

# A revision of some Western Palaearctic Oxytorine genera (Hymenoptera, Ichneumonidae)

by G. van Rossem

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# A revision of some Western Palaearctic Oxytorine genera

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Plant Protection Service Wageningen

Dem Andenken Arnold Förster (1810–1884) gewidmet

## Abstract

Redescriptions of Western Palaearctic species of the following genera are presented: *Microleptes* Gravenhorst; *Hemiphanes* Förster; *Oxytorus* Förster; *Hyperacmus* Holmgren; *Entypoma* Förster; *Allomacrus* Förster; *Apoclima* Förster; *Cylloceria* Schiødte; *Aniseres* Förster; *Pantisarthrus* Förster; *Dialipsis* Förster; *Laepserus* Förster; *Symplicis* Förster and *Catastenus* Förster.

The generic name *Laepserus* Förster is introduced instead of *Blapticus* Förster. The type species of *Blapticus* turned out to be a species of *Symplicis*.

A supplement on the genus *Eusterinx* is given.

Two new genera are introduced, viz. *Phosphorus* with *Entypoma rugosissimum* Strobl, 1903 as the type species and *Ephalmator* with *E. subsimilis* nova species as the type species.

The following new species are proposed: *Hemiphanes townesi*; *Pantisarthrus dispar*; *Laepserus restrictus*; *Ephalmator subsimilis*; *Symplicis invositata*; *Symplicis infavorabilis* and *Eusterinx inaequalis*.

*Cylloceria marginator* Schiødte and *Chalinoceras altior* Heinrich are considered to be forms of *Cylloceria melancholica* Gravenhorst. *Blapticus crassulus* Thomson, 1888 is regarded as a form of *Laepserus dentifer* (Thomson, 1888).

Holotypes and lectotypes of several species are designated.

## Introduction

### Supergeneric name

In their paper “The family-group names of the Ichneumonidae (excluding Ichneumoninae)” FITTON and GAULD (1976) determined that certain names of the family-group taxa in TOWNES’ revision of the Ichneumonidae do not comply with the provisions of the Code of Zoological Nomenclature. Among their findings is that the name *Microleptinae* has to be rejected and *Oxytorinae* Thomson, 1883 should take its place.

TOWNES (November 8, 1978) wrote me, that he thinks that basing a supergeneric group name on the oldest genus is the best method and noted that this was advocated by earlier codes of nomenclature. The present International Code mandates a different method. TOWNES believes that method will not result in a stable set of names until:

1. Bibliographic data on supergeneric group names are complete.
2. There is general and stable agreement about what constitutes a valid proposal of such names.

Although it is a pity to change the name used by TOWNES in his monograph, it is also inconvenient to undermine the code. This decided me to follow the suggestion of FITTON and GAULD (1976).

With respect to *Oxytorus*, TOWNES (1971, p. 186) noted that the genus was "traditionally placed in the Scolobatinae, but there it appears to be a misfit. Its present referral to the Microleptinae however, may not be an improvement as its true relationships are obscure". Consequently the supergeneric name Oxytorinae might neither be stable.

### Genera in discussion

TOWNES (1971) placed 24 genera in the Microleptinae, of these 3 are not Palaearctic. The genus *Kentrotryphon* Strobl of which only one specimen exists, was discussed by TOWNES (1967). The GRAVENHORST, SCHIØDTE and FÖRSTER types belonging to *Megastylus* Schiødte were studied by VAN ROSSEM (1974). It is unfortunate that two printer's errors occurred in two of the headings in that paper, namely on page 281 "inpressor" instead of impressor and on page 283 "subtiliventrie" instead of subtiliventralis.

Of the genera *Proclitus*, *Plectiscidea*, *Aperileptus*, *Eusterinx* and *Helictes* the type material was studied and rearranged by AUBERT, respectively in 1968, 1975 and 1977.

### Acknowledgements

The author is greatly indebted to the Uyttenboogaart – Eliasen Stichting at Amsterdam for grants to travel to München. I wish to express my gratitude to Dr. E. J. Fittkau, Director of the Zoologische Staatssammlung, Schloss Nymphenburg at München and Mr. Erich Diller for kind hospitality during my stays.

I wish to express my sincere thanks to Dr. Henry Townes for reading this manuscript and especially for drawing attention to several incorrect identifications within one of the genera. I should also like to thank Dr. Townes for sending me a number of important specimens.

Two chief contributors of specimens are Dr. E. Haeselbarth, München and Drs. C. J. Zwak-hals, Arkel and I should like to thank them gratefully.

For the loan of important type material or specimens for comparison it gives me great pleasure to thank the following persons: Dr. Børge Petersen, København; Dr. R. Danielsson, Lund; Dr. E. J. Fittkau, München; Dr. R. Jussila, Turku, Finland; Dr. E. Königsmann, Berlin; Prof. Dr. habil. G. Morge, Custodia Dipterorum Collectionis Strobl, Eberswalde-Finow, DDR and Dr. W. J. Pulawski. Wrocław.

### Materials and Methods

Of the following institutes type material and specimens were received:

American Entomological Institute, Ann Arbor (TC)

Custodia Dipterorum Collectionis Strobl, Admont (abbreviated CDSC)

Entomological Museum, Lund

Muzeum Zoologicze, Uniwersytet Wrocławski, Wrocław

Universitetets Zoologisk Museum, København

Zoologisches Museum, Humboldt Universität, Berlin, DDR

Zoologische Staatssammlung, München

External measurements were taken with an ocular micrometer (1 cm at 10 $\times$ ) on a Zeiss binocular low power microscope. All total sizes were measured at 10 $\times$  enlargement. The length of the ovi-positor was measured from the apex of gaster. Most relative measurements, made for comparison of parts, were taken at an enlargement of 40 $\times$ .

Microscope slides were made of the male genitalia of the genus *Laepserus*. For these pieces of cover slips were used which could be fixed on the pin. Photographs were taken at a magnification of  $200 \times$  with a Polaroid camera on a Olympus microscope (phase contrast). I thank Miss A. E. F. Link for her assistance with the photographs.

### Genus *Microleptes*

- Microleptes* Gravenhorst, 1829, Ichneum. Europ. 1: 679  
*Miomeris* Förster, 1868, Verh. naturh. Ver. preuss. Rheinl. 25: 171  
*Miomeris* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 91  
*Miomeris:* THOMSON, 1888, Opusc. ent. 38 (Fasc. 12): 1316  
*Miomeris:* SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 29): 2242  
*Gnathoniella* Schmiedeknecht, 1924, Ent. Monthly Mag. 60: 47  
*Microleptes:* TOWNES, 1971, The Genera of Ichneumonidae Part 4: 183

### Key to the males

1. Propodeum coriaceous. Propodeal carinae very weakly developed.  
*M. aquisgranensis* (Först.) (page 82).
  - Propodeum polished. Propodeal carinae present . . . . .
  2. Postannellus and second flagellar segment about the same length, not outcurved but proximally narrow. Tyloids present on flagellar segments 5–8. Nervellus not intercepted.  
*M. rectangulus* (Ths.) (page 82).
  - Postannellus 0.8 of length of second flagellar segment. Postannellus and second flagellar segment distally outcurved. Tyloids present on postannellus and second flagellar segment. Nervellus intercepted low.  
*M. glabriventris* (Ths.) (page 84).

### Key to the females

1. Propodeum with regular rough sculpture. Propodeal carinae weakly developed.  
*M. aquisgranensis* (Först.) (page 82).
  - Propodeum polished. Propodeal carinae developed . . . . .
  2. Apex of clypeus without a median tooth or tubercle. Antenna strongly widened apically. Nervellus intercepted, low.  
*M. glabriventris* (Ths.) (page 84).
  - Apex of clypeus with a medial tooth or tubercle. Nervellus not intercepted.  
*M. rectangulus* (Ths.) (page 82).

Remark.—I did not see the type of *Microleptes splendidulus* Gravenhorst. According to Dr. W. J. PULAWSKI the drawer no. 13 in which the specimens were placed, was lost during the evacuation of the collection.

*Microleptes aquisgranensis* (Förster)

*Miomeris aquisgranensis* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 92

*Miomeris aquisgranensis*: THOMSON, 1888, Opusc. ent. 38 (Fasc. 12): 1317

*Miomeris aquisgranensis*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 29): 2243

Characteristics of the lectotype of *Miomeris aquisgranensis*: Labels: Aachen, 16 gl. Lectotype label AUBERT, 1968. Female. Front wing 3.5 mm. Clypeus truncate, with a median row of setae. Anterior tentorial pits large. Face below antennae strongly protuberant. Malar space wide, about the length of scape. Gena, temple and vertex wide. Head square. Occipital carina present. Antenna short, segments square, apically widening. Prothorax narrow, collar medially protuberant and laterally wide, closely sculptured medially. No epomia present. Notauli well developed, not meeting. Mesoscutum polished. Propodeum roughly sculptured, carinae obsolescent except for apical transverse carina. Wings without areola. Nervulus distad of basal vein. Legs yellow, including coxae. Fringe on hind tibia dense and long. Hairs on legs long, especially on hind tarsus. Apex of first sternite at apical 0.3 of segment. Spiracle in front of middle. No glymma present. First tergite coriaceous, with striation on postpetiole. Following tergites polished, second tergite proximally with some rough sculpture. Ovipositor not beyond apex of gaster.

