 1 ♂, J. GANEV leg., det. S. BESHKOV. It seems that in W Bulgaria *Dryobotodes servadeii* is not uncommon. See also under the previous species.

*Dryobotodes roboris roboris* (BOISDUVAL, 1828)

= *cerris* (BOISDUVAL, 1840)\*

= *roboris* GEYER in HÜBNER, [1835], auct., nec FABRICIUS, 1776

\* According to GANEV (1984a: 37) *Dryobotodes cerris* has never been found in Bulgaria. All reports for it concern the closely related species *Dryobotodes carbonis* (WAGNER, 1931). The present author is of the same opinion. *Dryobotodes roboris* (BOISDUVAL) is an atlantico-mediterranean species, which has never been found in the Balkan Peninsula.

**393. *Dryobotodes carbonis carbonis* (WAGNER, 1931)\***

= *carbonis europaea* PINKER, 1976

= *cerris* (BOISDUVAL, 1840) auct.

= *roboris* GEYER in HÜBNER, [1835], nec FABRICIUS, 1776

\* *Dryobotodes carbonis* (WAGNER) is known in Bulgaria from "Kutelka" above Sliven town as *Dryobota roboris* B. (REBEL, 1903: 219); W Bulgaria, Zemen Gorge, Skakavitza Railway Station (GANEV, 1981: 79 as a new species for Bulgaria; GANEV, 1983b: 92; 1983e: 91); SW Bulgaria, "Dzumaja" [= Gorna Dzhumaja, = Blagoevgrad town] (REBEL & ZERNY, 1931: 95), "Rupite" near Volcanic Hill Kozhouh, Petrich district (GANEV, 1982b: 164; 1984b: 134); Kresna (GANEV, 1983e: 91; MÉSZÁROS et al., 1984a: 69); Melnik (GYULAI, 1983: 206; MÉSZÁROS et al., 1984a: 69); Banja village, Pazardzhik Region (GANEV & BOCHAROV, 1982: 104); Belassitza Mts, low forest zone, as *Dryobotodes roboris* Bsdv. (SLIVOV, 1988b); Black Sea Coast and Strandzha Mts, as *Dryobotodes cerris* B. (SLIVOV, 1978a: 43); Black Sea Coast, Varna town, as *Dryobotodes roboris* Bsd. (SLIVOV, 1976 [1977]: 66); E Rhodopi Mts, Byalo Pole (= Belopolyane) village, series bred ab ovis (GOATER, 1996: 282) and many other still unpublished localities, most of them in the E Rhodopi Mts and in S Bulgaria.

Subgenus *Dichonioxa* BERIO, 1980

**394. *Dryobotodes tenebrosa tenebrosa* (ESPER, [1789])\***  
= *accipitrina* (ESPER, 1788)

\* *Dryobotodes tenebrosa* (ESPER) has been recorded in Bulgaria from SW Bulgaria, "Kozuh" [Volcanic Hill of Kozhouh near Petrich town] (GANEV, 1983c: 116; 1984b: 134); SW Bulgaria, [Melnik; Kresna?] (HERCZIG & SZABÓKY, 1984: 107); Melnik (MÉSZÁROS, RONKAY, HERCZIG, SZEÓKE & SZABÓKY, 1984a: 69); Ograzhden Mts, Sestrino village (GANEV, 1987b: 8); E Rhodopi Mts, Yazovir Studen Kladenetz Dam, Sredna Arda Railway Station (BESHKOV, 1995a: 212).

Genus *Antitype* HÜBNER, [1821]

**395. *Antitype chi chi* (LINNAEUS, 1758)\***

\* The first record of *Antitype chi* (LINNAEUS) for Bulgaria was by ILTSHEV (1914: 142), which BURESCH & TULESCHKOW (1932: 71, 115) considered doubtful. BOCAROV (1959: 59–60) reported it from Sofia town, from Vitosha Mts: "Byalata Voda" and from Rila Mts: Rilski Manastir monastery. In fact, it is not a rare species in Bulgaria, at altitudes between about 200–1530 m.

**396. *Antitype suda* (GEYER, [1832]) ssp. *schimae* (SCHAWERDA, 1911)\***

\* SLIVOV & LUKOV (1976 [1977]: 239) reported *Antitype suda* as a new species for Bulgaria from Iskarski Prolom Gorge, Lakatnik Railway Station. An examination of the specimen (♀) by the present author showed it to be *Antitype suda schimae* (SCHAWERDA, 1911). The report of SLIVOV & LUKOV (1976 [1977]: 239) is the only published record for Bulgaria. In the collection of J. GANEV there is single male specimen from SW Bulgaria, Kresna Gorge, 02.X.1980, J. GANEV leg.

*Antitype jonis jonis* (LEDERER, 1865)\*

\* *Antitype jonis* (LEDERER) is another species which might be found in Bulgaria. In the Balkan Peninsula known from the Republic of Macedonia and Albania (REBEL & ZERNY, 1931: 94; THURNER, 1964: 98; HEINICKE, 1965: 544; HACKER, 1989: 191).

Genus *Ammoconia* LEDERER, 1857

**397. *Ammoconia caecimaculaca caecimacula* ([DENIS & SCHIFFERMÜLLER], 1775)**



**398. *Ammonoconia senex senex* (GEYER, [1828])\***

= *Ammonoconia senex wagneri* BOURSIN, 1935, syn. nov.\*\*

\* *Ammonoconia senex senex* (GEYER, [1828]) (type locality: Croatia, "Fiume" [= Rijeka]) is a common species in Bulgaria, known from many localities. The flight period in Bulgaria is between early September and early December. In the Republic of Macedonia known at an altitude up to 1500 m (Galitchitza Mts, above Trapejca, 10.IX.1997, S. BESHKOV & V. GASHTAROV leg.). Until recently the nominate taxon in Bulgaria was known with certainty only from the Western part of the country: Kostinbrod near Sofia town and Struma Valley: Kresna Gorge and Melnik town (RONKAY & VARGA, 1984: 487). Now all Bulgarian populations are considered to belong to the nominate *Ammonoconia senex senex* (GEYER, [1828]). See also under *Ammonoconia senex wagneri* BOURSIN.

\*\* The type locality of *Ammonoconia senex wagneri* BOURSIN is Bulgaria, Slivno [Sliven town]. Other places from which *Ammonoconia senex wagneri* BOURSIN, 1935 has been reported are as follows: SW Bulgaria, "Rupite" near Volcanic Hill Kozhouh, Petrich district (GANEV, 1984b: 134); Bessaparskite Ridove Hills, above Isperihovo village, Pazardzhik Region (GANEV & BESCHKOV, 1987: 116) and Belassitza Mts (SLIVOV, 1988b: 131). In SLIVOV (1988b: 131, 134), *Ammonoconia senex wagneri* is reported from SW Bulgaria, Belassitza Mts, low and middle forest zone as a "new taxon for Bulgaria", although the type locality of *A. senex wagneri* is in Bulgaria. According to RONKAY & VARGA (1984: 485–487), *A. senex wagneri* is known only from the type locality and *A. senex senex* in Bulgaria is known from Kresna, Melnik and Kostinbrod towns. However, in MÉSZÁROS et al. (1984a: 70) *Ammonoconia senex wagneri* (BOURSIN, 1935) is also reported from the same localities, Kostinbrod town, Kresna and Melnik. *A. senex wagneri* is reported also from the Republic of Macedonia (TURNER, 1938: 149). According to HACKER (1989: 192), *A. senex* is a polymorphic species and its populations differ from one another depending on the habitat. HACKER could not find constant differences between specimens from Bulgarian Macedonia, Greece and Dalmatia, with which to prove distinct geographical races. According to him, the subspecific status of the populations of *A. senex* needs revision. The present author made an attempt to solve the problem of the subspecies of *Ammonoconia senex* in Bulgaria, and found that this species, which is very variable both in external and in genital features, has eight (!) named subspecies in its range across S Europe and the Near East. He examined more than 20 specimens from different parts of Bulgaria (including from the type locality of *wagneri* BOURSIN), a single specimen from the Republic of Macedonia and two from Asia Minor (Prov. Antalia), and examined the genitalia of 20 individuals, including everted vesica of 19 specimens. He was unable to find constant differences between specimens from E Bulgaria (E Rhodopi and Sakar Mts), Central Bulgaria (Bessaparskite Ridove Hills, W Rhodopi Mts, Devin town and Loukovitza Motel above Assenovgrad town), SW Bulgaria (Volcanic Hill Kozhouh, Petrich district; Kresna Gorge; and the districts of Gradeshnitsa village, Kresna district), W Bulgaria (Zemen Gorge, Kyustendil Region), Republic of Macedonia and the type locality of *wagneri* BOURSIN (Sliven town, ex coll. "Princ. Bulg." in the collection of the National Museum of Natural History, Sofia, gen. prep. 1./05.III.1998, S. BESHKOV, male, genitalia with everted vesica). The specimens from E Rhodopi Mts have a wingspan of 37–41 mm, those from Sakar Mts of 37–38 mm, from W Rhodopi Mts 41–43 mm, from Zemen Gorge 43 mm, from SW Bulgaria 41–43 mm, 40 mm from the Republic of Macedonia (Galitchitza Mts) and 47 mm from Sliven. The smallest one is a specimen from Bessaparskite Ridove Hills—36 mm. According to RONKAY & VARGA (1984: 485) the wingspan of ssp. *wagneri* is 43–44 mm. In regard to wingspan, specimens from E Bulgaria (average 39.5 mm) are more similar to the Turkish *Ammonoconia senex victoris* RONKAY & VARGA, 1984. In the everted vesica very small, unimportant and inconstant differences were found between the specimens from SW Bulgaria and the Republic of Macedonia (nominate subspecies) (gen. figs 78, 79) and from Central and E Bulgaria (ssp. *wagneri*) (gen. fig. 80). The shape of the vesica (gen. figs 78–80) in specimens from both regions is the same, but in the cornutus field the larger distal cornuti in the specimens from E Bulgaria and Rhodopi Mts appear to be more massive. In those from W Bulgaria (SW Bulgaria (gen. fig. 79) and Zemen Gorge) the larger distal cornuti in the cornutus field look thinner, sometimes more numerous, but not so massive as in the specimens from E Bulgaria. The most important character used to distinguish the subspecies of *Ammonoconia senex*, the shapes of the clavus and of the sacculus process, is extremely variable even among specimens from the same locality. The specimens from E Bulgaria,

Sakar Mts, (gen. figs 69, 76) which have to represent ssp. *wagneri* are variable, with angular or rounded pointed narrow left clavus and pointed rounded right one. Left saccular process is very long, sometimes curved, with narrow apex, the right one is of different shape and size—small and rectangular, shortly pointed, or very long irregular. In the E Rhodopi Mts (gen. figs 67, 68, 70, 75, 77) there is also much variation in valval characters. Clavus has different shapes: rectangular, triangular, rounded, acute, more or less sclerotised. Right saccular process varies from very small to very massive, in some specimens only its basis is present, in others it is very long, acute, or rectangular. The left saccular process is long, acute, with large or narrow basis and with more and less long and acute apex. The specimen from Rhodopi Mts, Devin town (gen. fig. 63) has narrow, pointed, irregular clavus, left saccular process is narrow, acute, very long, the right one is also long and acute. A single specimen from Rhodopi Mts, Loukovitza above Assenovgrad town (gen. fig. 61) has similar valval characteristics: both clavi are very pointed, irregular, both saccular processes are equal, long, pointed, narrow, finger-like. From Bessaparskite Ridove Hills, a single specimen examined (gen. fig. 64) has rectangular left and triangular right clavus, the left saccular process is long, acute and narrow, the right one is small, dentate. The specimens from Zemen Gorge (gen. figs 65, 66) have acute, extremely long saccular processes in both valvae and angular, strongly sclerotised clavus. In those from SW Bulgaria (gen. figs 71, 73, 74), the left and the right saccular processes are less pointed, smaller, especially the right one, which is extremely small, sometimes greatly reduced. Clavus is rounded, sometimes elongated or massive, triangular, less sclerotised. However, in the genital characters, the specimens from Sliven (gen. fig. 72) are more similar to those from SW Bulgaria and from the Republic of Macedonia (gen. fig. 62). Also, the genitalia of the specimen illustrated in HACKER (1989: 505) from Turkey, Canakkale, which according to RONKAY & VARGA (1984) must be ssp. *wagneri* or ssp. *victoris*, has valval features like the specimens from SW Bulgaria. The subspecies *Ammonoconia senex victoris* RONKAY & VARGA, 1984 is probably also of doubtful taxonomic value.

Genus *Polymixis* HÜBNER, [1820]\*

= *Eumichtis* HÜBNER, [1821]

= *Myxinia* BERIO, 1985

= *Parabrachionycha* HACKER, 1990

= *Serpmyxis* BECK, 1991

= *Xanthomixis* BECK, 1996

\* The systematics of the genus *Polymixis* HÜBNER, [1820] follows HACKER & RONKAY (1992).

Subgenus *Polymixis* HÜBNER, [1820]

= *Xanthomixis* BECK, 1996

399. *Polymixis polymita polymita* (LINNAEUS, 1761)

400. *Polymixis xanthomista xanthomista* (HÜBNER, [1819])\*

\* *Polymixis xanthomista* HÜBNER was reported as a new species for Bulgaria from Iskarski Prolom Gorge, Tscherepisch Railway Station and Lakatnik Railway Station (SLIVOV & LUKOV, 1976 [1977]: 238). The present author examined two female *Polymixis xanthomista* HÜBNER, [1819] from the collection of SLIVOV, one labelled "Lakatnik, 14.10.1965, AL. SLIVOV" and the other "Tscherepisch, 13.10.1965, AL. SLIVOV". These are the only definite specimens of the species known from the Balkan Peninsula. Material from Varna town in the collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, identified as *Polia xanthomista* are *Aporophila canescens*.

Subgenus *Eumichtis* HÜBNER, [1821]*Polymixis lichenea lichenea* (HÜBNER, [1813])\*

\* *Polymixis lichenea* (HÜBNER) was reported for S Bulgaria (Skou, 1991: 291) without exact localities and without giving the source of the data. This seems to be the only record for the whole Balkan Peninsula. HACKER (1989: 193), following WARREN (1910: 130), reported it from Dalmatia, but has never seen *Polymixis lichenea* from the Balkans. The foodplants given in Skou (1991: 291) for Northern Europe, *Armeria maritima* and *Centranthus ruber*, do not occur in Bulgaria. However, we have the closely related taxa *Armeria rumelica* and *Centranthus kellereri* in Bulgaria.

Subgenus *Myxinia* BERIO, 1985401a. *Polymixis rufocincta rufocincta* (GEYER, [1828])\*

= *rufocincta* Hb. (incorrect subsequent spelling and author's name)

= *rufocincta mucida* (GUENÉE, 1852)

\* The nominate subspecies *Polymixis rufocincta rufocincta* (pl. 6, figs 1, 2) is widely distributed in the southern parts of the country, locally abundant. The first report for Bulgaria was by LEDERER (1963: 26) from Sliven town.

401b. *Polymixis rufocincta isolata* RONKAY & UHERKOVICH, 1983\*

\* *Polymixis rufocincta isolata* was known in Bulgaria until now only from "Kaylaka" near Pleven town, N Bulgaria (BESHKOW, 1992: 48) (pl. 6, figs 3, 4). All the specimens the present author has seen from N Bulgaria (and from Iskarski Prolom Gorge, Lakatnik Railway station and Milanovo village) show no differences from the examined paratypes of *Polymixis rufocincta isolata* and evidently belong to this subspecies. They are easily distinguished from the nominate subspecies from S Bulgaria.

*Polymixis flavicincta flavicincta* ([DENIS & SCHIFFERMÜLLER], 1775)\*

= *dysodea* (ESPER, [1790], nec [DENIS & SCHIFFERMÜLLER], 1775

= *clavescens* BOISDUVAL, 1840

= *lajonquieri* BOURSIN, 1963

\* The present author has never seen *Polymixis flavicincta* ([DENIS & SCHIFFERMÜLLER], 1775) (pl. 6, fig. 5) in Bulgaria, although it has been reported from several localities. GOGOV & LOUKOV (1964: 153) reported *Polymixis flavicincta* ([DENIS & SCHIFFERMÜLLER], 1775) as a new species for Bulgaria from Vitosha Mts, Minstroi Chalet and var. *calvescens* B. from Kazanlak town. GANEV (1982b: 164; 1983b: 92) reported *Polymixis flavicincta* from Zemen Gorge, Skavitzta Railway Station, 15.X.1979. However, there is no specimen in GANEV's collection. The specimen illustrated in RÁKOSY (1996b: pl. 15, fig. 9) from Bulgaria, Kresna Gorge as *Polymixis flavicincta*, is *Polymixis rufocincta*. Reported from the Romanian part of the Dobrogea (Hagieni), very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 141, 516, map 382). At present, the occurrence of *Polymixis flavicincta* in Bulgaria remains unconfirmed.

Subgenus *Parabrachionycha* HACKER, 1990402. *Polymixis trisignata trisignata* (MÉNÉTRIÉS, 1847)\*

= *leuconota* (HERRICH-SCHÄFFER, 1850)

\* At present, it is not clear whether the species which occurs in Bulgaria is *trisignata* MÉNÉTRIÉS or another, probably undescribed species. According to HACKER & RONKAY (1992: 485) and to HACKER

(1998a: 191) *tresignata* and *leuconota* are conspecific. According to FIBIGER (1997a: 22) there is an undescribed European species in this species group. Careful examination of the specimens of this group from Bulgaria, E Rhodopi and Sakar mountains, including everted vesica, in the collection of the present author, has shown some differences between *P. trisignata* as illustrated in HACKER & RONKAY (1992: 493a, Taf. Q, fig. 17) and in FIBIGER (1997a: 21, figs 8, 10; 27, figs 6, 7). Bulgarian specimens differ slightly from the illustrations there, mostly in the shape of the white spot in the reniform stigma and in the pattern of the hind wings. The male genitalia are identical, except for small differences in the everted vesica. In our specimens the basal diverticulum is pointed upward, dorsally. Aedeagus has two sclerotized bands, the right one with a small spinous field of cornuti, continued to the apex. The above mentioned differences are probably valid for describing the Bulgarian population as a subspecies, or they are a result of differences of the deformation of the vesicas under a cover glass. According to REBEL (1903: 217) "Ein frisches Exemplar (weiblich), welches vorzüglich mit HERRICH-SCHÄFFERS Bild 389 übereinstimmt, erbeutete HABERHAUER bei Slivno (Kirchenwald)" [= Tserkovnata Kuriya near Sliven town, E Bulgaria] (as *leuconota*), which is the first report for this species for Bulgaria. From HERRICH-SCHÄFFER's plate 16, fig. 389, as well as the text (p. 279) it is clear that HABERHAUER's specimen really belongs to this species group. In the collection of the National Museum of Natural History, Sofia, one female specimen has been found from the Black Sea Coast, Varna town, 01.XI.1957, N. KARNOSCHITZKY leg., gen. prep. 3./22.VI.1998, BESHKOV. The genitalia of this specimen shows no differences from those illustrated as *P. trisignata* in FIBIGER (1997a). Another specimen from the same collection and the same locality, dated 23.X.1933 has been found, originally wrongly determined as *Hadena furva*. Known under the names *Hadena/Blepharita leucinota* H.-S. from Sliven town, J. HABERHAUER leg. (REBEL, 1903: 217; BURESCH, 1914a: 46; BURESCH & TULESCHKOW, 1932: 109); Sakar Mts: above Dossiteevo village and in Orechnik village near Topolovgrad town (pl. 6, fig. 6) (BESHKOV, 1992: 48); E Rhodopi Mts, Yazovir Studen Kladenetz Dam between Kaloyantzi and Gnyazdovo villages, and Siv Kladenetz village, Ivaylovgrad district (BESHKOV, 1995a: 212). Recently found in some other localities in the E Rhodopi Mts (BESHKOV & GASHTAROV, in press) and in SW Bulgaria, Volcanic Hill of Kozhouh near Petrich town (S. BESHKOV & B. GOATER leg., single female specimen, in coll. GOATER). Two specimens from the S Black Sea Coast: Bourgass town, collected in the second half of October (22.X.) (TCHORBADJIEV leg.) and Pomorie town, 31.X.1971, I. IVANOV leg., ♀, have been found by the present author in the collection of AL. SLIVOV (Institute of Zoology, Sofia), however the first one was incorrectly identified as "*Mamestra thalassina* ROTT.", and the second one was undetermined at all. The flight period in Bulgaria is from the beginning of October to the second third of November. According to SPULER (1908: 357) its flight period is August to September. Known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 142, 516, map 380). In NOWACKI & FIBIGER (1996: 276) this species is included for Bulgaria under the name *Polymixis leuconota*.

Subgenus *Serpmixis* BECK, 1991

**403. *Polymixis serpentina serpentina* (TREITSCHKE, 1825)**  
= *serpentina* (incorrect subsequent spelling)

Genus *Crypsedra* WARREN, 1911

***Crypsedra gemmea gemmea* (TREITSCHKE, 1825)\***

\* *Crypsedra gemmea* (TREITSCHKE, 1825) is a species which could occur in Bulgaria. From the neighbouring territories, it is known from the Republic of Macedonia (THURNER, 1964: 98) and the Republic of Serbia, Negotin town, not far away from the Bulgarian/Yugoslavian border (ZECEVIC, 1993: 27).

Genus *Maraschia* OSTHELDER, 1933

*Maraschia grisescens grisescens* OSTHELDER, 1933\*

\* *Maraschia grisescens* OSTHELDER, 1933 has never been reported from Bulgaria, but might occur here. Known from Ohrid town in Macedonia (TURNER, 1938: 151; 1964: 117) and from Kastoria in Greece (HACKER, 1989: 279). It is wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 277).

Genus *Blepharita* HAMPSON, 1907

Subgenus *Ablephica* BERIO, 1985

**404. *Blepharita satura satura* ([DENIS & SCHIFFERMÜLLER], 1775)\***

= *porphyrea* (ESPER, [1789]), nec [DENIS & SCHIFFERMÜLLER], 1775

\* BOCAROV (1959: 58) reported *Blepharita satura* as a new species for Bulgaria from Rila Mts, Rilski Manastir monastery. However, the first report for Bulgaria was by CARADJA (1930), quoted below as *Hadena porphyrea* Esp. Found in many other places at altitudes from sea level on the Black Sea Coast, Balchik (CARADJA, 1930: 45; SLIVOV, 1976 [1977]: 66) up to 1600 m in the mountains. The flight period is from late August to mid-October; in SLIVOV (1976 [1977]: 66) it is given as July, which seems incorrect. Probably he had confused *Blepharita satura* with another species.

*Blepharita amica amica* (TREITSCHKE, 1825)\*

\* *Blepharita amica* (TREITSCHKE) is another species which could be discovered in Bulgaria. Known from Montenegro (Durmitor Mts) (CARNELUTTI, VASIC, TOMIC, ZECEVIC & KRANJCEV, 1991: 109).

Genus *Mniotype* FRANCLEMONT, 1941

**405. *Mniotype adusta adusta* (ESPER, [1790])**

= *duplex* (HAWORTH, 1809)

= *sommeri* LEFEBVRE, 1836

= *pavida* (BOISDUVAL, 1840)

= *baltica* (HERING, 1846)

Genus *Pseudomniotype* BECK, 1991

**406. *Pseudomniotype solieri solieri* (BOISDUVAL, 1840)\***

= *soliteri* (incorrect subsequent spelling)

\* SLIVOV (1979: 40) reported *Pseudomniotype solieri* as a new species for Bulgaria from the Black Sea Coast, Varna town, 07.XI.1954, 1 ♂ in coll. KARNOSCHITZKY. The only true specimen from Bulgaria the present author has seen is from SW Bulgaria, Volcanic Hill of Kozhouh near Petrich town, 1 ♂, R. RADEV leg. (BESHKOV & RADEV, in press). *Pseudomniotype solieri* seems to be very rare in Bulgaria.

Genus *Apamea* OCHSENHEIMER, 1816\*

= *Hadena* SCHRANK, 1802, auct.

= *Handea* (incorrect subsequent spelling)

= *Abromias* BILLBERG, 1820

- = *Crymodes* GUENÉE, 1841
- = *Eleemosia* PROUT, 1901
- = *Agroperina* HAMPSON, 1908
- = *Apaconjunctdonta* BECK, 1991
- = *Loscopia* BECK, 1991
- = *Furvabromias* BECK, 1991
- = *Sinapamea* RÁKOSY, 1996

\* The genus *Apamea* OCHSENHEIMER, 1816 is rather homogenic in genital features and for this reason most subgenera of this genus are omitted here.

Subgenus *Apamea* OCHSENHEIMER, 1816

**407. *Apamea monoglypha monoglypha* (HUFNAGEL, 1766)**

- = *monoglypha* (incorrect subsequent spelling)

**408. *Apamea syriaca syriaca* (OSTHELDER, 1933)\***

- = *sicula* (TURATI, 1909), auct.
- = *tallosi* KOVACS & VARGA, 1969

\* *Apamea syriaca* (OSTHELDER) is recognized as a bona spec. by HACKER & TALHOUK (1998: 378). It was reported as a new species for the country from SE Bulgaria, Simeonovo (Otmanli) village near Bourgass town, 1 ♂, leg. PENEV (GANEV & BESCHKOV, 1987: 117). Known also from SW Bulgaria, "Roupite" near the Volcanic Hill of Kozhouh, Petrich town district, 27.V.1991 and 03.VI.2000 and from E Rhodopi Mts: Dolno Loukovo village, Ivaylovgrad districts (pl. 6, fig. 7), as well as from Arda Chalet near Dabovetz village and from Momina Skala Chalet near Madzharovo town (BESHKOV & GASHTAROV, in press), from the S Black Sea Coast, "Arkoutino" near Primorsko (BESHKOV, NOWACKI & PALKA, 1999: 181) as well as from NE Bulgaria, N Black Sea Coast, SE side of Dourankoulak Lake, near Vaklino village, 04.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg., single male specimen. Probably *Apamea syriaca* (OSTHELDER) is not uncommon in the low-lying temperate areas of Bulgaria. The very limited number of published localities is probably due to confusion with the closely related species *Apamea monoglypha* (HUFNAGEL, 1766). However, the two species have a different flight period. *Apamea syriaca* is single brooded and flies during May to July, whereas the flight period of *Apamea monoglypha* in Bulgaria is from the end of June to the beginning of October. For the synonymy and the differences between the species from this group with a key to their female genitalia see in FIBIGER & HACKER (1998: 36).

**409. *Apamea lithoxylaea lithoxylaea* ([DENIS & SCHIFFERMÜLLER], 1775)**

- = *lithoxylea* (incorrect subsequent spelling)
- = *lithoxilea* (incorrect subsequent spelling)

**410. *Apamea sublustris sublustris* (ESPER, [1788])**

**411. *Apamea crenata crenata* (HUFNAGEL, 1766)\***

- = *rurea* (FABRICIUS, 1775)
- = *alepecurus* (ESPER, [1790])
- = *alopecurus* (ESPER, [1803])
- = *combusta* (HÜBNER, [1808])

\* *Apamea crenata* (HUFNAGEL) was reported as a new species for Bulgaria, from Rila Mts, Borovetz Resort, as recently as 1962 (SOFFNER, 1962: 156). Not rare in Bulgaria, and now known from many localities in the mountains.

**412. *Apamea epomidion epomidion* (HAWORTH, 1809)\***

- = *epimidion* (incorrect subsequent spelling)
- = *charactera* auct. nec ([DENIS & SCHIFFERMÜLLER], 1775)
- = *charactera* Hbn. (incorrect author's name)
- = *hepatica* sensu auct.

\* The first report of *Apamea epomidion* (HAWORTH, 1809) (as *Hadena hepatica* Hb.) for Bulgaria is that of BACHMETJEW (1902: 433) for Sliven town, following the unpublished manuscript of H. FIGULEV. According to REBEL (1903: 217) and to BURESCH & TULESCHKOW (1932: 71, 112) *Apamea epomidion* (HAWORTH, 1809) has been wrongly reported for Bulgaria in the above mentioned article of BACHMETJEW. NESTOROVA-KVARTIRNIKOVA (1972) reported *A. epomidion* (HAWORTH, 1809) (as *hepatica*) as a new species for Bulgaria from Vitosha Mts. SLIVOV (1984: 62) again reported *Apamea charactera* Hbn. [sic!] as a new species for Bulgaria from Belogradtchik town. After that, *Apamea epomidion* (HAWORTH, 1809) has been found in a few other localities in the country, from arid places at low altitude such as East Rhodopi Mts (BESHKOV, NOWACKI & PALKA, 1999: 181), Black Sea Coast and Kresna Gorge, to high altitudes in the mountains. Sometimes, in one and the same night it is not rare at sugar, but at the same time it does not come to lamps. Without sugar collecting *Apamea epomidion* (HAWORTH, 1809) could be wrongly accepted as a rare species.

**413. *Apamea aquila aquila* DONZEL, 1837\***

- = *funerea* (HEINEMANN, 1859)

\* *Apamea aquila aquila* DONZEL was reported as *Hadena funerea* HEIN. from Sliven town by BACHMETJEW (1902: 433), following unpublished data of FIGULEV. According to REBEL (1903: 217) and to BURESCH & TULESCHKOW (1932: 71, 109) this report is incorrect. At present known from Rhodopi Mts, Motel Loukovitza above Assenovgrad town and the Black Sea Coast, Varna town as a new species for Bulgaria (det. L. RONKAY) (GANEV, 1985b: 90) as *Apamea aquila funerea* HEIN.; SW Bulgaria, S. Pirin Mts, Liljanovo village above Sandanski town, 500 m altitude (HACKER, 1989: 586; EICHLER, HACKER & SPEIDEL, 1996: 267); Central Stara Planina Mts, Dermenkaya Chalet, 1530 m, 05.–11.VII.1986, 1 ♀, leg. and in coll. BESHKOV (pl. 6, fig. 8) (BESHKOV & GASHTAROV, in press).

**414. *Apamea lateritia lateritia* (HUFNAGEL, 1766)****415. *Apamea furva furva* ([DENIS & SCHIFFERMÜLLER], 1775)****416. *Apamea maillardi* (HÜBNER-GEYER, [1834]) ssp. *oxygrapha* (VARGA, 1976)\***

- = *Apamea maillardi perstriata* (VARGA, 1976 [1977])

\* *Apamea maillardi oxygrapha* (VARGA) is another variable taxon, described from Bulgaria, Stara Planina Mts and Vitosha Mts at an altitude of 1450–1800 m. *Apamea maillardi perstriata* (VARGA, 1976 [1977]) which is a synonym, is described (Terrestrial Fauna of Bulgaria, Bulg. Acad. Sc., 1976 [1977]: 180) from the same mountains. Very similar to *michieli* (VARGA, 1976) and without knowing the locality, it is sometimes difficult to distinguish specimens of the taxa *A. michieli* (VARGA, 1976) and *A. m. oxygrapha* (VARGA, 1976). Referring to the literature, all the specimens reported as *maillardi* (HÜBNER-GEYER, [1834]) from Rila and Pirin Mts should belong to *Apamea michieli* (VARGA, 1976). *Apamea maillardi* is also reported from Ossogovo Mts, but it is not clear which taxon is represented there, *A. maillardi oxygrapha* or *A. michieli michieli*.

**417. *Apamea zeta* (TREITSCHKE, 1825) ssp. *cyanochlora* VARGA, 1976\***

- = *A. exulis* LEFEBVRE, 1836 (synonym of *A. zeta zeta* Tr.)
- = *pernix* (GEYER in HÜBNER, [1832]) (synonym of *A. zeta zeta* Tr.)
- = *groenlandica* (DUPONCHEL, [1838])

- = *groelandica* (incorrect subsequent spelling)
- = var. *curoi* (CALBERLA, 1888)
- = *zeta pseudopernix* VARGA, 1976 [1977]
- = *zeta pseudopertinax* (incorrect subsequent spelling sensu GANEV, 1982a)

\* *Apamea zeta cyanochlora* VARGA, 1976 is a very variable taxon. Type locality: Bulgaria, Rila Mts, but known also from Pirin Mts, from altitudes of 1900–2400 m. The occurrence of *A. zeta cyanochlora* VARGA in Rhodopi, Ossogovo, Slavyanka (Alibotoush) and Vitosha Mts is doubtful. Its synonym *zeta pseudopernix* VARGA, 1976 [1977] is described (Terrestrial Fauna of Bulgaria, Bulg. Acad. Sc., 1976 [1977]: 180) from Rila and Pirin Mts. For the differences between *cyanochlora* VARGA and some other taxa of this group see in PEREGOVITS & VARGA (1984).

#### 418. *Apamea michielii michielii* (VARGA, 1976)\*

- = *maillardi michaelii* (incorrect subsequent spelling)
- = *michelli* (incorrect subsequent spelling)

\* The taxonomic status of the variable *Apamea michielii michielii* (VARGA) is uncertain and needs revision. Known as a Balkan endemic species at altitudes of 1600–2400 m from Rila and Pirin Mts in Bulgaria, and from the Republic of Macedonia and N Albania (VARGA & SUVOV, 1976 [1977]). "*Apamea maillardi*" is reported from Ossogovo Mts, but it is not clear to which taxon this refers, *A. michielii michielii* or *A. maillardi oxygrapha*. See also under *Apamea maillardi oxygrapha* (VARGA).

#### 419. *Apamea rubrivena* (TREITSCHKE, 1825) ssp. *marginipicta* VARGA, 1973\*

- = *rubrivena marginepuncta* (incorrect subsequent spelling)
- = *feisthameli* (BOISDUVAL, 1833) (synonym of *A. r. rubrivena*)
- = var. *hercyniae* (STAUDINGER, 1871) (synonym of *A. r. rubrivena*)
- = *rubrivena miriquidoi* KOCH, 1963 (synonym of *A. r. rubrivena*)

\* The first report for this rather common Bulgarian species was by ZÜLLICH (1929: 49) as *Hadena rubrivena* f. *hercyniae* from Rila Mts above Rilski Manastir monastery [1400 m altitude]. VARGA (1972–73: 204–208) illustrated and described the Bulgarian *rubrivena* population as a distinct subspecies named *marginipicta* (type locality: Bulgaria, Vitosha—holotype: Vitosha, Kumata Chalet, 1650 m altitude, 23.VII.1969—Rila, West Rhodopi and Pirin Mts at altitudes 1600–2150 m). Some of these data can be found also in VARGA & SUVOV (1976 [1977]: 181). The correct year of the publication of the description of ssp. *marginipicta* VARGA is 1973, as it is stated in POOLE (1989: 107), not 1977, as it is stated in HACKER (1989: 262; 1990: 217), RÁKOSY (1996b: 146), BESHKOV (1993: 370), BESHKOW (1998: 238) and by some other authors. The article with the primary description of ssp. *marginipicta* is that of VARGA (1972–73): *Apamea*-Studien, No 2. I. Beiträge zur Kenntnis der Verbreitung der *Apamea rubrivena* (TREITSCHKE, 1825; Lep.: Noctuidae) mit Beschreibung einer neuen Unterart aus der Balkanhalbinsel. – Acta biologica Debrecina 10–11: 201–211, as it is stated in POOLE (1989: 107), not Terrestrial Fauna of Bulgaria, Bulgarian Academy of Sciences, as it is stated in HACKER (1989: 262; 1990: 217). *Apamea rubrivena marginipicta* (VARGA, 1973) is not a rare species in the mountains, and is now known also from Ossogovo Mts, and Central (Troyanska) Stara Planina Mts (BESHKOV, 1993: 370; BESHKOW, 1998: 238) at altitudes from 1200–2200 m. According to GANEV (1983d: 69), in Ossogovo Mts *Apamea rubrivena* occurs at altitudes of 500–700 m and also between 1400–1700 m.

#### 420. *Apamea platinea platinea* (TREITSCHKE, 1825)\*

- = *montana* (HERRICH-SCHÄFFER, 1852), auct.
- = *pentheri* (REBEL, 1906) (synonym of *Apamea platinea montana* HERRICH-SCHÄFFER, 1852, auct.)
- = *platinea albida* (TURNER, 1938)
- = *platinea grisescens* TOULECHKOFF, 1951 nom. preoccupied
- = *platinea toulechkoffi* KOÇAK, 1980



\* In Bulgaria, *Apamea platinea platinea* (type locality: Austria, Vienna region, near Mödling and Baden) is reported from SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 07.VI.1981, single female specimen (SLIVOV, 1984: 62); Pirin Mts without exact locality (THURNER, 1964: 115); Pirin Mts, Vihren Chalet (GROSSER, 1982: 222) and Kamenitza Chalet, 1750 m (BUSSE & OCKRUCK, 1991: 20); Black Sea Coast, Euxinograd near Varna town (1 ♂, BURESCH coll.), 18.V.1906 (SLIVOV, 1979: 40). It seems likely that both reports of SLIVOV are wrong, due to misidentification (probably confused with *Yigoga renigera renigera*/*Yigoga argentina argentina* or another species): the low altitude given for this subalpine xeromontane species, the biotopes and the earlier flight period suggest a possible incorrect determination by both BURESCH and SLIVOV. The taxon *platinea griseescens* TOULECHKOFF, 1951, described from Mt Olympus (Greece) is a nomen praecoccupatum, junior primary homonym of *griseescens* STAUDINGER. KOÇAK (1980: 144) proposed the new name *toulechhoffi* to replace *griseescens* TOULECHKOFF. However, both these taxa are synonyms of *platinea platinea* (TREITSCHKE, 1825). *Apamea platinea* is wrongly excluded for the Bulgarian fauna in NOWACKI & FIBIGER (1996: 277).

**421. *Apamea oblonga oblonga* (HAWORTH, 1809)\***

= *abjecta* (HÜBNER, [1813])

\* SLIVOV (1979: 40) reported *Apamea oblonga* as a new species for Bulgaria from Sofia town. Subsequently recorded from many other localities in the country up to 2400 m in the mountains (Rila Mts, Mussala Chalet, BESHKOV leg.).

**422. *Apamea remissa remissa* (HÜBNER, [1809])**

= *remissa* TREITSCHKE (incorrect author's name)

= *gemina* HÜBNER, [1813]

**423. *Apamea unanimitas unanimitas* (HÜBNER, [1813])\***

= *unanimitas* TREITSCHKE, 1835

= f. *fasciata* WARREN, 1911

\* SLIVOV (1973: 44) reported *Apamea unanimitas* (as f. *fasciata* WARR.) as a new species for Bulgaria from Iskarski Prolom Gorge, Lakatnik Railway Station. Some, but very few other reports follow after that for this species which is very rare in Bulgaria.

**424. *Apamea illyria illyria* FREYER, 1846\***

= *illyrea* (incorrect subsequent spelling)

= *illyrica* FR. (incorrect subsequent spelling), nec *illyrica* (REBEL & ZERNY, 1931), auct.

\* *Apamea illyria* FREYER was reported as a new species for Bulgaria from Rila Mts, Borovetz Resort (SOFFNER, 1962: 156). In fact it had been already reported from Bulgaria long ago (ZÜLLICH, 1929: 49) from Rila Mts above Rilski Manastir monastery, and from Rilski Manastir monastery and Souhia Tchal (ZÜLLICH, 1936: 53). Now known from many other localities in Bulgaria, where it is quite common. In the collection of N. VIHODCEVSKY in the National Museum of Natural History, Sofia, a specimen from Vitoshka Mts, BAN Chalet, 1450 m, June, 22.1953, identified as *Hadena secalis*, is in fact *Apamea illyria*.

**425. *Apamea anceps anceps* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *sordida* BORKHAUSEN, 1792

= *siegeli* BERIO, 1985

**426. *Apamea sordens sordens* (HUFNAGEL, 1766)\***

= *basilinea* ([DENIS & SCHIFFERMÜLLER], 1775)

\* *Apamea sordens* (HUFNAGEL) was reported as new for Bulgaria by TULESKOV (1965: 205), from Plovdiv town. However, long ago, BACHMETJEV (1902: 433), following the unpublished data of PIGULEV, had already published it (as *Hadena basilinea* F.) from Plovdiv and Sliven towns. According to REBEL (1903: 217) and to BURESCH & TULESCHKOW (1932: 71, 112) though, the report of BACHMETJEV is wrong. It is a common species in Bulgaria, both at light and at sugar.

Subgenus *Loscopia* BECK, 1991

= *Sinapamea* RÁKOSY, 1996 syn. nov.

#### 427. *Apamea scolopacina scolopacina* (ESPER, [1788])

Genus *Leucapamea* SUGI, 1982

#### 428. *Leucapamea ophiogramma ophiogramma* (ESPER, [1794])\*

\* DRJANOVSKY (1906: 104, 111) reported *Miana ophiogramma* as a new species for Bulgaria from Vitosha Mts without giving the exact locality. Again, DRENOWSKY (1907: 13) reported it from Sofia town, which is probably the correct locality of the previous report. Probably the source of both reports is one and the same specimen. Later *ophiogramma* again was reported as a species new for Bulgaria from the districts of Plovdiv town, 08.VI.1934 (TULESCHKOV, 1936: 206). There are very few subsequent records. This species is known from the Romanian part of the Dobrogea (Hagieni), very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 148, 520, map 408).

Genus *Eremobina* McDUNNOUGH, 1927

= *Pabulatrix* SUGI, 1982

#### 429. *Eremobina pabulatricula pabulatricula* (BRAHM, 1791)\*

\* In Bulgaria, *Eremobina pabulatricula* (BRAHM) is known only from the S Black Sea Coast, Kiten, 01.VII.1985 and 28.V.1996 (J. GELBRECHT, pers. comm.); idem, HACKER (1996a: 254).

Genus *Oligia* HÜBNER, [1821]\*

= *Miana* STEPHENS, 1829

\* Recently several new taxa of the genus *Oligia* HÜBNER, [1821] have been described from Turkey and from the Near East: *Oligia pseudodubia* REZBANYAI-RESER, 1997, *Oligia turcia* REZBANYAI-RESER, 1997, *Oligia suleiman* REZBANYAI-RESER, 1997 and *Oligia vandarban* REZBANYAI-RESER, 1997. These species can only be distinguished from each other and from the other closely related European *Oligia* species by means of the genitalia. One of them, *Oligia turcia* REZBANYAI-RESER, 1997, has already been recorded close to Europe, from Bozuyuk (Prov. Bilecik), and probably will be found here, too, particularly in the Balkans. Further careful examination of a large amount of material is urgently needed in order to establish which taxa are in fact present in Bulgaria.

#### 430. *Oligia strigilis strigilis* (LINNAEUS, 1758)

= *strigilis* CL. (incorrect author's name)

= *preaduncula* ([DENIS & SCHIFFERMÜLLER], 1775)

= *praedunculata* Hb. (incorrect subsequent spelling and author's name)

= *aethiops* HAWORTH, 1809

**431. *Oligia versicolor versicolor* (BORKHAUSEN, 1792)\***= *fersicolor* BKH. (incorrect subsequent spelling)

\* *Oligia versicolor* (BORKHAUSEN), is easily misidentified, and is known with certainty only from very few localities in the country: S Bulgaria, Black Sea Coast, Arkoutino near Primorsko (EICHLER, HACKER & SPEIDEL, 1996: 267). HACKER (1996a: 254), quoted the data of the above mentioned article, and mentioned *Oligia versicolor* for Pirin Mts, the districts of Sandanski town. Whether this is a new locality or a misquote is unclear for now. Other specimens (genitalia checked) are from Pirin Mts, Liljanovo village (J. GELBRECHT, pers. comm.). Probably these are the only definite published reports of this species in Bulgaria. The localities given in VARGA & SLIVOV (1976 [1977]: 182): Vitosha Mts, "Aleko" and "Koumata" chalets, 1700–1800 m, 23.–24.VII.1969, 2 ♂♂ and 1 ♀, and Rila Mts, Rilski Manastir monastery, 1100 m, 28.–30.VII.1967, 4 ♂♂ and 1 ♀ seem correct, but require confirmation. The present author has seen only five specimens from Bulgaria from four localities, as follows: W Stara Planina Mts, "Yavor" Chalet above Tchiprovtsi town, 950 m, 27.VI.1998, S. BESHKOV, B. PETROV & G. STOYANOV leg., gen. preps 2.–3./09.VI.1998, S. BESHKOV, ♀♀, and Gorni Lom village, 30.VI.1998, G. GEORGIEV leg., 1 ♂, gen. prep. 1./08.X.1998, S. BESHKOV, genitalia with everted vesica; "Gradishteto" between Nova Lovtcha and Paril villages, S Pirin Mts, 780 m altitude, 18.VII.1998, S. BESHKOV & S. ABADJIEV leg., in coll. BESHKOV, 1 ♂, genitalia with everted vesica checked; Alibotoush [= Slavyanka] Mts., between "Livada" and Goleshovo village, 1500 m, 15.VII.1998, S. BESHKOV & S. ABADJIEV leg., single female specimen in coll. BESHKOV, genitalia checked. The present author has found no others, although he has examined the genitalia of a large number of specimens and there are several reports for *Oligia versicolor* in the literature for Bulgaria. Reported from several localities in the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 145, 521, map 411), but never found in the Bulgarian part of the Dobrogea.

**432. *Oligia latruncula latruncula* ([DENIS & SCHIFFERMÜLLER], 1775)**= *aerata* (ESPER, [1790])= *serrata* ESP. (incorrect subsequent spelling)*Oligia* spec. (undescribed/or abnormal?)\*

\* The author found a single female specimen (gen. prep. 2./08.VII.1998, S. BESHKOV) (gen. figs 88, 89) in the E Rhodopi Mts, bridge over the Arda River between Dolno Tcherkovishte and Oreshari villages, 160 m alt., 07.VI.1998, S. BESHKOV, J. NOWACKI, K. PALKA & M. BUNALSKI leg., in coll. S. BESHKOV (BESHKOV, NOWACKI & PALKA, 1999: 181), which shows completely different genital features from the other known *Oligia* species. For now this species remains undescribed, until some more material is found: it may simply be an abnormal specimen with pathologic genital anomalies.

*Oligia fasciuncula fasciuncula* (HAWORTH, 1809)\*

\* *Oligia fasciuncula* (HAWORTH) is another species wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 278). It has never been found in this country. There is an old, doubtful report from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 150, 521, map 413), and from the neighbouring territories it is reported also from Serbia (ZECEVIC, 1996: 68).

Genus *Mesologia* BOURSIN, 1965**433. *Mesologia furuncula furuncula* ([DENIS & SCHIFFERMÜLLER], 1775)**= *furcula* (incorrect subsequent spelling)= *bicoloria* (DE VILLERS, 1789)

**434. *Mesoligia literosa literosa* (HAWORTH, 1809)\***= ssp. *subarcta* (STAUDINGER, 1898), auct.\*\*= *subaerata* (incorrect subsequent spelling)= ssp. *faraulti* (ROTHSCHILD, 1914), auct.

\* At present only the nominate *Mesoligia literosa literosa* (HAWORTH) has been proven to occur in Bulgaria. After reading the article of REZBANYAI-RESER (1998) the present author examined genitalia, including everted vesica, of several specimens from SW Bulgaria (Alibotoush Mts and Paril village) and from N Bulgaria (Resseletz village) and found no differences from the nominate species illustrated in REZBANYAI-RESER (1998). The female specimens from Alibotoush (= Slavyanka) Mts are extremely large (wingspan up to 30 mm) (pl. 6, fig. 9) (according to REZBANYAI-RESER, 1998: 111, wingspan of the nominate subspecies is 22–25 mm). See also under ssp. *subarcta* (STAUDINGER, 1898) and under ssp. *minorasia* REZBANYAI-RESER, 1998.

\*\* According to some authors (HACKER, 1989: 269; 1996a: 254) ssp. *subarcta* (STAUDINGER, 1898) occurs on the Balkan Peninsula and in Bulgaria. Recent studies (REZBANYAI-RESER, 1998) showed that we do not have this taxon neither in Bulgaria nor on the Balkan Peninsula or indeed in Europe. See also under *M. literosa literosa* (HAW.). *Mesoligia literosa subarcta* is an eastern taxon. For its distribution see REZBANYAI-RESER (1998: 117).

***Mesoligia literosa minorasia* REZBANYAI-RESER, 1998\***

\* REZBANYAI-RESER (1998: 112) described a subspecies of *Mesoligia literosa* from Asiatic Turkey, named ssp. *minorasia* (pl. 6, fig. 10). It is also known from the Republic of Macedonia, the districts of Ohrid town (REZBANYAI-RESER, 1998: 113, 117), and its occurrence both in SE and SW Bulgaria seems possible. The present author examined several specimens from SW Bulgaria (Alibotoush Mts and Paril village) and found no differences from the nominate species illustrated in REZBANYAI-RESER (1998). The female specimens from Alibotoush (= Slavyanka) Mts are extremely large (wingspan up to 30 mm) (according to REZBANYAI-RESER, 1998: 111, wingspan of ssp. *minorasia* is 19 mm). See also under *M. literosa literosa* (HAW.).

**Genus *Mesapamea* HEINICKE, 1959**= *Lampetia* BOIE, 1837, nec CURTIS, [1830]\*

\* *Lampetia* BOIE, 1837 is a junior homonym of *Lampetia* MEIGEN, 1800, Diptera. The subjective replacement name is *Mesapamea* HEINICKE, 1959 (see in POOLE, 1989: 566). *Lampetia* CURTIS, [1830] is a synonym of *Jodia* HÜBNER, 1818.

**435. *Mesapamea secalis secalis* (LINNAEUS, 1758)\***= *leucostigma* (ESPER, [1791]), nec (HÜBNER, [1808]), auct.= *furca* (HAWORTH, 1809)= *rava* (HAWORTH, 1809)= *i-niger* (HAWORTH, 1809)= ab. *nictitans* ESP. (sensu ILTCHEV, 1913: 102 and DRENOWSKI, 1930a: 15), incorrect used= ? ab. *oculea* GUENÉE= *didyma* auct.

\* Probably some of the specimens reported in the literature for Bulgaria as *Mesapamea secalis* (LINNAEUS) belong to the sibling species *Mesapamea didyma*, or to other species, due to misidentification. For example, in the collection of N. VIHODCEVSKY in the National Museum of Natural History, Sofia, a specimen from Vitosha Mts, BAN Chalet, 1450 m, June, 22.1953, identified as *Hadena secalis* is *Apamea illyria* FREYER, 1846.

**436. *Mesapamea didyma didyma* (ESPER, [1788])\***= *secalella* REMM, 1983= *secalella* REMM, 1984

\* The first report of *Mesapamea didyma* (ESPER) for Bulgaria was from Sliven, 1000 m, 20.–30.VI.1965, 1 ♂ (leg. THURNER, coll. ZSM) (HACKER, 1989: 270). Other localities: Pirin Mts, Popina Laka, 900 m (BUSSE & OCKRUCK, 1991: 10; 20); N Black Sea Coast, near Balchik town (BESHKOV, 1997: 160; BESHKOV & NOWACKI, 1998: 49) and Kavarna town, 07.VIII.1997, S. BESHKOV & M. MARINOV leg., 1 ♂, genitalia checked; W Stara Planina Mts, near Varbovo village, 02.IX.1998, S. BESHKOV, D. VASSILEV & G. STOYANOV leg., 1 ♀, genitalia checked; Stara Planina Mts, Bozhentzite village, Gabrovo Region, 550 m, 15.VIII.1998, S. BESHKOV leg., 1 ♀, genitalia checked, and some other still unpublished localities recently found by the present author, in other parts of the country. Probably some specimens reported in the literature for Bulgaria as *Mesapamea secalis* belong to *Mesapamea didyma* due to misidentification.

**Genus *Phothedes* LEDERER, 1857**= *Petilampa* AURIVILLIUS, 1891**437. *Phothedes captiuncula captiuncula* (TREITSCHKE, 1825)**= *captiuncula delattini* VARGA, 1970 nec *delattini* WILTSHIRE, 1953\*= *Miana expolita* DOUBLEDAY, 1855= *expolita* (STT.) sensu DRENOWSKI, 1928a, DRENOWSKI, 1929a\*\*= var. *spolitha* (STT.) incorrect subsequent spelling sensu DRENOWSKI, 1928a\*\*\*= *spolita* STT. (incorrect subsequent spelling)

\* Two of the localities the type material of *P. captiuncula delattini* VARGA, 1970 originated from are: Rila Mts., Rilski Monastir and Vitosha Mts, Koumata [Chalet], 1600–1700 m altitude (VARGA, 1970: 244). *Phothedes captiuncula delattini* VARGA is reported also from Vitosha Mts (Dragalevski Monastir monastery, 850 m altitude in the pine tree (*Pinus*) zone by SLIVOV (1990: 196). Some old reports for *Phothedes captiuncula* from low altitudes are probably wrong, due to misidentification. The only specimen the present author has seen from a low altitude is from Rhodopi Mts, Loukovitza above Assenovgrad town, [400 m], 03.VII.1958, by day, S. BOCHAROV leg., in coll. of BOCHAROV in the National Museum of Natural History, Sofia. The taxonomic status of the taxon *delattini* VARGA, 1970 is unclear. *Phothedes captiuncula* is a variable species, known mostly from the mountains up to about 1900–2000 m altitude (BESHKOV, 1996c: 123) and can be found flying during the day, as well as at light.

\*\* DRENOWSKI (1909a: 26) reported *Maiana captiuncula* Tr. var. *expolita* STT. for Bulgaria [Rila and Vitosha Mts] without localities. Later, DRENOWSKI (1928a: 100; 1929a: 87) reported *Maiana captiuncula expolita* (STT.) from Vitosha Mts at an altitude of 1400–1600 m.

\*\*\* *Miana captiuncula* var. *spolitha* (STT.) was reported from Vitosha Mts at an altitude of 1400–1600 m (DRENOWSKI, 1928a: 54; DRENOWSKI, 1925: 54, 118).

**438. *Photedes minima minima* (HAWORTH, 1809)\***= *arcuosa* (HAWORTH, 1809)

\* *Photedes minima* (HAWORTH) is a rare species in Bulgaria, known from very few localities only: Vitosha Mts Planinetz Chalet (NESTOROVA-KVARTIRNIKOVA, 1972, as a new species for the Balkan Peninsula; NESTOROVA, 1974: 229; SLIVOV, 1990: 195). Another locality, Sliven town, given in BACHMETJEV (1902: 435), following the unpublished data of H. PIGULEV, is regarded as doubtful by REBEL (1903: 223) and by BURESCH & TULESCHKOW (1932: 71, 131). The present author has collected this species in large numbers in Dragalevtzi village near Sofia town (BESHKOV, 1992: 51) and a single specimen in Rhodopi Mts near Teshel village, Devin district.

Genus *Eremobia* STEPHENS, 1829

439a. *Eremobia ochroleuca ochroleuca* ([DENIS & SCHIFFERMÜLLER], 1775)

439b. *Eremobia ochroleuca asiatica* DRAUDT, 1936\*

\* FIBIGER & HACKER (1991: 61) reported *Eremobia asiatica* DRAUDT as "a full species also occurring in Greece and Bulgaria (FIBIGER, in litt.)", also FIBIGER (pers. comm., September, 1994). The origin of FIBIGER's data from Bulgaria is not clear to the present author. It is also included for Bulgaria in NOWACKI & FIBIGER (1996: 278). According to HACKER (1998a: 199) and FIBIGER (pers. comm. 12.VII.2000) *asiatica* DRAUDT is only a subspecies of *ochroleuca* ([DENIS & SCHIFFERMÜLLER], 1775) which inhabits Bulgaria, Greece and Turkey. Careful examination of Bulgarian *Eremobia* specimens is necessary to establish for certain which subspecies occur/s in this country.

Genus *Luperina* BOISDUVAL, 1829

= *Apamea* OCHSENHEIMER, 1816, auct.

= *Luperina* SPULER, 1908

= *Palluperina* HAMPSON, 1920

440. *Luperina testacea testacea* ([DENIS & SCHIFFERMÜLLER], 1775)\*

= *testacea* Hb. (incorrect author's name)

\* In Bulgaria *Luperina testacea* seems to be a very rare and local species, and only few records exist in the literature. BURESCH (1932: 23) reported "*Apamea testacea* Hb." from the Black Sea Coast, Varna, N. KARNOSCHITZKY leg. In the collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, the specimen collected by KARNOSCHITZKY from Varna town and determined and published by BURESCH (1932: 23) as *Luperina testacea* is *Luperina rubella sericea*. Two other specimens from Varna, 03.IX.1940, 15.IX.1939 in the collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, determined as *Luperina testacea* are also *Luperina rubella sericea*. In BOCHAROV (1959: 58) *Apamea testacea* Hb. is reported from Sredna Gora Mts, Bouzovgrad village, Kazanlak district from 08.VI.1948 and from Kourilo village, Sofia Region, 22.IV.1950. Taking into account the flight period of the species (end of July to October), these cannot be *Luperina testacea*, or the collecting date is wrongly given. In the same article of BOCHAROV "*Apamea testacea* Hb." (KARNOSCHITZKY det.) is also reported from Sofia (09.IX.1951, 09.IX.1955), from Vitosha Mts, Knyazhevo (27.IX.1953) and from Rila Mts, Rilski Manastir monastery (10.X.1955, G. STOYANOV leg.). In the collection of BOCHAROV in the National Museum of Natural History, Sofia, no specimens of *Luperina* species taken in April or June were found. All specimens in the collection of BOCHAROV from Tzegrilovtzi (Tran district), Balchik, Banya village in Sredna Gora Mts and from Sofia town determined as *Luperina testacea* are *Luperina rubella*. At present, *Luperina testacea* is known in Bulgaria with certainty only from Sofia town (August, 1927, 01. and 15.IX.1923) (in coll. National Museum of Natural History, Sofia), and from Iskarski Prohom Gorge, Svoge town, 28.-29.VIII.1965, leg., det. and in coll. AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia) (genitalia with everted vesica checked by the present author). Another specimen, also from W Bulgaria, but from Kostinbrod town, Sofia region, 27.VII.1969, P. POPOV leg. was found also correctly determined in the same collection. The highest locality in Bulgaria, *Luperina testacea* is surely known from, is W Stara Planina Mts, Petrohan Pass, Petrohan Chalet 1400 m, 20.VIII.1988, one male specimen, leg. and in coll. S. BESHKOV, genitalia with everted vesica checked.

*Luperina nickerlii nickerlii* (FREYER, 1845)\*

\* GOGOV & LOUKOV (1964: 152) reported *Luperina nickerlii* as a new species for Bulgaria from Sofia, Pavlovo suburb and from Borissovata Gradina Park (as "Parka na Svobodata"). Probably this report is incorrect, due to misidentification. The present author has never seen these specimens of *Luperina*

*nickerlii*. In the collection of BOCHAROV in the National Museum of Natural History, Sofia, there is one male specimen from Vitosha Mts, Boyana village, 06.IX.1951, S. BOCHAROV leg., determined as *Luperina nickerlii* by JULIUS GANEV (gen. prep. 17. J. GANEV, vesica subsequently everted by S. BESHKOV). This specimen and its genital armature was examined by the present author and it is *Luperina rubella*, probably *Luperina rubella sericea* (CARADJA, 1932). In external features it corresponds nearly well to this subspecies. *Luperina nickerlii* is also wrongly included for Bulgaria in the list of GANEV (1982a: 154) and in NOWACKI & FIBIGER (1996: 278), who probably used the mentioned above incorrect reports.

#### 441a. *Luperina rubella rubella* (DUPONCHEL, 1835)

= *rubella thurneri* SCHAWERDA, (1938)\*

\* SLIVOV (1988b: 131, 135) reported the synonym (*rubella thurneri* SCHAWERDA) as a new taxon for Bulgaria from Belassitza Mts, low and middle forest zone. See also under *Luperina rubella sericea* (CARADJA).

#### 441b. *Luperina rubella sericea* (CARADJA, 1932), stat. rev.\*

\* CARADJA (1932: 38) described and reported this taxon as "*Palluperina (Luperina) rubella* DUP. var. *sericea* ssp. n." (type locality: Black Sea Coast, Balçic, 06. November, 30. December 1930). It is illustrated in POPESCU-GORJ (1964, pl. XIII) from the same locality. Known also from Bale Herculane (Romania), 21.VIII.1911 (POPESCU-GORJ, 1964: 189). The present author has collected this taxon at the end of September (29.IX.1998) in Balçik (Balçic) (pl. 6, fig. 14, 15), Shabla lake—"Residence" and Dourankoulak Lake near Vakilno village, both also at the end of September, as well as near Cape Kaliakra in August (25.VIII.1997) (col. pl. I, fig. 16). In the collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, there is one specimen of *Luperina rubella sericea* from Varna town, 15.IX.1931, determined as *Luperina testacea*. The specimen reported by GOATER (1996: 283) as *Luperina rubella* (DUP.) from Belija Bryag near Balçik belongs to *Luperina rubella sericea* (CARADJA, 1932). All these localities are situated at the N Black Sea Coast. In the collection of BOCHAROV in the National Museum of Natural History, Sofia, there is one male specimen from Vitosha Mts, Boyana village, 06.IX.1951, S. BOCHAROV leg., wrongly determined as *Luperina nickerlii* by GANEV (gen. prep. 17, J. GANEV, vesica subsequently everted by S. BESHKOV). In external features and genitalia the specimen corresponds well to *Luperina rubella*, most likely to *Luperina rubella sericea* (CARADJA, 1932). In all other places in Bulgaria the nominate *Luperina rubella rubella* (pl. 6, figs 11–13) occurs. SLIVOV (1976 [1977]: 70) later gave the name *sericea* for all the specimens from the Black Sea Coast, Varna, Nessebar, Ahtopol. All the specimens collected by the present author from other localities at the Black Sea Coast belong to *Luperina rubella rubella* (DUPONCHEL, 1835). See also under *Luperina rubella rubella* (DUPONCHEL, 1835). According to some authors (RÁKOSY, 1996b: 152; HACKER, 1990: 227), *sericea* CARADJA, 1932 is a synonym of the nominate subspecies. The present author examined several specimens from the type locality and from the near surroundings (gen. preps S. BESHKOV 2–5/25.I.1999, and one additional male, genitalia with everted vesica) and found good, probably constant differences between the two taxa—*sericea* CARADJA and *rubella* DUPONCHEL. In the everted vesica and in the genital armature there are no differences, except for the shape of the uncus. In *sericea* CARADJA it is wide, rhomboidal, arrow shaped (gen. figs 81–84). In *rubella* DUPONCHEL it is much narrower, lanceolate (gen. figs 85–87). This always correlated with the external features, and the genital and internal differences, as well as the range of both taxa are good reasons for considering *sericea* CARADJA to be a valid subspecies of *rubella* DUPONCHEL.

#### 442. *Luperina dumerilii dumerilii* (DUPONCHEL, 1826)\*

\* *Luperina dumerilii* (DUPONCHEL) is a very variable polymorphic species, of which the normal morphotype and other different colour forms and size aberrations occur in Bulgaria. In the E Rhodopi Mts together with the normal morphotype, there is found a very strange, small dark form (pl. 6, fig. 16). Many male individuals of different forms from E Rhodopi Mts, Black Sea Coast and SW Bulgaria have

been examined by the present author (genitalia with everted vesica examined), and there have been found no differences in genitalia between them.

*Luperina zollikoferi zollikoferi* (FREYER, 1836)\*

\* *Luperina zollikoferi* (FREYER) is wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 279). It has never been found in Bulgaria, but it is known from the Romanian part of the Dobrogea (HACKER, 1989: 276), very close to the Bulgarian/Romanian border (Hagieni and Tecuci) (RÁKOSY, 1996b: 153, 523, map 423). It is a migrant species, which could find its way into Bulgaria.

*Luperina pozzii pozzii* CURO, 1883\*

= *standfussi* WISKOTT, 1894

\* *Luperina pozzii* has never been found in Bulgaria, but it may possibly occur there. From the adjacent countries known from Romania (Karpati Mts) (RÁKOSY, 1996b: 153) and from Slovenia (Rogashka Slatina) (BARTOL, CARNELUTTI & MICHELI, 1965: 72).

Genus *Rhizedra* WARREN, 1911

**443. *Rhizedra lutosa lutosa* (HÜBNER, [1803])\***

\* The first report for *Rhizedra lutosa* (HÜBNER) was by BURESCH (1932: 23) (as *Calamia lutosa* MÜLL.) from the Black Sea Coast, Varna town, KARNOSCHITZKY leg. A few other localities, also in some other parts of the country (SW Bulgaria, E Rhodopi and Sakar Mts) have been found since for this rare Bulgarian species. It comes to light and sugar bait.

Genus *Amphipoea* BILLBERG, 1820

**444. *Amphipoea oculea oculea* (LINNAEUS, 1761)\***

= *nictitans* (LINNAEUS, 1767)

= *auricula* (DONOVAN, 1807)

= *erythrostigma* (HAWORTH, 1809)

\* The first report of *Amphipoea oculea* (LINNAEUS) for Bulgaria was by REBEL (1903: 220) for Sliven town. There are very few more recent reports. It seems that all *Amphipoea* specimens collected in Bulgaria are *Amphipoea oculea* (LINNAEUS, 1761). The present author has examined (genitalia checked of four *Amphipoea* specimens) all material from Bulgaria available in his own collection and in the collection of the National Natural History Museum, Sofia, and they are all *Amphipoea oculea oculea* (LINNAEUS, 1761) (BESHKOV & GASHTAROV, in press). Known mostly from the mountains up to 1700 m, but there are some localities in an arid area at an altitude below 150 m.

*Amphipoea fucosa fucosa* (FREYER, 1830)\*

= *nictitans paludis* (TUTT, 1888)

\* *Amphipoea fucosa* (FREYER) is wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 279). *Amphipoea fucosa* has never been found in this country. All Bulgarian *Amphipoea* specimens the present author has checked belong to *Amphipoea oculea* (LINNAEUS). *Amphipoea fucosa* is known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 154, 524, map 429). From the neighbouring territories (doubtful identification), *A. fucosa* is recorded from Serbia, Timocka Krajina, Kraljevac (ZECEVIC & RADOVANOVIC, 1974: 109). *Amphipoea fucosa* is another species which may possibly occur in Bulgaria.



Genus *Hydraecia* GUENÉE, 1841

= *Hydroecia* AGASSIZ, [1847]

**445. *Hydraecia micacea micacea* (ESPER, [1789])\***

= *cypriaca* (HÜBNER, [1803])

= *cypriaca* HAW. (incorrect author's name)

\* *Hydraecia micacea* is included for Bulgaria in the list of GANEV (1982a: 154). However, according to GANEV (pers. comm.) this species has probably never been found in Bulgaria and his previous report for it is wrong, due to doubtful data. The present author has also never seen this species in Bulgaria before. According to him, previous reports may refer to misidentifications of *Hydraecia ultima* HOLST, 1965, a species also present in Bulgaria. There are only several authentic *Hydraecia micacea* (ESPER) specimens from Bulgaria, originating from: Rhodopi Mts, Martziganitza Chalet, 1500 m altitude, 30.V.1995, leg. and in coll. R. RADEV (genitalia not checked) (BESHKOV & RADEV, in press); Yambol town (or from "Bakadzika" near Tarnava village, Yambol region) (1 ♂, leg. and in coll. P. PETKOV, S. BESHKOV det. (pl. 6, figs 17, 18), gen. prep. 1./22.XII.1999, S. BESHKOV, genitalia with everted vesica—gen. fig. 90); Vitosha Mts, Aleko Chalet, [1800 m alt.], 09.–10.VIII.1983 (pl. 7, fig. 1), leg. and in coll. AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia) (male, genitalia checked by the present author); Pirin Mts, Gotze Delchev Chalet, 1600 m, 04.VIII.1981 (pl. 7, fig. 2), leg. and in coll. AL. SLIVOV (♂, genitalia checked by the present author); Kostinbrod Town, Sofia region, 16.IX.1969, P. POPOV leg., in coll. AL. SLIVOV (pl. 7, fig. 3) (♂, genitalia checked by the present author); Stara Planina Mts, Tvarditza, 1100 m alt., 04.–05.VIII.1971, at lamp, 1 ♀ (pl. 7, fig. 4), leg. and in coll. AL. SLIVOV (gen. prep. 2./27.XII.1999, S. BESHKOV, gen. fig. 92).

**446. *Hydraecia ultima ultima* HOLST, 1965\***

\* The only known localities of *Hydraecia ultima* HOLST in Bulgaria are: Danube Plain, "Kalimok" Research Station near Nova Tcherana village, Tutrakan district, 27.VI.1994, one male specimen (pl. 7, fig. 5), D. VASSILEV leg., in coll. BESHKOV (gen. prep. 8./07.V.1997, S. BESHKOV, male genitalia with everted vesica). Another specimen from the same locality is in the collection of I. STOYTCHEV (Sofia) (BESHKOV & GASHTAROV, in press); Rhodopi Mts, Tchepinska Reka River, 11.IX.1957, D. GOGOV leg. (pl. 7, fig. 6), in coll. AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia) (gen. prep. 1./27.XII.1999, S. BESHKOV, male genitalia with everted vesica—gen. fig. 91). The genitalia of the specimens from "Kalimok" and "Tchepinska Reka River" correspond well to that illustrated in NOWACKI (1998: pl. 28, fig. 396), RÁKOSY (1996b: 373, fig. 541), FORSTER & WOHLFAHRT (1980: 316, fig. 174) and MIKKOLA & JALAS (1979: 261) as *Hydraecia ultima*, as well as to those illustrated as *Hydraecia nordstroemi* (HORKE, 1952) in FIBIGER & SVENDSEN (1981: 212, fig. 244b). *Hydraecia ultima* is known in the Romanian part of the Dobrogea near to the Bulgarian/Romanian border (RÁKOSY, 1996b: 155, map 431).

**447. *Hydraecia petasitis* DOUBLEDAY, 1847 ssp. *vindelicia* (FREYER, 1849)\***

\* The first report of *Hydraecia petasitis* for Bulgaria was by SLIVOV & LUKOV (1976 [1977]: 239) from Vitosha Mts, above Boyana village. Very few other reports follow afterwards, from low arid regions in S Bulgaria (Sakar Mts, Driptchevo) (GANEV, 1987: 103), which is not typical for this species, and up to 1500 m in the Rhodopi Mts: Tchepelare (GANEV, 1987: 103) and above Shiroka Laka village (GANEV & BESHKOV, 1987: 117).

Genus *Gortyna* OCHSENHEIMER, 1816

= *Cortina* (incorrect subsequent spelling)

= *Xanthoecia* HAMPSON, 1908

= *Nyrtorga* BECK, 1996

**448. *Gortyna flavago flavago* ([DENIS & SCHIFFERMÜLLER], 1775)\***= *flavago* (incorrect subsequent spelling)= *ochracea* (HÜBNER, 1786)

\* The report of BOCAROV (1959: 60) for "*Cortina ochracea* Hb. var. *xanthenes* GERM." and of ABADJIEV (1999: 634; 2000: 602) for *Gortyna xanthenes* refer to *Gortyna flavago* ([DENIS & SCHIFFERMÜLLER], 1775). See also under *Gortyna xanthenes* (GERMAR, [1842]).

***Gortyna xanthenes xanthenes* (GERMAR, [1842])\***

\* *Gortyna xanthenes* (GERMAR) has never been found in Bulgaria. It is reported as "*Cortina ochracea* Hb. var. *xanthenes* GERM." by BOCAROV (1959: 60) from Kazanlak town. HACKER (1989: 281) considers this report doubtful. According to him "this typical mediterranean species does not occur with certainty in Bulgarian mountains". Although Kazanlak town with an altitude of less than 200 m is not in a mountain, the present author is in complete agreement with HACKER. Also, no specimen has been found in the collection of BOCAROV in the National Museum of Natural History, Sofia. *Gortyna xanthenes* is wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 279). It is also wrongly reported for Rila Mts, Rilski Manastir monastery by ABADJIEV (1999: 634; 2000: 602), who quoted BOCAROV (1959: 60). However, in the above mentioned article of BOCAROV *Gortyna xanthenes* is reported only from Kazanlak town; from Rilski Manastir the record is for "one typical specimen", therefore for *G. ochracea*, a synonym of *G. flavago*.

**449. *Gortyna moesiaca moesiaca* HERRICH-SCHÄFFER, 1849\***= *perlucida* (WARREN, 1914)

\* According to REBEL (1903: 221) and to BURESCH (1915: 78) the type material of *moesiaca* HERRICH-SCHÄFFER, illustrated in HERRICH-SCHÄFFER (II. p. 118) from "Balkan" is from Sliven town, collected on the first expedition of FRIVALDSZKI in 1833. REBEL (1903: 221), probably quoting the previous data, reported it for the districts of Sliven town (Kirchenwald) [= Tserkovnata Kuriya near Sliven town, E Bulgaria] in August. BURESCH (1914a: 46, 82, 86; 1914c: 122; 1915: 78) reported it from Sofia town [23.IX.1909, BURESCH leg, single male specimen in the National Museum of Natural History, Sofia]. The specimen reported by SLIVOV (1968: 168) from Iskarski Prolom Gorge, Lakatnik Railway Station as "*Hydroecia leucographa* Bkh." is *Gortyna moesiaca* HERRICH-SCHÄFFER, 1849 (SLIVOV, 1974: 184). In Iskarski Prolom Gorge known also from Romtcha (SLIVOV, 1984: 63). Recently some more localities of *Gortyna moesiaca* (pl. 7, fig. 7) have been found, most of them in E Bulgaria (several localities in E Rhodopi Mts (gen. figs 93–94) and Sakar Mts, S. BESHKOV leg.), "Bakadzika" near Tarnava village, Yambol region (leg. and in coll. P. PETKOV, S. BESHKOV det.), as well as at the Black Sea Coast, Pomorie (SLIVOV, 1984: 63). *G. moesiaca* is wrongly excluded for Bulgaria in NOWACKI & FIBIGER (1996: 279).

***Gortyna puengeleri* (TURATI, 1909)\***= *püngeleri* (incorrect subsequent spelling)

\* *Gortyna puengeleri* is an atlantico-mediterranean species which has never been found in Bulgaria. In the Balkan Peninsula reported from Istria and the Adriatic Sea Coast (HACKER, 1989: 280; MLADINOV, 1968: 102) as well as from Slovenia (BARTOL, CARNELUTTI & MICHELI, 1965: 73).

**450. *Gortyna borelii* (PIERRET, 1837) ssp. *lunata* FREYER, 1839\***= *leucographa* auct., nec BORKHAUSEN, 1792

\* TULESKOV (1965: 206) reported *Gortyna borelii* (PIERRET) (as "*Hydroecia leucographa* Bkh. var. *borelii* PIERRET.") as a new species for Bulgaria from Stara Zagora town. According to him, that specimen differs from the typical form in its rather smaller size. The present author could not find this specimen in the collection of TULESKOV in the National Museum of Natural History (Sofia) and he doubts about the correct identification of the specimen. *Gortyna borelii lunata* is very rare in Bulgaria, known from

Stara Zagora town (see above), Lakatnik Railway Station in Iskarski Prolom Gorge and Kresna Gorge, Stara Kresna Railway Station (SLIVOV, 1984: 63).

**451. *Gortyna cervago cervago* EVERSMAHN, 1844\***

\* *Gortyna cervago* EVERSMAHN is known in Bulgaria from two localities only: NW Bulgaria, Belogradchik town (GANEV, 1987b: 9) and SW Bulgaria, Parli village, 900 m altitude (between S. Pirin Mts and Slavyanka [= Alibotoush] Mts), 28.VII.1996, R. RADEV leg. (BESHKOV & RADEV, in press). *G. cervago* is wrongly not included for Bulgaria in NOWACKI & FIBIGER (1996: 279). Known in the Romanian part of the Dobrogea very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 156, 525, map 437).

