©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at

On the type specimens of the Tortricidae described by Eduard Friedrich Eversmann from the Volgo-Ural Region

Svetlana V. Nedoshivina

Department of Entomology, St. Petersburg State University, Universitetskaya nab., 7/9, RUS-199034 St. Petersburg, Russia; e-mail: n_svet@list.ru

Abstract. The type material of the species of Tortricidae described by E. Eversmann from the Volgo-Ural Region was examined in the collection of the Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia. Lectotypes are designated for 19 taxa. The following previous synonymies are documented in more details: *Archips rosana* (Linnaeus, 1758) = *Tortrix testaceana* Eversmann, 1844; *Phtheochroa inopiana* (Haworth, 1811) = *Tortrix tripsiana* Eversmann, 1844; *Epiblema costipunctana* (Haworth, 1811) = *Paedisca cervana* Eversmann, 1844; *Capricornia boisduvaliana* (Duponchel, 1836) = *Tortrix graphitana* Eversmann, 1844; *Paedisca* (now in *Argyroploce*) *externa* Eversmann, 1844 = *Selenodes dalecarliana* Guenée, 1845; *Grapholitha* (now in *Epibactra*) *immundana* Eversmann, 1844 = [*Syndemis*] *cuphulana* Herrich-Schäffer, 1851 = *Grapholitha sareptana* Herrich-Schäffer, 1861. *Eugnosta parreyssiana* (Duponchel, 1843) is elevated from the status of a subspecies to that of a species and a comparative diagnosis is provided.

Introduction

This article deals with the type material of Tortricidae described by E. Eversmann from the Volgo-Ural region. The majority of Eversmann's descriptions were published in his famous "Fauna lepidopterologica Volgo-Uralensis" (Eversmann 1844) and a few in "Bulletin de la Société Impériale des Naturalistes de Moscou" (Eversmann 1842). As a whole he described 24 species of tortricid moths from the region under consideration. Surprisingly, most of them were never reexamined for taxonomic or faunistic purposes so far. As a result, most of his names were ignored or forgotten by later revisers or were wrongly considered as synonyms of widely distributed European species. In his work of 1844, Eversmann only gave short and poorly detailed descriptions without illustrations. This often led to great confusion regarding the status of some of his species and consequently, the examination of the type material was required.

Eduard Friedrich Eversmann (1794–1860) (Fig. 1) was born in the village of Wehringhausen, nearby Hagen, in Westfalia. In 1814, after taking a doctor's degree, he moved to Russia with plans to visit the innermost parts of Asia. Being European, he was not allowed to go further than Bukhara and had to come back. Beginning in 1820 Eversmann lived in Orenburg and practised medicine for seven years. In 1827 he was invited to Kasan University to assume a professorship in natural history, which he held until his death. During his lifetime Eversmann organized numerous expeditions through the territory comprised between the Volga River and the Ural Mountains and made a great contribution to the knowledge of the entomofauna of that region as well as Russia as a whole (Geptner 1940).

Eversmann surely possessed one of the largest private entomological collections of the mid-19th Century in the whole of Europe. After his death, the main part of his collection was bought and presented to the Russian Entomological Society by the

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at

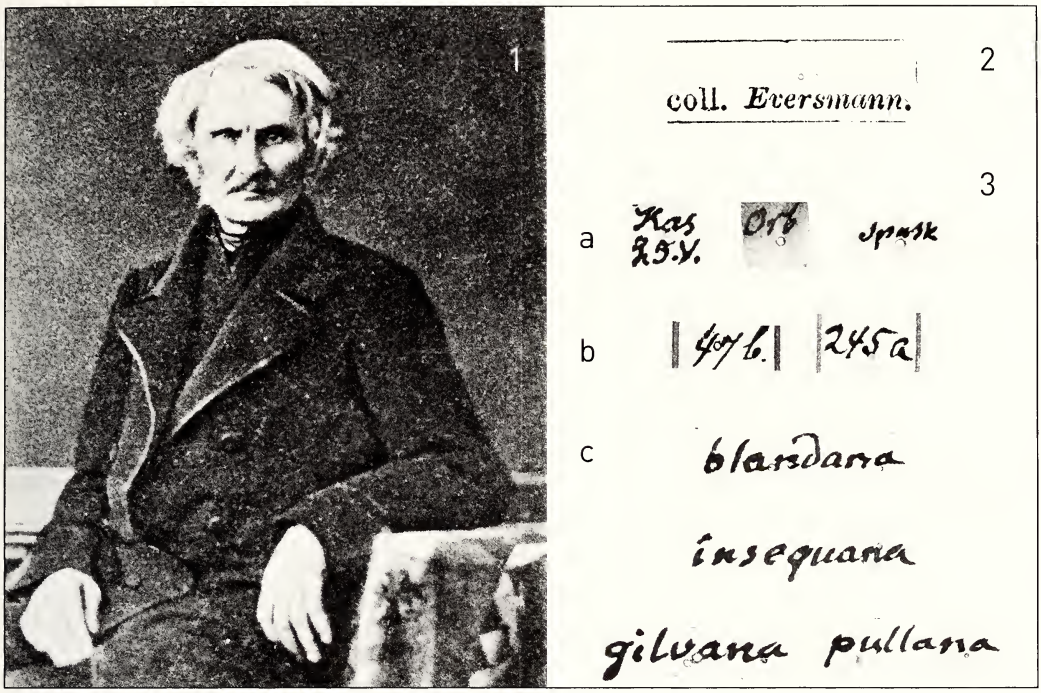
Society's patron, the Grand Duchess Elena Pavlovna. A catalogue of Eversmann's collection of Lepidoptera was published soon afterwards by O. V. Bremer (1867). Since then, Eversmann's specimens have been kept in the Zoological Institute of the Russian Academy of Sciences in St. Petersburg, Russia (ZISP), where they were arranged taxonomically within the main collection. The smaller part of Eversmann's collection was transmitted to his disciple, the famous chemist Alexander M. Butlerov; it is now kept in the collection of Kasan State University. A catalogue of Lepidoptera from Butlerov's collection was published by N. M. Mel'nikov (1887) and 63 species of Tortricidae are listed among other species. It is possible that some additional type specimens are kept in this collection, but they are not considered in the present paper because the material has not yet been examined. However, the published information on these specimens is given under the comments of the relevant species.
The specimens of Eversmann's collection could still be identified by their distinctive labels as follows:

1 Each specimen has a standard white label with printed text "coll. *Eversmann*." (Fig. 2).
2 The vast majority of specimens have a handwritten (in ink) original label bearing an abbreviation of locality, sometimes combined with the date of collecting (Fig. 3a). The following abbreviations were used by Eversmann for most typical localities: "Orb" – Orenburg, Russia; "Kas" – Kasan, Tatarstan, Russia; and "Spask" – Spassk, which was Eversmann's estate at 106 km ENE from Orenburg[1].
3 Each specimen also has a label with two red vertical lines along the edges and an individual code written in ink (Fig. 3b). These labels were probably added after the reception of the collection by the Russian Entomological Society to give ordinal numbers to each species in the original collection and to mark a position for each specimen in a series. The code consists of a number and a letter in Roman alphabet. The number refers to a species number in Eversmann's collection. Thus, the specimens with the same numbers were considered by Eversmann to be conspecific. The original position of a specimen in the series is determined by the letter on its label. This system allowed us to judge the quantity of specimens in a series. It is especially important considering that Eversmann did not ever record the number of specimens in the original descriptions. Only his comment "Volat raro" (meaning "infrequent") allows us to suppose a few specimens in a type series.
4 Some (but relatively few) specimens have an original handwritten Eversmann's label with the species name (Fig. 3c). In most cases these specimens were selected as lectotypes.

The type material of 24 species described by E. Eversmann in the "Tortrices" species group from the Volgo-Ural Region was examined. As a result new synonymies were

[1] When E. Eversmann recorded the locality of "Spask" as "promontoriis Uralensibus", I consider this record to correspond to the territory of Orenburg Province. There is no evidence in support of considering Spassk as a town to the SE of Kasan, now disappeared under the Volga's waters.

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at



Figs 1–3. 1. E. Eversmann (from Bogdanov 1891). **2.** Standard label associated with each specimen of Eversmann's collection. **3.** Handwritten labels. **3a.** Eversmann's labels with abbreviations of localities. **3b.** Labels with individual specimen codes. **3c.** Original labels with species names.

proposed for seven species and two species names were considered as oldest valid names (Anikin et al. 2006). Because the latter didn't record detailed information on types, I provide here all possible data, including images of moths and drawings of genitalia structures, as well as lectotype designations.

All of Eversmann's species are listed alphabetically below and for each species the following information is provided:

1. Original reference with type locality.
2. Types. Designation of lectotype and paralectotypes, and description of their labels.
3. Present status of the species based on my investigations of the type material and literature data, mostly that contained in the monographs by J. Razowski (2001, 2002, 2003) and the world Tortricidae catalogue by J. Brown et al. (2005).
4. Comments. Additional data concerning the type specimens, criteria for the selection of the lectotype, and specimens not included in the type series.
5. Taxonomic notes. The principal works in which the species was mentioned and the previous status of the species.

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at

An annotated checklist of E. Eversmann's Volgo-Ural Tortricidae

1. *acutana* Eversmann, 1844 (Figs 13, 41)

Cochylis acutana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 529. Locus typicus: "in provincia Casanensi".

Types. Lectotype ♂ (here designated) (Fig. 13): 'Kas | 27.VI' <handwritten>, '187g' <handwritten>, 'Praep. micr. N 0043 | *Bactra furfurana* | (Haworth, 1811) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Cochylis acutana* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>. – Paralectotypes: 1♂ and 2♀ from Kasan ('Kas').