Description of a male in FÖRSTER's collection: Labels: ♂, 19 gl. Aachen. Label AUBERT: *Miomeris aquisgranensis*. Front wing 3.8 mm. Clypeus truncate. Anterior tentorial pits large, open. Face below antennae protuberant, somewhat coriaceous and vaguely punctured. Malar space wide, about the length of postannellus. Gena and vertex broad, polished. Antenna with postannellus short, about 0.6 of length of second flagellar segment. Tyloids on postannellus and two following segments. Base of second flagellar segment weakly constricted. Prothorax narrow, collar protuberant, dorsally coriaceous. No epomia present. Mesoscutum polished, with adpressed long hairs, notauli well developed. Mesopleurum polished, prepectal carina weak, reaching margin somewhat above the middle. Mesopleural impression an isolated pit, short horizontal groove not present. Propodeum coriaceous, carinae weakly developed. Wings without areola. Nervulus about its length distad of basal vein. Nervellus intercepted, discoidella not present. Legs including front and middle coxae yellow. Hind coxae brown. Fringe on hind tibia dense and long. Gaster brown. First segment slender, postpetiole little widened. Spiracle at 0.4 of length. Apex of first sternite at about 0.55 of length. Following tergites polished.

Material examined.—Germany: ♀, lectotype (AUBERT, 1968), Aachen; ♂, Aachen. Both collection Förster, München.

*Microleptes rectangulus* (Thomson)

*Miomeris rectangulus* Thomson, 1888, Opusc. ent. 38 (Fasc. 12): 1317

*Miomeris rectangulus*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 29): 2243

*Gnathoniella egregia* Schmiedeknecht, 1924, Ent. Monthly Mag. 60: 47

Characteristics of the lectotype of *Miomeris rectangulus* Thomson: Labels: Cartereau, Bar-s-Seine, Gallia. *rectangulus* (Ths label). Lectotype AUBERT. Male. Front wing 3.5 mm. Tyloids on flagellar segments 5–8, distal part of antennae missing. Antennal segments not outcurved. Front wing without areolet. Nervellus not intercepted.

Characteristics of the male. Front wing 3.5–4.2 mm. Clypeus medially outcurved and weakly toothed, not separated from face by a groove. Clypeus and face with erect, widely placed setae. Anterior tentorial pits open. Face polished, below antennae with a coriaceous protuberance. Malar space broad. Gena, temple and vertex wide and polished. Head square. Genal carina present, not reaching mandibular base. Antenna yellowish to brown. Postannellus and second flagellar segment of the same length and not outcurved. Tyloids on flagellar segments five, six, seven and eight (postannellus no. one). Prothorax narrow, collar long, medially protruding. Mesoscutum polished, with adpressed setae. Notauli obsolescent, only indicated at front edge of mesoscutum. Mesopleurum polished, prepectal carina present, dorsal part obsolescent or reaching subtegular ridge. Propodeum with all carinae, basal area and areola confluent. Nervulus opposite basal vein or somewhat distad. Nervellus not intercepted. Legs yellowish, hind coxae brown and proximal part coriaceous. Fringe on apex of hind tibia dense and long. Gaster brownish to black. Median dorsal carinae absent, first tergite with longitudinal striation. Following tergites polished. Second tergite with large thyridia.

Description of the female (and the lectotype of *Gnathoniella egregia* Schmiedeknecht): Front wing 3.7 mm. Palpi white. Mandible blunt, teeth obsolete (also in the male). Clypeus medially outcurved and weakly toothed, separation from face rather obsolete. Face below antennae protuberant and closely punctured. Malar space about as wide as length of scape. Gena, temple and vertex wide and polished. Genal carina not reaching mandible. Proximad part of antenna yellow, distally brown. Postannellus and following segment of the same length. Prothorax narrow, the collar medially protruding. Mesoscutum polished with fine implantations of setae. Notauli obsolete, only indicated at front margin. Mesopleurum polished, prepectal carina reaching to subtegular ridge. Propodeum with all carinae, basal area and areola confluent. Nervulus somewhat distad of basal vein. Nervellus not intercepted. Hind coxae coriaceous for the greater part fuscous. Middle and hind femora slender. Hind tibia robust, apical fringe dense and long. Gaster brownish to black. First tergite with longitudinal striation. Second tergite polished or with some longitudinal striation and large thyridia lying almost in proximad corners. Following tergites polished. Tip of ovipositor just beyond apex of gaster.

Material examined.—DDR: ♀, lectotype of *Gnathoniella egregia* Schmiedekn., Blankenburg, Thüringen; ♀, paralectotype of *Gn. egregia*, Blankenburg, Thür., 14. IX. 1919 (Berlin). France: ♂, Cartereau, Bar-s-Seine, Gallia, *rectangulus* ♂, lectotype *Miomeris rectangulus* Ths (label AUBERT); ♂, Cartereau, Bar-s-Seine, Gallia, *Miomeris rectangulus* Ths, label AUBERT (no gaster) (collection Thomson, Lund). Netherlands: ♂, Asperen (prov. Zuid-Holland), 25. IX. 1973, collection Zwakhals. ♂, Ede, garden, trap, 28. IX.–9. X. 1970 (Coll. van Rossem).

*Microleptes glabriventris* (Thomson)

*Miomeris glabriventris* Thomson, 1888, Opusc. ent. 38 (Fasc. 12): 1317

*Miomeris glabriventris*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 29: 2243

*Miomeris glabriventris*: AUBERT, 1970, Bull. mens. Soc. de Lyon 39 (9): 274

Characteristics of the female: Front wing 3.3 mm. Clypeus weakly outcurved, not separated from face by a groove, with two rows of four erect setae. Anterior tentorial pits small, open. Face polished, below antennae protuberant. Malar space broad, as wide as mandibular base. Gena and temple broad, reaching width of eye, polished. Head square. Vertex and frons polished. Antenna short, distally somewhat club shaped, medial segments about 0.6 as long as broad, the last segment about 2× as long as more proximal ones. Pedicel large, postannellus constricted proximally. Occipital carina present, closed dorsally, not reaching mandibular base. Thorax entirely polished. Epomia not present. Mesoscutum badly damaged by pin. Prepectal carina reaching subtegular ridge. Propodeum with all carinae. Wings badly damaged. Nervellus not intercepted. Legs including coxae yellow. All coxae polished. All femora and tibiae stout. Front and middle tibiae club shaped. Fringe of hind tibia well developed. First tergite with weak longitudinal striation. Following tergites polished. Ovipositor slightly protruding beyond apex of gaster.

Characteristics of the male: Front wing 4.2–4.4 mm. Clypeus medially somewhat outcurved, not separated from face by a groove, medially with a row of setae. Anterior tentorial pits not large, open. Face polished, with widely placed robust punctures, below antennae strongly protuberant. Malar space broad. Gena, temple and vertex wide and polished. Head square. Occipital carina present, not reaching base of mandible. Proximal part of antenna yellowish, distally brown. Postannellus about 0.9 of length second flagellar segment. Tyloids on postannellus and second flagellar segment. Second flagellar segment proximally weakly constricted and here as wide as postannellus. Prothorax narrow, collar broad. Mesonotum polished, notauli strongly developed. Mesopleurum polished, prepectal carina reaching subtegular ridge. Propodeum with strongly developed carinae, polished. Nervulus opposite basal vein. Discoidella present, but vague. Legs, including coxae yellow. Hind coxae polished. Fringe on hind tibia dense and long. Gaster brownish black. First tergite with strong median dorsal carinae and longitudinal striation. Following tergites polished (with some striation on base of second).

Material examined.—Germany: ♂, Feldstetten, Rauhe Alg., 27.VII.1928, leg. Schmidt, det. Habermehl (no name). *Miomeris rectangulus* Thoms. HABERMEHL ist das Tier nicht bekannt (coll. E. Bauer, München); ♂, Goslar a. H. Grauhöfer Holz, 2.IX.1942, *Miomeris rectangulus* Thoms. det. Bauer (coll. E. Bauer, München). Netherlands: ♂, Ede, 11.IX.1975, leg. B. van Aartsen (coll. Zwakhals). Sweden: ♂, Lhn 9.8. *Miomeris glabriventris* Ths. det. Aubert; ♂, no locality label, *Miomeris glabriventris* det. Aubert; ♀, no locality label, green tag, red rimmed box label “*glabriventris*”, det. Aubert (all three specimens original Thomson material, but not from the type locality) (coll. Thomson, Lund).

country?

♂, Styr. Podčetrtek, VI. 1933, leg. Jaeger, *Miomeris* spec. det. Habermehl (coll. E. Bauer).

Genus *Hemiphanes*

- Hemiphanes* Förster, 1868, Verh. naturh. Ver. preuss. Rheinl. 25: 172  
*Hemiphanes*: FÖRSTER, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 101 ·  
*Hemiphanes*: THOMSON, 1888, Opusc. ent. 38 (Fasc. 12): 1318  
*Hemiphanes*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 29): 2267  
*Hemiphanes*: TOWNES, 1971, The Genera of Ichneumonidae Part 4: 184

Key to species

1. Hind aspect of head deeply concave. Occipital carina interrupted.  
    *H. gravator* Förster (page 86).  
— Hind aspect of head normal, not concave. Occipital carina not interrupted.      2
2. Lateral lobes of mesoscutum for the greater part without adpressed hairs, only proximally and laterally some hairs present. In females gaster from tergite three yellow (in the males this character is unreliable). Tyloids on flagellar segments\* 9–10 or 9–11; tyloids well developed and running over the whole length of segment.  
    *H. flavipes* Förster (page 85).  
— Lateral lobes of mesoscutum covered with adpressed hairs. Gaster more fuscous with yellowish spots medially on tergites two and three. Following tergites more yellow. Tyloids in European males on flagellar segments 9–12, but much shorter.  
    *H. townesi* nov. spec. (page 86).

*Hemiphanes flavipes* Förster

*Hemiphanes flavipes* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 101

Holotype labelled by present author.