Genus *Calamia* HÜBNER, [1821]

= *Luceria* HEINEMANN, 1859

**452. *Calamia tridens tridens* (HUFNAGEL, 1766)**

= *virens* (LINNAEUS, 1767)

= *virens* var. *immaculata* (STAUDINGER, 1871)

Genus *Celaena* STEPHENS, 1829

= *Helotrophia* LEDERER, 1857

**453. *Celaena leucostigma leucostigma* (HÜBNER, [1808])\***

\* BACHMETJEV (1902: 434), following the unpublished data of PIGULEV, reported *Helotrophia leucostigma* Hb. from Sliven and Vidin towns. According to REBEL (1903: 220) and to BURESCH & TULESCHKOW (1932: 71, 122) this report is not correct. DRJANOWSKY (1906: 115) and DRENOWSKY (1907: 16) reported it from Sofia town. From Sofia, [Lozenetz], it is also reported as collected by BACHMETJEV, but in April (BACHMETJEV, 1910a: 284). The present author agrees with the opinion of BURESCH & TULESCHKOW (1932: 71, 122) that the reports for Sofia are due to misidentification; both DRENOWSKY (1907: 16) and BACHMETJEV (1910a: 284) reported it from April (!), but the flight period of the univoltine *Celaena leucostigma* is July to September. DRENOWSKI (1930a: 16) reported it with a question mark as *Helotrophia leucostigma* Hb. from Stara Planina and Vitosha Mts. The report of SLIVOV (1990: 196) for Vitosha Mts follows the data of DRENOWSKI. Later, reported from the Black Sea Coast, Arkoutino (LEVY, 1968: 107) and from Polski Trambesh village, Veliko Tarnovo Region (GANEV, 1984a: 41). Probably only the last two reports are correct, the other reports seem incorrect, due to misidentification. *Celaena leucostigma* is known in the Romanian part of the Dobrogea, close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 157, 526, map 440).

Genus *Nonagria* OCHSENHEIMER, 1816

**454. *Nonagria typhae typhae* (THUNBERG, 1784)\***

= var. *fraterna* TREITSCHKE, 1835, nec BUTLER, 1878

\* The first report for *Nonagria typhae* (THUNBERG) from Bulgaria was by BURESCH (1939: 141) from the Black Sea Coast, Varna town, 23.VII.1933, N. KARNOSCHITZKY leg. Later, *Nonagria typhae* was reported again as a new species for Bulgaria by SOFFNER (1962: 156) from the Black Sea Coast, Nessebar, as *Phragmitiphila* (*Nonagria*) *typhae* THUNB. f. *fraterna* Tr. Many other records follow after that for this species, which is not rare in Bulgaria.

Genus *Archanara* WALKER, 1866

**455. *Archanara geminipuncta geminipuncta* (HAWORTH, 1809)\***

\* *Archanara geminipuncta* (HAWORTH) was reported as a new species for Bulgaria by GANEV (1983a: 87) from Svilengrad. Known also from Vitosha Mts, "Bounkera" (GANEV, 1984a: 41), Black Sea Coast, Kiten, NW from Tzarevo (Mitschurin) (KALLIES, 1990: 95) and Atanasovsko Ezero Lake near Bourgass town (BESHKOW, 1992: 52).

**456. *Archanara neurica neurica* (HÜBNER, [1808])**

**457. *Archanara dissoluta dissoluta* (TREITSCHKE, 1825)\***

\* *Archanara dissoluta* (TREITSCHKE) is a rare species in Bulgaria, known from SW Bulgaria, Volcanic Hill of Kozhouh near Petrich town (as a species new for Bulgaria) (GANEV, 1982b: 166, also GANEV, 1984b: 134); SE Bulgaria, Svilengrad town (GANEV, 1987a: 103); S Black Sea Coast, "Arkoutino" (FRANKE, 1989: 145), Atanasovsko Ezero Lake near Bourgass; "Bakadzika" near Tarnava village, Yambol region (leg. and in coll. P. PETKOV, S. BESHKOV det.) and N Black Sea Coast: Shablensko Ezero Lake (BESHKOW, 1992: 52) and Kranevo village (J. GELBRECHT, pers. comm.).

**458. *Archanara sparganii sparganii* (ESPER, [1790])\***

\* The first report of *Archanara sparganii* (ESPER) for Bulgaria was that of TULESCHKOW (1934: 222) from Kresna Gorge in SW Bulgaria. Many other records follow after that for this species, which is not rare near wetlands.

**459. *Archanara algae algae* (ESPER, [1789])\***

\* *Archanara algae* (ESPER) is known in Bulgaria from three localities only: N Black Sea Coast, Balchik (POPESCU-GORJ, 1964: 190; SLIVOV, 1976 [1977]: 70 and specimen from there, 15.VIII.1968, leg. and in coll. of AL. SLIVOV); S Black Sea Coast, Lake "Arkoutino", 20.VIII.1997, S. BESHKOV, M. & K. BESHKOV leg., single male specimen (BESHKOV & RADEV, in press) and Rhodopi Mts, "Tcepinska Reka River, 11.IX.1957, D. GOGOV leg., in coll. AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences.

Genus *Arenostola* HAMPSON, 1910

**460. *Arenostola phragmitidis phragmitidis* (HÜBNER, [1803])\***

= *semicana* (ESPER, [1798]), auct.\*\*

= f. *pallida* TUTT

\* The first report for *Arenostola phragmitidis* HÜBNER, [1803] for Bulgaria was by SLIVOV & LUKOV (1976 [1977]: 240) from W Rhodopi Mts, Velingrad town, as *Arenostola phragmitidis* Hbn. f. *pallida* Tutt (det. Z. VARGA). Mr AL. SLIVOV has kindly allowed the present author to examine this specimen, a female, from Velingrad, 26.VII.1964, Loukov leg. It has the data label "*Arenostola phragmitidis* f. *pallida* Tutt (oder eine neue Subsp. der Art? Genitalprüfung nötig! VZ" [ZOLTAN VARGA]. It is, however, only *Chorotodes fluxa fluxa* (HÜBNER, [1809]). The present author has also seen several specimens in the collection of HRISTO LOUKOV in the National Museum of Natural History, Sofia, from SW Bulgaria, Kresna Gorge, 20.VI.1980 and 24.-25.VI.1976, determined as *Arenostola phragmitidis* f. *pallida*, all of which are in fact *Dicycla oo*. The other published report, W Bulgaria, Zemen Gorge, Skakavitza Railway Station as *A. phragmitidis* (GANEV, 1982b: 166; 1983b: 93), is also a misidentification for *Dicycla oo* (LINNAEUS, 1758). Six other specimens in the collection of AL. SLIVOV, which he supposed to be *Arenostola phragmitidis*, are five *Dicycla oo* and one *Mythimna vitellina*! The only *Arenostola* specimens from

Bulgaria, the present author has seen are in the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia) with labels as follows: "Bulgaria, [N Black Sea Coast], Balchik, 15.VIII.1968, leg. SLIVOV, gen. No. 2009" (pl. 7, fig. 8), determined by him as *Arenostola phragmitidis* HBN. However, the genital slide of this male specimen has not been found for checking in the collection of AL. SLIVOV; the second specimen, ♀, is bearing the label "Varschez [Bulgaria, West Stara Planina Mts], 22.VI.1964, Prof. Kr. TULESCHKOV" (pl. 7, fig. 9). It is without abdomen and checking of genitalia also is impossible. Both these specimens in appearance look like *Arenostola phragmitidis* HÜBNER, [1803] from W Europe (pl. 7, fig. 10), but without genitalia sure identification is impossible. They could be also *Arenostola unicolor* WARREN, 1914 (pl. 7, fig. 11), the occurrence of which in Bulgaria is possible, but to solve this problem some more specimens are needed. For both these species see HACKER (1996b: 303).

\*\* For the name *semicana* ESPER, [1798] see here under *Aegle semicana*, as well as in POOLE (1989: 119) and in HACKER (1998b: 462). The name *semicana* (ESPER, [1798]) was incorrectly offered by POOLE (1989: 119) to replace the name *phragmitidis* HÜBNER, [1803] from the genus *Arenostola* due to misidentification; *semicana* ESPER, [1798] is the current name of *Aegle semicana*, previously known as *Aegle verpentalis* (HÜBNER).

### Genus *Chortodes* TUTT, 1897

= *Hypocoena* HAMPSON, 1908

#### *Chortodes extrema extrema* (HÜBNER, [1809])\*

\* GANEV (1982a: 154) in his list of Bulgarian Noctuidae included *Chortodes extrema* as a species inhabiting Bulgaria. However, *pygmina* (HAWORTH, 1809), a surely proven species for Bulgaria, similar in appearance to *C. extrema* was omitted there. *Chortodes extrema* is also included for Bulgaria by HACKER (1989: 272), who quoted the wrong report of GANEV, and by RÁKOSY (1996b: 160), who quoted HACKER. Later GANEV corrected his mistake and accepted *Chortodes extrema* as a species never found in Bulgaria (J. GANEV, pers. comm.). *Chortodes extrema* (HÜBNER) is also wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 280), but its occurrence in N Bulgaria seems possible. The nearest places to Bulgaria *Chortodes extrema* is known from are Banat, the Danube Delta (RÁKOSY, 1996b: 528, map 450) and Deliblatski Pesak, Belgrade districts (VASIC, 1975: 115).

#### 461. *Chortodes fluxa fluxa* (HÜBNER, [1809])\*

= *fluxus* (incorrect subsequent spelling)

= *hellmanni* EVERSMAHN, 1843

= *kullmanni* EV. (incorrect subsequent spelling)

\* SLIVOV (1973: 44) reported *Chortodes fluxa* as new for Bulgaria from Pirin Mts, Gotze Delchev Chalet, 1600 m altitude. However, it had been already reported for Bulgaria by SOFFNER (1961: 240) from the Black Sea Coast, Nessebar town. Some other reports follow after that. Known also from W Rhodopi Mts, "Kastrakly" near Borino village (SLIVOV & NESTOROVA, 1985: 133), Teshel village (SLIVOV, 1984: 62), Tchairski Ezera Lakes and Teshel Chalet (BESHKOV, 1995a: 212); SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station (SLIVOV, 1984: 62); Danube Plain, "Kalimok" Research Station near Nova Tcher-na village, Tutrakan district (BESHKOV & VASSILEV, 1995: 198); Black Sea Coast, Priseltzi village near Obzor; Volcanic hill of Kozhouh near Petrich town and from Rhodopi Mts, Beglika Resort (BESHKOV, 1992: 51); SW Bulgaria, S. Pirin Mts, Liljanovo village above Sandanski town (EICHLER, HACKER & SPEIDEL, 1996: 267) and Papaz Tchair Chalet (leg. and in coll. AL. SLIVOV); Alibotoush [= Slavyanka] Mts, between "Livada" and Goleshovo village, 1500 m, 15.VII.1998, S. BESHKOV, V. GASHTAROV & S. ABADJIEV leg., in coll. BESHKOV; Belassitza Mts, Belassitza Chalet (leg. and in coll. AL. SLIVOV); Rhodopi Mts, Dedovo village, Plovdiv Region, 16.VIII.1982, S. BOCHAROV leg., one female specimen in coll. National Museum of Natural History, Sofia (gen. prep. 1./16/I.1999, S. BESHKOV). The specimen in the collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, from the Black Sea Coast, Varna,

30.VIII.1935 is wrongly determined (det. REBEL, 1936), as "*Tapinostola kullmanni* Ev." [= *hellmanni* EVERSMANN, 1843, a synonym of *P. fluxa* (HÜBNER, [1809])], gen. prep. 4./05.I.1999, S. BESHKOV, male genitalia with everted vesica. It is in fact *Sedina pygmina* (HAWORTH). The specimen reported by SLIVOV & LUKOV (1976 [1977]: 240) from W Rhodopi Mts, Velingrad town as *Arenostola phragmitidis* HBN. f. *pallida* TUTT (det. Z. VARGA) is just a female *Chortodes fluxa fluxa* (HÜBNER, [1809]).

**462. *Chortodes morrisii morrisii* (DALE, 1837)\***

- = *morrisii* (MORRIS, 1837) sensu auct.
- = *morrisi* (incorrect subsequent spelling)
- = *bondii* (KNAGGS, 1861)

\* *Chortodes morrisii* (DALE) was reported as a new species for Bulgaria by SOFFNER (1962: 156) from the Black Sea Coast, Nessebar. There are very few subsequent records for this very rare Bulgarian species. Known from Rhodopi Mts, Beglika resort at an altitude of 1400 m (BESHKOV, 1992: 51).

Genus *Sedina* URBACH, 1933

= *Denticucullus* RÁKOSY, 1996

**Subgenus *Sedina* URBACH, 1933**

**463. *Sedina buettneri buettneri* (E. HERING, 1858)\***

\* *Sedina buettneri* (E. HERING) was reported as a new genus and a new species for Bulgaria by GANEV (1983a: 87) from "Kozhouh" near Petrich town in SW Bulgaria. Known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 159, 527, map 447). Very possibly to be found in the Bulgarian part of the Dobrogea or at the N Black Sea Coast.

Subgenus *Denticucullus* RÁKOSY, 1996 comb. nov.

**464. *Sedina pygmina pygmina* (HAWORTH, 1809)\***

\* SLIVOV (1984: 62) reported *pygmina* (HAWORTH) as a new species for Bulgaria from Etropole Monastery, Botevgrad district. It is very rare in Bulgaria, and the only specimens the present author has seen are from S Bulgaria, Black Sea Coast, "Arkoutino" lake, Primorsko districts, 20.VIII.1997, S. BESHKOV, M. & K. BESHKOVI leg. (pl. 7, fig. 12) (BESHKOV & RADEV, in press) and from Varna town, 30.VIII.1935, N. KARNOSCHITZKY leg., in coll. National Museum of Natural History, Sofia, wrongly determined (det. REBEL, 1936), as "*Tapinostola kullmanni* Ev." [= *hellmanni* EVERSMANN, 1843, a synonym of *P. fluxa* (HÜBNER, [1809])], gen. prep. 4./05.I.1999, S. BESHKOV, male genitalia with everted vesica. Known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 161, 528, map 453). It could very possibly occur in the Bulgarian part of the Dobrogea.

Genus *Oria* HÜBNER, [1821]

= *Tapinostola* LEDERER, 1857

**465. *Oria musculosa musculosa* (HÜBNER, [1808])\***

- = *frumentalis* (LINDEMAN, 1883)
- = f. *olivina* ALPHÉRAKY
- = var. *laeta* ALPHÉRAKY, 1889

\* The first reports for *Oria musculosa musculosa* (HÜBNER, [1808]) from Bulgaria were by MARKOWITSCH (1909a: 20, 1909b: 26) from the districts of Razgrad town [Golemiat Yug], 11.VI.1905, in coll. of

the National Museum of Natural History, Sofia. Some other records follow, most of them for N Bulgaria. Reported as a harmful species on cereal plants in the districts of Sofia (DRENOWSKI, 1921b: 13).

Genus *Argyrospila* HERRICH-SCHÄFFER, [1851]

*Argyrospila succinea succinea* (ESPER, [1798])\*

\* According to BURESCH & TULESCHKOW (1932: 71, 122), *Argyrospila succinea* (ESPER, [1798]) is wrongly reported for Bulgaria by both BACHMETJEV and DRENOWSKI. The present author agrees.

Tribus Hadenini GUENÉE, 1852

Genus *Coranarta* HACKER, 1998

= *Anarta* OCHSENHEIMER, 1816, auct.

#### 466. *Coranarta cordigera cordigera* (THUNBERG, 1788) sensu auctorum\*

\* CARADJA (1896: 47), following a communication of HABERHAUER, reported *Anarta cordigera* THNBG. "auch in Bulgarien" DRENOWSKI (1928a: 94, 105), following CARADJA (1896: 47), reported *Anarta cordigera* for Rila Mts. According to REBEL (1903: 231) and to BURESCH & TULESCHKOW (1932: 71, 1935: 122), the record is doubtful and probably refers to *Anarta melanopa*. SLIVOV (1984: 57), reported a single male specimen at sugar, Stara Kresna Railway Station in SW Bulgaria [200 m altitude], 02.–05.VII. 1976. This specimen (a female labelled: sp. Kresna, 02.05.1976, leg. SLIVOV) has been examined by the present author who confirms that it really is *Conanarta cordigera* (THUNBERG, 1788). In Macedonia known also from arid areas at low altitudes, Stari Dojran village and Bitola town (THURNER, 1964: 76). Reported as well from the Black Sea Coast by SLIVOV (1984: 57), quoting his article for the Black Sea Coast (SLIVOV, 1976 [1977]). However, in this article, *Coranarta cordigera* (THUNBERG) is not included. It is not included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 281). However, the locality in Kresna, 200 m altitude, for this boreomontane species seems a little bit doubtful. It is possible that this locality is a result of mislabeling. The present author has two ♀♀ collected flying at day time over *Vaccinium* in SW Bulgaria, Belassitza Mts, 1800 m, between Kongour and Radomir tops, 05.VI.2000, V. GASHTAROV leg. On 10.VI.2000 he has visited that locality, but no *Coranarta* specimens were collected because of the very bad weather—rain and hail. It is very possible that *Conanarta cordigera* sensu auct. is a complex of at least two species; the Spanish population, according to YELA (1997: 120) differs in genitalia from the nominate *Coranarta cordigera cordigera* from the rest of Europe and perhaps represents another species. It shows also some differences in its ecological preferences (YELA & ORTIZ, 1990). So far, as the present author knows, the Iberian population is still not described as a different taxon. Probably our population belongs to this not described taxon, or to another one, also undescribed yet. However, some more material is necessary to solve this problem. This will be an aim for further research.

Genus *Hadula* STAUDINGER, 1889\*

= *Discestra* HAMPSON, 1905

= *Calocestra* BECK, 1991

= *Melanarta* BECK, 1991

\* The systematic of the genus *Hadula* STAUDINGER follows HACKER (1998c).

Subgenus *Calocestra* BECK, 1991

#### 467. *Hadula pugnax pugnax* (HÜBNER, [1824])\*

= *pugnax italica* (BERIO, 1942)

\* The present author has found an undetermined single male specimen of *Hadula pugnax* in the collection of AL. SLIVOV in the institute of Zoology, Bulgarian Academy of Sciences (gen. prep. with everted vesica 1./14.XII.1999, S. BESHKOV) (gen. figs 95, 96, 98, 99). This specimen (pl. 7, figs 13, 14) originated from the S Black Sea Coast and bears the label "15–20.VII.76, Sl. Bryag, V. Loukov" [Slantchev Bryag Resort, Bourgass Region]. In genitalia and external fetures it shows some differences from specimens from Italy (pl. 7, figs 15, 16; gen. figs 97, 100–101) and France, Provence (pl. 7, figs 17, 18), examined by the present author. *Hadula pugnax* (HÜBNER) was also reported from Yugoslavia, at the river Morava, in the outskirts of Nish town, April 26, 1981 (PETTERSSON, 1990: 76) (as *Mythimna pugnax* HBN.). This locality is situated not far away from the Bulgarian/Yugoslavian border. However, the report is likely to be incorrect as a result of misidentification. *Hadula pugnax pugnax* was known as an Atlantico-mediterranean species, which has never been found before in the Balkan Peninsula. Its subspecies *Hadula pugnax intermedia* (PINKER, 1980) is known from Turkey, Iran and Aserbeidschan (HACKER, 1998c: 649). Now, after this finding of LOUKOV, the report of PETTERSSON seems more believeable.

#### 468. *Hadula odontites odontites* (BOISDUVAL, 1829)\*

= *marmorosa* (BORKHAUSEN, 1792), nec ESPER, 1788

= *microdon* auct. nec GUÉNÉE, 1852

\* The first reports of *Hadula odontites* (as *Mamestra marmorosa* ВКН. v. *microdon* GN.) for Bulgaria were by ILTCHEV (1913: 90, 102; 1914: 124) for Sredna Gora Mts, Stambolovo [Bodrovo] village. Known also from the Black Sea Coast, Balchik (ZUKOWSKY, 1937: 574), Varna town (SLIVOV, 1979: 38); SW Bulgaria, Sandanski town (LEHMANN, 1990: 128) and from Kresna Gorge, Stara Kresna Railway Station, 09.–10.V.1977, one male specimen (confirmed by the present author), leg. and in coll. AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences, Sofia. One additional locality is published in the "Hadula Revision" by HACKER (1998c: 565): Pirin Mts, Vihren-Banderitza, 1900 m, 21.VII.1992, 1 ♂, leg. UHERKOVICH, in coll. HERCZIG.

#### 469. *Hadula mendax* (STAUDINGER, 1879) ssp. *occidentalis* HACKER, 1998\*

\* *Hadula mendax* (STAUDINGER) was reported as a new species for Bulgaria from Kresna Gorge, Stara Kresna Railway Station (SLIVOV, 1979: 38). However, it has already been reported for Bulgaria from almost the same locality (GYULAI & VARGA, 1974: 207). Known also from some other localities in SW Bulgaria and from several places in E Rhodopi Mts. HACKER (1998c: 705) described the Balkan population as a distinct subspecies, differing from the nominate one externally. The type locality of ssp. *occidentalis* HACKER, 1998 is Bulgaria, Pirin Mts, Lilyanovo village, 1000 m. It flies at altitude of less than 100 m up to 1800 m. In S Pirin Mts below "Orelyak" top, 1800 m (05.VI.2000, S. BESHKOV & K. SOICHIRO leg.), it is sympatric and synchronic with mountain species such as *Lygephila viciae*, *Mniotype adusta*, *Apamea illyria*, *Hada plebeja*, *Papestra biren*, *Mythimna andereggi pseudocomma* and *Agrotis cinerea*.

#### 470. *Hadula dianthi dianthi* (TAUSCHER, 1809)\*

\* *Hadula dianthi* (TAUSCHER) was reported as a new species for Bulgaria from the Black Sea Coast, Nessebar (SOFFNER, 1962: 156). It could be also ssp. *hungarica* (F. WAGNER, 1930), known from SE Austria, S Slovakia, Hungary and Romania (HACKER, 1998c: 722). *Hadula dianthi hungarica* (F. WAGNER, 1930) is reported also from Bulgaria by RÁKOSY (1996b: 162) and by HACKER (1998c: 722), but the present author hardly believes that they have seen any Bulgarian specimen. The present author also has never seen any Bulgarian specimen of *Hadula dianthi* and the subspecific status of our *Hadula dianthi* here is accepted as the nominotypical one only "on suggestion"

#### 471. *Hadula trifolii trifolii* (HUFNAGEL, 1766)

= *chenopodii* ([DENIS & SCHIFFERMÜLLER], 1775)

= *saucia* (ESPER, [1790]), nec (HÜBNER, [1808])

= *farkasii* (TREITSCHKE, 1835)

= *farkasi* (incorrect subsequent spelling)



= f. *indistincta* TUTT, 1892

= f. *brunnescens* HEYDEMANN, 1933

= *trifolii* aberr. nova (unnamed and undescribed, "nomen nudum") (ZUKOWSKY, 1937: 574)

**472. *Hadula stigmōsa* (CHRISTOPH, 1887) ssp. *atlantica* (BOURSIN, 1936)\***

= *stigmasa* (incorrect subsequent spelling)

\* The strongly halophile coastal subspecies *Hadula stigmōsa atlantica* (BOURSIN) is known from several localities at the Black Sea Coast and has a flight period from April to September. Surprisingly, it was found at a distance of more than 250 km from the sea coast in N Bulgaria, Iskarski Prolom Gorge, Tcherepish, 20.VII.1964, 1 ♂, leg. and in coll. AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences, det. S. BESHKOV (genitalia checked). Other localities deep in the land are Danube Plain, Nova Tchernavilla village, Kalimok Experimental Station, Tutrakan district (more than 150 km from the sea coast), 25.–26.V.1994, 1 ♂ and 30.V.1994, another ♂, D. VASSILEV leg. at 125 W Hg lamp (BESHKOV & VASSILEV, 1995: 198). In order to be certain of the correct identification, genitalia of both these specimens were checked (gen. preps with everted vesicae 1./03.X.1997, and 1./13.XI.1997, BESHKOV), which confirmed the determination. Other unpublished localities into the countryside are Dobrich (= Tolbouhin) town, 06.VIII.1976, 1 ♀ (genitalia not checked) and "Karandila" above Sliven town, 1000 m alt., 16.VIII.1969, 1 ♂ without abdomen, both leg. and in coll. AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences. A single male specimen (gen. prep. 1./02.III.1999, S. BESHKOV, genitalia with everted vesica) (gen. figs 102–104) from the collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, from the Black Sea Coast, Varna, shows an unusual genital armature with poorly developed valvae and aedeagus, which are merely pathological anomalies.

**473. *Hadula melanopa* (THUNBERG, 1791) ssp. *rupestralis* (HÜBNER, [1796–1799])\***

\* The first report of *Hadula melanopa rupestralis* (as *Anarta*) for Bulgaria was by REBEL (1903: 231) for Rila Mts, Eleni Vrah Top, 2650 m altitude. At present, known in Bulgaria only from Rila and Pirin Mts at an altitude of 2000–2900 m.

Genus ***Anarta*** OCHSENHEIMER, 1816

= *Charelia* SODOFFSKY, 1837

= *Coranarta* BECK, 1991

*Anarta myrtilli myrtilli* (LINNAEUS, 1761)\*

\* *Anarta myrtilli* (LINNAEUS) is wrongly included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 281). It has never been collected or reported from Bulgaria.

Genus ***Cardepiā*** HAMPSON, 1905

*Cardepiā irrisoria* (ERSHOV, 1784)\*

\* *Cardepiā irrisoria* (ERSHOV, 1784) has never been reported from Bulgaria. From the adjacent territories it is reported—as *Cardepiā sociabilis irrisoria* (ERSHOV, 1784)—from Romania, Danube delta (RÁKOSY, 1996b: 163) and from Greece, including W Thracia (Lagos Laguna, Komotini surroundings), not far away from the Bulgarian/Greece border (HACKER, 1989: 91). The expansive turanoeremic *Cardepiā irrisoria* (ERSHOV, 1784) has never been found on the Balkan Peninsula. The nearest localities are in Ukraine and Russia. The taxon reported by RÁKOSY (1996b: 163; gen. fig. 578) as *Cardepiā irrisoria* (ERSHOV, 1784) is *C. hartigi* PARENZAN (HACKER, 1998c: 808, 817). *Cardepiā sociabilis sociabilis* (DE GRASLIN, 1850) is a distinct species, which also has never been found in Bulgaria and Romania. However, it is known from Greece (HACKER, 1998c: 788).

*Cardepi* *hartigi hartigi* (PARENZAN, 1981)\*

\* Although *Cardepi hartigi* (PARENZAN) is another species, which has never been found in Bulgaria, it can be expected here. In HACKER (1998c: 818) it is marked for all the Bulgarian Black Sea Coast. Close to Bulgaria it is known from Greece, Kavala, Strymondelta (HACKER, 1998c: 816) and from Romania, Danube Delta; the taxon reported by RÁKOSY (1996b: 163; gen. fig. 578) as *Cardepi irrisoria* (ERSHOV, 1784) is *Cardepi hartigi* PARENZAN (HACKER, 1998c: 808, 817).

Genus *Lacanobia* BILLBERG, 1820\*

= *Lacanobia* (incorrect subsequent spelling)

= *Mamestra* OCHSENHEIMER, 1816 auct.

= *Diataraxia* HÜBNER, [1821]

\* The systematics of the genus *Lacanobia* BILLBERG follow BEHOUNEK (1992, Esperiana 3: 33–65).

Subgenus *Lacanobia* BILLBERG, 1820474. *Lacanobia w-latinum w-latinum* (HUFNAGEL, 1766)

= *W. latinum* ESP. (incorrect spelling and author's name)

= *genistae* (BORKHAUSEN, 1792)

Subgenus *Diataraxia* HÜBNER, [1821]*Lacanobia aliena aliena* (HÜBNER, [1808])\*

\* *Lacanobia aliena* (HÜBNER) is wrongly included for Bulgaria in RÁKOSY (1996b: 164) and in NOWACKI & FIBIGER (1996: 281). It has never been collected in Bulgaria. From the adjacent countries known from Serbia, the districts of Belgrade (ZECEVIC, 1996: 62), from the Republic of Macedonia (Kitchevo–Petersson, 1990: 76) and from Romania.

475. *Lacanobia splendens splendens* (HÜBNER, [1808])\*

\* *Lacanobia splendens* is a very rare species in Bulgaria, known from three localities only: W Rhodopi Mts, "Kastrakly" Natural Reserve, 1100 m altitude, at sugar (SLIVOV, 1984: 58, as a new species for Bulgaria; *ibid.*, SLIVOV & NESTOROVA, 1985: 133); Radnevo town, Stara Zagora Region at a lamp (BESHKOV, 1995a: 213); Srebarna near Silistra in NE Bulgaria, 06.VI.1978, single specimen in the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences. Known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 164, 530, map 465). Very possibly to be found in other parts of the Bulgarian Dobrogea or at the N Black Sea Coast.

476. *Lacanobia oleracea oleracea* (LINNAEUS, 1758)

= *oleraceae* (incorrect subsequent spelling)

= *variegata* AUSTAUT, 1885

= *f. rufa* TUTT, 1892

477. *Lacanobia blenna blenna* (HÜBNER, [1823–1824])\*

= *peregrina* TREITSCHKE, 1825

\* Until recently, *Lacanobia blenna blenna* (HÜBNER, [1823–1824]) was known in Bulgaria only from the Black Sea Coast. Recently, this halophilous species has been found in many localities at the Black Sea

Coast, as well as in several places in South, West, Northwest and Central Bulgaria, some of them several hundred kilometres from the sea coast.

#### 478. *Lacanobia praedita praedita* (HÜBNER, [1809–1813])\*

\* *Lacanobia praedita* (HÜBNER) is known in Bulgaria only from the Black Sea Coast, Balchik (CARADJA, 1932: 38; 1934: 187; POPESCU-GORJ, 1964: 164; SLIVOV, 1976 [1977]: 63; BESHKOV, 1993: 376; BESHKOW, 1998: 241; BESHKOV, NOWACKI & PALKA, 1999: 181). The present author has also collected several specimens from the district of Balchik (col. pl. I, fig. 13) and from Turkey, Pontic Mts, Prov. Artvin (col. pl. I, fig. 14). Our specimens from Balchik form an isolated colony at the extreme edge of the range of the species, and look somewhat different in appearance from the other ones. The flight period in Bulgaria is from the beginning of June (03.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg.) to late July (29.VII.1933, POPESCU-GORJ, 1964: 164).

Subgenus *Dianobia* BEHOUNEK, 1992

#### 479. *Lacanobia thalassina thalassina* (HUFNAGEL, 1766)\*

= *thalassina* ROTT. (incorrect author's name)

\* "*Mamestra thalassina* ROTT." is reported as a new species for Bulgaria by TSCHORBADJIEV (1915: 29) from the S Black Sea Coast, Bourgas town, collected in the second half of October (23.[22].X.1910). This specimen has been found by the present author in the collection of AL. SLIVOV (Institute of Zoology, Sofia), and it turned out that in fact it belongs to *Polymixis trisignata* (see also under this species). *L. thalassina* is not a rare species in Bulgaria, at present known from many localities, mostly in the mountains up to 2000 m. It flies only during May to July in one generation.

#### 480. *Lacanobia suasa suasa* ([DENIS & SCHIFFERMÜLLER], 1775)

= *suase* (incorrect subsequent spelling)

= *suasa* BORKH. (incorrect author's name)

= *dissimilis* (KNOCH, 1781)

= *confluens* (EVERSMANN, 1844)

#### 481. *Lacanobia contigua contigua* ([DENIS & SCHIFFERMÜLLER], 1775)\*

= *contigua* (incorrect subsequent spelling)

\* The first report of *Lacanobia contigua* ([DENIS & SCHIFFERMÜLLER]) for Bulgaria was by REISSER & ZÜLLICH (1934: 14) from Pirin Mts, Banderitza Chalet and Spano Pole. SOFFNER (1962: 156) also reported it as new for Bulgaria from Rila Mts, Borovetz Resort. For a third time, it was reported as a new species for Bulgaria by VARGA & SLIVOV (1976 [1977]: 178) from Vitosha Mts, Koumata Chalet, 1700 m altitude and from Rila Mts, Treshtenik Chalet, 1700 m altitude. Subsequently recorded by GANEV (1980: 78) from Vitosha Mts, "Bounkera", 730 m altitude, 1 ♀, SLIVOV det. SLIVOV (1990: 192), following the previous reports mentioned here, placed it in his list for Vitosha, but instead of giving the locality "Bounkera" from the above mentioned article of GANEV, he quoted another locality in an article (ВИХОДЦЕВСКИ & ГОГОВ, 1963), in which *Lacanobia contigua* is not mentioned. In SLIVOV (1990: 192), before the locality "Bounkera" there is a question mark, although this specimen was determined by him. The present author checked the specimen from "Bounkera" in the collection of GANEV in the National Museum of Natural History, Sofia, and it is correctly named. In fact, the first report of *Lacanobia contigua* for Bulgaria was by BACHMETJEV (1902: 432), following the unpublished manuscript of H. FIGULEV for Sliven and Plovdiv towns, but was forgotten. New, unpublished localities of *Lacanobia contigua* in Bulgaria are Rhodopi Mts, Martziganitza Chalet above Batchkovo, N. KODZHABASHEV leg., in coll. BESHKOV; Rhodopi Mts, above Trigrad village, 1200–1300 m, S. BESHKOV & S. ABADJIEV leg.; Rho-

dopi Mts, Rozhen Pass, J. GANEV leg., in the collection of GANEV in the National Museum of Natural History, Sofia; Rila Mts, above Kostenetz town, 1200 m, 18.VII.1933, TOULESCHKOW leg., in coll. Institute of Zoology, Bulgarian Academy of Sciences, Sofia; Pirin Mts, Peyo Yavorov Chalet, 1800 m, 07.VII.1995, S. ABADJIEV leg., in coll. BESHKOV; S Pirin Mts, below "Orelyak" top, 1800 m, 05.VI.2000, S. BESHKOV & K. SOICHIRO leg.; Soushevo village, Razgrad Region, NE Bulgaria, 06.–18.VIII.1991, I. STOYTCHEV leg., in colls BESHKOV and STOYTCHEV; Peyova Bouka Chalet, 1000 m altitude, Plana Mts, Sofia Region, VII.1992, I. STOYTCHEV leg. (BESHKOV & GASHTAROV, in press); Paril village (situated in Paril Col between S Pirin and Slavyanka [= Alibotoush] Mts), 900 m, 28.VII.1995, R. RADEV leg. (BESHKOV & RADEV, in press); Dedovo village, Plovdiv Region, 15.VII.1971 and 03.VII.1985, S. BOCHAROV leg., in coll. of the National Museum of Natural History, Sofia; Alibotoush [= Slavyanka] Mts, between "Livada" and Goleshovo village, 1500m., 15.VII.1998, S. BESHKOV, V. GASHTAROV & S. ABADJIEV leg., in coll. BESHKOV; Stara Planina Mts, Bozhentzite village, Gabrovo Region, 550 m, 15.VIII.1998, S. BESHKOV, M. & K. BESHKOVI leg., one male and one female specimen; Ograzhden Mts, Markovi Kladentzi Chalet, 1500 m, 15.VII.1984, J. GANEV leg., in the collection of GANEV in the National Museum of Natural History, Sofia. In Bulgaria *Lacanobia contigua* seems to be a mountain species, the only lowland locality being Soushevo (see above). Known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border, near sea level (RÁKOSY, 1996b: 531, map 471). The species might possibly occur in the Bulgarian part of the Dobrogea or at the N Black Sea Coast.

#### Genus *Hada* BILLBERG, 1820

##### 482. *Hada plebeja plebeja* (LINNAEUS, 1761)\*

- = *nana* (HUFNAGEL, 1766)
- = *dentina* ([DENIS & SCHIFFERMÜLLER], 1775)
- = *dentina* (ESPER) (incorrect author's name)
- = *corticea* (ESPER, [1789], nec [DENIS & SCHIFFERMÜLLER], 1775
- = f. *ochrea* TUTT, 1892
- = f. *obsoleta* TUTT, 1892
- = *dentina reducta* (REBEL & ZERNY, 1931)\*\*
- = *latenai* PIERRET, 1837

\* *plebeja* LINNAEUS, 1761 is a senior subjective synonym of *nana* HUFNAGEL, 1766 (see MIKKOLA & HONEY, 1993: 150).

\*\* The type material of *dentina reducta* REBEL & ZERNY, 1931 is from Albania, "Yugoslavia" and Bulgaria, "Musallah" [Mussala in Rila Mts] (REBEL & ZERNY, 1931: 92). Reported also from Alibotoush Mts in SW Bulgaria, collected there in 1934 (DRENOWSKI, 1939: 158).

#### Genus *Hecatera* GUENÉE, 1852

- = *Aethria* HÜBNER, [1821]
- = *Aetheria* (incorrect subsequent spelling) sensu KARSHOLT, 1996

##### 483. *Hecatera dysodea dysodea* ([DENIS & SCHIFFERMÜLLER], 1775)

- = *spinaceae* (VIEWEG, 1790)
- = *spinaciae* (incorrect subsequent spelling)
- = *chrysozona* (BORKHAUSEN, 1792)
- = *chrisozona* (incorrect subsequent spelling)
- = *caduca* (HERRICH-SCHÄFFER, 1850)
- = var. *innocens* STAUDINGER, 1871
- = *faroulti* ROTHSCILD, 1914

**484. *Hecatera bicolorata bicolorata* (HUFNAGEL, 1766)**

- = *serena* ([DENIS & SCHIFFERMÜLLER], 1775)
- = *serena* F. (incorrect author's name)
- = *serena* var. *obscura* STAUDINGER, 1861
- = *leuconota* (EVERSMANN, 1837)
- = *leuconota* (incorrect subsequent spelling)

**485. *Hecatera cappa cappa* (HÜBNER, [1809])**

Genus *Hadena* SCHRANK, 1802\*

= *Dianthoecia* BOISDUVAL, 1834

\* The systematics of the genus *Hadena* and related genera follows HACKER (1996c).

Subgenus *Hadena* SCHRANK, 1802

**486. *Hadena bicruris bicruris* (HUFNAGEL, 1766)\***

= *capsincola* ([DENIS & SCHIFFERMÜLLER], 1775) auct.

\* *Hadena bicruris* (HUFNAGEL, 1766) differs from its closely related sister species *Hadena capsincola* ([DENIS & SCHIFFERMÜLLER], 1775) mostly in the female genitalia (length of the apophyses) (see under that species), as well as in small differences in the structure of the everted vesica in the male genitalia. The pattern of occurrence of both species in Bulgaria is not clear yet, and more research is necessary. In the past, all specimens from this complex have been considered as *H. bicruris*. The only authentic specimens from Bulgaria are from the N Black Sea Coast: Druzha Resort near Varna town, 25.VI.1985, gen. prep. 1./17.V.1994, ♀, BESHKOV leg. and in coll. BESHKOV; from Varna town, 28.V.1941 (gen. prep. 2./05.III.1999, ♀), 02.VI.1936 (gen. prep. 3./05.III.1999 and 01.VI.1938 (gen. prep. 2./09.III.1999, male genitalia with everted vesica, S. BESHKOV, gen. fig. 107), leg., in coll. of KARNOSCHITZKY in the National Museum of Natural History, Sofia; between Dourankoulak Lake and Krapetz village, 12.VIII.1998, 1 ♀, leg. and in coll. BESHKOV (gen. prep. 2./03.II.1999, S. BESHKOV, gen. fig. 105) and from SW Bulgaria: Kresna Gorge, 28.V.1980, H. Loukov leg., in coll. National Museum of Natural History, Sofia, gen. prep. 1./03.II.1999, S. BESHKOV, male genitalia with everted vesica; from the Volcanic Hill of Kozhouh near Petrich town, 10.VI.1983, leg. and in coll. J. GANEV, in the National Museum of Natural History, Sofia, gen. prep. 2./28.I.1999, S. BESHKOV, ♀; from Ograzhden Mts, Sestrino village, 650 m, 15.V.1985, J. GANEV leg., in coll. J. GANEV in coll. National Museum of Natural History, Sofia, gen. prep. 1./28.I.1999, S. BESHKOV, ♀; and from Central Bulgaria, Kazanlak town, 15.VI.1959, M. JOSIFOV leg., in coll. National Museum of Natural History, Sofia, gen. prep. 2./22.VI.1998, ♀, S. BESHKOV. See also HACKER (1996c, Abb. 2–4, 8).

**487. *Hadena capsincola capsincola* ([DENIS & SCHIFFERMÜLLER], 1775)\***

\* So far, the only confirmed Bulgarian specimens of *Hadena capsincola* ([DENIS & SCHIFFERMÜLLER], 1775) are from Bessaparskite Ridove Hills, above Byaga village, 250 m altitude, Pazardzhik Region, 14.VII.1985, leg. and in coll. BESHKOV (gen. prep. 2./17.V.1994 S. BESHKOV, ♀, gen. fig. 106), and from the Black Sea Coast, Varna town, 05.V.1939, KARNOSCHITZKY leg., in coll. of KARNOSCHITZKY in the National Museum of Natural History, Sofia (gen. prep. 1./09.III.1999, S. BESHKOV, male genitalia with everted vesica, gen. fig. 108). *Hadena capsincola capsincola* differs from its close related species *Hadena bicruris* (HUFNAGEL, 1766) in the length of the apophyses in the female genitalia (see gen. figs 105, 106), as well as in the small differences in the structure of the everted vesica in the male genitalia (see gen. figs 107, 108). In the female genitalia of *Hadena capsincola* ([DENIS & SCHIFFERMÜLLER], 1775) the apophyses are 1/3 shorter than in *H. bicruris* (HUFNAGEL). See also HACKER (1996c, Abb. 2–4, 8).

**488. *Hadena magnolii magnolii* (BOISDUVAL, 1829)\***= *magnoli* (incorrect subsequent spelling)

\* The first report for *Hadena magnolii* (BOISDUVAL), which is a widely distributed species in Bulgaria, was by DRENOWSKI (1930f: 21) from Svoje town, Tcheplare town and Belassitza Mts, Eleshnitsa [Belassitza village]. According to him, the specimen reported before from Belassitza as *D. lepida* is wrongly determined and it belongs to *magnolii*. TULESCHKOW (1931a: 27) again reported *Hadena magnolii* as a new species for Bulgaria from Belassitza Mts. There are records from many other localities for this species, which is not rare in Bulgaria.

**489. *Hadena compta compta* ([DENIS & SCHIFFERMÜLLER], 1775)***Hadena compta armeriae* (GUENÉE, 1852)\*

\* *Hadena compta armeriae* (GUENÉE, 1852) is an eastern species, which has never been found in Europe. The type locality of *Hadena armeriae* is "Russie Meridionale" GANEV (1982a) placed it in his systematic list of Bulgarian Noctuidae. Probably, due to nomenclature problems, it was reported there instead of *Hadena adriana adriana* (SCHAWERDA, 1921). The same mistake exists in NOWACKI & FIBIGER (1996: 282). The only faunistical reports for *Hadena armeriae* for Bulgaria (as "*Harmodia armeriae* Bsd. (= *Gueneei* STGR.), det. RBL. [REBEL]"), were by DRENOWSKI (1936: 240) for Alibotoush Mts, the former summer border post No. 18, 1700 m altitude, July 1943 and by DRENOWSKI (1939: 156) from Alibotoush Mts, collected there in 1934. Probably all those reports refer to *Hadena adriana*, or perhaps to *Hadena compta compta* or to another species, for example to *Hadena gueneei*.

**490. *Hadena confusa confusa* (HUFNAGEL, 1766)**= *conspersa* ([DENIS & SCHIFFERMÜLLER], 1775)= *nana* (ROTTEMBURG, 1776) nec FABRICIUS, 1766**491. *Hadena adriana adriana* (SCHAWERDA, 1921)\***

\* *Hadena adriana adriana* (SCHAWERDA, 1921) is the correct name for the species reported for Bulgaria by GANEV (1982a) as *Hadena armeriae* (GUENÉE, 1852). See also under *Hadena compta armeriae* (GUENÉE, 1852). According to HACKER (1996b: 154–157) *Hadena adriana* (SCHAWERDA, 1921) is a good species. The type locality of *Hadena adriana* is Croatia. In the recent literature (MLADINOV, 1968: 93; CARNELUTTI, 1994: 217) *Hadena armeriae* is also reported from there (Dalmatia, Knin and the Gulf of Rijeka), which also seems to be a confusion with *Hadena adriana*. The two taxa, *Hadena adriana adriana* (SCHAWERDA, 1921) and *Hadena compta armeriae* (GUENÉE, 1852), differ clearly from each other in the structure of everted vesica (in *Hadena adriana* the diverticulum lacks a cornutus, in *Hadena compta armeriae* a large cornutus is present), and in female genitalia, and they belong to different species groups. The present author has never seen a specimen of *Hadena adriana*/*Hadena compta armeriae* from Bulgaria, but there is no doubt that the specimens from the Balkan Peninsula known in the past under the name *Hadena armeriae* are actually *Hadena adriana* (pl. 8, fig. 1). The only faunistical report for *Hadena adriana* for Bulgaria (as "*Harmodia armeriae* Bsd. (= *Gueneei* STGR.), det. RBL. [REBEL]"), is by DRENOWSKI (1936: 240) for Alibotoush Mts, the former summer border post No. 18, 1700 m altitude, July 1943, and by DRENOWSKI (1939: 156) from Alibotoush Mts, 1934 year. *Hadena adriana* is wrongly omitted for Bulgaria in the list of NOWACKI & FIBIGER (1996: 282).

*Hadena gueneei gueneei* (STAUDINGER, 1901)\*

\* *Hadena gueneei* is another species which could occur in Bulgaria. In the neighbouring countries it is known from Greece and from former Yugoslavia). See also under *Hadena compta armeriae* (GUENÉE).

**492. *Hadena albimacula albimacula* (BORKHAUSEN, 1792)**= *compta* (ESPER, 1887)), nec [DENIS & SCHIFFERMÜLLER], 1775**493. *Hadena vulcanica* (TURATI, 1907) ssp. *urumovi* (DRENOWSKI, 1931)\***= *urumovi* DRENOWSKI, 1931= *castriota* REBEL & ZERNY, 1931= *melanochroa* (STAUDINGER, 1892) auct. ssp. *castriota* REBEL & ZERNY, 1931= *urumovi scotophoba* BOURSIN, 1959

\* The type locality of *urumovi* DRENOWSKI, 1931 is Bulgaria, Alibotoush (= Slavyanka) Mts at an altitude of 1450–1550 m above Gaitaninovo village and the slopes of the mountain, described as “*Harmodia caesia Urumovi* n. var., flying together with *Hadena caesia*.” (DRENOWSKI, 1931a: 17; 1931b: 57). Synonymized by ZILLI & BERIO (1989) as a subspecies of *H. vulcanica* (TURATI, 1907). The reports for *Hadena clara macedonica* by TULESCHKOV & SLIVOV (1975: 133), by SLIVOV & LUKOV (1976 [1977]: 238) and by GANEV (1980: 78; 1984/3: 126) and all other records of *Hadena clara macedonica* in Bulgaria refer to *Hadena vulcanica urumovi* (DRENOWSKI, 1931b) (see also under *Hadena clara macedonica* BOURSIN). *Hadena vulcanica urumovi* (DRENOWSKI, 1931) (pl. 8, fig. 2; pl. 8, fig. 3) is known from Alibotoush (= Slavyanka) Mts, Pirin Mts, Rhodopi Mts (several localities), Kresna Gorge, Bessaparskite Ridove Hills and Kokalyane village near Sofia, 700 m, 05.VII.1975, 1 ♀ in coll. BOCHAROV in the National Museum of Natural History, Sofia, wrongly determined as *Hadena caesia*. This species inhabits the high parts of the mountains at an altitude up to 2200 m (Alibotoush) and arid areas such as Bessaparskite Ridove Hills above Byaga village (250 m altitude), Loukovitza Motel above Assenovgrad town in Rhodopi Mts (400 m altitude) (GANEV & BESHKOV, 1987: 116), Kresna Gorge (200 m altitude) in June to July (GYULAY, 1983: 205), and “Gradishteto” between Nova Lovtcha and Paril villages, S Pirin Mts, 780 m altitude (BESHKOV & ABADJIEV leg., in coll. BESHKOV). The specimens illustrated in THURNER (1938: 146) as *Dianthoecia caesia urumovi* are *Hadena caesia bulgarica* BOURSIN, 1959.

***Hadena melanochroa melanochroa* (STAUDINGER, 1892)\***

\* *Hadena melanochroa* (STAUDINGER) has never been found in Bulgaria, nor in Europe. It has been wrongly reported from Europe, including Balkan Peninsula, but never from Bulgaria (see HACKER, 1996c: 210). *Hadena melanochroa* is wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 282).

***Hadena luteocincta luteocincta* (RAMBUR, 1834)\***= *schawerdae* KRÜGER, 1914, nec REISSER, 1930= *azarai* AGENJO, 1940

\* The first report for *Hadena* (as *Dianthoecia*) *luteocincta* RBR. for Bulgaria was by BURESCH (1939: 155), who reported it from the Black Sea Coast, Varna, N. KARNOSCHITZKY leg., determined by BOURSIN in Paris and by Prof. DRAUDT in Darmstadt. Later, KARNOSCHITZKY (1954: 176) bred a single caterpillar of *Hadena luteocincta* found on *Silene nutans* L. near Varna town, Black Sea Coast, which emerged on July 21, 1940. SLIVOV (1976 [1977]: 64), following KARNOSCHITZKY, again reported the species for Varna. The present author checked the whole collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, and could not find a specimen of *Hadena luteocincta* or any similar taxon. GANEV & BOCHAROV (1982: 104) reported *Hadena luteocincta* RBR. from SW Bulgaria, Melnik town [400 m alt.], 05.VII.1960, 1 ♂. The present author some time ago checked the collection of BOCHAROV in the National Museum of Natural History, Sofia, and found two male specimens with the same data, which look similar to *Hadena luteocincta* (RAMBUR, 1834) (genitalia not checked). Recently the collection of BOCHAROV was checked again and another specimen was found there from Melnik, 14.VII.1960, which is in fact a female *Hadena wehrlii frequens* (gen. prep. 6./11.XII.1998, S. BESHKOV). The other two specimens could not be relocated. According to FRANK FRANKE (pers. comm. 04.II.1999), *Hadena luteocincta* (RAMBUR) was collected also in Melnik, 23.VI.1985 by HACZ. More likely this report again refers to *Hadena wehrlii frequens*. Another published locality, W Rhodopi Mts, the Chalet at Smolyansky Ezera.

Lakes, 1550 m (BESHKOV, 1995a: 213) also refers to *Hadena wehrlii* (DRAUDT, 1934) ssp. *frequens* HACKER, 1996. According to HACKER (1996b: 312) *Hadena wehrlii frequens* inhabits the Central Balkan Peninsula (mountains), Turkey, Armenia, Aserbeidzhan and Georgia. The nominate *Hadena wehrlii* (DRAUDT, 1934) is known from the mountains of Spain only, whereas *Hadena luteocincta* is a lowland species, in the Balkan Peninsula until now known only from Dalmatia and the Republic of Macedonia (HACKER, 1996c: 297), as well as from Bosnia and Herzegovina, from where its synonym *schawerdae* KRÜGER, 1914 was described. The two taxa (*H. luteocincta* and *H. wehrlii frequens*) can be distinguished from each other only by female genitalia (apophyses) and the ground colour. *Hadena luteocincta* (RAMBUR) is greenish, whereas *Hadena wehrlii frequens* is greyish. *Hadena luteocincta* is included for Bulgaria in NOWACKI & FIBIGER (1996: 282), but *Hadena wehrlii frequens* is not. In the meantime, the presence of *Hadena luteocincta* in Bulgaria remains unconfirmed.

#### 494. *Hadena wehrlii* (DRAUDT, 1934) ssp. *frequens* HACKER, 1996\*

\* *Hadena wehrlii frequens* HACKER, 1996 is known in Bulgaria from W Rhodopi Mts, the Chalet at Smolyansky Ezera Lakes, 1550 m (BESHKOV, 1995a: 213) as *Hadena luteocincta* (RAMBUR, 1834) (see under *Hadena luteocincta* (RAMBUR, 1834)); Tchepelare town, 15.–20.VII.1978, J. GANEV leg., in coll. GANEV in the National Museum of Natural History, Sofia, wrongly determined by GANEV as *Hadena filigrama*, gen. prep. 3./03.II.1999, S. BESHKOV, ♀; Devin, 20.VII.1976 (gen. prep. 268–2) and Tcudnite Mostove [Erkupriya], 1500 m, 21.–22.VII.1980 (gen. prep. 268–1), leg. and in coll. AL. SUVOV in the Institute of Zoology, determined as *Hadena luteocincta* R&R. Other known Bulgarian localities are: Pirin Mts, Lilyanovo village, Sandanski district, 27.VI.–25.VII.1985, 1 ♀, leg. EICHLER, coll. SPEIDEL (HACKER, 1996c: 310); Melnik [400 m altitude], 14.VII.1960, 1 ♀ in coll. of BOCHAROV in the National Museum of Natural History, Sofia (gen. prep. 6./11.XII.1998, S. BESHKOV, gen. fig. 109); Sandanski town, 29.VI. 1937, 1 ♀, TOULESCHKOW leg., in coll. National Museum of Natural History, Sofia; “Gradishteto” between Nova Lovtcha and Paril villages, S Pirin Mts, 780 m altitude (BESHKOV & ABADJIEV leg., in coll. BESHKOV); Alibotoush [= Slavyanka] Mts, between “Livada” and Goleshovo village, 1500 m, 15.VII. 1998 (pl. 8, figs 4, 5) (BESHKOV & ABADJIEV leg., in coll. BESHKOV). The specimen recorded by F. FRANKE (pers. comm. 04.II.1999) as *Hadena luteocincta* (RAMBUR) from Melnik, 23.VI.1985, HACZ leg., is considered more likely to be *Hadena wehrlii frequens*. *Hadena luteocincta* is included for Bulgaria in NOWACKI & FIBIGER (1996: 282), but *Hadena wehrlii frequens*, a species surely proven for the country is not.

#### *Hadena persimilis balcanica* HACKER, 1996\*

\* *Hadena persimilis balcanica* HACKER has never been found in Bulgaria, although it may occur here. Until now, it is known only from the type locality—N Greece, Ioannina, Vradeto, 2100 m (HACKER, 1996c: 318).

#### 495. *Hadena filigrama filigrama* (ESPER, [1788])

= *filigrana* ESPER, [1788]\*

= *filigramma* (incorrect subsequent spelling)

= *xanthocyanea* (HÜBNER, [1819])

\* This species was misspelt as *filigrana* on the plate of ESPER's work [1788], but the correct spelling was given by the author in the original publication [1796], although at a later date. It is thus a justified emendation and the corrected name takes author and date of original spelling (ICZN) (KARSHOLT, in KARSHOLT & RAZOWSKI, 1996: 337).

#### 496a. *Hadena caesia* ([DENIS & SCHIFFERMÜLLER], 1775) ssp. *bulgarica* BOURSIN, 1959\*

\* *Hadena caesia bulgarica* BOURSIN, 1959 (type locality: Bulgaria, Central Stara Planina Mts, Jumruck-Tschal [Botev] Top district, 1800 m) (pl. 8, figs 6, 7) is widely distributed in the mountains of



Bulgaria as follows: Pirin (pl. 8, figs 8–10); Rila; Ossogovo; W and Central Stara Planina; Vitosha; Alibotoush (= Slavyanka) and Rhodopi in altitudes between 1400–2400 m. The specimen from Devin in Rhodopi Mts, 700–850 m altitude, reported in BURESCH & TULESCHKOW (1932: 102) probably belongs to another species, most likely to *Hadena vulcanica urumovi* (DRENOWSKI, 1931) which is known to occur there. The specimens illustrated in TURNER (1938: 146) as *Dianthoecia caesia urumovi* should belong to *Hadena caesia bulgarica* BOURSIN, 1959. *Dianthoecia caesia* var. *nigrescens* STAUDINGER, 1901, described from Norway, is a synonym of *Hadena caesia frigida* ZETTERSTEDT, [1839], a taxon known only from Fennoscandia. It has never been found in the Balkan Peninsula.

#### 496b. *Hadena caesia xanthophoba* (SCHAWERDA, 1922)\*

\* *Hadena caesia xanthophoba* (SCHAWERDA, 1922) has not been reported before from within the present political borders of Bulgaria. Known from the Republic of Macedonia, Greece, Albania, Bosnia and Herzegovina. In the collection of the National Museum of Natural History, Sofia, there is a long series of specimens of this taxon from Alibotoush [= Slavyanka] Mts, [Alibotoush and Tzarev Vrah Tops, 2183, 2212 m altitude], 26.VII.1930 and 29.VII.1930, Kr. TOULESCHKOW leg. (pl. 8, figs 11–13; col. pl. I, fig. 15). *Hadena caesia xanthophoba* is known also from N Greece, Phalakron Oros, Chionotrypa, 1700 m (HACKER, 1996c: 390), very close to the present borders of Bulgaria and to the Alibotoush Mts.

#### *Hadena clara* (STAUDINGER, 1901) ssp. *macedonica* BOURSIN, 1959\*

\* TULESCHKOV & SLIVOV (1975: 133) reported *Hadena clara macedonica* BOURSIN from Rhodopi Mts, Pamporovo Resort, 1600 m. All other data for Bulgaria, Rhodopi Mts follow this wrong report. The specimens determined and published by SLIVOV & LUKOV (1976 [1977]: 238) as *Hadena clara macedonica* from this locality have been examined by the present author and it turned out that they belong to another species, *Hadena vulcanica urumovi* (DRENOWSKI, 1931), a taxon which is widely distributed in the Rhodopi Mts. The same mistake was made by GANEV (1980: 78; 1984/3: 126), who reported *Hadena clara macedonica* from Rhodopi Mts, Devin town and "Fichtenzone". The specimens of GANEV from Rhodopi Mts are also *Hadena vulcanica urumovi* (GANEV, pers. comm.). Another specimen in the collection of SLIVOV, labelled "Rila – Ovnarsko, 1550 m, 19–20.7.85, leg. SLIVOV" and determined by him as *Hadena clara macedonica* is probably *Hadena filigrana* (ESPER, [1788]). The specimen, examined by the present author, is worn and the genital preparation is missing. In BERIO (1985: 245), Bulgaria is given as a locus typus of *Hadena clara* (STGR.) together with Asia Minor and Armenia. The source of BERIO's data for Bulgaria is not known, but it is probably the article of VARGA (1975), in which *Hadena clara* is marked on p. 25, map 14 for SW Bulgaria [Pirin and Alibotoush Mts]. In HACKER (1990: 115), the type locality is given as "Pontus, Taurus, Armenien". The taxon *Hadena clara macedonica* was described from the Balkan Peninsula, Republic of Macedonia, Petrina Planina [Galichitza] Mts. For Bulgaria it is also wrongly included in NOWACKI & FIBIGER (1996: 282), probably following the previous erroneous reports mentioned above.

#### 497. *Hadena drenowskii drenowskii* (REBEL, 1930)\*

\* *Hadena drenowskii drenowskii* (REBEL) was described from Bulgaria, Alibotoush (= Slavyanka) Mts, 1400 m altitude (REBEL, 1930: 12; DRENOWSKI, 1930c: 113; 1933: 9, 17; HACKER, 1996c: 427, Taf. P: 16). DRENOWSKI (1931b: 53–56) reported it again from Alibotoush (= Slavyanka) Mts at an altitude of 1450–1550 m above Gaitaninovo village, July to August and illustrated it in monochrome. TULESCHKOW (1931b: 191) and BURESCH & TULESCHKOW (1932: 100) reported it from Alibotoush Mts at 1800 m altitude. Another locality in Bulgaria is Rila Mts, Grantchar (Boriss Hadzhissotirov) Chalet, 2200 m altitude (GYULAI, 1983: 205; HACKER (1989: 114). Recently a single male specimen was collected in S Pirin Mts, "Orelyak", 1900 m altitude, Gotze Delchev district (BESHKOV & NOWACKI, 1998: 49). Known also from W Rhodopi Mts, near the TV tower above Yagodina village, 1270 m (pl. 14, fig. 1), 19.VII.1998 (pl. 8, fig. 14) (S. BESHKOV & S. ABADJIEV leg., in coll. BESHKOV), 4 ♂♂ at a light trap.

Subgenus *Anepia* HAMPSON, 1918

**498. *Hadena irregularis irregularis* (HUFNAGEL, 1766)\***

\* The only known locality of *Hadena irregularis* (HUFNAGEL, 1766) in Bulgaria is "Palamara", Shoumen Region in NE Bulgaria (SUVOV, 1979: 38). Known from two places in the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 170, 533, map 485), and considered likely to be discovered in the Bulgarian part of the Dobrogea or at the N Black Sea Coast.

**499. *Hadena syriaca* (OSTHELDER, 1933) ssp. *podolica* (KREMSKY, 1937)\***

\* *Hadena syriaca podolica* (KREMSKY) occurs in several localities in SW Bulgaria from sea level to 1000 m altitude in the mountains. From Central Rhodopi Mts known from Devin town and Mine Persenk, 900 m altitude (GANEV, 1982b: 163), as well as from Assenovgrad (as Stanimaka) town (HACKER, 1992a: 280). In E Bulgaria known from "Karandila", 1000 m altitude, above Sliven (as Sliben) town (HACKER, 1992a: 280), E Rhodopi Mts (several localities) to "Belija Brijag" Camping, between Balchik and Kavarna towns, N Black Sea Coast (BESHKOV, 1995a: 213). In N Bulgaria known also from Veliko Tarnovo town, 04.IV.1939, TOULESHKOV leg., in coll. National Museum of Natural History, Sofia. Reported also from the S Black Sea Coast, Arkoutino near Primorsko (EICHLER, HACKER & SPEIDEL, 1996: 267; BESHKOV, NOWACKI & PALKA, 1999: 182) and from Byaga village [Bessaparskite Ridove Hills, Pazardzhik Region, 250 m] (HACKER, 1992a: 280). The flight period is from April to the first half of July.

**500. *Hadena perplexa perplexa* ([DENIS & SCHIFFERMÜLLER], 1775)**

- = *carpophaga* (BRAHM, 1791)
- = *carpophaga* (BORKHAUSEN, 1792) (preoccupied)
- = *lepida* (ESPER, [1790])
- = *capsophila* (BOISDUVAL, 1840)
- = *capsophila* (DUPONCHEL, 1842)
- = *carpophaga* var. *brunnea* (TUTT, 1892)

**501. *Hadena silenens silenens* (HÜBNER, [1822])\***

- = *variegata* (F. WAGNER, 1929) auct.\*\*

\* The first reports of *Hadena silenens* (HÜBNER) in Bulgaria were from Alibotoush [= Slavyanka] Mts in SW Bulgaria (TULESCHKOW, 1929: 157, 1930a: 33). Many other records follow after that for this species, which is not rare in Bulgaria.

\*\* *Hadena silenens variegata* (F. WAGNER, 1929) is a valid subspecies of *Hadena silenens* (HÜBNER, [1822]), which does not occur in Bulgaria.

Subgenus *Pinkericola* HACKER, 1987

***Hadena tephroleuca tephroleuca* (BOISDUVAL, 1833)\***

\* *Hadena tephroleuca* is wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 282). It has never been found in Bulgaria, but it is not impossible that it will be discovered here. From the Balkan Peninsula, *H. tephroleuca* is known from Greece, Nestos, Paraneftion, near the Bulgarian/Greece border (HACKER, 1989: 582) and from Albania (BESHKOV & MISJA, 1995: 356). In both these articles it is recorded as *Hadena tephroleuca asiatica* (F. WAGNER, 1931). Careful examination of the Albanian *tephroleuca* and comparison with specimens from Turkey and Alps have shown that the population in Albania belongs to *Hadena tephroleuca tephroleuca* (BOISDUVAL, 1833). In the Balkan Peninsula,

*Hadena tephroleuca* is known also from the Durmitor Mts in Montenegro (CARNELUTTI, VASIC, TOMIC, ZECEVIC & KRANJCEV, 1991: 93).

Genus *Enterpia* GUENÉE, 1850

= *Euterpia* SPULER, 1907

**502. *Enterpia laudeti laudeti* (BOISDUVAL, 1840)\***

= *laudeti* (incorrect subsequent spelling)

\* The first report of *laudeti* BOISDUVAL, 1840 for Bulgaria was by LEDERER (1863: 27) for Sliven. The foodplant of *Enterpia laudeti* in Sliven town, according to REBEL (1903: 234) and to BURESCH & TULESCHKOW (1935: 127) is "*Silene ?paradoxa*". According to HACKER (1996: 596, 598) the closely related species *Enterpia roseocandida* HACKER, 1996 is known from the European part of Turkey, Edirne (Odrin town) and should occur in Bulgaria and Greece as well. The present author has examined many specimens of this group from his collection and from some other collections. All these, from SW Bulgaria, Kresna Gorge, Belassitza Mts, Volcanic Hill of Kozhouh near Petrich town; from Sliven town; Black Sea Coast, Balchik (pl. 8, figs 16, 17) and Albena; Seslav hunting reserve near Koubrat town, Razgrad Region, NE Bulgaria, from the collection of present author and from the collections of ALEXANDER SLIVOV and of the National Museum of Natural History, Sofia, are indeed *Enterpia laudeti* (BOISDUVAL, 1840). A single male specimen from the Volcanic Hill of Kozhouh near Petrich town showed a slight resemblance to *Enterpia roseocandida* and *Enterpia laudeti orientis* HACKER, 1996 (pl. 8, fig. 18; pl. 9, fig. 1) in the ground colour: the genitalia with everted vesica of this specimen were examined, and they correspond exactly to those of *Enterpia laudeti laudeti*. *Enterpia laudeti orientis* is an eastern subspecies and its occurrence in the Balkans together with *Enterpia laudeti laudeti* is impossible.

*Enterpia laudeti roseomarginata* CALBARLA, 1891\*

\* According to SPULER (1908: 285) *Enterpia laudeti roseomarginata* occurs in Bulgaria and Macedonia as well (see also HACKER, 1996c: 594). However, *Enterpia laudeti roseomarginata* is an eastern species, and has never been found in Bulgaria or Europe.

Genus *Sideridis* HÜBNER, 1821

= *Aneda* SUKHAREVA, 1973

= *Colonsideridis* BECK, 1991\*

\* For *Colonsideridis* BECK, 1991 see HACKER (1996c: 610).

**503. *Sideridis rivularis rivularis* (FABRICIUS, 1775)\***

= *cucubali* ([DENIS & SCHIFFERMÜLLER], 1775)

= *rivosa* (STRÖM, 1783)

\* Correctly removed to the genus *Sideridis* from the genus *Hadena* (see HACKER, 1996c: 611).

**504. *Sideridis lampra lampra* (SCHAWERDA, 1913)**

= *anapheles* NYE, 1975

= *evidens* HÜBNER, [1808]

Genus *Colonsideridis* BECK, 1991

= *Sideridis* HÜBNER, 1821, auct.

= *Heliophobus* BOISDUVAL, 1829, auct.

**505. *Colonsideridis turbida turbida* (ESPER, [1790])\***= *albicolon* (HÜBNER, [1809–1813])\*\*= *albicolon* STAINT. (incorrect author's name)= *albicolon* SEPP. (incorrect author's name)

\* *Colonsideridis turbida* (ESPER, [1790]) was reported for the first time for Bulgaria from Obratzov Tchiflik, Russe Region (KOWATSCHIEW, 1898: 27). BACHMETJEW (1902: 432), following the unpublished data of PIGULEV, reported *Mamestra albicolon* Hb. from Sliven town. REBEL (1903: 214) considered both these reports to be doubtful. ILTCHEV (1913: 90, 102; 1914: 124) reported it as a new species for Bulgaria and the Balkan Peninsula (as *Mamestra albicolon* Hb.) from Sredna Gora Mts, Stambolovo [Bodrovo] village. Many other localities in Bulgaria have been reported since for this species, which is not rare in the country.

\*\* For the synonymy between *turbida* ESPEr and *albicolon* HÜBNER see HACKER (1998b: 466) and FIBIGER & HACKER (1998: 21).

**Genus *Heliophobus* BOISDUVAL, 1829****506. *Heliophobus reticulata reticulata* (GOEZE, 1781)*****Heliophobus kitti kitti* (SCHAWERDA, 1913)\***

\* *Heliophobus kitti* (SCHAWERDA) has never been found in Bulgaria. It is wrongly included for the Bulgarian fauna by NOWACKI & FIBIGER (1996: 283). *Heliophobus kitti* has been reported recently from the Republic of Serbia, Homoljske Planine, Dubashniza, near the Bulgarian/Serbian border and from "Yuzhnog Kuchia" (ZECEVIC, 1993: 26), and is also included in the list of Serbian Lepidoptera (ZECEVIC, 1996: 62) as "*Heliophobus texturata* (ALPH.): and *Heliophobus texturata* ALPHERAKY, ssp. *kitti* SCHAWERDA, 1917" These appear to be the only records of *Heliophobus kitti* for the Balkan Peninsula, except for other data of uncertain origin in NOWACKI & FIBIGER (1996: 283). Probably both these records are a result of misidentification with another *Heliophobus* species (see under the next taxon). However, if they are correct, *Heliophobus kitti* must be expected in Bulgaria as well.

***Heliophobus texturata* (ALPHÉRAKY, 1892) ssp. *silbernageli* (TYKAC, 1940)\***

\* *Heliophobus texturata silbernageli* is a distinct taxon, different from *Heliophobus kitti* (see in BEHOUNEK, 1994). Until now, there are no confirmed data for this taxon for Bulgaria and for the Balkan Peninsula. All reports for *Heliophobus texturata* (see under *H. kitti*) for the Balkan Peninsula probably refer to *Heliophobus kitti kitti*.

**Genus *Conisania* HAMPSON, 1905**= *Luteohadena* BECK, 1991***Conisania leineri leineri* (FREYER, 1836)\***

\* In the faunistic literature for Bulgaria there are several incorrect reports of *Conisania leineri* (FREYER) for the country, all of which have been shown subsequently to be *Conisania renati* (OBERTHÜR). According to GANEV (1984a: 37) "*Conisania leineri* FREYER does not occur in Bulgaria. All data reported for this species in fact concerns *Conisania renati* OCHSENHEIMER" These incorrect reports of *C. leineri* for the country are as follows: W Bulgaria, Zemen Gorge, Skakavitza Railway Station (GANEV, 1982b: 163); Stara Planina Mts at altitude up to 800 m, det. Z. VARGA (SLIVOV, 1974: 181) [using the data for Tzerovo, given below]; Iskarski Prolom Gorge, Tzerovo Railway Station as a new species for Bulgaria (SLIVOV & LUKOV, 1976 [1977]: 238). The present author has found the specimen from Tzerovo, 12.VI.1961, Loukov leg., VARGA det. as *Conisania leineri*, in the collection of J. GANEV in the National Museum of Natu-

ral History, Sofia, subsequently correctly determined by GANEV as *Conisania renati*. The present author agrees with GANEV (1984a: 37), and finds it hard to believe that *C. leineri* occurs in Bulgaria. *Conisania leineri* (FREYER) is also shown in NOWACKI (1994: 110) on the distribution map 54 for the Bulgarian Black Sea Coast. The origin of the data of NOWACKI (1994: 110) is unclear to the present author. NOWACKI (pers. comm. VIII.1996) has forgotten the source of these data. *C. leineri* is also wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 283) instead of *C. renati meszarosi*. It is uncertain whether *Conisania leineri* FREYER occurs at all in the Balkan Peninsula. For Romania there is a doubtful unconfirmed report for the Black Sea Coast (see in RÁKOSY, 1996b: 172, 536, map 495). The reports for Yugoslavia (Vojvodina) probably refer to *Conisania poelli ostrogovichii* DRAUDT, 1933, as do those of GRADOJEVIC (1964) and of VASIC (1969: 202; 1975: 18) for Serbia, Deliblatski Pesak, Belgrade.

#### 507. *Conisania renati* (OBERTHÜR, 1890) ssp. *meszarosi* VARGA & RONKAY, 1991\*

\* The type locality of *Conisania renati meszarosi* VARGA & RONKAY is Bulgaria, Kostinbrod near Sofia (VARGA & RONKAY, 1991: 157). This species occurs also in Vitosha Mts (one male specimen from Bosnek, 05.VI.1967, E. NESTOROVA leg.), wrongly determined by her as "*Diantoecia carpophaga*" with a question mark. Another known locality is Dobarchin village near Svoje town (pl. 9, fig. 2) (BESHKOV & GASHTAROV, in press). Probably the whole population in Bulgaria belongs to this recently described subspecies. The specimens reported from Kostinbrod by MÉSZÁROS et al. (1984a: 68) as "*Conisania* sp." are also *Conisania renati meszarosi* VARGA & RONKAY, 1991. Other known localities are W Bulgaria, Zemen Gorge, Skavitzta Railway Station (GANEV, 1982b: 163, and 1 ♂ collected there on 09.VI.1993 by V. GASHTAROV) and Iskarski Prolom Gorge, Tzerovo Railway Station (SLIVOV & LUKOV, 1976 [1977]: 238), reported from both localities as *Conisania leineri*. See also under that species. *Conisania renati* (OBERTHÜR) is wrongly excluded for Bulgaria in NOWACKI & FIBIGER (1996: 283).

#### 508. *Conisania luteago luteago* ([DENIS & SCHIFFERMÜLLER], 1775)\*

= *brunneago* (ESPER, [1804])

= *argillacea* (HÜBNER, [1813])

\* *luteago* [DENIS & SCHIFFERMÜLLER], 1775 was transferred from the genus *Hadena* to the genus *Conisania* (see HACKER, 1996c: 629).

#### Genus *Saragossa* STAUDINGER, 1900\*

##### Subgenus *Saragossa* STAUDINGER, 1900

##### *Saragossa siccanorum siccanorum* (STAUDINGER, 1870)\*

\* *Saragossa siccanorum* (STAUDINGER) is a species which could possibly occur in the Bulgarian part of the Dobrogea or at the N Black Sea Coast. Known from the Romanian part of the Dobrogea, very near to the Bulgarian/Romanian border (RÁKOSY, 1996b: 173, 535, map 497).

##### Subgenus *Dianthivora* VARGA & RONKAY, 1991

= *Sideridis* HÜBNER, 1821, auct.

#### 509. *Saragossa implexa implexa* (HÜBNER, [1809])\*

\* The first reports of *implexa* HÜBNER, [1809] for Bulgaria were by DRENOWSKI (1931a: 17; 1931b: 53): Alibotoush [= Slavyanka] Mts in SW Bulgaria, not by THURNER (1964) as it is given in SLIVOV (1984: 57). Some other records follow later for this species, which is nevertheless rare in Bulgaria.

Genus *Melanchra* HÜBNER, [1820]  
= *Ceramica* GUEENÉE, 1852

**510. *Melanchra persicariae persicariae* (LINNAEUS, 1761)\***

\* The first report of *Melanchra persicariae* for Bulgaria was by BACHMETJEV (1902: 432) for Sliven town, based on the unpublished manuscript of PIGULEV. According to REBEL (1903: 214) and to BURESCH & TULESCHKOW (1932: 71; 97) this record is doubtful. Reported also from the Dobrogea [Tulcha] (MANN, 1866; BACHMETJEV, 1902: 432). VARGA & SLIVOV (1976 [1977]: 178) confirmed the presence of *persicariae* in Bulgaria from Rila Mts: Rilski Manastir monastery, 1100 m altitude and Treshtenik Chalet, 1700 m altitude, and from Pirin Mts, Yane Sandanski Chalet, 1200 m altitude. Known also from SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station (SLIVOV & LUKOV, 1976 [1977]: 237). According to HACKER (1989: 98), after GANEV (pers. comm. 28.VIII.1984), *M. persicariae* is known also from Rhodopi Mts. The source of these data is unclear to the present author.