Present status: *Bactra furfurana* (Haworth, 1811).

Comments. The genitalia of the lectotype (Fig. 41) are in euparal. The paralectotypes were collected in June ('Kas | 27.VI', 'Kas | 28.VI', 'Kas | 24.VI'). There is another specimen without abdomen in the original collection. I suppose it was not included in the type series because the specimen was collected in Orenburg ('Orb'). It was determined by A. Diakonoff as *Bactra furfurana* (Haworth, 1811) and bears the following label 'Gen. No: 4140 Museum Leiden *Bactra* (*Bactra*) *furfurana* Hw. det. A. Diakonoff'.

Taxonomic notes. This name has been known for a long time to be a junior synonym of *Bactra furfurana* (Haworth, 1811) (Rebel 1901). My examination confirms this synonymy.

2. *arabescana* Eversmann, 1844 (Figs 6, 28)

Cochylis arabescana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 528. Locus typicus: "in promontoriis Uralensibus".

Types. Lectotype ♂ (here designated) (Fig. 6): '169e' <handwritten>, 'Praep. micr. N 0012 | *Pelochrista arabescana* | (Eversmann, 1844) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Cochylis arabescana* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>. – Paralectotypes: 6 ♀ from Spassk ('Spask').

Present status: *Pelochrista arabescana* (Eversmann, 1844).

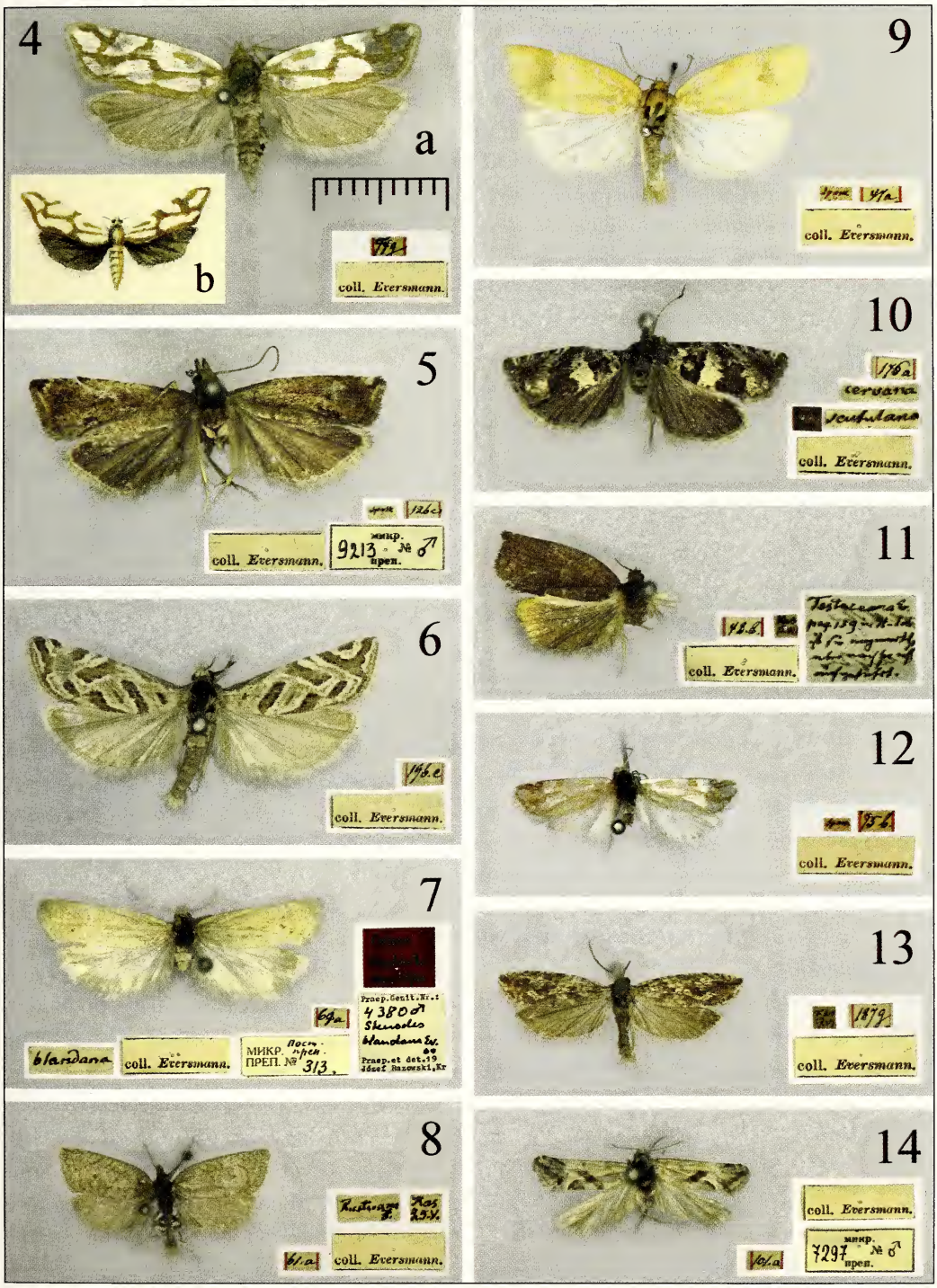
Comments. The genitalia of the lectotype (Fig. 28) are in euparal. One female in the original collection does not belong to the type series because it was collected in August ('Spask | Aug'), whereas the decription was based on the specimens collected in June and July: "Volat non rara in promontoriis Uralensibus, Iunio et Iulio." Probably an additional syntype is in the collection of Kasan State University (Mel'nikov 1887).

Taxonomic notes. This species name has been known as valid. My examination confirms this opinion.

3. *blandana* Eversmann, 1844 (Figs 7, 42)

Tortrix blandana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 492. Locus typicus: "in promontoriis Uralensibus".

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at



Figs 4–11. Lectotypes of Eversmann's tortricid species (scale bar 1 cm). **4**. *Tortrix hydrargyrana* Eversmann. **a**. Photo. **b**. Eversmann's drawing from the original description. **5**. *Teras umbraculana* Eversmann. **6**. *Cochylis arabescana* Eversmann. **7**. *Tortrix blandana* Eversmann. **8**. *Tortrix pulverana* Eversmann. **9**. *Tortrix stigmatana* Eversmann. **10**. *Paedisca cervana* Eversmann. **11**. *Tortrix testaceana* Eversmann. **12**. *Tortrix insequana* Eversmann. **13**. *Cochylis acutana* Eversmann. **14**. *Cochylis obliquana* Eversmann.

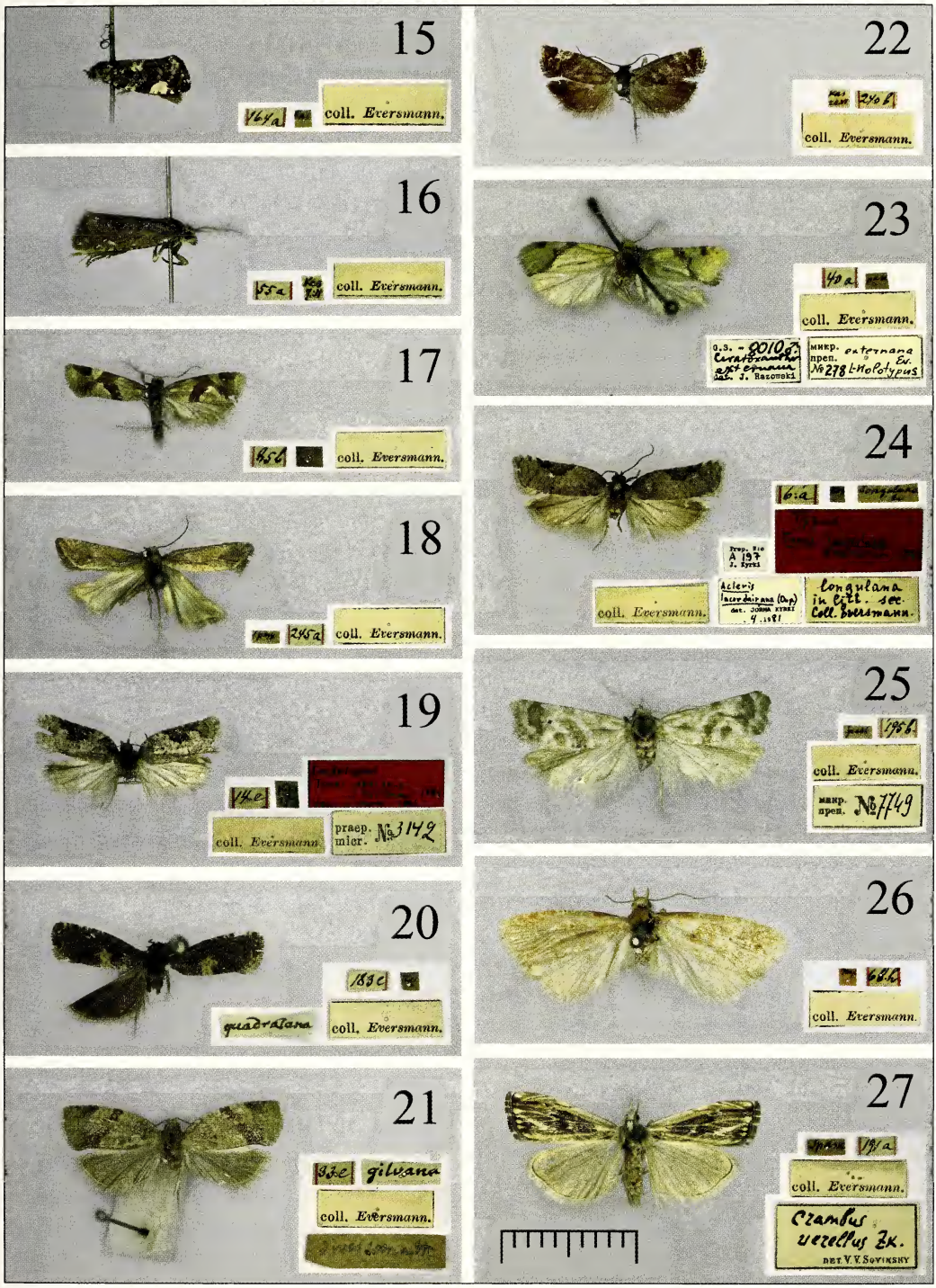
©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at