Characteristics of the male: Front wing 4.5–5.3 mm. Maxillary palp reaching beyond front coxa. Mandible yellow, lower tooth shorter. Clypeus yellow, apex truncate. Anterior tentorial pits open. Antenna long, reaching length of body, scape rather swollen, pedicel large, yellow. Tyloids on flagellar segments\* 9–11. Postannellus 5.2–6.0 as long as wide. Thorax black, apical corners of prothorax and tegulae yellow. Front parts of notauli deep. Median lobe of mesoscutum with adpressed hairs, lateral lobes polished. Epomia present. Apex of scutellum with some rough sculpture. Propodeum with apical transverse carina strong. Basal transverse carina absent. Median longitudinal carinae present. Front wing without areolet. Nervulus basad of basal vein. Nervellus about vertical, intercepted low, discoidella present. Legs including coxae yellow, hind coxae comparatively large. Hind femur 5.0–5.7 as long as wide, rather short and slender. First gastral segment wide towards apex, end of sternite and spiracles in front of middle.

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\* postannellus no. one

Characteristics of the female: Front wing 5.4–6.0 mm. Maxillary palp reaching beyond front coxa. Mandible yellow, lower tooth shorter. Clypeus yellow, 2× as wide as long, truncate. Malar space wide. Anterior tentorial pits open. Antenna long, reaching length of body, scape ovoid, pedicel large. Index postannellus 8.0, slender. Gena and temple polished. Occipital carina closed, vertex polished. Pronotum for the greater part polished, epomia present but weak, with some parallel running ridges. Notauli long, running beyond centre of mesoscutum. Median lobe of mesoscutum with adpressed hairs, lateral lobes polished. Apical part of scutellum with rough sculpture. Mesopleurum polished, prepectal carina reaching subtegular ridge. Apical transverse carina strong, basal transverse carina absent. Median longitudinal carinae present. Legs, including coxae yellow. Index of hind femur 5.8–6.0. Sternite of first gastral segment and spiracles in front of middle. Lateral parts of first tergite with longitudinal striation, with some continuation on tergite two. Following tergites polished. Ovipositor slightly protruding beyond apex of gaster. Gaster rather strongly depressed towards apical part.

Material examined.—Germany: ♂, Aachen, holotype (coll. Förster, München); ♀, Oberbayern, Garmisch, Eibsee, 7. VIII. 1928, leg. Bauer; ♀, Oberbayern, Garmisch, 700 m, 23. VIII. 1955, leg. Bauer (all coll. Bauer, München). Sweden: 2♀ & 1♂, Pälslö (coll. Thomson, Lund); ♀♂, Lappland, Abisko 600 m, Björkstugan b., 25. VII.–15. VIII. 1953, A. Schulte leg. (coll. Bauer, München).

### *Hemiphanes gravator* Förster

*Hemiphanes gravator* Förster, 1871. Verh. naturh. Ver. preuss. Rheinl. 28: 102. Lectotype labelled by present author.

Characteristics of the male: Front wing 4.0–5.0 mm. Mandible yellow, lower tooth shorter and narrower. Maxillary palp long, reaching front coxa. Apical margin of clypeus yellow, truncate. Anterior tentorial pits open. Face rather protuberant below antennal base (more than in *H. flavipes*). Hind aspect of head deeply concave. Occipital carina interrupted. Ventral part of scape yellow. Postannellus 5.0–6.0 as long as wide. Tyloids on flagellar segments 9–12. Notauli present. Scutellum flat, closely punctured. Wing without areolet. Nervulus somewhat distad of basal vein. Legs including coxae yellow. Hind femur 4.7–6.0 as long as wide. Propodeum with only apical transverse carina developed, more smoothly sculptured than in *H. flavipes*. First gastral segment wide towards apex, postpetiole striate, with yellow spot. Sternite in front of middle. Second segment striate, with brown spots laterally.

Material examined.—Austria: ♂, Griesenau, Tirol, 700 m, 4. VI. 1968 (coll. Haeselbarth). Germany: ♂, lectotype, no locality; ♂, paralectotype, Aachen (coll. Förster, München) ♂, Geierlambach, Heidelbeere (coll. Haeselbarth); ♂, Oberbayern, Grainbach, 800 m, 3. VI. 1968 (coll. Haeselbarth); ♂, Eberschütz, Hessen, 6. VIII. 1967 (coll. Haeselbarth). Sweden: ♂, Phalempin; ♂, Rh (?), red rimmed box label “gravator” (both coll. Thomson, Lund).

### *Hemiphanes townesi* nova species

Characteristics of the holotype: Labels: Shaowu Hsien, Fukien TCMAA, 1200–1500 m, 20.–25. IV. 1943. Female. Front wing 4.5 mm. Palpi long, yellowish. Mandible yellowish, teeth brown, lower tooth slightly shorter. Clypeus convex, truncate, about 2.1

as wide as long. No groove between clypeus and face. Face with adpressed, long hairs and medially with close shallow punctures. Malar space wide, about 1.6 the width of mandibular base, polished. Scape globular, pedicel rather large, both yellow to brownish. Postannellus slender, 7.6 as long as wide. Frons and vertex polished, not concave, antennal scrobes not present. Temple and gena polished. Most of the pronotum polished, epomia present, dorsal top yellow. Mesoscutum with close, adpressed hairs, also present on lateral lobes. Notauli present. Scutellum punctured, proximally somewhat sculptured, apex with rough sculpture. Propodeum with all longitudinal carinae, no areola present. Apical transverse carina strong, medially developed into a keel, lying near to apex of propodeum. Propodeal spiracles circular, minute. Dorsal rim of metanotum with a triangular projection opposite front end of lateral longitudinal carina. Mesopleurum polished. Prepectal carina to middle of pronotal rim. Nervulus distad of basal vein. Arealot not defined. Nervellus intercepted low, discoidella almost to hind margin of wing. All coxae and legs whitish brown, hind tibia and tarsi brown. Hind femur 4.5 as long as wide. First tergite fuscous, with close longitudinal striation, spiracles and end of sternite at 0.37 of length. Proximal half of second tergite fuscous, with longitudinal striation, apical half medially polished, laterally with weak striation. A brown spot medially. Following tergites polished. Third tergite proximally and apically with light brown spot, further tergites more yellowish brown. Ovipositor not beyond apex of gaster.

Characteristics of a paratype: Labels: Shaowu Hsien, Fukien TCMAa, 1200–1500 m, 6–9. IV. 1943. Male. Front wing 5.8 mm. Palpi and mandible whitish, mandibular teeth brown. Lower tooth about 0.5 shorter than upper. Clypeus whitish to brownish, convex, truncate, about 2.4 as wide as long. No groove between clypeus and face. Face in zone below antennal sockets closely punctured, with adpressed long, silvery hairs. Malar space wide, about 1.5 the width of mandibular base, polished. Scape globular, pedicel large, whitish to brownish. Postannellus slender, about 8.0 as long as wide. Antenna without tyloids. Frons and vertex polished. Frons not concave. Temple and gena polished. Pronotum polished, with epomia. Mesoscutum, also lateral lobes, with close adpressed hairs. Scutellum punctured, apex with rough sculpture. Propodeum with irregular sculpture, median longitudinal and lateral longitudinal carinae proximally obsolete. Apical transverse carina strong, medially developed into a keel, lying near to apex of propodeum. Propodeal spiracles circular, minute. Dorsal rim of metanotum with a triangular projection, lying opposite front end of lateral longitudinal carina. Mesopleurum highly polished. Prepectal carina present, dorsally somewhat obsolete. Front wing without areolet. Nervulus slightly distad of basal vein. Nervellus intercepted low, discoidella almost to wing margin. All coxae and legs whitish to light brown. First tergite with rough sculpture, spiracles at 0.4 of length, end of first sternite at 0.3 of length. Proximal half of second tergite with longitudinal striation and coriaceous sculpture, fuscous. Apical half with weak longitudinal striation and a medial yellow brown spot. Following tergites more polished. Third and fourth tergite with yellow brown area. Apical part of gaster depressed and gradually widening.

Remark. – Males of this species from Europe (Finland and Sweden) have tyloids on flagellar segments 9–12.

I should like to name this species after Dr. Henry Townes (Ann Arbor) in recognition for his help and encouragement during these investigations.

Material examined. — China: ♀ (holotype), Shaowu Hsien, Fukien TCMaa, 1200–1500 m, 20–25. IV. 1943. Paratypes: ♀ (without head), Shaowu Hsien, Fukien TCMaa, 1200–1500 m, 1–9. X. 1943; 2♂, Shaowu Hsien, Fukien TCMaa, 1200–1500 m, 6–9. IV. 1943; ♂, Shaowu Hsien, Fukien TCMaa, 1200–1500 m, 30. IV. 1942. Finland: ♂, Helsinki, 14. VIII. 1968, H. & M. Townes. Germany: ♂, Oberbayern, Garmisch, 700 m, 24. VIII. 1942 (coll. E. Bauer, München). Sverige: ♂, Växjö, 20. VIII. 1958, 150 m, leg. David Townes; ♂, Skåne, VIII. 1969, trap 1, leg. Bo Svensson; ♂, Skåne, VIII. 1969, trap 2, leg. Bo Svensson (all collection Townes, Ann Arbor, U.S.A., except specimen from Germany).

### Genus *Oxytorus*

*Oxytorus* Förster, 1868, Verh. naturh. Ver. preuss. Rheinl. 25: 199

*Oxytorus*: THOMSON, 1883, Opusc. ent. 32 (Fasc. 9): 387–936

*Oxytorus*: SCHMIEDEKNECHT, 1912, Opusc. Ichneum. 5, Fasc. 32: 2515

*Oxytorus*: TOWNES, 1971, The genera of Ichneumonidae, Part 4: 185

*Callidiotes* Förster, 1868, Verh. naturh. Ver. preuss. Rheinl. 25: 199

*Callidiotes*: SCHMIEDEKNECHT, 1912, Opusc. Ichneum. 5, Fasc. 32: 2516

*Callidiotes*: KERRICH, 1939, Opusc. ent. 4: 126–128

Remark. — TOWNES informed me that preference of *Oxytorus* was based on the first revisor principle. *Callidiotes* was synonymized under *Oxytorus* by MEYER (1936). *Delolytus* was synonymized under *Oxytorus* by PERKINS (1962).