**511. *Melanchra pisi pisi* (LINNAEUS, 1758)**

Genus *Mamestra* OCHSENHEIMER, 1816

**512. *Mamestra brassicae brassicae* (LINNAEUS, 1758)**  
= *albidilinea* (HAWORTH, 1809)  
= f. *ochracea* TUTT, 1889

Genus *Papestra* SUKHAREVA, 1973

**513. *Papestra biren biren* (GOEZE, 1781)**  
= *bi-ren* (incorrect subsequent spelling)  
= *glauca* HÜBNER, [1809]

Genus *Polia* OCHSENHEIMER, 1816  
= *Chera* HÜBNER, [1816]  
= *Polia* BOISDUVAL, 1829, nec OCHSENHEIMER, 1816  
= *Pachetra* GUENÉE, 1841\*  
= *Aplecta* GUENÉE, 1852  
= *Bompolia* BECK, 1996

\* For the synonymy see in HACKER (1998c: 578) and in FIBIGER & HACKER (1998: 21).

**514. *Polia bombycina bombycina* (HUFNAGEL, 1766)\***  
= *bombicina* (incorrect subsequent spelling)  
= *advena* ([DENIS & SCHIFFERMÜLLER], 1775)  
= *nitens* (HAWORTH, 1809)  
= *nitens* TUTT (incorrect author's name)

\* SLIVOV (1973: 44) reported *Polia bombycina* as new for Bulgaria from the Pirin Mts, Gotze Delchev Chalet, 1600 m altitude, but in fact it had already been reported for Bulgaria by SOFFNER (1962: 156) from the Rila Mts, Borovetz and by NESTOROVA-KVARTIRNIKOVA (1972) from the Vitosha Mts. Many other reports follow after that for this species, which is not rare in the mountains of Bulgaria.

**515. *Polia trimaculosa trimaculosa* (ESPER, [1788])\***= *tincta* (BRAHM, 1790)= *hepatica* auct. nec CLERCK

\* *trimaculosa* (ESPER, [1788]) is a valid name (see MIKKOLA, 1993: 143). This species is wrongly excluded for Bulgaria in NOWACKI & FIBIGER (1996: 283). It is not very rare in Bulgaria, and is known from several localities in the mountains.

**516. *Polia nebulosa nebulosa* (HUFNAGEL, 1766)***Polia cherrug cherrug* RÁKOSY & WIESER, 1997\*

\* *Polia cherrug* is described as a new species from the Romanian part of the Dobrogea–Macin Mts. Its occurrence in the Bulgarian part of the Dobrogea or at the N Black Sea Coast seems possible.

**517. *Polia sagittigera sagittigera* (HUFNAGEL, 1766)**= *leucophaea* ([DENIS & SCHIFFERMÜLLER], 1775)= *leucophaea* VIEW. (incorrect author's name)= *fulminea* (FABRICIUS, 1781)= f. *albistriata* (ZÜLLICH)**518. *Polia serratilinea serratilinea* OCHSENHEIMER, 1816**= *serratilinea* TREITSCHKE, 1825= *spalax* ALPHÉRAKY, 1887= *serratilinea* var. *kowatschevi* DRENOWSKI, 1931\*

\* DRENOWSKI (1930c: 113; 1931a: 17) reported *Mamestra serratilinea* Tr. as new for Bulgaria from Alibotoush [= Slavyanka] Mts at an altitude of 1400–1550 m, and described it as *Mamestra serratilinea* var. *kowatschevi* (DRENOWSKI, 1931a: 17; DRENOWSKI, 1931b: 56–57; DRENOWSKI, 1933: 17). TULESCHKOW (1931b: 193) also reported it from Alibotoush [= Slavyanka] Mts as abundant at an altitude of 1350 m. *Polia serratilinea* is also known from the Central Rhodopi Mts, “Kastrakli” Natural Reserve near Borino village, 1100 m altitude (SLIVOV, 1984: 57). In the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences there is a specimen with a label from Rhodopi Mts, Snezhanka top above Pamporovo resort. The present author collected it from Alibotoush [= Slavyanka] Mts, between “Livada” and Goleshovo village, 1500 m, 15.VII.1998 (pl. 9, fig. 3), and found no differences between the population there and the nominate subspecies.

**Tribus Mythimnini****Genus *Mythimna* OCHSENHEIMER, 1816\***= *Leucana* (incorrect subsequent spelling of *Leucania* OCHSENHEIMER, 1816, auct.)= *Mithymna* (incorrect subsequent spelling)= *Heliophila* HÜBNER, [1822]= *Hyphilare* HÜBNER, [1821]= *Aletia* HÜBNER, [1821]= *Sablia* SUKHAREVA, 1973

\* For the tribe Mythimnini—comparative morphology and inferences based on the diversity of the androconial organs see ZILLI & GIULIO (1996).

**Subgenus *Mythimna* OCHSENHEIMER, 1816****519. *Mythimna turca turca* (LINNAEUS, 1761)**

Subgenus *Aletia* HÜBNER, [1821]

520. *Mythimna conigera conigera* ([DENIS & SCHIFFERMÜLLER], 1775)

521. *Mythimna vitellina vitellina* (HÜBNER, [1808])

= *vitellina* ab. *pallida* (WARREN, 1910)

= *vitelina* (incorrect subsequent spelling)

522. *Mythimna pudorina pudorina* ([DENIS & SCHIFFERMÜLLER], 1775)\*

= *impudens* (HÜBNER, (1803))

\* *Mythimna pudorina* ([DENIS & SCHIFFERMÜLLER]) was recorded as new for Bulgaria from Kostinbrod town, Sofia Region (GANEV, 1981: 79). Known also from NE Bulgaria, Danube River, "Kalimok" Experimental Station near Nova Tcherana village, Tutrakan district, D. VASSILEV leg., common (BESHKOV & VASSILEV, 1995: 198).

523. *Mythimna straminea straminea* (TREITSCHKE, 1825)\*

\* The first reports of *Mythimna straminea* (TREITSCHKE) for Bulgaria were by TSCHORBADSCHJEV (1910: 140) and TSCHORBADJIEV (1915: 30) from the districts of Bourgass town. There are very few other localities known for this local Bulgarian species. Known from W Bulgaria, Zemen Gorge, Skakavitza Railway Station (GANEV, 1984a: 40; GANEV, 1985b: 88), and Kostinbrod Town, Sofia Region (GANEV, 1984a: 40), from SW Bulgaria, Volcanic Hill "Kozhouh" near Petrich Town (GANEV, 1987a: 102) and Kresna Gorge, Stara Kresna Railway Station (19.VI.1988, 1 ♂, S. BESHKOV leg.). Not a rare species in NE Bulgaria, at the N Black Sea Coast, near the lakes "Shabla" (BESHKOV, 1992: 46), "Dourankoulak" and "Ezeretz", where it is on the wing from the very end of May to the third decade of September.

524. *Mythimna impura impura* (HÜBNER, [1808])\*

\* The first report of *Mythimna impura* (HÜBNER) for Bulgaria is surprisingly recent (GANEV, 1984a: 40). It is not a rare species in the mountains, and had been overlooked due to misidentification.

525. *Mythimna pallens pallens* (LINNAEUS, 1758)

= f. *ectypa* HÜBNER, [1803]

= f. *arcuata* STEPHENS, 1829

Subgenus *Hyphilara* HÜBNER, [1821]

526. *Mythimna ferrago ferrago* (FABRICIUS, 1787)

= *lithargyria* (ESPER, [1788])

= *lythargyria* (incorrect subsequent spelling)

= *grisea* STEPHENS, 1829

= *grisea* HAWORTH (incorrect author's name)

*Mythimna ferrago* ssp. *argyristis* (RAMBUR, 1858)\*

= *argyritis* (incorrect subsequent spelling)

\* *Mythimna ferrago* ssp. *argyristis* (RAMBUR, 1858) is a name with an uncertain taxonomic status.



**527. *Mythimna albipuncta albipuncta* ([DENIS & SCHIFFERMÜLLER], 1775)****528. *Mythimna congrua congrua* (HÜBNER, [1817])\***

\* BACHMETJEV (1902: 435), following the unpublished manuscript of H. PIGULEV, reported *Mythimna congrua* from Samokov and Sliven towns. According to REBEL (1903: 221) and to BURESCH & TULESCHKOW (1932: 71, 125) this report is wrong. Later, GANEV (1983a: 86) reported *Mythimna congrua* Hb. from "Kozhouh" and Kresna [Gorge] as a new species for Bulgaria. In fact, *Mythimna congrua congrua* (HÜBNER, [1817]) is not a rare species, recently found in very many localities. It has two generations, in May to June and August to October.

**529. *Mythimna l-album l-album* (LINNAEUS, 1767)**

- = *L. album* (incorrect subsequent spelling)
- = *Lalbum* (incorrect subsequent spelling)
- = *album* (incorrect subsequent spelling)

Subgenus *Sablia* SUKHAREVA, 1973

**530. *Mythimna andereggii* (BOISDUVAL, 1840) ssp. *pseudocomma* (REBEL & ZERNY, 1931)\***

- = *andereggi pseudocomma* ZERNY (incorrect author's name)
- = *andereggi pseudocomma* RBL. (incorrect author's name)
- = *Mythimna andereggii lineata* auct.
- = *liniata* (incorrect subsequent spelling)

\* The first report of *Mythimna andereggii pseudocomma* for Bulgaria was by ZÜLLICH (1929: 49) (as *Leucania andereggii* B. f. *pseudocomma* ZERNY) from the Rila Mts, above Rilski Manastir monastery, published before the appearance of the original description by REBEL & ZERNY. Later, DRENOWSKI (1931a: 16–17; 1931b: 58; 1933: 17) reported "*Leucania andereggi* var. *pseudocomma* RBL." [REBEL & ZERNY] from Alibotoush [= Slavyanka] Mts at altitudes between 750–1500 m as new for Bulgaria. TULESCHKOW (1931a: 27; 1931b: 194) also reported *Leucania andereggii pseudocomma* from Alibotoush [= Slavyanka] Mts as new for Bulgaria. REBEL & ZERNY (1931: 95) reported it from Rila Mts [above Doupnitsa (= Stanke Dimitrov) town], BUBACEK & ZÜLLICH leg. In the same year TULESCHKOW (1931a: 27) reported *Leucania lineata* Ev. as a new species for Bulgaria (EDW. MEYRICK det.) from Belassitza Mts. According to SUVOV (1988: 137), the report of TULESCHKOW for *Mythimna lineata* FR. from Belassitza is wrong, and the present author thinks that it refers to *M. a. pseudocomma*, a species probably present in Belassitza. *M. a. pseudocomma* is known from Rila Mts, Central Stara Planina Mts, Alibotoush [= Slavyanka] Mts, Pirin Mts, Ossogovo Mts and W Rhodopi Mts at altitudes of 1100–2376 m. It flies from the very end of May to the end of July depending on the mountain and the altitude. The reports of BACHMETJEV (1902: 434), following MARKOVITCH (1900: 43 [35]) for *Leucania lineata* Ev. (as *Leucania liniata*) from Razgrad town, are doubtful, according to REBEL (1903: 221). BURESCH & TULESCHKOW (1932: 71, 125) also regarded both these reports for *Leucania lineata* Ev. as doubtful. *Leucania lineata* has never been found in Bulgaria.

**531. *Mythimna sicula sicula* (TREITSCHKE, 1835)\***

- = *cyper* (BOISDUVAL, 1840)

\* *Mythimna sicula sicula* (TREITSCHKE) is known in Bulgaria from the Black Sea Coast, near Lozenetz village, south of Bourgass town and from Sakar Mts, Dossitevo village (BESHKOW, 1992: 46); In SW Bulgaria known from S Pirin Mts, Liljanovo village above Sandanski town, 500 m (EICHLER, HACKER & SPEIDEL, 1996: 267). *Mythimna sicula* (TREITSCHKE) is probably conspecific with *Mythimna scirpi* (DUPONCHEL, 1836).

**532. *Mythimna scirpi scirpi* (DUPONCHEL, 1836)\***= *montium* (BOISDUVAL, 1840)

\* The first reports of *Mythimna scirpi* (DUPONCHEL) for Bulgaria were by DRJANOVSKY (1906: 111) and by BACHMETJEV (1910a: 284) for Vitosha Mts. According to REBEL (1903: 221) and to BURESCH & TULESCHKOW (1932: 71) the presence of *M. scirpi* in Bulgaria requires confirmation. *M. scirpi* has now been reported from many localities under the name *Mythimna sicula scirpi* (DUPONCHEL), and the records before BURESCH & TULESCHKOW (1932) seem perfectly acceptable. In NOWACKI & FIBIGER (1996: 284) *M. scirpi* is wrongly not included for Bulgaria. *M. sicula* and *M. scirpi* however, seem to be one and the same species.

**533. *Mythimna alopecuri alopecuri* (BOISDUVAL, 1840)\***= *alopecuri syriaca* (OSTHELDER, 1933)= *pseudalopecuri* DE LAEVER, 1984

\* *Mythimna alopecuri alopecuri* (BOISDUVAL) was reported as "*Mythimna pseudalopecuri*" from Zemen Gorge, Skakavitzia Railway Station and from SW Bulgaria, "Rupile" [Rupite near Petrich town] (type locality of *pseudalopecuri* DE LAEVER) (DE LAEVER, 1984: 116). Later, GANEV (1987a: 102) reported *M. alopecuri* (Bsdv.) as a new species for Bulgaria from NW Bulgaria, Belogradchik town. The present author has seen a specimen from Belogradchik in the collection of GANEV (genitalia checked) and confirmed the identification. Other known localities in Bulgaria are Resseletz Chalet near Resseletz village, Tcherven Bryag district (BESHKOV, 1995a: 214) and W Stara Planina Mts, above Prolaznitza village, Belogradchik district, 26.VII.1998, S. BESHKOV, D. VASSILEV & G. STOYANOV leg., 6 ♀♀.

**Subgenus *Morphopoliana* HREBLAY & LEGRAIN, 1996\***

\* For subgenus *Morphopoliana* HREBLAY & LEGRAIN, 1996 see HREBLAY (1996b, Esperiana 4).

***Mythimna languida languida* (WALKER, 1858)\***= *consanguis* (GUENÉE, 1852), auct.\*\*

\* The report of RONKAY (1985: 382) of *Mythimna consanguis* for Greece refers to *Mythimna languida*. In Europe the migrant *Mythimna languida* is known also from the Republic of Macedonia (Kitchevo) (PETERSSON, 1990: 73). It is very likely to be found in Bulgaria as well.

\*\* *Mythimna consanguis* (GUENÉE, 1852) was wrongly reported from Greece (RONKAY, 1985: 382) instead of *Mythimna languida*. *Mythimna consanguis* has never been found in Europe.

**Genus *Pseudaletia* FRANCLEMONT, 1951****534. *Pseudaletia unipuncta unipuncta* (HAWORTH, 1809)\***

\* The first report for this very common species in Bulgaria was by TULESKOV (1965: 203) for the districts of Assenovgrad town. *Pseudaletia unipuncta* (HAWORTH, 1809) flies in two generations in Bulgaria, the second one more common. Sometimes the majority of specimens in October to November are probably the result of migration.

**Genus *Analetia* CALORA, 1966****Subgenus *Anapoma* BERIO, 1980****535. *Analetia riparia riparia* (RAMBUR, 1829)\***

\* *Analetia riparia* (RAMBUR) was reported as a new species for Bulgaria from the Black Sea Coast, Nessebar (SOFFNER, 1962: 156). Known also from SW Bulgaria, "Rupite" near Volcanic Hill Kozhouh,

Petrich district (GANEV, 1984b: 133). The specimen collected on the Volcanic Hill "Kozhouh" is in the collection of GANEV in the National Museum of Natural History, Sofia, with the label "SW Bulgaria, Hill Malki Kozhouh, with lamp, 15.VI.1981, leg. V. KAMNISKAS", (gen. prep. 299 [J. GANEV]) and is correctly identified.

Genus *Acantholeucania* RUNGS, 1953

### 536. *Acantholeucania loreyi loreyi* (DUPONCHEL, 1827)

Genus *Leucania* OCHSENHEIMER, 1816

= *Leuconia* (incorrect subsequent spelling)

= *Senta* STEPHENS, 1834

Subgenus *Leucania* OCHSENHEIMER, 1816

### 537. *Leucania obsoleta obsoleta* (HÜBNER, [1800–1803])\*

\* TULESCHKOW (1930a: 32; 1930b: 142) reported *Leucania obsoleta* as a new species for Bulgaria from Preobrazhenski Manastir monastery, the districts of Veliko Tarnovo town in N Bulgaria. However, it was found in Bulgaria in Sliven ("Slivno, coll. Princ. Bulg.") long before the reports of TULESCHKOW. The specimens from Sliven are in the National Museum of Natural History, Sofia. Many other localities have been recorded since, all over the country.

### 538. *Leucania comma comma* (LINNAEUS, 1761)\*

\* The first report for this species in Bulgaria, which is very common, sometimes abundant in the mountains, was by BACHMETJEV (1902: 79). However, REBEL (1903: 221) and BURESCH (1915: 68) considered the record to be doubtful. Subsequently reported again as a new species for Bulgaria by BURESCH (1915: 68) and by DRENOWSKI (?) (see also in BURESCH, 1924b: 20).

*Leucania zae zae* (DUPONCHEL, 1827)\*

\* *Leucania zae* (DUPONCHEL) has never been found in Bulgaria, but may well occur here. Known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 176, 537, map 508) and from Greece (HACKER, 1989: 138). Very likely to be found in the Bulgarian part of the Dobrogea or at the N Black Sea Coast.

### 539. *Leucania herrichi herrichi* HERRICH-SCHÄFFER, 1849\*

\* *Leucania herrichi* HERRICH-SCHÄFFER (pl. 9, fig. 4) is known in Bulgaria only from the E Rhodopi Mts: Momina Skala Chalet near Madzharovo town (BESHKOV, 1995a: 213) and Studen Kladenetz village (BESHKOV & GOATER, in press; GOATER, 1996: 272, 281).

### 540. *Leucania putrescens putrescens* (HÜBNER, [1824])

### 541. *Leucania punctosa punctosa* (TREITSCHKE, 1825)\*

= *Laconobia punctosa* (incorrect subsequent spelling and incorrect genus name)

\* The only records of *Leucania punctosa* (TREITSCHKE) for Bulgaria are from E Rhodopi Mts: Byalo Pole (= Belopolyane) village near Ivaylovgrad town, 180 m altitude, 21.IX.1995, 1 ♂, (pl. 9, fig. 5) S. BESHKOV

& B. GOATER leg., in coll. BESHKOV (gen. prep. 2./24.XI.1997, S. BESHKOV) and Momina Skala Chalet near Madzharovo town, 140 m, 22.IX.1994, S. BESHKOV leg. at sugar, 1 ♂ in coll. BESHKOV (BESHKOV & GASH-TAROV, in press).

Subgenus *Senta* STEPHENS, 1834

**542. *Leucania flammea flammea* CURTIS, 1828\***

= *stenoptera* STAUDINGER, 1892, nec REBEL, 1933

\* The only report of *Leucania (Senta) flammea* CURTIS for Bulgaria is from the S Black Sea Coast, near Kiten village, NW from Tzarevo (Mitchurin) town, 05.VIII.1985, 1 ♂ (KALLIES, 1990: 95). From the Balkan Peninsula, it is known from the Peninsula of Istria (HACKER, 1989: 140), several localities in the Danube Delta (POPESCU-GORJ, OLARU & DRAGHIA, 1972: 198; POPESCU-GORJ, 1985: 78; HACKER, 1989: 140), Republic of Serbia (ZECEVIC, 1996: 65), Serbia, Vojvodina, Lugovo (VAJGAND, 1995: 32 as *Meliana stenoptera*), and the southern part of the Romanian Dobrogea, Hagieni Forest between Albesti and Mangalia, close to the Bulgarian/Romanian border (STANESCU, 1993: 278). It will probably be found in other parts in Bulgaria.

Tribus Orthosiini GUENÉE, 1837

Genus *Orthosia* OCHSENHEIMER, 1816

= *Monima* HÜBNER, [1821]

= *Cuphanoa* HÜBNER, [1821]

= *Semiophora* STEPHENS, 1829

= *Taeniocampa* GUENÉE, 1839

= *Cororthosia* BERIO, 1980

= *Microrthosia* BERIO, 1980

= *Parorthosia* RÁKOSY, 1991

= *Dioszeghyana* HREBLAY, 1993

= *Poporthosia* BECK, 1996

Subgenus *Orthosia* OCHSENHEIMER, 1816

= *Taeniocampa* GUENÉE, 1839

= *Cororthosia* BERIO, 1980

**543. *Orthosia incerta incerta* (HUFNAGEL, 1766)**

= *incarta* (incorrect subsequent spelling)

= *fuscatus* HAWORTH, 1803

= *fuscata* (incorrect subsequent spelling)

Subgenus *Semiophora* STEPHENS, 1829

**544. *Orthosia gothica gothica* (LINNAEUS, 1758)**

= *gothicina* HERRICH-SCHÄFFER, [1849]\*

= f. *variegata* TUTT, 1892

= f. *rufescens* TUTT, 1892

= f. *brunnea* TUTT, 1892

\* The northern form *Taeniocampa gothica* var. *gothicina* H.-S. (type locality: Lapland) is wrongly reported for Bulgaria by CARADJA (1896) (see in REBEL, 1903: 224).

Subgenus *Microthosia* BERIO, 1980

**545. *Orthosia cruda cruda* ([DENIS & SCHIFFERMÜLLER], 1775)**  
= *pulverulenta* (ESPER, [1786])

Subgenus *Monima* HÜBNER, [1821]  
= *Cuphanoa* HÜBNER, [1821]  
= *Poporthosia* BECK, 1996

**546. *Orthosia miniosa miniosa* ([DENIS & SCHIFFERMÜLLER], 1775)**  
= *rubricosa* ESPER, [1786], nec [DENIS & SCHIFFERMÜLLER], 1775, auct.

**547. *Orthosia opima opima* (HÜBNER, [1809])\***

\* BACHMETJEV (1902: 436), following the unpublished manuscript of H. FIGULEV, reported *opima* HÜBNER, [1809] from Sliven and [Veliko] Tarnovo towns. According to REBEL (1903: 225), this report must be considered doubtful because of the absence of voucher specimens. Later, ILTCHEV (1913: 90, 103) reported it as a new species for Bulgaria and the Balkan Peninsula (as *Taeniocampa opima* Hb.) from Sredna Gora Mts, Stambolovo [Bodrovo] village. Many other localities in the country are now known.

**548. *Orthosia populeti populeti* (FABRICIUS, 1781)\***  
= *populi* (STRÖM, 1783)

\* The first report of *Orthosia populeti* (FABRICIUS) for Bulgaria was by SLIVOV (1976 [1977]: 64) from the Black Sea Coast, Varna town. However, it was already found, but not reported, due to misidentification; in the collection of the National Museum of Natural History (Sofia) there is one specimen with the label "*Orthodia ligula* Esp., caterpillar on *Populus tremulae*, found in Tcham Koriya [Borovetz Resort above Samokov Town, Rila Mts] on 7/20.VI.1915, pupated in a soil on 10/23.VI.1915, emerged on 28.II.1916" In fact this specimen is a ♂ of *Orthosia populeti* (FABRICIUS). A common species in Bulgaria, now known from many places in the country.

**549. *Orthosia cerasi cerasi* (FABRICIUS, 1775)**  
= *stabilis* ([DENIS & SCHIFFERMÜLLER], 1775)

*Orthosia dalmatina dalmatina* (F. WAGNER, 1909) / *Orthosia dalmatina ivani* GYULAI\*  
= *dalmatica* (incorrect subsequent spelling)  
= *stabilis* ([DENIS & SCHIFFERMÜLLER], 1775) auct.

\* *Orthosia dalmatina* (WAGNER) (pl. 9, fig. 7) in Bulgaria is tentatively claimed from Rhodopi Mts, Assenova Krepost above Assenovgrad town, 350 m altitude, ♂, leg. Z. KOLEV, genitalia checked (under magnification glass) (KOLEV, pers. comm.). It is very possible that this specimen has been confused with *Orthosia cerasi* (pl. 9, fig. 6) due to misidentification. The present author has never seen this species in Bulgaria, although it should occur there. Both subspecies are occurring in Greece.

Subgenus *Cororthosia* BERIO, 1980

**550. *Orthosia gracilis gracilis* ([DENIS & SCHIFFERMÜLLER], 1775)\***  
= *gracilis* F. (incorrect author's name)

\* KARNOSCHITZKY (1954: 178) reported *Orthosia gracilis* ([DENIS & SCHIFFERMÜLLER]) as a new species for Bulgaria from the districts of Varna town. SLIVOV (1976 [1977]: 64) examined the specimen of KARNOSCHITZKY and found that it was *Orthosia miniosa*. However, many other localities have been found recently all over the country. The present author has collected it in Kresna Gorge, Stara Kresna Railway Station in early June, and in March to April in several other localities.

Subgenus *Parorthosia* RÁKOSY, 1991

= *Dioszeghyana* HREBLAY, 1993

**551. *Orthosia schmidtii* (DIOSZEGHY, 1935) ssp. *pinkerii* HREBLAY & VARGA, 1993\***

\* *Orthosia schmidtii* (DIOSZEGHY) is known from several localities in the E Rhodopi Mts and from Sakar Mts, above Dossiteevo village (pl. 9, fig. 8) (BESHKOV, 1995a: 214, BESHKOV & GASHTAROV, in press). In E Rhodopi it is a locally abundant species at the end of April to the beginning of May. The larva from there is illustrated here in colour (col. pl. II, figs 12, 13). Another unpublished locality is "Kritschim bei Plovdiv, 03.IV.1935, Dr. Iw. BURESCH", single undetermined female specimen in the collection of the National Museum of Natural History, Sofia. From the neighbouring territories *Orthosia schmidtii* is known from Romania, Serbia and Greece. In appearance and in genital features (see figs 11–13 in BESHKOV, 1995a) our population is recognized here to belong to ssp. *pinkerii* HREBLAY & VARGA, 1993, described in HREBLAY (1993: 81) from West Turkey. The nominate *Orthosia schmidtii* is known from Romania, Slovakia and Hungary.

Genus *Panolis* HÜBNER, [1821]

**552. *Panolis flammea flammea* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *griseo-variegata* (GOEZE, 1781)

= *griseovariegata* (incorrect subsequent spelling)

= *piniperda* (LANG, 1782)

Genus *Egira* DUPONCHEL, 1845

= *Xylomyges* GUENÉE, 1852

**553. *Egira conspicillaris conspicillaris* (LINNAEUS, 1758)**

= *conspicillaria* (incorrect subsequent spelling)

= *conspicillaris* ab. *melaleuca* (VIEWEG, 1790)

= *conspicillaris* var. *intermedia* (TUTT, 1891)

**554. *Egira tibori tibori* HREBLAY, 1994\***

\* *Egira tibori* HREBLAY has been recently described as a new species (HREBLAY, 1994: 247–249) from the Asiatic part of Turkey (Asia Minor and Marash). Reported as a new species for Europe from Bulgaria, E Rhodopi Mts, Studen Kladenetz village and Yazovir Studen Kladenetz dam, Kroyatzi Hunt Chalet near Nanovitza village; from Bessaparskite Ridove Hills above Byaga village, Pazardzhik Region; from N Black Sea Coast, Belya Bryag Camping between Balchik and Kavarna and from Kresna Gorge, Stara Kresna Railway Station (BESHKOV, 1999). Recently found in E Rhodopi Mts, Byalo Pole (= Belopolyane) village near Ivaylovgrad town, 180 m, 28.IV.1997, 1 ♂ (genitalia with everted vesica checked) (BESHKOV & GASHTAROV, in press) and in Rhodopi Mts, Assenova Krepost above Assenovgrad town, 430 m, 10.IV.1999, S. BESHKOV & V. GASHTAROV leg. at light trap two male specimens (genitalia with everted vesicae examined, gen. figs 111, 112). Its presence in these localities suggests that *Egira tibori* HREBLAY, 1994

will probably be found in Greece, Republic of Macedonia and Romania, too. Distinguished from *Egira conspiciellaris* (LINNAEUS, 1758) (gen. fig. 110) with certainty only by differences in male genitalia, mainly in the everted vesica. At low altitudes in Bulgaria *Egira tabori* HREBLAY is almost always syntopic, sympatric and synchronic with *Egira conspiciellaris* (LINNAEUS, 1758).

#### 555. *Egira anatolica anatolica* (HERING, 1933)\*

\* *Egira anatolica* (HERING) (gen. figs 113–115) is known with certainty in Bulgaria from a single locality only: Rhodopi Mts., Assenova Krepost above Assenovgrad town, 430 m, 26.IV.1997 (pl. 9, figs 9, 10), S. BESHKOV, M. & K. BESHKOVI and D. VASSILEV leg. at 160W MVL, 25W black lamp and light trap, 2 ♂♂, gen. preps 1./18.V.1997 and 2./19.V.1997, S. BESHKOV, male genitalia with everted vesica and 1 ♀, gen. prep. 3./19.V.1997, S. BESHKOV. The same locality was visited twice more again: on 18.IV.1998 by S. BESHKOV, D. VASSILEV & T. YANAKIEV and on 10.IV.1999 by S. BESHKOV & V. GASHTAROV, both times using 160W MVL, 25W black lamp and light trap, and they collected many *Egira anatolica* specimens, all in coll. BESHKOV (BESHKOV & GASHTAROV, in press).

#### 556. *Egira bulgarica* BESHKOV, spec. nov.\*

\* A single specimen from Assenova Krepost above Assenovgrad town, 430 m shows a structure of the everted vesica, different from all other known *Egira* species. Although it is not good to describe a species only from a single individual, taking into account the differences between the taxa within the genus *Egira*, the differences found between *E. anatolica* and *Egira bulgarica* spec. nov. are good enough for the last one to be described as a distinct species. Moreover the differences are in the most conservative structure and in the new species there is one additional element. This specimen is described here as

#### *Egira bulgarica* spec. nov.

Description and differential diagnosis: Wingspan 38 mm. In appearance and size (pl. 9, fig. 11) very similar to the black forms of the females of *E. anatolica*. Male genitalia also shows no sufficient differences to those of *E. anatolica*. The main differences are in the structure of the everted vesica. In *Egira bulgarica* spec. nov. the everted vesica is similar to that of *E. anatolica*, but has 3 diverticula each with a big bulbous cornutus (gen. fig. 116) (Gen. prep. 1./19.V.1997, S. BESHKOV). In *Egira anatolica* (gen. figs 113–115) there are two diverticula only. The additional diverticula in *Egira bulgarica* spec. nov. goes out from the main tube of the vesica and is pointed upwards. This cannot be seen on the inclosed drawing, elaborated using genital structures in euparal under a cover glass.

In this locality have been collected also *Egira anatolica*, *Egira conspiciellaris* and *Egira tabori*. The same locality was visited twice again on 18.IV.1998 by S. BESHKOV, D. VASSILEV & T. YANAKIEV and on 10.IV.1999 by S. BESHKOV & V. GASHTAROV, both times using 160W MVL and 25W black lamp, but only *E. conspiciellaris*, *E. tabori* and *E. anatolica* were found. The author checked genitalia, including everted vesicas of nine *Egira* specimens from Central Anatolia (Cappadocia), 13.–17.V.1999, but the vesicas of all these specimens were with two diverticula only.

Holotype ♂ (pl. 9, fig. 11, gen. fig. 116) (gen. prep. 1./19.V.1997, S. BESHKOV): Rhodopi Mts, Assenova Krepost above Assenovgrad town, 430 m, 26.IV.1997, S. BESHKOV, M. & K. BESHKOVI and D. VASSILEV leg., in coll. S. BESHKOV in the National Museum of Natural History (Sofia). The holotype is bearing three labels: the first and second one a white paper with locality and the number of the genital slide, and the third one on red paper with the name of the taxon and the designation "Holotype"

Locus typicus (pl. 16, fig. 2): S Bulgaria, Rhodopi Mts, Assenova Krepost above Assenovgrad town, Plovdiv region, 430 m, limestone rocks with *Syringa*, *Carpinus*, *Fraxinus*, *Tilia*, *Carpinus*, etc.

Distribution: At the moment known only from the type locality.

Etymology: The new species is named after the country it is described from.

Genus *Perigrapha* LEDERER, 1857\*

\* The systematics of the genus *Perigrapha* follow HREBLAY (1996a).

Subgenus *Perigrapha* LEDERER, 1857557. *Perigrapha i-cinctum i-cinctum* ([DENIS & SCHIFFERMÜLLER], 1775)\*  
= *cincta* (FABRICIUS, 1787)

\* The first report for *Perigrapha i-cinctum* (as *Perigrapha cincta* F.) for Bulgaria was by BACHMETJEV (1902: 436) for Sliven town, following the unpublished manuscript of H. PIGULEV. According to REBEL (1903: 224), it seems to be have been mistaken with *Orthosia gothica*. BURESCH & TULESCHKOW (1932: 71, 134) also considered the report of BACHMETJEV (1902) to be doubtful. Later, BOCAROV (1959: 61) reported it from Lyulin Mts near Vladaya village. Some other records follow after that: Vitosha Mts: Minstroi Chalet, 1100 m (SLIVOV, 1990: 193) and "Dupkite" (VIHODCEVSKIJ & GOGOV, 1963: 231); Kyustendil town (GANEV, 1981: 79); Golo Bardo Mts (GANEV, 1984a: 40), Zemen Gorge, Skakavitza Railway Station (GANEV, 1983b: 91); Tcherven Bryag village, Dupnitsa district (I. STOYTCHEV, pers. comm.); Dragovishtitsa village, Kostinbrod district (D. KIRIAKOV, pers. comm.). All the confirmed localities of *Perigrapha i-cinctum* in Bulgaria are in W Bulgaria, south or west of Sofia.

Subgenus *Opacographa* HREBLAY, 1996558. *Perigrapha rorida rorida* (FRIVALDSZKY, 1835)\*

\* *P. rorida* FRIVALDSZKY, 1835 was described from Bulgaria (then part of Turkey): in the fruit gardens of the south slopes of Stara Planina Mts [type locality: Sliven town] (FRIVALDSZKY, 1835: 272, T. VII., 7). See also FRIVALDSZKY (1837b: 91) and REBEL (1903: 224–225). According to BURESCH & TULESCHKOW (1932: 135) "*rorida* is figured for the first time by FRIVALDSZKY in 1837 from specimens from S Bulgaria, and the foodplant of the larvae is *Paliurus australis*". In BERIO (1985: 335) Hungary is given as the locus typus, which is incorrect. According to HREBLAY (1996a: 74) *rorida* belongs to the genus *Perigrapha*. Widely distributed in the lowlands with its foodplant (*Paliurus*) in S Bulgaria, and common in many localities. Reported as well from Iskarski Prolom Gorge, Lakatnik Railway Station, 29.III.1966, 1 ♀ (SLIVOV, 1979: 38). This specimen, with the same collecting data and identification label, in the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences was examined by the present author and it turned out, that it is really a female one, but belonging to a completely different species and family; it belongs to *Dasycorsa modesta* (STAUDINGER, 1879) of the family Geometridae! From N Bulgaria *Perigrapha rorida* is known from the Black Sea Coast, Varna town (27.IV.1932, KARNOSCHITZKY leg., in coll. of KARNOSCHITZKY in the National Museum of Natural History, Sofia). Attracted to light and also to sugar. According to SLIVOV (1978b: 24) the foodplant of *rorida* is *Quercus*, but this is believed to be guesswork.

Subgenus *Anorthoa* BERIO, 1980559. *Perigrapha munda munda* ([DENIS & SCHIFFERMÜLLER], 1775) nec HUFNAGEL, 1766\*

\* *P. munda* [DENIS & SCHIFFERMÜLLER], 1775 was reported as a new species for Bulgaria by GOGOV & LOUKOV (1964: 153) from Iskarski Prolom Gorge near Lakatnik Railway Station. A very common species, now known from many other localities in Bulgaria.



Genus *Cerapteryx* CURTIS, 1833

**560. *Cerapteryx graminis graminis* (LINNAEUS, 1758)\***

= *gramminis* (incorrect subsequent spelling)

= *tricuspis* (ESPER, [1786])

= f. *rufa* TUTT, 1889

\* *Cerapteryx graminis* (LINNAEUS) is reported as new for Bulgaria from W Rhodopi Mts by MARKOWITSCH (1910: 87). REBEL (1916: 38) reported it from Rilski Manastir monastery. Later, MARKOWITSCH (1923: 134) again reported it as new for Bulgaria from W Rhodopi Mts. *Cerapteryx graminis* is a common species up to 2200 m altitude in the mountains of Bulgaria, but also collected by the present author at 250 m in an arid area (Bessaparskite Ridove Hills near Byaga village, Pazardzhik Region).

Genus *Tholera* HÜBNER, [1821]

= *Neuronion* HÜBNER, [1821]

= *Charaeas* STEPHENS, 1829

= *Epineuronion* REBEL, 1901

**561. *Tholera cespitis cespitis* ([DENIS & SCHIFFERMÜLLER], 1775)\***

\* The first report for *Tholera cespitis* ([DENIS & SCHIFFERMÜLLER]) in Bulgaria was by BACHNETJEW (1897: 198) for Sofia. In BURESCH & TULESCHKOW (1932: 71; 95), this common Bulgarian species was omitted, on the grounds that the collected materials from the previous reports are missing in the Royal Entomological Station in Sofia. *Tholera cespitis* is a species widely distributed in Bulgaria, but reported again as new for the country by GOGOV (1963: 240).

**562. *Tholera decimalis decimalis* (PODA, 1761)**

= *popularis* (FABRICIUS, 1775)

Genus *Eriopygodes* HAMPSON, 1905

**563. *Eriopygodes imbecilla imbecilla* (FABRICIUS, 1794)**

= *imbezilla* (incorrect subsequent spelling)

= f. *obscura* (F. HOFFM.)

= var. *rubra* (ZÜLLICH, 1936)\*

\* The type locality of *Mythimna imbecilla* var. *rubra* is in Bulgaria, Rila Mts at an altitude of 1800 m (ZÜLLICH, 1936: 53).

Genus *Lasionycta* AURIVILLIUS, 1892

= *Eriopygodes* HAMPSON, 1905, auct.

= *Lasionhada* BERIO, 1981

**564. *Lasionycta proxima proxima* (HÜBNER, [1809])**

= *ochrostigma* (EVERSMANN, 1842)

= *ochreostigma* (incorrect subsequent spelling)

Subfamily Noctuinae LATREILLE, 1809\*

\* The classification of the subfamily Noctuinae follows FIBIGER (1997b): Noctuidae Europeae, Vol. 3, Noctuinae III and NOWACKI & FIBIGER (1996), In: OLE KARSHOLT & JOSEF RAZOWSKI (eds.): The Lepidoptera of Europe.

Tribe Noctuini LATREILLE, 1809

Genus *Axylia* HÜBNER, [1821]  
= *Axylea* (incorrect subsequent spelling)

**565. *Axylia putris putris* (LINNAEUS, 1761)**

Genus *Basistriga* FIBIGER & LAFONTAINE, 1997\*  
= *Pseudochropleura* BECK, 1991 (nomen nudum)

\* This genus must be moved close to *Yigoga* (following it) (FIBIGER, pers. comm. 12.VII.2000).

**566. *Basistriga flammatra flammatra* ([DENIS & SCHIFFERMÜLLER], 1775)**

Genus *Albocosta* FIBIGER & LAFONTAINE, 1997\*  
= *Pseudochropleura* BECK, 1991 (nomen nudum)

\* This genus must also be moved close to *Yigoga* (following it) (FIBIGER, pers. comm. 12.VII.2000).

**567. *Albocosta musiva musiva* (HÜBNER, [1800–1803])\***

\* The first report of *Albocosta musiva* (HÜBNER) for Bulgaria was by CARADJA (1896), which according to REBEL (1903: 212) and to BURESCH & TULESCHKOW (1932: 71, 85) is wrong. At present, known in Bulgaria only from W Rhodopi Mts, Rhozhen Pass, D. KIRIAKOV leg. (GANEV, 1983e: 90) as a new species for Bulgaria, "Fichtenzone" (GANEV, 1984/3: 25), following his previous report and Shiroka Laka village (GANEV & BESCHKOV, 1987: 116).

Genus *Ochropleura* HÜBNER, [1821]

**568. *Ochropleura plecta plecta* (LINNAEUS, 1761)**

**569. *Ochropleura leucogaster leucogaster* (FREYER, [1831])\***

\* BACHMETJEV (1902: 461), following unpublished data of A. DRENOWSKI, reported *Ochropleura leucogaster* from Sofia town. According to REBEL (1903: 210) this report is doubtful. DRJANOVSKY (1904: 257) and BURESCH (1914a: 85) also reported it from Sofia town. According to DRJANOVSKY (1906: 114), *O. leucogaster* is wrongly reported for Vitosha Mts instead of *O. plecta*. The present author regards the reports for Sofia as correct: he has seen specimens from Sofia and from Bourgass towns, as well as from an additional locality, Rila Mts, Borovetz, 03.VIII.1936, BURESCH leg. in the collections of the National Museum of Natural History, Sofia. Later, TSCHORBADJIEV (1915: 4, 28) again reported it as a new species for Bulgaria. In BURESCH & TULESCHKOW (1932: 85), both these localities (Sofia and Bourgass) are given, as well as one more locality, Lyulin Mts above Knyazhevo village. Reported also from Pirin Mts, Spano Pole, 1800 m (REISSER & ZÜLLICH, 1934: 14) and from the Black Sea Coast: Slantchev Bryag Resort near Nessebar town (LEVY, 1968: 110) and Balchik town, N Black Sea Coast (CARADJA, 1932:

38). Very few other records follow, and it is a very rare species in Bulgaria. Probably in the past confused with *Ochropleura plecta* (L.). The two species can easily be distinguished by comparing the differences in male antennae: in *O. leucogaster* they are lighter with longer cilia, clearly visible without magnification.

Genus *Diarsia* HÜBNER, [1821]

= *Brunnarsia* BECK, 1996 (nomen nudum)

= *Rubarsia* BECK, 1996 (nomen nudum)

= *Menarsia* BECK, 1996 (nomen nudum)

570. *Diarsia mendica mendica* (FABRICIUS, 1775)\*

= *festiva* ([DENIS & SCHIFFERMÜLLER], 1775)

= *primulae* (ESPER, [1788])

= *dannehli* CORTI & DRAUDT, 1933

\* BACHMETJEV (1902: 430), following the unpublished manuscript of H. PIGULEV, reported *Diarsia mendica* from Sliven town (as *Agrotis festiva* Hb.). According to REBEL (1903: 210), this species does not occur in Bulgaria. Confirmed for Bulgaria by DRENOWSKI (1909b: 609; 1909c: 74) and by DRENOWSKY (1909a: 26). *Diarsia mendica mendica* (FABRICIUS, 1775) is widespread in the mountains of Bulgaria. SLIVOV (1972: 54) reported it from W Rhodopi, Smolyanski Ezera Chalet, 1500 m altitude "*Diarsia mendica dannehli* CORTI". Now, *dannehli* CORTI & DRAUDT, 1933 is considered to be merely a form of *Diarsia mendica mendica* (FABRICIUS, 1775), known in Bulgaria from Rila, Pirin, Belassitza, Rhodopi, Vitosha, Ossogovo and Stara Planina Mountains at altitudes between 950–1800 m. *Diarsia mendica mendica* (FABRICIUS, 1775) is recorded also from the Black Sea Coast, Varna town (SLIVOV, 1976 [1977]: 62), but the present author cannot believe that this relict species really occurs at the Black Sea Coast. The species reported in ABADJIEV (1997: 75) as *Discestra mendica* (FABRICIUS, 1775) must be *Diarsia mendica*.

*Diarsia dahlia dahlia* (HÜBNER, [1813])\*

= *dachlii* (incorrect subsequent spelling)

= *dahli* (incorrect subsequent spelling)

\* *Diarsia dahlia dahlia* (HÜBNER, [1813]) was wrongly reported from the districts of Russe town (KOWATSCHEW, 1898: 27; BACHMETJEV, 1902: 430; MARKOWITSCH, 1909a: 19), from Rila Mts (BACHMETJEV, 1907 182; DRENOWSKY leg., det. REBEL), from Razgrad town (MARKOWITSCH, 1909a: 19; MARKOVITCH, 1904: 230) and Belassitza Mts (TULESCHKOW, 1931a: 27 as new species for Bulgaria). Probably this species has been mistaken in the past with *Diarsia rubi* (VIEWEG, 1790). The DRENOWSKY specimen from Rila, although it was determined by REBEL, was re-determined in the Museum für Naturkunde in Berlin where it was stated to "belong to *Agrotis primulae* Esp." (BACHMETJEV, 1910a: 283). According to REBEL (1903: 210) and to BURESCH & TULESCHKOW (1932: 71, 83), *D. dahlia* does not occur in Bulgaria. The present author agrees. From the adjacent countries *Diarsia dahlia* is known from Serbia (ZECEVIC, 1996: 14, 60), Slovenia (BARTOL, CARNELUTTI & MICIELI, 1965: 70) and from Romania.

571. *Diarsia brunnea brunnea* ([DENIS & SCHIFFERMÜLLER], 1775)\*

= *brunnea* FABR. (incorrect author's name)

= f. *nigricans* LAMPRA, 1885

= f. *nigricans* HOMEYER (incorrect author's name)

= f. *rufa* TUTT, 1892

\* BACHMETJEV (1902: 430), following the unpublished manuscript of H. PIGULEV, reported *Diarsia brunnea* from Sliven, [Veliko] Tarnovo and Shipka. According to REBEL (1903: 212) and to BURESCH & TULESCHKOW (1932: 71, 83), these records are doubtful. Reported as a new species for Bulgaria from Rila Mts, Dolna Banya, 850 m altitude, August, 1935 (DRENOWSKI, 1936: 240). Again reported as a new species

for Bulgaria from Rila Mts, collected in 1905 (DRENOWSKI, 1939: 159). Later, Gogov (1963: 239) reported it again as a new species for Bulgaria. *Diarsia brunnea* is a very common species, known from Ossogovo, Stara Planina, Vitosha, Pirin, Rhodopi and Rila Mountains (BESHKOV, 1993: 379; BESHKOW, 1998: 242) at altitudes between 400–1900 m. Known also from Sandanski town in SW Bulgaria (FRANKE, 1989: 142). Reported also from Strandzha Mts and Black Sea Coast, Sozopol, Ahtopol, Gramatikovo and Zvezdets (SLIWOV, 1978a: 37). Some of the last localities require confirmation.

**572. *Diarsia rubi rubi* (VIEWEG, 1790)\***

= ab. *grisea* HORMUZAKI, 1916

= ab. *ochrea* HORMUZAKI, 1916

\* BACHMETJEV (1902: 430), following the unpublished manuscript of H. PIGULEV, reported *Diarsia rubi* from Sliven and Kotel towns. DRJANOVSKY (1904: 257) reported it from Sofia town. According to REBEL (1903: 210) both records are doubtful. DRJANOVSKY (1906: 104, 108) reported it from Vitosha Mts without locality from the low forest zone at an altitude of 600–800 m. Recently found in several localities in Bulgaria in two generations from May to September, including some at very low altitudes as Kresna Gorge (GANEV, 1985b: 87) and also at the Black Sea Coast (SLIWOV, 1978a: 37).

*Diarsia florida florida* (F. SCHMIDT, 1859)\*

\* *Diarsia florida* (F. SCHMIDT) is wrongly included for the Bulgarian fauna in NOWACKI & FIBIGER (1996: 283). It has never been found in the country. From the adjacent countries, *Diarsia florida* is reported from Serbia [Kosovo] (ZECEVIC, 1996: 60, following VULEVIC, 1988) and from Romania.

Genus **Noctua** LINNAEUS, 1758

= *Lampra* HÜBNER, [1821]

= *Euschesis* HÜBNER, [1821]

= *Paranoctua* BECK, KOBES & AHOLA, 1993

= *Latanoctua* BECK, KOBES & AHOLA, 1993

= *Internoctua* BECK, KOBES & AHOLA, 1993

= *Triphaena* HÜBNER, [1821] (preoccupied)

**573. *Noctua pronuba pronuba* (LINNAEUS, 1758)**

= *connuba* HÜBNER, 1822

= f. *innuba* TREITSCHKE, 1825, nec SCHMIDT, 1825

= *inuba* (incorrect subsequent spelling)

= f. *hoegei* HERRICH-SCHÄFFER, 1861

= f. *ochrea* TUTT, 1892

= f. *brunnea* TUTT, 1892

= f. *coerulescens* TUTT, 1892

= ab. *pallida* KAISER, 1919

*Noctua undosa undosa* (LEECH, 1889)\*

\* *Noctua undosa* (LEECH) was reported with a question mark for Serbia (ZECEVIC, 1996: 14, 59). It is a Japanese species (FIBIGER, 1993a: 71, 73), which cannot possibly inhabit Europe. Probably the specimen from Serbia is misidentified, or originated from elsewhere.

**574. *Noctua orbona orbona* (HUFNAGEL, 1766)**

= *subsequa* ([DENIS & SCHIFFERMÜLLER], 1775)

= *subsequa* (HÜBNER, [1803])

= *subsequa* (TREITSCHKE, 1825)

**575. *Noctua interposita interposita* (HÜBNER, 1790)\***= *consequa* HÜBNER, [1803]

\* VARGA & SLIVOV (1976 [1977]: 176) reported *Noctua interposita* (HÜBNER) as a new species for the Balkan Peninsula from Stara Planina Mts, "Karandila" above Sliven town, 1000 m altitude. However, the first report of *Noctua interposita* for the Balkan Peninsula is that of BARTOL, CARNELUTTI & MICIELI (1965: 71) from Slovenia. *Noctua interposita* is locally fairly common in Bulgaria. It flies from sea level up to 2376 m in the mountains (Central Stara Planina Mts, Botev Top, 20.VII.1994, S. BESHKOV leg.) and comes to light and sugar bait from May to late September. The reason it was recorded so recently from the Balkan Peninsula and Bulgaria is that in the past it was not separated from *Noctua orbona*.

**576. *Noctua comes comes* (HÜBNER, [1813])**= *orbona* FABRICIUS, 1787 (preoccupied)= *subsequa* auct., nec ([DENIS & SCHIFFERMÜLLER], 1775)= *consequa* CURTIS, nec HÜBNER, [1803]**577. *Noctua fimbriata fimbriata* (SCHREBER, 1759)**= *fimbria* LINNAEUS, 1767= *solani* FABRICIUS, 1787\*= *f. rufa* TUTT, 1892= *f. brunnea* TUTT, 1892

\* *Agrotis fimbria* L. tr. ab. *solani* F. was reported for Bulgaria by both ILTCHEV (1913: 87, 101) and TSCHORBADJIEV (1919: 186). Probably many of the specimens reported in the past as *Noctua fimbriata* belong to the closely related and recently described species *Noctua tirrenica*.

**578. *Noctua tirrenica tirrenica* (BIEBINGER, SPEIDEL & HANIGK, 1983)\***

\* *Noctua tirrenica* has been recorded in Bulgaria from SW Bulgaria, Ograzhden Mts, Yakovo village, 900–[1000]m (GANEV, 1985b: 87); SE Bulgaria, Sakar Mts, Driptchevo village (GANEV, 1987a: 102); Bessaparskite Ridove Hills, above Byaga village, Pazardzhik Region (GANEV & BESHKOV, 1987: 116); Black Sea Coast, Priseltsi village near Obzor town and Tzarevo [= Mitchurin] town (BESHKOV, 1992: 46); SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 19.VI.1988, 2 ♂♂ (genitalia checked, leg. and in coll. BESHKOV), idem, 13.IX.1995 (GOATER, 1996: 281); SW Bulgaria, Kresna Gorge, Peyo Yavorov Railway Station (LEHMANN, 1994: 281); SW Bulgaria, S Pirin Mts, Liljanovo village above Sandanski town, 500 m (EICHLER, HACKER & SPEIDEL, 1996: 268); "Gradishteto" between Nova Lovtcha and Paril villages, S Pirin Mts, 780 m altitude (BESHKOV & ABADJIEV leg., in coll. BESHKOV); Ograzhden Mts, below Tchurichene village, 670 m, 05.IX.1999, S. BESHKOV & D. VASSILEV leg. *Noctua tirrenica* seems to be not a rare species in the lowlands in Bulgaria. The limited number of known localities are due to confusion with the closely related species *Noctua fimbriata*.

**579. *Noctua janthina janthina* ([DENIS & SCHIFFERMÜLLER], 1775)\***= *ianthiana* Esp. (incorrect subsequent spelling and author's name)= *janthina* (incorrect subsequent spelling)

\* *janthina* ([DENIS & SCHIFFERMÜLLER], 1775) sensu auct. is a complex of three species: *janthina* ([DENIS & SCHIFFERMÜLLER], 1775), *janthe* (BORKHAUSEN, 1792) and *tertia* VON MENTZER, MOBERG & FIBIGER, 1991 (VON MENTZER, MOBERG & FIBIGER, 1991). They all occur in the country, but the most common species of them is the true *Noctua janthina*. In S Bulgaria *janthina* is sympatric with *tertia*, and probably some of the records for *janthina* here refer to *tertia*. It seems, that in SW Bulgaria, in the near surroundings of Petrich town, all this species are sympatric. See also under the other species of this complex.

**580. *Noctua janthe janthe* (BORKHAUSEN, 1792)\***

\* The present author has found six undetermined specimens of *Noctua janthe* in the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia), originating from SW Bulgaria, Belassitza Mts, 04.–05.VI.1977, AL. SLIVOV leg. The present author recently (IX.1997) collected two specimens of *Noctua janthe* at the Treska Gorge, Skopje Region in the Republic of Macedonia (pl. 9, fig. 12) and expects it in the Bulgarian part of Macedonia as well, from where indeed are the specimens of SLIVOV.

**581. *Noctua tertia tertia* VON MENTZER, MOBERG & FIBIGER, 1991\***

\* In Bulgaria *Noctua tertia* is known from SW Bulgaria, Volcanic Hill "Kozhouh" near Petrich town (type locality) (VON MENTZER, MOBERG & FIBIGER, 1991: 37–38); Rhodopi Mts, Assenova Krepost above Assenovgrad town (KOLEV, 1993: 45); Sandanski town in SW Bulgaria, 08.VIII.1988 (LEHMANN, 1994: 281); SW Bulgaria, S Pirin Mts, Liljanovo village above Sandanski town, 500 m altitude (EICHLER, HACKER & SPEIDEL, 1996: 268); Sofia town and SW Bulgaria, Rhozen near Melnik town (GOATER, 1996: 281); "Rhodopi Mts, Belovo, A. et J. MILDE leg.", in coll. of the National Museum of Natural History, Sofia, 1 ♀; S Pirin Mts, below "Olelyak", 1900 m, and Rhodopi Mts, Smolyanski Ezera Lakes, 1550 m (BESHKOV & NOWACKI, 1998: 50). Known also from N Bulgaria, Dryanovski Manastir monastery near Dryanovo, Veliko Tarnovo Region, S. BESHKOV & M. MARINOV leg. It seems to be widespread throughout Bulgaria, collected both at light and sugar. Known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 191, 547, map 564). Very possibly to be found in the Bulgarian part of the Dobrogea or at the N Black Sea Coast.

**582. *Noctua interjecta interjecta* (HÜBNER, [1803])**

Genus *Divaena* FIBIGER, 1993

= *Calonoctua* BECK, KOBES & AHOLA, 1993, nomen nudum

**583. *Divaena haywardi haywardi* (TAMS, 1926)\***

= *haywardi balcanica* (SLIVOV, 1985)

\* SLIVOV (1979: 36) reported *haywardi* (TAMS) as a new species from Bulgaria from Kresna Gorge, Stara Kresna Railway Station and from Rhodopi Mts, Polkovnik Serafimovo village, Smolyan Region. Now known from some more localities: Vitosha Mts, "Bounkera" near Sofia (GANEV, 1980: 78), Ossogovo Mts, between 500–700 m altitude (GANEV, 1983d: 64), near Sandanski town (BUSSE & OCKRUCK, 1991: 19), Sakar Mts, Driptchevo village (GANEV, 1987a: 102), Rozhen Pass in Rhodopes, 1450 m altitude (GANEV, 1985c), Tzegrilovtzi village, Tran district (GANEV, 1984a: 39), Iskretz village, Svoge district (BESHKOV & GASHTAROV, in press), Sarantzi village near Sofia (BESHKOV & NOWACKI, 1998: 50), E Rhodopi Mts, Studen Kladenetz village (BESHKOV & GASHTAROV, in press). The taxon *balcanica* (SLIVOV, 1985) is synonymized by both GANEV (1985: 181–182) and HACKER (1989: 69) with the nominate subspecies. *Divaena haywardi* flies from June to the middle of September and has been collected in Bulgaria both at sugar and at light.

Genus *Epilecta* HÜBNER, 1821

**584. *Epilecta linogrisea linogrisea* ([DENIS & SCHIFFERMÜLLER], 1775)**

Genus *Spaelotis* BOISDUVAL, 1840**585. *Spaelotis ravida ravida* ([DENIS & SCHIFFERMÜLLER], 1775)\***= *obscura* (BRAHM, 1790)

\* *Spaelotis ravida* ([DENIS & SCHIFFERMÜLLER]) is known in Bulgaria from the following localities: Sliven (REBEL, 1903: 211); Mussa Baba-Teke [= Samuil Railway Station], Razgrad Region (MARKOWITSCH, 1909a: 18); Rila Mts, Borovetz [Tcham-Koria] (DRENOWSKI, 1909c: 74) and a specimen in coll. National Museum of Natural History, Sofia, and Rila Mts up to 1400 m (DRENOWSKI, 1909a: 14; DRENOWSKI, 1910a: 83); Black Sea Coast, Bourgas town (TSCHORBADJIEV, 1915: 28—this specimen however, is present in the National Museum of Natural History (Sofia) and in fact belongs to *Euxoa conspicua conspicua* (HÜBNER, [1823–1824]); Lovetch town (IWANOV, 1926: 219; BURESCH & TULESCHKOW, 1932: 79); Sredna Gora Mts, Stambolovo [Bodrovo] village as *Agrotis obscura* (ILTCHIEV, 1913: 101); Stara Planina, Vitosha, Alibotoush [Slavyanka] Mts, Razgrad and Bourgas towns (DRENOWSKI, 1930a: 50); Vrana near Sofia town (BURESCH, 1914a: 85); Sofia town (BURESCH & TULESCHKOW, 1932: 79); Alibotoush [Slavyanka] Mts up to 1400 m altitude (DRENOWSKI, 1930c: 113; 1934a: 76); Ossogovo Mts and [Kyustendil] town (DRENOWSKI, 1939b: 43); Ossogovo Mts at altitudes 500–1000 m (GANEV, 1983d: 64); Vitosha Mts without exact locality (DRJANOVSKI, 1906: 104); Vitosha Mts, Bosnek village and Planinets Chalet (NESTOROVA, 1974: 229; SLIVOV, 1990: 191); Stara Zagora town (TULESKOV, 1965: 200); all along Black Sea Coast (SLIVOV, 1976 [1977]: 62); Strandzha Mts, Sozopol, Gramatikovo, Malko Tarnovo (SLIVOV, 1978a: 37); Balchik (CARADJA, 1931: 313); Balchik, Valea Ak-Bunar (POPESCU-GORJ, 1964: 160); Obratzov Tchiflik near Russe town, Kritchim town, Plovdiv region and Black Sea Coast, Varna town, several specimens in coll. National Museum of Natural History, Sofia; the high mountains of Bulgaria [Rila or Pirin?], without locality (GYULAI & VARGA, 1974: 209). Although it has been recorded from a large number of localities, *Spaelotis ravida* is a rare species in Bulgaria.

**586. *Spaelotis senna* (FREYER, [1829]) ssp. *contorta* (REBEL & ZERNY, 1931)\***

\* BACHMETJEV (1902: 429), following the unpublished manuscript of H. PIGULEV, reported *Spaelotis senna* from [Belovo] town. The same data are given in YURKEVICH (1904: 302). According to REBEL (1903: 210) and to BURESCH & TULESCHKOW (1932: 70, 79) this report is doubtful. In Bulgaria *Spaelotis senna contorta* is known from Ossogovo Mts, Ossogovo Chalet (GANEV, 1981: 79 as new for Bulgaria; GANEV, 1982b: 163; GANEV, 1983d: 64); Rhodopi Mts, Tchepelare (GANEV, 1982b: 163); Zemen Gorge, Skakavitza Railway Station (GANEV, 1983b: 91); Kostinbrod, Sofia Region (GYULAI, 1983: 204; MÉSZÁROS et al., 1984a: 68). However, there was a doubtful report for *Spaelotis senna* from the high mountains of Bulgaria [Rila or Pirin?], without any additional data (GYULAI & VARGA, 1974: 209).

Genus *Lycophotia* HÜBNER, [1821]= *Scotophila* STEPHENS, 1829= *Violaphotia* BECK, 1991= *Paucdraphia* BECK, 1991**587. *Lycophotia molothina molothina* (ESPER, 1789)\***

\* A single female specimen of *Lycophotia molothina* has been found in the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia). This specimen (gen. prep. 1./03.XII.1999, S. BESHKOV, gen. fig. 117) is bearing the label "Ivailovgrad, 13.V.1981, leg. AL. SLIVOV" (pl. 9, fig. 13). Mr SLIVOV was asked for more detailed information on the origin of this specimen, and he answered that the specimen was collected in a forestry between Ivaylovgrad and Kroumovgrad towns in East Rhodopi Mts. So far as the present author knows, its hostplant (*Calluna*) is not found there (I. GERASSIMOVA, pers. comm.), but its presence in that area seems believable (D. VASSILEV, pers. comm.). The present author thinks, that the specimen of SLIVOV is possibly the result of a mislabeling,

and checking of the locality mentioned above is necessary. *Lycophotia molothina* has never been found in Bulgaria before, nor in the Balkan Peninsula, and its presence there still needs confirmation. It was also included for Bulgaria in NOWACKI & FIBIGER (1996: 286) without any authentic record. HACKER (1996a: 248) reported *Lycophotia molothina* (ESPER) from SW Bulgaria, district of Sandanski town, he quoted as source for this data EICHLER et al. (1995). However, there is no mention of *L. molothina* in this article (EICHLER, HACKER & SPEIDEL, 1996, Esperiana 4), instead, there is a report about *Lycophotia porphyrea* ([D. & S.]).

**588. *Lycophotia porphyrea porphyrea* ([DENIS & SCHIFFERMÜLLER], 1775)\***

= *porphyrea* (incorrect subsequent spelling)

= *strigula* THUNBERG, 1792 (preocc.), nec ([DENIS & SCHIFFERMÜLLER], 1775), nec BORKHAUSEN, 1792

= *marmorea* GRASLIN, 1863

\* *Lycophotia porphyrea* ([DENIS & SCHIFFERMÜLLER]) is a mountain species in Bulgaria, known from Vitosha, Pirin, Stara Planina and Rila Mts at altitudes between 900–2000 m. According to BURESCH & TULESCHKOW (1932: 77) it is a glacial relict in Bulgaria. BESHKOV (1993: 379) and BESHKOV (1998: 242) also recognized it as a relict species in Bulgaria. However, it is known from low altitudes as well: Sofia [550 m] (DRENOWSKI, 1907: 11) as a new species for Bulgaria, Vitosha Mts, "Eichen- und Buchenwäldern" (DRENOWSKI, 1929b: 133) and Kroupnik village in SW Bulgaria [400 m] (SUVOV, 1979: 38). According to FIBIGER (1993a: 120), *Lycophotia porphyrea* is an atlantico-mediterranean species, never recorded outside Europe, and the larval foodplants are *Calluna* and *Erica*. In RÁKOSY (1996b: 192) another foodplant is given, *Bruckanthalia spiculifolia* [sic!] for the Karpathian Mts. In Bulgaria *Bruckanthalia spiculifolia* occurs only in the high parts of the mountains, from the *Fagus/Carpinus* zone up to the alpine zone, and probably it is the foodplant of *Lycophotia porphyrea* there; *Calluna vulgaris* and *Erica* are known in Bulgaria from regions where *L. porphyrea* has never been recorded. Perhaps the distribution of the foodplant is the reason why *L. porphyrea* is considered a boreo-montane relict species.

**Genus *Chersotis* BOISDUVAL, 1840**

= *Multsotis* BECK, 1991

= *Elesotis* BECK, 1991

= *Margasotis* BECK, 1991

= *Cupreosotis* BECK, 1991

= *Fimbriosotis* BECK, 1991

**589. *Chersotis rectangula rectangula* ([DENIS & SCHIFFERMÜLLER], 1775)\***

\* *Chersotis rectangula* ([DENIS & SCHIFFERMÜLLER]) is reported as a new species for Bulgaria by TULESCHKOW (1931a: 28; 1931b: 193) from Alibotoush [= Slavyanka] Mts in SW Bulgaria at an altitude of 1500[1700]m. However, it was already reported for the country (as "Rumelia", a part separated at that time from Bulgaria) in HAMPSON (1903: 447). Many other records followed after that from all over the country, from sea level up to 2200 m altitude in the mountains. According to SUVOV (1979: 37) it has two generations, the first one from the end of April to the beginning of June, and the second one from mid July to the end of August. The present author agrees with SUVOV (1979: 37). He also has collected specimens of *Chersotis rectangula* from late May (Sakar Mts, Dossiteevo village) to late September. According to FIBIGER (1993a: 43), the flight period is from late June to mid September.

**590. *Chersotis andereggii andereggii* (BOISDUVAL, [1837])\***

\* The first report of *Chersotis andereggii* (BOISDUVAL) from Bulgaria (Pirin Mts, Gotze Delchev Chalet, 1600 m, 04.VIII.1981) was by SUVOV (1984: 57), a record that was overlooked for many years. The present author checked the genitalia and everted vesica of this specimen (gen. prep. 1./09.III.1995, BESH-



kov) and confirmed that the identification by SLIVOV was correct (BESHKOV & SLIVOV, in press). Another locality (unpublished) is in the Rila Mts, Grantchar (= Boris Hadzhsotirov) chalet, 2200 m alt., 27.–29.VII.1975, one male specimen (pl. 9, fig. 14), leg., det. and in coll. AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia) (gen. prep. 1./23.XI.1999, S. BESHKOV, genitalia with everted vesica (gen. figs 118–120). These are the only specimens known to have been taken in Bulgaria. In the Balkan Peninsula it is reported also from Greece (HACKER, 1989: 58) and from Serbia (ZECEVIC, 1996: 59). In FIBIGER (1993a), the species is neither mentioned in the text nor marked on the distribution map for the Balkan Peninsula, including Bulgaria. *Chersotis andereggii* is also wrongly not included for Bulgaria in NOWACKI & FIBIGER (1996: 286).

*Chersotis ocellina ocellina* ([DENIS & SCHIFFERMÜLLER], 1775)\*

\* *Chersotis ocellina* is a species which has never been found in Bulgaria, nor in the Balkan Peninsula. According to FIBIGER (1993a: 45) its range is the Alps, Pyrenees and Cantabrian mountains. However, there is a single unconfirmed report for the Balkan Peninsula, Serbia [Kosovo, Titova (= Kosovska) Mitrovitza-Rasadnik, 17.VII.1977 (D. VAJGAND, pers. comm.)] (ZECEVIC, 1996: 59, following VULEVIC, 1988). If this report really refers to this species group, it is very possible that it concerns *Chersotis alpestris* (see under this species below), not *Chersotis ocellina*.

**591. *Chersotis alpestris* (BOISDUVAL, [1837]) ssp. *ponticola* (DRAUDT, 1936)\***

= *alpestris* (incorrect subsequent spelling)

\* A single male specimen of *Chersotis alpestris ponticola* (DRAUDT) has been found in the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia). This specimen (pl. 9, figs 15, 16) bears the label “Rila, h. Grancar, 27.–29.VII.1975, leg. AL. SLIVOV” [Grantchar (= Boris Hadzhsotirov) Chalet, 2200 m alt.], gen. prep. with everted vesica 1./30.XI.1999, S. BESHKOV (gen. figs 121–123). Mr SLIVOV was asked for more detailed information on the origin of this specimen, and he answered that the specimen was in fact collected in the locality mentioned above together with Z. VARGA. The specimen has another identification label “*Rhyacia elegans* Ev.?”; hand written [by Z. VARGA]. So far as the present author knows (from the type material of *Euchalcia variabilis fuscolivacea* VARGA & RONKAY, 1984) Z. VARGA has indeed collected there at that particular time. However, the present author thinks, that the specimen of SLIVOV is possibly the result of a mislabeling, and checking of the locality mentioned above is necessary. He is in doubt, that only a week before he picked up the specimen of SLIVOV for examination, he has seen that particular specimen with another label, but also from Bulgaria: “h. Skalnite Mostove” [Central Rhodopi Mts]. So far as the present author knows, Mr. SLIVOV has not been anywhere abroad to take this eastern taxon. In his collection there are some western and northern species, but there are no eastern ones. *Chersotis alpestris* has never been found before in Bulgaria, nor in the Balkan Peninsula, and its presence there still needs confirmation. The nominate *Chersotis alpestris alpestris* is known from the Alps, Appennines and the Pyrenees; ssp. *ponticola* occurs in south-east European Russia, Ural mountains, Caucasus area, Armenia, Kirghisia, Turkey, Syria and Iran (FIBIGER, 1993a: 47–48).

**592. *Chersotis multangula multangula* (HÜBNER, [1803])\***

= f. *dissoluta* STAUDINGER, 1899

= f. *travunia* SCHAWERDA, 1912

= *andreae* DUFAY, 1973

\* KARNOSCHITZKY (1954: 173) reported ab. *dissoluta* STGR. from the surroundings of Varna town, Black Sea Coast. However, in the collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, there is one specimen (Varna, 23.VI.1951) determined as *Ch. multangula*, which in fact is *Ch. rectangula*. *Chersotis multangula* (HÜBNER, [1803]) occurs in Bulgaria mainly in the mountains at altitudes of 800–1500 m. Collected by the present author also at the Black Sea Coast (pl. 9, fig. 18) (BESHKOV, 1990: 75) and in lowlands in N Bulgaria. *Chersotis multangula* specimens from Balchik, as

so many other species from this region, are coloured silverish, lighter than specimens from other the parts of the country.

**593. *Chersotis margaritacea margaritacea* (DE VILLERS, 1789)\***

= *margaritaceae* BKH. (incorrect spelling and author's name).

\* *Chersotis margaritacea* (DE VILLERS) is reported as a new species for Bulgaria by MARKOVITCH (1904: 230) and by MARKOWITSCH (1909a: 19) for the districts of Razgrad town. The reports of MANN (1866) and BACHMETJEV (1902: 430) for the Dobrogea follow the record of VON MALINOVSKY for Tulchea, Danube Delta. However, it was already reported for the country (as "Rumelia", a part separated from Bulgaria at that time) by HAMPSON (1903: 560). There have been reported many other more recent localities, from sea level at Varna town, KARNOSCHITZKY leg. (BURESCH & TULESCHKOW, 1932: 83) up to 1900 m in the mountains, S Pirin, "Orelyak" above Gotze Delchev town (BESHKOV & NOWACKI, 1998: 50). There is a specimen in coll. KARNOSCHITZKY in the National Museum of Natural History, Sofia, from Varna town, 27.V.1944, identified as *Chersotis margaritacea*, which is in fact *Platyperigea kadenii*. However, there is also a genuine specimen of *Chersotis margaritacea* collected from Varna town. The flight period of *Chersotis margaritacea* is from July to mid October.

**594. *Chersotis elegans elegans* (EVERSMANN, 1837)\***

= *grammiptera* RAMBUR, [1839]

= *cancelata* FREYER, [1839]

= *aragonensis* SCHWINGENSCHUSS, 1962

\* The reports of *Chersotis elegans* (EVERSMANN) by DRENOWSKI (1931b: 53), and BURESCH & TULESCHKOW (1932: 83), Alibotoush [Slavyanka] Planina Mts in SW. Bulgaria, 1450–1550 m altitude, and of DRENOWSKI (1934a: 76), Alibotoush [Slavyanka] Planina Mts up to 1400 m could refer to *Ch. elegans* or to *Ch. anatolica*, two closely related, previously not distinguished species; the present author has recently seen the latter species in some numbers near here (see below). The only authentic specimen of *C. elegans* captured in Bulgaria is from Vitosha Mts, Bulgarian Academy of Sciences Chalet, 1425 m altitude (pl. 10, fig. 1), VIHOĐEVSKY leg., in coll. Beshkov (BESHKOV & KOLEV, 1996: 98). There are also some reports for *Chersotis elegans* in the literature for the Republic of Macedonia. However, all specimens from this group, seen by the present author in the collection of Macedonian Museum of Natural History (Skopje), or collected by him, belong in fact to *Ch. anatolica*.

**595. *Chersotis anatolica anatolica* (DRAUDT, 1936)\***

= *elegantula* BOURSIN, 1945

= *elegans* sensu DUFAY, 1981

\* *Chersotis anatolica* (DRAUDT) is known in Bulgaria from two localities only: Rhodopi Mts, Rozhen National Astronomical Observatory, leg. and in coll. KOLEV (BESHKOV & KOLEV, 1996: 99), and recently, several specimens were also collected in S Pirin Mts, "Orelyak", 1900 m altitude (pl. 10, fig. 2), Gotze Delchev district (BESHKOV & NOWACKI, 1998: 50) (pl. 14, fig. 2). Also, all specimens from this group, seen by the present author in the collection of Macedonian Museum of Natural History (Skopje), or collected by him in the Republic of Macedonia, belong to *Ch. anatolica*.

**596. *Chersotis cuprea cuprea* ([DENIS & SCHIFFERMÜLLER], 1775)\***

= *Chersotis cuprea jordanovi* TOULECHKOFF, 1951\*\*

\* The first report of *Chersotis cuprea* ([DENIS & SCHIFFERMÜLLER]) for Bulgaria was by REBEL (1916: 38) from Rila Mts, "Bilsh bor" [= Bitchebor]. Known from Rila, Pirin, Slavyanka [= Alibotoush], Rhodopi, Vitosha, Ossogovo and Stara Planina Mountains at altitudes of 1400–2200 m.

\*\* GANEV (1985a: 129) correctly synonymized the taxon *jordanovi* TOULECHKOFF, 1951 (type locality: Greece, Mt Olympus, 1750 m) with *Ch. cuprea cuprea* ([DENIS & SCHIFFERMÜLLER], 1775).

**597. *Chersotis laeta* (REBEL, 1904) ssp. *macini* RÁKOSY, STANGELMAIER & WIESER, 1996\***

\* The previous reports for *Chersotis fimbriola* (ESPER, [1803]) from the Bulgarian Black Sea Coast, "Silberküste", Balchik and Valea Ak Bunar near Balchik, 5 ♀♀, collected between early June and early July by CARADJA (1930: 45 as *Agrotis fimbriola* var., male and female), quoted by CARADJA (1931: 314), POPESCU-GORJ (1964: 158), SLIVOV (1976 [1977]: 62) and HACKER & VARGA (1990: 290 as f. *rufa*), refer to *Chersotis laeta macini* according to RÁKOSY (1996b: 194). The present author has seen a coloured illustration of a specimen labelled "Balcic, Val. Ag-Bunar, 2.VII.930.I., Coll. A. OSTROGOVICH" received from M. STANESCU (Bucharest) (pl. 10, fig. 3) in a letter dated 31.VIII.1995. It resembles *Chersotis laeta macini* RÁKOSY, STANGELMAIER & WIESER, 1996 rather than *Chersotis fimbriola* (ESPER, [1803]). Other subspecies, *Chersotis laeta leonhardi* (REBEL, 1904) and *Chersotis laeta achaiana* THURNER, 1967, are known from other parts of the Balkan Peninsula (Republic of Macedonia, former Yugoslavia and Greece) and could be found in the mountains of SW Bulgaria. *C. laeta* is not listed for Bulgaria in NOWACKI & FIBIGER (1996: 287).