Types. Lectotype: ♂ (here designated) (Fig. 7): 'Spask' <handwritten>, '*blandana*' <handwritten>, '69a' <handwritten>, 'Cotypus | *blandana* Ev. | des. Kuzn[etzov]' <red, handwritten>, 'Praep. Genit. Nr.: | 4380 ♂ | *Stenodes* | *blandana* Ev. | Praep. et det. 1969 | Jozef Razowski, Kr' <white, printed>, 'Praep. | micr. | N 313 | *Stenodes* | *blandana* Ev. | ♂ Cotypus' <handwritten>, 'LECTOTYPUS. | *Tortrix blandana* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>. – Paralectotypes: 5♂ and 1♀ from Spassk ('Spask') and 1 ♂ without locality label.
Present status: *Cochylimorpha blandana* (Eversmann, 1844).
Comments. The genitalia of the lectotype (Fig. 42) are in Canada balsam. One male without locality label from the original collection has Eversmann's label '69h', which corresponds to the label of the lectotype ('69a'). Based on this fact, it is designated as paralectotype. One female paralectotype has the original author's label '*blandana* Evm.' and was later additionally labelled '*Stenodes* ♀ | *blandana* Ev. | Typus. Praep. micr. N 9710'. The same additional label '*Stenodes* ♂ | *blandana* Ev. | Typus. Praep. micr. N 9710' is also affixed to one male paralectotype. Another male paralectotype has J. Razowski's labels '*blandana*', 'G.S. | 10200 ♂ | det. J. Razowski', 'Praep. micr. N 312'. One male paralectotype has a label '*Blandana* Evm. sic! HS.' probably written by Eversmann's hand.
Taxonomic notes. This species name has the status of a valid taxon since its description; my examination confirms this opinion.

4. *cervana* Eversmann, 1844 (Figs 10, 36)

Paedisca cervana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 507. Locus typicus: "in promontoriis Uralensibus".
Types. Lectotype ♂ (here designated) (Fig. 10): 'Spask | Iun' <handwritten>, '176a' <handwritten>, '*cervana*' <handwritten>, '*scutulana*' <handwritten>, '*Epiblema costipunctana* | (Haworth, 1811) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Paedisca cervana* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>. – Paralectotypes. 1♀ and 1 specimen without abdomen from Spassk ('Spask').
Present status: *Epiblema costipunctana* (Haworth, 1811).
Comments. The genitalia of the lectotype (Fig. 36) were mounted on slide, but the slide was unfortunately lost. A female from the original type series labelled '176b' is not conspecific with the lectotype and belongs to *Epinotia demarniana* (Fischer von Röslerstamm, 1840) (gen. prep. N 0052). Another syntype labelled 'Spask | Iun', '176c' is not conspecific with the lectotype either, but because it is without abdomen, its determination remains uncertain, although probably it is conspecific with *Epiblema graphanum* (Treitschke, 1835).
Taxonomic notes. Shortly after it was described, this species was synonymized with *Paedisca dissimilana* Treitschke, 1835 (Herrich-Schäffer 1847–[1855]). In 1901, H. Rebel treated *dissimilana* Tr. as a junior synonym of *Phalaena Tortrix similana* Hübner, 1793. Later, both were considered as junior synonyms of *Epinotia trigonella* (Linnaeus, 1758), and *cervana* Eversmann has been known for a long time to be a junior

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at



Figs 15–27. Lectotypes of Eversmann's tortricid species (scale bar 1 cm). **15**. *Paedisca externa* Eversmann. **16**. *Tortrix graphitana* Eversmann. **17**. *Tortrix tergana* Eversmann. **18**. *Grapholitha immundana* Eversmann. **19**. *Teras obtusana* Eversmann. **20**. *Grapholitha quadratana* Eversmann. **21**. *Tortrix gilvana* Eversmann. **22**. *Sericoris pullana* Eversmann. **23**. *Tortrix externana* Eversmann. **24**. *Teras longulana* Eversmann. **25**. *Cochylis discopunctana* Eversmann. **26**. *Tortrix tripsiana* Eversmann. **27**. *Teras radiolana* Eversmann.

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at

synonym of *Epiblema similanum* (Fabricius, 1794) (e.g., Razowski 2003). However, my examination showed that it is conspecific with *Epiblema costipunctana* (Haworth, 1811) (sensu Razowski 2003) and should be considered as its junior synonym (see Anikin et al. 2006).

5. *discopunctana* Eversmann, 1844 (Figs 25, 50)

Cochylis discopunctana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 528. Locus typicus: "in promontoriis Uralensibus".

Types. Lectotype ♂ (here designated) (Fig. 25): 'Spask' <handwritten>, '195b' <handwritten>, 'praep. | micr. | N 7749 | *Eux. discopunctana* Ev. ♂ | Cotypus. Spask' <white, printed>, 'Praep. micr. N 0040 | *Cochylimorpha discopunctana* | (Eversmann, 1844) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Cochylis discopunctana* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>. – Paralectotypes: 1♂, 1♀ and 1 specimen without abdomen from Spassk ('Spask').

Present status: *Cochylimorpha discopunctana* (Eversmann, 1844).

Comments. The genitalia of the lectotype (Fig. 50) are in euparal. In Razowski's paper of 1970, the type locality was given erroneously for *discopunctana* Eversmann, 1844: "Rußland: Kasan-Distrikt".

Taxonomic notes. This species name has been known as valid, but the type material was never reexamined and supposed to be lost (Razowski 1970: 177). The type material is available in ZISP and my examination confirms the validity of the species name.

6. *externa* Eversmann, 1844 (Figs 15, 39)

Paedisca externa Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 508. Locus typicus: "in provincia Casanensi".

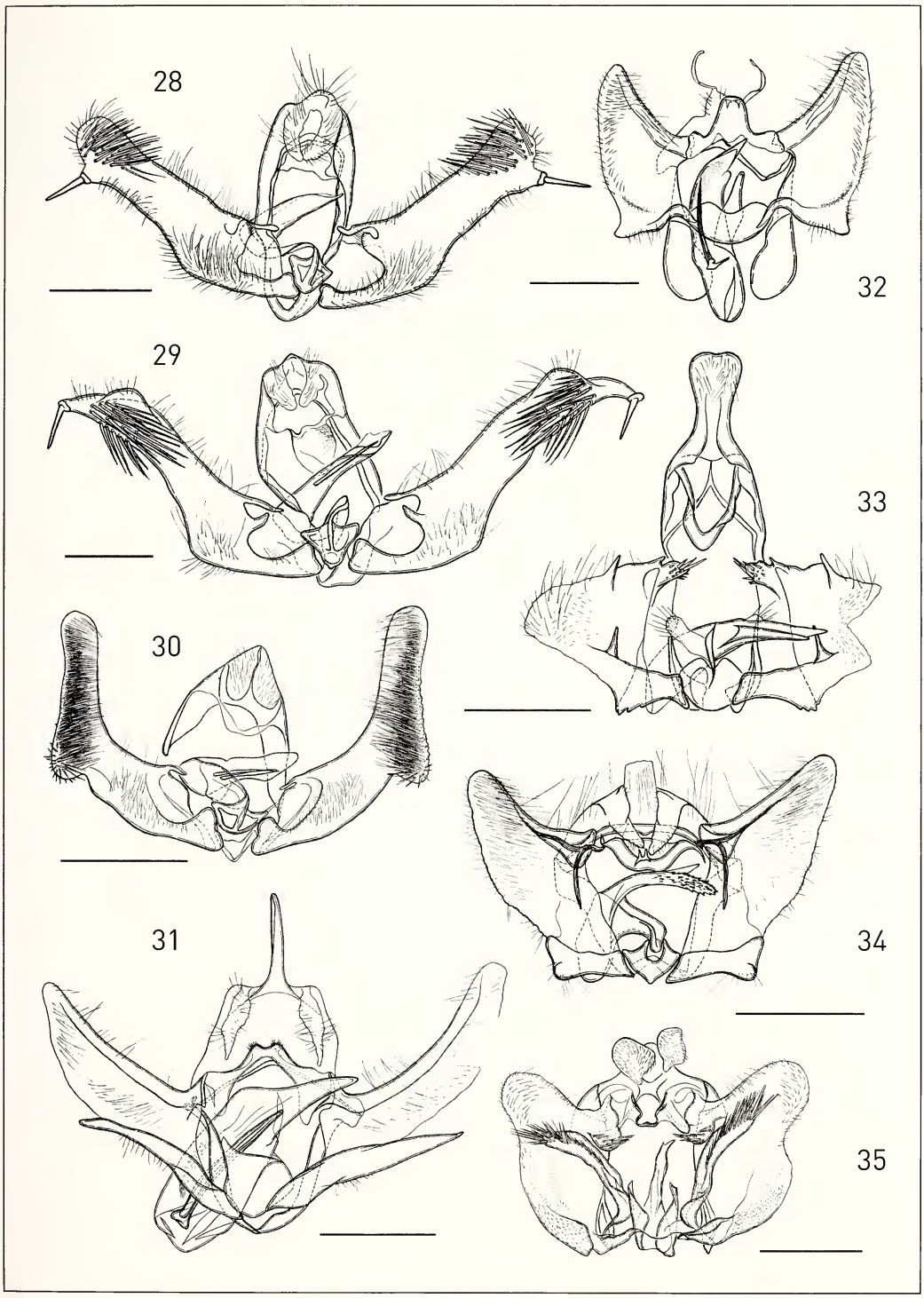
Types. Lectotype ♂ (here designated) (Fig. 15): 'Kas' <handwritten>, '164a' <handwritten>, 'Praep. micr. N 0008 | *Argyroploce externa* | (Eversmann, 1844) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Paedisca externa* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>, '*Exterana* <sic> Ev. | *Roseomaculana* H-Sch.' <written in Eversmann's hand>.