### Key to the species (in the males none of the characters is quite reliable)

1. Areolet closed. Tergites one and two coriaceous. Ovipositor sheath fig. 1B.  
In many specimens apophyses strongly developed.  
*O. armatus* Thomson (page 88).
- Areolet open. Tergites two and further polished, some slight indication of coriaceous sculpture on tergite two of males. Ovipositor sheath fig. 1A.  
Apophyses not developed.  
*O. luridator* (Grav.) (page 90).

#### *Oxytorus armatus* Thomson

*Oxytorus armatus* Thomson, 1883, Opusc. ent. 32 (Fasc. 9): 910

*Oxytorus armatus*: SCHMIEDEKNECHT, 1912, Opusc. Ichneum. 32: 2515

*Callidiotes armatus*: KERRICH, 1939, Opusc. ent. 4: 126

Characteristics of the lectotype: Labels: Pål (Pålsjö, Skåne). Lectotype label KERRICH 1938. Female. Front wing 4.3 mm. Postannellus and two following segments whitish. Flagellar segments 7–12 white. Second intercubitus weak. Apophyses strong. All coxae white brownish. First gastral segment slender, index 2.8. Spiracle at about the midlength. Gastral tergites one, two and three coriaceous. Apex of ovipositor sheath fig. 1B.

A second specimen from the Thomson collection is a male, also from Pålslöö. The second intercubitus is somewhat more developed, but the apophyses are very weak. This character is thus unreliable for separation of the species (KERRICH, 1939).

Description of the female: Front wing 4.3–6.2 mm. Palpi whitish, long. Maxillary palp reaching beyond coxae. Mandible slender, upper tooth somewhat longer. Clypeus for the greater part polished, with an apical fringe of erect setae and an anterior row of widely placed setae. Face coriaceous. Malar space about as wide as length of second flagellar segment. Frons finely coriaceous. Occipital carina complete, meeting oral carina rather far beyond mandibular base. Width of lower gena about the same as that of eye. Antenna slender, segments short, with a white band on segments 7–11. Postanellus and following two segments yellow. Epomia weak. Mesoscutum coriaceous, notauli not developed. Propodeum with all carinae strong, apophyses in most cases well developed. Petiolar area and areola with rough transverse sculpture. Front wing more often with closed areolet. Nervellus intercepted below the middle. Legs yellowish to orange. Hind coxae stout, roughly coriaceous. Fringe of hind tibia present, not long. First segment of gaster very slender, coriaceous. Postpetiole somewhat widened. Tergites two and three finely coriaceous their epipleura separated by a crease. Gaster gradually compressed towards apex. In fresh specimens gaster towards apex with rather long and relatively close setae. This character certainly offers a difference with *O. luridator*. Ovipositor more slender than in *O. luridator* (fig. 1B), apex more acute.

Description of the male: Front wing 4.9–6.5 mm. Palpi whitish to brownish. Maxillary palp long, reaching beyond coxa. Mandible long and slender, upper tooth longer and wider than lower. Clypeus for the greater part polished, with an apical fringe of widely placed setae and an anterior row of erect setae. Face coriaceous and with close punctures. Malar space narrow, less than basal width of mandible. Frons finely coriaceous. Ocelli large. Occipital carina complete, meeting oral carina far beyond mandibular base. Width of lower gena about half the width of eye. Epomia weak or absent. Mesoscutum coriaceous. Notauli absent. Propodeum with all carinae strong, apophyses more often well developed, sometimes weak or absent. Front wing more often with closed areolet. Nervellus intercepted below the middle. Coxae whitish to brown. Hind coxa stout, coriaceous. Fringe on hind tibia present, short. First gastral segment slender, postpetiole somewhat widened. Median dorsal carinae weak. Apical margin of postpetiole, tergites two, three and often base of four orange. Sculpture of tergites two and three in most cases weakly leathery, but in some specimens almost polished (KERRICH, 1939). Tergites two and three and following tergites with regular and closely placed setae (longer than in *O. luridator*).

Material examined. – Netherlands: ♂, Ede, garden, 20. VIII. 1964; 2♂, Ede, garden, 4. IX. 1964; ♂, Ede, garden, 17–18. VIII. 1965; ♂, Ede, Malaise trap, 29. VIII.–2. IX. 1970; 2♂, Ede, Malaise trap, 8. IX.–15. IX. 1970; ♀, Ede, Malaise trap, 15. IX.–22. IX. 1970 (all coll. van Rossem); ♂, Ede, 16. VIII. 1970 (coll. Zwakhals); ♂, Ede, 31. VIII. 1970 (coll. Zwakhals). Sverige: ♀, lectotype KERRICH 1938, Pålslöö, Skåne, coll. Thomson, Lund; ♂, Pålslöö, Skåne, coll. Thomson, Lund.

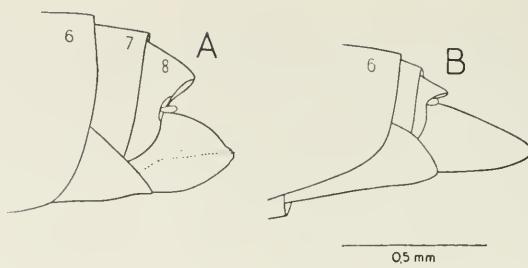


Fig. 1. Apex of ovipositor sheath. A, *Oxytorus luridator* (Grav.). B, *Oxytorus armatus* Thomson. After KERRICH (1939).

### *Oxytorus luridator* (Gravenhorst)

*Ichneumon luridator* Gravenhorst, 1820, Mém. Acad. Sci. Torino **24**: 379

*Mesoleptus ventrator* Gravenhorst, 1829, Ichneum. Europ. **2**: 105

*Mesoleptus coxator* Gravenhorst, 1829, Ichneum. Europ. **2**: 109

*Callidiotes luridator*: SCHMIEDEKNECHT, 1912, Opusc. Ichneum. **32**: 2517

*Callidiotes luridator*: KERRICH, 1939, Opusc. Ent. **4**: 126

Characteristics of the lectotype of *Ichneumon luridator*: Labels: an original tag "m"; a white tag "Pantoporthus"; a small green tag; lectotype label Townes, 1964. Male. Front wing 5.5 mm. Palpi whitish, long, reaching to front trochanter. Mandible slender, rather roughly punctured, upper tooth longer than lower. Clypeus  $3.3\times$  as wide as long, with a marginal fringe of setae and a median and anterior row of erect setae. Malar space about as wide as diameter of ocellus. Face closely punctured, somewhat convex below the antennal sockets. Frons coriaceous. Scape ovate. Antenna yellowish orange. Occipital carina complete, reaching oral carina just beyond mandibular base. Gena about as wide as length of scape. Epomia absent. Mesoscutum coriaceous, finely punctured towards scutellum. Notaulus absent. Scutellum rather convex. Propodeum with all carinae and short triangular apophyses. Petiolar area with some transverse ridges. Prepectal carina reaching hind margin of pronotum below the middle. Upper part of mesopleurum with transverse ridges and punctured, lower half coriaceous and punctured. Speculum large and polished. Front wing without areola and one bulla. Nervellus intercepted far below the middle. Discoidella strong. Hind coxa stout. Fringe present on hind tibia. First tergite with strong median dorsal carinae and no glymma. Tergites polished. Epipleura of tergites 2 and 3 separated by a crease.

Description of the female: Front wing 4.5–5.7 mm. Maxillary palp very long reaching beyond coxa. Mandibles slender, upper tooth somewhat wider and longer than lower. Clypeus about  $3.0\times$  as wide as long, with a marginal fringe of setae and a median and anterior row of erect setae. Malar space wide. Face coriaceous and closely and finely punctured. Frons coriaceous. Scape ovate, flagellum stout and with short segments, postannellus  $2.0\times$  as long as wide. Flagellar segments 8–12 (or 9–13) white. Antennal base often yellow. Occipital carina complete, reaching oral carina just beyond mandibular base. Gena about as wide as length of scape and pedicellus. Epomia present. Mesoscutum coriaceous, finely and closely punctured towards scutellum. Notaulus absent. Scutellum rather convex. Propodeum with strong carinae. Petiolar area, areola

and basal area confluent and with transverse ridges. Apophyses present but weak. Prepectal carina strong, reaching margin of pronotum about in the middle. Upper part of mesopleurum with transverse ridges, lower half with rough sculpture. Speculum large, polished. Front wing without areola, sometimes with a trace of second intercubitus. Nervellus intercepted far below the middle. Discoidella strong. Middle and hind coxae yellow, hind coxae very stout. Fringe of hind tibia short. Median dorsal and dorsolateral carinae of first tergite well developed. No glymma present. Gaster highly polished. Ovipositor slightly beyond apex of gaster, flat, broad (fig. 1A), with erect, long setae. Epipleura of tergite 2 and half of 3 separated by a crease.

Characteristics of the lectotype of *Mesoleptus ventrator*. Male. Front wing 5.0 mm. Labels: a green tag. Lectotype label of Townes, 1964.

Characteristics of the lectotype of *Mesoleptus coxator*. Female. Front wing 5.4 mm. Labels: a green tag. Lectotype label of Townes, 1964. Propodeum and gaster eaten by Dermestids.

Material examined. – ♂, lectotype of *Ichneumon luridator* (Wrocław); ♂, lectotype of *Mesoleptus ventrator* (Wrocław); ♀, lectotype of *Mesoleptus coxator* (Wrocław).