**598. *Chersotis fimbriola* (ESPER, [1803]) ssp. *forsteri* THURNER, 1964\***

\* *Chersotis fimbriola* (ESPER) was in the past probably wrongly reported from the Bulgarian Black Sea Coast (see under *Chersotis laeta macini*). The next reports for Bulgaria are based upon the same wrong records (POPESCU-GORJ, 1964: 158; SLIVOV, 1976 [1977]: 62, and HACKER & VARGA, 1990: 290 as f. *rufa*). In FIBIGER (1993a: 65) Bulgaria is not marked on the distribution map of the species. *Chersotis fimbriola* is also mentioned for Bulgaria in KOZHANTSHIKOV (1937: 295). Probably the source of the data of KOZHANTSHIKOV is not the record of CARADJA mentioned above, because at that time Balchik was in an area occupied by Romania. It is also included as a Bulgarian species in NOWACKI & FIBIGER (1996: 287) without any authentic record. The present author has seen a colour photograph of one specimen from the material examined by CARADJA, labelled "Balcic, Val. Ag-Bunar, 2.VII.930.I., Coll. A. OSTROGOVICH", received from M. STANESCU (Bucharest) in a letter dated 31.VIII.1995. On the picture, the specimen looks more like the recently described taxon *Chersotis laeta macini* RÁKOSY, STANGELMAIER & WIESER, 1996: 194. According to RÁKOSY (1996b: 194) the specimens from Balchik all belong to *Chersotis laeta macini*. *Chersotis fimbriola* (ESPER, [1803]) is known from the Romanian part of the Dobrogea (ssp. *niculescui* RÁKOSY, 1996), as well as from Greece, Republic of Macedonia, former Yugoslavia (Serbia, Kosovo, Montenegro and Hrvatska) and Albania (ssp. *forsteri* THURNER, 1964) and may be found in other parts of Bulgaria. However, until now there is only one (unpublished) authentic record of it within the present political borders of Bulgaria: SW Bulgaria, Pirin Mts, Yane Sandansky Chaler, 1200 m alt., 29.VII.1969, single female specimen (pl. 10, fig. 4) at lamp, leg., det. and in coll. of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences, Sofia (gen. prep. 1./22.XI.1999, S. BESHKOV, gen. fig. 124). This specimen should belong to ssp. *forsteri* THURNER, 1964. The taxon *Chersotis fimbriola bohatschi* (REBEL, 1904), listed for the Republic of Macedonia in HEINICKE (1965: 513) is not a European subspecies.

***Chersotis fimbriola niculescui* RÁKOSY, 1996\***

\* *Chersotis fimbriola niculescui* is a low altitude endemic subspecies, described from the Romanian part of the Dobrogea and its occurrence in the Bulgarian part of the Dobrogea or at the N Black Sea Coast seems very possible.

**Genus *Rhyacia* HÜBNER, [1821]**

= *Antirhyacia* BECK, 1991

**599. *Rhyacia simulans simulans* (HUFNAGEL, 1766)\***

= *similans* (incorrect subsequent spelling)

\* Probably some of the specimens, determined and reported from all over the country as *simulans* (Hufnagel), belong to the sister species *Rhyacia arenacea* (HAMPSON, 1907). Both species are sympatric in Troyanska Stara Planina Mts, Dermenkaya Chalet, 1530 m altitude (BESHKOV, 1995a: 215). These closely related species can be separated from each other with certainty only by taking into account the differences in the male (everted vesica) and female genitalia.

**600. *Rhyacia arenacea arenacea* (HAMPSON, 1907)\***

= *pseudosimulans* KOZHANTSHIKOV, 1929

\* Recently *Rhyacia arenacea* (HAMPSON) was reported as a new species for Bulgaria from the S Black Sea Coast, Tzarevo (= Mitchurin) town (LASTUVKA leg., coll. and det. FIBIGER), Troyanska Stara Planina Mts, Dermenkaya Chalet, 1530 m altitude and W Rhodopi Mts, Smolyanski Ezera Chalet, 1550 m altitude (BESHKOV, 1995a: 215). Probably many other specimens will be found among those of its sibling *Rhyacia simulans* (HUFNAGEL, 1766).

**601. *Rhyacia lucipeta lucipeta* ([DENIS & SCHIFFERMÜLLER], 1775)\***

\* The first reports for *Rhyacia lucipeta* ([DENIS & SCHIFFERMÜLLER]) in Bulgaria were by ZÜLLICH (1929: 49) from Rila Mts above Rilski Manastir monastery as a new species for Bulgaria and by DRENOWSKI (1930d: 180, 1930f: 22) from Vitosha Mts, east of Knjazhevo, also as a new species for Bulgaria. Many other localities have been recorded after that from all over the country, from high altitudes (Rila Mts, Mussala Chalet, 2500 m [2391 m])—(BURESCH & TULESCHKOW, 1932: 86—and a specimen collected by the present author) to the arid area in the lowlands below 200 m in S Bulgaria (Kresna Gorge and E Rhodopi Mts). The flight period is from the first half of June to the second half of October (E Rhodopi Mts, Yazovir Studen Kladenetz Dam, Sredna Arda Railway Station, 19.X.1990, S. BESHKOV leg.).

**Genus *Epipsilia* HÜBNER, [1821]**

= *Episilia* (incorrect subsequent spelling)

***Epipsilia latens latens* (HÜBNER, [1809])\***

= *lateus* (incorrect subsequent spelling)

\* *Epipsilia latens latens* (HÜBNER) has been reported in Bulgaria from Pirin Mts, Damyanitza Chalet, 1900 m altitude, at light (SLIVOV, 1973: 44; VARGA & SLIVOV, 1976 [1977]: 175), Pirin Mts, subalpine zone without exact locality (KARISCH, 1991: 350); Pirin Mts, Vihren Chalet (GYULAI, 1983: 204); Pirin Mts, Begovitza Chalet [1750 m] altitude (GANEV, 1985b: 87); Rila Mts, Grantchar (= Boris Hadzhisotirov) Chalet, 2200 m altitude (VARGA & SLIVOV, 1976 [1977]: 175; GYULAI, 1983: 204); Rila Mts, Malyovitza Chalet, 2050 m (SLIVOV, 1984: 57); Alibotoush [Slavyanka] Planina Mts (TULESCHKOW, 1931a: 27). According to FIBIGER (1993a: 22), *Epipsilia latens* (HÜBNER) does not occur in the Balkans. However, it is included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 287) and for Serbia in the list of ZECEVIC (1996: 58). Probably the reports of *Epipsilia latens* (HÜBNER) for Bulgaria and others Balkan countries are due to confusion with *Epipsilia cervantes vargai* FIBIGER, and also possibly with *Epipsilia grisescens* (FABRICIUS).

**602. *Epipsilia grisescens grisescens* (FABRICIUS, 1794)\***

= *grisescens* var. *albescens* (SOHN-RETHEL, 1929)

\* *Epipsilia grisescens grisescens* (FABRICIUS) was reported from Alibotoush (= Slavyanka) Mts, 2000 m altitude as new for Bulgaria (TULESCHKOW, 1931a: 28; 1931b: 193). Reported also from Pirin Mts, Vihren Chalet 1950 m (GOGOV, 1963), S Pirin Mts, above Popovi Livadi, "Orelyak", below the TV Tower of Gotze Delchev town, 1900 m altitude (BESHKOV & NOWACKI, 1998: 50); Vitosha Mts, BAN Chalet, 1450 m altitude (NESTOROVA, 1974: 229; SLIVOV, 1990: 191); Stara Planina Mts, Botev Top [2376 m] and

Central Rhodopi Mts, "Rhozhen" Pass (GANEV & BOCHAROV, 1982: 104); Ossogovo Mts, Ossogovo Chalet, 1640 m (GANEV, 1982b: 163); Rhodopi Mts, "Fichtenzone" (GANEV, 1984/3: 125) and above Trigrad village, 1300 m, S. BESHKOV & M. MARINOV leg. Probably some of the reports of *Epipsilia griseescens* in Bulgaria are mistakes for *Epipsilia cervantes vargai* FIBIGER. The present author found a single slide of a male genitalia in the collection of AL. SLIVOV with the label "Spirka Kresna, 24.VI.1981, leg. AL. SLIVOV" [SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, alt.] determined as *Rhyacia griseescens*. This genital armature belongs to an *Epipsilia* specimen, but it was not examined for a correct identification, because the present author thinks that it is a result of mislabeling.

**603. *Epipsilia cervantes* (REISSER, 1935) ssp. *vargai* FIBIGER, 1993\***

= *Epipsilia cervantes gyulaipetri* VARGA, 1975 (nomen nudum).\*\*

\* FIBIGER (1993a: 22) described *Epipsilia cervantes vargai* from Greece (type locality: Greece, Drama, Mt. Phalakron above Volas, 1700 m) and Bulgaria, Rila and Pirin Mts. At present, these are the only known localities of this taxon in Bulgaria. Known also from the Republic of Macedonia, Galichitza Mts, above Trapejca, 10.IX.1997, S. BESHKOV & V. GASHTAROV leg. (pl. 10, fig. 5), genitalia with everted vesica checked (gen. fig. 125). The nominate subspecies occurs in Central Spain.

\*\* VARGA (1975: 24–25) marked *Epipsilia cervantes gyulaipetri* VARGA (nomen nudum) for Bulgaria, N Greece and the Republic of Macedonia. According to FIBIGER (1993a: 22) *gyulaipetri* VARGA, 1975 (nomen nudum) is a synonym of *Epipsilia cervantes cervantes* (REISSER, 1935). It is actually a synonym of *Epipsilia cervantes vargai* FIBIGER, 1993.

Genus *Standfussiana* BOURSIN, 1946

**604. *Standfussiana dalmata dalmata* (STAUDINGER, 1901)\***

\* All reports for *Standfussiana nictymera* (BOISDUVAL) for Bulgaria, Alibotoush [Slavyanka] Planina Mts (see under that species) probably refer to *Standfussiana dalmata dalmata* (STAUDINGER, 1901). According to J. GANEV (pers. comm.), *Standfussiana dalmata* is the species which occurs in Bulgaria, in this locality. The present author has never seen a Bulgarian specimen of *S. dalmata/nictymera*. It may be also that the above mentioned reports refer to a form of the variable *Standfussiana lucerneae illyrica* (REBEL & ZERNY, 1931) (pl. 10, fig. 6). *Standfussiana dalmata dalmata* (STAUDINGER, 1901) is known only from Dalmatia, Bosnia and Herzegovina. In Dalmatia, it is sympatric with *Standfussiana nictymera nictymera* (BOISDUVAL). Recently reported from Albania, Lure (BESHKOV, MISJA & ABADJIEV, 1996: 645).

*Standfussiana nictymera nictymera* (BOISDUVAL, 1834)\*

= *nictymera* (incorrect subsequent spelling)

\* TULESCHKOW (1931a: 27) reported "*Agrotis nictymera* B." from Alibotoush [Slavyanka] Planina Mts. Later, DRENOWSKI (1934a: 76) also reported *Agrotis nictymera* B. from Alibotoush [Slavyanka] Planina Mts up to 1400 m altitude. These are the only records of *Standfussiana nictymera* from Bulgaria, and the present author thinks they are a mistake. He believes that *Standfussiana nictymera* has been wrongly reported instead of *Standfussiana dalmata dalmata* (STAUDINGER, 1901), a species which is more believable to be present in Alibotoush [Slavyanka] Planina Mts. It may be also that the above mentioned reports refer to a form of the variable *Standfussiana lucerneae illyrica* (REBEL & ZERNY, 1931) (pl. 10, fig. 6). In the next articles of both authors they reported that certain species, whereas *Standfussiana nictymera* is not mentioned furthermore neither for Alibotoush (both Bulgarian and Greek part of the mountain as well), nor for Bulgaria, which suggests the probability of a primary misidentification. See also under *S. dalmata*. However, *Standfussiana nictymera* has recently been reported from Serbia (ZECEVIC, 1996: 58). *Standfussiana nictymera nictymera* is known in the Balkan Peninsula from the Peninsula of Istria, from the Dinar Mts (MLADINOV & LORKOVIC, 1985: 24) and from the Dalmatian Coast (SVENDSEN & FIBIGER, 1992: 287). Very possibly some of these reports are also incorrect, due to confusion with *Standfussiana dalmata dalmata*, which according to FIBIGER (1990: 157, 195) and to

SVENDSEN & FIBIGER (1992) is sympatric with *Standfussiana nictymera nictymera* in Dalmatia. Recently *S. nictymera nictymera* is accepted to occur only in the Western Alps and the Central Massif (France) and ssp. *osmana* in Turkey (FIBIGER, pers. comm. 12.VII.2000). In Cyprus occurs ssp. *koinistra* NILSSON, SVENDSEN & FIBIGER (FIBIGER et al., 1999: 648).

**605. *Standfussiana lucerneae* (LINNAEUS, 1758) ssp. *illyrica* (REBEL & ZERNY, 1931)\***

= *lucernea illyricus* (incorrect subsequent spelling)

= *lucernea bureschi* TULESCHKOW, 1932\*\*

\* The first reports of the variable *Standfussiana lucerneae illyrica* (REBEL & ZERNY, 1931) (gen. fig. 126; pl. 10, fig. 6) for Bulgaria were by TULESCHKOW (1931a: 27) from Belassitza Mts as *Agrotis lucerneae* L. and by TULESCHKOW (1931b: 193) as *Agrotis lucerneae illirica* RBL. & ZERNY (det. REBEL) from Alibotoush [Slavyanka] Planina Mts. Recently found in some other mountains and localities, at altitudes from 1000 m (above Sliven Town, Z. KOLEV, pers. comm. VIII.1999) up to 2400 m. In some articles published in Bulgaria, *Standfussiana lucerneae illyrica* is wrongly regarded as a Balkan endemic taxon. Outside of the Balkan Peninsula it is known from the Near East and S Russia.

\*\* The type material of *Standfussiana lucerneae bureschi* (TULESCHKOW, 1932) is from Bulgaria, W Stara Planina Mts, below Martinova Tchouka Top, 1800 m altitude and/or below Midzhur Top, 1820 m altitude, and Belassitza Mts, below "Galabak (Alabak) Top, 1800 m altitude" [Radomir Top (= Kalabak Top)]. There are some differences concerning the type localities in the Bulgarian text and the German summary in the original description of TULESCHKOW (1932c). Reported again from Belassitza Mts and W Stara Planina Mts [below Martinova Tchouka Top, 1800 m altitude] (TULESCHKOW, 1932b: 29).

Genus *Paradiarsia* McDUNNOUGH, [1929]

= *Beckeugenia* BECK, 1996

**606. *Paradiarsia punicea punicea* (HÜBNER, [1803])\***

\* REBEL (1903: 211) reported *Agrotis punicea* Hb. from Sofia [more likely Vitosha Mts], DRENOWSKI leg., det. REBEL. DRJANOVSKY (1904: 257) reported a single specimen from Sofia town, August. DRJANOVSKY (1906: 104, 108) reported *punicea* from Vitosha Mts without exact locality, low forest zone at an altitude of 600–800 m; DRENOWSKI (1928a: 54, 105; 1929a: 87) again reported it from Vitosha Mts at an altitude of 500–1000 m. Another report from Vitosha Mts, "Eichen- und Buchenwäldern" is that of DRENOWSKI (1929b: 133). According to BURESCH & TULESCHKOW (1932: 79), the source for all this data is the original discovery by AL. DRENOWSKY, August, 1901. SLIVOV (1990: 191) again reported it from several localities in Vitosha Mts: Bosnek village, 900 m altitude; Selimitza Chalet, 1300 m altitude and Boeritza Chalet, 1700 m altitude. According to SLIVOV (pers. comm.) the origin of these data is the PhD thesis of Mrs. E. NESTOROVA-KVARTIRNIKOVA (1972). In the PhD thesis of Dr. NESTOROVA-KVARTIRNIKOVA for Vitosha Mts the common species *Diarsia mendica* (FABRICIUS, 1775) is not listed, and this suggests that the two species *Diarsia mendica* and *Paradiarsia punicea* are exchanged there, another case of misidentification. Maybe SLIVOV made the same mistake. There are no specimens of *Paradiarsia punicea* (HÜBNER, [1803]) in his collection. The present author has never seen this species in Bulgaria, and if there were not a specimen determined by H. REBEL, he would have deleted this species from the list of Bulgarian Noctuidae. However, misidentification seems very possible (see under *Diarsia dahlii*). By the way, the most suitable and likely locality for *P. punicea* in the Balkan Peninsula is indeed Vitosha Mts. Vitosha is the only credible locality for this damp moorland species in the Balkan Peninsula. In the Balkan Peninsula, *P. punicea* has also been reported from the Romanian Black Sea Coast (Techirghiol), a record which, according to RÁKOSY (1996: 198), and in the view of the present author is doubtful.

Genus *Eurois* HÜBNER, [1821]

**607. *Eurois occulta occulta* (LINNAEUS, 1758)\***

\* The first reports of *Eurois occulta* (LINNAEUS) for Bulgaria were by ZÜLLICH (1929: 49) from Rila Mts above Rilski Manastir monastery and by ZÜLLICH (1936: 52), also from Rila Mts at an altitude of 2000 m. Later, GOGOV & LOUKOV (1964: 152) again reported this as a new species for Bulgaria. It is not rare, and is widely distributed in the mountains at altitudes between 800 m and 2300 m.

Genus *Opigena* BOISDUVAL, 1840

**608. *Opigena polygona polygona* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *polygona* F. (incorrect subsequent spelling and author's name)

Genus *Graphiphora* OCHSENHEIMER, 1816

***Graphiphora augur* (FABRICIUS, 1775)\***

\* *Graphiphora augur* (FABRICIUS, 1775) was reported by BACHMETJEV (1902: 429), following the unpublished manuscript of H. PIGULEV, from Vidin and Razgrad towns. According to REBEL (1903: 210) and to BURESCH & TULESCHKOW (1932: 70, 79) the record is doubtful. The next report for Bulgaria is by MARKOVITCH (1904: 230), also for Razgrad town. The present author has never seen this species in Bulgaria and also considers both records to be doubtful. So far, there is no authentic record of this species in Bulgaria. From the adjacent countries known from Serbia (ZECEVIC, 1996: 14, 60) and from Romania. It is another species wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 288).

Genus *Eugnorisma* BOURSIN, 1946

= *Paradiarsia* McDUNNOUGH, [1929], aut.

Subgenus *Eugnorisma* BOURSIN, 1946

***Eugnorisma glareosa glareosa* (ESPER, [1788])\***

\* *Eugnorisma glareosa* (ESPER) has never been reported from Bulgaria. In the most recent literature (HACKER, 1989, 1990; FIBIGER, 1993a, 1997b; NOWACKI & FIBIGER, 1996; RÁKOSY, 1996b; NOWACKI, 1998), it is considered to be an atlantico-mediterranean species which does not occur in the Balkan Peninsula. However, it is reported (as *Paradiarsia glareosa* Esp.) from Yugoslavia, Serbia, Timocka Krajina, Rtnju, 02.VIII.1972 (ZECEVIC & RADOVANOVIC, 1974: 98). Although misidentification is possible, this record seems to be correct, and lately (ZECEVIC, 1996: 60) included it also in his list of Serbian Lepidoptera. The locality is close to the Bulgarian border, and *Eugnorisma glareosa* may be expected in Bulgaria. The other report the present author has found is that of MISJA (1976: 81) for Albania, Ibë (Tiranë). This report however is due to misidentification; the specimen reported there as *Paradiarsia glareosa* Esp. actually belong to *Praestilbia armeniaca* STGR. (S. BESHKOV revised). For the systematic position of *glareosa* (ESPER, [1788]) and its transfer to the genus *Eugnorisma* see FIBIGER (1997: 172).

Subgenus *Metagnorisma* VARGA & RONKAY, 1987

**609. *Eugnorisma pontica pontica* (STAUDINGER, 1892)\***

= f. *consenescens* STAUDINGER, 1891

\* *Eugnorisma pontica* (STAUDINGER) is known in Bulgaria from SW Bulgaria, Melnik-Rozhen as "*Eugnorisma pontica* STGR. (ssp.?)" (GYULAI, 1983: 204 as new for Bulgaria, and GOATER, 1996: 271–272); Melnik as *Eugnorisma pontica* (STAUDINGER, 1891) ssp. (MÉSZÁROS et al., 1984a: 67); W Bulgaria, Zemen Gorge, Skakavitsa Railway Station (GANEV, 1985b: 87; GANEV, 1987a: 102); Pirin Mts, "Sandanski" Chalet; SW Bulgaria, S. Pirin Mts, Liljanovo village above Sandanski town, 500 m (EICHLER, HACKER & SPEIDEL, 1996: 268) and Yane Sandanski Chalet [1250 m] (GANEV, 1987a: 102); NW Bulgaria, Belogradchik town (GANEV, 1987a: 102 and many specimens in the collection of J. GANEV in the National Museum of Natural History, Sofia); Kresna Gorge (GANEV, 1984a: 39; 1987a: 102); SW Bulgaria, Kroupnik, D. ILTCHEV leg., several specimens in coll. National Museum of Natural History, Sofia; W Stara Planina Mts, Lyulyaka Chalet, Kostinbrod districts (GANEV & BESHKOV, 1987: 116); Rhodopi Mts, "Vutcha-2" power station near Kritchim, 300 m altitude (KOLEV, 1993: 44); E Bulgaria, Sliven (two specimens from "Slivno" in the "coll. Princ. Bulg." in the National Museum of Natural History, Sofia, wrongly determined as *Eugnorisma depuncta* LINNAEUS). According to VARGA & RONKAY (1987) our population belongs to the nominate subspecies. *Eugnorisma pontica* is known from the Romanian part of the Dobrogea, very near to the Bulgarian/Romanian border (RÁKOSY, 1996b: 202, 551, map 589), and is very likely to occur in the Bulgarian part of the Dobrogea or at the N Black Sea Coast.

#### 610. *Eugnorisma depuncta depuncta* (LINNAEUS, 1761)

Genus *Xestia* HÜBNER, [1818]

= *Amathes* HÜBNER, [1821]

= *Segetia* STEPHENS, 1829

= *Hiptelia* GUENÉE, 1852

= *Pachnobia* GUENÉE, 1852

= *Platagrotis* SMITH, 1890

= *Cenigra* BECK, 1996

= *Ashworthia* BECK, 1996

= *Megarhomba* BECK, 1996

= *Castanasta* BECK, 1996

Subgenus *Anomogyna* STAUDINGER, 1871

#### 611. *Xestia speciosa speciosa* (HÜBNER, [1813])\*

\* BACHMETJEV (1902: 430), following the unpublished manuscript of H. PIGULEV, reported *Agrotis speciosa* Hb. from Sliven town. The same data are given in YURKEVICH (1904: 302). According to REBEL (1903: 210) and to BURESCH & TULESCHKOW (1932: 71, 80) the record is doubtful. Known from Rila Mts above Rilski Manastir monastery (ZÜLLICH, 1929: 49) as a species new for Bulgaria; Rila Mts without exact locality (ZÜLLICH, 1936: 52); some other, still unpublished localities in Rila Mts at altitudes up to 2050 m (ex coll. STOYTCHEV); Pirin Mts: Gotze Delchev Chalet, 1900 m, 30.VII.1970 (unpublished, leg. and in coll. AL. SLIVOV), and from Begovitza Chalet, 1750 m (LEHMANN, 1990: 128). In the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences, there is a specimen with a label from Rhodopi Mts, Studenetz Chalet, 1700 m, 17.–18.VII.1980. WARNECKE & HOLDHAUS (1954: 393) reported *speciosa* from "Alibotusch planina in Mazedonien" BERON (1969: 121) included *speciosa* as a boreo-alpine species in his list, and following WARNECKE & HOLDHAUS (1954) also reported it from Alibotoush Mts. As far as the present author knows, *speciosa* has never been found or reported before from Alibotoush Mts, and the source of the data of WARNECKE & HOLDHAUS (1954: 393) for this area is unclear to him.



*Xestia viridescens viridescens* (TURATI, 1919)\*

\* *Xestia viridescens* is a sister taxon to *Xestia speciosa*, on the Balkan Peninsula known from Montenegro. Its occurrence in Bulgaria seems possible. In the Alps both taxa occur sympatrically (FIBIGER, 1997b: 179).

*Xestia alpicola alpicola* (ZETTERSTEDT, [1839])\*  
 = *hyperborea* ZETTERSTEDT, [1839])

\* BACHMETJEV (1902: 430), following the unpublished manuscript of H. FIGULEV, reported *Agrotis hyperborea* ZETT. from Sliven town. According to REBEL (1903: 210) and to BURESCH & TULESCHKOW (1932: 71, 80) this record is doubtful, and this is also the opinion of the present author. *Xestia alpicola* (= *hyperborea*) has a boreoalpine distribution in Europe, and the nearest localities to Bulgaria are in the eastern Alps and in Slovakia—ssp. *carnica* (HERING, 1846).

Subgenus *Megasema* HÜBNER, [1821]**612. *Xestia c-nigrum c-nigrum* (LINNAEUS, 1758)**

- = *c-nigrum* (incorrect subsequent spelling)
- = *c. nigrum* (incorrect subsequent spelling)
- = f. *degenerata* STAUDINGER, 1889
- = ab. *nigrescens* BURESCH, 1915\*

\* The correct year of the description of *Agrotis c-nigrum* ab. *nigrescens* BURESCH (type locality: Bulgaria, Sofia) is 1915 (BURESCH, 1915: 72); In FIBIGER (1993a: 156) the year of the description is wrongly given as 1914.

**613. *Xestia ditrapezium ditrapezium* ([DENIS & SCHIFFERMÜLLER], 1775)\***

- = *ditrapetium* (incorrect subsequent spelling)

\* BACHMETJEV (1902: 430), following the unpublished manuscript of H. FIGULEV, reported *Agrotis ditrapezium* BKH. from Samokov and [Belovo] towns. According to REBEL (1903: 210) and to BURESCH & TULESCHKOW (1932: 70, 82) the record is doubtful. KARNOSCHITZKY (1954: 172–173) and SLIVOV (1967: 63), following the record of KARNOSCHITZKY, reported a single specimen from the surroundings of Varna town, Black Sea Coast, 11.X.1933. The present author checked the whole collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, and could find no specimen of *X. ditrapezium*. The specimen reported by VIHODCEVSKY (1958: 359) from Vitosha Mts, BAN chalet, 1420 m altitude is *Diarsia brunnea* ([DENIS & SCHIFFERMÜLLER], 1775) (GANEV & BOCHAROV, 1982: 105); it is in the collection of S. BESHKOV. Other specimens in the collection of N. VIHODCEVSKY in the National Museum of Natural History, Sofia, from Vitosha Mts, BAN Chalet, 1450 m, July, 27.1959, identified as *Agrotis ditrapezium* are in fact *Xestia triangulum*. The reports of SLIVOV (1990: 192) and of NESTOROVA-KVARTIRNIKOVA (1972) for Vitosha Mts are based on the incorrect data of VIHODCEVSKY (1958: 359). There is another report by SLIVOV (1978a: 37) for Strandzha Mts, Gramatikovo and Malko Tarnovo. However, in this article the more common species *X. triangulum* is not included for Strandzha Mts, which suggests another case of misidentification. The only authentic Bulgarian *X. ditrapezium* seen by the present author are nine specimens from the collection of AL. SLIVOV with localities as follows: Vitosha Mts, Bounkera, 10 km from Sofia, 13.VII.1979, ♂, J. GANEV leg.; Pobit Kamak [Sofia Region], 09.VII.1958, ♂, H. Loukov leg.; NW Bulgaria, Belogradtchik town, 24.VII.1964, ♂, K. TOULESHKOV leg.; SW Bulgaria, Kresna, 04.VII.1961, ♂, D. Gogov leg.; NE Bulgaria, "Palamara" near Ispirih, 07.–09.VI.1976, ♀, AL. Slivov leg.; S Black Sea Coast, "Ahtopol-Veleka, 16.VI.1968, [on] *Quercus*", ♀, AL. Slivov leg.; Strandzha Mts, Zvezdetz town, 21.–22.VII.1973, ♂, Gramatikovo village, 19.–20.VII.1973, ♀, AL. Slivov leg. and Malko Tarnovo town, 22.VI.1975, ♀, E. NESTOROVA leg. From the neighbouring countries the occurrence of

*X. ditrapezium* is confirmed from Romania, the Republic of Macedonia, Serbia and Croatia. The localities mentioned above suggest that it could also occur in Greece and in European Turkey.

**614. *Xestia triangulum triangulum* (HUFNAGEL, 1766)\***

= *rhomboidea* (ESPER, 1790)

= *sigma* Esper, [1796], nec ([DENIS & SCHIFFERMÜLLER], 1775

= *sigma* HÜBNER (incorrect author's name)

= *intermedia* TUTT, 1892

\* *Xestia triangulum* (HUFNAGEL) is wrongly excluded for Bulgaria in the list of NOWACKI & FIBIGER (1996: 289). It is a common species in Bulgaria, widely distributed from sea level up to high altitudes in the mountains. The specimens in the collection of N. VIHODCEVSKY in the National Museum of Natural History, Sofia, from Vitosha Mts, BAN Chalet, 1450 m, July, 27.1959, identified as *Agrotis ditrapezium* are in fact *Xestia triangulum*. For the synonymy between *triangulum* HUFNAGEL and *rhomboidea* ESPEER see HACKER (1998b: 461).

**615. *Xestia ashworthii* (DOUBLEDAY, 1855) ssp. *candelarum* (STAUDINGER, 1871)\***

= *ashwortii candelarum* (incorrect spelling)

= var. *signata* STAUDINGER, 1871\*\*

\* *Xestia ashworthii candelarum* (STAUDINGER, 1871) was reported as new for Bulgaria by both DRENOWSKI (1931a: 17; 1931b: 53) and TULESCHKOW (1931a: 27; 1931b: 193) from Alibotoush [= Slav-yanka] Mts in SW Bulgaria. Now it is known from most of the Bulgarian mountains: Ossogovo, Slav-yanka [= Alibotoush], Stara Planina, Pirin, Rhodopi and Vitosha Mountains up to 1950–2100 m altitude. However, it has never been reported from Rila Mts. Known also from Kresna Gorge in July (coll. KIRIAKOV) (GANEV, 1985b: 87).

\*\* REBEL (1903: 211) and DRENOWSKI (1930a: 14) reported *Agrotis candelarum* STGR. var. *signata* STGR. from the Black Sea Coast, Varna town and from the Dobrogea. However, the locality in the Dobrogea is Tulchea, the Danube Delta (REBEL, 1903: 211).

Subgenus *Xestia* HÜBNER, [1818]

**616. *Xestia baja baja* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *tricomma* (ESPER, [1791])

= *baja* ssp. *bajula* STAUDINGER, 1881, auct.\*

= f. *grisea* TUTT, 1892

\* In HORMUZAKI (1916: 411) "*Agrotis baja* var. *Bajula* STGR." is reported from Bukowina, Romania. *Xestia baja bajula* STAUDINGER, 1881 is a taxon which has never been found in Europe. According to FIBIGER (1993: 165) it is an eastern subspecies of the nominate *X. baja*, occurring in Central Asia and eastwards. In POOLE (1989: 995) *bajula* STAUDINGER is given as a synonym of *X. baja baja*.

**617. *Xestia stigmatica stigmatica* (HÜBNER, [1809–1813])\***

= *stigmata* (incorrect spelling)

= *Stig-mata* (incorrect spelling)

= *rhomboidea* sensu auct. nec ESPEER, [1790]

\* *Xestia stigmatica* (HÜBNER) was reported as a new species for Bulgaria as *Agrotis stig-mata* Hb. by TSCHORBADJIEV (1924: 25) from Pirin Mts. Many other localities, mostly in the mountains, but from low altitudes as well (e.g. 400 m) are now known for this quite common Bulgarian species. For the synonymy between *stigmatica* HÜBNER and *rhomboidea* sensu auct. see HACKER (1998b: 461) and FIBIGER & HACKER (1998: 23).

*Xestia trifida trifida* (FISCHER VON WALDHEIM, 1820)\*

\* *Xestia trifida* (FISCHER VON WALDHEIM) has never been found in Bulgaria. Known from the Romanian part of the Dobrogea (Hagieni), very close to the Bulgarian/Romanian border (NEUMANN & VARGA, 1995: 191; RÁKOSY, 1996b: 205, 552, map 599). Very possibly to be found in the Bulgarian part of the Dobrogea or at the N Black Sea Coast.

**618. *Xestia castanea castanea* (ESPER, [1798])**

= *neglecta* (HÜBNER, [1800–1803])

**619. *Xestia ochreago ochreago* (HÜBNER, [1808–1809])\***

\* *Xestia ochreago* (HÜBNER, [1809]) was reported from the Black Sea Coast, the districts of Bourgass town, worn specimens at the end of October (TSCHORBADJIEV, 1915: 32), and by DRENOWSKI (1930e: 184; 1931c: 147), following the above mentioned report of TSCHORBADJIEV. According to BURESCH & TULESCHKOW (1932: 136) this report is due to misidentification, the altitude and flight period being quite wrong. The present author agrees. Very likely these reports concern species from another genus, for example from the genera *Xanthia* or *Agrochola*. *Xestia ochreago* (HÜBNER) is known from the mountains at high altitudes and its flight period is from July to September. The first correct report for this species in Bulgaria (as *Hiptelia ochreago* Hb.) was by DRENOWSKI (1925: 56, 118) from Rila Mts at an altitude of 1500–1800 m.

**620. *Xestia collina collina* (BOISDUVAL, 1840)\***

\* *Xestia collina* (BOISDUVAL, 1840) is first mentioned for Bulgaria in KOZHANTSHIKOV (1937: 179) without given source of this data. It is also included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 289). From the Balkan Peninsula there is also another unconfirmed report from the Romanian part of the Dobrogea near the Black Sea Coast (RÁKOSY, 1996b: 553, map 602). Except for the data above, *Xestia collina* (BOISDUVAL, 1840) has never been published in the faunistic literature for Bulgaria. In the most recent literature, e.g. HACKER (1989, 1990), FIBIGER (1993a, 1997b) the species is neither mentioned nor marked for the Balkan Peninsula. However, in the faunistic literature there are reports from Yugoslavia, Serbia, Timocka Krajina (without locality) (ZECEVIC & RADOVANOVIC, 1974: 98; ZECEVIC, 1996: 60). This area is near to the Bulgarian border. *Xestia collina* is known also from Slovenia (CARNELUTTI, 1989: 5). The present author found one female specimen with the label “Rhodopy, Kostenetz, 1500 m, 18.VII.1933, Kr. TULESCHKOW” and determined as “*Agrotis collina* B.” in the collection of the National Museum of Natural History, Sofia. This specimen (pl. 10, fig. 7) is correctly identified (gen. prep. 8./22.VI.1998, S. BESHKOV, gen. fig. 127), and it is the first authentic record for Bulgaria, confirming the occurrence of the species in the Balkan Peninsula. However, the collecting locality is situated in the Rila Mts, not in “Rhodopy”, as written on the label by Kr. TULESCHKOW.

**621. *Xestia xanthographa xanthographa* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *xanthographa* (incorrect subsequent spelling)

= f. *rufa* TUTT, 1892

**622. *Xestia cohaesa cohaesa* (HERRICH-SCHÄFFER, [1849])\***

= *pulverea* (HAMPSON, 1903)\*\*

\* *Xestia cohaesa* (HERRICH-SCHÄFFER) is known at present only from S Bulgaria, as well as from the Northern Black Sea Coast as follows: SW Bulgaria: Melnik-Rozhen and Kresna Gorge (GYULAI, 1983: 205, as a new species for Bulgaria; MÉSZÁROS et al., 1984a: 68); SW Bulgaria, “Rupite” near Volcanic Hill Kozhouh, Petrich district (GANEV, 1984b: 133; GANEV, 1984a: 39); SW Bulgaria, Ograzhden Mts Tchuritchene village, 600 m altitude (GANEV, 1984a: 39); W Bulgaria, Zemen Gorge, Skakavitzia Railway Station (GANEV, 1985b: 87); SW Bulgaria, Pirin Mts, Popina Laka, 900 m (BUSSE & OCKRUCK, 1991: 10, 15, 19); Melnik (GOATER, 1996: 271, 281); SE Bulgaria, Sakar Mts, Driptchevo village (GANEV, 1987a: 102); E Rhodopi Mts, Momina Skala Chalet near Madzharovo town, Meden Bouk and Byalo Pole

(= Belopolyane) villages (GOATER, 1996: 281) and many other, still unpublished localities in the E Rhodopi Mts. However, the first report for Bulgaria (as *Rhyacia pulverea* Hps.) is that of BOURSIN (1940: 90) from the N Black Sea Coast, Varna town and from SW Bulgaria: Maleshevska Planina Mts. near Krupnik and Kresna Gorge. Known from the Romanian part of the Dobrogea (Hagieni), near the Bulgarian/Romanian border (RÁKOSY, 1996b: 206, 553, map 605). It is very likely to be discovered in N Bulgaria as well (Bulgarian part of the Dobrogea or in other localities at the N Black Sea Coast).

\*\* The first report of *pulverea* (HAMPSON, 1903) for Bulgaria (as *Rhyacia pulverea* Hps.) is that of BOURSIN (1940: 90) from the N Black Sea Coast, Varna town and from SW Bulgaria: Maleshevska Planina Mts near Krupnik and Kresna Gorge. According to FIBIGER (1993b: 124; 1997: 197) the taxon *pulverea* HAMPSON is a synonym of *Xestia cohaesa cohaesa*. The taxon described as "*Xestia (Xestia) cohaesa pulverea* (HAMPSON, 1903), stat. rev." in FIBIGER (1993a: 176) (Noctuidae Europeae 2, Noctuidae II) was subsequently described as new subspecies: *Xestia (Xestia) cohaesa lineata* FIBIGER, 1997 (FIBIGER, 1997: 197). At present it is known only from Crimea, Dagestan and Turkmenistan (FIBIGER, 1997: 197).

### Genus *Eugraphe* HÜBNER, [1821]

#### 623. *Eugraphe sigma sigma* ([DENIS & SCHIFFERMÜLLER], 1775)\*

= *signum* (FABRICIUS, 1787)

\* BACHMETJEV (1897: 198; 1898: 37) reported *Eugraphe sigma* from Kokalyanski Manastir monastery, Sofia Region. BACHMETJEV (1902: 429), following the unpublished manuscript of H. PIGULEV, reported it from Sliven town. Both these localities are given in REBEL (1903: 210) and in BURESCH & TULESCHKOW (1932: 77). In Bulgaria, *Eugraphe sigma* is known from Vitosha Mts without exact locality (DRJANOVSKY, 1906: 104; DRENOWSKI, 1930a: 13); Sofia; Sliven town; Vitosha Mts "Shantzata" (VIHODCEVSKIY & GOGOV, 1963: 229), "Turskiya Pat", 800–1000 m, Ostritza Chalet (SLIVOV, 1990: 191); Stara Planina Mts, Etropole Monastery, Ribaritza, Berkovitza, Karandila above Sliven town, Teteven (SLIVOV & LUKOV, 1976 [1977]: 237) and "Palamara" near Shoumen Town (AL. SLIVOV, unpublished data). NIKOLOVA (1967: 116) reported *Rhyacia signum* F. as a harmful species in plantations of *Rosa damascena* MILL. in Bulgaria without giving localities. According to her, the moth flies in October and the larva feeds also on other *Rosa* spp., *Alnus* spp. and *Prunus spinosa* and pupates in the soil in September. The present author considers this report to be dubious because of the wrongly given flight period.

### Genus *Cerastis* OCHSENHEIMER, 1816\*

= *Pachnobia* auct.

= *Gypsitesa* TAMS, 1939

= *Sora* HEINEMANN, 1859 (junior homonym of *Sora* WALKER, 1859)

\* *leucographa* ([DENIS & SCHIFFERMÜLLER], 1775), which is the type species of *Gypsitesa* TAMS, 1939, shows some important differences on a subgeneric level in female genitalia and in the everted vesica in the males, as well as in the immature stages with regard to *Cerastis rubricosa* ([DENIS & SCHIFFERMÜLLER], 1775) (type species of *Cerastis* OCHSENHEIMER, 1816). This was the reason why *leucographa* is placed in an own genus or subgenus by some authors. Original this (subgenus) was also the opinion of the present author, but after consultation with M. FIBIGER (12.VII.2000) *Cerastis* is recognized here as monophyletic. However, it cannot be accepted as a subgenus according to differences in the vesica. If this is done in *Cerastis*, it would become paraphyletic.

#### 624. *Cerastis rubricosa rubricosa* ([DENIS & SCHIFFERMÜLLER], 1775)\*

= *rubricolis* F. (incorrect subsequent spelling and author's name)

= *rufa* HAWORTH, 1803

\* In the past there were very few reports and many discussions and doubts about the presence of *Cerastis rubricosa* ([DENIS & SCHIFFERMÜLLER]) in Bulgaria. Maybe the reason for this confusion was the early flight period of this species. The first report for Bulgaria seems to be that of STAUDINGER & REBEL (1901) (without exact locality), quoted by BACHMETJEV (1902: 461). According to REBEL (1903: 214) these data originated from the report of HABERHAUER for Sliven town, however, without any specimen for evidence. This is the reason why *Cerastis rubricosa* was not included in BURESCH & TULESCHKOW (1932: 71; 95) as well. This very common, in Bulgaria widely distributed and locally abundant spring species was reported as a new species for the country by GOGOV (1963: 239). Later, VIHODCEVSKIJ (1970: 55) again reported *rubricosa* as a "confirmed" species for Bulgaria. However, the first report of it (as *Pachnobia rubricolis* F.) was by BURESCH (1939: 146) from Kritchim Residence, 01.-05.IV.1935. MÉSZÁROS et al. (1984a: 68) reported "*Cerastis rubricosa* (DENIS & SCHIFFERMÜLLER, 1775) ssp." from Rila Mts, Partizanska Polyana [= Kirilova Polyana]. So far as the present author knows, that material has not been described or recognized as a separate subspecies, and the present author cannot believe that our *Cerastis rubricosa* belongs to a new subspecies.

*Cerastis faceta faceta* (TREITSCHKE, 1835)\*

\* *Cerastis faceta* has never been found in Bulgaria. From the Balkan Peninsula, reported only from Dalmatia (HABELER, 1976: 77; MLADINOV, 1977b: 91; HACKER, 1989: 85). In the original report of HABELER (1976) the larva was recorded on *Quercus ilex* L., the moth emerging in February. This record requires confirmation.

**625. *Cerastis leucographa leucographa* ([DENIS & SCHIFFERMÜLLER], 1775)\***

\* *Cerastis leucographa* ([DENIS & SCHIFFERMÜLLER]) has never been found in Bulgaria before. However, it was reported for the country (as "Rumelia", a part separated at that time from Bulgaria) in HAMPSON (1903: 604), without given locality and source of the data. Mr. M. HONEY from The Natural History Museum (London) was asked to check the *C. leucographa* specimens in his institution, and his answer was: "The citation by HAMPSON is not made from a specimen in our collection – the reference must have come from STAUDINGER's Catalogue (1901: 153) where he cites the locality "Rum." under the entry for *Pachnobia leucographa*. In our copy of the unpublished list to STAUDINGER's collection there is no specimen from Rumelia listed there. It may, of course, have originated, or been referred to, in one of the other references (TREITSCHKE, BOISDUVAL, DONZEL, etc.) that are mentioned by STAUDINGER." (M. HONEY, pers. comm. 6.ix.1999). *C. leucographa* is also wrongly included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 298). However, it is reported from Serbia by ZECEVIC (1996: 61) and had already been known from Timocka Krajina, Zajecar, in August [!] (ZECEVIC & RADOVANOVIC, 1974: 100). This locality is very close to the Bulgarian border and if this report is correct, *Cerastis leucographa* can be expected in other parts of NW Bulgaria as well. But the flight period (August) given in the papers quoted above for this spring species suggests a misidentification. However, very recently *Cerastis leucographa* has been found in Bulgaria in West Stara Planina Mts, below the cave near Tcherkasi village, the districts of Berkovitz town, 300 m, 30.III.2000, S. BESHKOV, B. PETROV & G. STOYANOV leg., in coll. S. BESHKOV, single male specimen at a light trap (pl. 12, figs 4, 5) (genitalia with everted vesica checked, gen. figs. 133, 134).

Genus *Naenia* STEPHENS, 1827

**626. *Naenia typica typica* (LINNAEUS, 1758)\***

\* The first report for *Naenia typica* (LINNAEUS) from Bulgaria was by REBEL (1903: 220) from Sliven town. There are specimens from Sliven in the National Museum of Natural History, Sofia ("Slivno, coll. Princ. Bulg."). In Bulgaria, known also from Stara Planina Mts without exact locality (probably the data of REBEL for Sliven?) (DRENOWSKI, 1930a: 16); furthermore known also from Krasimir village near Dal-

gopol, Provadia district, ZLATARSKI leg. (BURESCH, 1940: 247), from the Black Sea Coast, Balchik, Valea Ak-Bunar (CARADJA, 1931: 317; POPESCU-GORJ, 1964: 162); from Pirin Mts, Bansko (GANEV, 1985b: 87); from Rhodopi Mts, Teshel Chalet, Devin district (BESHKOV, 1995a: 216) and from Vitosha Mts, "Bounkera", [730 m], Sofia Region, 19.VII.1981, J. GANEV leg., single female in coll. GANEV in the National Museum of Natural History, Sofia.

Genus *Anaplectoides* McDUNNOUGH, [1929]

**627. *Anaplectoides prasina prasina* ([DENIS & SCHIFFERMÜLLER], 1775)**

Genus *Protolampra* McDUNNOUGH, [1929]

*Protolampra sobrina sobrina* (DUPONCHEL, 1842)\*

\* Until now there is no record of *Protolampra sobrina* in Bulgaria. From the adjacent countries, known from Serbia (as *Paradiarsia sobrina*) (ZECEVIC, 1996: 14, 60) and from Romania.

Tribus Agrotini GROTE, 1890

Genus *Peridroma* HÜBNER, [1821]

**628. *Peridroma saucia saucia* (HÜBNER, [1808])**

= *margaritosa* (HAWORTH, 1809)

= *majuscula* (HAWORTH, 1809)

= f. *nigricostata* TUTT, 1892

= f. *nigricosa* (incorrect subsequent spelling)

= f. *nigricosta* (incorrect subsequent spelling)

= f. *ochrea-costa* TUTT, 1892

= f. *ochraecosta* (incorrect subsequent spelling)

= f. *ochraceata* (incorrect subsequent spelling)

Genus *Parexarnis* BOURSIN, 1946

**629. *Parexarnis fugax fugax* (TREITSCHKE, 1825)\***

\* There is only a single sure record of *Parexarnis fugax* (TREITSCHKE) for the country: NW Bulgaria, Boinitza village, Vidin Region (GANEV, 1987b: 8) as a new species for Bulgaria. However, there was a doubtful report for *Parexarnis fugax* from the high mountains of Bulgaria [Rila or Pirin?], without any additional data (GYULAI & VARGA, 1974: 209). *Parexarnis pseudosollers* (BOURSIN, 1940) is wrongly reported from N Greece, Phalakron Mts (HACKER, 1989: 581), near the Bulgarian/Greece border. This specimen, originally identified as *Parexarnis taurica* (STAUDINGER, 1879) (= *P. pseudosollers* BRSN.) was subsequently correctly determined as *P. fugax* Tr. (FIBIGER & HACKER, 1991: 78; HACKER, 1992b: 365).

Genus *Actebia* STEPHENS, 1829

**630. *Actebia praecox praecox* (LINNAEUS, 1758)\***

\* *Actebia praecox* (LINNAEUS) is a rare species in Bulgaria, known mostly from the mountains up to an altitude of 2400 m (Rila Mts, Mussala Chalet), as well as from the lowlands in arid area at an altitude of about 200 m (e.g. Kresna Gorge) (GYULAI, 1983: 204; MÉSZÁROS et al., 1984a: 67, and a specimen collected there by H. Loukov, 23.IX.1981, in coll. of Loukov in the National Museum of Natural History (Sofia), and also by the present author).

Genus *Euxoa* HÜBNER, [1821]

Subgenus *Chorizagrotis* SMITH, 1890

*Euxoa penelope penelope* FIBIGER, 1997\*

\* *Euxoa penelope* FIBIGER is a recently described species, at present known only from the type locality: N Greece, the region of Ioannina (FIBIGER, 1997b: 36–38). It is a species which might be expected in September also in Bulgaria.

Subgenus *Pleonectopoda* GROTE, 1873

*Euxoa hilaris hilaris* (FREYER, 1838)\*

\* *Euxoa hilaris* (FREYER, 1838) has never been found in Bulgaria. It is wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 290). See also under *Euxoa derrae* HACKER.

*Euxoa derrae derrae* HACKER, 1985\*

\* *Euxoa* (*Pleonectopoda*) *derrae* HACKER, 1985 has been reported from N Greece, Phalakron Oros, Chionotrypa, 6 km SE from Volas, 1700 m altitude (HACKER, 1985: 22; 1989: 35) as "*Euxoa inclusa derrae* n. ssp." This locality is close to the Bulgarian/Greece border and the species can be expected in Bulgaria—Alibotoush and S Pirin Mts. Later, HACKER (1989: 35) recognized the taxon *derrae* as a bona spec. FIBIGER (1990: 67) considered *derrae* HACKER to be a subspecies of *Euxoa hilaris* (FREYER, 1838). In FIBIGER & HACKER (1991: 78), FIBIGER (1993a: 191), NOWACKI & FIBIGER (1996: 290) and in FIBIGER (1997b: 39) *Euxoa* (*Pleonectopoda*) *hilaris* and *E. (P.) derrae* are recognized as two distinct species.

Subgenus *Euxoa* HÜBNER, [1821]

**631. *Euxoa birivia birivia* ([DENIS & SCHIFFERMÜLLER], 1775)\***

\* A single male *Euxoa birivia* specimen has been found by the present author in the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences. It is bearing the label "Etropolis monastir, 27.VII.1971 leg. AL. SLIVOV" (Central Stara Planina Mts) (pl. 10, fig. 8). *Euxoa birivia* ([DENIS & SCHIFFERMÜLLER]) has never been found in Bulgaria before, but its occurrence there always seemed very possible. In the adjacent territories, it is known from Albania, Romania, former "Yugoslavia", Montenegro and Slovenia, as well as from Turkey. It should be expected in other Bulgarian mountains.

**632. *Euxoa decora* ([DENIS & SCHIFFERMÜLLER], 1775) ssp. *hackeri* FIBIGER, 1990\***= *livia* (FREYER, 1833)= *livida* STAUDINGER, 1901= *decora macedonica* THURNER, 1936, sensu auct.

\* Up to now the subspecific status of the Bulgarian populations of *E. decora* was uncertain. In some articles it was wrongly reported as ssp. *macedonica* THURNER, 1936. The identity of our population as ssp. *hackeri* was confirmed by M. FIBIGER (pers. comm. 12.VII.2000). From this very variable species three subspecies are described from the Balkan Peninsula. In Pirin Mts the populations from the northern part of the mountain also differ from that in the southern part of the mountain: that in S Pirin (above Popovi Livadi, Gotze Delchev district) corresponds exactly to *Euxoa decora hackeri* FIBIGER, 1990, but the female is a little bit different, being smaller, darker, with narrow rectangular wings (specimens in the collection of V. GASHTAROV examined by the present author). *E. decora* is known in Bulgaria from Alibotoush [= Slavyanka] Mts (TULESCHKOW, 1931b: 193) as new for Bulgaria; idem (as *Agrotis decora* Hb. together with var. *livida* STGR.) at an altitude of 1400–1500 m (DRENOWSKI, 1932b: 38, 44, 1933: 16); Pirin Mts below Vihren Top, 2000 m (KALLIES, 1990: 94); Pirin Mts, Peyo Yavorov Chalet, 1800 m (GANEV & BESHKOV, 1987: 116) (pl. 10, figs 13, 14); Pirin Mts, Gotze Delchev Chalet, 1900 m, 29.–30.VII.1970, 1 ♂ (pl. 10, figs 9, 10) (unpublished, leg. and in coll. AL. SLIVOV); S Pirin Mts, above Popovi Livadi, Gotze Delchev district (leg. and in coll. V. GASHTAROV and R. RADEV); W Rhodopi Mts, "Kastrakly" ["Orpheus" Chalet] near Borino village (SLIVOV, 1984: 56; SLIVOV & NESTOROVA, 1985: 133); W Rhodopi Mts, Smolyanski Ezera Lakes, [1600 m alt.], 23.VII.1978, 1 ♂ (pl. 10, figs 11, 12) (unpublished, leg. and in coll. AL. SLIVOV); Alibotoush Mts [= Slavyanka Mts] as *Agrotis decora* var. *livida* STGR. (DRENOWSKI, 1931a: 18; 1931b: 53) as new for Bulgaria. According to FIBIGER (1990: 55), *livida* STAUDINGER, 1901 is a synonym of *Euxoa decora simulatrix* (HÜBNER, [1824]), which occurs only in the Alps and the Pyrenees. The specimens illustrated in FIBIGER (1990: pl. 5, figs 39–40) as *Euxoa decora macedonica* THURNER, 1936 from Greece, Evrytania, Mt. Tymphristos differ from specimens of *macedonica* THURNER from the type locality (Macedonia, Petrina Planina near Ohrid) collected there by the present author (pl. 10, figs 15, 16).

**633a. *Euxoa cos cos* (HÜBNER, 1824)**= *cycladum* STAUDINGER, 1870= *cyclodum* STGR. (incorrect subsequent spelling)\*

\* The taxon *Euxoa cos cyclodum* STGR. is reported from Karlovo town in Central Bulgaria by SLIVOV (1979: 37). It is an incorrect subsequent spelling of *cycladum* STAUDINGER, 1870, a synonym of *Euxoa cos cos* (HÜBNER, 1824).

**633b. *Euxoa cos crimaee* A. BANG-HAAS, 1906\***

\* A single male specimen of *Euxoa cos crimaee*, previously known as an endemic taxon only from the Crimea, was collected at light at the N Black Sea Coast between Balchik town and Touzlata, 25.VIII.1996, S. BESHKOV, M. BESHKOVA & K. BESHKOVA leg. (pl. 10, fig. 17). Another female specimen was taken in the same region, Beliya Bryag camping between Balchik and Kavarna towns, 23.IX.1995, S. BESHKOV & B. GOATER leg., in coll. BESHKOV (BESHKOV, 1997: 160; BESHKOV, 1998a: 9–10; BESHKOV & GOATER, in press). Known also from Varna town, 31.VIII.1946, KARNOSCHITZKY leg., single female specimen in coll. of KARNOSCHITZKY in the National Museum of Natural History, Sofia, previously wrongly determined as "*Agrotis castanea neglecta*"

***Euxoa glabella glabella* WAGNER, 1930\***

\* All reports for *Euxoa glabella glabella* WAGNER, 1930 from Bulgaria (and Europe) must be referred to *Euxoa glabella balcanica* FIBIGER, 1997. See also under the this subspecies.



**634. *Euxoa glabella* WAGNER, 1930 ssp. *balcanica* FIBIGER, 1997\***

\* *Euxoa glabella balcanica* is known in Bulgaria from north of Kostinbrod town (GYULAI, 1983: 204; MÉSZÁROS et al, 1984a: 67) and Melnik-Rozhen (GYULAI, 1983: 204); SE Bulgaria, Sakar Mts (Driptchevo village) and Svilengrad town (GANEV, 1987a: 102); Stara Planina Mts, Lyulyaka Chalet, Kostinbrod districts (GANEV & BESCHKOV, 1987: 116); Bessaparskite Ridove Hills near Isparihovo village (BESHKOV, 1992: 45). Known from the Romanian part of the Dobrogea (Hagieni), near the Bulgarian/Romanian border (RÁKOSY, 1996b: 213, 557, map 626), and very likely to be found in the Bulgarian part of the Dobrogea or at the N Black Sea Coast. According to FIBIGER (1997b: 48–49), the race of *Euxoa glabella* which occurs in Europe, in the Balkans and Bulgaria is ssp. *balcanica* FIBIGER, 1997. The nominotypical subspecies occurs from Central Anatolia eastward to Kyrgyzstan. Latest opinion is that *E. glabella balcanica* may be a good species (FIBIGER, pers. comm. 12.VII.2000).

**635. *Euxoa aquilina aquilina* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *fictilis* HÜBNER, [1813]

= *petrina* (MAYER, 1937)

**636. *Euxoa distinguenda* (LEDERER, 1857) ssp. *distincta* STAUDINGER, 1892**

= f. *rumelica* BOURSIN, 1935\*

= f. *uralensis* CORTI, 1926

\* *Euxoa distinguenda rumelica* BOURSIN, 1935 was described from Bulgaria, Slivno [= Sliven] town. In BURESCH & TULESCHKOW (1932: 71, 91) *Euxoa distinguenda* (as *Agrotis distiguenda* L.) is not included for Bulgaria, probably because of misidentification. Not a rare species in Bulgaria, known from many localities.

**637. *Euxoa hastifera hastifera* (DONZEL, 1847)\***

= *hastiera* (incorrect subsequent spelling)

\* The first reports of *Euxoa hastifera* (DONZEL) for Bulgaria were by ILTSCHW (1911: 16) and by ILTCHW (1913: 90, 101) for Sredna Gora Mts, Stambolovo [Bodrovo] village. There are some further records of *Euxoa hastifera*, from the Black Sea Coast up to 1700 m in the mountains.

**638. *Euxoa temera temera* (HÜBNER, [1808])\***

= f. *ruris* (HÜBNER, [1808])

= f. *villiersi* GUENÉE, 1837

= f. *huebneri* BOURSIN, 1926

= f. *hübneri* (incorrect subsequent spelling)

\* *Euxoa temera* (HÜBNER) is the most common *Euxoa* species in Bulgaria, in the middle of this century known as a pest in a large part of the country. Regarding its biology, enemies and parasitoids in Bulgaria, see BURESCH, LASAROV, BALEVSKI, BOGDANOV & ZELEV (1950) and DRENSKY & ZAHARIEVA-STOILOVA (1951).

**639. *Euxoa nigricans nigricans* (LINNAEUS, 1761)**

= f. *rubricans* (ESPER, [1788])

**640. *Euxoa diaphora diaphora* BOURSIN, 1928\***

\* For the localities of *Euxoa diaphora diaphora* in Bulgaria see the distribution map 11 in SVENDSEN & FIBIGER (1992: 164). Due to misidentification, the true distribution of the two closely related taxa *Euxoa diaphora* and *E. segnilis* in Bulgaria is not clear. For both these species see the comments in FIBIGER (1990: 38–40; 1997b: 59), SVENDSEN & FIBIGER (1992: 49), RÁKOSY (1996b: 211) and HACKER (1996a: 246). A future careful investigation of the genitalia, including everted vesica, of all our specimens from this group is necessary to solve the problem concerning the distribution of these species in Bulgaria.

**641a. *Euxoa segnilis segnilis* (DUPONCHEL, 1836)\***= f. *huebneroides* BOURSIN, 1940

\* *Euxoa segnilis segnilis* (DUPONCHEL) was reported from the Black Sea Coast, Nessebar [Slantchev Bryag] (MOUCHA, 1966: 210; SLIVOV, 1976 [1977]: 61), from Sliven town (SLIVOV & LUKOV, 1976 [1977]: 236) and from the slopes of Vitosha Mts near Boyana village (SLIVOV & LUKOV, 1976 [1977]: 236; SLIVOV, 1990: 191). Recently found in E Rhodopi Mts (BESHKOV & NOWACKI, 1998: 50) and at the Black Sea Coast, Sozopol (J. GELBRECHT, pers. comm.), Arkoutino near Primorsko (GOATER, 1996: 280; BESHKOV & GOATER, in press), Pomorie near Bourgass, 13.IX.1973, S. BOCHAROV leg., 1 ♂ in coll. of BOCHAROV in the National Museum of Natural History, Sofia (gen. prep. 6./14.XII.1998 S. BESHKOV, male genitalia with everted vesica), Primorsko, S Black Sea Coast, 17.VIII./02.IX.1968, BOCHAROV leg., in coll. BOCHAROV in the National Museum of Natural History, Sofia, wrongly determined as *Euxoa cursoria*, and "Pobitite Kamani" near Varna town (pl. 10, fig. 18) (S. BESHKOV, unpublished data). In the collection of KARNO-SCHITZKY in the National Museum of Natural History, Sofia, there is a single female specimen from the Black Sea Coast, Varna, 31.VIII.1932, determined as *Agr. ripae desertorum*, which is in fact *Euxoa segnilis* (gen. prep. 5./14.XII.1998, S. BESHKOV). See also under *Euxoa diaphora*.

**641b. *Euxoa segnilis cortii* WAGNER, 1930\***

\* *Euxoa segnilis cortii* WAGNER is reported from SW Bulgaria, "Rupite" near Volcanic Hill Kozhouh, Petrich district (GANEV, 1984b: 132); *ibid*, 01.VI.1998, J. NOWACKI, K. PALKA & M. BUNALSKI leg. (BESHKOV, NOWACKI & PALKA, 1999: 182), single male specimen (genitalia with everted vesica checked, S. BESHKOV); Kresna (MÉSZÁROS et al., 1984a: 67) as *Euxoa segnilis* DUPONCHEL, 1836; "Kreszna [Kresna] and Greece/Bulgaria (banks of the River Struma (Strimon)" (FIBIGER, 1990: 39); Pirin Mts, Popina Laka, 900 m (BUSSE & OCKRUCK, 1991: 19).

**642. *Euxoa nigrofusca nigrofusca* (ESPER, [1788])\***= *tritici* sensu auct. nec LINNAEUS, 1761

\* The lectotype of *Phalaena (Noctua) tritici* LINNAEUS, 1761 selected by MIKKOLA & HONEY (1993: 161–162) is conspecific with the taxon known as *Euxoa crypta* (DADD, 1927) in FIBIGER (1990, 1997b). Until this problem was resolved, the names *tritici* and *crypta* were used according to FIBIGER (1990, 1997b) (see in KARSHOLT & RAZOWSKI, 1996: 339). FIBIGER & HACKER (1998: 23) and HACKER (1998b: 455) offered the first available synonymic name, which is an ESPER name: *nigrofusca* ESPER, [1788].

**643. *Euxoa eruta eruta* (HÜBNER, [1814–1817])\***

\* *Euxoa eruta eruta* (HÜBNER, [1814–1817] (forma of *E. tritici* (LINNAEUS) or bona sp.—FIBIGER, 1990: 32) has been reported from the Black Sea Coast, Balchik (CARADJA, 1931: 316), Varna and Ahtopol towns (SLIVOV, 1976 [1977]: 61). A careful examination of all these Bulgarian specimens is necessary to establish their correct specific identity. Known from the Romanian Black Sea Coast (Eforie Sud) close to the Bulgarian/Romanian border (POPESCU-GORJ, 1964: 155) and from the Republic of Macedonia (TURNER, 1938: 144). According to BECK (1996: 93) and to FIBIGER (1997b: 55) *Euxoa eruta* is a good species. The only Bulgarian *Euxoa eruta* specimen, ♀ (gen. prep. 2./02.I.2000, S. BESHKOV, gen. fig. 128) the present author has seen is from the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia) with the label: "Karnobat, L. S. Seslav, 1–2.08.1967 leg. AL. SLIVOV" [Seslav hunting reserve near Koubrat town, Razgrad region, NE Bulgaria] (pl. 11, fig. 1).

***Euxoa homicida homicida* (STAUDINGER, 1900)\***

\* *Euxoa homicida* (STAUDINGER) has never been found in Bulgaria. It is reported from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 214, 558, map 630). If this report is correct, it is very possibly to be found in the Bulgarian part of the Dobrogea or at the N Black Sea Coast as well. However, according to FIBIGER (pers. comm. 12.VII.2000) *E. homicida* has not been found in Romania and not in Europe.

**644. *Euxoa obelisca obelisca* ([DENIS & SCHIFFERMÜLLER], 1775)\***

? = *f. ochraceo-cinereae* HORMUZAKI, 1916

\* The first report for *Euxoa obelisca* ([DENIS & SCHIFFERMÜLLER]) from Bulgaria was by DRENOWSKI (1932a: 23) from Alibotoush Mts, 1500 m altitude, 28.VII.1930. There are now many other known localities from all over the country for this species, which is not uncommon in Bulgaria.

***Euxoa montivaga montivaga* FIBIGER, 1997\***

\* *Euxoa montivaga* FIBIGER is a recently described species, closely related to *E. obelisca*. The range of *Euxoa montivaga* is not yet clear: it is known only from the type material from Greece and Asiatic Turkey. It is a xeromontane species, and inhabits N Greece (Phalakron, above Volas, 1700 m—type locality) (FIBIGER, 1997b: 52–55) and it seems very possible that it could occur in the mountains of SW Bulgaria. Careful examination of all “*E. obelisca*” from dry mountains in Bulgaria is necessary to establish its presence or absence there. *Euxoa montivaga* flies early in June/July, one month earlier than *E. obelisca* (FIBIGER, 1997: 55; pers. comm. 12.VII.2000).

**645. *Euxoa vitta* (ESPER, [1789]) ssp. *hercegovinensis* SCHAWERDA, 1938\***

\* The first record of *Euxoa vitta* (ESPER) for Bulgaria and for the Balkan Peninsula was by GANEV (1983e: 90) from Ossogovo Mts, Ossogovo Chalet. However, it cannot be new to the Balkan Peninsula, because the type locality of its subspecies *hercegovinensis* SCHAWERDA, 1938 is Mostar, in Hercegovina, situated on the Balkan Peninsula and it has already been reported from Slavonia, Vinkovci (KOCA, 1925: 65). The next records for Bulgaria are from Ossogovo Mts at altitudes of 1400–1700 m (GANEV, 1983d: 63) and from Troyanska Stara Planina Mts, Dermentkaya Chalet, 1530 m, 21.IX.1987 (pl. 12, fig. 7) (BESHKOW, 1992: 45), and recently collected in one further locality in Stara Planina Mts: W Stara Planina Mts, Petrohan Pass, Petrohan Chalet 1400 m, 20.VIII.1988, 6 specimens, S. BESHKOV leg. (BESHKOV & GASHTAROV, in press).

**646. *Euxoa cursoria cursoria* (HUFNAGEL, 1766)\***

\* *Euxoa cursoria* has never been reported from Bulgaria, nor from the Balkan Peninsula before. The present author has found a single female specimen of this species in the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia), determined as *Euxoa recussa* with labels as follow: [NW Bulgaria], “Belogradtchik, 8.7.1963, Prof. KR. TULESCHKOV” The specimen from Belogradtchik (pl. 11, fig. 2) without any doubt belongs to *Euxoa cursoria*. However, *Euxoa cursoria* is a species, which occurrence in Bulgaria needs confirmation with more, reliably labelled specimens.

**647. *Euxoa conspicua conspicua* (HÜBNER, [1823–1824])\***

= *conspiqua* (incorrect subsequent spelling)

= *agricola* (BOISDUVAL, 1829)

= *lycarum* (HERRICH-SCHÄFFER, 1846)

\* *Euxoa conspicua* (HÜBNER) was recorded in Bulgaria from Sofia, as *Agrotis lycarum* H.-S. in October (BACHMETJEV, 1897: 198; 1898: 37; 1902: 431), but according to REBEL (1903: 210) this report is doubtful. Also known from Central Stara Planina Mts Botev Top, 2376 m altitude, in large numbers (BOCAROV, 1959: 57); Slavyanka [= Alibotoush] Mts, 1500 m altitude (DRENOWSKI, 1931a: 17; 1931b: 53), Slavyanka [= Alibotoush] Mts, up to 1800 m altitude (DRENOWSKI, 1934a: 81); Slavyanka [= Alibotoush] Mts, 2100 m altitude, as a new species for Bulgaria (TULESCHKOW, 1931b: 193); Slavyanka [= Alibotoush] Mts in SW Bulgaria, 1500–2100 m altitude (BURESCH & TULESCHKOW, 1932: 93); Rila Mts, Musala Chalet, 2391 m altitude, and the N Black Sea Coast, Balchik (BESHKOW, 1992: 45); “Sopharma Camping, Skriniski Prolom Gorge, Kyustendil region, 500 m (BESHKOV, 1995a: 217). From the Black Sea Coast known also from Bourgass town, 02.V.1911, TSCHORBADJIEV leg., in coll. National Museum of Natural History, Sofia, wrongly determined as *Agrotis obscura* (BRAHM). A single specimen in the KARNO-SCHITZKY collection in the National Museum of Natural History, Sofia, determined as “*Mamestra*

*leucophaea*", 21.VII.1948, with illegible locality, has been found. Probably it is from the Black Sea Coast, the districts of Varna, because the biggest part of the collection of KARNOSCHITZKY is from this region. Recently collected in S Pirin Mts, "Orelyak", 1900 m altitude, Gotze Delchev district (BESHKOV & NOWACKI, 1998: 50).

Genus *Dichagyris* LEDERER, 1857

= *Dychagyris* (incorrect subsequent spelling)

Subgenus *Dichagyris* LEDERER, 1857

= *Grisyigoga* BECK, 1991 (nomen nudum)

= *Renyigoga* BECK, 1996

*Dichagyris squalidior squalidior* (STAUDINGER, 1901)\*

\* *Dichagyris squalidior* (STAUDINGER) has never been found in Bulgaria. KOZHANTSHIKOV (1937: 401) mentioned it for "Balkan Peninsula, Balkan Range, Gyaour Daghs Mts". In another article by KOZHANTSHIKOV (1930: 11), the same localities are mentioned, but from Taurus Mts in Turkey, and probably KOZHANTSHIKOV originally had in mind Bolkar Mts, a part of the Toros Range in Asia Minor.

**648. *Dichagyris candelsequa candelsequa* ([DENIS & SCHIFFERMÜLLER], 1775)**

= *candilisequa* Hb. (incorrect subsequent spelling and author's name)

= *candelsequa rana* (LEDERER, 1853), auct.\*

\* *Dichagyris candelsequa rana* (LEDERER, 1853) is an eastern subspecies of *Dichagyris candelsequa*, wrongly reported from the Black Sea Coast, Balchik (CARADJA, 1931: 314; 1934: 187; POPESCU-GORJ, 1964: 158). In Bulgaria and the Balkan Peninsula (according to HACKER, 1990: 47) we have only the nominate *Dichagyris candelsequa candelsequa* ([DENIS & SCHIFFERMÜLLER], 1775) (pl. 11, fig. 4; pl. 11, figs 5, 6). In Turkey and the Near East there occurs another subspecies—*Dichagyris candelsequa achaemenidica* HACKER, 1990 (pl. 11, figs 7–9). Our *Dichagyris candelsequa* is very variable, from very light as illustrated in FIBIGER (1990, pl. 14, fig. 4) (N Bulgarian Black Sea Coast, Balchik) to such as the Central Anatolian ones. After examination of Bulgarian and Central Anatolian specimens in his collection and the description of *achaemenidica* HACKER, the present author could not find good differences between them. Here, the subspecific identity of our population as the nominate *candelsequa* follows HACKER (1990: 47).

**649a. *Dichagyris melanura melanura* (KOLLAR, 1846)\***

\* The nominate *Dichagyris melanura melanura* (KOLLAR) is known from several places in South and SW Bulgaria. BACHMETJEV (1902: 443), following the unpublished manuscript of H. PIGULEV, reported it from [Veliko] Tarnovo and Sliven towns, June to July. According to REBEL (1903: 212) these data are wrong. Confirmed for Bulgaria from the northern slopes of the Konyavska Planina Mts and from the southern slopes of Lyulin Mts near Vladaya village (DRENOWSKI, 1906: 21). In this article, the specimen from Konyavska Planina is illustrated in monochrome and the Bulgarian specimens are redescribed in detail. DRJANOVSKY (1906: 99, 111) listed it for Vitosha Mts without exact locality at an altitude of 800–1600 m. Later, DRENOWSKI (1907: 12; 1930a: 14) reported it from Vitosha Mts near Vladaya village, Lyulin Mts and Konyavska Mts. BURESCH (1914a: 46), following the data of DRJANOVSKY, probably for Vitosha Mts, recorded it from Sofia town. The report from Vitosha Mts (probably by DRENOWSKI, 1907: 12, for Vladaya) is doubtful according to SLIVOV (1990: 191). In FIBIGER (1990) the specimen on pl. 11, fig. 41 must be from SW Bulgaria, Sandanski town, a locality given in REISSER & ZÜLLICH (1934: 14) and in FRANKE (1989: 142). "Sweti Wratsch" is the old name of Sandanski town, which has never been in "Yugoslavia"

**649b. *Dichagyris melanura albida* (CARADJA, 1931)\***

\* The type locality of *Dichagyris melanura albida* is the Bulgarian Black Sea Coast, "Silberküste", Balchik, which at the time of the description of this taxon was occupied by Romania. *Dichagyris melanura albida* (CARADJA) is one of the most common species in Balchik in the first half of July (CARADJA, 1931: 314; CARADJA, 1932: 38); it flies from the end of June to the middle of August. In addition to the districts of Balchik town, known also from Kavarna town (07.VIII.1997, S. BESHKOV & M. MARINOV leg.).

**650a. *Dichagyris renigera renigera* (HÜBNER, [1808])\***

= *renigera ochridana* THURNER, 1936

\* In Bulgaria, *Dichagyris renigera renigera* (HÜBNER) is known from Lyulin Mts Sofia Region (GOGOV, 1966: 62); Zemen Gorge, Skakavitza Railway Station (GANEV, 1982b: 162; 1983b: 91; SLIVOV, 1984: 57); Belassitza Mts, as "*Ochropleura renigera ochridana* THUR. – a new subspecies for Bulgaria" (SLIVOV, 1988b: 132). This single specimen from Belassitza, 21.–22.VI.1979 in the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia) is in fact *Dichagyris renigera argentina* (CARADJA, 1930), which is without any doubt a result of a mislabeled locality. HACKER (1989: 44) correctly considered *Agrotis renigera ochridana* THURNER, 1936 as a synonym of *Dichagyris renigera renigera* (HÜBNER).

**650b. *Dichagyris renigera argentina* (CARADJA, 1930)\***

= *renigera argentea* CARADJA, 1931 (homonym)

= *Agrotis pontica* BURESCH (unpublished), nomen nudum\*\*

\* The type locality of *renigera argentina* CARADJA is the Bulgarian Black Sea Coast, "Silberküste", Balchik (CARADJA, 1930: 45; CARADJA, 1931: 314), which at that time was occupied by Romania. Known also from Euksinograd and Varna town, also at the Black Sea Coast (SLIVOV, 1976 [1977]: 62). The specimens from the Black Sea Coast, Euksinograd, reported by BURESCH (1930a: 218) as *Agrotis renigera* Hb. belong to *Dichagyris renigera argentina* (CARADJA) (see BURESCH & TULESCHKOW, 1932: 87). Recently found near Dourankoulak Lake (N Black Sea Coast), R. RADEV leg. (BESHKOV & RADEV, in press). The flight period is from the first half of May (12.V.1921) to the middle of July (15.VII.1930). A sometimes abundant species (more than 30 specimens in one night!) at light in the districts of Balchik in the first days of June (BESHKOV, NOWACKI & PALKA, 1999: 182). In the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences (Sofia) the present author has found several specimens of *Dichagyris renigera argentina* (CARADJA, 1930), which are without any doubt a result of mislabeled localities. They must have originated from the districts of Balchik. However, they have the labels: "Kostinbrod, 19.VI.1969", "Stara Planina Mts, Ribaritza, 23.VI.1972", "Belassitza, 21–22.VI.1979", "E Rhodopi Mts, "Momtchilgrad, 10.VI.1983" and "Seslav [Seslav hunting reserve near Koubrat town, Razgrad Region, NE Bulgaria], 02–03.VI.1976."