Present status: *Argyroploce externa* (Eversmann, 1844).

Comments. The genitalia of the lectotype (Fig. 39) are in euparal. The lectotype probably is the single specimen of the original type series. This suggestion is confirmed indirectly by the presence of the letter 'a' on the label '164a'.

Taxonomic notes. The last citation of *Paedisca externa* Eversmann in the literature is found in the catalogue of H. Rebel (1901) where the species name was treated as valid. Since 1901, it was out of usage and its status remained uncertain. My examination shows that the type specimen of *externa* Eversmann is conspecific with that of *Argyroploce dalecarliana* (Guenée, 1845) (sensu Brown 2005). Because of the principle of priority, *externa* Eversmann is the valid name and *dalecarliana* Guenée is considered as its junior synonym (see Anikin et al. 2006).

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at



Figs 28–35. Genitalia of lectotypes (scale bar 0.5 mm). **28**. *Cochylis arabescana* Eversmann. **29**. *Teras umbraculana* Eversmann. **30**. *Grapholitha immundana* Eversmann. **31**. *Tortrix tripsiana* Eversmann. **32**. *Tortrix tergana* Eversmann. **33**. *Tortrix pulverana* Eversmann. **34**. *Cochylis obliquana* Eversmann. **35**. *Tortrix externana* Eversmann.

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at

7. *externana* Eversmann, 1844 (Figs 23, 35)

Tortrix externana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 490. Locus typicus: "in promontoriis Uralensibus".

Types. Lectotype ♂ (designated by J. Razowski, 1970) (Fig. 23): 'Spask' <handwritten>, '40a' <handwritten>, 'G.S. – 1030 ♂. | *Ceratoxanthis* | *externana* | J. Razowski' <white, printed>, 'praep. | micr. | N 278 | *externana* Ev. | L-Holotypus' <handwritten>, 'LECTOTYPUS. | *Tortrix externana* Ev., 1844. | J. Razowski design. 1970' <red, printed>.

Present status: *Ceratoxanthis externana* (Eversmann, 1844).

Comments. The genitalia of the lectotype (Fig. 35) are in Canada balsam. The lectotype was designated by Razowski (1970), but the genitalia of this specimen were not figured. The female of *C. externana* (also on genitalia slide N 278) whose genitalia were figured in the same paper, was incorrectly interpreted by Razowski as a paralectotype. Actually it was collected by H. Christoph in Guberli in 1891 and does not belong to the *externana* type series; the latter probably consisting of a single specimen. This mistake was probably caused by the presence of the genitalia of both specimens on the same slide although under separate cover glasses.

Taxonomic notes. This species name was considered to be valid since its description. This status was confirmed by Razowski (1970).

8. *gilvana* Eversmann, 1842 (Figs 21, 47)

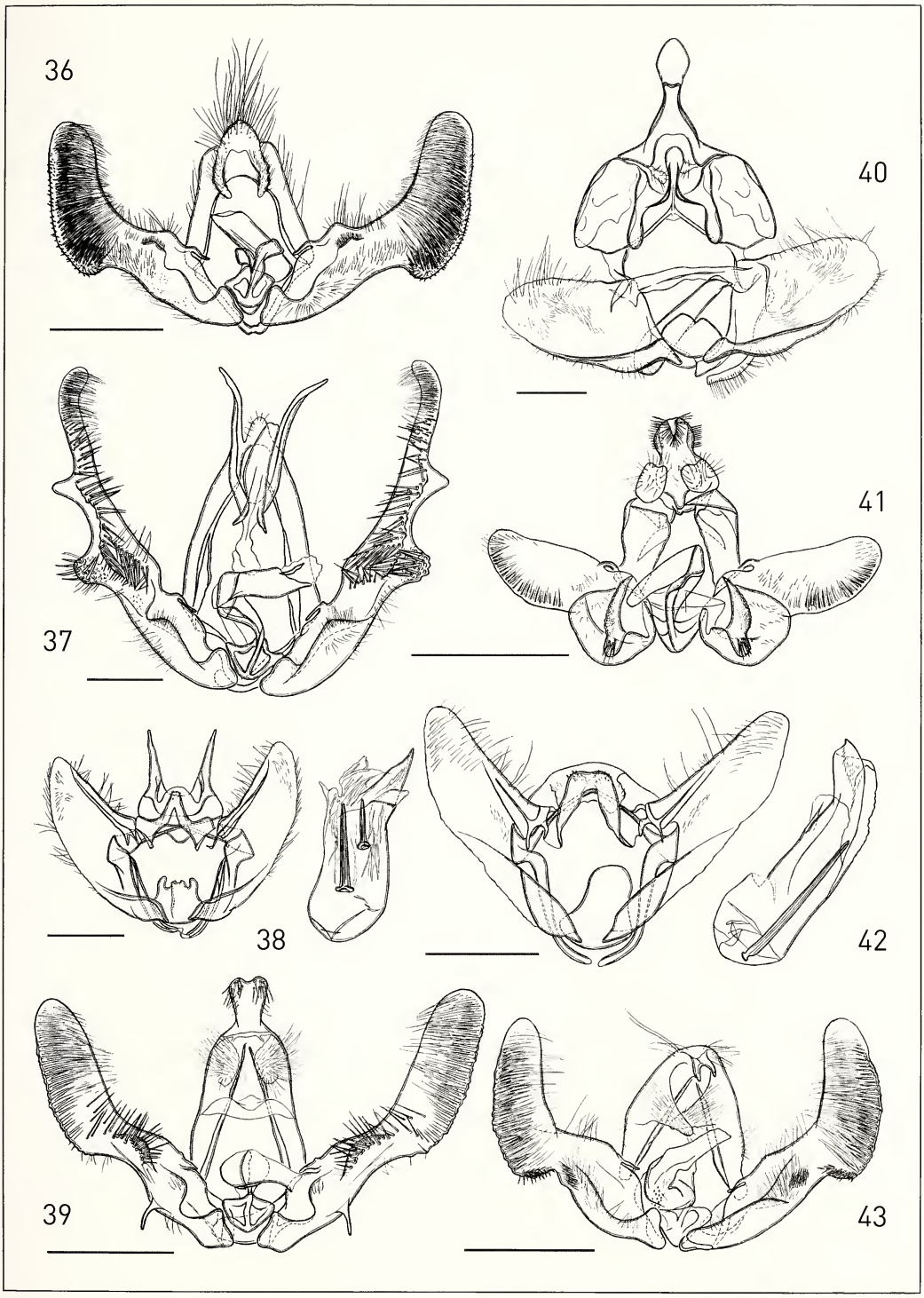
Tortrix gilvana Eversmann, 1842, *Bull. Soc. Imper. Nat. Moscou* 15(3): 562. Locus typicus: "in provinciae Casanensis".

Types. Lectotype ♂ (here designated) (Fig. 21): '*gilvana*' <handwritten in ink>, '*diversana* H.' <handwritten in pencil>, '33e' <handwritten in ink>, 'Praep. micr. N 0018 | *Choristoneura diversana* | (Hübner, 1817) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Tortrix gilvana* Ev., 1842. | S. Nedoshivina design. 2007' <red, printed>. – Paralectotypes: 3 specimens (without abdomen) from Kasan ('Kas') and 1♂ without locality label.

Present status: *Choristoneura diversana* (Hübner, 1817).

Comments. The genitalia of the lectotype (Fig. 47) are in euparal. The type series of *gilvana* in the original collection consists of six specimens. Three paralectotypes from Kasan ('Kas') with labels '33a', '33b', '33c' are in very poor condition: one only has part of the thorax and the hind wings, and the other two only have part of the thorax with one fore and one hind wing. The fourth specimen, labelled 'Spask', '*Diversana* 50', '33d', was probably collected some time later because Spassk does not correspond with Kasan Province, which is considered to be the type locality. So I suppose that this specimen does not belong to the type series. The two remaining syntypes have no locality labels and are labelled '*gilvana*', '*diversana* H.', '33e' and '*Diversana* 52', '33f'. The first of these two is evidently conspecific with the specimens from Kasan and here designated lectotype, whereas the other belongs to *Choristoneura lafauryana* (Ragonot, 1875) (gen. prep. N 0053).