Austria: 5♂, Carinthia, Ostkarawanken, Ebriach, 580–750 m, 21–29. VII. 1964 (coll. van Rossem); ♂, Carinthia, Matschach, Gem. Feistritz, 750 m, Picea, 19. VII. 1964 (coll. van Rossem); ♀, Aschbach (Tirol), 1400 m, 25. VIII. 1975 (coll. Zwakhals).

Germany: ♂, Glonn, Oberbayern, 14. VII. 1968 (coll. Haeselbarth).

Italia: ♂, Sarntal (prov. Bolzano), 1250 m, 28. VI. 1976 (coll. Zwakhals); ♂, Funes (prov. Bolzano), S. Pietro 1200–1400 m, 20. VII.–9. VIII. 1968 (coll. van Rossem); ♂, Campi, Riva s., Garda 1200 m, D/7. VII. 1966 (coll. Haeselbarth); ♂, Riva s. Garda, 500 m, D/3. VII. 1966 (coll. Haeselbarth); ♂, Karthaus, Südtirol, 1200 m, B 14. VII. 1966 (coll. Haeselbarth); ♂, Karthaus, Südtirol, 1200 m, AB. 2. IX. 1967 (coll. Haeselbarth).

Netherlands: the following specimens were all taken in my garden at Ede (prov. Gelderland) with a Malaise trap: ♂, 13. VI. 1964, 4♂, 17–18. VIII. 1965, ♀, 13. VIII. 1966, ♀, 1. VIII. 1970, 2♂, 2. VIII. 1970, ♀, 15. IX.–22. IX. 1970, ♀, 21. IX.–8. X. 1971, 3♀, 1♂, 22. IX.–28. IX. 1972, ♀, Ede; 31. VII. 1970 (Zwakhals); ♀, Ede, Sijsselt, 7. IX. 1963 (van Rossem); ♀♂, Radio Kootwijk, 3. VIII. 1963 (van Rossem); ♂, Asperen (Zuid-Holland), 8. VII. 1973 (Zwakhals); ♂, Valkenisse (Zeeland), 28. VII. 1975 (Zwakhals); ♂, Best (Nd. Br.), 17. VII. 1975 (van Aartsen); ♂, Venlo, 19. VII. 1975 (van Aartsen); Vlodrop (Limburg), 29. VI. 1973 (van Aartsen); ♂, Kunrade (Limburg), 6. VII. 1975 (Zwakhals).

Sverige: 2♂, Stöllöt, Värmland, 30. VI.–19. VII. 1975 (coll. van Rossem).

### Genus *Hyperacmus*

*Hyperacmus* Holmgren, 1856, K. Svenska Vetensk. Akad. Handl. n. f. 1: 322

*Hyperacmus*: SCHMIEDEKNECHT, 1925, Opusc. Ichneum. 5 (Fasc. 40): 3147

*Hyperacmus*: TOWNES, 1971, The Genera of Ichneumonidae Part 4: 187

*Hyperacmus crassicornis* (Gravenhorst)

*Exochus crassicornis* Gravenhorst, 1829, Ichneum. Europ. 2 (2): 347, ♀.

*Hyperacmus crassicornis*: HOLMGREN, 1856, K. Svenska Vetensk. Akad. Handl. n. f. 1: 322, ♀.

*Hyperacmus crassicornis*: SCHMIEDEKNECHT, 1925, Opusc. Ichneum. 5 (Fasc. 40): 3148, ♀♂.

Characteristics of the holotype: Labels: none. Holotype label of the present author. Female. Front wing 5.4 mm. Palpi whitish. Clypeus flat, on one level with face. Upper face and antennal sockets strongly expanded. Malar space and lower gena as wide as length of scape, polished. Occipital carina meeting oral carina just beyond mandibular base, widely interrupted dorsally. Frons and vertex lying almost on the same horizontal level. Scape ovate, broadly truncate distally. Antenna short, segments about  $2\times$  as wide as long, orange. Head with widely placed erect or suberect setae. Pronotum polished, no epomia. Mesoscutum damaged by pin, flat, polished, with notauli. Scutellum flat, polished. Propodeum flat, with irregular sculpture. Pleural and lateral longitudinal and median longitudinal carinae present, areola and petiolar area not defined. Only upper part of prepectal carina developed. Postpectal carina absent. Front wing without areolet. Nervellus somewhat inclivous, intercepted low. Discoidella developed. Legs orange, with all femora and tibiae stout. Front femur about  $2.3\times$  as long as wide. Front and middle tibiae dorsally with close spines. Hind tibia with few spines but long hairs. All tarsi with adpressed long hairs. Gaster depressed. Spiracle of first segment at 0.43 of length, about 1.3 as long as wide, no glymma present. First tergitefuscous, with rough sculpture, all other tergites brown, polished. Ovipositor slightly beyond apex of gaster.

Characteristics of the female: Front wing 5.0–6.0 mm. Head black. Maxillary palps long. Second segment short and wide, third segment as wide as second  $2\times$  as long as broad. Last segment slender. Labial palps short. Clypeus small, flat, brown, 1.7 as wide as long. Tentorial pits lying on lateral corner of clypeus. Upper face strongly produced forward below the antennae. Face, malar space and gena with widely scattered setiferous punctures. Eyes small, almost round. Malar space and lower gena as wide as length of scape. Occiput deeply impressed, occipital carina broadly interrupted dorsally. Scape ovate, with strong setiferous punctures. Flagellum with wide and robust segments. Thorax black, depressed. Pronotum in the dorsoventral axis short, mesopleurum protruding ventrally. Pronotum polished, hind dorsal margin with setiferous punctures. Mesoscutum polished, coarse setiferous punctures along front and lateral margins. Notaulices well developed. Scutellum polished, without carina. Propodeum roughly sculptured, only longitudinal carinae present. Front wing without areolet and with two bullae. Nervellus inclivous, discoidella present. Legs light brown, robust. Coxae stout, with scattered long hairs. Femora 2.0–2.2; 2.0–2.1; 2.4–3.0 as long as wide. Front and middle tibiae dorsally with close spines. First tergite 1.1–1.3 as long as wide, roughly sculptured, black. Spiracle at 0.43–0.4.8 of length, apex of first sternite in front of spiracle. No glymma. Following tergites brown, polished. On second tergite thyridia near base. Ovipositor slightly beyond tip of gaster.

Male. I have not seen the male.

Material examined. – ♀, Holotype of *Exochus crassicornis* Gravenhorst, no labels (Wrocław). Germany (?); ♀, Judikar, Voralpen C. Tombea, 1800 m, 18. VI. 1958 (coll. Haeselbarth). Sverige: ♀, Stöllet, Värmland, 30. VI.–19. VII. 1975 (coll. van Rossem).

Genus *Entypoma*

- Entypoma* Förster, 1868, Verh. naturh. Ver. preuss. Rheinl. 25: 171  
*Entypoma*: FÖRSTER, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 81  
*Entelechia* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 110  
*Entypoma*: STROBL, 1903, Mitt. Nat. Ver. f. Steierm. 40: 114  
*Entypoma*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2177  
*Entelechia*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2179  
*Entypoma*: AUBERT, 1968, Bull. Soc. Ent. Mulh. mai-juin: 38  
*Entypoma*: TOWNES, 1971, The Genera of Ichneumonidae Part 4: 189

Remark. – The species of STROBL (1903), *Entypoma rugosissimum*, is now arranged in a new genus *Phosphorus* (page 129). The species described by AUBERT (1968) takes a somewhat doubtful position. The postannellus is in fact shorter, but the character of the median dorsal carinae is unreliable. No females were found of *E. robustum* Förster, as AUBERT placed the FÖRSTER females under *E. robustator*.

Key to the species

1. Front wing without areolet. Ovipositor upcurved, about the length of middle femur beyond apex of gaster.  
    *E. suspicuum* (Förster) (page 95).
- Front wing with areolet. Ovipositor upcurved, 0.8 of length hind tibia beyond apex of gaster ..... 2
2. Postannellus 4.0–5.0 as long as wide. No females known.  
    *E. robustum* Först. (page 93).
- Postannellus 3.0–3.6 as long as wide. Ovipositor 0.8 of length hind tibia beyond apex of gaster.  
    *E. robustator* Aubert (page 94).

*Entypoma robustum* Förster

*Entypoma robustum* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 82 (Lectotype AUBERT, 1967)

*Entypoma robustum*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2178

*Entypoma robustum*: JUSSILA, 1965, Ann. Univ. Turkuensis A, II (34): 103

*Entypoma robustum*: AUBERT, 1968, Bull. Soc. Ent. Mulh. mai-juin: 38

Remark. – ROMAN (1923) reported *Dynatosoma fuscicorne* (Meigen) (Dipt. Nematocera) to be the host of *Entypoma robustum* (Jussila, 1965).

Characteristics of the lectotype: Labels: none. Lectotype AUBERT, 1967. Male. Front wing 4.25 mm. Malar space with a groove. Index postannellus 4.0. Front wing with areolet. Median dorsal carinae to apex of first tergite. Second and third tergite with apical margins yellow.

Description of the male: Front wing 3.7–4.3 mm. Palpi, mandibles and often clypeus yellowish to brownish. Lower tooth of mandible slightly shorter. Clypeus about half circularly of shape, flat, 1.8–2.0 as wide as long. Malar space about as wide as second front tarsal segment is long, with a groove. Postannellus 4.0–5.0 as long as wide. Tylo-

ids on flagellar segments 3–6, two longitudinal carinae per segment, with a flattened area between (often difficult to see). Face medially coriaceous, with rather close hairs. Frons polished. Pronotum polished or with some weak striation, epomia present. Mesoscutum polished, notaui well defined, meeting in center. In some specimens weak longitudinal striation between apical ends of notaui. Propodeum dorsally polished, pleural areas coriaceous. Carinae strong, costula not defined. Petiolar area reaching to about the middle of propodeum. Mesopleurum highly polished. Prepectal carina to about the middle of pronotal hind margin, not reaching mesopleural margin. Front wing with areolet. Nervellus intercepted below the middle, discoidella present. Front and middle coxae yellow, hind coxae more brownish, coriaceous. Hind femur about 4.0 as long as wide, stout. First tergite fuscous, coriaceous, median dorsal carinae developed to the apical margin or not. Second tergite for the greater part duscosus and coriaceous. Following tergites polished.