\*\* In BURESCH & TULESCHKOW (1932: 87) the following synonymy was found: "*Agrotis renigera* Hb. ssp. *argentina* CAR. (= *Agrotis pontica* BUR., in litt.)." So far as the present author knows, a description of *Agrotis pontica* BUR. (nomen nudum) has never been published.

***Dichagyris forficula forficula* (EVERSMANN, 1851)\***

\* *Dichagyris forficula* (EVERSMANN, 1851) was reported as a new species for Europe from N Greece, Phalakron Oros, Chionotrypa at Volas, 1700 m (HACKER, 1989: 45; FIBIGER, 1990: 123). It could possibly be found in Bulgaria as well (Alibotoush, S Pirin Mts, or S Rhodopi Mts).

**Genus *Yigoga* NYE, 1975**

= *Ogygia* HÜBNER, [1821], nec BRONGNIART, 1817

= *Flavyigoga* BECK, 1996

= *Nigryigoga* BECK, 1996

**651. *Yigoga flavina* (HERRICH-SCHÄFFER, 1852) ssp. *pretiosa* (CARADJA, 1931)\***= *flavina* ssp. *pretiosa* (CARADJA, 1931)\*= *pretiosissima* (CORTI & DRAUDT, 1933)

\* *Yigoga flavina pretiosa* (CARADJA) was described from the Bulgarian Black Sea Coast, Balchik (CARADJA, 1931: 314), occupied at that time by Romania. The type locality of *pretiosissima* (CORTI & DRAUDT, 1933) is also Balchik town. HACKER (1989) synonymized ssp. *pretiosa* (CARADJA, 1931) with ssp. *flavina*, but later used the name *pretiosa* (CARADJA) again. In FIBIGER (1990) *pretiosa* is used for the European ssp. of *flavina* (H. S.). BESHKOV (1996a: 69–80) wrongly considered *pretiosa* as a colour form of *Y. flavina flavina* after studying much material from Bulgaria and several specimens from Asia Minor. According to him, both subspecies are syntopic and synchronic in Bulgaria and show intermediate forms. This feature, and the absence of any differences in the male and female genitalia, including everted vesica, were the reasons he synonymized “*pretiosa*”. Another feature, not mentioned in his article, but noticed later by him, is the presence of dark fringes, as dark as in the specimens from the Balkans, in several specimens from Asia Minor in the collection of Dr. J. GELBRECHT (Königs-Wusterhausen, Germany). Similar specimens were collected by the present author in Asia Minor (near Ilgaz town) in June 1996. However, he was on a wrong way, because it is always possible to separate specimens from Europe and Turkey by colour. The argument concerning genitalia (especially vesica) means nothing in this group (also the opinion of FIBIGER, pers. comm. 12.VII.2000).

**652. *Yigoga nigrescens nigrescens* (HÖFNER, 1888)****653. *Yigoga forcipula forcipula* ([DENIS & SCHIFFERMÜLLER], 1775)\***

\* The reports for *Yigoga forcipula* by MANN (1866) and by BACHMETJEV (1902: 431) for the Dobrogea follow the record of VON MALINOVSKY for Tulchea, Danube Delta. The first reports for Bulgaria were by LEDERER (1863: 26) (and BACHMETJEV, 1902: 457, following LEDERER, 1863), for Varna town. Many other reports for this not rare species follow after that. The specimens from “Silberküste”, the districts of Balchik town, are of a light silverish colour (pl. 11, fig. 11), like most of the local races described from there. However, a normal coloured form can be found together with them there.

*Yigoga celsicola goateri* FIBIGER & MOBERG, 1990\*

\* *Yigoga celsicola goateri* is another taxon from this species group, recently described from Greece, which may perhaps occur in Bulgaria.

**654. *Yigoga signifera signifera* ([DENIS & SCHIFFERMÜLLER], 1775)\***

\* *Yigoga signifera signifera* ([DENIS & SCHIFFERMÜLLER], 1775) is known mostly from the mountains, but there are reports also from the Black Sea Coast, Varna town (BURESCH, 1934: 208) and Kranevo village (J. GELBRECHT, pers. comm.). A male specimen from the Black Sea Coast, Varna town, 12.VI.1932, KARNOSCHITZKY leg., in coll. KARNOSCHITZKY in the National Museum of Natural History, Sofia, (gen. prep. 1./10.III.1999, S. BESHKOV, male genitalia with everted vesica (gen. fig. 129) shows some differences, both external and internal, from other specimens of *Yigoga signifera* examined by the present author, from Turkey, Bulgaria and the Alps, the main difference being in the shape of the uncus. More material is needed to clarify the significance of this difference.

*Yigoga soror soror* FIBIGER, 1997\*

\* *Yigoga soror* FIBIGER, 1997 is another species of this group, closely related to *Yigoga signifera* ([DENIS & SCHIFFERMÜLLER], 1775), which may possibly be found in Bulgaria. It was recently described from Greece and Turkey.

*Yigoga orientis* (ALPHÉRAKY, 1882) ssp. *pseudosignifera* (BOURSIN, 1952)\*

\* *Yigoga orientis* has never been found in Bulgaria but probably occurs here. From the neighbouring countries known from the Republic of Macedonia, Petrina Planina [Galitchitza] Mts (TURNER, 1964: 67), Romania, Danube Delta (RÁKOSY & WEBER, 1990: 25) and Dalmatia (FIBIGER, 1990: 184 as *Yigoga orientis pseudosignifera* (BOURSIN, 1952)).

# Genus *Agrotis* OCHSENHEIMER, 1816

- = *Scotia* HÜBNER, [1821]
- = *Agronoma* HÜBNER, [1821]
- = *Feltia* WALKER, 1856
- = *Putagrotis* BECK, 1991
- = *Striagrotis* BECK, 1996
- = *Exagrotis* BECK, 1996
- = *Ripagrotis* BECK, 1996
- = *Spinagrotis* BECK, 1996
- = *Crassagrotis* BECK, 1996

## 655. *Agrotis obesa scitha* (ALPHÉRAKY, 1889)

- = *obesa scita* (incorrect subsequent spelling)
- = *obesa nivea* (CARADJA, 1932)\*

\* The type locality of *obesa nivea* CARADJA is the Bulgarian Black Sea Coast, "Silberküste", Balchik (CARADJA, 1932: 38). The reason BURESCH (1939: 150) reported it (*Agrotis obesa scita* ALPH.) as new for Bulgaria from Euxinograd near Varna town is that at that time the only known locality (Balchik) was occupied by Romania. Known from Varna town, also at the Black Sea Coast (SLIVOV, 1976 [1977]: 61) and from several localities in SW Bulgaria, e.g. Stara Kresna Railway Station and Lilyanovo village (SLIVOV, 1984: 57). Known also from Bessaparskite Ridove Hills near Isperrichovo village, Pazardzhik Region (GANEV & BESCHKOV, 1987: 116) and from Slivenski Mineralni Bani near Sliven town, 11.IX.1950, S. BOCHAROV leg., in coll. of BOCHAROV in the National Museum of Natural History, Sofia. All records of the nominate *Agrotis obesa obesa* (BOISDUVAL) reported from Bulgaria actually refer to *Agrotis obesa scitha* (ALPHÉRAKY). See also under *Agrotis obesa obesa* (BOISDUVAL).

## *Agrotis obesa obesa* (BOISDUVAL, 1829)\*

\* *Agrotis obesa obesa* (BOISDUVAL) was reported from SW Bulgaria, "Rupite" near Volcanic Hill Kozhuh, Petrich district (GANEV, 1982b: 162; 1984b: 132). Specimens from the collection of GANEV in the National Museum of Natural History, Sofia, have been examined by the present author and they are referable to *Agrotis obesa scitha* (ALPHÉRAKY). The nominate subspecies has never been found in Bulgaria. All reports of it refer to *Agrotis obesa scitha* (ALPHÉRAKY, 1889).

## 656. *Agrotis bigramma bigramma* (ESPER, [1790])\*

- = *crassa* (HÜBNER, [1803])
- = *lata* TREITSCHKE, 1835 auct.\*\*

\* For the synonymy between *bigramma* ESPER, [1790] / *crassa* HÜBNER, [1803] see in HACKER (1998b: 442).

\*\* *Agrotis crassa* ab. *lata* Tr. was reported from the Black Sea Coast, Balchik (CARADJA, 1931: 316; ZUKOWSKY, 1937: 574). *Agrotis lata* TREITSCHKE, 1835 (= *dirempta* STAUDINGER, 1859) is a bona spec. (see ZILLI, 1992), with atlantico-mediterranean range (FIBIGER, 1990: 97), which has never been found in the Balkan Peninsula.

*Agrotis desertorum desertorum* BOISDUVAL, 1840\*

\* HACKER (1990: 42–43) recorded *Agrotis desertorum* from the Balkan Peninsula, Romania, Dobrogea, for the first time. Later, HACKER (1992b: 365) again reported *Agrotis desertorum* from the Romanian Dobrogea. According to him it is a South Russian-Near Eastern steppe species. It seems that all the subsequent reports of *Agrotis desertorum* for Europe follow these records of HACKER. In the list of European Noctuidae, FIBIGER & HACKER (1991: 82) both *Agrotis ripae* (HÜBNER, [1823]) and *Agrotis desertorum* BOISDUVAL, 1840 are given as occurring in Europe. In the distribution maps of European Noctuidae by SVENDSEN & FIBIGER (1992: 62, 223–224), *Agrotis ripae* HBN. is marked for the Atlantic and Baltic Coasts and their near surroundings, from S Spain to S Sweden and to NW Byelorussia to the East. *Agrotis desertorum* BOISDUVAL is marked from the European part of the Black Sea Coast including Bulgaria and Romania, along the border of Europe, northeast to the South Ural. According to SVENDSEN & FIBIGER (1992: 62) “due to confusion with *A. ripae* the distribution of *A. desertorum* outside Europe is uncertain.” The present author thinks that the distribution of *A. desertorum* in Europe, as well as that of *A. ripae* in Asia is not sufficiently clear. It is necessary here to mention that the occurrence of *Agrotis desertorum* on the Balkans does not mean that *Agrotis ripae* is absent: both species seem to be sympatric at the N Black Sea Coast. In NOWACKI & FIBIGER (1996: 292), *A. desertorum* is wrongly included for Bulgaria instead of *A. ripae*. HACKER (1986: 27) recognized the taxon *wagneri* CORTI & DRAUDT, 1933 (*Agrotis ripae* f. *wagneri*) from Turkey as a bona species; *Agrotis ripae* HBN. is a strongly halophilous species, whereas *desertorum wagneri* CORTI & DRAUDT is widely distributed in Turkey up to 2800 m altitude. In his book Noctuidae Europeae 1, Noctuidae I, FIBIGER (1990: 94–96) reported both species for Europe with the range as above (SVENDSEN & FIBIGER, 1992). He recalled *Agrotis desertorum* BOISDUVAL, 1840 from synonymy and regarded *wagneri* CORTI & DRAUDT as a subspecies of *desertorum* BOISDUVAL. Recently *A. desertorum* is reported to occur in Poland (NOWACKI, PALKA & SOSINSKI, 1997). According to RÁKOSY (pers. comm. 2.04.1996) from the material he checked, collected from the Dobrogea and Danube Delta, he could find only *A. desertorum* (see also RÁKOSY, 1996b: 219). However, the pair of specimens from the Danube Delta illustrated in RÁKOSY (1996b: Taf. 27, figs 29–29), are in fact *Agrotis ripae*. Here I would like to quote Dr. POPESCU-GORJ (+) (pers. comm. 29.IV.1996): “Concerning *Agrotis ripae* – the specimens present in my collection, originally from Dobrogea, have been revised by the great French specialist BOURSIN who established that they indeed belong to *Agrotis ripae desertorum* B.—those having a well-marked pattern on the forewings, while he considered the almost white specimens, without an obvious pattern, to be *Agrotis ripae* f. *weissenborni* FRR., both forms occurring in Dobrogea.” In the collection of KARNOSCHITZKY in the National Museum of Natural History, Sofia, there is a single female specimen from the Black Sea Coast, Varna, 31.VIII.1932, determined as “*Agr. ripae desertorum* B.” However, this specimen is *Euxoa segnalis* (gen. prep. 5./14.XII.1998, S. BESHKOV). For the two species *riparae* and *desertorum* see also BESHKOV (in press) and under the next species.

**657. *Agrotis ripae ripae* (HÜBNER, [1823])\***

= *riparae* f. *weissenbornii* (FREYER, 1845)

= *obotritica* SCHMIDT, 1858

\* *Agrotis ripae* (HÜBNER, [1823]) was reported for the first time for Bulgaria (Black Sea Coast, Varna town, 08.VIII.1931) by BURESCH & TULESCHKOW (1932: 90) and by BURESCH (1932: 23), using the data of N. KARNOSCHITZKY. In that locality the larva is reported to feed on the halophytic vegetation, especially *Salsola kali* L. and *Cakile maritima* SCOP. (BURESCH & TULESCHKOW, 1932: 90). Later, the species was collected near Bourgass, Balchik and Beloslav towns. KARNOSCHITZKY (1954: 161) reported the taxon *Agrotis ripae obotritica* SCHMIDT as a halophile species, inhabiting the sandy beaches of the valley of the Varnensko Ezero Lake, a salt lake connected with the sea. SLIVOV (1976 [1977]: 61) reported *Agrotis ripae* HBN. from Varna and Nessebar towns and *Agrotis ripae* f. *weissenborni* FRR. from Balchik, Varna and Bourgass towns, all at the Black Sea coast. Regarding the habitat of *Agrotis ripae*, soil with a halophyte vegetation is mentioned (SLIVOV, 1976 [1977]: 76). SOFFNER (1961: 240) reported the species from Nessebar as *Rhyacia ripae* f. *obotritica* SCHMIDT. In POPESCU-GORJ (1964: 156–157, pl. IX: 36) the



taxon *Agrotis ripae* f. *weissenborni* FRR. is also reported for the Black Sea Coast, Eforie Sud and for Bugaz (Cetatea Alba) = Akerman in USSR [Akerman, Black Sea Coast, south of Odessa]. A specimen from Eforie Sud is illustrated there (pl. IX, fig. 36) in monochrome. The pair of specimens from the Danube Delta, illustrated in RÁKOSY (1996b: Taf. 27, figs 29–29) as *Agrotis desertorum*, are in fact *Agrotis ripae*. In the collection of N. KARNOSCHITZKY in the National Museum of Natural History, Sofia, eleven specimens of *Agrotis ripae* HbN. from Bulgaria have been found with localities as follow: Black Sea Coast, Varna town; Bourgass town; Gebedje, Dikili-Tasch [Beloslav town and Pobitite Kamani, Varna Region]. In the collection of KARNOSCHITZKY there is a single female from the Black Sea Coast, Varna, 31.VIII.1932, determined as *Agr. ripae desertorum*, which is in fact *Euxoa segnilis* (gen. prep. 5./14.XII.1998, S. BESHKOV). Several other *Agrotis ripae* specimens, all from the Black Sea Coast as follow: Slantchev Bryag resort, Nessebar district, 30.VII.1975, Loukov leg., “Taukliman” near Cape Kaliakra, 10.VIII.1967, Balchik, 12.VIII.1967 and 15.VIII.1968, Varna Town, 01.–04.VII.1975, and “Blatnza, Varnensko” [? Dourankoulak village, Varna Region], 09.VIII.1967 are present in the collection of AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences, Sofia. In NOWACKI & FIBIGER (1996: 292) *A. ripae* is wrongly not included for the Bulgarian fauna. See also BESHKOV (in press) and under the previous species.

#### 658. *Agrotis syricola syricola* (CORTI & DRAUDT, 1933)\*

\* *Agrotis syricola syricola* is known in Bulgaria from SW Bulgaria, Kroupnik, D. ILTSCHEW leg., 2 ♀♀ in the exposition of the National Museum of Natural History, Sofia, [19.VIII.1918], primary wrongly published by ILTSCHEW (1921) and by BURESCH & TULESCHKOW (1932) as *Agrotis puta* Hb. (BESHKOV, in press). Known almost throughout S Bulgaria–SW Bulgaria, Volcanic Hill of Kozhouh near Petrich town (S. BESHKOV & B. GOATER leg.); Kresna Gorge; several localities in E Rhodopes; Bessaparskite Ridove Hills near Pazardzhik town. However, it is not always possible to be sure which specimens belong to *syricola* and which to *puta*. It is however impossible that *syricola* and *puta* hybridize, because the vesica/corpus bursae are too different (FIBIGER, pers. comm. 12.VII.2000). Known also from a single locality in NE Bulgaria: “Pobitite Kamani” near Varna town, Black Sea Coast surroundings, 18.IX.1999, S. BESHKOV & S. ABADJIEV leg. (pl. 12, fig. 6).

#### 659. *Agrotis puta puta* (HÜBNER, [1803])

= *renitens* (HÜBNER, [1824])

= *lignosa* (GODART, 1825) (nomen preoccupied)

= ab. *masculina* BERIS?\*

\* *Agrotis puta* ab. *masculina* BERIS (det. REBEL) is reported as a new taxon for Bulgaria from Rila Mts, Dolna Banya, (850 m, August, 1935) (DRENOWSKI, 1936: 240; DRENOWSKI, 1939: 160).

#### 660. *Agrotis ipsilon ipsilon* (HUFNAGEL, 1766)

= *ypsilon* (incorrect spelling), nec [DENIS & SCHIFFERMÜLLER], 1775

= *ypsilon* ROTT. (incorrect spelling and author's name)

= *suffusa* ([DENIS & SCHIFFERMÜLLER], 1775)

= *annexa* STEPHENS, 1829

= *connexa* STPH. (incorrect spelling)

#### 661. *Agrotis trux trux* (HÜBNER, [1824])

= *tryx* (incorrect subsequent spelling)

= *lunigera* STEPHENS, 1929

= *olivina* STAUDINGER, 1901

**662. *Agrotis exclamationis exclamationis* (LINNAEUS, 1758)**

- = *axclamationis* (incorrect subsequent spelling)
- = *informis* var. *confluens* LEECH, 1889
- = *conflua* (incorrect subsequent spelling)
- = f. *costata* TUTT, 1892
- = f. *rufescens* TUTT, 1892
- = f. *pallida* TUTT, 1892
- = f. *brunnea* TUTT, 1892

**663. *Agrotis clavis clavis* (HUFNAGEL, 1766)**

- = *corticea* ([DENIS & SCHIFFERMÜLLER], 1775)
- = *corticea* Hb. (incorrect author's name)
- = *corticae* (incorrect subsequent spelling)
- = *subfuscus* (HAWORTH, 1803)
- = f. *irrorata-fusca* TUTT, 1892
- = f. *inornata-fusca* (incorrect subsequent spelling)
- = f. *brunnea* TUTT, 1892
- = f. *suffusa-brunnea* TUTT, 1892
- = f. *suffuso-brunnea* (incorrect subsequent spelling)

**664. *Agrotis segetum segetum* ([DENIS & SCHIFFERMÜLLER], 1775)**

- = *segetis* (FABRICIUS, 1794)
- = *segetis* Hb. (incorrect author's name)
- = *subatratus* (HAWORTH, 1803)
- = *nigricornutus* (HAWORTH, 1809)
- = *nigricornis* (incorrect subsequent spelling)
- = f. *pallida* STAUDINGER, 1881

**665. *Agrotis spinifera spinifera* (HÜBNER, [1808])\***

- = *nec spinifera* VILLERS, 1789
- = *biconica* KOLLAR, 1844

\* The first report of *Agrotis spinifera* (HÜBNER) for Bulgaria was by ILTSCHEV (1921: 100) from SW Bulgaria, Kroupnik. According to BURESCH & TULESCHKOW (1932: 71, 89), *Agrotis spinifera* Hb. has to be omitted from the list of the Bulgarian Noctuidae, because of the absence of voucher material in the Royal Entomological Station, Sofia. In Bulgaria, *Agrotis spinifera* is known from SW Bulgaria only, in Struma Valley to Kroupnik village to the North. Sometimes this migrant species is not rare at the Volcanic Hill of Kozhouh near Petrich town and the near surroundings. The present author found one specimen in the collection of J. GANEV in the National Museum of Natural History, Sofia, in a box with material from SW Bulgaria: "Kozuh" and "Sestrino". This specimen is among others with the shared label: "Belogradtschik [NW Bulgaria], 22.9. [1982]". The presence in the series of such species as *Grammodes bifasciata* and the early spring flying Geometrid *Anticlea badiata* suggests a wrong locality and date, due to exchanged labels. This data is therefore suspect and must be ignored.

**666. *Agrotis vestigialis vestigialis* (HUFNAGEL, 1766)\***

\* *Agrotis vestigialis* (HUFNAGEL) was reported as a new species for Bulgaria and also the Balkan Peninsula from Pobitite Kamani near Varna town (SLIVOV, 1979: 37). Known also from NW Bulgaria, Negovantzi village, Vidin Region (30.VI.1980) (GANEV & BOCHAROV, 1982: 104); N Black Sea Coast: several localities near Dourankoulak Lake (pl. 11, fig. 12) and Shablenska Touzla Lake; S Black Sea Coast: Arapia Camping near Tzarevo (Mitchurin) town, 11.IX.1988, I. STOYTCHEV leg. (BESHKOV & RADEV, in press), Arkoutino Lake near Sozopol, Black Sea Coast, abundant in August to September (GOATER,

1996: 273, 280; BESHKOV & NOWACKI, 1998: 50; BESHKOV & GOATER, in press) and near Sozopol town (J. GELBRECHT, pers. comm.). The flight period is from June to the end of September. Locally abundant, it comes both to light and sugar bait. According to the references (KOZHANTSCHIKOV, 1937; ZOLOTARENKO, 1970; HACKER, 1989, 1990; FIBIGER, 1990; SVENDSEN & FIBIGER, 1992) it seems that the locality Arapia Camping is the extreme SE point of the species' range. According to HACKER (1990), records for Turkey require confirmation, and they are thought to be misidentifications. However, the occurrence of *Agrotis vestigialis* in European Turkey (Black Sea Coast) seems rather likely; "Arapia" is only about 30 km from the Bulgarian/Turkish border.

**667. *Agrotis cinerea cinerea* ([DENIS & SCHIFFERMÜLLER], 1775)\***

= *livonica* TEICH, 1886

= *obscura* TUTT, 1892

\* The first reports for *Agrotis cinerea* ([DENIS & SCHIFFERMÜLLER]) were from Alibotoush [= Slavyanka] Mts in SW Bulgaria (TULESCHKOW, 1929: 156; 1930a: 33) and from Rila Mts above Rilski Manastir monastery (ZÜLLICH, 1929: 49), both authors recording it as new for Bulgaria. Many other reports for this quite common Bulgarian species follow after that from all over the country, mostly from the mountains, but also from low altitudes.

**668. *Agrotis fatidica fatidica* (HÜBNER, [1824])\***

\* The first report for *Agrotis fatidica* (HÜBNER) for Bulgaria, and for the whole Eastern Europe was by BACHMETJEV (1910b: 488) from Rila Mts, 2100 m altitude, AL. DRENOWSKI leg. Again reported as a new species for East Europe from Rila Mts, 2100 m altitude (DRENOWSKI, 1909b: 32) and again by DRENOWSKI (1925: 73, 103) from Rila Mts at an altitude of 2300–2500 m. In Bulgaria, known only from several localities in Rila Mts where it is not a rare species at altitudes of 2100–2700 m. In the Balkan Peninsula it is known also from Korabi Mts in Albania on the border with the Republic of Macedonia. There is also a report for Dalmatia (SPEYER & SPEYER, 1862), which is rightly considered by MLADINOV & LORKOVIC (1985: 32) to be incorrect.

Other families, previously known as subfamilies of Noctuidae, recently recognized as distinct families (according to KARSHOLT & RAZOWSKI, 1996) or newly recognized as a subfamilies of Noctuidae

**Subfamily Aganainae SAALMÜLLER, 1884\***

\* For the sysyematic placement of the subfamily Aganainae with the genera *Euplagia* and *Callimorpha* into the family Noctuidae see YELA (1997).

**Genus *Euplagia* HÜBNER, 1820**

= *Callimorpha* auct.

**(669.) *Euplagia quadripunctaria* (PODA, 1761)**

= *quadripunctata* (incorrect spelling)

**Genus *Callimorpha* LATREILLE, 1809**

= *Panaxia* TAMS, 1939

**(670.) *Callimorpha dominula* (LINNAEUS, 1758)**

Family Pantheidae SMITH & DYAR, 1898

Genus *Panthea* HÜBNER, [1820]

= *Diphthera* HAMPSON, 1913 nec HÜBNER, [1809]

(671.) *Panthea coenobita coenobita* (ESPER, 1785)\*

\* *Panthea coenobita* (ESPER) was reported as a new species for Bulgaria from Rhodopi Mts, "Tashboaz" and from Rila Mts, "G. Dimitrov" Resort above Kostenetz town (BOCAROV, 1959: 57). Recorded more recently from Rhodopi Mts, Tchepelare town (GANEV, 1980: 79) and "Fichtenzone" (GANEV, 1984/3: 128); W Rhodopi Mts, "Kastrakly" near Borino village (SLIVOV & NESTOROVA, 1985: 135); Central Rhodopi, Trigrad village, 1100 m altitude, 26.VI.1995, leg. and in coll. R. RADEV (BESHKOV & RADEV, in press).

Genus *Trichosea* GROTE, 1875

*Trichosea ludifica ludifica* (LINNAEUS, 1758)\*

\* *Trichosea ludifica* (LINNAEUS) has never been found in Bulgaria. It is wrongly reported for Bulgaria in NOWACKI & FIBIGER (1996: 293). However, *Trichosea ludifica* is reported from Serbia, Timocka Krajina (ZECEVIC & RADOVANOVIC, 1974: 117). It is also included in the list of Serbian Lepidoptera by ZECEVIC (1996: 77). The locality quoted above is very near to the Bulgarian border, and if the record is correct, *Trichosea ludifica* can be expected in Bulgaria as well.

Genus *Colocasias* OCHSENHEIMER, 1816

= *Leptostola* BILLBERG, 1820

= *Demas* STEPHENS, 1829

(672.) *Colocasias coryli coryli* (LINNAEUS, 1758)

= *corili* (incorrect subsequent spelling)

Family Nolidae HAMPSON, 1894\*

\* Opinions differ concerning the systematic position and the taxonomic range of the subfamily (family) Nolinae. According to some authors (e.g. BECK, 1996; KARSHOLT & RAZOWSKI, 1996; YELA, 1997) it is a distinct family. In FIBIGER & HACKER (1991) and in HEPPNER (1996) the Nolinae are treated as a subfamily of the Noctuidae. In FIBIGER & HACKER (1991) it is placed between the subfamilies Euteliinae and Sarrothripinae, and in HEPPNER (1996) it is put between Chloephorinae and Plusiinae.

Subfamily Nolinae HAMPSON, 1894

Genus *Antennola* DE FREINA & WITT, 1984

(673.) *Antennola impura impura* (MANN, 1862)\*

\* *Antennola impura* (MANN) has never been found in Bulgaria. In DE FREINA & WITT (1987: 619) on the distribution map 5 *Antennola impura* is marked for SE Bulgaria and with a question mark for SW Bulgaria. In Europe it is known from NE Greece (W Thrace) (DE FREINA & WITT, 1987: 44; FIBIGER & HACKER,

1991: 28). The present author has never seen *Antennola impura* in Bulgaria, and he doubts whether it will be found in the country. According to FIBIGER (pers. comm. 12.VII.2000) for *A. impura* should be looked in lowland, steppe-like biotopes close to small rivers in late August, together with *Euxoa (glabella) balcanica*. *Antennola impura* can be very easily distinguished from the other species of the (sub)family by the structure of the male antennae (see DE FREINA & WITT, 1987: 43).

Genus *Meganola* DYAR, 1898

**(674.) *Meganola togatalis togatalis* (HÜBNER, 1796)**

= *fogatulalis* (incorrect subsequent spelling)

**(675.) *Meganola strigula strigula* ([DENIS & SCHIFFERMÜLLER], 1775) nec BORKHAUSEN, 1792, nec THUNBERG, 1792 (preoccupied)\***

= *kolbi* DANIEL, 1935, auct.

\* Probably another taxon (undescribed) from this species group occurs in Bulgaria. Among material examined by the present author there are three female specimens (all from E Rhodopi Mts) with different genital features from those illustrated in RÁKOSY & SZEKELY (1995: 174) and in RÁKOSY (1996b: 259), the only illustrations of the female genitalia the present author could find. In these three specimens (gen. preps 3./03.VII.1998; 1./06.VII.1998, 1./09.VII.1998, S. BESHKOV) the bursa copulatrix is composed of two membranous regions, situated longitudinally and separated from each other by a short narrowing: the superior of these is small and the inferior is large, with two signa (see also in BESHKOV, NOWACKI & PÁLKA, 1999: 178). The true identity of these specimens can be solved only after obtaining some more material from this "taxon" and from typical *strigula*. It is possible that the illustrations of the genitalia in the articles quoted above are not entirely accurate. Small differences in male antennae of *M. strigula* and *M. kolbi* were found by the present author: in *M. strigula* the antennae are less strongly pectinated, with narrower lamellae, but with longer flagellum.

**(676.) *Meganola kolbi kolbi* DANIEL, 1935\***

\* From Bulgaria *Meganola kolbi* DANIEL is known with certainty only from Kresna Gorge (Mészáros, RONKAY, HERCZIG, SZEÓKE & SZABÓKY, 1986: 67), from Sakar Mts (without locality): 20.V.1974 (gen. prep. 4./11.XII.1998, S. BESHKOV) and 20.V.1977 (?) (gen. prep. 2./11.XII.1998, S. BESHKOV), and from "Stara Planina Mts, Lulyatzi", [Lulyaka Chalet near Beledie Han, Sofia Region or Lulyak Chalet, Sliven Region?], 20.V.1974(?), (gen. prep. 3./11.XII.1998, S. BESHKOV), all ♂♂, SEVAR ZAGORTCHINOV leg., in coll. National Museum of Natural History, Sofia. DANIEL (1964: 22) accepted all Macedonian populations of this species group as *Roeselia strigula kolbi* DAN., including those from two localities in Bulgarian Macedonia, Pirin, Sweti Wratsch [Sandanski town], 300 m, 10.-12.VII.1933 (REISSER & ZÜLLICH, 1934: 16 as *Nola strigula*) and Elehsnitza [Belassitza Mts, Belassitza village] (DRENOWSKI, 1921a, as the primary source). The present author thinks that DANIEL accepted our population as *kolbi* only "on suggestion", and he hardly believes that he critically examined the material from the localities mentioned there. In DRENOWSKI (1921a) there is no report for *strigula*, nor for *kolbi* from Elehsnitza [Belassitza Mts] or from anywhere else. Later, again reported as a new subspecies for Bulgaria, as *Roeselia strigula kolbi* DAN., from Belassitza Mts, "low forest zone", 37 collected specimens (SLIVOV, 1988a: 123), and he again quoted wrongly the previously cited report of DRENOWSKI (1921a). According to DE FREINA & WITT (1987), *kolbi* DANIEL, 1935 is a synonym of *Meganola strigula strigula* ([DENIS & SCHIFFERMÜLLER], 1775). Later, RÁKOSY & SZEKELY (1995) recognized *Meganola kolbi* as a bona species, based on the differences in the male and female genitalia and wing pattern. Also small differences were found by the present author in the male antennae: in *M. kolbi* the antennae are much more strongly pectinated with wide lamellae, but with shorter flagellum. The present author cannot believe that the specimens reported for Belassitza by SLIVOV (1988a: 123) really belong to *Meganola kolbi*, because in this region *Meganola*

*strigula* is not a rare species. It is impossible for all specimens from Belassitza to belong to *Meganola kolbi*, and the common *Meganola strigula* not to occur there; in the same article *Meganola strigula* is not listed for the mountain. *Meganola kolbi* is known from the Romanian part of the Dobrogea, very close to the Bulgarian/Romanian border (RÁKOSY, 1996b: 67, 465, map 77), and is very likely to be found also in the Bulgarian part of the Dobrogea or at the N Black Sea Coast. In KARSHOLT & RAZOWSKI (1996: 339) *Meganola kolbi* and *Meganola strigula* are treated as conspecific.

**(677.) *Meganola gigantula gigantula* (STAUDINGER, 1879)\***

\* The first report of *Meganola gigantula* (STAUDINGER) for Bulgaria and Europe was by TULESCHKOV (1936: 209) from SW Bulgaria, Kresna Gorge, south of Gara Pirin [Kresna town]. The same data can be found also in TULESCHKOV (1939: 177). Many other records follow after that from this part of the country—Struma Valley and the adjacent slopes of the mountains up to 750 m altitude, from Kresna Gorge to the Volcanic Hill of Kozhouh near Petrich town, where *Meganola gigantula* is not a rare species.

**(678.) *Meganola albula albula* ([DENIS & SCHIFFERMÜLLER], 1775)\***

= *Meganola albula nivalis* (CARADJA, 1934), **syn. nov.\*\***

\* Both *Meganola albula albula* ([DENIS & SCHIFFERMÜLLER], 1775) and *Meganola albula nivalis* (CARADJA, 1934) are reported from the Black Sea Coast, the districts of the Balchik town (CARADJA, 1931: 324; 1934: 198; POPESCU-GORJ, 1964: 217), but *Meganola albula albula* is reported there from June, whereas *Meganola albula nivalis* is recorded from August. It flies to the end of September. See below.

\*\* Described as *Nola albula nivalis* nov. var. CARADJA (1934: 198). Its type locality is the Bulgarian Black Sea Coast, Balcic, then occupied by Romania. It is illustrated in POPESCU-GORJ (1964, pl. XVII, fig. 68). In Balcic (= Balchik) sympatric with *Meganola albula albula* ([DENIS & SCHIFFERMÜLLER], 1775) (see under that taxon). The present author examined genital armature of three male specimens from the type locality of *Meganola albula nivalis* (CARADJA, 1934) (Balchik), collected in August and compared them with male genitalia of specimens from other parts of the country, as well as with specimens from Germany and France (Provence), collected in May, June and August. No differences were found in the genitalia between the different generations and different regions, which is why *M. albula nivalis* (CARADJA) is regarded here as a junior subjective synonym of the nominate subspecies. However, all our specimens show differences, especially in the shape of the clasper, from the illustrations in RÁKOSY (1996b: 260, fig. 90) and in NOWACKI (1998: pl. 11, fig. 148), which is probably due to the not very precise elaboration of those illustrations.

Genus *Nola* LEACH, [1815]

= *Roeselia* HÜBNER, [1825]

= *Celama* WALKER, 1865

**(679.) *Nola cucullatella cucullatella* (LINNAEUS, 1758)**

**(680.) *Nola confusalis confusalis* (HERRICH-SCHÄFFER, [1847])\***

\* *Nola confusalis* (HERRICH-SCHÄFFER) specimens from E Rhodopi Mts (pl. 11, fig. 13; col. pl. II, fig. 11) (several localities) and from Lozenska Planina Mts differ a little bit from the specimens from other parts of Bulgaria, Europe (pl. 11, figs 14–16) and the British Isles (also the opinion of B. GOATER, pers. comm., October, 1997). Such a specimen the present author has collected in Turkey, Prov. Antalia, Cevizli village near Akseki, 1200 m, 12.V.1999, S. BESHKOV & J. GELBRECHT leg. Also, they differ from the specimens from other parts of Bulgaria (pl. 11, figs 15, 16). Probably they belong to an undescribed taxon, inhabiting part of Bulgaria and Asia Minor as well. Detailed examination of material from those populations is necessary.

**(681.) *Nola cicatricalis cicatricalis* (TREITSCHKE, 1835)****(682.) *Nola aerugula aerugula* (HÜBNER, 1793)\***= *centonalis* (HÜBNER, 1796)= *ceutonais* (incorrect subsequent spelling)= *atomosa* (BREMER, 1861)

\* *Nola aerugula* is a species very variable in size, colour and wing pattern, and has at least two generations from May to September. A single male specimen from SW Bulgaria, Gradeshka Banya near Kresna town 265 m, 02.IX.1987, leg. and in coll. S. BESHKOV (pl. 11, fig. 17) in appearance looks like another species and its identification was possible only by examination of the genitalia (gen. prep. 3./02.I.2000, S. BESHKOV).

**(683.) *Nola squalida squalida* STAUDINGER, 1871\***

\* Until now there is only a single report of *Nola squalida* STAUDINGER from Bulgaria. In the literature: SW Bulgaria, S. Pirin Mts, Liljanovo village above Sandanski town, 500 m altitude, 09.VIII.–2.IX.1986 (EICHLER, HACKER & SPEIDEL, 1996: 265). Reported as a new species for the Balkan Peninsula from two localities in Albania (BESHKOV, 1995b: 365, 382, 387). On the Balkan Peninsula known also from Greece (NW Peloponnesos, Sea Coast near Kalogria, 07.V.1998, S. BESHKOV, J. GELBRECHT & E. SCHWABE leg., several specimens on light). Found as well in three localities in Central and Northern Greece, one of which (Kerkini Lake) is very close to the boundary with Greece (DE FREINA & PIATKOWSKI, 1999: 261). It seems, that *Nola squalida* has at least two generations in the Balkans.

**(684.) *Nola cristatula cristatula* (HÜBNER, 1793)\***

\* In Bulgaria *Nola cristatula cristatula* (HÜBNER) is known from very few localities as follows: N. Black Sea Coast, Balchik (ZUKOWSKY, 1937: 573); Sofia (BESHKOV, 1992: 42); Trivoditzi village, Pazardzhik Region (BESHKOV & GASHTAROV, in press).

**(685.) *Nola subchlamydula subchlamydula* (STAUDINGER, 1871)\***

\* The first report of *Nola subchlamydula* (STAUDINGER) for Bulgaria was by of REBEL (1916: 40), who reported female(s) from Sliven town (TSCHORBADJIEV leg., det REBEL.). Later, TSCHORBADJIEV (1919: 193) reported two (probably the same) specimens of *Nola subchlamydula* STGR. from the districts of Sliven town, taken in the first half of April. According to BURESCH & TULESCHKOW (1943: 87) "in the collection of TSCHORBADJIEV there are three specimens determined as *N. subchlamydula*: two from Sliven (12. and 19.VII.1913) and one from Bourgass town. None shows sufficient differences from *Nola chlamitulalis*, except for much more brownish forewings and must belong to *Nola chlamitulalis*". Later, GANEV (1984c: 439) reported *N. subchlamydula* as a new species for Bulgaria from SW Bulgaria, Kresna Gorge and from Volcanic Hill of Kozhouh near Petrich town from May to September in two generations. From Kresna [Gorge] this species is reported also by MÉSZÁROS et al. (1986: 67). Known also from Ograzhden Mts "up to 300 m" (GANEV, 1988: 30) and from Pirin Mts, Liljanovo village (J. GELBRECHT, pers. comm.). The present author has collected a single male specimen in E Rhodopi Mts, Odrintzi village, Ivaylovgrad district, 30.IV.1997 (pl. 11, fig. 18) and near Momina Skala Chalet near Madzharovo town, 21.VI.1996 (BESHKOV & GELBRECHT leg., in coll. BESHKOV) (BESHKOV & GASHTAROV, in press).

**(686.) *Nola chlamitulalis chlamitulalis* (HÜBNER, [1813])**= *chlamidulalis* (incorrect subsequent spelling)= *chlamydulalis* (incorrect subsequent spelling)= *chlamytulalis* (incorrect subsequent spelling)

Subfamily Chloephorinae STANTON, 1859

= *Beninae* OBRAZTSOV, 1950

Tribus Sarrothripini MELL, 1943\*

\* For the systematic position of Sarrothripinae see in KARSHOLT & RAZOWSKI (1996: 340).

Genus *Nycteola* HÜBNER, 1822

= *Sarrothripus* CURTIS, 1824

= *Sorothripus* (incorrect subsequent spelling)

= *Sarothripus* AGASSIZ, [1847]

= *Sarotricha* MEYRICK, 1888

= *Dufayella* CAPUSE, 1972

Subgenus *Nycteola* HÜBNER, 1822

(687.) *Nycteola revayana revayana* (SCOPOLI, 1772)

= *revayna* (incorrect subsequent spelling)

= *revayanus* (incorrect subsequent spelling)

= *ramosana* (HÜBNER, [1796–1799])

= *dilutana* HÜBNER, [1799], auct.

= *ramosanus* (incorrect subsequent spelling)

= *undulana* (HÜBNER, [1799]) nec ([DENIS & SCHIFFERMÜLLER], 1775)

(688.) *Nycteola columbana columbana* (TURNER, 1925)\*

\* A single female specimen of *Nycteola columbana* has been collected at light in SW Bulgaria, Alibotoush [= Slavyanka] Mts, between “Livada” and Goleshovo village, 1340 m, 02.IX.1999, S. BESHKOV & D. VASSILEV leg. (pl. 11, figs 19, 20), in coll. S. BESHKOV (gen. prep. 1./02.I.2000, S. BESHKOV, gen. fig. 130). *Nycteola columbana* (TURNER) has never been found in Bulgaria before. It was wrongly included for Bulgaria without any authentic record in NOWACKI & FIBIGER (1996: 295) and in RÁKOSY (1996b: 69).

*Nycteola degenerana degenerana* (HÜBNER, [1799])\*

= *degeneraria* (incorrect subsequent spelling)

\* The only report for *Nycteola degenerana* (HÜBNER) from Bulgaria was by DRENOWSKI (1931b: 60) as *Sarrothripus revayana* var. *degeneraria* Hb. from Alibotoush [= Slavyanka] Mts at an altitude of 750–1500 m. Probably this report is a result of misidentification. In the next articles of DRENOWSKI, and in the rest of the Bulgarian literature, this taxon is not included. *Nycteola degenerana* is also wrongly included for Bulgaria in NOWACKI & FIBIGER (1996: 295).

(689.) *Nycteola siculana siculana* (FUCHS, 1899)\*

= *siculana* KR. (incorrect author's name)

= *dilutana* HÜBNER, [1799] nec ([DENIS & SCHIFFERMÜLLER], 1775)

\* The first report of *Nycteola siculana* (FUCHS) for Bulgaria is from the Dobrogea, without exact locality, as *Sarrothripa undulana* ab. *dilutana* Hb. (BACHMETJEV, 1902: 419). Known from Sliven as *Sarrothripus revayana* Sc. var. *dilutana* Hb. (REBEL, 1903: 271; BURESCH & TULESCHKOW, 1943: 88); Alibotoush [= Slavyanka] Mts at an altitude of 750–1500 m as *Sarrothrypus revayna* Sc. ab. *dilutana* Hb. (DRENOWSKI, 1931a: 17; 1931b: 60; TULESCHKOW, 1931b: 196); Paril village (LUTZ LEHMANN, pers. comm.);



W Bulgaria, Zemen Gorge, Skakavitza Railway Station and Ossogovo Mts, Ossogovo Chalet as a new species for Bulgaria (GANEV, 1983d: 70; 1983e: 91); Zemen Gorge, Skakavitza Railway Station (GANEV, 1983b: 94); Ossogovo Mts, 1400–1700 m altitude (GANEV, 1983d: 70); SW Bulgaria, “Rupite” near Volcanic Hill Kozhouh, Petrich district (GANEV, 1984b: 135); SW Bulgaria, Melnik town (GOATER, 1996: 283); E Bulgaria, Strandzha Mts, Malko Tarnovo town (GANEV, 1985b: 90); Rhodopi Mts, Kritchim, 300 m altitude (KOLEV, 1993: 43); E Rhodopi Mts, Studen Kladenetz village (BESHKOV, 1995a: 207) and Byalo Pole (= Belopolyane) village (GOATER, 1996: 283); Stara Planina Mts without exact locality as *Sarrothrips revayana* var. *dilutana* Hb. (DRENOWSKI, 1930a: 25), probably following the previous reports for Sliven town; N Black Sea Coast, near Balchik town (BESHKOV, 1997: 160; BESHKOV & NOWACKI, 1998: 48).

Subgenus *Dufayella* CAPUSE, 1972

(690.) *Nycteola asiatica asiatica* (KRULIKOVSKY, 1904)

= *asiatica* CRUL. (incorrect author's name)

= *populana* (PATOČKA, 1953)

Tribus Benini BECK, 1960

Genus *Bena* BILLBERG, 1820

(691.) *Bena bicolorana bicolorana* (FUESSLY, 1775)\*

= *prasinana* auct., nec LINNAEUS, 1758

= *quercana* ([DENIS & SCHIFFERMÜLLER], 1775)

\* For the synonymy and the current status of *Bena bicolorana* (FUESSLY, 1775) / *Pseudoips prasinanus* (LINNAEUS, 1758) see MIKKOLA & HONEY (1993: 153).

Tribus Chloephorini STANTON, 1859

Genus *Pseudoips* HÜBNER, 1822

(692.) *Pseudoips prasinanus prasinanus* (LINNAEUS, 1758)\*

= *fagana* (FABRICIUS, 1781)

= *faganus* F. (incorrect subsequent spelling)

\* *Prasinanus* LINNAEUS, 1758 is a senior subjective synonym of *Pseudoips faganus* (FABRICIUS, 1781). For the synonymy between both taxa see MIKKOLA & HONEY (1993: 152).

Tribus Eariini BECK, 1996

Genus *Earias* HÜBNER, [1825]

(693.) *Earias clorana clorana* (LINNAEUS, 1761)

= *chlorana* auct. (incorrect subsequent spelling)

**(694.) *Earias vernana vernana* (HÜBNER, [1796–1799])\***

\* *Earias vernana* (HÜBNER) is not a very rare species, reported as new for Bulgaria from the Black Sea Coast, Varna, 28.V.1936, N. KARNOSCHITZKY leg. (BURESCH, 1939: 155). Many other localities have been established since.

***Earias insulana insulana* (BOISDUVAL, 1833)\***

\* *Earias insulana* (BOISDUVAL) has never been found in Bulgaria. It is another species wrongly included for Bulgaria in the list of NOWACKI & FIBIGER (1996: 296).

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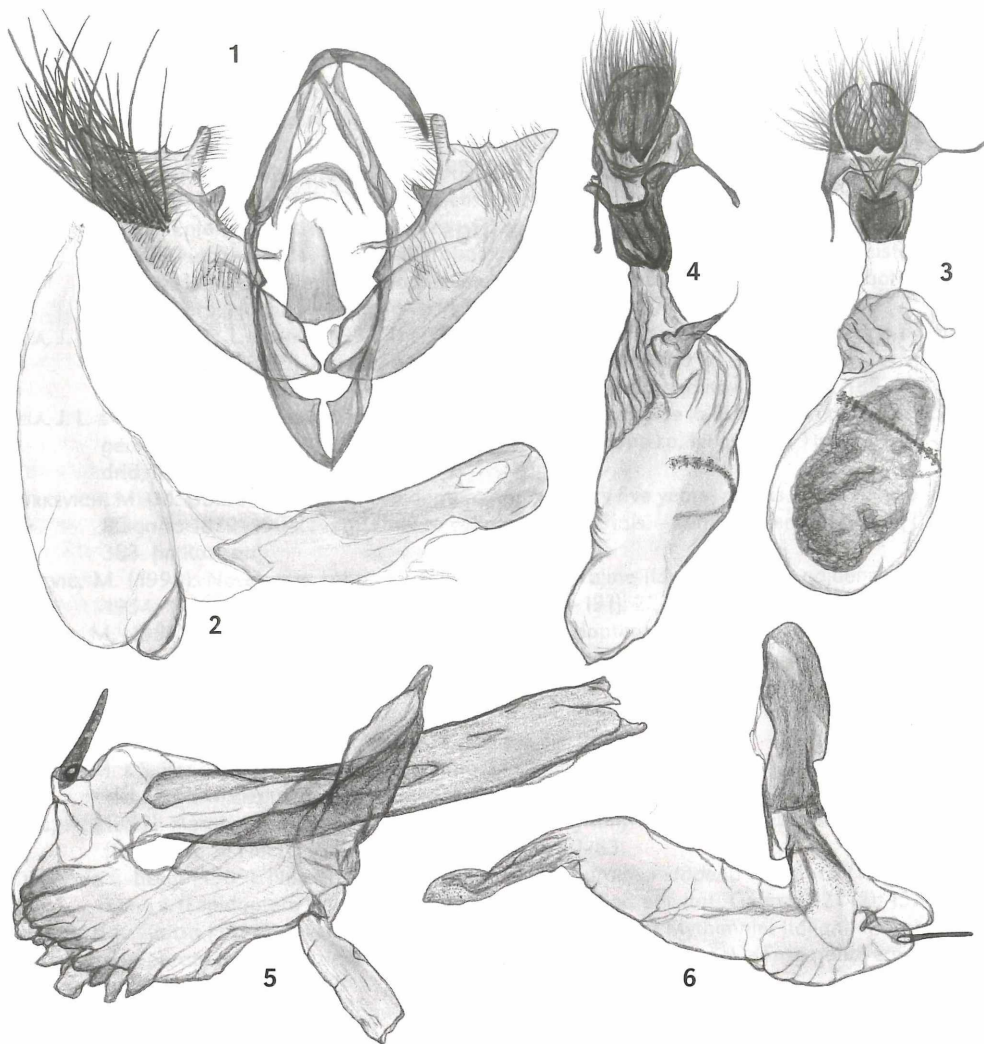
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**Genitalia figures 1–150**

***Metaegle-frons* (figs 151–154)**



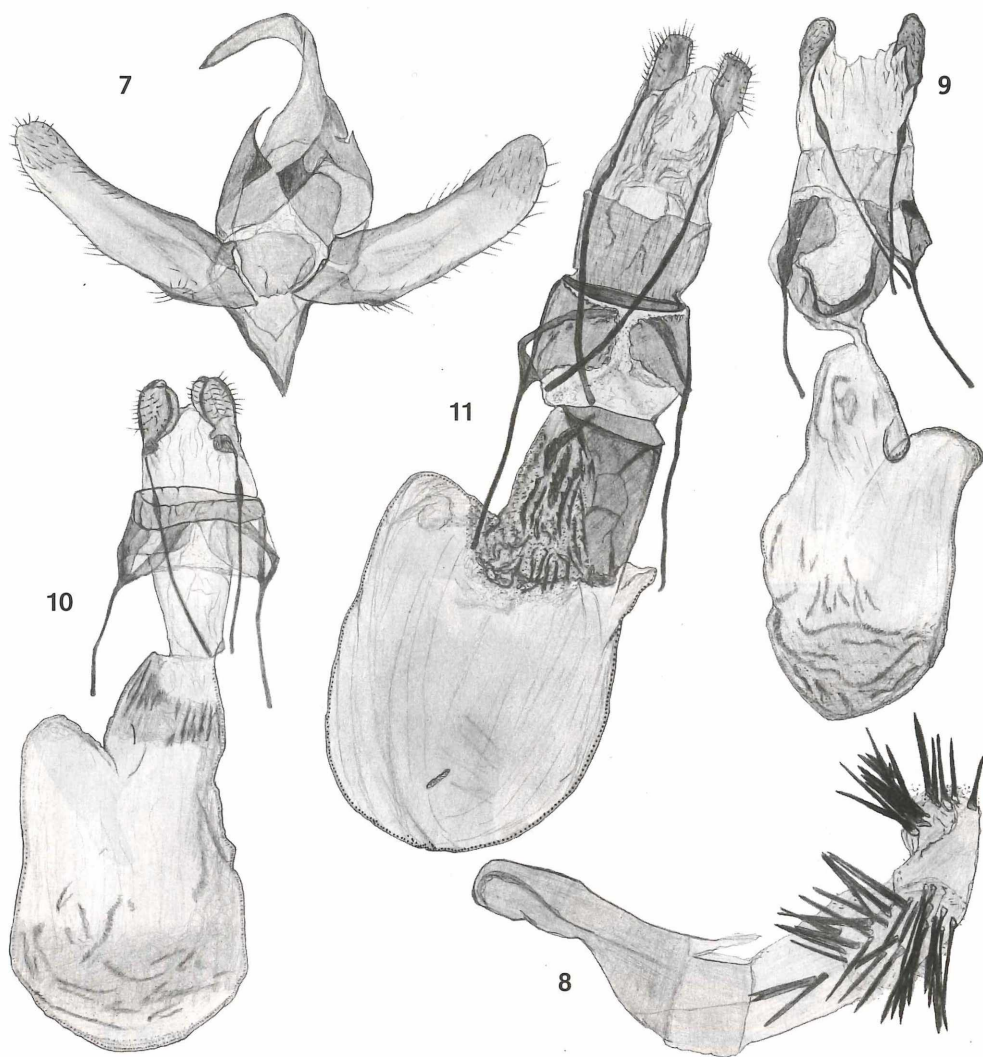
Gen. figs 1, 2: *Cryphia receptricula receptricula* (HÜBNER, [1803]), male genitalia (1) with everted vesica (2). Gen. prep. 1./11.XII.1998, S. BESHKOV. [SE Bulgaria, Svilengrad town, TSCHORBADZHIEV leg.], 29.VII.?, in coll. National Museum of Natural History (Sofia). [1, 2: 25×]

Gen. fig. 3: *Autophila dilucida dilucida* (HÜBNER, [1808]), female genitalia. SW Bulgaria, Aramiiska Douпка Cave near Levounovo village, Petrich district, 14.XII.1996, V. GASHTAROV leg., in coll. S. BESHKOV.

Gen. fig. 4: *Autophila asiatica argentea* (CARADJA, 1930), female genitalia. Gen. prep. 1./31.XII.1999, S. BESHKOV. NE Bulgaria, Seslav hunting reserve near Koubrat town, Razgrad region, 02.–03.VI.1976, leg. and in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia). [3, 4: 10×]

Gen. fig. 5: *Cucullia lactucae* ([DENIS & SCHIFFERMÜLLER])?, everted vesica. Gen. prep. 1./15.XI.1999, S. BESHKOV. NE Bulgaria, Razgrad town, 27.IV.1908, MARKOWITSCH leg., in coll. National Museum of Natural History (Sofia). [15×]

Gen. fig. 6: *Cucullia lucifuga* ([DENIS & SCHIFFERMÜLLER], 1775), everted vesica. Gen. prep. 1./08.VII.1998, S. BESHKOV. Bulgaria, West Stara Planina Mts, "Yavor" Chalet above Tchiprovtzi Town, 950 m, 27.VI.1998, S. BESHKOV, B. PETROV & G. STOYANOV leg., in coll. S. BESHKOV. [10×]



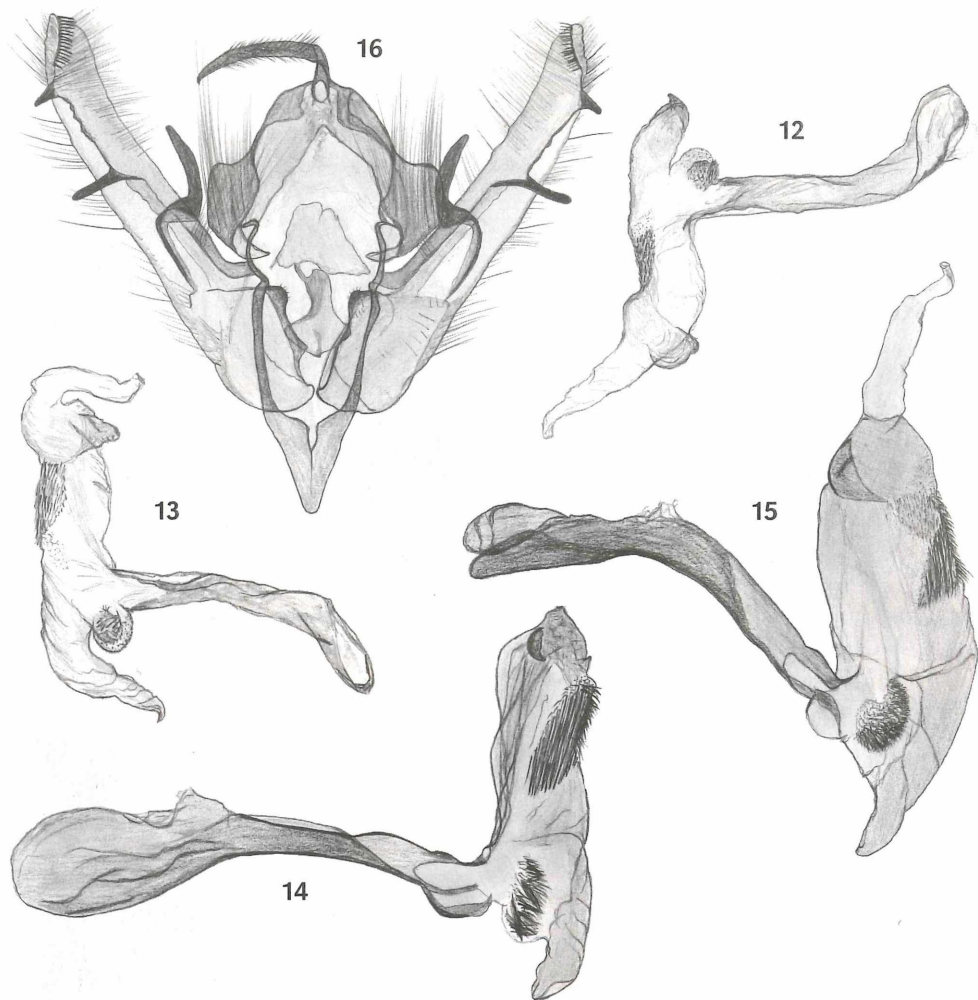
Gen. figs 7, 8: *Panemeria tenebrata tenebrata* (SCOPOLI, 1763), male genitalia (7) with everted vesica (8). Gen. prep. 5./22.VI.1998, S. BESHKOV. SW Bulgaria, Kroupnik near Kresna Gorge, 25.IV.1918, D. ILCHEV leg., in coll. National Museum of Natural History (Sofia). [7, 8: 37.5×]

Gen. fig. 9: *Panemeria tenebrata tenebrata* (SCOPOLI, 1763), female genitalia. Gen. prep. 6./22.VI.1998, S. BESHKOV. SW Bulgaria, Kroupnik near Kresna Gorge, 25.IV.1918, D. ILCHEV leg., in coll. National Museum of Natural History (Sofia). [25×]

Gen. fig. 10: *Panemeria tenebrata tenebrata* (SCOPOLI, 1763), female genitalia. Gen. prep. 7./22.VI.1998, S. BESHKOV. SW Bulgaria, Kresna Gorge, Kresna town, 04.V.1929, KR. TULESHKOV leg., in coll. National Museum of Natural History (Sofia). [25×]

Gen. fig. 11: *Panemeria tenebromorpha tenebromorpha* RÁKOSY, HENTSCHOLEK & HUBER, 1996, female genitalia. Gen. prep. 1./15.I.1999, S. BESHKOV. Bulgaria, W Stara Planina Mts, Beledye Han near Kostinbrod town, Sofia Region, 04.VI.1967, S. BOCHAROV leg., in coll. BOCHAROV in National Museum of Natural History (Sofia). [25×]





Gen. fig. 12: *Paradrina suscianja* VON MENTZER, 1981, everted vesica. Gen. prep. 1./15.VIII.1994, S. BESHKOV. Bulgaria, Rila Mts., Yazovir Beli Iskar dam, the resting house, 1500 m, 08.VII.1994, I. STOYCHEV leg., in coll. S. BESHKOV.

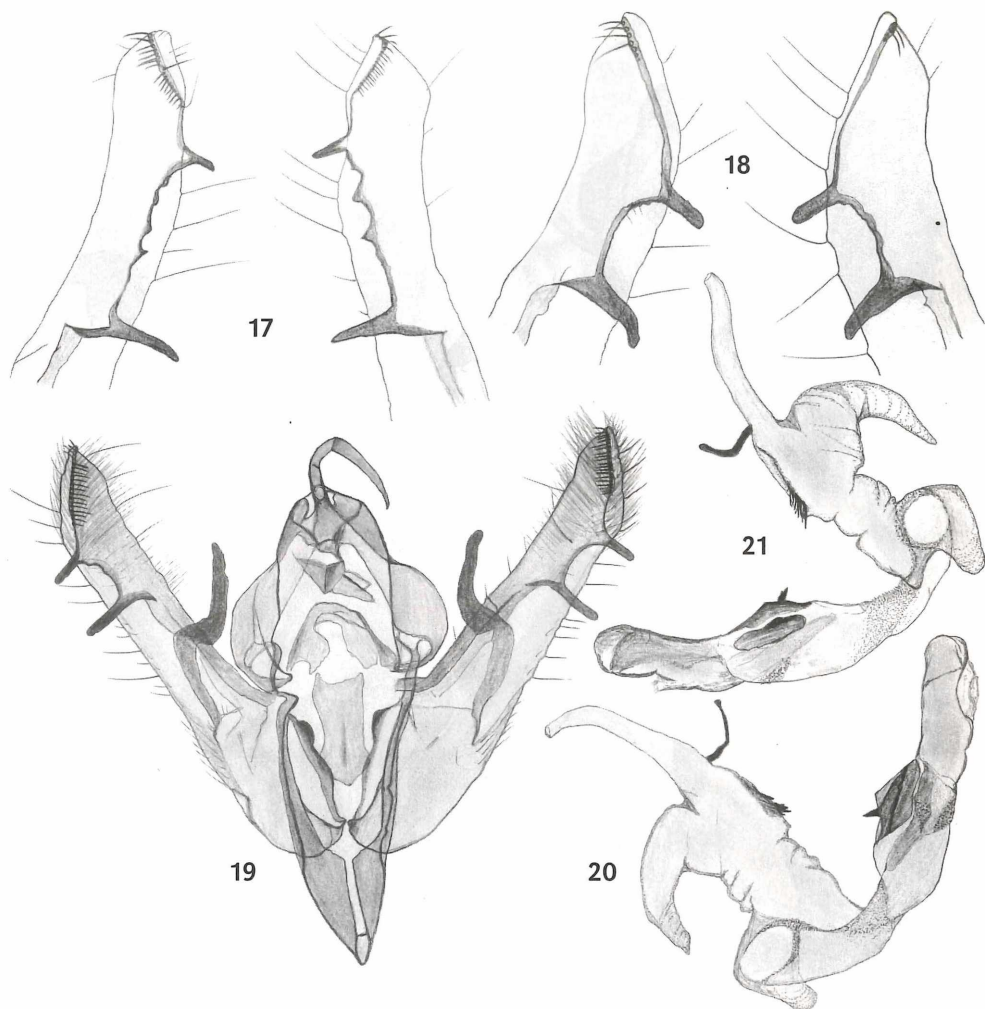
Gen. fig. 13: *Paradrina suscianja* VON MENTZER, 1981, everted vesica. Gen. prep. 2./15.VIII.1994, S. BESHKOV. Bulgaria, Rila Mts., Yazovir Beli Iskar dam, the resting house, 1500 m, 08.VII.1994, I. STOYCHEV leg., in coll. S. BESHKOV.

Gen. fig. 14: *Paradrina wulschlegeli schwingenschussi* (BOURSIN, 1936), everted vesica. Gen. prep. 3./07.VII.1998, BESHKOV. Bulgaria, Black Sea Coast, between Balchik Town and Touzlata, 2 km to Touzlata, 23.VIII.1996, S. BESHKOV, J. NOWACKI, C. PALKA & M. BUNALSKI leg., in coll. S. BESHKOV. [25×]

Gen. fig. 15: *Paradrina wulschlegeli schwingenschussi* (BOURSIN, 1936), everted vesica. Gen. prep. 9./18.I.1999, S. BESHKOV. NE Turkey, Karadeniz Daglari, Prov. Artvin, Yusufeli Region, above Barhal village, 1200 m, 19.VII.1995, BESHKOV, GELBRECHT & SCHWABE leg., in coll. S. BESHKOV. [25×]

Gen. fig. 16: *Agrochola kindermannii kindermannii* (FISCHER VON RÖSLERSTAMM, [1837]), male genitalia. Gen. prep. 4./29.III.1999, S. BESHKOV. SW Bulgaria, Roupite by Volcanic Hill of Kozhuh near Petrich Town, 29.X.1991, V. GASHTAROV leg., in coll. S. BESHKOV. [15×]





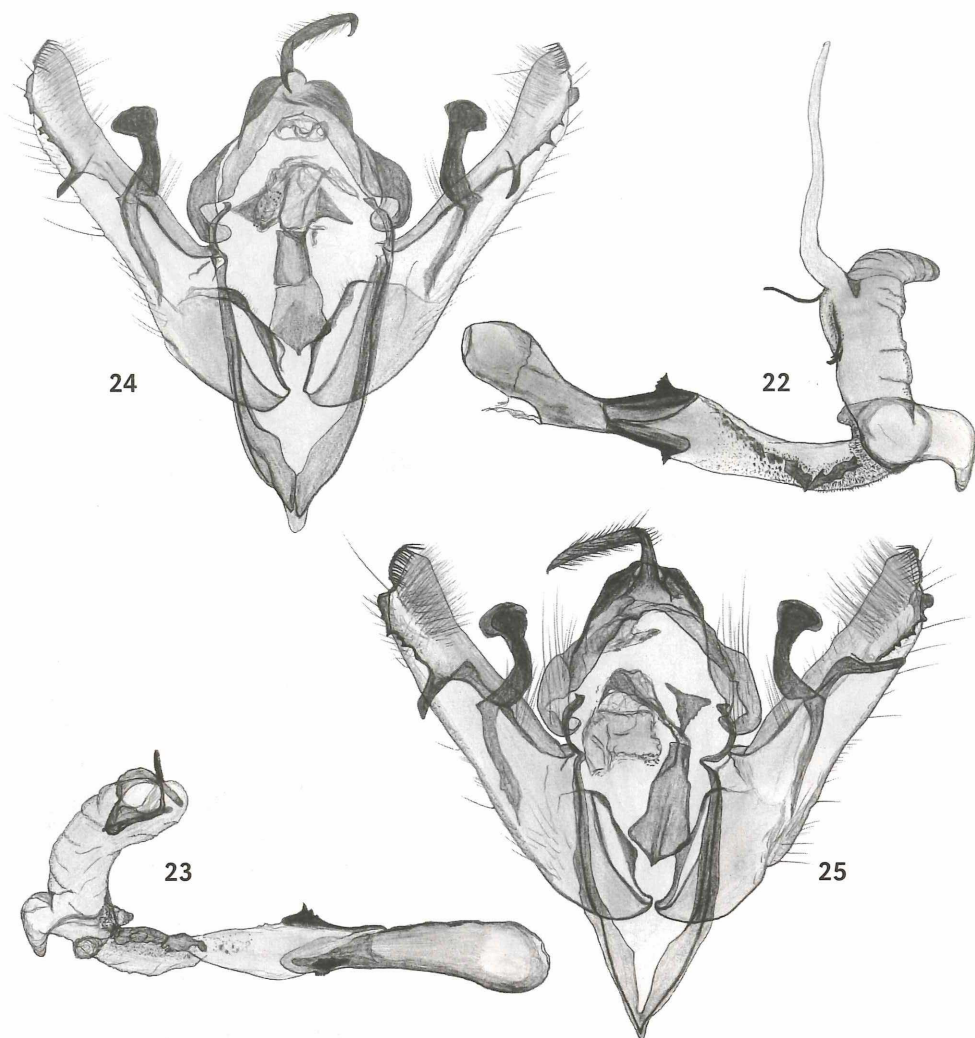
Gen. fig. 17: *Agrochola kindermannii kindermannii* (FISCHER VON RÖSLERSTAMM, [1837]), male, valval tips. Gen. prep. 3./29.III.1999, S. BESHKOV. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 14.XI.1987, leg. and in coll. S. BESHKOV. [25×]

Gen. fig. 18: *Agrochola consueta consueta* HERRICH-SCHÄFFER, [1852], male, valval tips. Gen. prep. 2./13.II.1999, S. BESHKOV. Turkey, Asia Minor, Prov. Antalia, "Termessos", 20 km from Antalia on the road to Denizli, near Karain village, 400 m, 22.XI.1998, S. BESHKOV, J. GELBRECHT & B. SCHACHT leg., in coll. S. BESHKOV. [25×]

Gen. fig. 19: *Agrochola consueta consueta* HERRICH-SCHÄFFER, [1852], male genitalia. Gen. prep. 1./13.II.1999, S. BESHKOV. Turkey, Asia Minor, Prov. Antalia, "Termessos", 25 km from Antalia on the road to Denizli, near Köyü, 600 m, 27.XI.1998, S. BESHKOV, J. GELBRECHT & B. SCHACHT leg., in coll. S. BESHKOV. [15×]

Gen. fig. 20: *Agrochola kindermannii kindermannii* (FISCHER VON RÖSLERSTAMM, [1837]), everted vesica. Gen. prep. 1./02.IV.1999, S. BESHKOV. SW Bulgaria, Volcanic Hill of Kozhuh near Petrich Town, 12.XI.1987, J. GANEV leg., in coll. National Museum of Natural History (Sofia). [10×]

Gen. fig. 21: *Agrochola kindermannii kindermannii* (FISCHER VON RÖSLERSTAMM, [1837]), everted vesica. Gen. prep. 1./02.IV.1999, S. BESHKOV. SW Bulgaria, Volcanic Hill of Kozhuh near Petrich Town, 12.XI.1987, J. GANEV leg., in coll. National Museum of Natural History (Sofia). [10×]

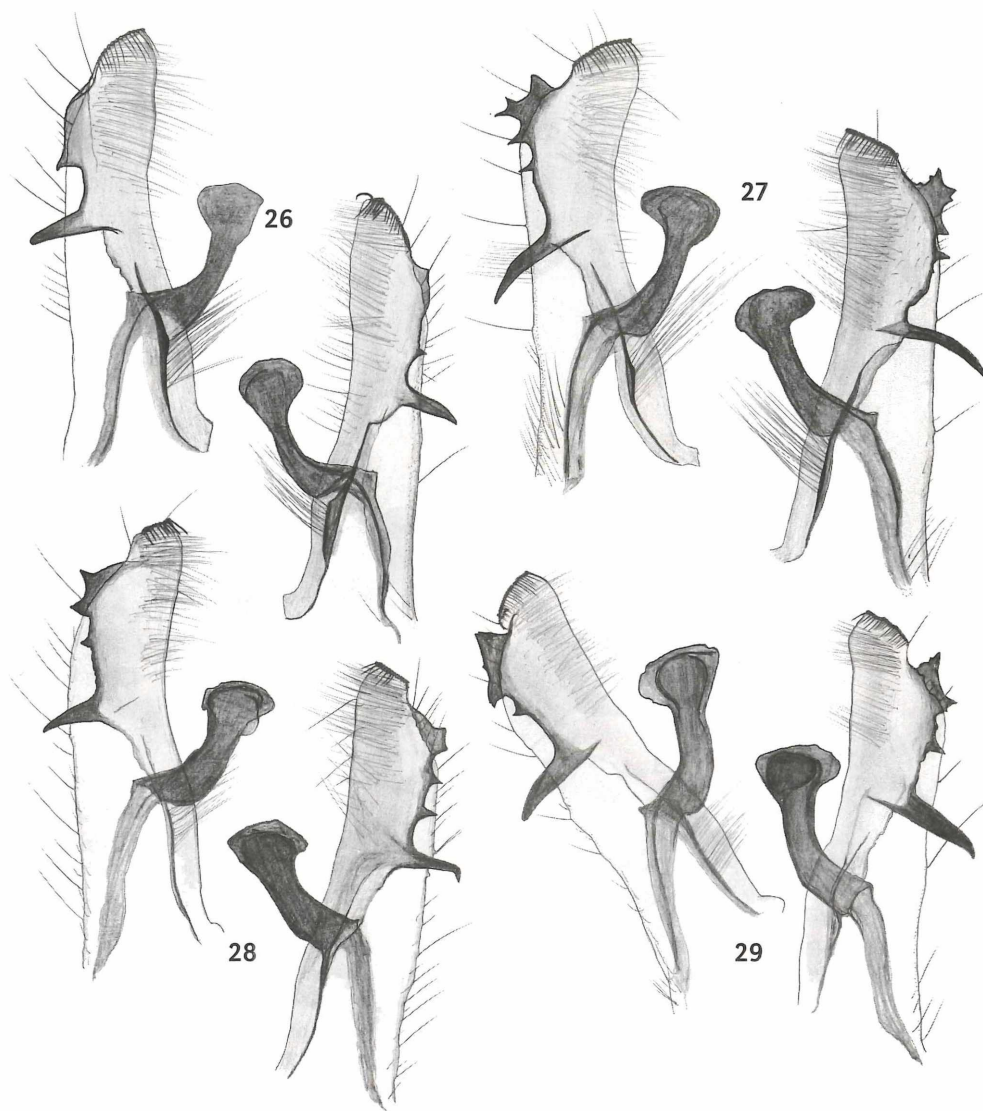


Gen. fig. 22: *Agrochola consueta consueta* HERRICH-SCHÄFFER, [1852], evereted vesca. Gen. prep. 1./29.III.1999, S. BESHKOV. Turkey, Asia Minor, Prov. Antalya, "Termessos", 25 km from Antalya on the road to Denizli, near Köyu, 600 m, 27.XI.1998, S. BESHKOV, J. GELBRECHT & B. SCHACHT leg., in coll. S. BESHKOV. [10×]

Gen. fig. 23: *Agrochola consueta consueta* HERRICH-SCHÄFFER, [1852], evereted vesca. Gen. prep. 2./29.III.1999, S. BESHKOV. Turkey, Asia Minor, Prov. Antalya, "Termessos", 25 km from Antalya on the road to Denizli, near Köyu, 600 m, 27.XI.1998, S. BESHKOV, J. GELBRECHT & B. SCHACHT leg., in coll. S. BESHKOV. [10×]

Gen. fig. 24: *Agrochola rupicapra rupicapra* (STAUDINGER, 1879), male genitalia. Gen. prep. 2./26.II.1999, S. BESHKOV. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 28.XI.1987, leg. and in coll. S. BESHKOV. [15×]

Gen. fig. 25: *Agrochola rupicapra rupicapra* (STAUDINGER, 1879), male genitalia. Gen. prep. 4./26.II.1999, S. BESHKOV. Turkey, Asia Minor, Prov. Antalya, "Termessos", 25 km from Antalya on the road to Denizli, near Köyu, 600 m, 27.XI.1998, S. BESHKOV, J. GELBRECHT & B. SCHACHT leg., in coll. S. BESHKOV. [15×]