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at



Figs 36–43. Genitalia of lectotypes (scale bar 0.5 mm). **36**. *Paedisca cervana* Eversmann. **37**. *Tortrix graphitana* Eversmann. **38**. *Tortrix insequana* Eversmann. **39**. *Paedisca externa* Eversmann. **40**. *Tortrix stigmatana* Eversmann. **41**. *Cochylis acutana* Eversmann. **42**. *Tortrix blandana* Eversmann. **43**. *Sericoris pullana* Eversmann.

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at

Taxonomic notes. *Tortrix gilvana* Eversmann was synonymized with [*Tortrix*] *diversana* Hübner, 1817, by Herrich-Schäffer (1847 – [1855]). Eversmann probably accepted Herrich-Schäffer's opinion and made corresponding additions of labels in his collection. Rebel (1901) removed Eversmann's species from synonymy and considered it as valid, and Kennel (1908) followed this opinion. The most recent record of *gilvana* Eversmann in the literature is in Obraztsov (1955), who treated it as a junior synonym of *Archips rosana* (Linnaeus, 1758). After that this species name was overlooked. My examination confirms that *Tortrix gilvana* is conspecific with *Choristoneura diversana* (Hübner, 1817) (sensu Razowski 2002) and should be considered as its junior synonym.

9. *graphitana* Eversmann, 1844 (Figs 16, 37)

Tortrix graphitana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 496. Locus typicus: "circa Casanum".

Types. Lectotype ♂ (here designated) (Fig. 16): 'Kas | 7.VI' <handwritten>, '55a' <handwritten>, 'Praep. micr. N 0009 | *Capricornia boisduvaliana* | (Duponchel, 1836) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Tortrix graphitana* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>, '*graphitana* mihi' < written in Eversmann's hand>.

Present status: *Capricornia boisduvaliana* (Duponchel, 1836).

Comments. The genitalia of the lectotype (Fig. 37) are in euparal. The lectotype probably is the single specimen of the type series. This is confirmed indirectly by presence of the letter "a" on the label '55a' and Eversmann's remark "volat raro" meaning "infrequent" in the original description.

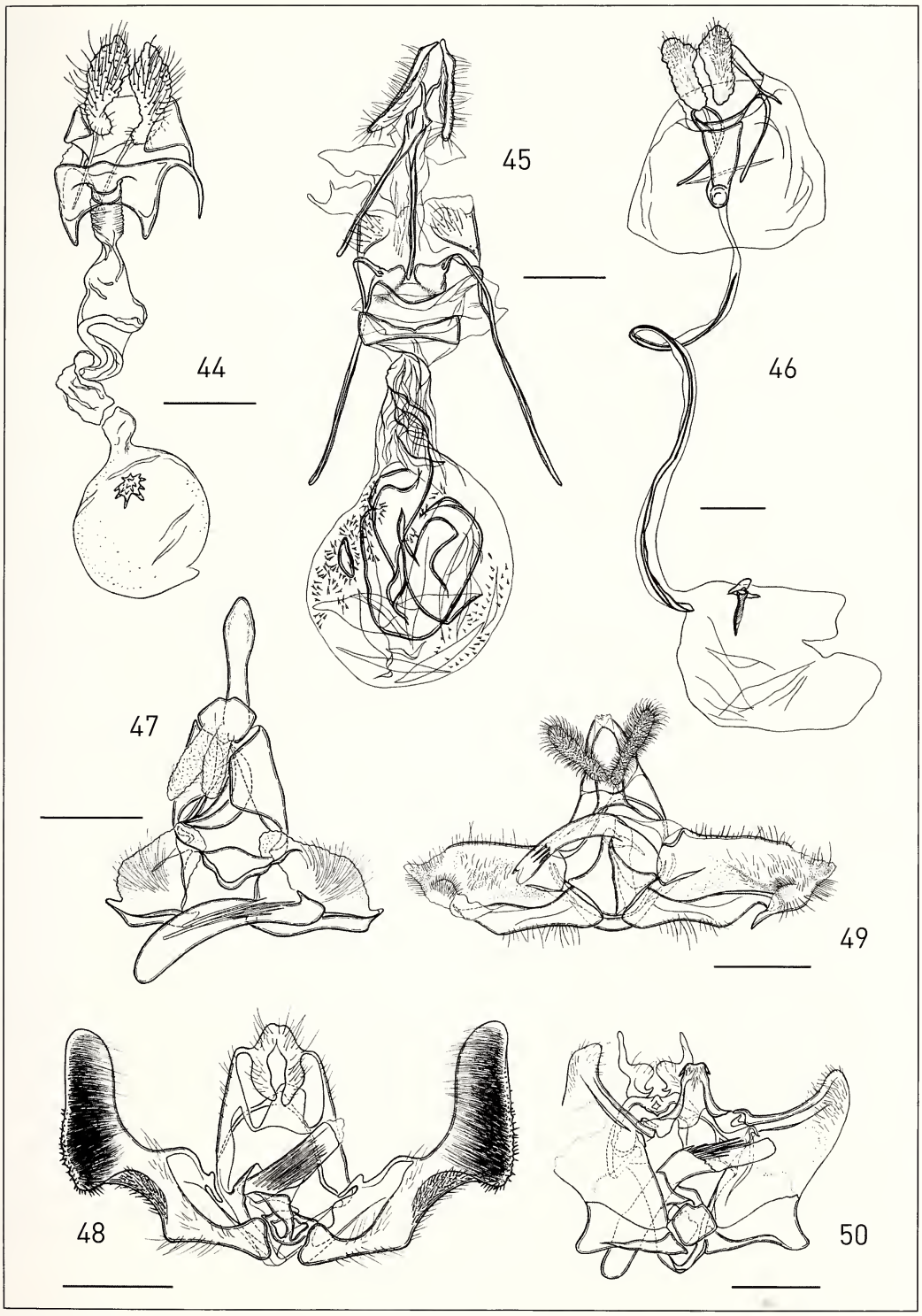
Taxonomic notes. Herrich-Schäffer (1847–[1855]) synonymized *Tortrix graphitana* Eversmann, 1844, as well as *Pyralis conwayana* [sic!] Fabricius, 1775, with *Tortrix hofmannseggana* Hübner, 1799. Later, Rebel (1901) considered *hofmannseggana* Hübner as a junior synonym of *Tortrix conwayana* [sic!] (Fabricius, 1775). As for *graphitana* Eversmann, it was not mentioned by Rebel (1901) and Kennel (1908), but suddenly reappeared in Hannemann (1961) where it was treated as a junior synonym of *Pseudargyrotoza conwagana* (Fabricius, 1775). Since that time, this synonymy has been generally accepted. However, my examination shows that *graphitana* Eversmann is a junior synonym of *Capricornia boisduvaliana* (Duponchel, 1836) (sensu Razowski 2003) (see Anikin et al. 2006).

10. *hydrargyrana* Eversmann, 1842 (Figs 4a, 4b, 45)

Tortrix hydrargyrana Eversmann, 1842, *Bull. Soc. Imper. Natural. Moscou:* 563, pl. 6 fig. 14. Locus typicus: "in promontoriis Uralensibus".

Types. Lectotype ♀ (designated by Razowski, 1970: 260) (Figs 4a, 4b): 'Spask' <handwritten>, '74g' <handwritten>, 'Praep. micr. N 0048 | *Eugnosta hydrargyrana* | (Eversmann, 1842) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. |

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at



Figs 44–50. Genitalia of lectotypes (scale bar 0.5 mm). **44**. *Teras obtusana* Eversmann. **45**. *Tortrix hydrargyrana* Eversmann. **46**. *Tortrix testaceana* Eversmann. **47**. *Tortrix gilvana* Eversmann. **48**. *Grapholitha quadratana* Eversmann. **49**. *Teras longulana* Eversmann. **50**. *Cochylis discopunctana* Eversmann.

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at

Tortrix hydrargyrana Ev., 1842. | J. Razowski design. 1970' <red, printed>. – Paralectotypes: 2♂ and 3♀ from Spassk ('Spask'), 1 ♂ from Orenburg ('Orb'), and 1 ♀ without locality label.
Present status: *Eugnosta hydrargyrana* (Eversmann, 1842).
Comments. The genitalia of the lectotype (Fig. 45) are in euparal. One male and one female from the type series respectively bear Eversmann's original labels '*Hydrargyrana* Eversm.' and '*Hydrargyrana*'.
Taxonomic notes. This species name has been mentioned as valid since its description. Razowski (1970) confirmed this opinion after investigating the type series and he designated a lectotype. However, the genitalia of the lectotype were not dissected. They are figured here for the first time.

11. *immundana* Eversmann, 1844 **(Figs 18, 30)**

Grapholitha [sic!] *immundana* Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 513. Locus typicus: "in promontoriis Uralensibus".
Types. Lectotype ♂ (here designated) (Fig. 18): 'Spask' <handwritten>, '245a' <handwritten>, 'Praep. micr. N 0014 | *Epibactra immundana* | (Eversmann, 1844) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Grapholitha immundana* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>. – Paralectotype: 1 specimen without abdomen from Spassk ('Spask').
Present status: *Epibactra immundana* (Eversmann, 1844).
Comments. The genitalia of the lectotype (Fig. 30) are in euparal. Two specimens of *immundana* Eversmann were found in the original collection. Although only the specimen without abdomen has Eversmann's distinguishing label '*immundana*', both have a label with number "245" showing that they were syntypes.
Taxonomic notes. Shortly after the description, Eversmann sent a probable syntype of his *Grapholitha immundana* to Herrich-Schäffer, who interpreted it as the already described *Paedisca immundana* Fischer von Röslerstamm, 1839. Later, in his work of 1847–[1855], Herrich-Schäffer described the specimen of Eversmann as new species *cuphulana* Herrich-Schäffer, 1851: "[*Syndemis*] 431. *Cuphulana* m.[ihi]. Eine ähnliche, doch unterschiedene Art schickte mir Herr Eversmann als *Immundana*, der Saum der Vordeflügel steht merklich schräger, die Saumlinie ist nur gegend den Afterwinkel etwas braun, aussen nicht leicht eingelegt, an der Stelle des Spiegels einige schwarze Punkte. Zum Abbilden ist das Exemplar verflogen." Therefore *cuphulana* Herrich-Schäffer, 1851, was synonymized with *immundana* Eversmann, 1844 (Anikin et al. 2006). My examination shows that the syntypes of *immundana* Eversmann are also conspecific with *Epibactra sareptana* (Herrich-Schäffer, 1861) (sensu Razowski 2003), so *sareptana* Herrich-Schäffer, 1861 also was synonymized with *immundana* Eversmann, 1844 (see Anikin et al. 2006).