Material examined. – Germany: ♂, lectotype, no locality label (coll. Förster, München); ♂, Oberbayern, Garmisch, 700 m, 11. VIII. 1928, det. E. robustum: A. ROMAN (coll. E. Bauer, München); ♂, Tremalzo, Judik. Voralpen, 1925 m, L 6. IX. 1967 (coll. Haeselbarth). Italia: ♂, Campi, Riva s. Garda, 1200 m, D 7. IX. 1967 (coll. Haeselbarth). Netherlands: 2♂, Asperen (prov. Zuid-Holland), 29. X. 1973 (coll. Zwakhals).

*Entypoma robustator* Aubert, 1968

*Entypoma robustator* Aubert, 1968, Bull. Soc. Ent. Mulh.: 38

Characteristics of the female: Length of front wing 4.3–4.5 mm. Clypeus flat, about 2.5× wider than long. Palpi yellow. Mandible with two teeth, the lower somewhat turned in, shorter. Malar space broad, about as wide as length of 4th flagellar segment. Gena broad, polished. Face polished, somewhat convex. Antenna short. Index postannellus 4.2. Vertex polished. Epomia not developed. Mesoscutum polished, notaui well developed. Mesopleurum polished. Prepectal carina about to the middle of hind margin pronotum. Propodeum with strong apical transverse carina. Median longitudinal carinae present. Front wing with large areola. Nervellus intercepted about in the middle, discoideilla present. Legs including front and middle coxae yellow. Hind coxae reddish brown. Hind femur reddish, stout, index 4.1. Gaster: first segment rather short and stout, index 1.5, coriaceous, median dorsal carinae only present at base. Base of second tergite coriaceous, hind margin orange yellow. Third tergite orange-yellow. Ovipositor upcurved, about the length of front tibia beyond apex of abdomen.

Characteristics of a paratype male: Labels: Lousberg 27. X. leg. Förster. Front wing 4.5 mm. Postannellus 3.6 as long as wide. Median dorsal carinae of first tergite not clear. Second and third tergites with apical margins yellow. Spot of yellow and apical margin yellow on fourth tergite.

Material examined. – Germany: ♀, Lousberg 25. X (paratype AUBERT); ♀, Lousberg 27. X (paratype AUBERT); ♀, no locality label; ♂, Lousberg 27. X (paratype AUBERT); ♂, no locality label. All specimens from Förster collection, München; ♂, Oberbayern, Garmisch, Kreuzeckweg, 1100–1200 m, 28. VIII. 1935 (coll. E. Bauer, München); ♂, Oberbayern, Ellmau, 1050 m, 2. IX. 1935 (coll. E. Bauer, München). Italia: ♂, St. Peter (Ahrntal), Prov. Bolzano, 1270 m, D 25. VIII. 1967 (coll. Haeselbarth).

*Entypoma suspicuum* (Förster)

*Entelechia suspicosa* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 111

*Bassus remotus* Marshall, 1896, Hymenoptera from Lapland, Entomologist's Rec. J. Var. 8: 296  
(sec. M. G. Fitton)

*Entelechia suspicosa*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2179

*Cylloceria suspicosa*: AUBERT, 1968, Bull. Soc. Linn. Lyon 37: 137

Characteristics of the holotype: Labels: Aachener Wald 8. VI. coll. Förster. Holotype label Zool. Staatss. München. Male. Front wing 3.7mm. Maxillary palpi long, reaching beyond front coxae. Antennae missing. Groove between face and gena absent. Thorax black. Front wing without areolet. Nervellus inclivous, intercepted. Legs including coxae yellow. Hind femur somewhat fuscous, 4.4 as long as wide. Glymma present. Apex of first sternite in front of the middle. Second, third and fourth tergite with apical margins yellow.

Description of the female. Front wing 4.0–4.2 mm. Head black. Eyes small, not converging. Malar space broad, somewhat less than 0.7 of width eye. Clypeus about 1.3 as wide as long. Face with rather long hairs. Base of antenna yellow. Postannellus 3.7 as long as wide. Notaulices rather strong, reaching center of mesoscutum. Front wing without areolet. Nervellus inclivous, intercepted and with discoidella. Propodeum with all longitudinal carinae and apical transverse carinae present. All coxae and most of the legs yellowish brown. Hind femur 4.0–4.5 as long as wide. Close fringe on apex of hind tibia. First tergite about 1.3 as long as wide, coriaceous. Glymma present. About 0.5 of second tergite coriaceous and fuscous. Following tergites polished. Third and fourth tergite yellow. Ovipositor upcurved, about the length of middle femur beyond apex of gaster.

The male closely resembles the female. Front wing 4.2–4.4 mm long.

Material examined. – Germany: ♂, holotype, Aachener Wald, 8. VI (coll. Förster, München); ♂, Goslar a. H., Haldenstieg, 5. VI. 1945 (coll. E. Bauer); 2♂, Goslar a. H., 30. VI. 1946 and 10. VII. 1946 (coll. E. Bauer); ♀, Blankenburg Thüringen, leg. Schmiedeknecht (all three coll. Bauer, München) ♂, Erdling, 4. VII. 1971 (coll. Haeselbarth). Netherlands: the following specimens are all from Asperen (prov. of Zuid-Holland) (coll. Zwakhals): 7♂, 22. VI., 5. VII., 18. VII. 1972; 17. VI., 29. VI., 5. VII., 12. VII. 1973; 18♀, 18. VI., 25. VI., 28. VI., 2. VII., 5. VII., 15. VII., 28. IX. 1972; 8. VI., 17. VI., 20. VI., 23. VI., 29. VI., 6. X. 1973.

Genus *Allomacrus*

*Allomacrus* Förster, 1868, Verh. naturh. Ver. preuss. Rheinl. 25: 177

*Sibriakoffia* Holmgren, 1881, Novas species insectorum cura et labore A. E. Nordenskiöldii e Nova Semlia coarctorum: 13

*Allomacrus*: THOMSON, 1888, Opusc. ent. 38 (Fasc. 12): 1281

*Allomacrus*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2167

*Allomacrus*: TOWNES, 1971, The Genera of Ichneumonidae Part 4: 190

*Allomacrus arcticus* (Holmgren)

*Sibriakoffia arctica* Holmgren, 1881, Nov. sp. ins A. E. Nord. Nov. Seml.: 13

*Allomacrus pimplarius* Thomson, 1888, Opusc. ent 38 (Fasc. 12): 1282

Characteristics of the lectotype of *Allomacrus pimplarius* Thomson: Labels: Esp. Lectotype label TOWNES, 1958. Female. Front wing 4.8 mm. Palpi, mandibles, labrum and clypeus yellow. Clypeus 3.0 as wide as long. Malar space broad, reaching width of scape. Epomia weak. Notaulices weak, reaching to center of mesonotum. Mesopleurum polished. Prepectal carina running to middle of hind margin pronotum. Propodeum coriaceous. Median longitudinal and pleural carinae defined. Front wing without areolet. First tergite 0.8 as wide as long, coriaceous, rather convex, with a glymma. The spiracle at 0.36 of length segment, dorsolateral carina strong. Second tergite weakly coriaceous, following tergites more polished. Ovipositor long, somewhat upcurved, 0.4 of length front wing.

Description of the female. Front wing 4.0–4.8 mm. Head black. Palpi, mandibles and clypeus yellowish brown. Clypeus 3.0 as wide as long. Malar space about as wide as base of mandible. Yellow spots between antennal socket and eye margin. Frons polished. Thorax black. Dorsal top of pronotum yellow. Mesoscutum polished, with short adpressed hairs. Tegulae yellow. Notaulices developed to about center of mesoscutum. Mesoscutum strongly convex. Front wing without areolet, nervulus distad of basal vein. Nervellus inclivous, intercepted, discoidella defined. Propodeum with irregular sculpture, indication of median longitudinal carinae and petiolar area defined. Legs slender, yellowish brown, including coxae. Hind femur 5.3 as long as wide. Gaster brownish black. First tergite 0.6–0.7 as wide as long, glymma present, spiracle at 0.40 of length. Median dorsal carinae indistinct. The first three tergites coriaceous. Tergites five, six and seven with yellow apical margin. Ovipositor upcurved, 0.35 of length front wing.

Description of the male. Front wing 4.7–5.4 mm. Head black with broad yellow spots along the inner orbits of eyes, only central part of face black. Palpi, clypeus and mandibles yellowish. Clypeus 2.6 as wide as long. Malar space slightly narrower than width of mandible. Face with subadpressed whitish hairs. Thorax black. Dorsal top of pronotum yellow. Mesoscutum polished, with adpressed hairs. Tegulae yellow. Notaulices developed towards centre. Mesoscutum strongly convex. Front wing without areola. Nervellus distad of basal vein. Nervellus inclivous, intercepted, discoidella present. Propodeum with irregular sculpture, median longitudinal carinae present, petiolar area defined. Legs slender, yellow, including coxae. Index hind femur 5.0. Hind tibia long and slender, almost reaching length of thorax. Gaster brownish black. First tergite 0.5–0.6 as wide as long, glymma present, spiracle at 0.46 of length. Median dorsal carinae indistinct. The first three tergites coriaceous.