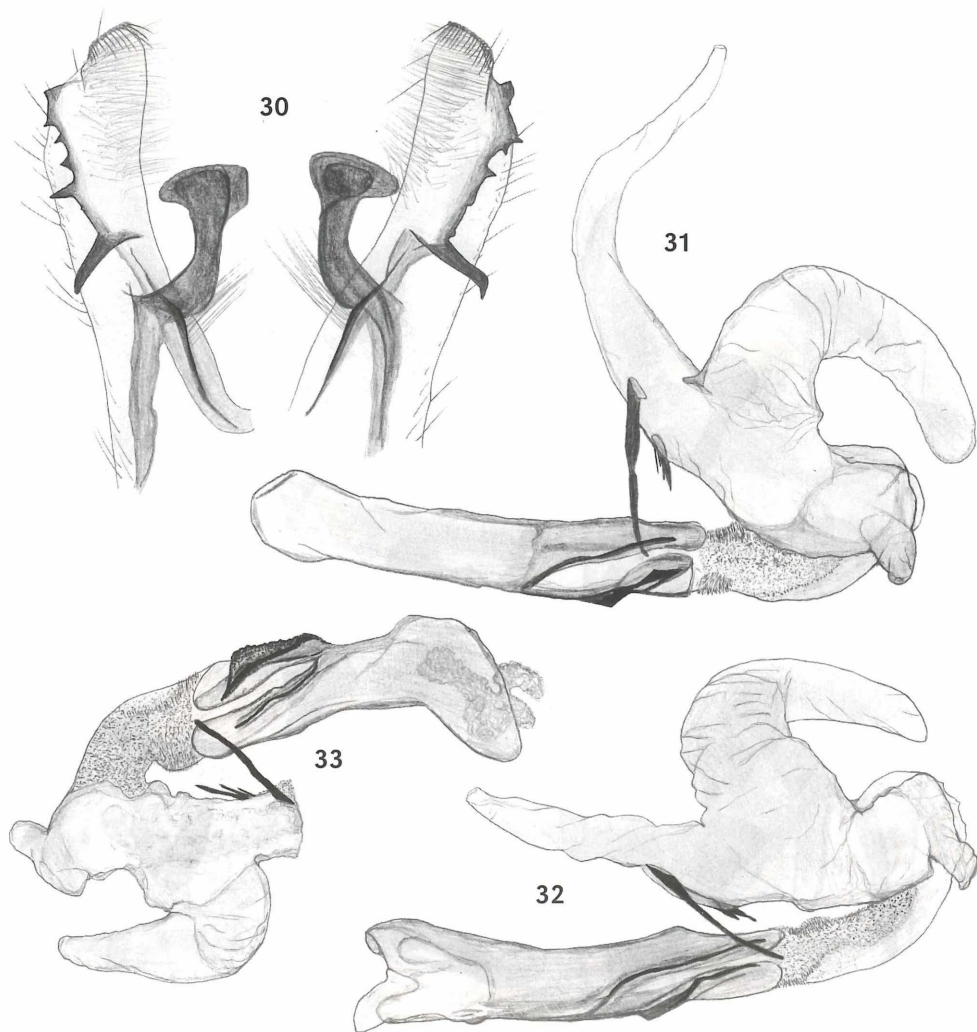
Gen. fig. 26: *Agrochola rupicapra rupicapra* (STAUDINGER, 1879), male, valval tips. Gen. prep. 3./26.II. 1999, S. BESHKOV. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 17.X.1987, leg. and in coll. S. BESHKOV. [25×]

Gen. fig. 27: *Agrochola rupicapra rupicapra* (STAUDINGER, 1879), male, valval tips. Gen. prep. 3./13.II. 1999, S. BESHKOV. Turkey, Asia Minor, Prov. Antalya, "Termessos", 25 km from Antalya on the road to Denizli, near Köyu, 600 m, 27.XI.1998, S. BESHKOV, J. GELBRECHT & B. SCHACHT leg., in coll. S. BESHKOV. [25×]

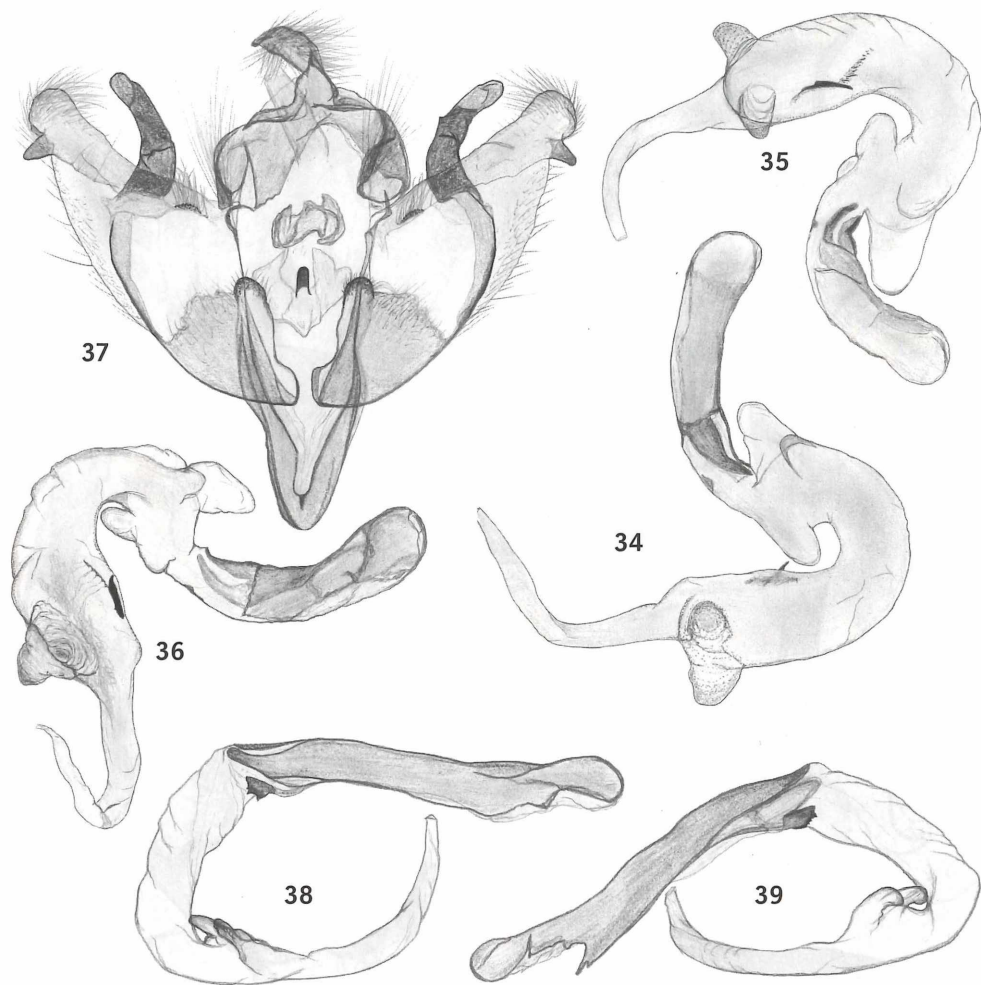
Gen. fig. 28: *Agrochola rupicapra rupicapra* (STAUDINGER, 1879), male, valval tips. Gen. prep. 1./26.II. 1999, S. BESHKOV. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 24.X.1995, leg. and in coll. S. BESHKOV. [25×]

Gen. fig. 29: *Agrochola rupicapra rupicapra* (STAUDINGER, 1879), male, valval tips. Gen. prep. 5./26.II. 1999, S. BESHKOV. Turkey, Asia Minor, Prov. Antalya, "Termessos", 25 km from Antalya on the road to Denizli, near Köyu, 600 m, 27.XI.1998, S. BESHKOV, J. GELBRECHT & B. SCHACHT leg., in coll. S. BESHKOV. [25×]





- Gen. fig. 30: *Agrochola rupicapra rupicapra* (STAUDINGER, 1879), male, valval tips. Gen. prep. 4./13.II. 1999, S. BESHKOV. Turkey, Asia Minor, Prov. Antalya, "Termessos", 25 km from Antalya on the road to Denizli, near Köyü, 600 m, 27.XI.1998, S. BESHKOV, J. GELBRECHT & B. SCHACHT leg., in coll. S. BESHKOV. [25×]  
 Gen. fig. 31: *Agrochola rupicapra rupicapra* (STAUDINGER, 1879), everted vesica. Gen. prep. 4./26.II. 1999, S. BESHKOV. Turkey, Asia Minor, Prov. Antalya, "Termessos", 25 km from Antalya on the road to Denizli, near Köyü, 600 m, 27.XI.1998, S. BESHKOV, J. GELBRECHT & B. SCHACHT leg., in coll. S. BESHKOV. [15×]  
 Gen. fig. 32: *Agrochola rupicapra rupicapra* (STAUDINGER, 1879), everted vesica. Gen. prep. 2./26.II. 1999, S. BESHKOV. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 28.XI.1987, leg. and in coll. S. BESHKOV. [15×]  
 Gen. fig. 33: *Agrochola rupicapra rupicapra* (STAUDINGER, 1879), everted vesica. Gen. prep. 3./26.II. 1999, S. BESHKOV. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 17.X.1987, leg. and in coll. S. BESHKOV. [15×]



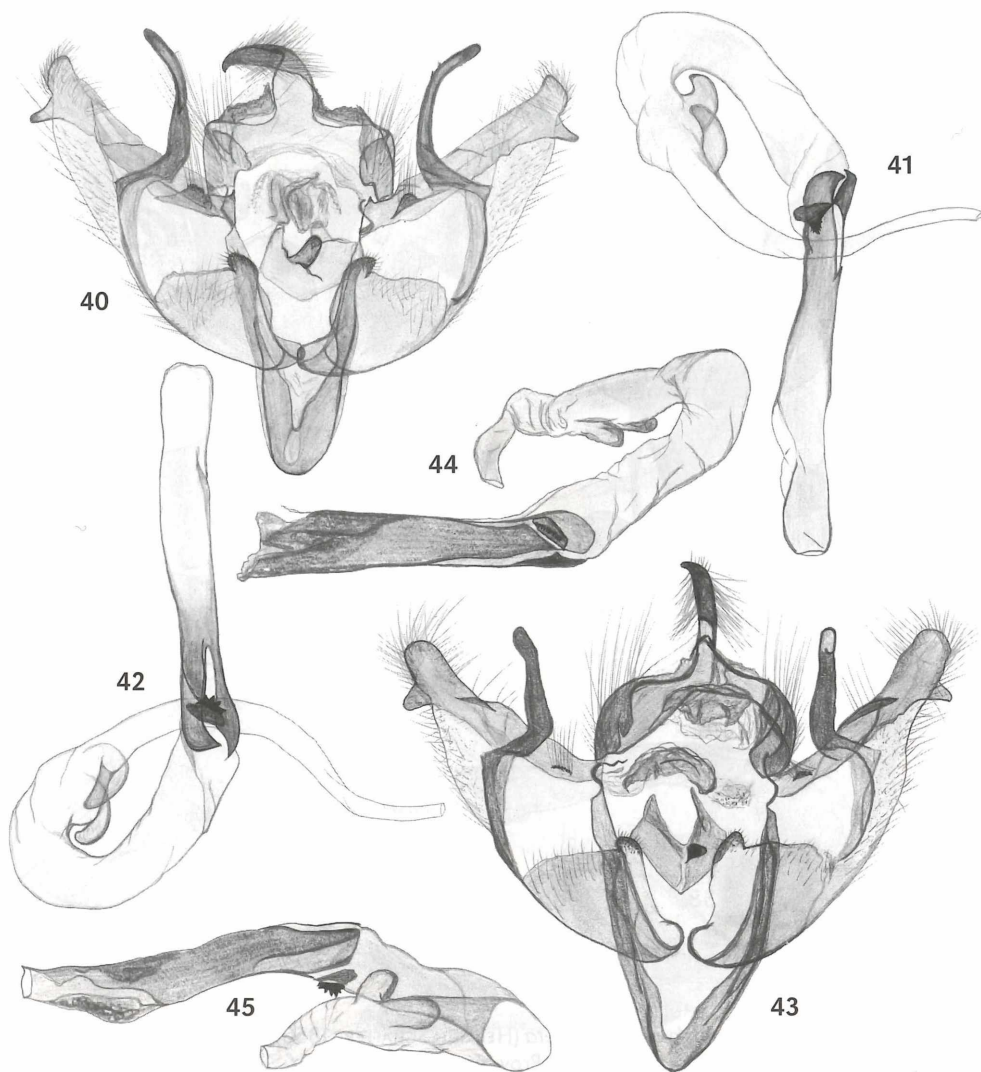
Gen. fig. 34: *Agrochola (Frivaldskyola) mansueta* (HERRICH-SCHÄFFER, 1850), evereted vesca. Gen. prep. 6./29.III.1999, S. BESHKOV. Turkey, Asia Minor, Prov. Antalia, "Termessos", 25 km from Antalia on the road to Denizli, near Köyu, 600 m, 27.XI.1998, S. BESHKOV, J. GELBRECHT & B. SCHACHT leg., in coll. S. BESHKOV. [10×]

Gen. fig. 35: *Agrochola (Frivaldskyola) mansueta* (HERRICH-SCHÄFFER, 1850), evereted vesca. Gen. prep. 6./29.III.1999, S. BESHKOV. Turkey, Asia Minor, Prov. Antalia, "Termessos", 25 km from Antalia on the road to Denizli, near Köyu, 600 m, 27.XI.1998, S. BESHKOV, J. GELBRECHT & B. SCHACHT leg., in coll. S. BESHKOV. [10×]

Gen. fig. 36: *Agrochola (Frivaldskyola) mansueta* (HERRICH-SCHÄFFER, 1850), evereted vesca. Gen. prep. 5./29.III.1999, S. BESHKOV. Turkey, Asia Minor, Prov. Antalia, "Termessos", 25 km from Antalia on the road to Denizli, near Köyu, 600 m, 27.XI.1998, S. BESHKOV, J. GELBRECHT & B. SCHACHT leg., in coll. S. BESHKOV. [10×]

Gen. fig. 37: *Dasypolia templi templi* (THUNBERG, 1792), male genitalia. Gen. prep. 1./16.XI.1999, S. BESHKOV. Sweden, Upl. 23.IX.1966, Kapelskär, E. VON MENTZER leg., in coll. J. GANEV. [15×]

Gen. figs 38, 39: *Dasypolia templi templi* (THUNBERG, 1792), everted vesica. Gen. prep. 1./16.XI.1999, S. BESHKOV. Sweden, Upl. 23.IX.1966, Kapelskär, E. VON MENTZER leg., in coll. J. GANEV. [15×]



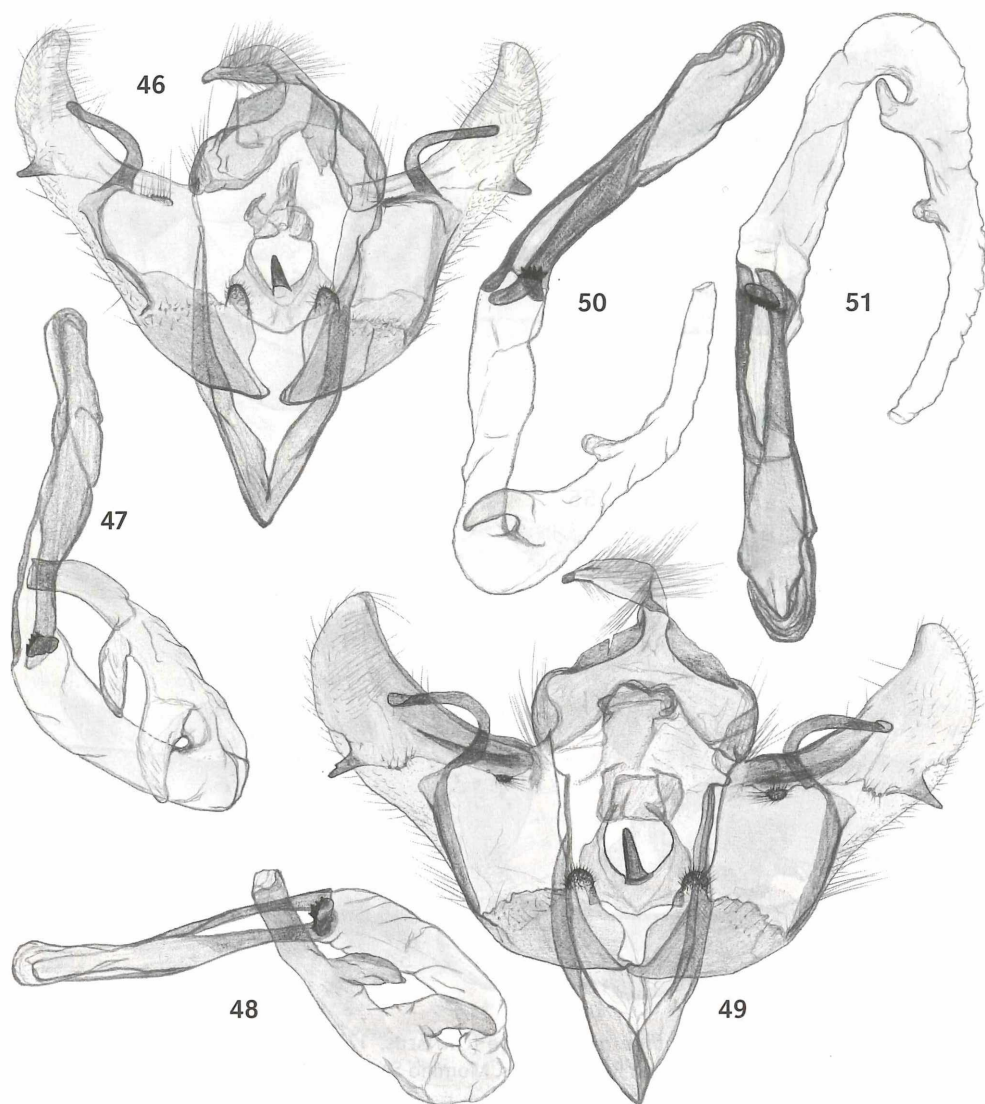
Gen. fig. 40: *Dasypolia templi vecchimontium* RONKAY & VARGA, 1985, male genitalia. Gen. prep. 1./18.X.1999, S. BESHKOV. Bulgaria, Iskar Valley, 2 km south of Passarel village, between Sofia and Samokov towns, ~700 m, 13.X.1999, S. BESHKOV, B. PETROV & VL. BESHKOV leg. in coll. S. BESHKOV. [15×]

Gen. figs 41, 42: *Dasypolia templi vecchimontium* RONKAY & VARGA, 1985, everted vesica. Gen. prep. 1./18.X.1999, S. BESHKOV. Bulgaria, Iskar Valley, 2 km south of Passarel village, between Sofia and Samokov towns, ~700 m, 13.X.1999, S. BESHKOV, B. PETROV & VL. BESHKOV leg. in coll. S. BESHKOV. [41, 42: 15×]

Gen. fig. 43: *Dasypolia templi macedonica* BESHKOV, subspec. nov. (holotype), male genitalia. Gen. prep. 1./20.X.1999, S. BESHKOV. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 08.–10.XI.1978, leg. and in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Gen. figs 44, 45: *Dasypolia templi macedonica* BESHKOV, subspec. nov. (holotype), everted vesica. Gen. prep. 1./20.X.1999, S. BESHKOV. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 08.–10.XI.1978, leg. and in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia). [43, 44, 45: 15×]



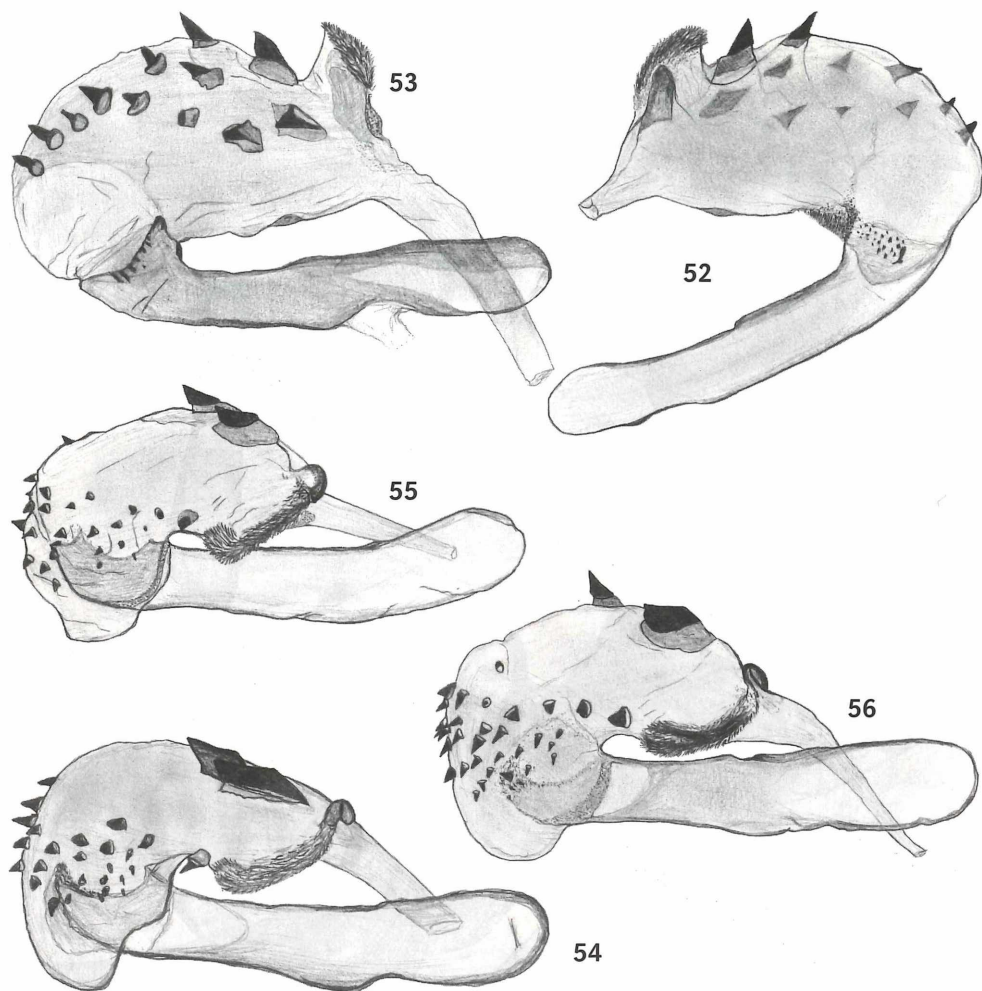


Gen. fig. 46: *Dasypolia ferdinandi ferdinandi* RÜHL, 1892, male genitalia. Gen. prep. 1./18.XI.1999, S. BESHKOV. Italy, Alps, Aosta, Val di Rhemes, 1800–2000 m, 14.X.1991, M. PETERSEN/Lübeck leg., in coll. S. BESHKOV. [15×]

Gen. figs 47, 48: *Dasypolia ferdinandi ferdinandi* RÜHL, 1892, everted vesica. Gen. prep. 1./18.XI.1999, S. BESHKOV. Italy, Alps, Aosta, Val di Rhemes, 1800–2000 m, 14.X.1991, M. PETERSEN/Lübeck leg., in coll. S. BESHKOV. [47, 48: 15×]

Gen. fig. 49: *Dasypolia ferdinandi petrovi* BESHKOV, subspec. nov. (holotype), male genitalia. Gen. prep. 1./10.XI.1999, S. BESHKOV. Bulgaria, East Rhodopi Mts, below Egrek village, Kroumovgrad district, 600 m, 06.XI.1999, S. BESHKOV, B. PETROV & D. VASSILEV leg., in coll. S. BESHKOV. [15×]

Gen. figs 50, 51: *Dasypolia ferdinandi petrovi* BESHKOV, subspec. nov. (holotype), everted vesica. Gen. prep. 1./10.XI.1999, S. BESHKOV. Bulgaria, East Rhodopi Mts, below Egrek village, Kroumovgrad district, 600 m, 06.XI.1999, S. BESHKOV, B. PETROV & D. VASSILEV leg., in coll. S. BESHKOV. [50, 51: 15×]



Gen. fig. 52: *Allophyes oxyacanthae oxyacanthae* (LINNAEUS, 1758), everted vesica. Gen. prep. 5./22.II.1999, S. BESHKOV. Bulgaria, East Rhodopi Mts, Momina Skala Chalet near Madzharovo Town, 160 m, 22.X.1998, leg. and in coll. S. BESHKOV. [15×]

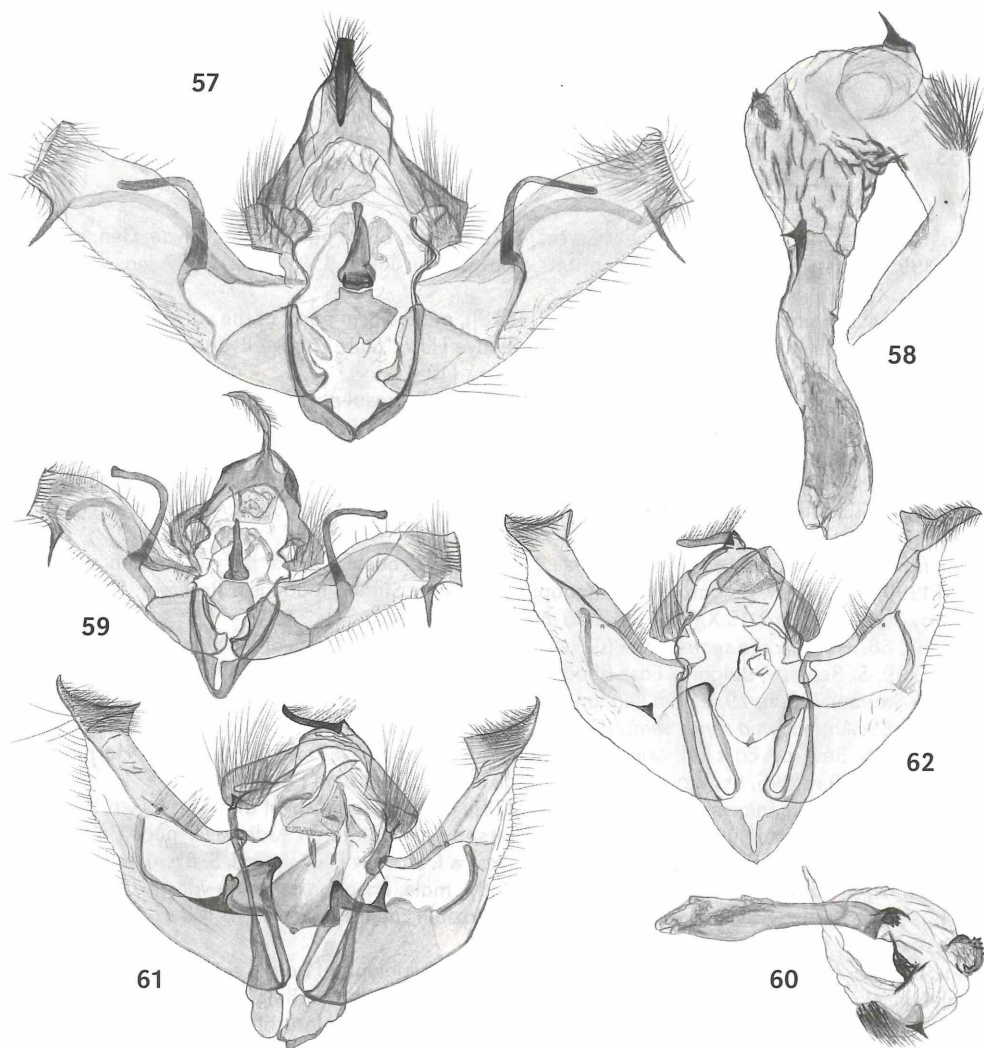
Gen. fig. 53: *Allophyes oxyacanthae oxyacanthae* (LINNAEUS, 1758), everted vesica. Gen. prep. 4./22.II.1999, S. BESHKOV. Bulgaria, East Rhodopi Mts, Siv Kladenetz village, Ivaylovgrad district, 140 m, 23.–24.X.1998, leg. and in coll. S. BESHKOV. [15×]

Gen. fig. 54: *Allophyes asiatica asiatica* (STAUDINGER, 1892), everted vesica. Gen. prep. 1./22.II.1999, S. BESHKOV. Turkey, Asia Minor, Prov. Antalia, "Termessos", 25 km from Antalia on the road to Denizli, near Köyü, 600 m, 27.XI.1998, S. BESHKOV, J. GELBRECHT & B. SCHACHT leg., in coll. S. BESHKOV. [15×]

Gen. fig. 55: *Allophyes asiatica asiatica* (STAUDINGER, 1892), everted vesica. Gen. prep. 2./22.II.1999, S. BESHKOV. Turkey, Asia Minor, Prov. Antalia, "Termessos", 20 km from Antalia on the road to Denizli, near Karain, village, 400 m, 22.XI.1998, S. BESHKOV, J. GELBRECHT & B. SCHACHT leg., in coll. S. BESHKOV. [15×]

Gen. fig. 56: *Allophyes asiatica asiatica* (STAUDINGER, 1892), everted vesica. Gen. prep. 3./22.II.1999, S. BESHKOV. Turkey, Asia Minor, Prov. Antalia, Alania districts, Güselbag, 850 m, 24.XI.1998, S. BESHKOV, J. GELBRECHT & B. SCHACHT leg., in coll. S. BESHKOV. [15×]



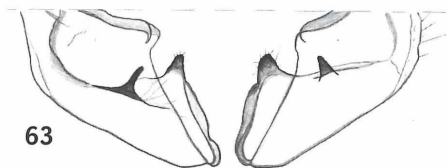


Gen. figs 57, 58: *Dryobotodes monochroma monochroma* (ESPER, [1790]), male genitalia (57) with everted vesica (58). Gen. prep. 1./16.XII.1998, S. BESHKOV. NE Bulgaria, Black Sea Coast, Varna town, 08.IX.1939, N. KARNOSCHITZKY leg., in coll. KARNOSCHITZKY in National Museum of Natural History (Sofia). [57, 58: 15×]

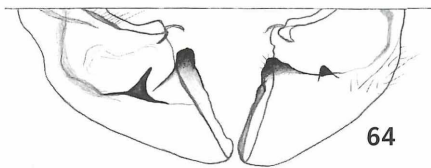
Gen. figs 59, 60: *Dryobotodes servadeii servadeii* PARENZAN, 1982, male genitalia (59) with everted vesica (60). Gen. prep. 1./20.I.1999, S. BESHKOV. W Bulgaria, Zemen gorge, Skakavitzia Railway Station, 01.IX.1980, J. GANEV leg., in coll. National Museum of Natural History (Sofia). [59, 60: 10×]

Gen. fig. 61: *Ammoconia senex senex* (GEYER, [1828]), male genitalia. Gen. prep. 8./09.II.1999, S. BESHKOV. Bulgaria, Rhodopi Mts, Lukovitza Motel above Assenovgrad Town, 29.X.1986, leg. and in coll. S. BESHKOV. [10×]

Gen. fig. 62: *Ammoconia senex senex* (GEYER, [1828]), male genitalia. Gen. prep. 1./19.III.1999, S. BESHKOV. Republic of Macedonia, Galitchitza Mts, above Trapejca village, 1480 m, between Trapejca and Oteshevo, Ohrid Region, 10.IX.1997, S. BESHKOV, V. GASHTAROV, M. & K. BESHKOVI leg., in coll. S. BESHKOV. [10×]



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Gen. fig. 63: *Ammoconia senex senex* (GEYER, [1828]), male, basal parts of the valvae. Gen. prep. 7./09.II.1999, S. BESHKOV. Bulgaria, Rhodopi Mts, above Devin Town, 850 m, 10.X.1987, leg. and in coll. S. BESHKOV. [10×]

Gen. fig. 64: *Ammoconia senex senex* (GEYER, [1828]), male, basal parts of the valvae. Gen. prep. 9./09.II.1999, S. BESHKOV. Bulgaria, Bessaparskite Ridove Hills, "Saite" above Byaga village, Pazardzhik Region, 250 m, 27.X.1986, leg. and in coll. S. BESHKOV. [10×]

Gen. fig. 65: *Ammoconia senex senex* (GEYER, [1828]), male, basal parts of the valvae. Gen. prep. 10./09.II.1999, S. BESHKOV. West Bulgaria, Zemen Gorge, Skakavitza Railway Station, 02.XI.1985, leg. and in coll. S. BESHKOV. [10×]

Gen. fig. 66: *Ammoconia senex senex* (GEYER, [1828]), male, basal parts of the valvae. Gen. prep. 11./09.II.1999, S. BESHKOV. West Bulgaria, Zemen Gorge, Skakavitza Railway Station, 13.X.1986, leg. and in coll. S. BESHKOV. [10×]

Gen. fig. 67: *Ammoconia senex senex* (GEYER, [1828]), male, basal parts of the valvae. Gen. prep. 12./09.II.1999, S. BESHKOV. Bulgaria, East Rhodopi Mts, Yazovr Studen Kladenetz Reservoir, Sredna Arda Railway Station, 200 m, 18.X.1990, leg. and in coll. S. BESHKOV. [10×]

Gen. fig. 68: *Ammoconia senex senex* (GEYER, [1828]), male, basal parts of the valvae. Gen. prep. 14./09.II.1999, S. BESHKOV. Bulgaria, East Rhodopi Mts, Yazovr Studen Kladenetz Reservoir, Sredna Arda Railway Station, 200 m, 29.X.1995, leg. and in coll. S. BESHKOV. [10×]

Gen. fig. 69: *Ammoconia senex senex* (GEYER, [1828]), male, basal parts of the valvae. Gen. prep. 15./09.II.1999, S. BESHKOV. East Bulgaria, Sakar Mts, Radinchevo above Dossiteevo village., Harmanli district, 400 m, 09.X.1996, BESHKOV & I. STOYCHEV leg., in coll. S. BESHKOV. [10×]

Gen. fig. 70: *Ammoconia senex senex* (GEYER, [1828]), male, basal parts of the valvae. Gen. prep. 16./09.II.1999, S. BESHKOV. Bulgaria, East Rhodopi Mts, by the bridge on Arda River near Dolno Tcherkoviste village, 180 m alt., 05.–06.X.1996, S. BESHKOV & I. STOYCHEV leg., in coll. S. BESHKOV. [10×]

Gen. fig. 71: *Ammoconia senex senex* (GEYER, [1828]), male, basal parts of the valvae. Gen. prep. 1./23.II.1999, S. BESHKOV. SW Bulgaria, Volcanic Hill "Kozhuh" near Petrich town, 100 m, 22.–23.X.1997, S. BESHKOV & B. GOATER leg., in coll. S. BESHKOV. [10×]

Gen. fig. 72: *Ammoconia senex senex* (GEYER, [1828]) (topotype of *senex wagneri* BOURSIN, 1935), male, basal parts of the valvae. Gen. prep. 1./05.III.1999, S. BESHKOV. Bulgaria, "Collectio Princ Bulg. Slivno" [Sliven town/or surroundings], in coll. National Museum of Natural History (Sofia). [10×]

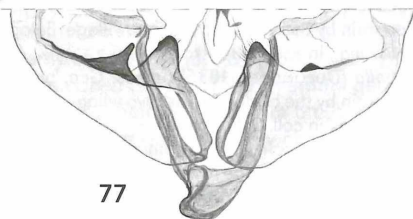
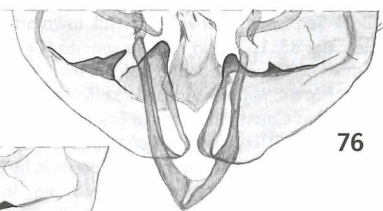
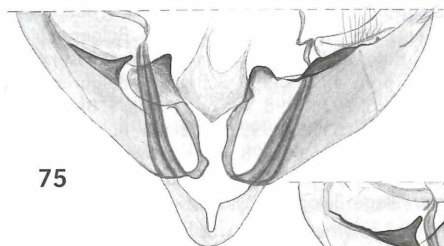
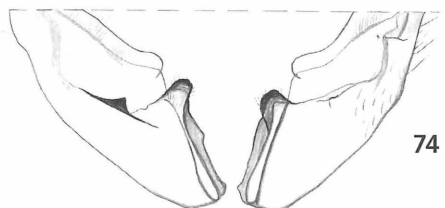
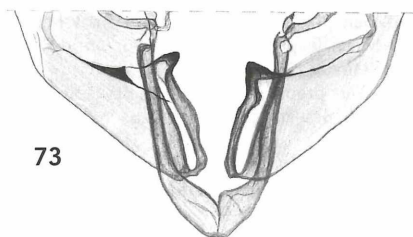
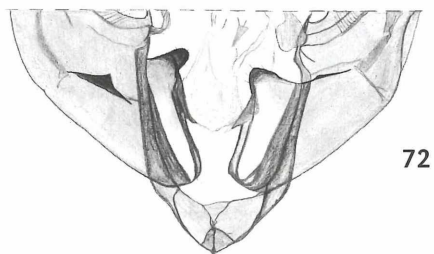
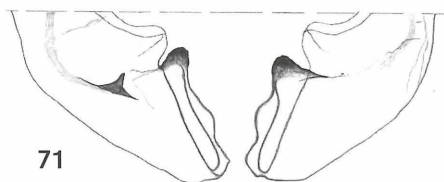
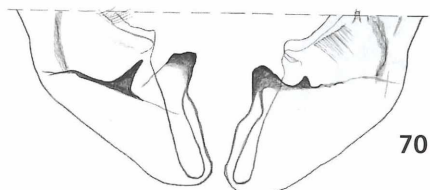
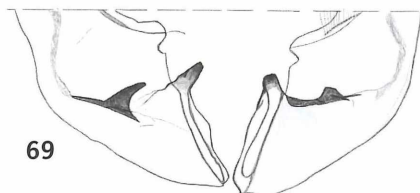
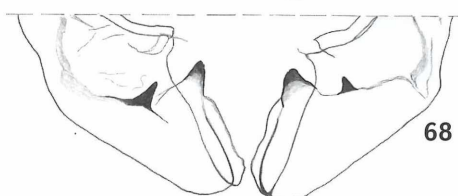
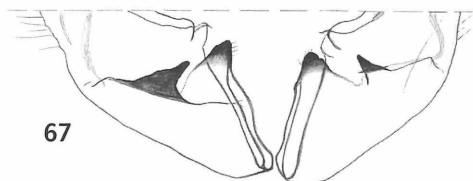
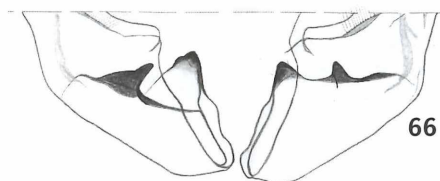
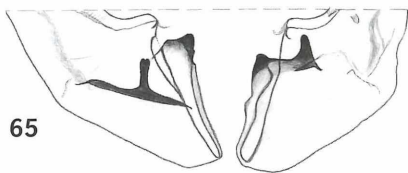
Gen. fig. 73: *Ammoconia senex senex* (GEYER, [1828]), male, basal parts of the valvae. Gen. prep. 5./09.II.1999, S. BESHKOV. SW Bulgaria, Gradeshka Banya near Kresna town, 265 m, 15.X.1987, leg. and in coll. S. BESHKOV. [10×]

Gen. fig. 74: *Ammoconia senex senex* (GEYER, [1828]), male, basal parts of the valvae. Gen. prep. 6./09.II.1999, S. BESHKOV. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m alt., 28.X.1994, leg. and in coll. S. BESHKOV. [10×]

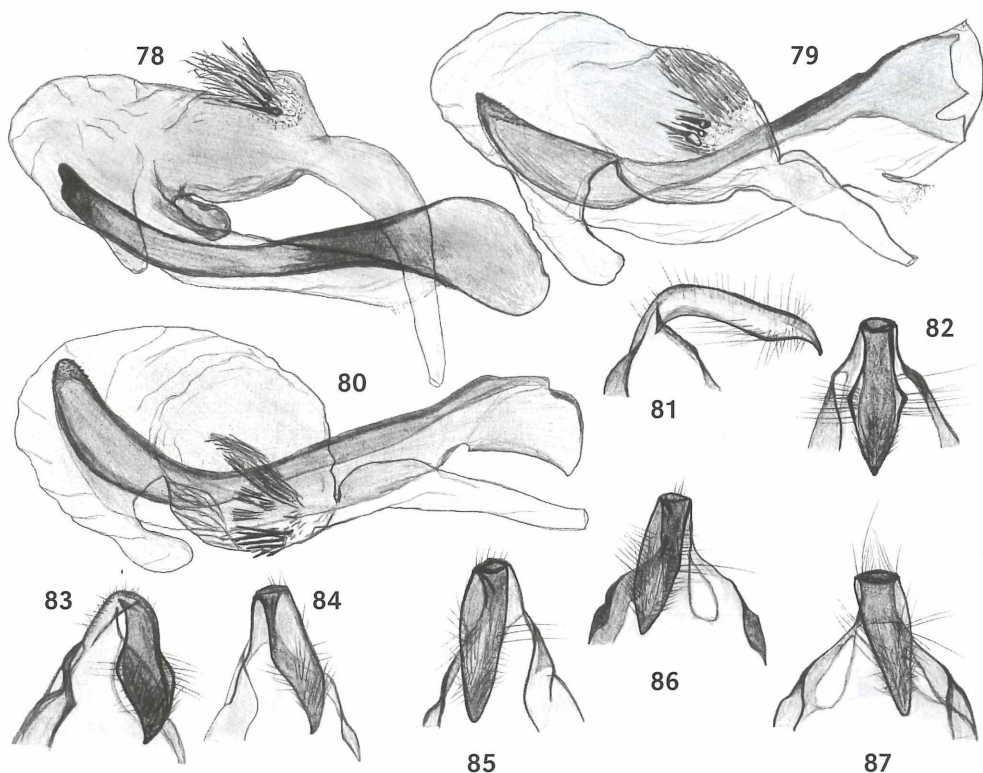
Gen. fig. 75: *Ammoconia senex senex* (GEYER, [1828]), male, basal parts of the valvae. Gen. prep. 1./09.II.1999, S. BESHKOV. Bulgaria, East Rhodopi Mts, Siv Kladenetz village near Mandritza, Ivaylovgrad district, 23.–24.X.1998, leg. and in coll. S. BESHKOV. [10×]

Gen. fig. 76: *Ammoconia senex senex* (GEYER, [1828]), male, basal parts of the valvae. Gen. prep. 3./09.II.1999, S. BESHKOV. SE Bulgaria, Sakar Mts, above Dossiteevo, village, 400 m, 12.X.1987, leg. and in coll. S. BESHKOV. [10×]

Gen. fig. 77: *Ammoconia senex senex* (GEYER, [1828]), male, basal parts of the valvae. Gen. prep. 4./09.II.1999, S. BESHKOV. Bulgaria, East Rhodopi Mt, Byalo Pole (= Belopolyane) village, Ivaylovgrad district, 07.X.1996, S. BESHKOV & I. STOYCHEV leg., in coll. S. BESHKOV. [10×]







Gen. fig. 78: *Ammoconia senex senex* (GEYER, [1828]), everted vesica. Gen. prep. 1./19.III.1999, S. BESHKOV. Republic of Macedonia, Galitchitza Mts, above Trapejca village, 1480 m, between Trapejca and Oteshevo, Ohrid Region, 10.IX.1997, S. BESHKOV, V. GASHTAROV, M. & K. BESHKOV leg., in coll. S. BESHKOV. [15×]

Gen. fig. 79: *Ammoconia senex senex* (GEYER, [1828]), everted vesica. Gen. prep. 1./23.II.1999, S. BESHKOV. SW Bulgaria, Volcanic Hill "Kozhuh" near Petrich town, 100 m, 22.–23.X.1997, S. BESHKOV & B. GOATER leg., in coll. S. BESHKOV. [15×]

Gen. fig. 80: *Ammoconia senex senex* (GEYER, [1828]) (topotype of *senex wagneri* BOURSIN, 1935), everted vesica. Gen. prep. 1./05.III.1999, S. BESHKOV. Bulgaria, "Collectio Princ Bulg. Slivno" [Sliven town/or surroundings], in coll. National Museum of Natural History (Sofia). [15×]

Gen. fig. 81: *Luperina rubella sericea* (CARADJA, 1932), uncus. Gen. prep. 2./25.I.1999, S. BESHKOV. Bulgaria, North Black Sea Coast, between Balchik town and Touzlata, 2 km to Touzlata, 29.IX.1998, leg. and in coll. S. BESHKOV.

Gen. fig. 82: *Luperina rubella sericea* (CARADJA, 1932), uncus. Gen. prep. 3./25.I.1999, S. BESHKOV. Bulgaria, North Black Sea Coast, between Balchik town and Touzlata, 2 km to Touzlata, 29.IX.1998, leg. and in coll. S. BESHKOV.

Gen. fig. 83: *Luperina rubella sericea* (CARADJA, 1932), uncus. Gen. prep. 4./25.I.1999, S. BESHKOV. Bulgaria, North Black Sea Coast, between Balchik town and Touzlata, 2 km to Touzlata, 29.IX.1998, leg. and in coll. S. BESHKOV.

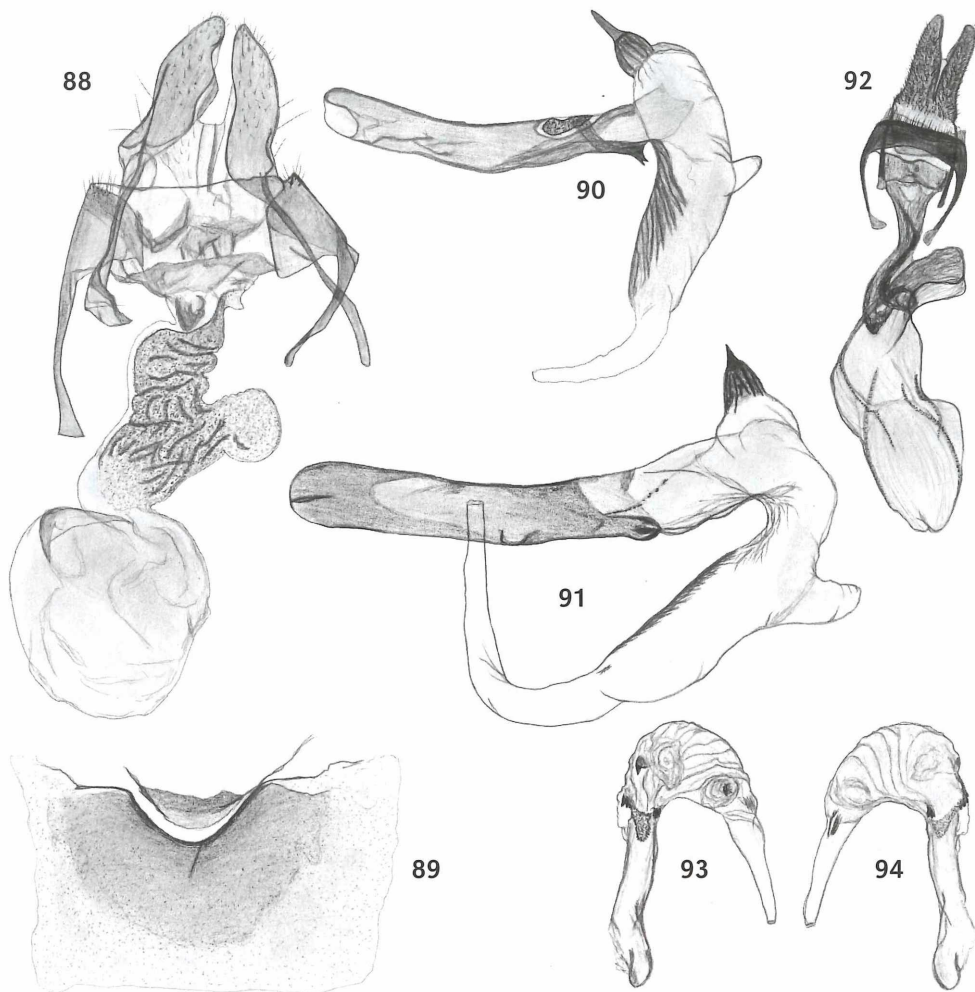
Gen. fig. 84: *Luperina rubella sericea* (CARADJA, 1932), uncus. Gen. prep. 5./25.I.1999, S. BESHKOV. Bulgaria, North Black Sea Coast, Shablensko Ezero Lake, the Residence near Shabla town, 25.IX.1998, leg. and in coll. S. BESHKOV.

Gen. fig. 85: *Luperina rubella rubella* (DUPONCHEL, 1835), uncus. Gen. prep. 6./25.I.1999, S. BESHKOV. Bulgaria, W Stara Planina Mts, above the fountain by the bridge to Varbovo village, Belogradchik district, 410 m, 02.IX.1998, S. BESHKOV, D. VASSILEV & G. STOYANOV leg., in coll. S. BESHKOV.

Gen. fig. 86: *Luperina rubella rubella* (DUPONCHEL, 1835), uncus. Gen. prep. 7./25.I.1999, S. BESHKOV. Bulgaria, W Stara Planina Mts, above the fountain by the bridge to Varbovo village, Belogradchik district, 410 m, 02.IX.1998, S. BESHKOV, D. VASSILEV & G. STOYANOV leg., in coll. S. BESHKOV.

Gen. fig. 87: *Luperina rubella rubella* (DUPONCHEL, 1835), uncus. Gen. prep. 8./25.I.1999, S. BESHKOV. Bulgaria, W Stara Planina Mts, above the fountain by the bridge to Varbovo village, Belogradchik district, 410 m, 02.IX.1998, S. BESHKOV, D. VASSILEV & G. STOYANOV leg., in coll. S. BESHKOV.

[81–87: 22.5×]



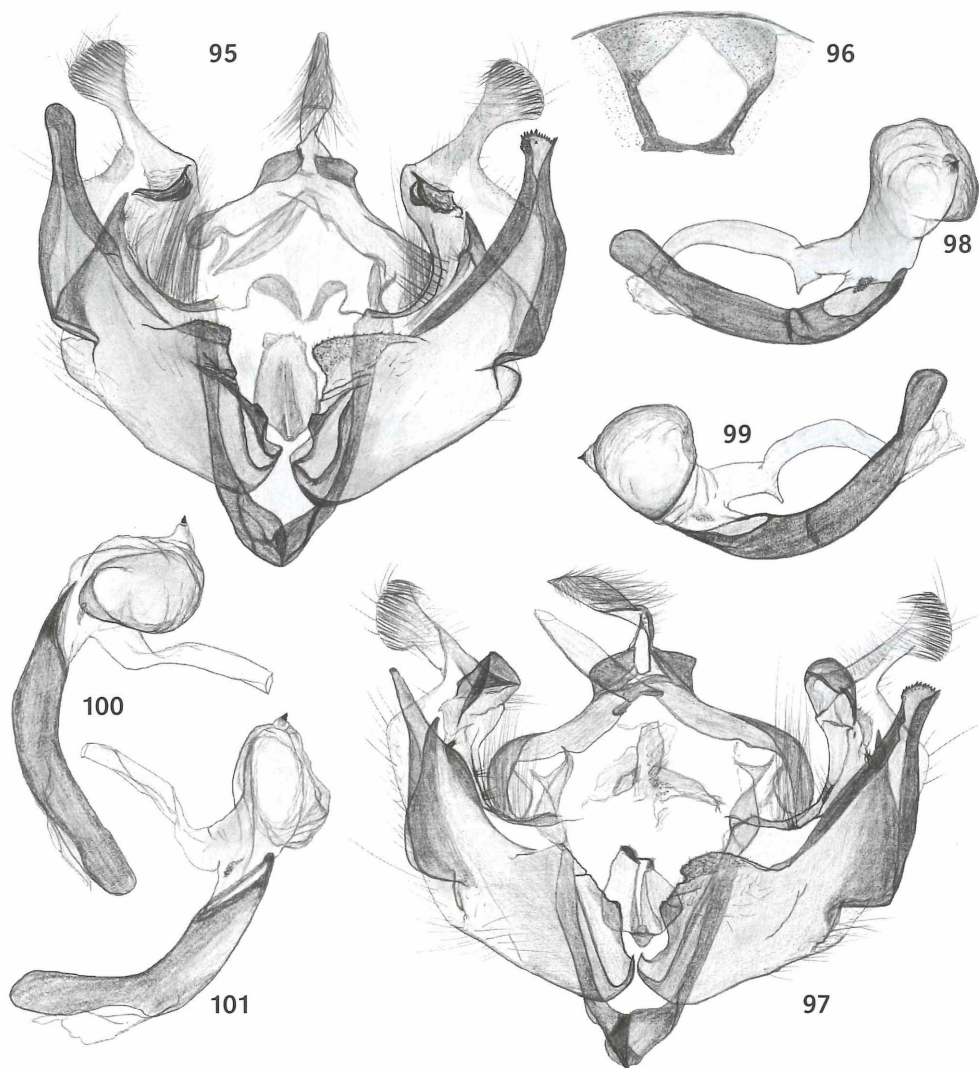
Gen. figs 88, 89: *Oligia* spec. (undescribed/or abnormal?), female genitalia (88) with eight sternit (89). Gen. prep. 2./08.VII.1998, S. BESHKOV. Bulgaria, E Rhodopi Mts, the bridge on Arda River between Dolno Tcherkovishhte and Oreshari villages, 160 m alt., 07.VI.1998, S. BESHKOV, J. NOWACKI, K. PALKÁ & M. BUNALSKI leg., in coll. S. BESHKOV. [88, 89: 25×]

Gen. fig. 90: *Hydraecia micacea micacea* (ESPER, [1789]), everted vesica. Gen. prep. 1./22.XII.1999, S. BESHKOV. Bulgaria, Yambol town (or from "Bakadzika" near Tarnava village, Yambol region), leg. and in coll. P. PETKOV. [10×]

Gen. fig. 91: *Hydraecia ultima ultima* HOLST, 1965, everted vesica. Gen. prep. 1./27.XII.1999, S. BESHKOV. Bulgaria, Rhodopi Mts, Tchepinska Reka River, 11.IX.1957, D. GOGOV leg., in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia). [15×]

Gen. fig. 92: *Hydraecia micacea micacea* (ESPER, [1789]), female genitalia. Gen. prep. 2./27.XII.1999, S. BESHKOV. Bulgaria, Stara Planina Mts, Tvarditza, 1100 m alt., 04.–05.VIII.1971, at lamp, leg. and in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia). [6×]

Gen. figs 93, 94: *Gortyna moesiaca moesiaca* HERRICH-SCHÄFFER, 1849, everted vesica. Gen. prep. 1./22.IV.1993, S. BESHKOV. Bulgaria, East Rhodopi Mts, near Momtchilgrad town, 23.X.1989, leg. and in coll. S. BESHKOV.



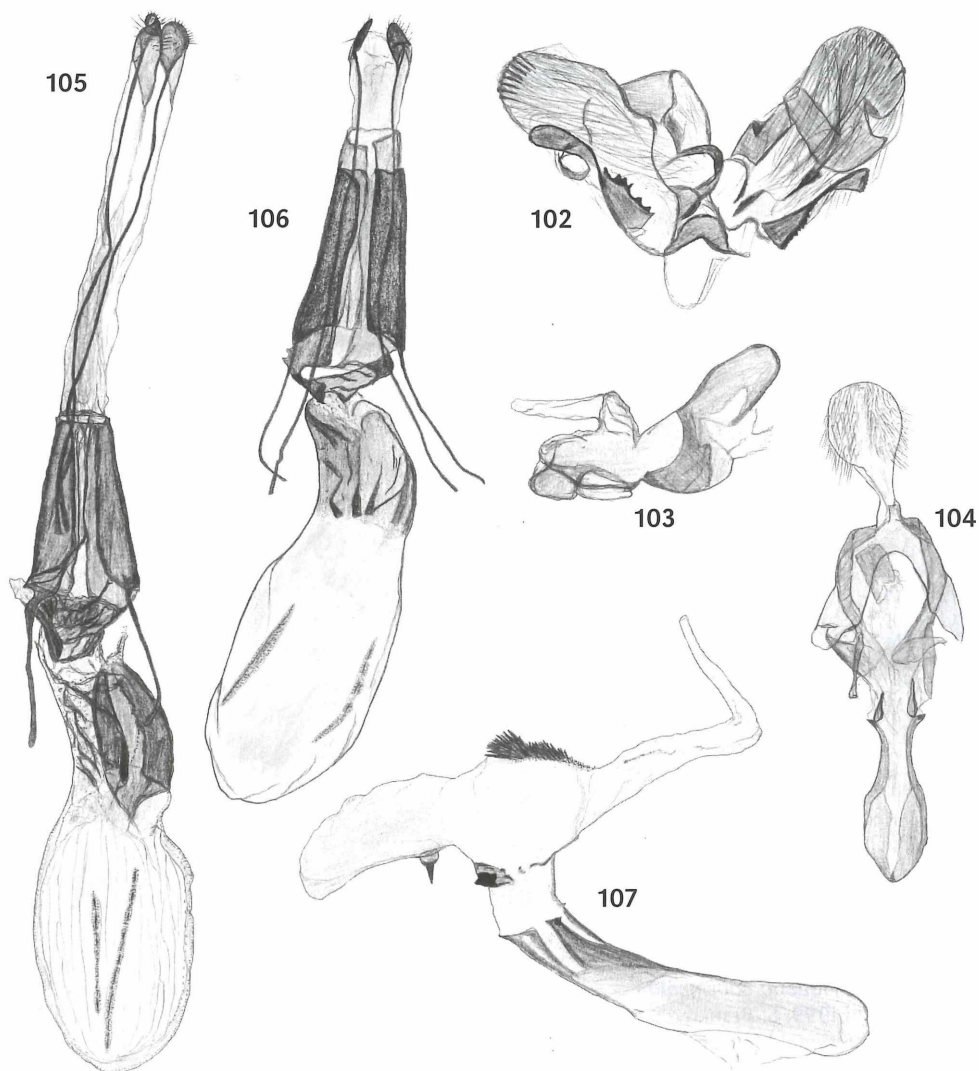
Gen. fig. 95, 96: *Hadula pugnax* (HÜBNER, [1824]), male genitalia (95) with eight sternite (96). Gen. prep. 1./14.XII.1999, S. BESHKOV. Bulgaria, S Black Sea Coast "15–20.VII.76, Sl. Bryag, V. Loukov" [Slantchev Bryag Resort, Bourgass Region], in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia). [95, 96: 15×]

Gen. fig. 97: *Hadula pugnax* (HÜBNER, [1824]), male genitalia. Gen. prep. 2./14.XII.1999, S. BESHKOV. Italy, Liguria, Alpi Liguri, dint. Apricale/Baiardo, M. Cianela (IM), 600 m, 29.IV.1988, A. ZILLI leg., in coll. S. BESHKOV. [15×]

Gen. figs 98, 99: *Hadula pugnax* (HÜBNER, [1824]), everted vesica. Gen. prep. 1./14.XII.1999, S. BESHKOV. Bulgaria, S Black Sea Coast "15–20.VII.76, Sl. Bryag, V. Loukov" [Slantchev Bryag Resort, Bourgass Region], in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia). [15×]

Gen. figs 100, 101: *Hadula pugnax* (HÜBNER, [1824]), everted vesica. Gen. prep. 2./14.XII.1999, S. BESHKOV. Italy, Liguria, Alpi Liguri, dint. Apricale/Baiardo, M. Cianela (IM), 600 m, 29.IV.1988, A. ZILLI leg., in coll. S. BESHKOV. [100, 101: 15×]



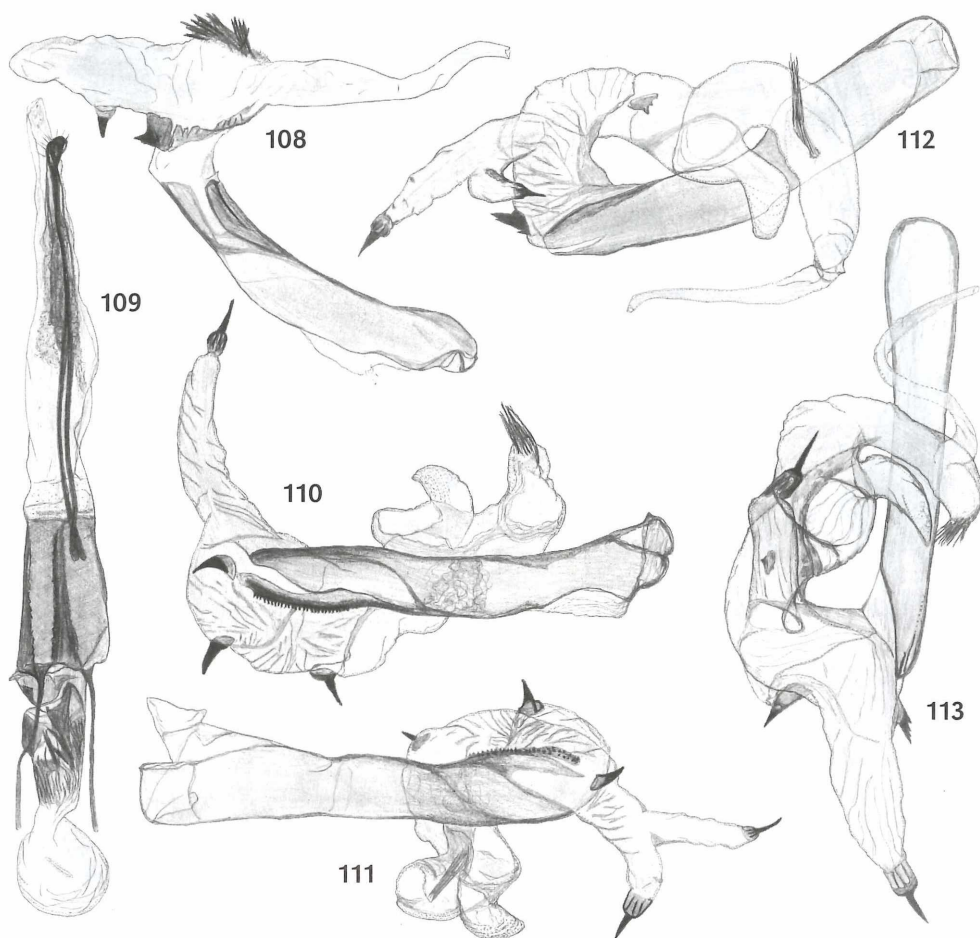


Gen. figs 102–104: *Hadula stigmosa* (CHRISTOPH, 1887) ssp. *atlantica* (BOURSIN, 1936), pathological male genitalia with everted vesica. Gen. prep. 1./02.III.1999, S. BESHKOV. Bulgaria, Black Sea Coast, Varna town, 20.V.1939, KARNOZHITZKI leg, in coll. National Museum of Natural History (Sofia). 102: Valvae; 103: Everted vesica; 104: Saccus with tegumen and uncus. [102–104: 15×]

Gen. fig. 105: *Hadena bicuris bicuris* (HUFNAGEL, 1766), female genitalia. Gen. prep. 2./03.II.1999, S. BESHKOV. Bulgaria, N Black Sea Coast, between Dourankoulak Lake and Krapetz village, 12.VIII.1998, leg. and in coll. S. BESHKOV. [10×]

Gen. fig. 106: *Hadena capsincola capsincola* ([DENIS & SCHIFFERMÜLLER], 1775), female genitalia. Gen. prep. 2./17.V.1994, S. BESHKOV. Bulgaria, Bessaparskite Ridove Hills, above Byaga village, Pazardzhik region, 250 m, 14.VII.1985, leg. and in coll. S. BESHKOV. [10×]

Gen. fig. 107: *Hadena bicuris bicuris* (HUFNAGEL, 1766), everted vesica. Gen. prep. 2./09.III.1999, S. BESHKOV. Bulgaria, Black Sea Coast, Varna town, 01.VI.1938, N. KARNOZHITZKI leg., in coll. National Museum of Natural History (Sofia). [15×]



Gen. fig. 108: *Hadena capsicola capsicola* ([DENIS & SCHIFFERMÜLLER], 1775), everted vesica. Gen. prep. 1./09.III.1999, S. BESHKOV. Bulgaria, Black Sea Coast, Varna town, 05.V.1939, N. KARNOZHITZKI leg., in coll. National Museum of Natural History (Sofia). [15×]

Gen. fig. 109: *Hadena wehrlii frequens* HACKER, 1996, female genitalia. Gen. prep. 6./11.XII.1998, S. BESHKOV. SW Bulgaria, Melnik town, Sandanski district, 400 m, 14.VII.1960, S. BOCHAROV leg., in coll. National Museum of Natural History (Sofia). [6.7×]

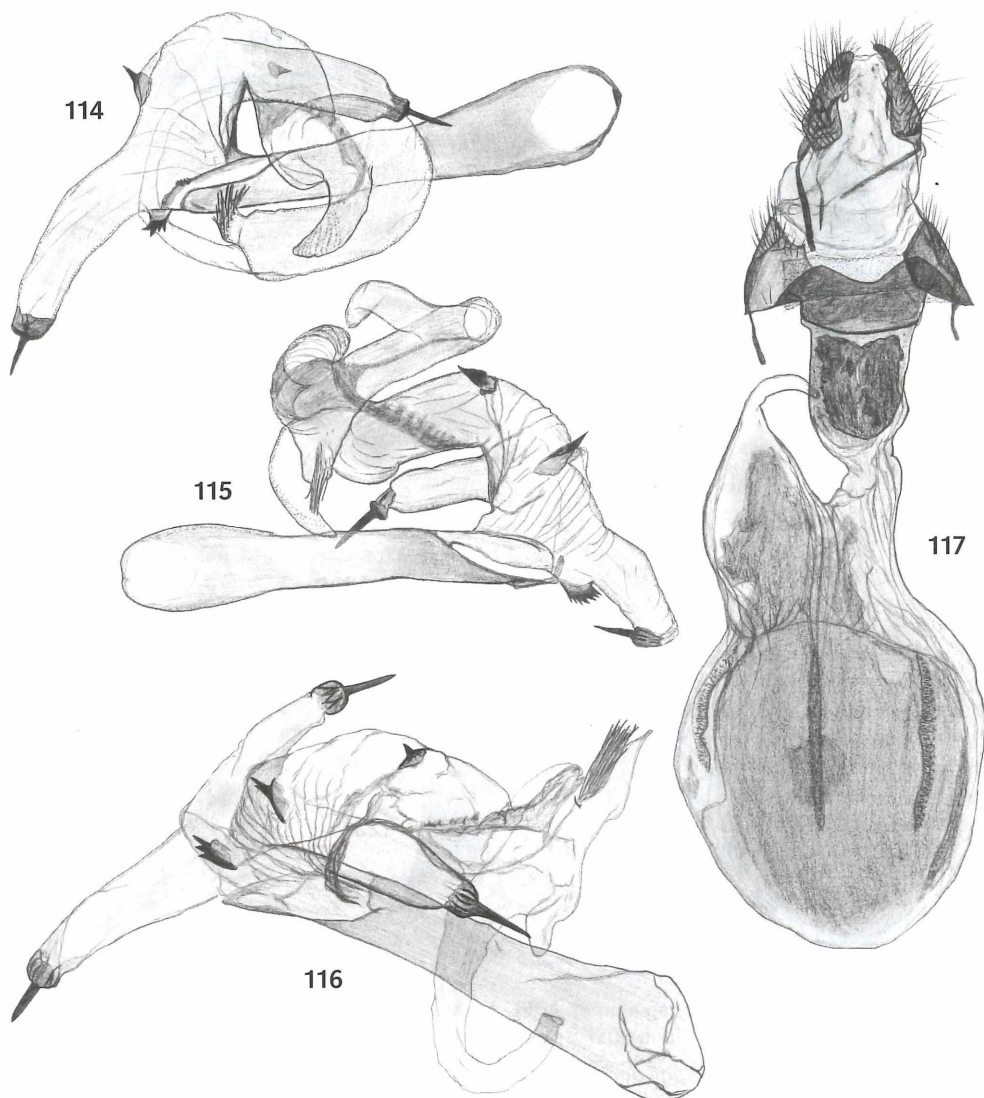
Gen. fig. 110: *Egira conspicularis conspicularis* (LINNAEUS, 1758), everted vesica. Gen. prep. 7./20.IV.1999, S. BESHKOV. Bulgaria, Rhodopi Mts., Assenova Krepost above Assenovgrad town, 430 m, 10.IV.1999, S. BESHKOV & V. GASHTAROV leg., in coll. S. BESHKOV. [15×]

Gen. fig. 111: *Egira tibori tibori* HREBLAY, 1994, everted vesica. Gen. prep. 8./20.IV.1999, S. BESHKOV. Bulgaria, Rhodopi Mts., Assenova Krepost above Assenovgrad town, 430 m, 10.IV.1999, S. BESHKOV & V. GASHTAROV leg., in coll. S. BESHKOV. [15×]

Gen. fig. 112: *Egira tibori tibori* HREBLAY, 1994, everted vesica. Gen. prep. 6./20.IV.1999, S. BESHKOV. Bulgaria, Rhodopi Mts., Assenova Krepost above Assenovgrad town, 430 m, 10.IV.1999, S. BESHKOV & V. GASHTAROV leg., in coll. S. BESHKOV. [15×]

Gen. fig. 113: *Egira anatolica anatolica* (HERING, 1933), everted vesica. Gen. prep. 1./20.IV.1999, S. BESHKOV. Bulgaria, Rhodopi Mts., Assenova Krepost above Assenovgrad town, 430 m, 10.IV.1999, S. BESHKOV & V. GASHTAROV leg., in coll. S. BESHKOV. [15×]



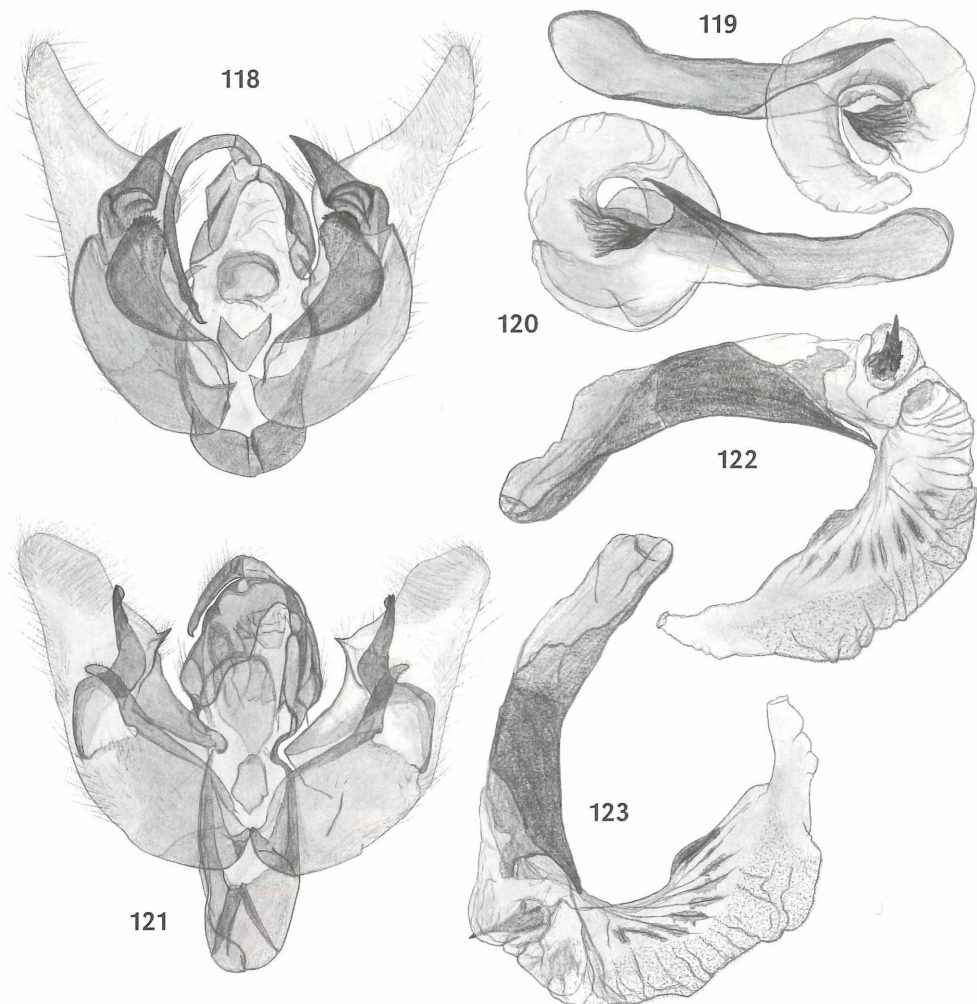


Gen. fig. 114: *Egira anatolica anatolica* (HERING, 1933), everted vesica. Gen. prep. 5./20.IV.1999, S. BESHKOV. Bulgaria, Rhodopi Mts., Assenova Krepost above Assenovgrad town, 430 m, 10.IV.1999, S. BESHKOV & V. GASHTAROV leg., in coll. S. BESHKOV. [15×]

Gen. fig. 115: *Egira anatolica anatolica* (HERING, 1933), everted vesica. Gen. prep. 2./20.IV.1999, S. BESHKOV. Bulgaria, Rhodopi Mts., Assenova Krepost above Assenovgrad town, 430 m, 10.IV.1999, S. BESHKOV & V. GASHTAROV leg., in coll. S. BESHKOV. [15×]

Gen. fig. 116: *Egira bulgarica* BESHKOV, spec. nov., everted vesica (Holotype). Gen. prep. 1./19.V.1997, S. BESHKOV. Bulgaria, Rhodopi Mts., Assenova Krepost above Assenovgrad town, 430 m, 26.IV.1997, S. BESHKOV leg. [15×]

Gen. fig. 117: *Lycophotia molothina* (ESPER, 1789), female genitalia. Gen. prep. 1./03.XII.1999, S. BESHKOV. Bulgaria, East Rhodopi Mts., "Ivailovgrad, 13.V.1981, leg. AL. SLIVOV", in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia). [15×]

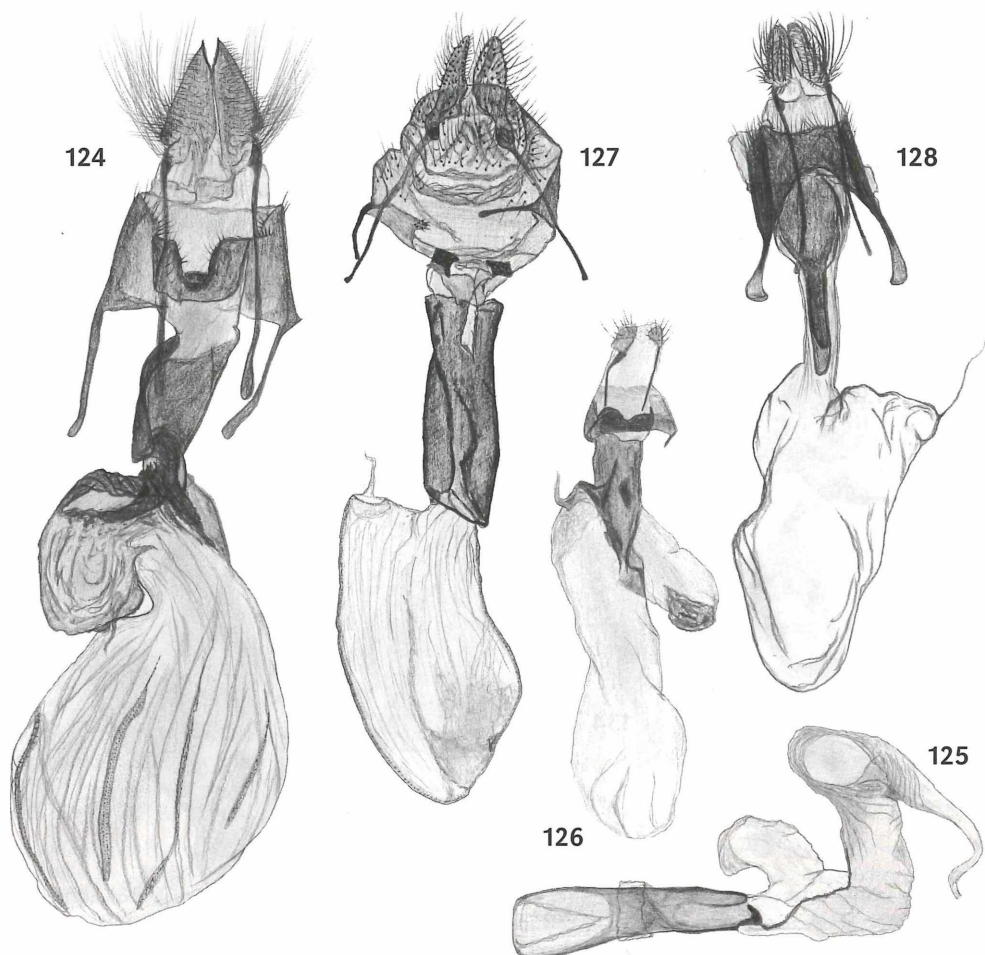


Gen. fig. 118: *Chersotis andereggii andereggii* (BOISDUVAL, [1837]), male genitalia. Gen. prep. 1./23.XI.1999, S. BESHKOV. Bulgaria, Rila Mts, Grantchar (= Boris Hadzhisotirov) chalet, 2200 m alt., 27.-29.VII.1975, leg., det. and in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Gen. figs 119, 120: *Chersotis andereggii andereggii* (BOISDUVAL, [1837]), everted vesica. Gen. prep. 1./23.XI.1999, S. BESHKOV. Bulgaria, Rila Mts, Grantchar (= Boris Hadzhisotirov) chalet, 2200 m alt., 27.-29.VII.1975, leg., det. and in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia). [118-120: 16.7×