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at

12. *insequana* Eversmann, 1844 (Figs 12, 38)

Tortrix insequana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 496. Locus typicus: "in promontoriis Uralensibus".

Types. Lectotype ♂ (here designated) (Fig. 12): 'Spask' <handwritten>, '75b' <handwritten>, 'Praep. micr. N 0054 | *Eugnosta parreyssiana* | (Duponchel, 1843) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Tortrix insequana* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>. – Paralectotypes: 2♂ and 1 specimen without abdomen from Spassk ('Spask'), and 1 ♂ from Orenburg ('Orb').

Present status: *Eugnosta parreyssiana* (Duponchel, 1843), **stat. rev.**

Comments. The genitalia of the lectotype (Fig. 38) are in euparal. One male paralectotype bears Eversmann's original label '*insequana*'.

Taxonomic notes. Herrich-Schäffer (1847–[1855]) synonymized this species name with *Argyroptera parreyssiana* Duponchel, 1843 and since then *insequana* Eversmann has not been mentioned in the literature. As for *parreyssiana* Duponchel, it was considered to be a subspecies of *Eugnosta hydrargyrana* (Eversmann, 1842) (e.g., Leraut 1997). Later, Razowski (1970) treated *insequana* Eversmann as a questionable junior synonym of *parreyssiana* Duponchel. He supposed also that the type material of *insequana* Eversmann was probably lost (Razowski 1970: 261). My examination shows that *insequana* Eversmann is indeed conspecific with *parreyssiana* Duponchel (sensu Razowski 2002) and that the latter has sufficiently distinct and stable characters to distinguish it from *hydrargyrana* Eversmann. Specimens of *hydrargyrana* as well as *parreyssiana* (=*insequana*) in Eversmann's collection originate from Spassk ('Spask') and Orenburg ('Orb'). This sympatry further supports the status of distinct species for *parreyssiana*.

Diagnosis (of *Eugnosta parreyssiana* (Duponchel, 1843)). The forewings of *parreyssiana* are much shorter (6–9 mm) than those of *hydrargyrana* (12–14 mm). The silver spots of *parreyssiana* are minor, narrow, elongated slightly, and with rounded edges, whereas in *hydrargyrana* the spots are large, wide and compact in shape, tightly arranged, with the edges of neighbouring spots almost parallel. In the male genitalia of *parreyssiana* one cornutus is twice as long as the other (Fig. 38), whereas in *hydrargyrana* (sensu Razowski, 2002: Pl. 14 Fig. 135a) both cornuti are similar in length. The medial process of the transtilla in *parreyssiana* is triangular and its distal part is about twice as narrow as the proximal part. In *hydrargyrana* the medial process is longer, more or less uniform in width (at least, its distal part is less than 1.5 times as narrow as the proximal). Also, the socii of *parreyssiana* are pointed whereas in *hydrargyrana* they are apically rounded. According to Razowski (2002: 53) the female genitalia of *parreyssiana* (Razowski 2002: Pl. 50 Fig. 135b) have the proximal part of the sterigma rather small, slender, and the sclerites of the corpus bursae are small; whereas in *hydrargyrana* (Fig. 45) the proximal part of the sterigma is broad and the sclerites of the bursa copulatrix are strong.

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at

13. *longulana* Eversmann, 1844 **(Figs 24, 49)**

Teras longulana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 525. Locus typicus: "in provincia Casanensi".

Types. Lectotype ♀ (designated by Kyrki, 1982) (Fig. 24): 'Kas' <handwritten>, '*longulana* Ev.' <handwritten>, '6a' <handwritten>, '*longulana* in litt. see coll. Eversmann' <handwritten>, 'Prep. No | A 197 | J. Kyrki' <white, printed>, '*Acleris* | *lacordairana* (Dup.) | det. Jorma Kyrki | .4.1981' <handwritten>, 'Typus | *Teras longulana* | Eversmann, 1844' <red handwritten >, 'LECTOTYPUS. | *Teras longulana* Ev., 1844. | J. Kyrki design. 1982' <red, printed>.

Present status: *Acleris lacordairana* (Duponchel, 1836).

Comments. The genitalia of the lectotype (Fig. 49) are in euparal.

Taxonomic notes. This species name was removed from the synonymy of *Acleris notana* (Donovan, 1806) and placed as a junior synonym of *Acleris lacordairana* (Duponchel, 1836) by Kyrki (1982).

14. *obliquana* Eversmann, 1844 **(Figs 14, 34)**

Cochylis obliquana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 528. Locus typicus: "in provincia Casanensi".

Types. Lectotype ♂ (here designated) (Fig. 14): '101b' <handwritten>, 'praep. | micr. | N 7297 ♂' <handwritten>, 'Praep. micr. N 0039 | *Cochylimorpha obliquana* | (Eversmann, 1844) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Cochylis obliquana* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>. – Paralectotype: 1♂ from Kasan ('Kas').

Present status: *Cochylimorpha obliquana* (Eversmann, 1844).

Comments. The genitalia of the lectotype (Fig. 34) are in euparal. Probably one additional syntype is in the collection of Kasan State University (Mel'nikov 1887).

Taxonomic notes. This species name has been known as valid for a long time. However, the type material had not been examined and according to a widespread belief, it was considered lost (Razowski 1970: 178). As shown here, the original type material is deposited in ZISP and my examination confirms the validity of the species name.

15. *obtusana* Eversmann, 1844 **(Figs 19, 44)**

Teras obtusana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 524. Locus typicus: "in provincia Casanensi".

Types. Lectotype ♀ (designated by J. Kyrki, 1982) (Fig. 19): 'Kas | 25.X' <handwritten>, '14e' <handwritten>, 'praep. | micr. | No 3142 | *Peronea* | *pulverana* | ♀ Kasan, H.S.' <handwritten>, 'Praep. micr. N 0044 | *Acleris obtusana* | (Eversmann, 1844) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Teras obtusana* | Eversmann, 1844 | des. J. Kyrki 1981' <red, printed>. – Paralectotypes: 5♀ from Kasan ('Kas') and 2♀ without locality label.

Present status: *Acleris obtusana* (Eversmann, 1844).

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at

Comments. The genitalia of the lectotype (Fig. 44) are in euparal. Two males labelled 'Orb' were treated by Kyrki (1982) as paralectotypes incorrectly because they were not mentioned in the original description.
Taxonomic notes. This species name was removed from the synonymy of *Acleris boscana* (Fabricius, 1794) and considered to be valid by Kyrki (1982).

16. *pullana* Eversmann, 1844 (Figs 22, 43)

Sericoris pullana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 502. Locus typicus: "in provincia Casanensi".
Types. Lectotype ♂ (here designated) (Fig. 22): 'Kas | 24.VI' <handwritten>, '240b' <handwritten>, 'Praep. micr. N 0017 | *Epinotia cruciana* | (Linnaeus, 1761) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Sericoris pullana* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>. – Paralectotypes: 2♀ from Kasan ('Kas').
Present status: *Epinotia cruciana* (Linnaeus, 1761).
Comments. The genitalia of the lectotype (Fig. 43) are in euparal. The paralectotypes were collected in July: 'Kas | 12.VII' and 'Kas | 10.VII'. One of them bears two original labels: '*pullana*' and '*angustana*'. Two additional syntypes are probably in the collection of Kasan State University (Mel'nikov 1887).
Taxonomic notes. Shortly after its description, this species name was treated as a junior synonym of [*Tortrix*] *angustana* Hübner, [1811–13] by Herrich-Schäffer (1847–[1855]). In 1901, Rebel synonymized *angustana* Hübner with *Phalaena Tortrix cruciana* Linnaeus, 1761. Thus, the species described by Eversmann has been for a long time known as a junior synonym of *Epinotia cruciana* (L.). My examination shows that this point of view is entirely correct.