Material examined.—Germany: ♀♂, Blankenburg, Thüringen, Schmiedeknecht (with his label of identification) (coll. E. Bauer, München); ♀, Oberbayern, Ellmau, 1050 m, 5. VIII. 1949 (coll. E. Bauer, München); ♀♂, Lippoldshausen, A 20. V. 1967 (coll. Haeselbarth); ♂, Oberbayern, Umg. Andechs, 16. VI. 1973 (coll. Haeselbarth). Sweden: ♀, „Esp.“ Lectotype label TOWNES, 1958 (coll. Thomson, Lund; ♀♂, Haig (?), label *pimplarius* (coll. Thomson, Lund).

Genus *Apoclima*

*Apoclima* Förster, 1868, Verh. naturh. Ver. preuss. Rheinl. 25: 171

*Apoclima*: FÖRSTER, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 97, ♂

*Apoclima*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 29): 2263-2264

*Apoclima*: TOWNES, 1971, The Genera of Ichneumonidae, Part 4: 191

*Apoclima signaticorne* Förster

*Apoclima signaticorne* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 98, ♂

*Apoclima signaticorne*: STROBL, 1903, Mitt. Nat. Ver. f. Steierm. 40: 138, ♂

*Apoclima signaticorne*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 29): 2264, ♀♂

Characteristics of the holotype: Labels: Aachen. Holotype label of the present author. Male. Front wing 3.2 mm. Clypeus rather convex. Anterior tentorial pits open. Face below the antennae somewhat convex. Malar space wide. Greater part of antennae missing. Pedicel large. Postannellus 3.7 as long as wide. Third flagellar segment narrowed, proximally with a small tooth and bristle. Fourth flagellar segment proximally somewhat narrowed. Occiput concave, occipital carina medially widely interrupted. Epomia weak. Mesoscutum mostly polished, somewhat coriaceous in the center. Notauli long. Propodeum with carinae rather obsolete, areola not defined, costula not present. Front wing without areolet. Legs including coxae yellow. First tergite wide and short. Apex of sternite in front of the middle. Spiracle in front of the middle. Glymma present. Median dorsal carinae not reaching spiracle. Second tergite proximally coriaceous, apical part polished.

Description of the female: Labels: Wiesen, Spessart, 22. VII. 1961, leg. Haeselbarth. Front wing 3.4 mm. Head black, palpi whitish. Maxillary palp long, reaching to base of trochanter, apical segment long and slender. Mandibles closed, but in the male specimen both teeth are sharp and about of the same length. Lower tooth turned inward. Clypeus polished, convex, 3.25 as wide as long, proximally with a row of widely placed setae. Anterior tentorial pits open. Face coriaceous, somewhat convex above clypeus, with suberect hairs. Malar space about as wide as half the diameter of eye. Occipital carina broadly interrupted dorsally, meeting oral carina somewhat beyond mandibular base. Postocciput rather concave. Gena broad, polished with suberect setae towards genal carina. Scape ovate, apical truncation rather strong. Pedicellus large. Flagellum slender. Postannellus 4.0 as long as wide. Frons weakly coriaceous. Thorax black. Mesoscutum coriaceous. Notauli strong on front margin, obsolescent towards center. Scutellum rather convex, polished, with carina to about half its length. Propodeum coriaceous, with pleural and median longitudinal carinae present. Petiolar area defined. Prepectal carina not reaching to pronotal margin. Mesopleurum somewhat coriaceous to polished. Postpectal carina not present. Front wing without areolet. Portion of cubitus between intercubitus and second recurrent vein 0.36 as long as second recurrent vein. Nervellus vertical, intercepted below the middle. Front part of discoidella defined. Legs including coxae light brown. Fringe on hind tibia little developed. First tergite 1.4 as long as wide, coriaceous. Glymma weakly defined. Median dorsal carinae short, not reaching spiracle. Hind end of first sternite in front of spiracle. Spiracle at 0.32 of length. Basal half of second tergite coriaceous, apically polished and with a light

brown band. Epipleurum of second tergite separated by a crease. Ovipositor about the length of hind tibia, apex somewhat upcurved. No dorsal notch present, but tip acuminate.

Characteristics of the male. Front wing 3.5 mm. Labels: Wiesen, Spessart, 22.VII.1961, leg. Haeselbarth. I refrain from giving a full description as the characters of the male agree with those of the female.

Apical half of third flagellar segment narrowed, fourth segment proximally narrowed. Weak tooth and bristle present.

Material examined. — Germany: ♂, holotype, Aachen (coll. Förster, München); ♀, Wiesen, Spessart, 22.VII.1961; ♂, Wiesen, Spessart, 22.VII.1961 (both coll. Haeselbarth).

### Genus *Cylloceria*

*Cylloceria* Schiødte, 1838, Rev. Zool. Soc. Cuvierienne 1: 140

Lampronota: THOMSON, 1877, Opusc. ent. 27 (Fasc. 8): 732-777

*Lampronota*: THOMSON, 1888, Opusc. ent. 37 (Fasc. 12): 1202-1265.

Lampronota: STROBL, 1901, Mitt. Nat. Ver. f. Steierm. 38: 36-38

*Lampronota*: SCHMIEDEKNECHT, 1907, Opusc. Ichneum. 3 (Fasc. 17): 1332–1335

*Cyllocera*: VIERECK, 1914, Type Species of the Genera of Ichneumon Flies, U.S. Nat. Mus. Bull. 83: 40.

*Cylloceria*: MUSEBECK, Krombein & Townes, 1951, Hymenoptera of America North of Mexico, Agric. Monogr. 2: 342

*Cylloceria*: JUSSILA, 1965, Ann. Univ. Turkuensis A, II (34): 101–102

*Cylloceria*: TOWNES, 1971, The Genera of Ichneumonidae Part 4: 192.

Remark. — In the genus *Cylloceria* two Fabrician names have been in u-

*Ictor Fabricius*, 1793 and *Ichneumon nunciator* Fabricius, 1793. Through kindness of Dr. Børge Petersen in Copenhagen I had the opportunity to study the type material of these two species. The only two type specimens of *I. accusator* proved to be a *Lissonota* species. There are no less than 8 specimens under *I. nunciator*. Three specimens were sent to me and they turned out to be two Braconidae and one *Glypta* species (Banchinae). According to PETERSEN the other specimens present do not come into consideration. Both FABRICIAN names have to be omitted from the Oxytorinae.

### Key to the species

### Females

(female of *C. suerinensis* unknown)

1. Frons with rough sculpture. Nervellus intercepted below the middle, upper part strongly inclivous, lower part reclivous. Dorsolateral carina of tergite one developed to spiracle. First tibia rather inflated, 5.4 as long as wide. Second to fourth tergite orange, polished. Proximal half of second tergite with some rough longitudinal striation on lateral parts. Ovipositor about the length of hind tibia.

*C. langei* (Brauns) (page 101).

- Frons polished, not this combination of characters . . . . . 2

2. Head and mesoscutum polished, without punctures. Mandibles and clypeus yellow. Hind femora fuscous. Nervellus strongly inclivous, intercepted deeply below the middle (cf. STROBL). *C. alpigena* (Strobl) (page 100).
- Mesoscutum with punctures. Clypeus not yellow . . . . . 3
3. All coxae, front and middle femora and tibiae orange. Hind tibiae and tarsi fuscous. *C. caligata* (Grav.) (page 100).
- All coxae fuscous . . . . . 4
4. Lateral longitudinal and median longitudinal carinae weakly developed. Third and fourth tergite in proximal half with longitudinal striation. Part of upper valve of ovipositor between tip and notch about the length of third tarsal segment of hind leg (Fig. 2). *C. striolata* (Hellén) (page 103).
- Lateral longitudinal and median longitudinal carinae strongly developed . . . 5
5. Ovipositor longer than gaster, ratio length gaster and ovipositor 5.5–6.5. *C. melancholica* f. *altior* (Heinr.) (page 107).
6. Proximal part of tergite two coriaceous, apical part polished. All following tergites polished. Gaster from apical half of tergite two orange. *C. fusciventris* (Hellén) (page 104).
- Tergites from tergite two and further coriaceous. Towards tergite four or five more polished. Tergites fuscous in *C. melancholica* f. *melancholica* and more orange in *C. melancholica* f. *marginator*. *C. melancholica* (Grav.) (page 105).

### Males

Remark. I have not seen the male of *C. langei*. Males of *C. alpigena* and *C. melancholica* f. *altior* unknown.

1. Frons with rough sculpture. *C. langei* (Brauns) (page 101).
- Frons polished . . . . . 2
2. All coxae, front and middle femora and tibiae orange. *C. caligata* (Grav.) (page 100).
- All coxae fuscous . . . . . 3
3. Flagellar segments four and five weakly notched. Third and following tergites polished. *C. suerinensis* (Brauns) (page 103).
- Flagellar segments three and four deeply notched . . . . . 4

4. Lateral longitudinal and median longitudinal carinae weakly developed. Third tergite proximally with weak longitudinal striation, towards apex more polished.

*C. striolata* (Hellén) (page 103).

- Lateral longitudinal and median carinae strong. Third tergite without or with weak striation . . . . .

5

5. Tergite two coriaceous with some longitudinal striation. Tergite three proximally with some coriaceous sculpture, apical part polished. Following tergites polished. Gaster from apical half of tergite two orange.

*C. fusciventris* (Hellén) (page 104).

- Gaster from tergite two and further coriaceous, more polished beyond tergite four. Gaster fuscous in *C. melanocholica* f. *melancholica*, more orange brown in *C. melanocholica* f. *marginator*.

*C. melanocholica* (Grav.) (page 105).