Gen. fig. 121: *Chersotis alpestris ponticola* (DRAUDT, 1936), male genitalia. Gen. prep. 1./30.XI.1999, S. BESHKOV. Bulgaria, "Rila, h. Grancar, 27-29.VII.1975, leg. AL. SLIVOV" [Grantchar (= Boris Hadzhisotirov) Chalet, 2200 m alt.], in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia). [16.7×

Gen. figs 122, 123: *Chersotis alpestris ponticola* (DRAUDT, 1936), everted vesica. Gen. prep. 1./30.XI.1999, S. BESHKOV. Bulgaria, "Rila, h. Grancar, 27-29.VII.1975, leg. AL. SLIVOV" [Grantchar (= Boris Hadzhisotirov) Chalet, 2200 m alt.], in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia). [122, 123: 15×



Gen. fig. 124: *Chersotis fimbriola forsteri* THURNER, 1964, female genitalia. Gen. prep. 1./22.XI.1999, S. BESHKOV. SW Bulgaria, Pirin Mts, Yane Sandansky Chalet, 1200 m alt., 29.VII.1969, at lamp, leg. and in coll. of AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia). [15×]

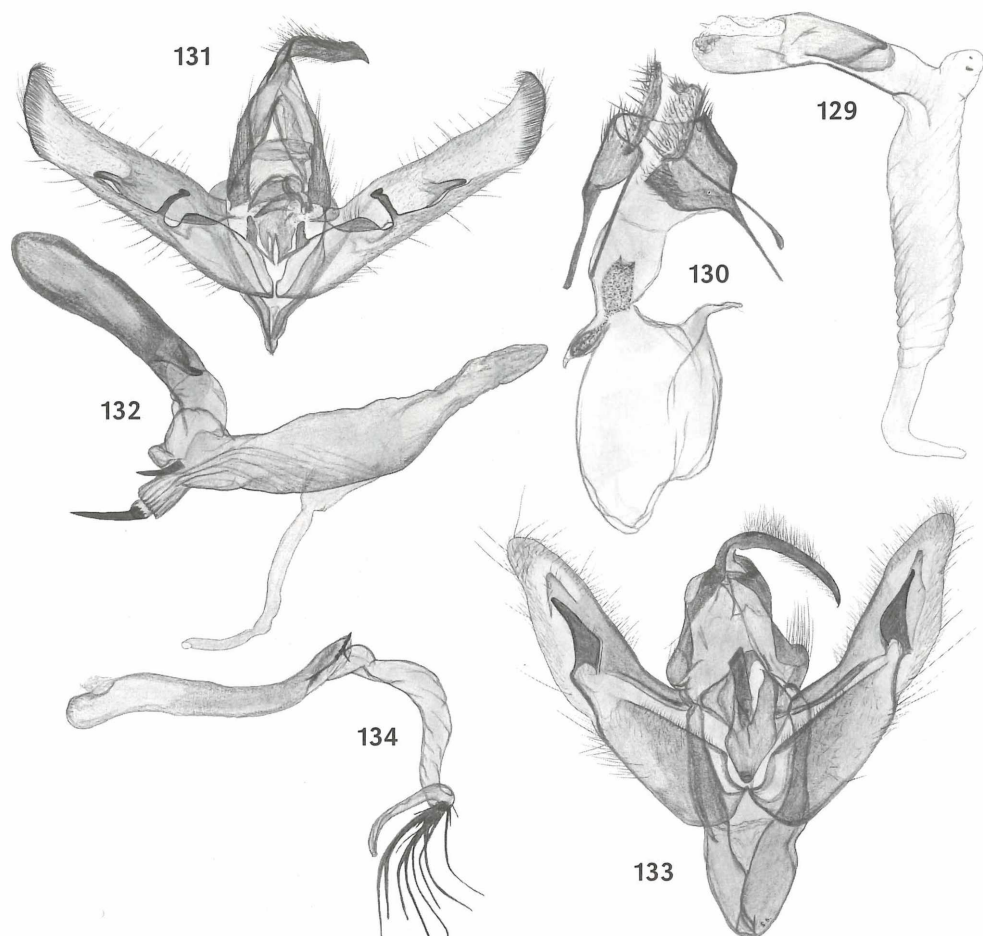
Gen. fig. 125: *Epipsilia cervantes vargai* FIBIGER, 1993, everted vesica. Gen. prep. 1./11.III.1999, S. BESHKOV. Republic of Macedonia, Galitchitza Mts, above Trapejca village, 1480 m, between Trapejca and Oteshevo, Ohrid region, 10.IX.1997, S. BESHKOV, V. GASHTAROV, M. & K. BESHKOVI leg., in coll. S. BESHKOV. [15×]

Gen. fig. 126: *Standfussiana lucerneae illyrica* (REBEL & ZERNY, 1931), female genitalia. Gen. prep. 2./10.III.1999, S. BESHKOV. Republic of Macedonia, Galitchitza Mts, above Trapejca village, 1480 m, between Trapejca and Oteshevo, Ohrid region, 10.IX.1997, S. BESHKOV, V. GASHTAROV, M. & K. BESHKOVI leg., in coll. S. BESHKOV. [6.7×]

Gen. fig. 127: *Xestia collina collina* (BOISDUVAL, 1840), female genitalia. Gen. prep. 8./22.VI.1998, S. BESHKOV. [Bulgaria], "Rhodopy [Rila], Kostenetz, 1500 m, 18.VII.1933, KR. TULESCHKOW", in coll. National Museum of Natural History (Sofia). [15×]

Gen. fig. 128: *Euxoa eruta eruta* (HÜBNER, [1814–1817], female genitalia. Gen. prep. 2./02.I.2000, S. BESHKOV. NE Bulgaria, Seslav hunting reserve near Koubrat town, Razgrad region, 01.–02.VIII.1967, leg. and in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia). [10×]





Gen. fig. 129: *Yigoga signifera* ([DENIS & SCHIFFERMÜLLER], 1775), everted vesica. Gen. prep. 1./10.III. 1999, S. BESHKOV. Bulgaria, Black Sea Coast, Varna town, 12.VI.1932, N. KARNOZHITZKI leg., in coll. National Museum of Natural History (Sofia). [10×]

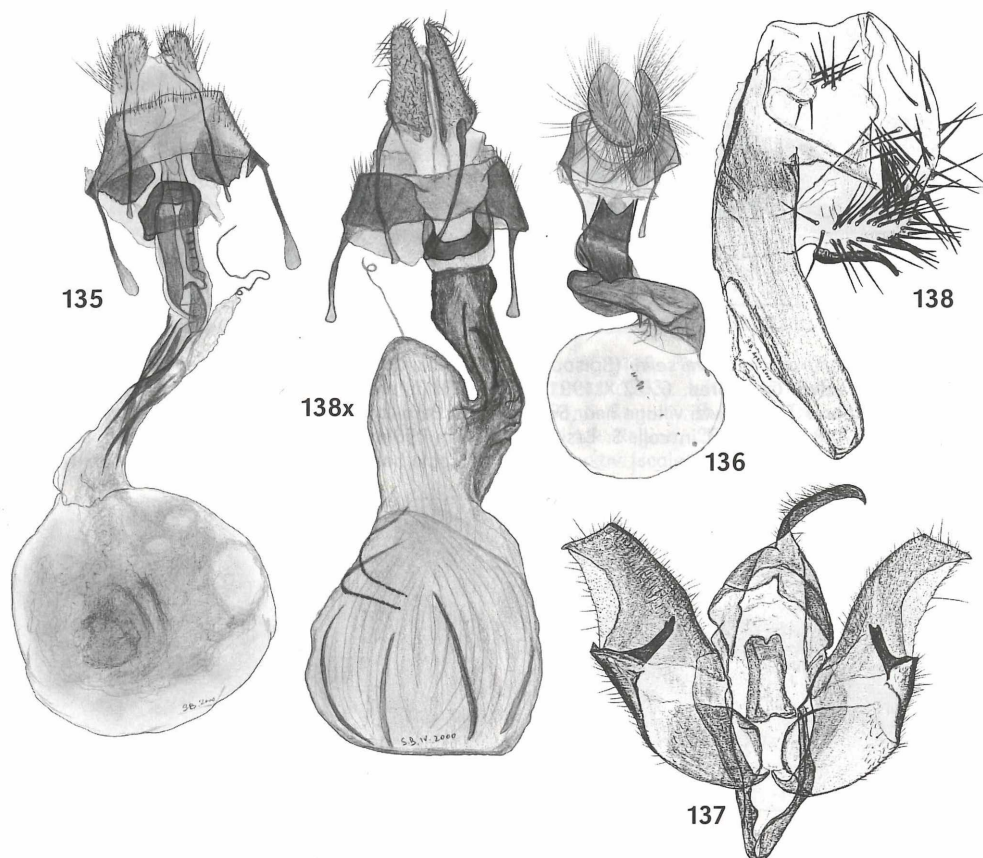
Gen. fig. 130: *Nycteola columbana* (TURNER, 1925), female genitalia. Gen. prep. 1./02.I.2000, S. BESHKOV. SW Bulgaria, Alibotoush [= Slavyanka] Mts, between "Livada" and Goleshovo village, 1340 m, 02.IX.1999, S. BESHKOV & D. VASSILEV leg., in coll. S. BESHKOV. [25×]

Gen. fig. 131: *Cucullia balsamitae balsamitae* BOISDUVAL, 1840, male genitalia. Bulgaria, North Black Sea Coast Region, group of "Pobitite Kamani" above Sluntchevo village, Varna districts, ~80 m alt., 14.V.2000, S. BESHKOV & D. TCHOBANOV leg., in coll. S. BESHKOV. [10×]

Gen. fig. 132: *Cucullia balsamitae balsamitae* BOISDUVAL, 1840, everted vesica. Bulgaria, North Black Sea Coast Region, group of "Pobitite Kamani" above Sluntchevo village, Varna districts, ~80 m alt., 14.V.2000, S. BESHKOV & D. TCHOBANOV leg., in coll. S. BESHKOV. [10×]

Gen. fig. 133: *Cerastis leucographa leucographa* ([DENIS & SCHIFFERMÜLLER], 1775), male genitalia. Bulgaria, West Stara Planina Mts, near Tcherkaski village, the districts of Berkovitz town, 300 m, 30.III. 2000, S. BESHKOV, B. PETROV & G. STOYANOV leg., in coll. S. BESHKOV. [16.7×]

Gen. fig. 134: *Cerastis leucographa leucographa* ([DENIS & SCHIFFERMÜLLER], 1775), everted vesica. Bulgaria, West Stara Planina Mts, near Tcherkaski village, the districts of Berkovitz town, 300 m, 30.III. 2000, S. BESHKOV, B. PETROV & G. STOYANOV leg., in coll. S. BESHKOV. [10×]



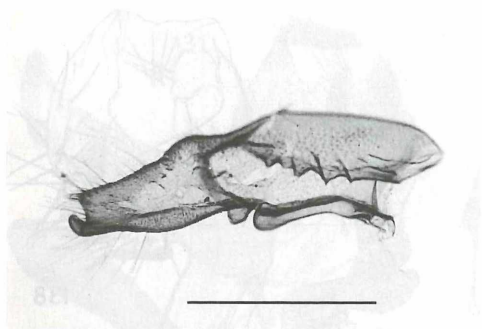
Gen. fig. 135: Genus?, species?, female genitalia. SW Bulgaria, Kroupnik, [Kresna Gorge between Kresna town and Kroupnik village, ~250 m alt.], 02.VII.1957, D. Gogov leg., in coll. AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences, Sofia. [16.7×]

Gen. fig. 136: *Autophila ligaminosa ligaminosa* (EVERSMANN, 1851), female genitalia. SW Bulgaria, Alibotoush [=Slavyanka] Mts., between "Livada" and Goleshovo village, 1500 m, 15.VII.1998, S. BESHKOV & S. ABADJIEV leg., coll. BESHKOV. [10×]

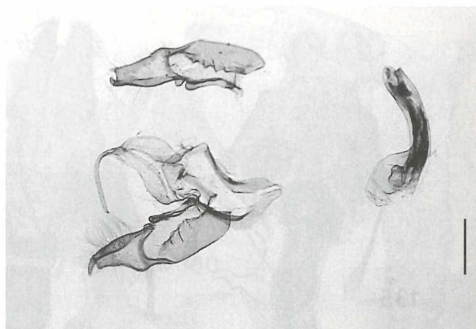
Gen. fig. 137: *Valerietta bulgarica* sensu HREBLAY, 1992, male genitalia under a cover glass in euparal. South Bulgaria, Black Sea Coast, *Carpinus-Fraxinus* longoz forest near Arkoutino lake, Primorsko district, 08.VI.1998, S. BESHKOV, J. NOWACKI, K. PALK & M. BUNALSKI leg. at 160 W MVL (Gen. prep. 1./03.VII.1998, S. BESHKOV), in coll. S. BESHKOV. [16.7×]

Gen. fig. 138: *Valerietta bulgarica* sensu HREBLAY, 1992, everted vesica under a cover glass in euparal. South Bulgaria, Black Sea Coast, *Carpinus-Fraxinus* longoz forest near Arkoutino lake, Primorsko district, 08.VI.1998, S. BESHKOV, J. NOWACKI, K. PALK & M. BUNALSKI leg. at 160 W MVL (Gen. prep. 1./03.VII.1998, S. BESHKOV), in coll. S. BESHKOV. [16.7×]

Gen. fig. 138x: *Apamea monoglypha* (HUFNAGEL, 1766), female genitalia. Bulgaria, Central Rhodopi Mts, above Trigrad village, 1300 m, 01.VIII.1997, S. BESHKOV & M. MARINOV leg., in coll. S. BESHKOV. [10×]



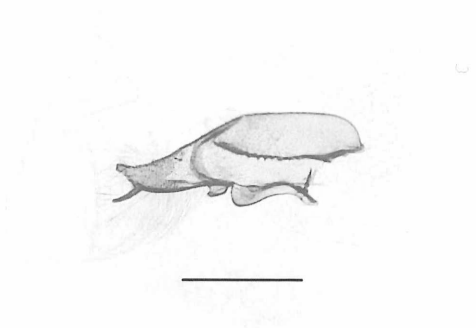
Gen. fig. 139: *Paradrina selini selini* (BOISDUVAL, 1840), right valva. Gen. prep. 6./22.XI.1991, S. BESHKOV. Bulgaria, Dragalevtzi village near Sofia, 750 m, 17.X.1984, leg. and in coll. S. BESHKOV. [scale bar: 1mm]



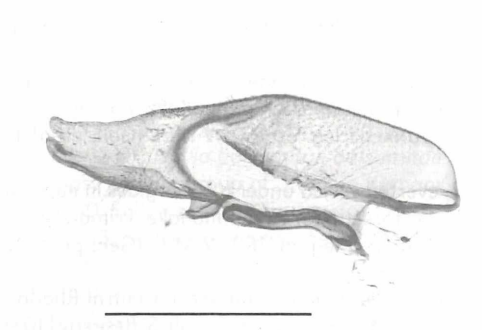
Gen. fig. 140: *Paradrina selini selini* (BOISDUVAL, 1840), male genitalia. Gen. prep. 6./22.XI.1991, S. BESHKOV. Bulgaria, Dragalevtzi village near Sofia, 750 m, 17.X.1984, leg. and in coll. S. BESHKOV. [scale bar: 1mm]



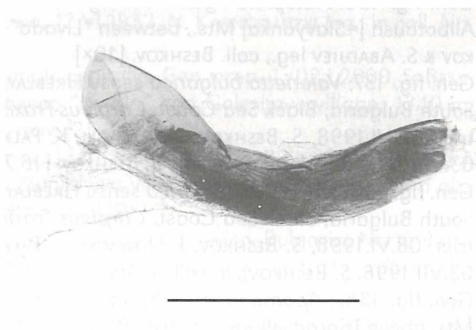
Gen. fig. 141: *Paradrina selini selini* (BOISDUVAL, 1840), aedeagus. Gen. prep. 6./22.XI.1991, S. BESHKOV. Bulgaria, Dragalevtzi village near Sofia, 750 m, 17.X.1984, leg. and in coll. S. BESHKOV. [scale bar: 1mm]



Gen. fig. 142: *Paradrina suscianja suscianja* VON MENTZER, 1981, right valva. Gen. prep. 6./13.I.1990, S. BESHKOV. Bulgaria, Troyanska Stara Planina Mts, Dermenkaya chalet, 1530 m, 24.VI.1989, leg. and in coll. S. BESHKOV. [scale bar: 1mm]

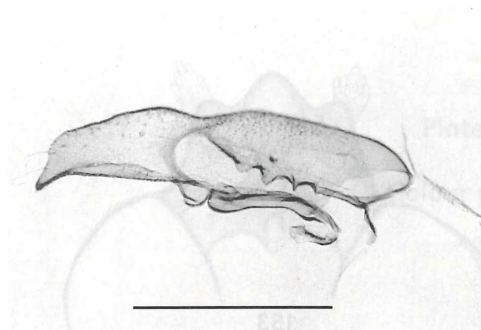


Gen. fig. 143: *Paradrina suscianja suscianja* VON MENTZER, 1981, right valva. Gen. prep. 19./24.I.1990, S. BESHKOV. Bulgaria, Rila Mts, Kirilova (= Partizanska) Polyana, 1600 m, 22.VII.1989, leg. and in coll. S. BESHKOV. [scale bar: 1mm]

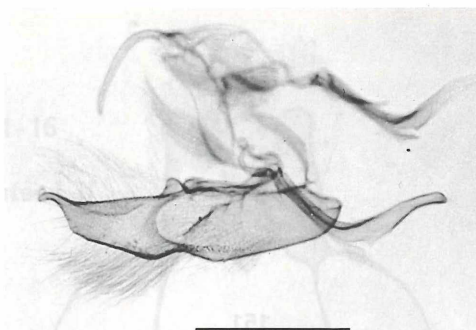


Gen. fig. 144: *Paradrina suscianja suscianja* VON MENTZER, 1981, aedeagus. Gen. prep. 6./13.I.1990, S. BESHKOV. Bulgaria, Troyanska Stara Planina Mts, Dermenkaya chalet, 1530 m, 24.VI.1989, leg. and in coll. S. BESHKOV. [scale bar: 1mm]





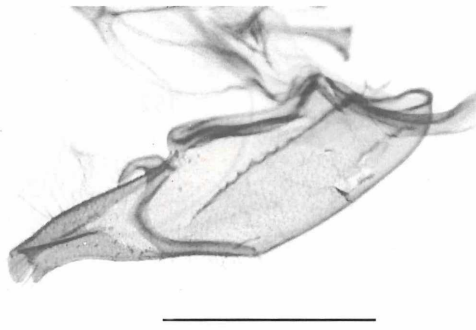
Gen. fig. 145: *Paradrina clavipalpis clavipalpis* (SCOPOLI, 1763), right valva. Gen. prep. 9./02.I. 1991, S. BESHKOV. Bulgaria, Trivoditzi village, Pazardzhik Region, 25.VII.1987, leg. and in coll. S. BESHKOV. [scale bar: 1mm]



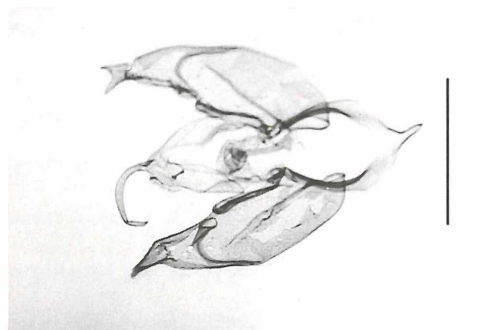
Gen. fig. 146: *Paradrina clavipalpis clavipalpis* (SCOPOLI, 1763), left valva. Gen. prep. 9./02.I. 1991, S. BESHKOV. Bulgaria, Trivoditzi village, Pazardzhik Region, 25.VII.1987, leg. and in coll. S. BESHKOV. [scale bar: 1mm]



Gen. fig. 147: *Paradrina clavipalpis clavipalpis* (SCOPOLI, 1763), aedeagus. Gen. prep. 9./02.I. 1991, S. BESHKOV. Bulgaria, Trivoditzi village, Pazardzhik Region, 25.VII.1987, leg. and in coll. S. BESHKOV. [scale bar: 1mm]



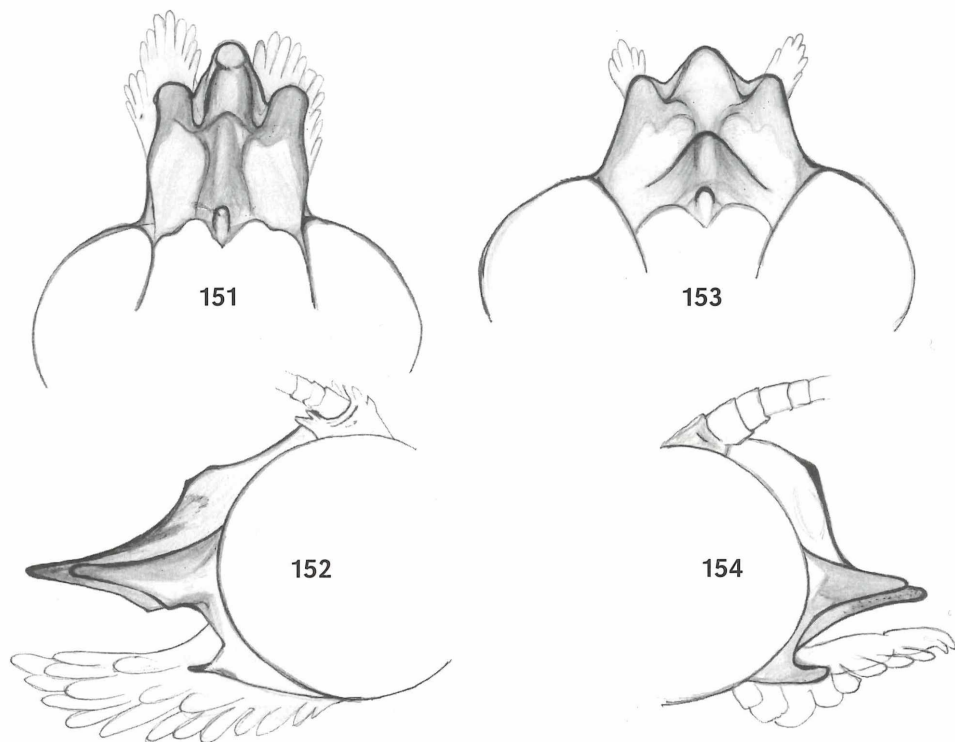
Gen. fig. 148: *Paradrina wulschlegeli schwingenschussi* (BOURSIN, 1936), left valva. Gen. prep. 5./09.V.1990, S. BESHKOV. Bulgaria, Troyanska Stara Planina Mts, Dermenkaya chalet, 1530 m, 24.VI. 1989, leg. and in coll. S. BESHKOV. [scale bar: 1mm]



Gen. fig. 149: *Paradrina wulschlegeli schwingenschussi* (BOURSIN, 1936), male genital armature. Gen. prep. 4./09.V.1990, S. BESHKOV. Bulgaria, Troyanska Stara Planina Mts, Dermenkaya chalet, 1530 m, 24.VI.1989, leg. and in coll. S. BESHKOV.



Gen. fig. 150: *Paradrina wulschlegeli schwingenschussi* (BOURSIN, 1936), aedeagus. Gen. prep. 5./09.V.1990, S. BESHKOV. Bulgaria, Troyanska Stara Planina Mts, Dermenkaya chalet, 1530 m, 24.VI. 1989, leg. and in coll. S. BESHKOV. [scale bar: 1mm]



Frons of *Metaegle* spp.:

Figs 151, 152: *Metaegle pallida subfumata* (STAUDINGER, 1892), male. SW Bulgaria, Paril Col, Paril village, 900 m, 28.VII.1995, leg. and in coll. V. GASHTAROV. 143: Dorsal view; 144: Lateral view.

Figs 153, 154: *Metaegle pallida pallida* (STAUDINGER, 1892), male. Asia Minor, Prov. Antalya, Korkuteli districts, Güllu Pinar, 1200 m, 13.VII.1991, S. BESHKOV & L. PREKROUTOV leg., in coll. S. BESHKOV. 145: Dorsal view; 146: Lateral view.



## **Plates 1–16**

### **Colour plates I, II**

## Plate 1:

Fig. 1: *Macrochilo cribrumalis* (HÜBNER, 1793), ♂, NE Bulgaria, N Black Sea Coast, SE side of Dourankoulak Lake, near Voklino village, 04.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg. at light, in coll. S. BESHKOV.

Fig. 2: *Drasteria caucasica* (KOLENATI, 1846), ♀, Bulgaria, N Black Sea Coast, Shablensko Ezero lake, the Residence, 03.VII.1989, S. BESHKOV & I. STOYTCHIEV leg., in coll. S. BESHKOV.

Fig. 3: *Lygephila pastinum pastinum* (TREITSCHKE, 1826), ♂, Rhodopi Mts, above Trigrad village, 1220 m, 20.VII.1998, S. BESHKOV & S. ABADJIEV leg., in coll. S. BESHKOV.

Fig. 4: *Lygephila pastinum pastinum* (TREITSCHKE, 1826), ♂, Bulgaria, W Rhodopi Mts, Orpheya Chalet near Borino village, 11.VII.1979, leg. and in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 5: *Lygephila pastinum pastinum* (TREITSCHKE, 1826), ♂, Bulgaria, W Rhodopi Mts, Orpheya Chalet near Borino village, 14.VII.1979, in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 6: *Callistege mi mi* (CLERCK, 1759), ♂, upperside. Bulgaria, Troyanska Stara Planina Mts, Dermenkaya Chalet, 1530 m, 27.VI.1987, leg. and in coll. S. BESHKOV.

Fig. 7: *Callistege mi mi* (CLERCK, 1759), ♂, underside. Bulgaria, Troyanska Stara Planina Mts, Dermenkaya Chalet, 1530 m, 27.VI.1987, leg. and in coll. S. BESHKOV.

Fig. 8: *Diachrysia chrysis chrysis* (LINNAEUS, 1758), ♂, upperside. Bulgaria, Black Sea Coast, Arkutino Motel, Primorsko districts, 22.IX.1995, S. BESHKOV & B. GOATER leg., in coll. S. BESHKOV.

Fig. 9: *Diachrysia chrysis chrysis* (LINNAEUS, 1758), ♂, underside. Bulgaria, Black Sea Coast, Arkutino Motel, Primorsko districts, 22.IX.1995, S. BESHKOV & B. GOATER leg., in coll. S. BESHKOV.

Fig. 10: *Diachrysia nadeja nadeja* (OBERTHÜR, 1880), ♂, upperside. NE Bulgaria, N Black Sea Coast, SE side of Dourankoulak Lake, near Voklino village, 04.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg., in coll. S. BESHKOV.

Fig. 11: *Diachrysia nadeja nadeja* (OBERTHÜR, 1880), ♂, underside. NE Bulgaria, N Black Sea Coast, SE side of Dourankoulak Lake, near Voklino village, 04.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg., in coll. S. BESHKOV.

Fig. 12: *Diachrysia chryson chryson* (ESPER, [1789]), ♀, upperside. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 17.VIII.1985, leg. and in coll. S. BESHKOV.

Fig. 13: *Diachrysia chryson chryson* (ESPER, [1789]), ♀, underside. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 17.VIII.1985, leg. and in coll. S. BESHKOV.

Fig. 14: *Diachrysia chryson deltaica* RAKOSY, 1996, ♂, upperside. NE Bulgaria, N Black Sea Coast, SE side of Dourankoulak Lake, near Voklino village, 04.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg. at light, in coll. S. BESHKOV.

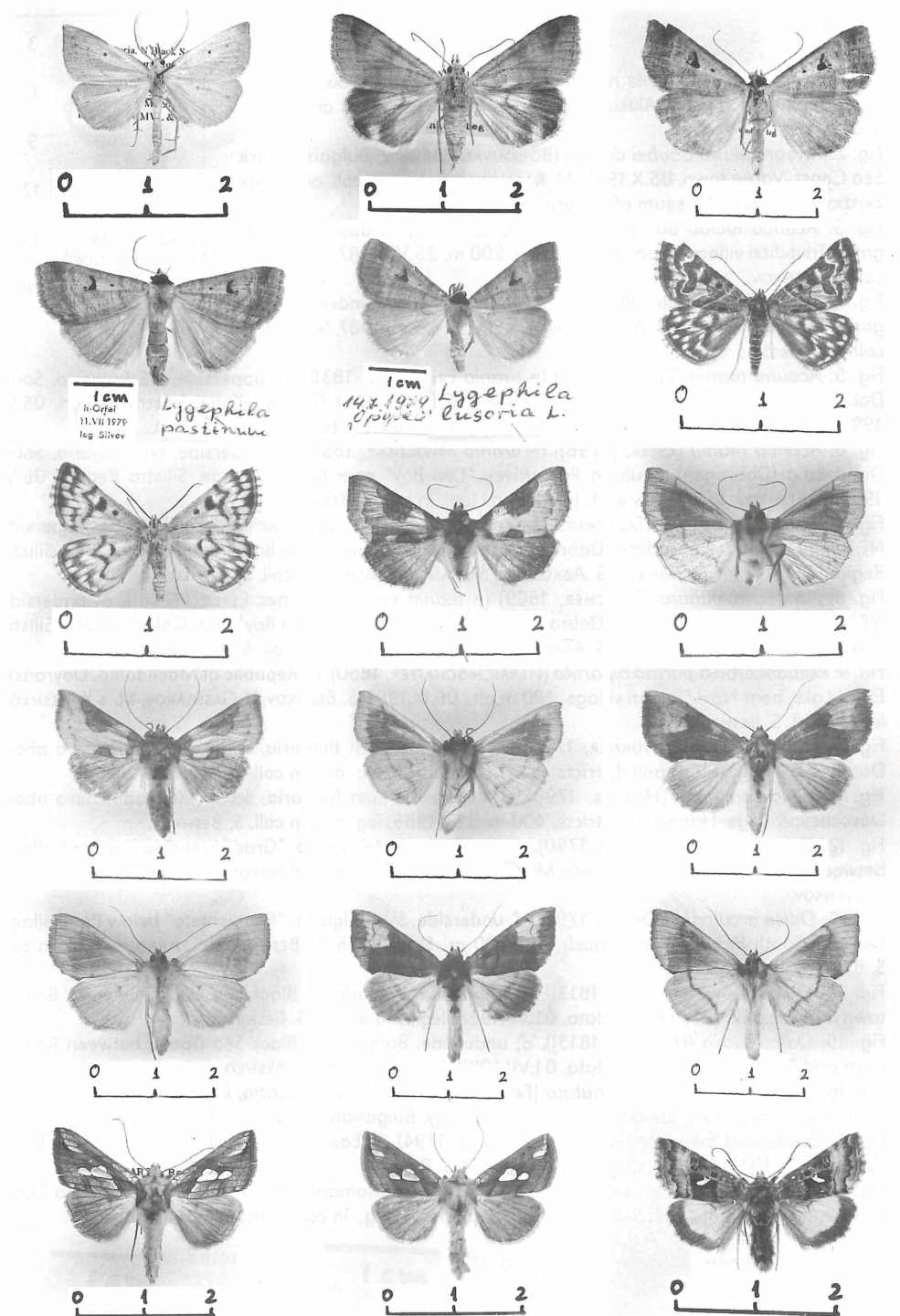
Fig. 15: *Diachrysia chryson deltaica* RAKOSY, 1996, ♂, underside. NE Bulgaria, N Black Sea Coast, SE side of Dourankoulak Lake, near Voklino village, 04.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg. at light, in coll. S. BESHKOV.

Fig. 16: *Plusia festucae festucae* (LINNAEUS, 1758), ♂, Bulgaria, near Radnevo town, Stara Zagora region, 200 m, 08.IX.1987, leg. and in coll. S. BESHKOV.

Fig. 17: *Plusia putnami gracilis* (LEMPKE, 1966), ♂, Bulgaria, Central Rhodopi Mts, Tchairski Ezera Lakes, 1600 m, 22.-23.VIII.1993, S. BESHKOV & D. VASSILEV leg., in coll. S. BESHKOV.

Fig. 18: *Syngrapha divergens rilaeacacuminum* VARGA & RONKAY, 1982, ♂, Bulgaria, Rila Mts, below Aleko top, 2650 m, 20.VII.1988, leg. and in coll. S. BESHKOV.

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18



## Plate 2:

Fig. 1: *Syngrapha devergens rilaecacuminum* VARGA & RONKAY, 1982, ♀. Bulgaria, Rila Mts, below Aleko top, 2650 m, 20.VII.1988, leg. and in coll. S. BESHKOV.

Fig. 2: *Thysanoplusia daubei daubei* (BOISDUVAL, 1840), ♀. Bulgaria, Black Sea Coast, Varna town, 05.X.1935, N. KARNOZHITZKY leg., in coll. of KARNOZHITZKY in National Museum of Natural History, Sofia.

Fig. 3: *Acontia lucida* ab. *albicolis* (FABRICIUS, 1781), ♂, upperside. Bulgaria, Trivoditzi village, Pazardzhik Region, 200 m, 25.VII.1987, leg. and in coll. S. BESHKOV.

Fig. 4: *Acontia lucida* ab. *albicolis* (FABRICIUS, 1781), ♂, underside. Bulgaria, Trivoditzi village, Pazardzhik Region, 200 m, 25.VII.1987, leg. and in coll. S. BESHKOV.

Fig. 5: *Acontia titania* (ESPER, [1798]) (= *urania* FRIVALDSKY, 1835), ♂, upperside. NE Bulgaria, South Dobrudzha (Dobrogea), Souhata Reka River, "Divi Boy" near Golesh village, Silistra Region, 06.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg., in coll. S. BESHKOV.

Fig. 6: *Acontia titania* (ESPER, [1798]) (= *urania* FRIVALDSKY, 1835), ♂, underside. NE Bulgaria, South Dobrudzha (Dobrogea), Souhata Reka River, "Divi Boy" near Golesh village, Silistra Region, 06.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg., in coll. S. BESHKOV.

Fig. 7: *Acontia melanura* (TAUSCHER, 1809) (= *titania* sensu auct. nec ESPER, [1798]), ♂, upperside. NE Bulgaria, South Dobrudzha (Dobrogea), Souhata Reka River, "Divi Boy" near Golesh village, Silistra Region, 06.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg., in coll. S. BESHKOV.

Fig. 8: *Acontia melanura* (TAUSCHER, 1809) (= *titania* sensu auct. nec ESPER, [1798]), ♂, underside. NE Bulgaria, South Dobrudzha (Dobrogea), Souhata Reka River, "Divi Boy" near Golesh village, Silistra Region, 06.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg., in coll. S. BESHKOV.

Fig. 9: *Pseudozarma bipartita bipartita* (HERRICH-SCHÄFFER, 1850), ♂. Republic of Macedonia, Doyransko Ezero Lake, near Novi Doyran village, 190 m alt., 06.IX.1997, S. BESHKOV, V. GASHTAROV, M. & K. BESHKOV leg., in coll. S. BESHKOV.

Fig. 10: *Odice arcuinna* (HÜBNER, 1790), ♂, upperside. East Bulgaria, Sakar Mt, Radinchevo above Dossiteevo village, Harmanli districts, 400 m, 31.V.1986, leg. and in coll. S. BESHKOV.

Fig. 11: *Odice arcuinna* (HÜBNER, 1790), ♂, underside. East Bulgaria, Sakar Mt, Radinchevo above Dossiteevo village, Harmanli districts, 400 m, 31.V.1986, leg. and in coll. S. BESHKOV.

Fig. 12: *Odice arcuinna* (HÜBNER, 1790), ♂, upperside. SW Bulgaria, "Gradishteto" below Paril village, between South Pirin and Alibotoush Mts, 700 m, 18.VII.1998, S. BESHKOV & S. ABADJIEV leg., in coll. S. BESHKOV.

Fig. 13: *Odice arcuinna* (HÜBNER, 1790), ♂, underside. SW Bulgaria, "Gradishteto" below Paril village, between South Pirin and Alibotoush Mts, 700 m, 18.VII.1998, S. BESHKOV & S. ABADJIEV leg., in coll. S. BESHKOV.

Fig. 14: *Odice suava* (HÜBNER, [1813]), ♂, upperside. Bulgaria, N Black Sea Coast, between Balchik town and Touzlata, 2 km to Touzlata, 01.VII.1988, leg. and in coll. S. BESHKOV.

Fig. 15: *Odice suava* (HÜBNER, [1813]), ♂, underside. Bulgaria, N Black Sea Coast, between Balchik town and Touzlata, 2 km to Touzlata, 01.VII.1988, leg. and in coll. S. BESHKOV.

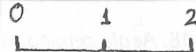
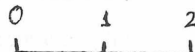
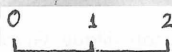
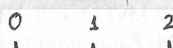
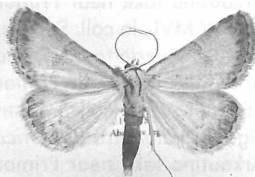
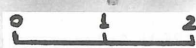
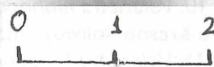
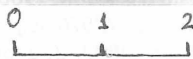
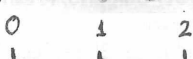
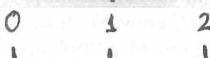
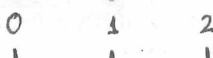
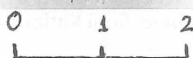
Fig. 16: *Eublemma minutata minutata* (FABRICIUS, 1794), ♂. SW Bulgaria, Belassitza Mts, 01.-05.VII.1980, leg. in coll. of AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 17: *Eublemma minutata minutata* (FABRICIUS, 1794), ♂. East Germany, Mark Brandenburg, Eisenhüttenstadt, 10.VII.1990, L. LEHMANN leg., in coll. S. BESHKOV.

Fig. 18: *Eublemma minutata* ssp., ♂. E Bulgaria, "Pobitite Kamani" near Varna town, Black Sea Coast surroundings, 08.VIII.1998, S. BESHKOV, M. & K. BESHKOV leg., in coll. S. BESHKOV.

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1 cm

Belasiza  
1-5.7.1980  
leg. Slivov



1 cm

Germania, or.  
Eisenach, Hainich  
10. VII. 1939  
L. Lehmann



1 cm

## Plate 3:

Fig. 1: *Eublemma minutata* ssp., ♂. E Bulgaria, "Pobitite Kamani" near Varna town, Black Sea Coast surroundings, 08.VIII.1998, S. BESHKOV, M. & K. BESHKOV leg., in coll. S. BESHKOV.

Fig. 2: *Eublemma viridula viridula* (GUENÉE, 1841), ♀. SW Bulgaria, Belasitzta Mts, 22.VI.1975, leg. and in coll. of AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 3: *Eublemma viridula viridula* (GUENÉE, 1841), ♂. "Dalmatia, collectio Princ. Bulg." in coll. National Museum of Natural History, Sofia.

Fig. 4: *Eublemma viridula viridula* (GUENÉE, 1841), ♂. Without label. Ex "collectio Princ. Bulg." in coll. National Museum of Natural History, Sofia.

Fig. 5: *Cucullia fraterna* BUTLER, 1878, ssp.?, ♂. NE Bulgaria, Danube River, "Kalimok" Experimental Station near Nova Tcherana village, Tutrakan district, 17.VI.1994, D. VASSILEV leg., in coll. S. BESHKOV.

Fig. 6: *Cleonymia opposita opposita* (LEDERER, 1870), ♂. Republic of Macedonia, Bani Katlanovo, Skopje region, 14.V.1994, leg. and in coll. S. BESHKOV.

Fig. 7: *Asteroscopus syriaca decipulae* KOVACS, 1966, ♂. Bulgaria, E Rhodopi Mts, Siv Kladenetz village, 30.XI.1996, S. BESHKOV, D. VASSILEV & S. TCHESHMEDJIEV leg., in coll. S. BESHKOV.

Fig. 8: *Asteroscopus syriaca decipulae* KOVACS, 1966, ♂. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 03.XII.1988, leg. and in coll. S. BESHKOV.

Fig. 9: *Valerietta niphopasta niphopasta* (HAMPSON, 1906), ♂, upperside. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 25.-27.V.1976, leg. and in coll. AL. SLIVOV.

Fig. 10: *Valerietta niphopasta niphopasta* (HAMPSON, 1906), ♂, underside. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 25.-27.V.1976, leg. and in coll. AL. SLIVOV.

Fig. 11: *Valerietta bulgarica* sensu HREBLAY, 1992, ♂, upperside. South Bulgaria, Black Sea Coast, by Arkoutino lake near Primorsko, 08.VI.1998, S. BESHKOV, J. NOWACKI, K. PALK & M. BUNALSKI leg. at 160 W MVL, in coll. S. BESHKOV.

Fig. 12: *Valerietta bulgarica* sensu HREBLAY, 1992, ♂, underside. South Bulgaria, Black Sea Coast, by Arkoutino lake near Primorsko, 08.VI.1998, S. BESHKOV, J. NOWACKI, K. PALK & M. BUNALSKI leg. at 160 W MVL, in coll. S. BESHKOV.

Fig. 13: *Valerietta bulgarica* sensu HREBLAY, 1992, ♂, underside. South Bulgaria, Black Sea Coast, by Arkoutino lake near Primorsko, 08.VI.1998, S. BESHKOV, J. NOWACKI, K. PALK & M. BUNALSKI leg. at 160 W MVL, in coll. NOWACKI.

Fig. 14: *Panemeria tenebrata* (SCOPOLI, 1763), ♀. France, Alpi Maritimi, Col de Champs near Colmas, 1900-2100 m. 07.VII.1997, S. BESHKOV & J. GELBRECHT leg., in coll. S. BESHKOV.

Fig. 15: *Panemeria tenebromorpha* RÁKOSY, HENTSCHOLEK & HUBER, 1996, ♀. SW Bulgaria, Ograzhden Mts., Lebnitza village, 18.IV.1986, J. GANEV leg., in coll. S. BESHKOV.

Fig. 16: *Panemeria tenebromorpha* RÁKOSY, HENTSCHOLEK & HUBER, 1996, ♂. SW Bulgaria, Kresna Gorge, Peyo Yavorov Railway Station, 200 m alt., 20.IV.1990, leg. and in coll. S. BESHKOV.

Fig. 17: *Panemeria tenebromorpha* RÁKOSY, HENTSCHOLEK & HUBER, 1996, ♂. SW Bulgaria, "Roupite" near Volcanic Hill of Kozhouh, Petrich district, 100 m alt., 24.IV.1991, V. GASHTAROV leg., in coll. S. BESHKOV.

Fig. 18: *Aegle semicana semicana* (ESPER, [1798]), ♂. S Albania, near Jorgucati village, Gjirokastra region, 400 m, 23.VI.1995, B. BESHKOV, S. ABADJIEV & O. ILIEV leg., in coll. S. BESHKOV.

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Bulgaria,  
Mite Kamar  
Kopane, 08.V.1978  
S. Beshkov leg.

1cm



1cm

Belasica  
22.06.1975  
leg. A. Slivov



1cm

Collection  
Princ. Bulg.  
S. Beshkov



1cm



0 1 2



0 1 2



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0 1 2



0 1 2



0 1 2



1cm



1cm



1cm



1cm



0 1 2



## Plate 4:

Fig. 1: *Aegle agatha agatha* (STAUDINGER, 1861), ♂. SW Albania, the sea coast near the chanal of the lake Butrinti, 24.VI.1995, S. BESHKOV, S. ABADJIEV & O. ILIEV leg., in coll. S. BESHKOV.

Fig. 2: *Metaegle pallida subfumata* (STAUDINGER, 1892), ♂. SW Bulgaria, Paril Col, Paril village, 900 m, 28.VII.1995, leg. and in coll. V. GASHTAROV.

Fig. 3: *Schinia cognata cognata* (FREYER, 1833), ♂. SW Bulgaria, Novo Konomladi village, Petrich district, 04.VII.1993, V. GASHTAROV leg., in coll. S. BESHKOV.

Fig. 4: *Apaustis rupicola* ([DENIS & SCHIFFERMÜLLER], 1775), ♀. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m alt., end of May, 1992, V. GASHTAROV leg., in coll. S. BESHKOV.

Fig. 5: *Apaustis rupicola* ([DENIS & SCHIFFERMÜLLER], 1775), ♀. SW Bulgaria, "Roupite" near Volcanic hill of "Kozhouh", Petrich district, 08.VI.1992, V. GASHTAROV leg., in coll. S. BESHKOV.

Fig. 6: *Apaustis rupicola* ([DENIS & SCHIFFERMÜLLER], 1775), ♀, upperside. SW Bulgaria, Novo Konomladi village, Petrich district, 02.VI.1993, V. GASHTAROV leg.

Fig. 7: *Apaustis rupicola* ([DENIS & SCHIFFERMÜLLER], 1775), ♀, underside. SW Bulgaria, Novo Konomladi village, Petrich district, 02.VI.1993, V. GASHTAROV leg.

Fig. 8: *Apaustis rupicola* ([DENIS & SCHIFFERMÜLLER], 1775) (ex "*theophila* (STAUDINGER, 1866)"), ♂, underside. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m alt., 03.VI.1988, ♂, S. BESHKOV & I. STOYTCHIEV leg., in coll. S. BESHKOV.

Fig. 9: *Apaustis rupicola* ([DENIS & SCHIFFERMÜLLER], 1775) (ex "*theophila* (STAUDINGER, 1866)"), ♀. SW Bulgaria, "Roupite" near Volcanic hill of "Kozhouh", Petrich district, 08.VI.1992, V. GASHTAROV leg., in coll. S. BESHKOV.

Fig. 10: *Apaustis rupicola* ([DENIS & SCHIFFERMÜLLER], 1775) (ex "*theophila* (STAUDINGER, 1866)"), ♀. SW Bulgaria, "Roupite" near Volcanic Hill of Kozhouh, Petrich district, 100 m, 28.IV.1991, V. GASHTAROV leg.

Fig. 11: *Apaustis rupicola* ([DENIS & SCHIFFERMÜLLER], 1775) (ex "*theophila* (STAUDINGER, 1866)"), ♂. SW Bulgaria, Novo Konomladi village, Petrich district, 02.VI.1993, V. GASHTAROV leg.

Fig. 12: *Praestilbia armeniaca* STAUDINGER, 1892, ♀. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 01.X.1988, S. BESHKOV & I. STOYTCHIEV leg., in coll. S. BESHKOV.

Fig. 13: *Praestilbia armeniaca* STAUDINGER, 1892, ♂. Republic of Macedonia, Treska Gorge, Gorna Matka village, Skopje Region, 560 m, 12.IX.1997, S. BESHKOV, V. GASHTAROV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

Fig. 14: *Paradrina suscianja* VON MENTZER, 1981, ♀. Bulgaria, Central Rhodopi Mts, below the TV tower above Yagodina village, 1250 m, 19.VII.1998, S. BESHKOV & S. ABADJIEV leg., in coll. S. BESHKOV.

Fig. 15: *Eremodrina pertinax pertinax* (STAUDINGER, 1879), ♀. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 08.VII.1995, S. BESHKOV & M. BESHKOVA leg., in coll. S. BESHKOV.

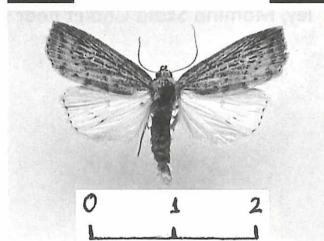
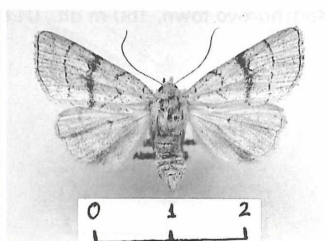
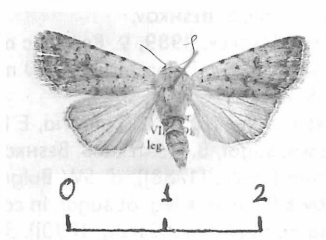
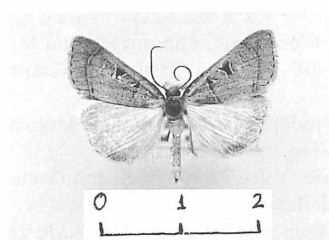
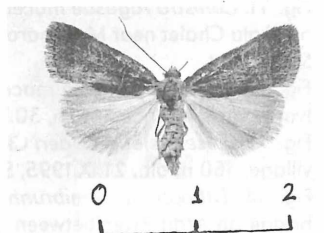
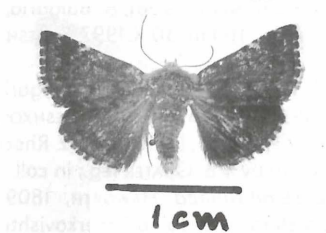
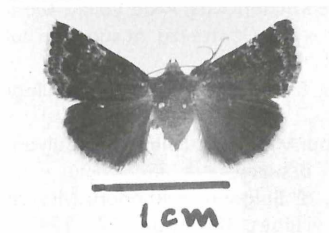
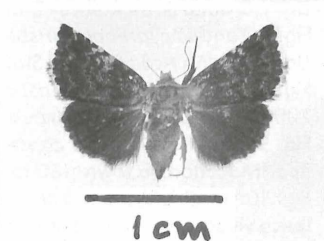
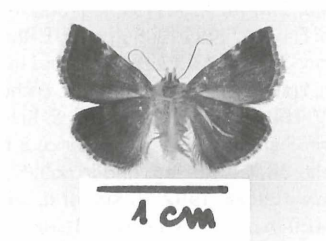
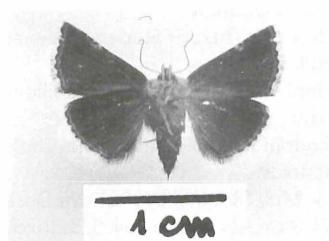
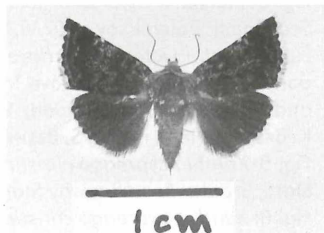
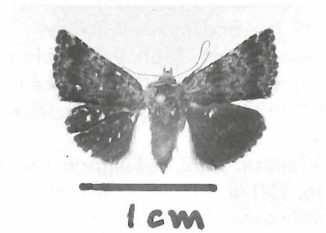
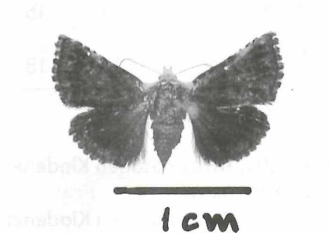
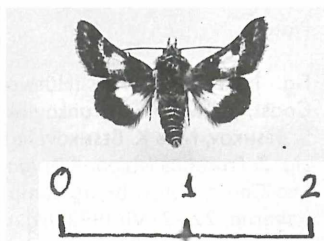
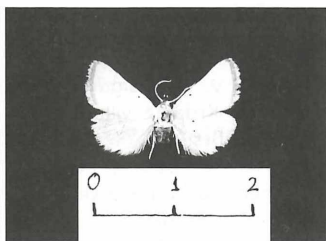
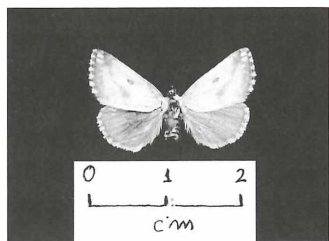
Fig. 16: *Eremodrina pertinax argentea* (CARADJA, 1930), ♂. Bulgaria, N Black Sea Coast, between Balchik town and Touzlata, 2 km to Touzlata, 22.-23.VIII.1997, S. BESHKOV, M & K. BESHKOVI leg. at light trap, in coll. S. BESHKOV.

Fig. 17: *Pseudoxestia apfelbecki apfelbecki* (REBEL, 1901), ♀. Bulgaria, Lozenska Planina Mts, above German village, 1000 m alt., Sofia region, 21.VI.1997, S. BESHKOV & S. ABADJIEV leg. at sugar, in coll. S. BESHKOV.

Fig. 18: *Chilodes maritima maritima* TAUSCHER, 1806, ♂. Bulgaria, S Black Sea Coast, Atanasovsko Ezero Lake near Bourgass town, 03.VIII.1987, leg. and in coll. S. BESHKOV.

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## Plate 5:

Fig. 1: *Athetis furvula* (HÜBNER, [1808]), ♀. NE Bulgaria, N Black Sea Coast, between Dourankoulak lake and Krapetz village, 12.VIII.1998, S. BESHKOV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

Fig. 2: *Proxenus lepigone lepigone* (MÖSCHLER, 1860), ♀. Bulgaria, N Black Sea Coast, Beliya Bryag camp site near Touzlata, between Balchik and Kavarna, 22.–27.VII.1992, leg. and in coll. S. BESHKOV.

Fig. 3: *Auchmis detersa argentea* (CARADJA, 1932), ♂. Bulgaria, N Black Sea Coast, Balchik town, 07.VI.1996, leg. and in coll. R. RADEV.

Fig. 4: *Xanthia icteritia* ab. *flavescens* (ESPER, [1788]), ♀. Republic of Macedonia, Galitchitza Mts, above Trapejca village, 1480 m, between Trapejca and Oteshevo, Ohrid Region, 10.IX.1997, S. BESHKOV, V. GASHTAROV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

Fig. 5: *Xanthia cypreago christiani* FIBIGER, 1992, ♂. Bulgaria, E Rhodopi Mts, Yazovir Studen Kladenetz Dam, Sradna Arda Railway Station, 250 m, 13.X.1991, leg. and in coll. S. BESHKOV.

Fig. 6: *Xanthia cypreago christiani* FIBIGER, 1992, ♀. Bulgaria, E Rhodopi Mts, Yazovir Studen Kladenetz Dam, Sradna Arda Railway Station, 250 m, 13.X.1991, leg. and in coll. S. BESHKOV.

Fig. 7: *Xanthia cypreago christiani* FIBIGER, 1992, ♀. Bulgaria, E Rhodopi Mts, Yazovir Studen Kladenetz Dam, Sradna Arda Railway Station, 250 m, 13.X.1991, leg. and in coll. S. BESHKOV.

Fig. 8: *Xanthia cypreago christiani* FIBIGER, 1992, ♂. Bulgaria, E Rhodopi Mts, Studen Kladenetz village, 200 m, 21.IX.1994, S. BESHKOV & V. TSHIKOLOVETS leg., in coll. S. BESHKOV.

Fig. 9: *Xanthia cypreago christiani* FIBIGER, 1992, ♀. Bulgaria, E Rhodopi Mts, Momina Skala Chalet near Madzharovo town, 160 m alt., 30.X.1995, leg. and in coll. S. BESHKOV.

Fig. 10: *Xanthia cypreago christiani* FIBIGER, 1992, ♀. Bulgaria, Sakar Mts, "Radincevo" above Dossiteevo village, Harmanli districts, 400 m alt., 09.X.1996, S. BESHKOV & I. STOYCHEV leg., in coll. S. BESHKOV.

Fig. 11: *Conistra ragusae macedonica* (PINKER, 1956), ♂. Bulgaria, E Rhodopi Mts, Arda Valley, Momina Skala Chalet near Madzharovo town, 160 m, 30.X.1997, S. BESHKOV & B. GOATER leg. at sugar, in coll. S. BESHKOV.

Fig. 12: *Conistra ragusae macedonica* (PINKER, 1956), ♀. Bulgaria, E Rhodopi Mts, Odrintzi village, Ivaylovgrad district, 160 m, 30.XI.1996, leg. and in coll. S. BESHKOV.

Fig. 13: *Episema lederi lederi* CHRISTOPH, 1885, ♀. Bulgaria, E Rhodopi Mts, Byalo Pole (= Belopolyane) village, 160 m alt., 21.IX.1995, S. BESHKOV & B. GOATER leg., in coll. S. BESHKOV.

Fig. 14: *Lithophane semibrunnea semibrunnea* (HAWORTH, 1809), ♂. Bulgaria, E Rhodopi Mts, the bridge on Arda River between Oreshari and Dolno Tcherkovishte villages, 180 m alt., 27.X.1997, at sugar, B. GOATER & S. BESHKOV leg., in coll. S. BESHKOV.

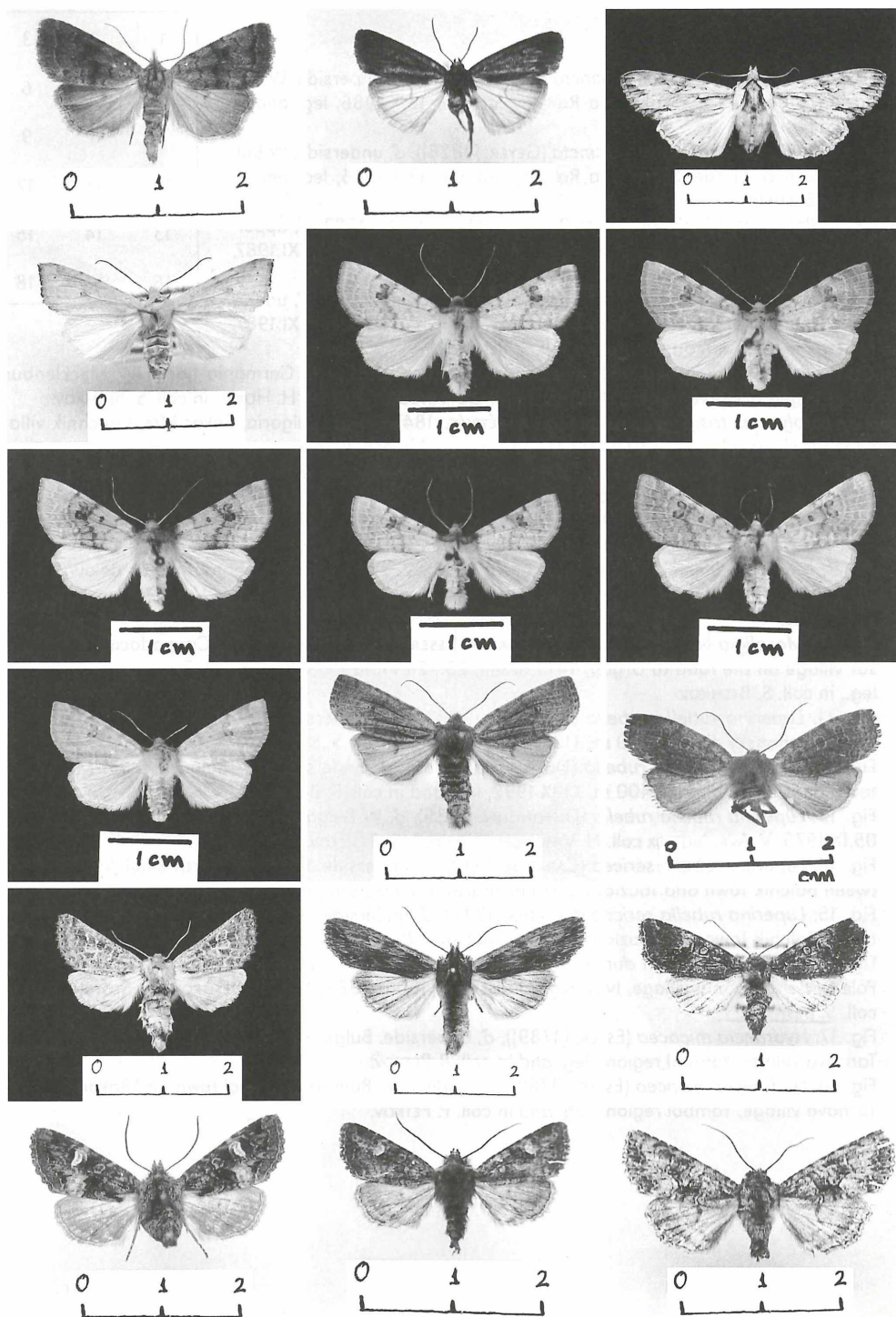
Fig. 15: *Evisa schawerdae balcanica* HACKER, 1989, ♀. Republic of Macedonia, Babuna Planina Mts, below Kozjak, between Pletvar and Drenovo, Prilep region, 750 m, 08.IX.1997, S. BESHKOV, V. GASHTAROV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

Fig. 16: *Rileyiana fovea fovea* (TREITSCHKE, 1825), ♀. Bulgaria, E Rhodopi Mts, Arda Valley, Momina Skala Chalet near Madzharovo town, sugar, B. GOATER & S. BESHKOV leg. in coll. S. BESHKOV.

Fig. 17: *Dryobota labecula labecula* (ESPER, [1788]), ♂. SW Bulgaria, Volcanic Hill of Kozhouh near Petrich town, 23.X.1997, S. BESHKOV & B. GOATER leg. at sugar, in coll. S. BESHKOV.

Fig. 18: *Dryobotodes monochroma monochroma* (ESPER, [1790]), ♂. Bulgaria, E Rhodopi Mts, Arda Valley, Momina Skala Chalet near Madzharovo town, 160 m alt., 01.IX.1992, leg. and in coll. S. BESHKOV.

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## Plate 6:

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Fig. 1: *Polymixis rufocincta rufocincta* (GEYER, [1828]), ♂, upperside. W Bulgaria, Zemen Gorge, Skakavitza Railway Station, 13.X.1986, leg. and in coll. S. BESHKOV.

Fig. 2: *Polymixis rufocincta rufocincta* (GEYER, [1828]), ♂, underside. W Bulgaria, Zemen Gorge, Skakavitza Railway Station, 13.X.1986, leg. and in coll. S. BESHKOV.

Fig. 3: *Polymixis rufocincta isolata* RONKAY & UHERKOVICH, 1983, ♂, upperside. N Bulgaria "Kaylaka" Park near Pleven town, 160 m, 16.XI.1987, S. BESHKOV & Z. ARNAODOV leg., in coll. S. BESHKOV.

Fig. 4: *Polymixis rufocincta isolata* RONKAY & UHERKOVICH, 1983, ♂, underside. N Bulgaria "Kaylaka" Park near Pleven town, 160 m, 16.XI.1987, S. BESHKOV & Z. ARNAODOV leg., in coll. S. BESHKOV.

Fig. 5: *Polymixis flavicincta* ([DENIS & SCHIFFERMÜLLER], 1775), ♀. Germania bor., NW Mecklenburg, Damshagen b. Grevesmühlen A.X.1995, 20.–30.IX.1996, e.o., leg. H. HOPPE, in coll. S. BESHKOV.

Fig. 6: *Polymixis trisignata trisignata* (MÉNÉTRIÉS, 1847), ♂. SE Bulgaria, Sakar Mts, Orechnik village near Topolovgrad town, 380 m, 09.XI.1987, leg. and in coll. BESHKOV.

Fig. 7: *Apamea syriaca syriaca* (OSTHELDER, 1933), ♀. Bulgaria, E Rhodopi Mts, Dolno Loukovo village, Ivaylovgrad districts, 200 m, 25.V.1990, leg. and in coll. BESHKOV.

Fig. 8: *Apamea aquila aquila* DONZEL, 1837, ♀. Bulgaria, Central (Troyanska) Stara Planina Mts, Dermenkaya Chalet, 1530 m, 05.–11.VII.1986, leg. and in coll. BESHKOV.

Fig. 9: *Mesoligia literosa literosa* (HAWORTH, 1809), ♀. SW Bulgaria, Alibotoush Mts, below "Livada" above Goleshovo village, 1500 m alt., 15.VII.1998, S. BESHKOV, S. ABADJIEV & V. GASHTAROV leg., in coll. S. BESHKOV.

Fig. 10: *Mesoligia literosa minorasia* REZBANYAI-RESER, 1998, ♂. Asia Minor, Cappadocia, above Uçhisar village on the road to Ürgüp, 1415 m alt., 23.–24.VII.1995, S. BESHKOV, J. GELBRECHT & E. SCHWABE leg., in coll. S. BESHKOV.

Fig. 11: *Luperina rubella rubella* (DUPONCHEL, 1835), ♂, upperside. SW Bulgaria, Pirin Mts, Melnik town, Sandansky district, 400 m, 11.IX.1992, leg. and in coll. S. BESHKOV.

Fig. 12: *Luperina rubella rubella* (DUPONCHEL, 1835), ♂, underside. SW Bulgaria, Pirin Mts, Melnik town, Sandansky district, 400 m, 11.IX.1992, leg. and in coll. S. BESHKOV.

Fig. 13: *Luperina rubella rubella* (DUPONCHEL, 1835), ♂. W Bulgaria, Zegrilovtzi village, Tran districts, 05.IX.1975, V. AVR. leg., ex coll. N. VIHODCEVSKI in coll. S. BESHKOV.

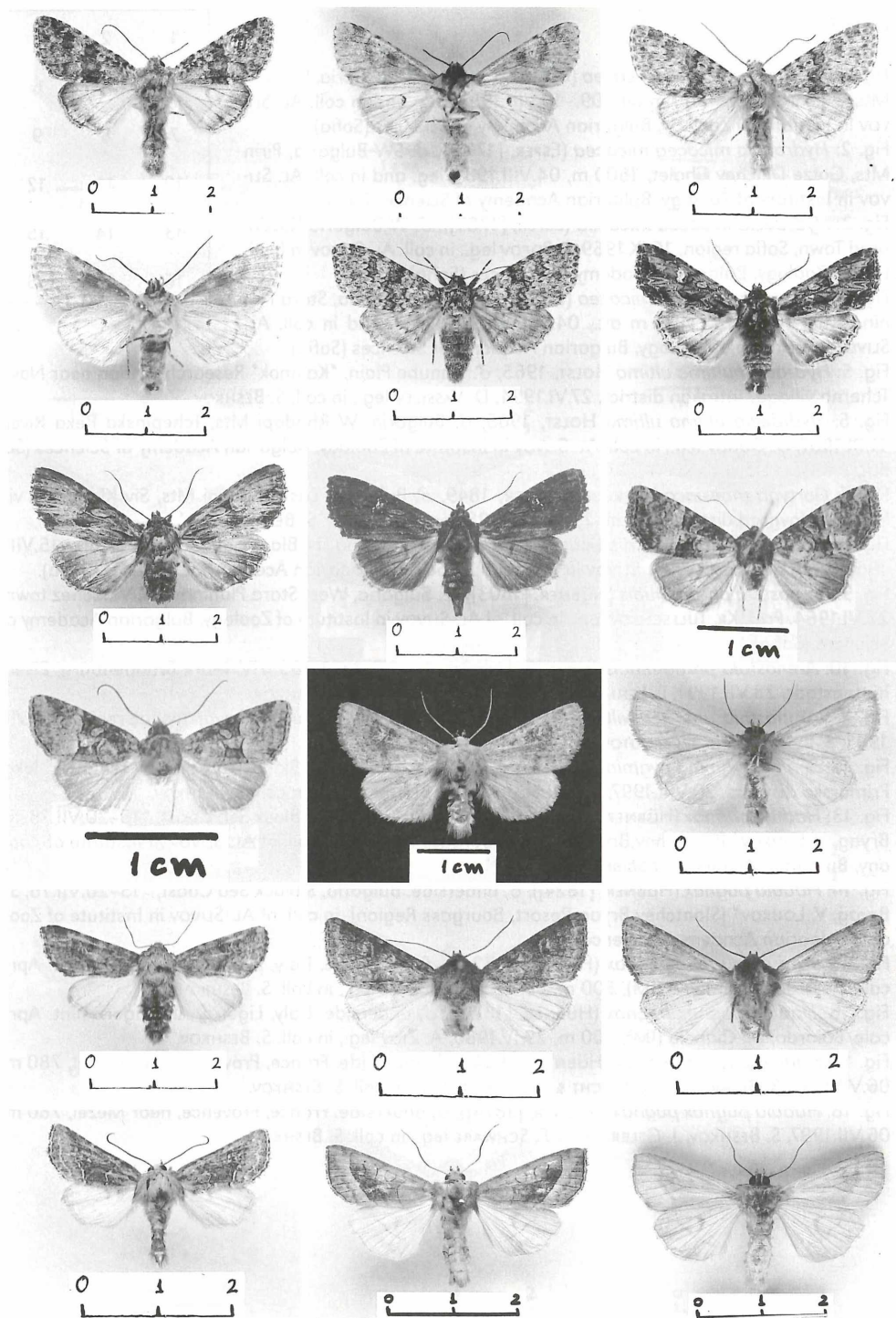
Fig. 14: *Luperina rubella sericea* (CARADJA, 1932), ♂, upperside. Bulgaria, North Black Sea Coast, between Balchik Town and Touzlata, 2 km to Touzlata, 29.IX.1998, leg. and in coll. S. BESHKOV.

Fig. 15: *Luperina rubella sericea* (CARADJA, 1932), ♂, underside. Bulgaria, North Black Sea Coast, between Balchik Town and Touzlata, 2 km to Touzlata, 29.IX.1998, leg. and in coll. S. BESHKOV.

Fig. 16: *Luperina dumerilii dumerilii* (DUPONCHEL, 1826), ♂, form. Bulgaria, East Rhodopi Mts, Byalo Pole (= Belopolyane) village, Ivaylovgrad districts, 160 m, 07.X.1996, S. BESHKOV & I. STOYCHEV leg., in coll. S. BESHKOV.

Fig. 17: *Hydraecia micacea* (ESPER, [1789]), ♂, upperside. Bulgaria, Yambol town (or "Bakadzika" near Tarnava village, Yambol region), leg. and in coll. P. PETKOV.

Fig. 18: *Hydraecia micacea* (ESPER, [1789]), ♂, underside. Bulgaria, Yambol town (or "Bakadzika" near Tarnava village, Yambol region), leg. and in coll. P. PETKOV.



## Plate 7:

Fig. 1: *Hydraecia micacea micacea* (ESPER, [1789]), ♂. W Bulgaria, Vitosha Mts, Aleko Chalet, 1800 m alt., 09.–10.VIII.1983, leg. and in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 2: *Hydraecia micacea micacea* (ESPER, [1789]), ♂. SW Bulgaria, Pirin Mts, Gotze Delchev Chalet, 1600 m, 04.VIII.1981, leg. and in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 3: *Hydraecia micacea micacea* (ESPER, [1789]), ♂. W Bulgaria Kostinbrod Town, Sofia region, 16.IX.1969, P. POPOV leg., in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 4: *Hydraecia micacea micacea* (ESPER, [1789]), ♀. Bulgaria, Stara Planina Mts, Tvarditza, 1100 m alt., 04.–05.VIII.1971, leg. and in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 5: *Hydraecia ultima ultima* HOLST, 1965, ♂. Danube Plain, "Kalimok" Research Station near Nova Tcherana village, Tutrakan district, 27.VI.1994, D. VASSILEV leg., in coll. S. BESHKOV.

Fig. 6: *Hydraecia ultima ultima* HOLST, 1965, ♂. Bulgaria, W Rhodopi Mts, Tchepinska Reka River, 11.IX.1957, D. GOGOV leg., in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 7: *Gortyna moesiaca* HERRICH-SCHÄFFER, 1849, ♂. Bulgaria, East Rhodopi Mts, Siv Kladenetz village, Ivaylovgrad district, 140 m, 23.–24.X.1998, leg. and in coll. S. BESHKOV.

Fig. 8: *Arenostola phragmitidis* (HÜBNER, [1803]), ♂. Bulgaria, N Black Sea Coast, Balchik, 15.VIII.1968, leg. and in coll. of AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 9: *Arenostola phragmitidis* (HÜBNER, [1803]), ♀. Bulgaria, West Stara Planina Mts, Varschez town, 22.VI.1964, Prof. KR. TULESCHKOV leg., in coll. of AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 10: *Arenostola phragmitidis* (HÜBNER, [1803]), ♀. DDR, MTB 3853/IV, Mark Brandenburg, Eisenhüttenstadt, 28.VII.1991, L. LEHMANN leg. at light trap, in coll. S. BESHKOV.

Fig. 11: *Arenostola unicolor wiltshirei* HACKER, 1996, ♂. Asia Minor, Sarikaya, Yosgat region, 19.VII.1991, S. BESHKOV & L. PREKROUTOV leg., in coll. S. BESHKOV.

Fig. 12: *Sedina pygmina pygmina* (HAWORTH, 1809), ♂. S Bulgaria, Black Sea Coast, "Arkoutino" lake, Primorsko districts, 20.VIII.1997, S. BESHKOV, M. & K. BESHKOV leg., in coll. S. BESHKOV.

Fig. 13: *Hadula pugnax* (HÜBNER, [1824]), ♂, upperside. Bulgaria, S Black Sea Coast, "15–20.VII.76, Sl. Bryag, V. Loukov" [Slantchev Bryag Resort, Bourgass Region], in coll. of AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences.

Fig. 14: *Hadula pugnax* (HÜBNER, [1824]), ♂, underside. Bulgaria, S Black Sea Coast, "15–20.VII.76, Sl. Bryag, V. Loukov" [Slantchev Bryag Resort, Bourgass Region], in coll. of AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences.

Fig. 15: *Hadula pugnax pugnax* (HÜBNER, [1824]), ♂, upperside. Italy, Liguria, Alpi Liguri, dint. Apricale/Baiardo, M. Cianela (IM), 600 m, 29.IV.1988, A. ZILLI leg., in coll. S. BESHKOV.

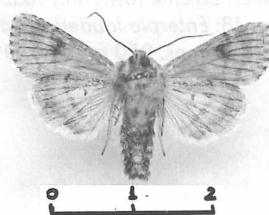
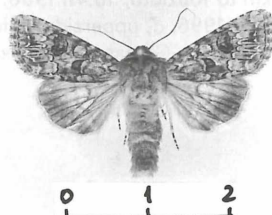
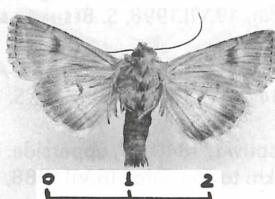
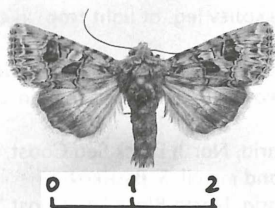
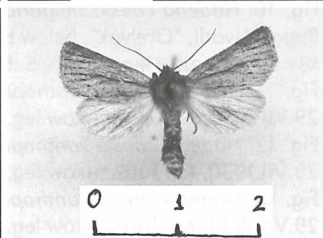
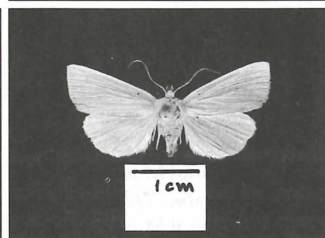
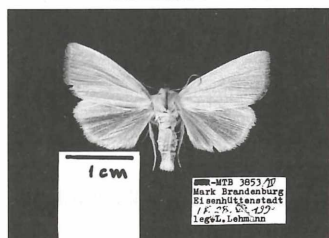
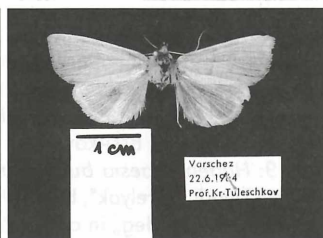
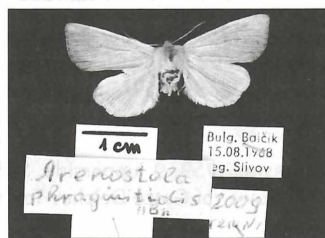
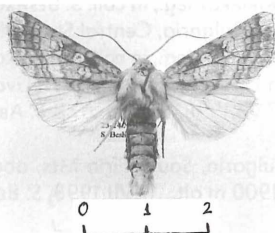
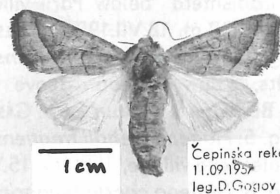
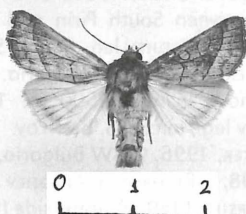
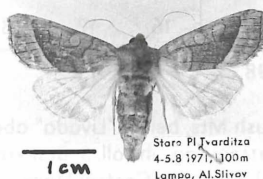
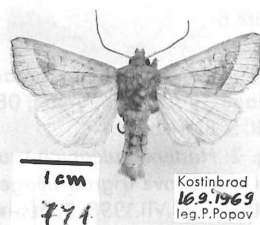
Fig. 16: *Hadula pugnax pugnax* (HÜBNER, [1824]), ♂, underside. Italy, Liguria, Alpi Liguri, dint. Apricale/Baiardo, M. Cianela (IM), 600 m, 29.IV.1988, A. ZILLI leg., in coll. S. BESHKOV.