17. *pulverana* Eversmann, 1844 (Figs 8, 33)

Tortrix pulverana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 491. Locus typicus: "in provinciae Casanensis".
Types. Lectotype ♂ (here designated) (Fig. 8): 'Kas | 25.V' <handwritten>, '61a' <handwritten>, '*Rusticana* ♂' <handwritten>, 'Praep. micr. N 0015 | *Clepsis senecionana* | (Hübner, 1819) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Tortrix pulverana* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>. – Paralectotypes: 12♂ and 7♀ from Kasan ('Kas').
Present status: *Clepsis senecionana* (Hübner, 1819).
Comments. The genitalia of the lectotype (Fig. 33) are in euparal. One female paralectotype has an original label with '*pulverana*'. The male with label '61a' was designated as the lectotype because it has more distinguishing characters than any other syntype. The lectotype's label '*Rusticana*' was added later by Eversmann as a correction (see reason below). Some other paralectotypes also have similar labels written in Eversmann's hand as follows: '*Rusticana* ♀ Kas', '*Rusticana* ♀', '*Tortrix Rusticana*',

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at

'*Perfusana?* ... <unreadable>'. The series of *pulverana* in Eversmann's collection included also one male from Spassk. This specimen does not belong to the type series because Spassk is not within Kasan Province, which was mentioned as the type locality.
Taxonomic notes. Herrich-Schäffer (1847–[1855]) synonymized *pulverana* Eversmann with *Tortrix rusticana* Treitschke, 1830. Razowski (1993) then stated that *rusticana* Tr. should be a junior synonym of *Tortrix senecionana* Hübner, 1818–19 (now in *Clepsis*). However, this was not based on an investigation of the type material. My examination confirms this synonymy.

18. *quadratana* Eversmann, 1844 **(Figs 20, 48)**

Grapholitha quadratana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 513. Locus typicus: "in provincia Casanensi".
Types. Lectotype ♂ (here designated) (Fig. 20): 'Kas' <handwritten>, '*quadratana*' <handwritten>, '183e' <handwritten>, 'Praep. micr. N 0011 | *Epiblema sticticana* | (Fabricius, 1794) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Grapholitha quadratana* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>. – Paralectotypes: 1♂ and 2♀ from Kasan ('Kas').
Present status: *Epiblema sticticana* (Fabricius, 1794).
Comments. The genitalia of the lectotype (Fig. 48) are in euparal. All three paralectotypes were collected in June: 'Kas | 11.VI', 'Kas | 10.VI', 'Kas | 2.VI'. Some females from the original type series are not conspecific with the lectotype but belong to *Epiblema cirsianum* (Zeller, 1843). One of them has Eversmann's handwritten label 'Hüb. f. 237'.
Taxonomic notes. Shortly after its description this species name was synonymized with *Phalaena Tortrix brunnichiana* Linnaeus, 1767 by Herrich-Schäffer (1851: 242): "*Brunnichiana* L. – W.V.? in Mus. Schiff. stickt hier eine *Sequana* H.; als *Jacquiniana* aber eine wahre *Brunnichiana*; FR vermuthet daher eine Verwechselung. – Tr. – H. 21 – FR. t. 65. f. 1. – *Quadratana* Eversm. nach einem von ihm mitdetheilten Exemplare. – *Rusticana u. Sticticana* Wood. – 8 – 10L." Later, *quadratana* Eversmann was considered to be a junior synonym of *Epiblema sticticanum* (Fabricius, 1794) (e.g., Razowski 2003). My examination shows that this synonymy is entirely correct.

19. *stigmatana* Eversmann, 1844 **(Figs 9, 40)**

Tortrix stigmatana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 493. Locus typicus: " in promontoriis Uralensibus ".
Types. Lectotype ♂ (here designated) (Fig. 9): 'Spask' <handwritten>, '47a' <handwritten>, 'Praep. micr. N 0049 | *Aphelia stigmatana* | (Eversmann, 1844) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Tortrix stigmatana* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>. – Paralectotypes: 1♂ from Spassk ('Spask') and one ♂ from Orenburg ('Orb').
Present status: *Aphelia stigmatana* (Eversmann, 1844).

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at

Comments. The genitalia of the lectotype (Fig. 40) are in euparal. One male from the original type series bears the following labels: '*stigmatana*', 'praep.micr. N 2822 ...<unreadable> *stigmatana* Ev. ♂ | Spask'. Probably one additional syntype is in the collection of Kasan State University (Mel'nikov 1887).
Taxonomic notes. This species name has been known in the literature as valid for a long time. However, the type material had not been examined (Razowski 1981: 352–353). My examination of the type material confirms the validity of this name.

20. *tergana* Eversmann, 1844 (Figs 17, 32)

Tortrix tergana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 498. Locus typicus: "in promontoriis Uralensibus et in tractu Menselinskio".
Types. Lectotype ♂ (here designated) (Fig. 17): 'Spask | Iun' <handwritten>, '85b' <handwritten>, 'Praep. micr. N 0013 | *Aethes triangulana* | (Treitschke, 1835) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Tortrix tergana* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>. – Paralectotypes: 1♂ and 2♀ from Spassk ('Spask').
Present status: *Aethes triangulana* (Treitschke, 1835).
Comments. The genitalia of the lectotype (Fig. 32) are in euparal. Two paralectotypes were collected also in June: 'Spask | VI.18', 'Spask | Iun'. One female from the original type series was labelled '*tergana*' and '*kuhlweiniana* Kef.'. This specimen is undoubtedly conspecific with the lectotype as well.
Taxonomic notes. *Tortrix tergana* Eversmann and *T. triangulana* Treitschke were both synonymized with *T. kuhlweiniana* Fischer von Röslerstamm, 1836, by Herrich-Schäffer (1847–[1855]). However, *triangulana* Treitschke has priority as mentioned by Razowski (1970). My examination of the type material confirms that *tergana* Eversmann is really conspecific with *triangulana* Treitschke (sensu Razowski 2002).

21. *testaceana* Eversmann, 1844 (Figs 11, 46)

Tortrix testaceana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 486. Locus typicus: "in provincia Casanensi et Orenburgensi".
Types. Lectotype ♀ (here designated) (Fig. 11): 'Kas | 15.VII' <handwritten>, '48b' <handwritten>, '*Testaceana* Ev. | pag. 159 in H.-Sch. | ist für ...<unreadable> | aber nachher nicht | aufgeführt' <handwritten>, 'Praep. micr. N 0045 | *Archips rosana* | (Linnaeus, 1758) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Tortrix testaceana* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>. – Paralectotypes: 5♀ from Kasan ('Kas'), 2♂ from Orenburg ('Orb'), and 2♀ without locality label.
Present status: *Archips rosana* (Linnaeus, 1758).
Comments. The genitalia of the lectotype (Fig. 46) are in euparal. The two females without locality label from the original collection have handwritten labels with the letters 'f' and 'g', whereas the other syntypes are labelled from 'a' to 'e' and 'h' and 'i'. So these two specimens are also designated as paralectotypes. One additional syntype is probably in the collection of Kasan State University (Mel'nikov 1887).

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at

Taxonomic notes. *T. testaceana* Eversmann was treated as a valid name at the species level by Rebel (1901) and Kennel (1908). In 1955 Obraztsov proposed to consider it as a subspecies of *Archips decretana* (Treitschke, 1835). Razowski (1977) then considered *testaceana* Eversmann, 1844 and *betulana* Hübner, 1787 (nomen oblitum) as junior synonyms of *Archips decretana* (Treitschke, 1835). Later, following the principle of priority, *betulana* Hübner was considered as the valid name (e.g. Leraut 1997) and *testaceana* Eversmann as its junior synonym. However, my examination has shown that it is conspecific with *A. rosana* (Linnaeus, 1758) (see Anikin et al. 2006).

22. *tripsiana* Eversmann, 1844 (Figs 26, 31)

Tortrix tripsiana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 491. Locus typicus: "in provincia Casanensi et Orenburgensi".

Types. Lectotype ♂ (here designated) (Fig. 26): 'Kas' <handwritten>, '66h' <handwritten>, 'Praep. micr. N 0046 | *Phtheochroa inopiana* | (Haworth, 1811) | S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Tortrix tripsiana* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>. – Paralectotype: 1♂ from Orenburg ('Orb').

Present status: *Phtheochroa inopiana* (Haworth, 1811).

Comments. The genitalia of the lectotype (Fig. 31) are in euparal. I have concluded that the other six males and one female from Spassk in the original collection do not belong to the type series even though Spassk geographically belongs to Orenburg Province. Eversmann apparently did not take them into account in the original description because he gave "provincia Casanensi et Orenburgensi" as the type locality, whereas he always recorded 'Spask' as "promontoriis Uralensibus".

Taxonomic notes. Shortly after its description, *tripsiana* Eversmann was synonymized with *Tortrix orana* Fischer von Röslerstamm, 1834 (Herrich-Schäffer, 1847–[1855]), but Rebel (1901) and Kennel (1908) did not mention it. However, in 1961 Hannemann treated *tripsiana* Eversmann as a junior synonym of *Adoxophyes reticulana* Hübner, [1818–1819]. *Tortrix orana* F. von Röslerstamm, was also mentioned by Hannemann (1961) as a junior synonym of *A. reticulana* Hübner. Later, *orana* F. von Röslerstamm was considered as the senior synonym of *tripsiana*, probably by Kuznetzov (1967). So *tripsiana* Eversmann has been known to be a junior synonym of *Adoxophyes orana* (F. von Röslerstamm) (e.g. Kuznetzov 1967). However, my examination showed that *Tortrix tripsiana* should be regarded as a junior synonym of *Phtheochroa inopiana* (Haworth, 1811) (see Anikin et al. 2006).

23. *umbraculana* Eversmann, 1844 (Figs 5, 29)

Teras umbraculana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 519. Locus typicus: "in promontoriis Uralensibus; nec non in tractu Menselinskio".

Types. Lectotype ♂ (here designated) (Fig. 5): 'Spask' <handwritten>, '126c' <handwritten>, 'Praep. | micr. | N 9213 ♂ | *Pseudoeucosma* | *umbraculana* | Ev. ' <handwritten>, 'Praep. micr. N 0042 | *Pelochrista umbraculana* | (Eversmann, 1844) |

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at

S. Nedoshivina det., 2006' <white, printed>, 'LECTOTYPUS. | *Teras umbraculana* Ev., 1844. | S. Nedoshivina design. 2007' <red, printed>. – Paralectotypes: 2 specimens without abdomen from Spassk ('Spask').