Fig. 17: *Hadula pugnax pugnax* (HÜBNER, [1824]), ♂, upperside. France, Provence, near Mezel, 780 m, 06.VII.1997, S. BESHKOV, J. GELBRECHT & E. SCHWABE leg., in coll. S. BESHKOV.

Fig. 18: *Hadula pugnax pugnax* (HÜBNER, [1824]), ♂, underside. France, Provence, near Mezel, 780 m, 06.VII.1997, S. BESHKOV, J. GELBRECHT & E. SCHWABE leg., in coll. S. BESHKOV.

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## Plate 8:

Fig. 1: *Hadena adriana adriana* (SCHAWERDA, 1921), ♂, S Albania, Vrissara village, Gjirokastra region, 08.VI.1992, S. BESHKOV & L. PREKROUTOV leg., in coll. S. BESHKOV.

Fig. 2: *Hadena vulcanica urumovi* (DRENOWSKI, 1931), ♂, Bulgaria, Rhodopi Mts, above Trigrad village, on the rock above Dyavolskoto Garlo Cave, 1200 m, 22.VII.1998, S. BESHKOV & S. ABADJIEV leg., in coll. S. BESHKOV.

Fig. 3: *Hadena vulcanica urumovi* (DRENOWSKI, 1931), ♀, SW Bulgaria, "Gradishteto" below Paril village, between South Pirin and Alibotoush Mts, 700 m, 18.VII.1998, S. BESHKOV & S. ABADJIEV leg., in coll. S. BESHKOV.

Fig. 4: *Hadena wehrlii frequens* HACKER, 1996, ♂, SW Bulgaria, Alibotoush Mts, below "Livada" above Goleshovo village, 1500 m, 15.VII.1998, S. BESHKOV, S. ABADJIEV & V. GASHTAROV leg., in coll. S. BESHKOV.

Fig. 5: *Hadena wehrlii frequens* HACKER, 1996, ♀, SW Bulgaria, Alibotoush Mts, below "Livada" above Goleshovo village, 1500 m, 15.VII.1998, S. BESHKOV, S. ABADJIEV & V. GASHTAROV leg., in coll. S. BESHKOV.

Fig. 6: *Hadena caesia bulgarica* BOURSIN, 1959, ♂, upperside (topotype). Bulgaria, Central Stara Planina Mts, "Ray" chalet above Kalofer town, 1600 m alt., 05.VII.1985, D. KIRIAKOV leg., in coll. S. BESHKOV.

Fig. 7: *Hadena caesia bulgarica* BOURSIN, 1959, ♂, underside (topotype). Bulgaria, Central Stara Planina Mts, "Ray" chalet above Kalofer town, 1600 m alt., 05.VII.1985, D. KIRIAKOV leg., in coll. S. BESHKOV.

Fig. 8: *Hadena caesia bulgarica* BOURSIN, 1959, ♂, SW Bulgaria, South Pirin Mts, above Popovi Livadi, "Orelyak", below the TV Tower of Gotze Delchev Town, 1900 m alt., 17.VII.1998, S. BESHKOV & S. ABADJIEV leg., in coll. S. BESHKOV.

Fig. 9: *Hadena caesia bulgarica* BOURSIN, 1959, ♀, upperside. SW Bulgaria, South Pirin Mts, above Popovi Livadi, "Orelyak", below the TV Tower of Gotze Delchev Town, 1900 m alt., 17.VII.1998, S. BESHKOV & S. ABADJIEV leg., in coll. S. BESHKOV.

Fig. 10: *Hadena caesia bulgarica* BOURSIN, 1959, ♀, underside. SW Bulgaria, South Pirin Mts, above Popovi Livadi, "Orelyak", below the TV Tower of Gotze Delchev Town, 1900 m alt., 17.VII.1998, S. BESHKOV & S. ABADJIEV leg., in coll. S. BESHKOV.

Fig. 11: *Hadena caesia xanthophoba* (SCHAWERDA, 1922), ♀, underside. SW Bulgaria, Alibotoush Mts, 29.VII.1930, Kr. TULESCHKOW leg., in coll. National Museum of Natural History, Sofia.

Fig. 12: *Hadena caesia xanthophoba* (SCHAWERDA, 1922), ♂, upperside. SW Bulgaria, Alibotoush Mts, 29.VII.1930, Kr. TULESCHKOW leg., in coll. National Museum of Natural History, Sofia.

Fig. 13: *Hadena caesia xanthophoba* (SCHAWERDA, 1922), ♂, underside. SW Bulgaria, Alibotoush Mts, 29.VII.1930, Kr. TULESCHKOW leg., in coll. National Museum of Natural History, Sofia.

Fig. 14: *Hadena drenowskii drenowskii* (REBEL, 1930), ♂, Bulgaria, Central Rhodopi Mts, below the TV tower above Yagodina village, 1250 m, 19.VII.1998, S. BESHKOV & S. ABADJIEV leg. at light trap, in coll. S. BESHKOV.

Fig. 15: *Hadena drenowskii sultana* HACKER, 1996, ♂, paratype. Asia Minor, Cappadocia, above Uçhisar village on the road to Ürgüp, 1415 m, 23.-34.VII.1995, S. BESHKOV & J. GELBRECHT leg., in coll. S. BESHKOV.

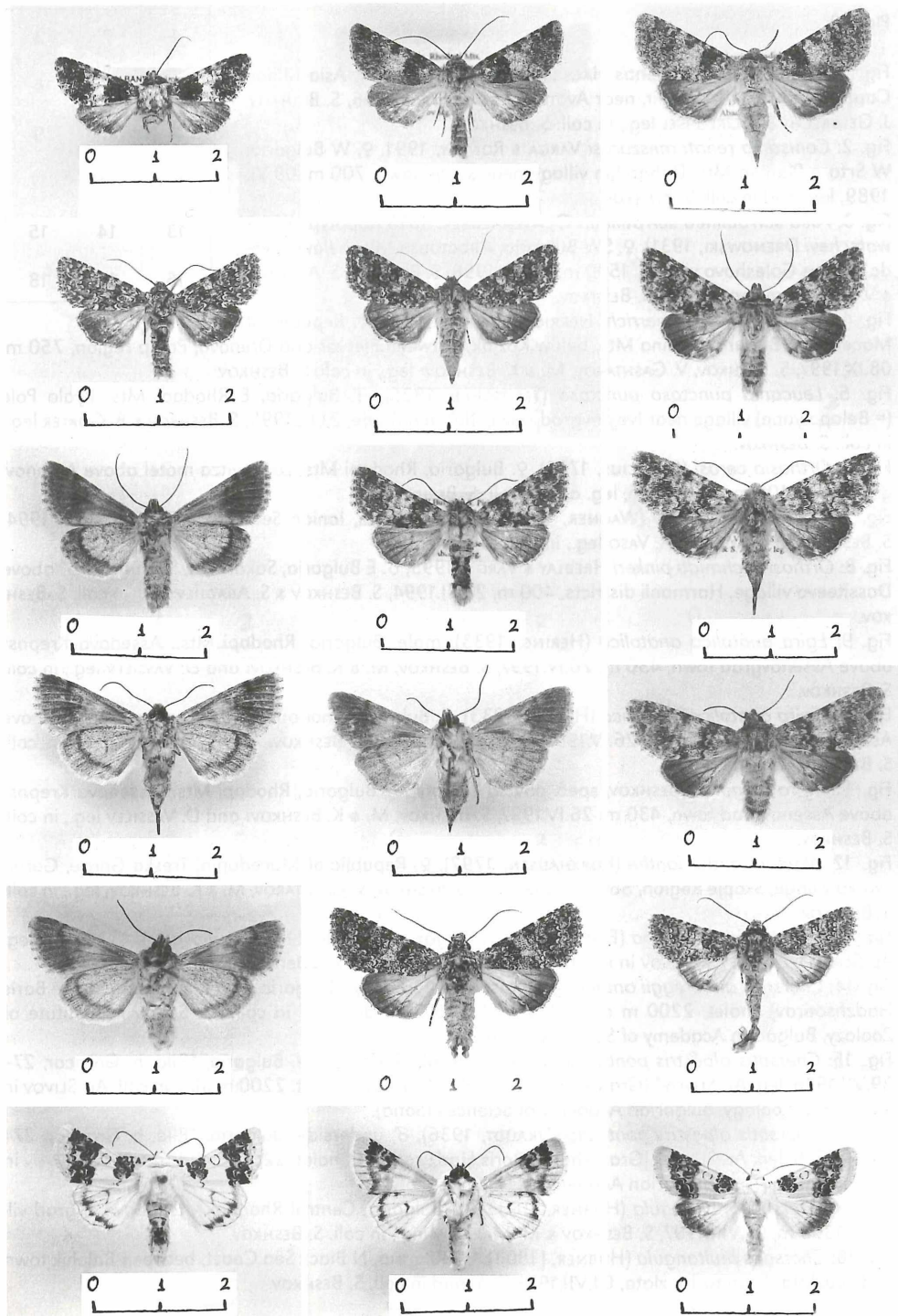
Fig. 16: *Enterpia laudeti laudeti* (BOISDUVAL, 1840), ♂, upperside. Bulgaria, North Black Sea Coast, between Balchik Town and Touzlata, 2 km to Touzlata, 16.VII.1988, leg. and in coll. S. BESHKOV.

Fig. 17: *Enterpia laudeti laudeti* (BOISDUVAL, 1840), ♂, underside. Bulgaria, North Black Sea Coast, between Balchik Town and Touzlata, 2 km to Touzlata, 16.VII.1988, leg. and in coll. S. BESHKOV.

Fig. 18: *Enterpia laudeti orientis* HACKER, 1996, ♂, upperside. Asia Minor, Cappadocia, Prov. Nevsehir, near Avanos, 950 m, 17.VI.1996, S. BESHKOV, J. GELBRECHT & T. DRECHSEL leg., in coll. S. BESHKOV.

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## Plate 9:

Fig. 1: *Enterpia laudeti orientis* HACKER, 1996, ♂, underside. Asia Minor, Cappadocia, Prov. Nevsehir, near Avanos, 950 m, 17.VI.1996, S. BESHKOV, J. GELBRECHT & T. DRECHSEL leg., in coll. S. BESHKOV.

Fig. 2: *Conisia renati meszarosi* VARGA & RONKAY, 1991, ♀. W Bulgaria, W Srtara Planina Mts, Dobarchin village near Svoje town, 700 m, 09.VI.1989, leg. and in coll. S. BESHKOV.

Fig. 3: *Polia serratilinea serratilinea* OCHSENHEIMER, 1816 (topotype of *ko-watschevi* DRENOWSKI, 1931), ♀. SW Bulgaria, Alibotoush Mts, below "Livada" above Goleshovo village, 1500 m, 15.VII.1998, S. BESHKOV, S. ABADJIEV & V. GASHTAROV leg., in coll. S. BESHKOV.

Fig. 4: *Leucania herrichi herrichi* HERRICH-SCHÄFFER, 1849, ♀. Republic of Macedonia, Babuna Planina Mts, below Kozjak, between Pletvar and Drenovo, Prilep region, 750 m, 08.IX.1997, S. BESHKOV, V. GASHTAROV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

Fig. 5: *Leucania punctosa punctosa* (TREITSCHKE, 1825), ♂. Bulgaria, E Rhodopi Mts, Byalo Pole (= Belopolyane) village near Ivaylovgrad town, 180 m altitude, 21.IX.1995, S. BESHKOV & B. GOATER leg., in coll. S. BESHKOV.

Fig. 6: *Orthosia cerasi* (FABRICIUS, 1775), ♀. Bulgaria, Rhodopi Mts, Loukovitza motel above Assenovgrad town, 400 m, 30.III.1986, leg. and in coll. S. BESHKOV.

Fig. 7: *Orthosia dalmatina* (WAGNER, 1909), ♀. SW Albania, Ionian Sea Coast, Butrinti, 16.IV.1994, S. BESHKOV, S. ABADJIEV & A. VASO leg., in coll. S. BESHKOV.

Fig. 8: *Orthosia schmidt pinkeri* HREBLAY & VARGA, 1993, ♂. E Bulgaria, Sakar Mts, "Radincevo" above Dossiteevo village, Harmanli districts, 400 m, 20.III.1994, S. BESHKOV & S. ABADJIEV leg., in coll. S. BESHKOV.

Fig. 9: *Egira anatolica anatolica* (HERING, 1933), male. Bulgaria, Rhodopi Mts., Assenova Krepost above Assenovgrad town, 430 m, 26.IV.1997, S. BESHKOV, M. & K. BESHKOVI and D. VASSILEV leg., in coll. S. BESHKOV.

Fig. 10: *Egira anatolica anatolica* (HERING, 1933), ♀. Bulgaria, Rhodopi Mts., Assenova Krepost above Assenovgrad town, 430 m, 26.IV.1997, S. BESHKOV, M. & K. BESHKOVI and D. VASSILEV leg., in coll. S. BESHKOV.

Fig. 11: *Egira bulgarica* BESHKOV, spec. nov., ♂ (holotype). Bulgaria, Rhodopi Mts., Assenova Krepost above Assenovgrad town, 430 m, 26.IV.1997, S. BESHKOV, M. & K. BESHKOVI and D. VASSILEV leg., in coll. S. BESHKOV.

Fig. 12: *Noctua janthe janthe* (BORKHAUSEN, 1792), ♀. Republic of Macedonia, Treska Gorge, Gorna Matka village, Skopje Region, 560 m, 12.IX.1997, S. BESHKOV, V. GASHTAROV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

Fig. 13: *Lycophotia molothina* (ESPER, 1789), ♀. Bulgaria, E Rhodopi Mts, "Ivailovgrad, 13.V.1981, leg. AL. SLIVOV", in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 14: *Chersotis andereggi andereggi* (BOISDUVAL, [1837]), ♂. Bulgaria, Rila Mts, Grantchar (= Boris Hadzsisotirov) chalet, 2200 m alt., 27.-29.VII.1975, leg., det. and in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

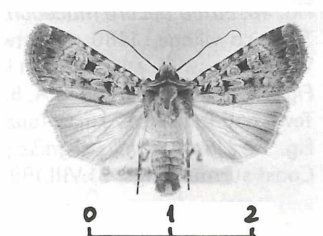
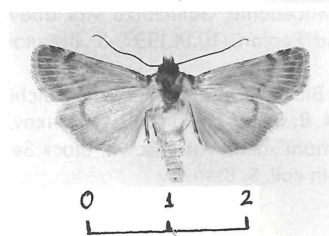
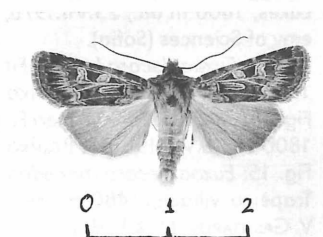
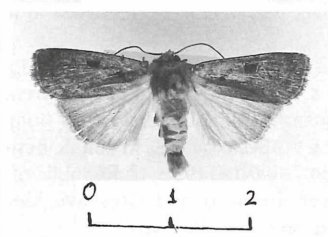
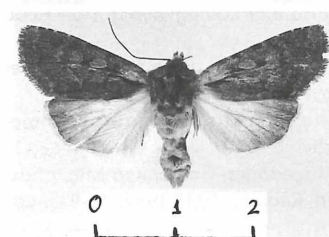
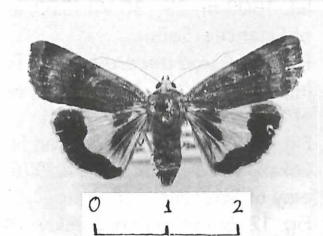
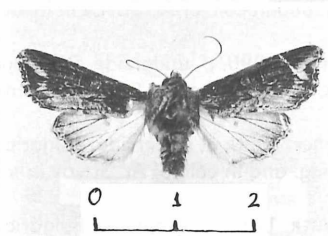
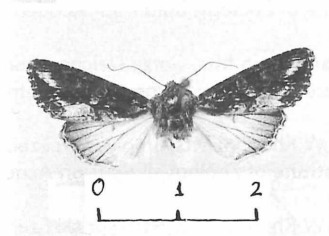
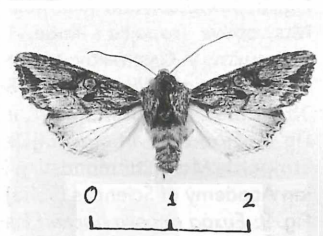
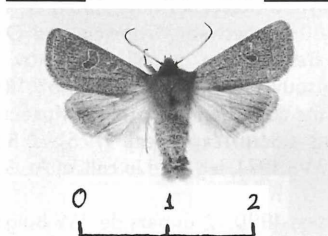
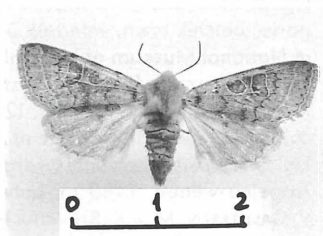
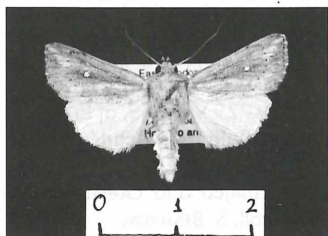
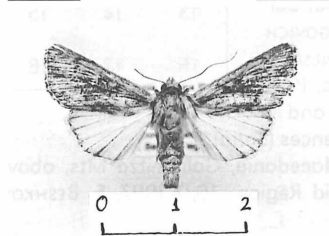
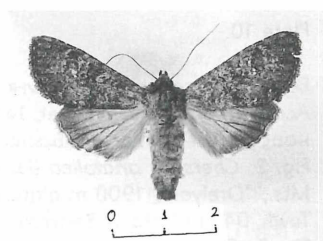
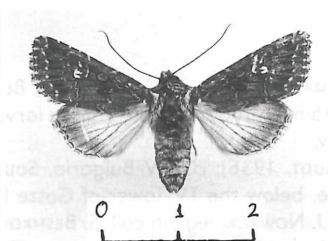
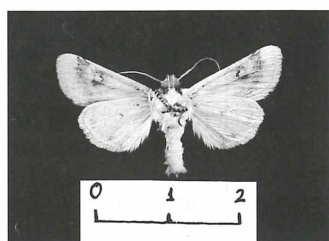
Fig. 15: *Chersotis alpestris ponticola* (DRAUDT, 1936), ♂, upperside. Bulgaria, "Rila, h. Grancar, 27-29.VII.1975, leg. AL. SLIVOV" [Grantchar (= Boris Hadzsisotirov) Chalet, 2200 m alt.], in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 16: *Chersotis alpestris ponticola* (DRAUDT, 1936), ♂, underside. Bulgaria, "Rila, h. Grancar, 27-29.VII.1975, leg. AL. SLIVOV" [Grantchar (= Boris Hadzsisotirov) Chalet, 2200 m alt.], in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 17: *Chersotis multangula* (HÜBNER, [1803]), ♂. Bulgaria, Central Rhodopi Mts, above Trigrad village, 1300 m, 01.VIII.1997, S. BESHKOV & M. MARINOV leg., in coll. S. BESHKOV.

Fig. 18: *Chersotis multangula* (HÜBNER, [1803]), ♂. Bulgaria, N Black Sea Coast, between Balchik town and Touzlata, 2 km to Touzlata, 01.VII.1988, leg. and in coll. S. BESHKOV.

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## Plate 10:

Fig. 1: *Chersotis elegans* (EVERSMANN, 1837), ♂. Vitosha Mts, Bulgarian Academy of Sciences Chalet, 1425 m altitude, 08.VIII.1954, ex larva, N. VI-HODCEVSKY leg., in coll. S. BESHKOV.

Fig. 2: *Chersotis anatolica* (DRAUDT, 1936), ♂. SW Bulgaria, South Pirin Mts., "Orelyak", 1900 m altitude, below the TV Tower of Gotze Delchev Town, 04.VIII.1996, S. BESHKOV & J. NOWACKI leg., in coll. S. BESHKOV.

Fig. 3: *Chersotis laeta macini* RÁKOSY, STANGELMAIER & WIESER, 1996. Bulgaria, Balchik town, valea Ak Bunar, 02.VII.1930, in coll. A. OSTROGOVICH in National Museum of Natural History (Bucharest). Photo: M. STANESCU.

Fig. 4: *Chersotis fimbriola forsteri* THURNER, 1964, ♀. SW Bulgaria, Pirin Mts, Yane Sandansky Chaler, 1200 m alt., 29.VII.1969, at lamp, leg. and in coll. of AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 5: *Epipsilia cervantes vargai* FIBIGER, 1993, ♀. Republic of Macedonia, Galitchitza Mts, above Trapejca village, 1480 m, between Trapejca and Oteshevo, Ohrid Region, 10.IX.1997, S. BESHKOV, V. GASHTAROV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

Fig. 6: *Standfussiana lucerneae illyrica* (REBEL & ZERNY, 1931), ♀. Republic of Macedonia, Galitchitza Mts, above Trapejca village, 1480 m, between Trapejca and Oteshevo, Ohrid Region, 10.IX.1997, S. BESHKOV, V. GASHTAROV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

Fig. 7: *Xestia collina collina* (BOISDUVAL, 1840), ♀. [Bulgaria], "Rhodopy [Rila], Kostenetz, 1500 m, 18.VII.1933, KR. TULESCHKOW", in the collection of National Museum of Natural History (Sofia).

Fig. 8: *Euxoa birivia birivia* ([DENIS & SCHIFFERMÜLLER], 1775), ♂. Bulgaria, Central Stara Planina Mts, Etropolski Manastir monastery, 27.VII.1971, leg. and in coll. of AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 9: *Euxoa decora hackeri* FIBIGER, 1990, ♂, upperside. SW Bulgaria, Pirin Mts, Gotze Delchev Chalet, 1900 m, 29.-30.VII.1970, leg. and in coll. of AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 10: *Euxoa decora hackeri* FIBIGER, 1990, ♂, underside. SW Bulgaria, Pirin Mts, Gotze Delchev Chalet, 1900 m, 29.-30.VII.1970, leg. and in coll. of AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 11: *Euxoa decora hackeri* FIBIGER, 1990, ♂, upperside. Bulgaria, W Rhodopi Mts, Smolyanski Ezera Lakes, 1600 m alt., 23.VII.1978, leg. and in coll. of AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 12: *Euxoa decora hackeri* FIBIGER, 1990, ♂, underside. Bulgaria, W Rhodopi Mts, Smolyanski Ezera Lakes, 1600 m alt., 23.VII.1978, leg. and in coll. of AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 13: *Euxoa decora hackeri* FIBIGER, 1990, ♂, upperside. SW Bulgaria, Pirin Mts, Peyo Yavorov Chalet, 1800 m, 15.VIII.1985, S. BESHKOV & VL. BESHKOV leg., in coll. S. BESHKOV.

Fig. 14: *Euxoa decora hackeri* FIBIGER, 1990, ♂, underside. SW Bulgaria, Pirin Mts, Peyo Yavorov Chalet, 1800 m, 15.VIII.1985, S. BESHKOV & VL. BESHKOV leg., in coll. S. BESHKOV.

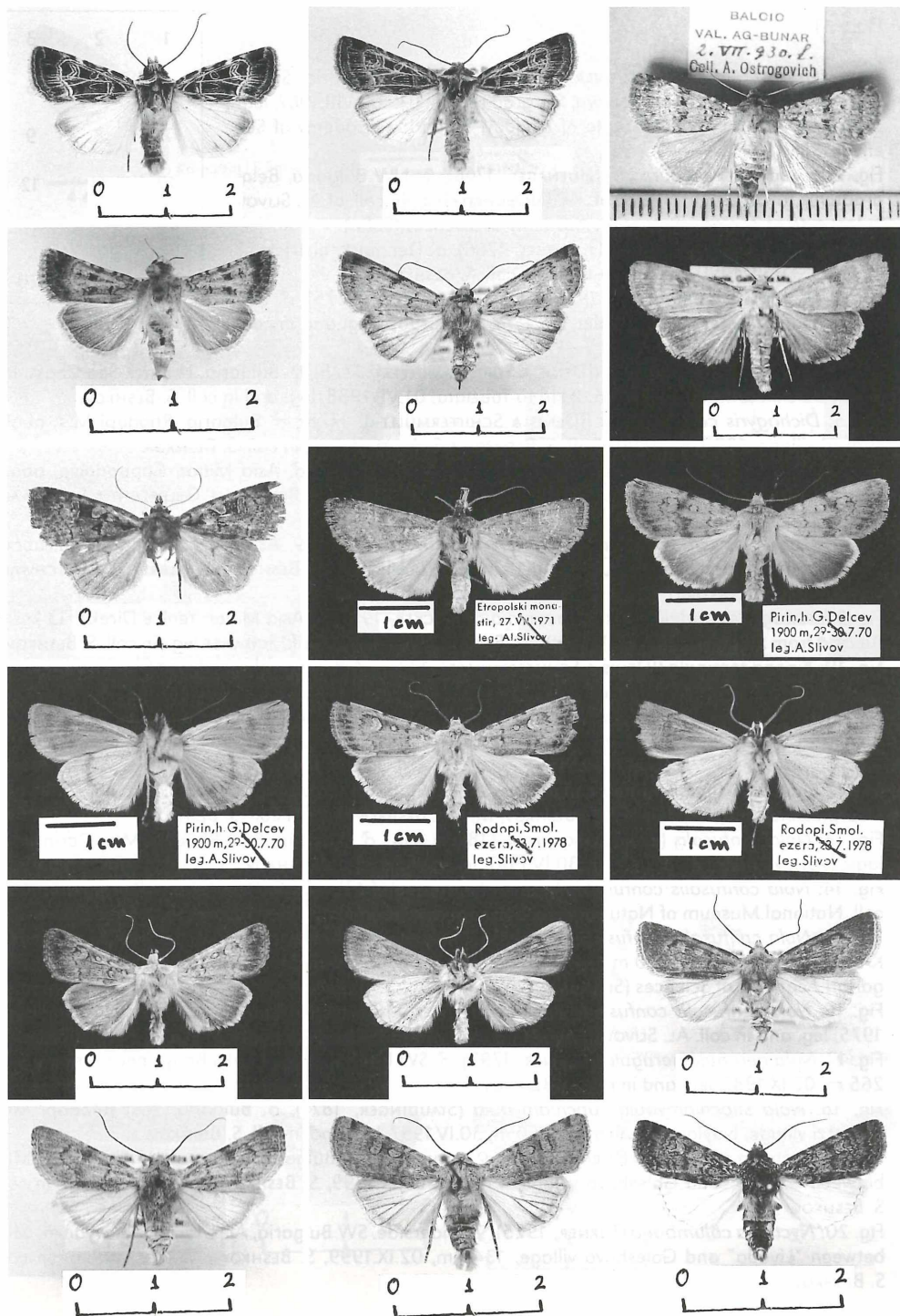
Fig. 15: *Euxoa decora macedonica* THURNER, 1936, ♂. Republic of Macedonia, Galitchitza Mts, above Trapejca village, 1480 m, between Trapejca and Oteshevo, Ohrid Region, 10.IX.1997, S. BESHKOV, V. GASHTAROV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

Fig. 16: *Euxoa decora macedonica* THURNER, 1936, ♂. Republic of Macedonia, Galitchitza Mts, above Trapejca village, 1480 m, between Trapejca and Oteshevo, Ohrid Region, 10.IX.1997, S. BESHKOV, V. GASHTAROV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

Fig. 17: *Euxoa cos crimaee* A. BANG-HAAS, 1906, ♂. Bulgaria, North Black Sea Coast, between Balchik Town and Touzlat, 2 km to Touzlat, 25.VIII.1996, S. BESHKOV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

Fig. 18: *Euxoa segnilis segnilis* (DUPONCHEL, 1836), ♂. "Pobitite Kamani" near Varna town, Black Sea Coast surroundings, 21.VIII.1997, S. BESHKOV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

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## Plate 11:

Fig. 1: *Euxoa eruta eruta* (HÜBNER, [1814–1817]), ♀. NE Bulgaria, Seslav hunting reserve near Koubrat town, Razgrad region, 01.–02.VIII.1967, leg. and in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 2: *Euxoa cursoria cursoria* (HUFNAGEL, 1766), ♀. NW Bulgaria, Belogradchik town, 08.VII.1963, Prof. KR. TULESCHKOV leg., in coll. of AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 3: *Euxoa cursoria cursoria* (HUFNAGEL, 1766), ♂. Denmark, districts of Blavand, 11.VIII.1990, RIEFENSTAHL leg., in coll. S. BESHKOV.

Fig. 4: *Dichagyris candelisequa* ([DENIS & SCHIFFERMÜLLER], 1775), ♂. Bulgaria, Rhodopi Mts, Bezovo chalet, 1220 m, 31.VII.1985, leg. and in coll. S. BESHKOV.

Fig. 5: *Dichagyris candelisequa* ([DENIS & SCHIFFERMÜLLER], 1775), ♀. Bulgaria, N Black Sea Coast, between Balchik town and Touzlata, 2 km to Touzlata, 01.VII.1988, leg. and in coll. S. BESHKOV.

Fig. 6: *Dichagyris candelisequa* ([DENIS & SCHIFFERMÜLLER], 1775), ♂. Bulgaria, Rhodopi Mts, above Trigrad village, 1220 m, 20.VII.1998, S. BESHKOV & S. ABADJIEV leg., in coll. S. BESHKOV.

Fig. 7: *Dichagyris candelisequa achaemenidica* HACKER, 1990, ♂. Asia Minor, Cappadocia, above Uchisar village on the road to Ürgüp, 1415 m, 23.–24.VII.1995, S. BESHKOV, J. GELBRECHT & E. SCHWABE leg., in coll. S. BESHKOV.

Fig. 8: *Dichagyris candelisequa achaemenidica* HACKER, 1990, ♀. Asia Minor, Cappadocia, above Uchisar village on the road to Ürgüp, 1415 m, 23.–24.VII.1995, S. BESHKOV, J. GELBRECHT & E. SCHWABE leg., in coll. S. BESHKOV.

Fig. 9: *Dichagyris candelisequa achaemenidica* HACKER, 1990, ♀. Asia Minor, Yenice Direkli, 13 km to Amasia from Akdag, 580 m, 13.VII.1995, S. BESHKOV, J. GELBRECHT & E. SCHWABE leg., in coll. S. BESHKOV.

Fig. 10: *Yigoga forcipula* ([DENIS & SCHIFFERMÜLLER], 1775), ♂. Bulgaria, E Rhodopi Mts, Yazovir Studen Kladenetz Dam, Sredna Arda Railway Station, 200 m, 16.VI.1993, leg. and in coll. S. BESHKOV.

Fig. 11: *Yigoga forcipula* ([DENIS & SCHIFFERMÜLLER], 1775), ♂. Bulgaria, N Black Sea Coast, between Balchik town and Touzlata, 2 km to Touzlata, 16.VII.1988, S. BESHKOV & S. ABADJIEV leg., in coll. S. BESHKOV.

Fig. 12: *Agrotis vestigialis vestigialis* (HUFNAGEL, 1766), ♂. Bulgaria, N Black Sea Coast, NE side of the Dourankoulak lake, 27.VIII.1997, S. BESHKOV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

Fig. 13: *Nola confusalis* (HERRICH-SCHÄFFER, [1847]), ssp., ♂. Bulgaria, East Rhodopi Mts, Odrintzi village, Ivaylovgrad districts, 160 m, 30.IV.1997, leg. and in coll. S. BESHKOV.

Fig. 14: *Nola confusalis confusalis* (HERRICH-SCHÄFFER, [1847]), ♂. „Collectio Princ. Bulg. Austria“, in coll. National Museum of Natural History, Sofia.

Fig. 15: *Nola confusalis confusalis* (HERRICH-SCHÄFFER, [1847]), ♂. SW Bulgaria, Kresna Gorge [Stara Kresna Railway Station, 200 m alt.], 16.IV.1975, leg. and in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 16: *Nola confusalis confusalis* (HERRICH-SCHÄFFER, [1847]), ♀. SW Bulgaria, Belassitza Mts, 15.IV.1975, leg. and in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

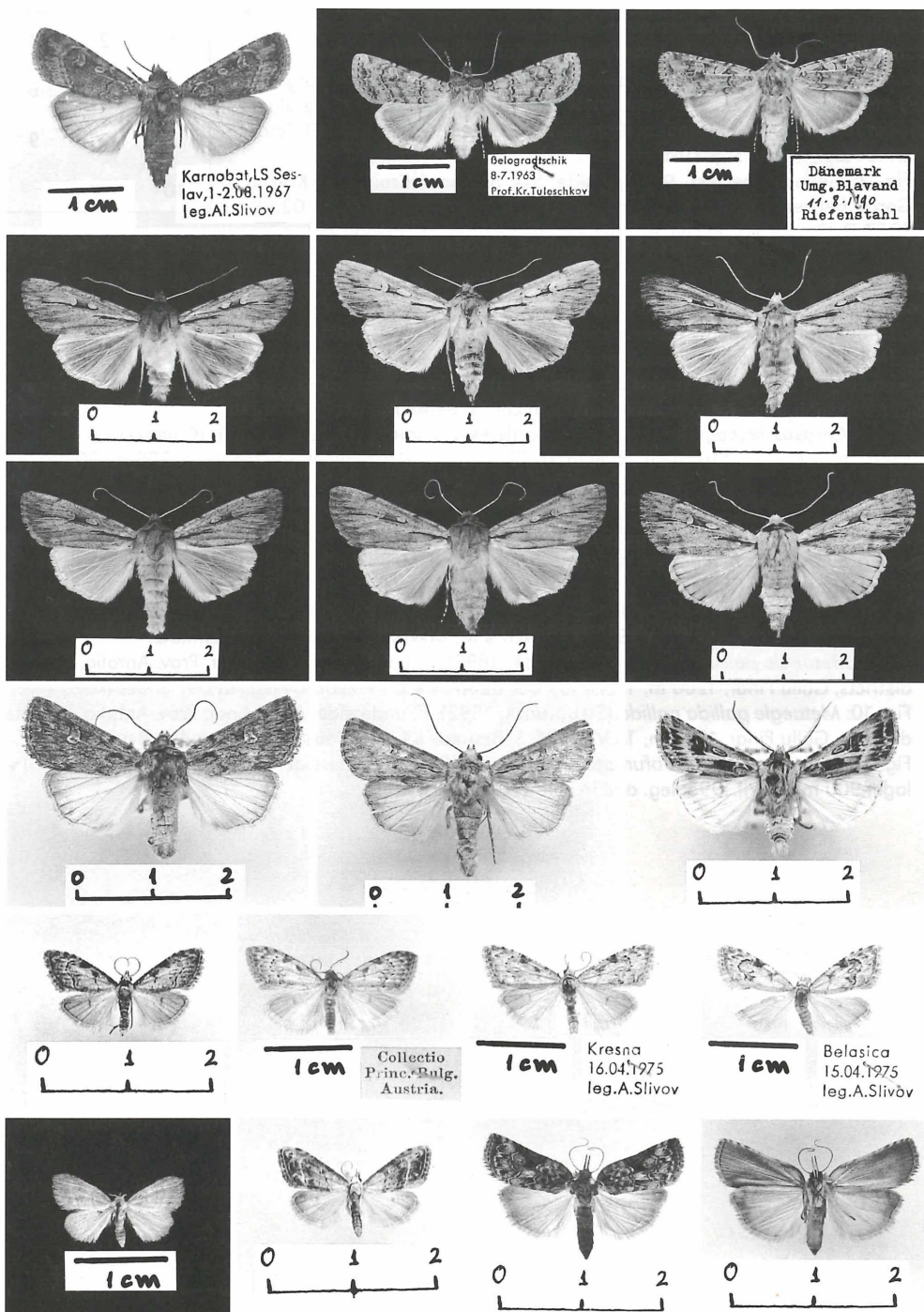
Fig. 17: *Nola aerugula aerugula* (HÜBNER, 1793), ♂. SW Bulgaria, Gradeshka Banya near Kresna town 265 m, 02.IX.1987, leg. and in coll. S. BESHKOV.

Fig. 18: *Nola subchlamydule subchlamydule* (STAUDINGER, 1871), ♂. Bulgaria, East Rhodopi Mts, Odrintzi village, Ivaylovgrad districts, 160 m, 30.IV.1997, leg. and in coll. S. BESHKOV.

Fig. 19: *Nycteola columbana* (TURNER, 1925), ♀, upperside. SW Bulgaria, Alibotoush [= Slavyanka] Mts, between „Livada“ and Goleshovo village, 1340 m, 02.IX.1999, S. BESHKOV & D. VASSILEV leg., in coll. S. BESHKOV.

Fig. 20: *Nycteola columbana* (TURNER, 1925), ♀, underside. SW Bulgaria, Alibotoush [= Slavyanka] Mts, between „Livada“ and Goleshovo village, 1340 m, 02.IX.1999, S. BESHKOV & D. VASSILEV leg., in coll. S. BESHKOV.

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## Plate 12:

Fig. 1: *Cucullia balsamitae balsamitae* BOISDUVAL, 1840, ♂. Bulgaria, North Black Sea Coast Region, group of "Pobitite Kamani" above Sluntchevo village, Varna districts, ~80 m alt., 14.V.2000, S. BESHKOV & D. TCHOVANOV leg., in coll. S. BESHKOV.

Fig. 2: Genus?, species?, ♀, upperside. SW Bulgaria, Kroupnik, [Kresna Gorge between Kresna town and Kroupnik village, ~250 m alt.], 02.VII.1957, D. Gogov leg., in coll. AL.SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences, Sofia.

Fig. 3: Genus?, species?, ♀, underside. SW Bulgaria, Kroupnik, [Kresna Gorge between Kresna town and Kroupnik village, ~250 m alt.], 02.VII.1957, D. Gogov leg., in coll. AL. SLIVOV in the Institute of Zoology, Bulgarian Academy of Sciences, Sofia.

Fig. 4: *Cerastis leucographa leucographa* ([DENIS & SCHIFFERMÜLLER], 1775), ♂, upperside. Bulgaria, West Stara Planina Mts, near Tcherkaski village, the districts of Berkovitz town, 300 m, 30.III.2000, S. BESHKOV, B. PETROV & G. STOYANOV leg., in coll. S. BESHKOV.

Fig. 5: *Cerastis leucographa leucographa* ([DENIS & SCHIFFERMÜLLER], 1775), ♂, underside. Bulgaria, West Stara Planina Mts, near Tcherkaski village, the districts of Berkovitz town, 300 m, 30.III.2000, S. BESHKOV, B. PETROV & G. STOYANOV leg., in coll. S. BESHKOV.

Fig. 6: *Agrotis syricola syricola* (CORTI & DRAUDT, 1933), ♂. Bulgaria, "Pobitite Kamani" near Varna town, Black Sea Coast surroundings, 18.IX.1999, S. BESHKOV & S. ABADJIEV leg., in coll. S. BESHKOV.

Fig. 7: *Euxoa vitta hercegovinensis* SCHAWERDA, 1938, ♀. Bulgaria, Central (Troyanska) Stara Planina Mts, Dermenkaya Chalet, 1530 m, 21.IX.1987, S. BESHKOV leg.

Fig. 8: *Apamea monoglypha* (HUFNAGEL, 1766), ♀ (forma). Bulgaria, Central Rhodopi Mts, above Trigrad village, 1300 m, 01.VIII.1997, S. BESHKOV & M. MARINOV leg., in coll. S. BESHKOV.

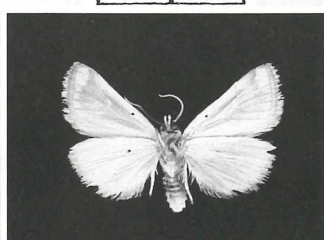
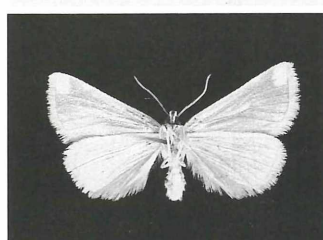
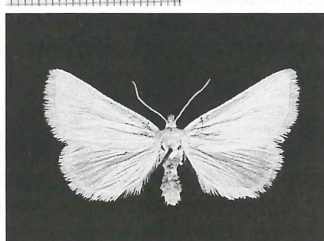
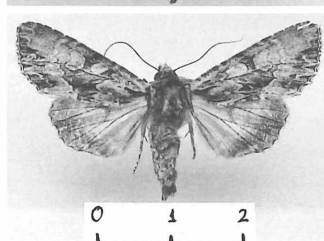
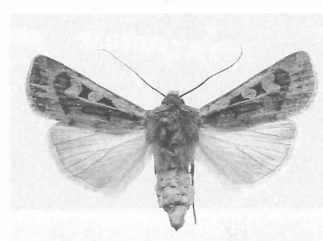
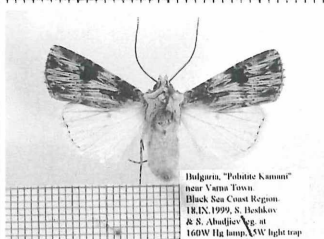
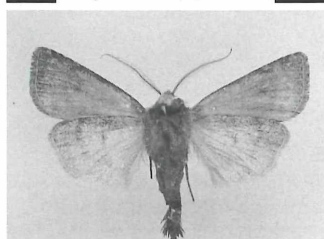
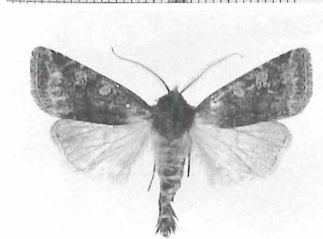
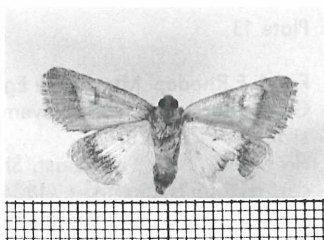
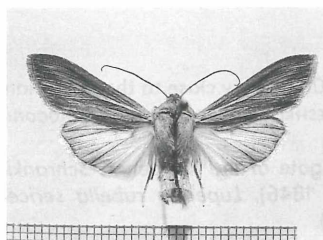
Fig. 9: *Metaegle pallida pallida* (STAUDINGER, 1892), ♂, upperside. Asia Minor, Prov. Antalia, Korkuteli districts, Güllu Pinar, 1200 m, 13.VII.1991, S. BESHKOV & L. PREKROUTOV leg., in coll. S. BESHKOV.

Fig. 10: *Metaegle pallida pallida* (STAUDINGER, 1892), ♂, underside. Asia Minor, Prov. Antalia, Korkuteli districts, Güllu Pinar, 1200 m, 13.VII.1991, S. BESHKOV & L. PREKROUTOV leg., in coll. S. BESHKOV.

Fig. 11: *Metaegle pallida subfumata* (STAUDINGER, 1892), ♂, underside. SW Bulgaria, Paril Col, Paril village, 900 m, 28.VII.1995, leg. and in coll. V. GASHTAROV.

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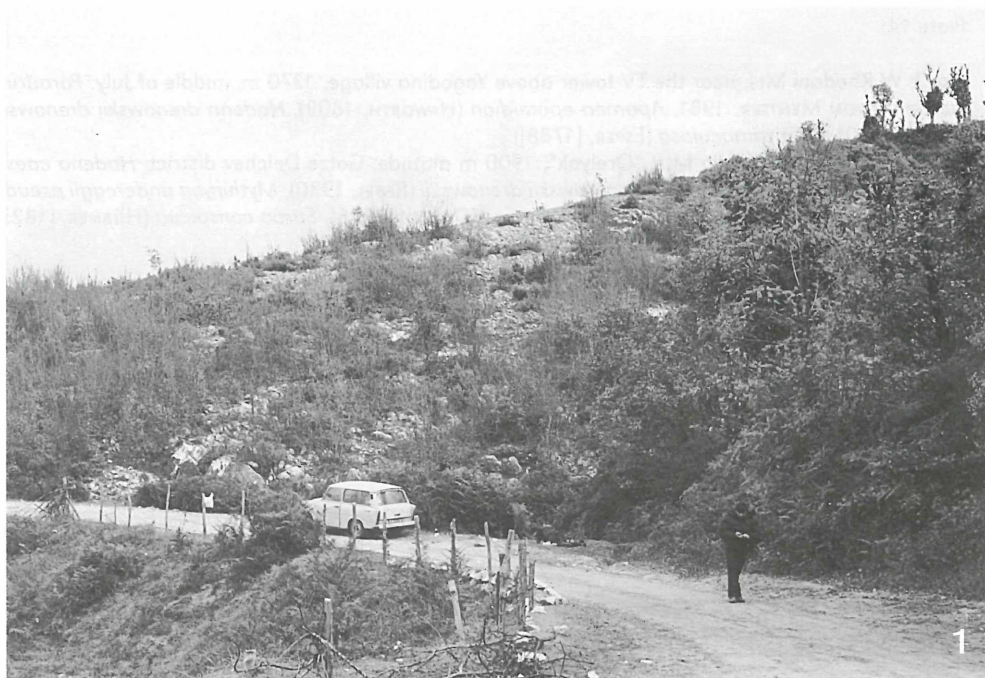




## Plate 13:

Fig. 1: E Rhodopi Mts, below Egrek village, Kroumovgrad district, 600 m, very close to the Bulgarian/Greece borderline, early November: *Dasyptolia ferdinandi petrovi* BESHKOV, subspec. nov., *Ammoconia senex* GEYER, [1828].

Fig. 2: NE Black Sea Coast, Shablensko Ezero Lake, near to the gate of the Residence: *Schrankia costaestrigalis* (STEPHENS, 1834), *Drasteria caucasica* (KOLENATI, 1846), *Luperina rubella sericea* (CARADJA, 1932), *Mythimna straminea straminea* (TREITSCHKE, 1825).

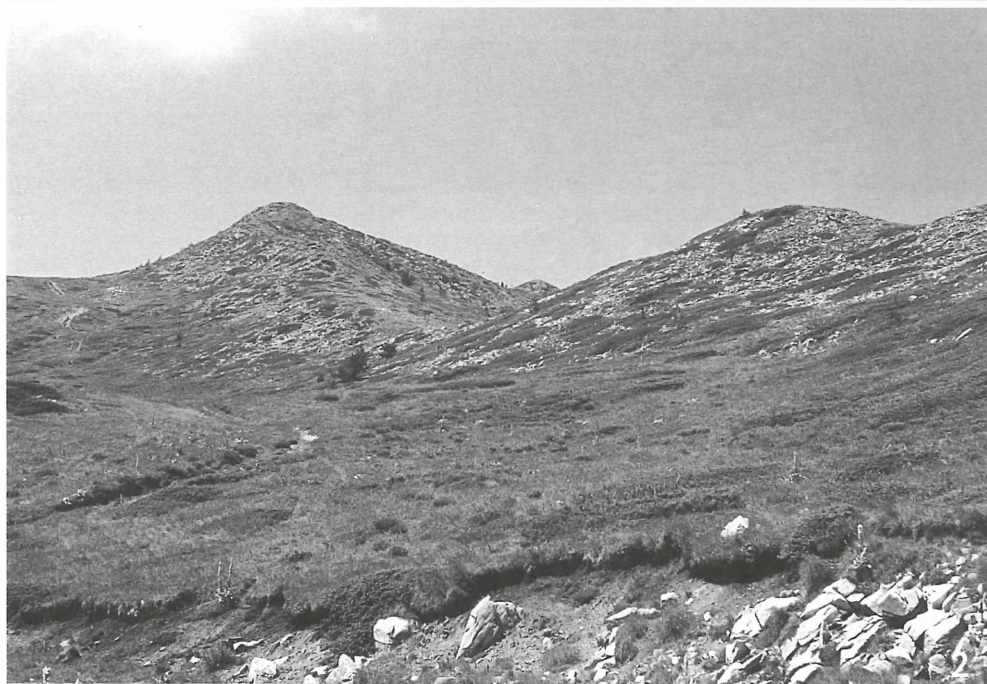
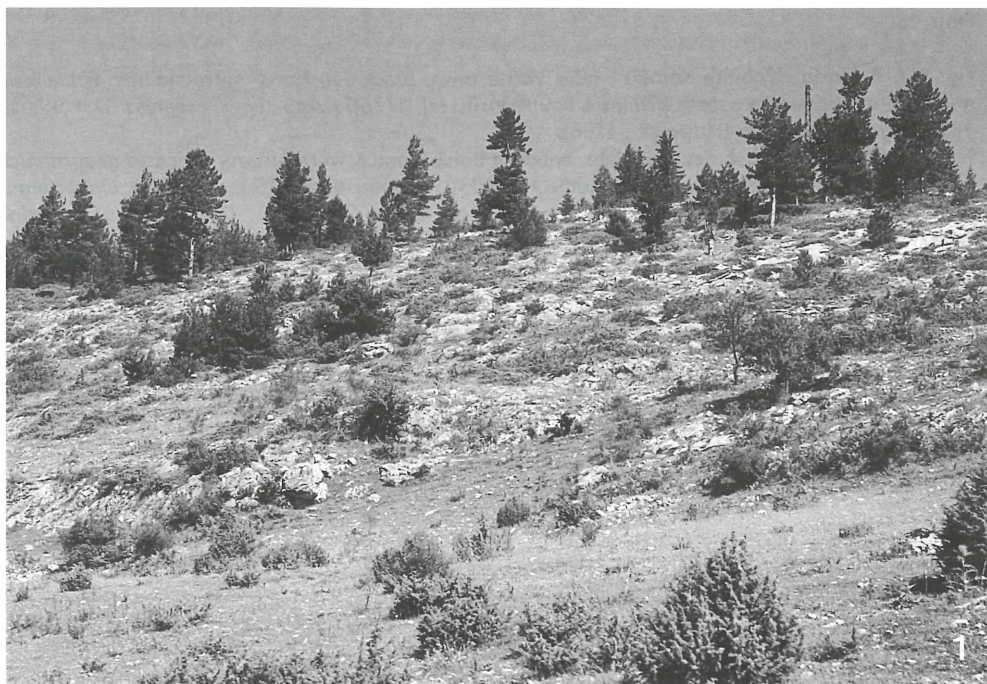


## Plate 14:

Fig. 1: W Rhodopi Mts, near the TV tower above Yagodina village, 1270 m, middle of July: *Paradrina suscianja* VON MENTZER, 1981, *Apamea epomidion* (HAWORTH, 1809), *Hadena drenowskii drenowskii* (REBEL, 1930), *Polia trimaculosa* (ESPER, [1788]).

Fig. 2: SW Bulgaria, S Pirin Mts, "Orelyak", 1900 m altitude, Gotze Delchev district: *Hadena caesia bulgarica* BOURSIN, 1959, *Hadena drenowskii drenowskii* (REBEL, 1930), *Mythimna andereggii pseudocomma* (REBEL & ZERNY, 1931), *Chersotis anatolica* (DRAUDT, 1936), *Euxoa conspicua* (HÜBNER, [1823-1824]).





## Plate 15:

Fig. 1: E Bulgaria, "Pobitite Kamani" near Varna town, Black Sea Coast surroundings: *Eublemma minutata* ssp., *Cucullia asteris* ([DENIS & SCHIFFERMÜLLER], 1775), *Euxoa segnilis segnilis* (DUPONCHEL, 1836), *Agrotis vestigialis* (HUFNAGEL, 1766).

Fig. 2: N Black Sea Coast, near Touzlata, between Balchik and Kavarna towns: *Oxicesta geographica* (FABRICIUS, 1787), *Panchrysia aurea* (HÜBNER, [1803]), *Acontia titania* (ESPER, [1798]), *Oncocnemis confusa michaelorum* BESHKOV, 1997, *Mycteroplus puniceago* (BOISDUVAL, 1840), *Pyrrhia purpurina* (ESPER, [1804]), *Pyrrhia victorina* (SODOFFSKY, 1849), *Paradrina wulschlegeli schwingenschussi* (BOUR-SIN, 1936), *Eremodrina pertinax argentea* (CARADJA, 1930), *Proxenus lepigone* (MÖSCHLER, 1860), *Luperina rubella sericea* (CARADJA, 1932), *Lacanobia praedita* (HÜBNER, [1809–1813]), *Hadena syriaca podolica* (KREMSKY, 1937), *Enterpia laudeti* (BOISDUVAL, 1840), *Egira tibori* HREBLAY, 1994, *Euxoa cos crimaea* A. BANG-HAAS, 1906, *Euxoa conspicua* (HÜBNER, [1823–1824]), *Dichagyris candelisequa* ([DENIS & SCHIFFERMÜLLER], 1775), *Dichagyris melanura albida* (CARADJA, 1931), *Dichagyris renigera argentina* (CARADJA, 1930), *Agrotis obesa scitha* (ALPHÉRAKY, 1889).



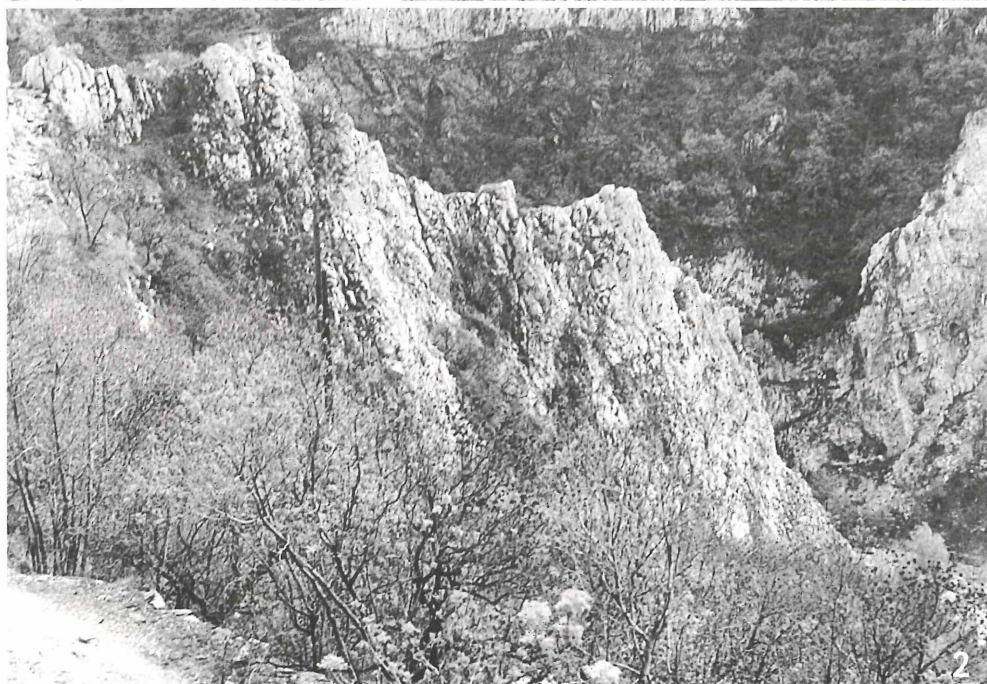
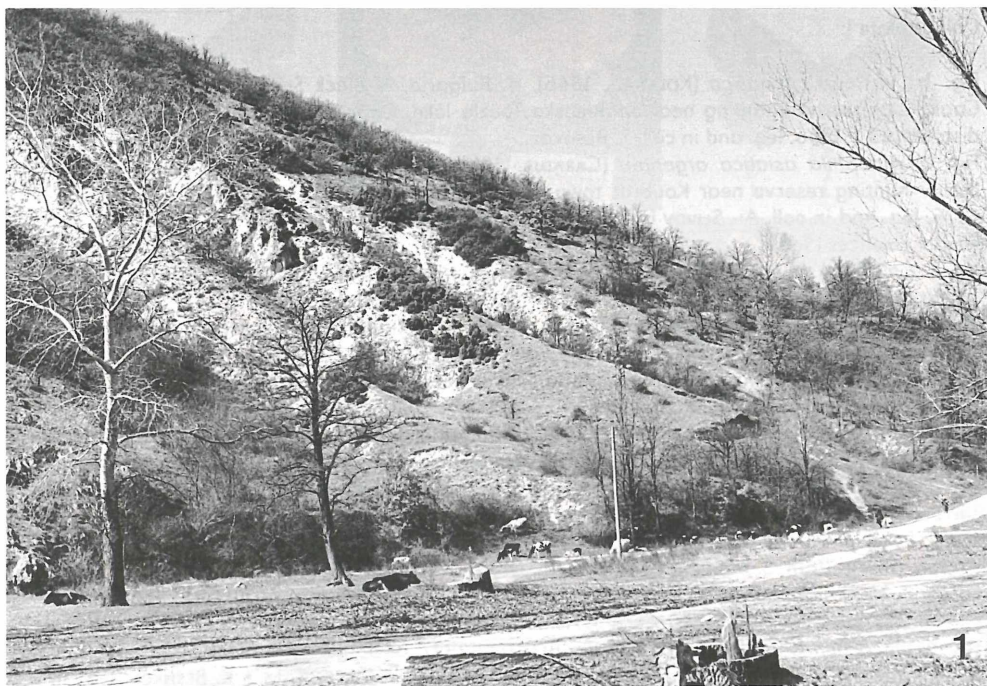


## Plate 16:

Fig. 1: SW Bulgaria, Volcanic Hill of Kozhouh (view from Roupite), Petrich town district: *Hypenodes anatalica* SCHWINGENSCHUSS, 1938, *Catocala separata separata* (FREYER, 1846), *Abrostola agnorista* DUFAY, 1956, *Cucullia scopariae* DORFMEISTER, 1853, *Amephana dalmatica* (REBEL, 1919), *Pyrrhia treitschkei* (FRIVALDSKY, 1835), ex "*Apaustis theophila* (STAUDINGER, 1866)", *Apaustis rupicola* ([DENIS & SCHIFFERMÜLLER], 1775), *Chilodes maritima* (TAUSCHER, 1806), *Proxenus hospes* (FREYER, 1831), *Agrochola gratiosa* (STAUDINGER, 1882), *Agrochola rupicapra* (STAUDINGER, 1879), *Agrochola osthelderi* BOURSIN, 1951, *Dryobota labecula* (ESPER, 1788), *Analetia riparia riparia* (RAMBUR, 1829), *Meganola gigantea* (STAUDINGER, 1879), *Nola subchlamydula subchlamydula* (STAUDINGER, 1871).

Fig. 2: Rhodopi Mts, Assenova Krepost above Assenovgrad town, 430 m: *Zethes insularis* RAMBUR, 1833, *Cucullia santonici* (HÜBNER, [1813]), *Hadena silenae silenae* (HÜBNER, [1822]), *Egira tibori tibori* HREBLAY, 1994, *Egira anatalica* (HERING, 1933), *Egira bulgarica* BESHKOV spec. nov. (type locality).





## Colour plate I:

Fig. 1: *Drasteria caucasica* (KOLENATI, 1846), ♂. Bulgaria, N Black Sea Coast, Dobrudzha camping near Shablenska Touzla lake, Cape Shabla districts, 13.V.1986, leg. and in coll. S. BESHKOV.

Fig. 2: *Autophila asiatica argentea* (CARADJA, 1930). ♀. NE Bulgaria, Seslav hunting reserve near Koubrat town, Razgrad region, 02.-03.VI. 1976, leg. and in coll. AL. SLIVOV in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 3: *Callistege mi elzei* DE FREINA, 1976, ♂, upperside. Bulgaria, E Rhodopi Mts, Yazovir Ivaylovgrad Reservoir, Arda Chalet near Dabovetz village, 27.IV.1990, S. BESHKOV & N. KODZHABASHEV leg., in coll. S. BESHKOV.

Fig. 4: *Callistege mi elzei* DE FREINA, 1976, ♂, underside. Bulgaria, E Rhodopi Mts, Yazovir Ivaylovgrad Reservoir, Arda Chalet near Dabovetz village, 27.IV.1990, S. BESHKOV & N. KODZHABASHEV leg., in coll. S. BESHKOV.

Fig. 5: *Abrastola clarissa* (STAUDINGER, 1900), ♂. Bulgaria, S Black Sea Coast, Tzarevo (= Mitchurin) town, 01.VII.1972, Z. LASTUYKA leg., in coll. S. BESHKOV.

Fig. 6: *Eublemma minutata* ssp., ♀. E Bulgaria, "Pobitite Kamani" near Varna town, Black Sea Coast surroundings, 08.VIII.1998, S. BESHKOV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

Fig. 7: *Eublemma minutata* ssp., ♂. E Bulgaria, "Pobitite Kamani" near Varna town, Black Sea Coast Region, 08.VIII.1998, S. BESHKOV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

Fig. 8: *Eublemma minutata* ssp., ♂. E Bulgaria, "Pobitite Kamani" near Varna town, Black Sea Coast surroundings, 18.IX.1999, S. BESHKOV & S. ABADJIEV leg., in coll. S. BESHKOV.

Fig. 9: *Oncocnemis confusa michaelorum* BESHKOV, 1997, ♂. Bulgaria, N Black Sea Coast, between Balchik town and Touzlata, 2 km to Touzlata, 22.VIII.1997, S. BESHKOV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

Fig. 10: *Valerietta bulgarica* sensu HREBLAY, 1992, ♂, upperside. South Bulgaria, Black Sea Coast, by Arkoutino lake near Primorsko, 08.VI.1998, S. BESHKOV, J. NOWACKI, K. PALK & M. BUNALSKI leg. at 160 W MVL, in coll. NOWACKI.

Fig. 11: *Lithophane ledereri* (STAUDINGER, 1892), ♀. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 21.IV.1995, S. BESHKOV & I. STOYTCHIEV leg. at a lamp, in coll. S. BESHKOV.

Fig. 12: *Dryobotodes servadeii servadeii* PARENZAN, 1982, ♂. Republic of Macedonia, Babuna Planina Mts, below Kozjak, between Pletvar and Drenovo, Prilep region, 750 m, 08.IX.1997, S. BESHKOV, V. GASH-TAROV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

Fig. 13: *Lacanobia praedita* (HÜBNER, [1809-1813]), ♂. Bulgaria, N Black Sea Coast, between Balchik town and Touzlata, 2 km to Touzlata, 02.VI.1999, S. BESHKOV, S. ABADJIEV & M. LANGOUROV leg., in coll. S. BESHKOV.

Fig. 14: *Lacanobia praedita* (HÜBNER, [1809-1813]), ♂. NE Turkey, Karadeniz Daglari, Prov. Artvin, above Yusufeli village on the road to Sarigöl, 650 m alt., 15.VII.1995, S. BESHKOV, J. GELBRECHT & E. SCHWABE leg., in coll. S. BESHKOV.

Fig. 15: *Hadena caesia xanthophoba* (SCHAWERDA, 1922), ♀, upperside. SW Bulgaria, Alibotoush Mts, 29.VII.1930, KR. TULESCHKOW leg., in coll. National Museum of Natural History, Sofia.

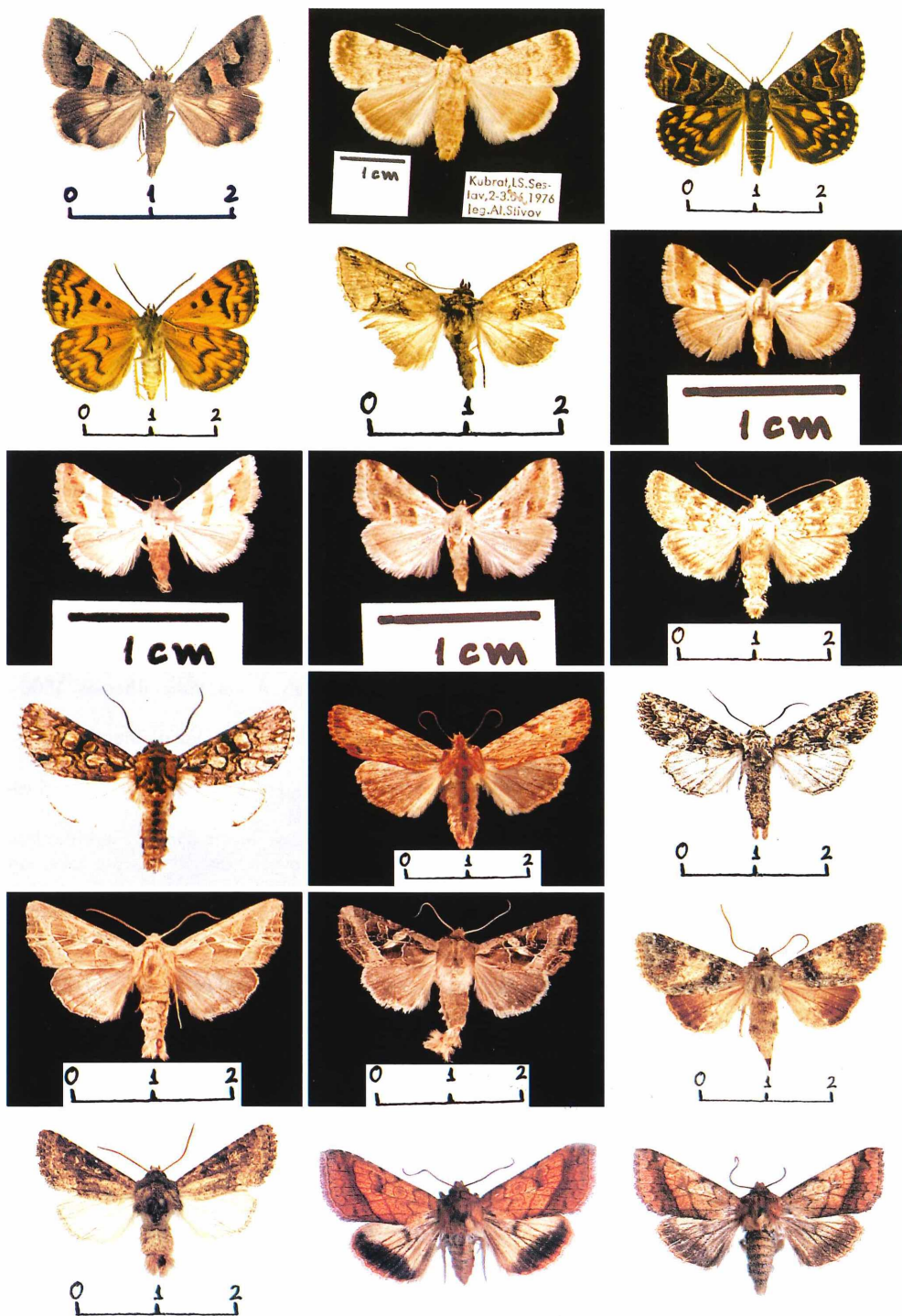
Fig. 16: *Luperina rubella sericea* (CARADJA, 1932), ♂. Bulgaria, N Black Sea Coast, between Balgarevo village and Cape Kaliakra, 25.VIII.1997, S. BESHKOV, M. & K. BESHKOVI leg., in coll. S. BESHKOV.

Fig. 17: *Pyrrhia umbra umbra* (HUFNAGEL, 1766), ♀. Bulgaria, Bessaparskite Ridove Hills above Byaga village, Pazardzhik region, 250 m, 10.V.1985, leg. and in coll. S. BESHKOV.

Fig. 18: *Pyrrhia purpurina purpurina* (ESPER, [1804]), ♀. SE Bulgaria, Sakar Mts "Radinchevo" above Dossitevo village, Harmanli district, 400 m alt., 31.V.1986, leg. and in coll. S. BESHKOV.

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## Colour plate II:

Fig. 1: *Dasypolia templi vecchिमontium* RONKAY & VARGA, 1985, ♂, upper-side. Bulgaria, Iskar Valley, 2 km southern of Passarel village, between Sofia and Samokov towns, ~700 m, 13.X.1999, S. BESHKOV, B. PETROV & VL. BESHKOV leg. at lamp, in coll. S. BESHKOV.

Fig. 2: *Dasypolia templi vecchिमontium* RONKAY & VARGA, 1985, ♂, under-side. Bulgaria, Iskar Valley, 2 km southern of Passarel village, between Sofia and Samokov towns, ~700 m, 13.X.1999, S. BESHKOV, B. PETROV & VL. BESHKOV leg. at lamp, in coll. S. BESHKOV.

Fig. 3: *Dasypolia templi macedonica* BESHKOV subsp. nov. (holotype), ♂, upper-side. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 08.–10.XI.1978, leg. and in coll. AL. SLIVOV, in Institute of Zoology, Bulgarian Academy of Sciences (Sofia).

Fig. 4: *Dasypolia templi macedonica* BESHKOV subsp. nov. (holotype), ♂, underside. SW Bulgaria, Kresna Gorge, Stara Kresna Railway Station, 200 m, 08.–10.XI.1978, leg. and in coll. AL. SLIVOV, in Institute of Zoology, Bulgarian Academy of sciences (Sofia).

Fig. 5: *Dasypolia templi templi* (THUNBERG, 1792), ♂, upper-side. Sweden, Upl. 23.IX.1966, Kapelskär, E. VON MENTZER leg., in coll. J. GANEV.

Fig. 6: *Dasypolia templi templi* (THUNBERG, 1792), ♂, underside. Sweden, Upl. 23.IX.1966, Kapelskär, E. VON MENTZER leg., in coll. J. GANEV.

Fig. 7: *Dasypolia ferdinandi petrovi* BESHKOV subsp. nov. (holotype), ♂, upper-side. Bulgaria, East Rhodopi Mts, below Egrek village, Kroumovgrad district, 600 m, 06.XI.1999, S. BESHKOV, B. PETROV & D. VASSILEV leg., in coll. S. BESHKOV.

Fig. 8: *Dasypolia ferdinandi petrovi* BESHKOV subsp. nov. (holotype), ♂, underside. Bulgaria, East Rhodopi Mts, below Egrek village, Kroumovgrad district, 600 m, 06.XI.1999, S. BESHKOV, B. PETROV & D. VASSILEV leg., in coll. S. BESHKOV.

Fig. 9: *Dasypolia ferdinandi ferdinandi* RÜHL, 1892, ♂, upper-side. Italy, Aosta, Val di Rhemes, 1800–2000 m, 14.X.1991, M. PETERSEN/Lübeck leg., in coll. S. BESHKOV.

Fig. 10: *Dasypolia ferdinandi ferdinandi* RÜHL, 1892, ♂, underside. Italy, Aosta, Val di Rhemes, 1800–2000 m, 14.X.1991, M. PETERSEN/Lübeck leg., in coll. S. BESHKOV.

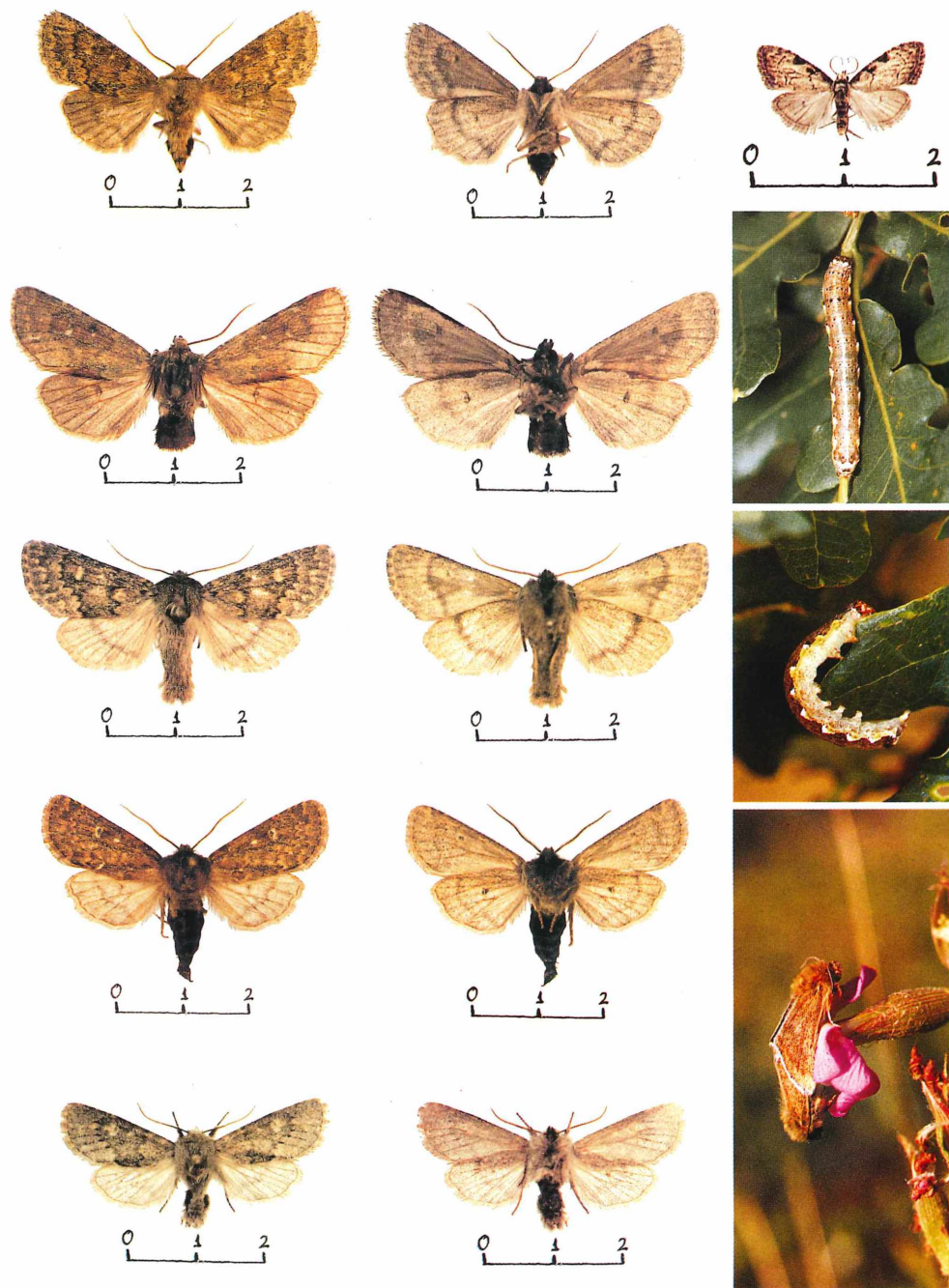
Fig. 11: *Nola confusalis* (HERRICH-SCHÄFFER, [1847]), ssp., ♂. Bulgaria, East Rhodopi Mts, Odrintzi village, Ivaylovgrad districts, 160 m, 30.IV.1997, leg. and in coll. S. BESHKOV.

Fig. 12: *Orthosia schmidt pinkeri* HREBLAY & VARGA, 1993, larva, dorsal view. Bulgaria, East Rhodopi Mts, the bridge on Byala Reka River near Meden Bouk village, Ivaylovgrad districts, ex ovo taken on 29.–30.IV.1997, leg. and photo S. BESHKOV.

Fig. 13: *Orthosia schmidt pinkeri* HREBLAY & VARGA, 1993, larva, lateral view. Bulgaria, East Rhodopi Mts, the bridge on Byala Reka River near Meden Bouk village, Ivaylovgrad districts, ex ovo taken on 29.–30.IV.1997, leg. and photo S. BESHKOV.

Fig. 14: *Stenoecia dos dos* (FREYER, 1838), copula on *Silene* spec. flowers. Turkey, Asia Minor, Cappadocia, near Göreme village, 1100 m, 14.V.1999, photo, leg. and in coll. S. BESHKOV.

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