Present status: *Pelochrista umbraculana* (Eversmann, 1844).

Comments. The genitalia of the lectotype (Fig. 29) are in euparal. The paralectotypes have labels written in Eversmann's hand '*umbraculana*' and '*Umbraculana* Ev.'. Both also bear red, printed labels 'Cotypus *umbraculana* Ev'.

Taxonomic notes. Since its description there has been no doubt in the validity of this name in the literature, but its status has changed. Rebel (1901) considered *umbraculana* Eversmann as a smaller and darker variety of *Epiblema infidana* Hübner, 1824: "v. *Umbraculana* Ev. (obscurior, minus variegata)". Obraztsov (1967) considered *infidana* Hübner as a junior synonym of *Pelochrista infidana* (Duponchel, 1836) whereas *umbraculana* Eversmann was treated as a distinct form of *infidana*: "f. *umbraculana* Ev.". The status as a valid species was re-established soon afterwards, probably by Kuznetzov (1967), who treated *umbraculana* Eversmann as a separate species but did not mark it with 'stat. nov.'. My examination of the type material confirms this.

Species misplaced in Tortricidae

radiolana Eversmann, 1844 (Fig. 27)

Teras radiolana Eversmann, 1844, *Fauna lepidopterologica Volgo-Uralensis*: 520. Locus typicus: "in promontoriis Uralensibus".

Types. Lectotype: ♀ (Fig. 27): 'Spask' <handwritten>, '191a' <handwritten>, '*Crambus verellus* det. V. V. Sovinsky' <handwritten>, 'LECTOTYPUS | *Teras radiolana* Ev., 1844. | S. Błeszyński design. 1965' <red, printed>.

Comments. Błeszyński (1965) gave the following erroneous type locality for *radiolana* Eversmann: "Rußland: Kasan-Distrikt".

Present status: *Catoptria verellus* Zincken, 1817 (Pyralidae, Crambinae).

Taxonomic notes. This species was described by Eversmann in the "Tortrices", but Błeszyński (1965) transferred it to the Pyralidae and considered it as a junior synonym of *Catoptria verellus* Zincken, 1817.

Acknowledgements

A wish to express my sincere thanks to Dr. Vadim V. Zolotuhin (Uljanovsk) for his valuable help at all stages of the preparation of the paper. I am indebted to Dr. Vladimir I. Kuznetzov (St. Petersburg) for providing access to Eversmann's collection and to Dr. Sergey Yu. Sinev (St. Petersburg) for his help during the examination of the type material. I express my thanks to Dr. Alexey V. Kouprianov (St. Petersburg) for his suggestions on nomenclatural issues and for correcting a draft of the manuscript. I want to thank Dr. Dieter Stüning (Bonn) for his kind help in translating Eversmann's original labels and Dr. Wolfgang Speidel (Munich) for providing rare literature sources. I owe special thanks to Mr. Kevin R. Tuck (London) and Mr. Alain Cama (France) for providing images of the type material that were necessary to define the status of some of Eversmann's species. I am grateful to Dr. Fedor V. Konstantinov and Dr. Dmitry A. Apanaskevich (both from St. Petersburg) for providing valuable information. And I thank Mrs. Olga V. Stepanova (St. Petersburg) for improvements of the language. This project was supported by the Federal programme supporting leading scientific schools (N 7130.2006.4).

©Societas Europaea Lepidopterologica; download unter http://www.biodiversitylibrary.org/ und www.zobodat.at

References

Anikin, V. V., S. A. Sachkov, V. V. Zolotuhin, S. V. Nedoshivina & T. A. Trofimova. 2006. "Fauna lepidopterologica Volgo-Uralensis" 150 years later: changes and additions. Part 9. Tortricidae (Insecta, Lepidoptera). – Atalanta **37** (3/4): 409–445.

Błeszyński, S. 1965. Crambidae. – *In*: H. G. Amsel, F. Gregor & H. Reisser (eds.) Microlepidoptera Palaearctica 1. – Verlag Georg Fromme & Co., Wien. 553 pp.

Bogdanov, A. 1891. Materials on history of scientific and applied activities in zoology and allied fields of knowledge in Russia mainly for last 30 years. – Izvestiya imperatorskogo obshchestva lubiteley estestvoznaniya, antropologii i etnografii **70**. 81 pp. (in Russian).

Bremer, O. V. 1867. Catalog der Lepidopteren-Sammlung des Professors Dr. Eversmann. – Horae Societas Entomologicae Rossicae **5**: 1–23. (in Russian).

Brown, J. W. et al. 2005. Tortricidae (Lepidoptera) – *In:* Landry, B. (ed.) World Catalogue of Insects 5. – Apollo Books, Stenstrup. 741 pp.

Eversmann, E. 1842. Quaeam lepidopterorum species novae, in Rossia orientali observatae, nunc descriptae et depictae – Bulletin de la Société Impériale des Naturalistes de Moscou **15** (3): 543–565.

Eversmann, E. 1844. Fauna lepidopterologica Volgo-Uralensis. Exhibens. Lepidopterorum species quar per quinque annos in provinciis Volgam fluvium inter et montes Uralenses sitis observavit et descripsit. – Casani typis universitatis. 633 pp.

Geptner, V. G. 1940. E. A. Eversmann. 1794–1860. – Moskovskoe Obshchestvo Ispytateley Prirody, Moscow. 79 pp. (in Russian).

Hannemann, H. J. 1961. Kleinschmetterlinge oder Microlepidoptera. I. Die Wickler (s. str.) (Tortricidae). – *In*: Dahl, F. (ed.), Die Tierwelt Deutschlands, 48. – Gustav Fischer, Jena.

Herrich-Schäffer, G. A. W. 1847–1855. Systematische Bearbeitung der Schmetterlinge von Europa. Zugleich als Text, Revision und Supplement Jakob Hübner's Sammlung Europäischer Schmetterlinge. Vol. 4 (48). Regensburg, in Commission bei G. J. Manz. 288 pp.

Kennel, J. 1908–1921. Die Palaearktischen Tortriciden. – Zoologica **21**(54), Stuttgart. 742 pp.

Kuznetzov, V. I. 1967. Leafrollers (Lepidoptera, Tortricidae) of the territory between Amur and Zea rivers and their ecology. – Trudy Zoologitsheskogo instituta Akademii Nauk SSSR **41**: 1–72 (in Russian).

Kyrki, J. 1982. *Acleris obtusana*, a good species (Lepidoptera, Tortricidae) – Notulae Entomologicae **62**: 37–42.

Leraut, P. 1997. Liste systématique et synonymique des Lépidoptères de France, Belgique et Corse (deuxième édition). – Suppl. Alexanor, 45. Belgium. 526 pp.

Mel'nikov, N. M. 1887. A catalogue of Alexandr M. Butlerov's Lepidoptera collection, presented by him to zoological laboratory of Imperial Kasan University. – Imperial University Press, Kasan. 27 pp. (in Russian).

Obraztsov, N. S. 1955. Die Gattungen der Palaearktischen Tortricidae I. Allgemeine Aufteilung der Familie und die Unterfamilien Tortricinae und Sparganothinae. – Tijdschrift voor Entomologie **98** (3): 147–228.

Obraztsov, N. S. 1967. Die Gattungen der Palaearktischen Tortricidae II. Die Unterfamilie Olethreutinae. 7 Teil. Tribus Eucosmini (Heinr. 1923) – Fortsetzung. – Tijdschrift voor Entomologie **110** (4): 65–88.

Razowski, J. 1970. Cochylidae – *In*: H. G. Amsel, F. Gregor & H. Reisser (eds.) Microlepidoptera Palaearctica 3. – Verlag Georg Fromme & Co., Wien. 528 pp.

Razowski, J. 1977. Monograph on the genus *Archips* Hübner (Lepidoptera, Tortricidae) – Acta zoologica cracoviensia **22** (5): 55–205.

Razowski, J. 1981. Revision of the genus *Aphelia* Hübner (Lepidoptera, Tortricidae) – Acta zoologica cracoviensia **25** (15): 341–388.

Razowski, J. 1993. The catalogue of the species of Tortricidae (Lepidoptera). Part II: Palaearctic Spar-ganothini, Euliini, Ramapesiini and Archipini – Acta zoologica cracoviensia **35** (3): 665–703.

Razowski, J. 2001. Die Tortriciden (Lepidoptera, Tortricidae) Mitteleuropas. – F. Slamka, Bratislava. 319 pp.

Razowski, J. 2002. Tortricidae (Lepidoptera) of Europe 1. Tortricinae and Chlidanotinae. – F. Slamka, Bratislava. 247 pp.

Razowski, J. 2003. Tortricidae (Lepidoptera) of Europe 2. Olethreutinae. – F. Slamka, Bratislava. 301 pp.

Rebel, H. 1901. Famil. Pyralidae – Micropterygidae. – *In*: O. Staudinger & H. Rebel, 1901. Catalog der Lepidopteren des Palaearctischen Faunengebietes. II Theil. – R. Friedlander & Sohn, Berlin.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Nota lepidopterologica

Jahr/Year: 2007

Band/Volume: 30

Autor(en)/Author(s): Nedoshivina Svetlana

Artikel/Article: On the type specimens of the Tortricidae described by Eduard Friedrich Eversmann from the Volgo-Ural Region 93-114