### *Cylloceria alpigena* (Strobl)

*Lampronota alpigena* STROBL, 1901, Mitt. Nat. Ver. f. Steierm. 38: 37, 2♀

Characteristics of the lectotype: Labels: Styriae alp, Strobl (an original label). Lectotype label of the present author. Female. Front wing 4.7 mm. Palpi brown. Mandibles yellow, teeth brown. Lower tooth slightly shorter and narrower. Clypeus flat, brownish, about 3× as wide as long. Face polished, laterally with subadpressed hairs. Frons polished, towards eye margin with short adpressed hairs. Gena polished, with subadpressed hairs. Antenna rather short, about 0.8 of length front wing. Nervellus inclivous, intercepted low, discoidella present. Pronotum finely coriaceous, epomia weak. Mesoscutum polished, notauli present, but weak. Scutellum polished, rather convex. Propodeum coriaceous, with median longitudinal carinae well defined. Mesopleurum polished, prepectal carina present, reaching to about the middle of pronotal hind margin. Legs, including coxae brown. Gaster with first two tergites fuscous and coriaceous, following tergites more polished and brown, narrow hind margin yellow. Spiracle of first segment at 0.5 of length. Dorsolateral carina strong, median dorsal carina not defined, some indication of longitudinal sculpture present. Ovipositor about 0.46 of length front wing.

Material examined. – Austria: ♀, lectotype, Styriae alp, Strobl (Hochalpenwiesen des Natterriegel bei Admont 26.VII); ♀, paralectotype, Styriae alp, Strobl (both CDCS).

### *Cylloceria caligata* (Gravenhorst)

*Phytodietus caligatus* Gravenhorst, 1829, Ichneum. Europ. 2 (2): 936, ♀♂

*Phytodietus niger* Gravenhorst, 1829, Ichneum. Europ. 2 (2): 935

*Cylloceria caligata*: SCHIØDTE, 1839, Mag. Zool (2) 1: 25

*Cylloceria nigra*: SCHIØDTE, 1839, Mag. Zool. (2) 1: 23, ♂

*Lampronota caligata*: SCHMIEDEKNECHT, 1907, Opusc. Ichneum. 3 (Fasc. 17): 1334

*Cylloceria nunciator*: JUSSILA, 1965, Ann. Univ. Turk. A, II, 34: 102

*Lampronota crenicornis*: FITTON, 1976, Bull. Br. Mus. nat. Hist. (Ent.) 32 (8): 323

Characteristics of the female: Front wing 5.7–8.0 mm. Palpi brown to whitish. Mandibles reddish brown, upper tooth 3× as wide as lower. Clypeus below margin impressed. Face medially closely punctured to closely sculptured. Frons polished, vertex polished and punctured, with long subadpressed hairs. Gena polished, with short adpressed hairs. Pronotum with wrinkled sculpture to almost polished, epomia present. Mesoscutum with median lobe strongly convex, notaui deeply impressed. Propodeum with all longitudinal carinae strongly defined, petiolar area present but small. Sculpture of propodeum rough to transversely striated in lateral areas. Mesopleurum polished, with fine punctures and subadpressed hairs. Prepectal carina to about the middle of pronotal margin. Nervellus intercepted somewhat above the middle or in the middle. Legs including all coxae orange, except for fuscous hind tibia and tarsi. First tergite roughly sculptured, spiracles at about 0.36 of length. Tergites two and three coriaceous, apical tergites more polished. Ovipositor about the length of gaster without first segment.

Most of the male characters agree with those of the female. A full description is not given, only some conspicuous features are enumerated.

Characteristics of the male: Front wing 5.8–7.0 mm. Frons polished, with some irregular sculpture. Vertex somewhat impressed beyond hind ocelli. Gena broad, polished, with rather long hairs. Third flagellar segment apically and base of fourth with a deep circular notch. Prepectal carina reaching proximal side of subtegular ridge. All legs, including coxae orange, except for more brownish hind tibia and tarsi.

Material examined. – Belgium: ♀, Kalmhoutse heide, 17. VIII. 1969, coll. Zwakhals. Denmark: ♀♂, Nordsjol, ex coll. Schiødte, Zool. Mus. Copenhagen; ♂, *Cylloceria nigra* Schiødte, ex coll. Schiødte, Zool. Mus. Copenhagen, 27. VIII. 1958 (leg. David Townes) Townes. Eire: ♂, Birr, Co. Kerry, 21. VII. 1943, Townes. Finland: ♂, Vaasa, 17. VIII. 1953, ♀, 25. VIII. 1955, *Cylloceria nunciator*: Jussila, coll. R. Jussila. Germany: 2♀, Glonn (Oberbayern), 14. VII. 1968, coll. Haeselbarth; ♀, Haag-Amper (Oberbayern), 27. VIII. 1947 (leg. Heinrich) Townes; ♂, Hamburg, Billewiesen, b. Trittau, VIII. 1945, Angelica (leg. Heinrich) Townes. Netherlands: ♀♂, Ede, 5. VIII. 1970; ♂, Ede, 12. VIII. 1970; ♀, Ede, 2. IX. 1970; ♂, Winterswijk, 20. VIII. 1974 (leg. van Aartsen); ♂, Overveen (N. Holl.), 15. VIII. 1974; ♂, Wassenaar, Zuydwijck, 18. VIII. 1962 (leg. Wagenaar); ♀, Udenhout (N. Br.), 1. VIII. 1969; ♀, Castelre (N. Br.), 29. VII. 1969 (all coll. Zwakhals); ♂, 2♀, Schayk (N. Br.), 29. VII. 1941 (leg. Teunissen) Townes; ♀♂, Oploo (N. Br.), 23. VII., 16. IX. 1947 (leg. Teunissen) Townes; ♀, Oisterwijk (N. Br.), 3. IX. 1941, Angelica (leg. Teunissen) Townes. Sverige: 50 specimens, Skåne, VII., VIII. 1969, Malaise trap (leg. Bo Svensson) Townes; ♂, Växjö, 20. VIII. 1958, 150 m (leg. David Townes) Townes; ♂, Lidingö (Stockholm), 27. VII. 1937, Townes. Switzerland: 3♂, Mülenen, 800 m, 19. VII. 1967, ♂, Mülenen, 800 m, 21. VII. 1967, coll. Zwakhals.

### *Cylloceria langei* (Brauns)

*Lampronota langei* Brauns, 1905, Z. syst. Hymenopt. & Dipterol. 5: 133, ♀♂

*Lampronota langei*: SCHMIEDEKNECHT, 1907, Opusc. Ichneum. 3 (Fasc. 17): 1335

Characteristics of a female: Labels: Grejsdal, 18. VII. 1916; *Lampronota langei* Brauns; Zool. Mus. Berlin (not a type specimen). Front wing 8.0 mm. Palpi brown. Base of mandible 2× as wide as apex, closely punctured. Upper tooth wider than lower,

polished. Mandible proximally with long suberect hairs. Malar space about as wide as mandibular base. Upper margin of clypeus convex, with erect long hairs, distal part rather strongly impressed, margin truncate. Face with close, subadpressed hairs, about 2.7 as wide as long (measured from clypeal base). Frons roughly sculptured. Vertex wide behind eye. Gena polished. Occipital carina closed. Postannellus 8.6 as long as wide, very slender. Following three segments also slender. Epomia very weak. Mesoscutum strongly convex. Notauli strong, meeting in center. Scutellum convex, lateral carina only in front corner. Propodeum roughly sculptured. Small petiolar area polished. Pleural, lateral longitudinal and median longitudinal carinae strong. Mesopleurum for the greater part polished, area around subtegular ridge with some rough longitudinal ridges. Prepectal carina defined to about the middle of pronotal margin, not reaching margin. Entire thorax with close, suberect hairs. Wings rather smoky. Arolet not present. Nervellus intercepted below the middle, upper part strongly inclivous, lower part reclivous. Discoidella strong. Front tibia rather inflated. Claws of all legs conspicuously strong, with slender long tips. Fringe of hind tibia short. First tergite roughly sculptured, median dorsal carinae strong in the center. Dorsolateral carina developed to spiracle. Ventrolateral carina rather well defined. Spiracle at about 0.3 of length. Hind margin orange. End of first sternite in 0.15 part of segment. Second to fourth tergite orange, polished. Second tergite with some longitudinal striation in proximal half. Ovipositor about the length of hind tibia beyond apex of gaster, somewhat upcurved, notch weak.

Characteristics of a male: Labels: Thüringen, Blankenburg, O. Schmiedeknecht S., 24515, *Lampronota marginator*, ex Berlin 1963. *Cyollocceria langei* (Brauns) det. van Rossem (coll. H. Townes, Ann Arbor). Front wing 6.2 mm. Palpi brown. Base of mandible 2× as wide as apex. Malar space as wide as mandibular base, coriaceous. Upper margin of clypeus convex with adpressed, long hairs. Distal part of clypeus rather impressed, margin truncate. Face coriaceous, with subadpressed hairs. Frons roughly sculptured. Vertex wide behind eye, medially impressed. Postannellus slender, 7.0 as long as wide. Mesoscutum with strong notauli, medially coriaceous, laterally more polished. Propodeum roughly sculptured, with all longitudinal carinae strong. Petiolar area small, half circularly in shape. Mesopleurum coriaceous. Prepectal carina not reaching the pronotal margin. Arolet not present. Discoidella strong. All coxae and trochanters fuscous. Femora, tibiae and tarsi orange to brownish. Claws of all legs conspicuous. First tergite with rough sculpture. Median dorsal carinae strong. Dorsolateral carina developed to spiracle. Spiracles robust, at 0.34 of length. Second to fourth tergite orange, polished.

Material examined: Germany (?): ♀, Grejsdal (?), 18. VII. 1916 (Zool. Mus. Berlin) DDR; ♂, Thüringen, Blankenburg (leg. O. Schmiedeknecht) (coll. H. Townes, Ann Arbor).

*Cylloceria suerinensis* (Brauns)

*Lampronota suerinensis* Brauns, 1905, Z. syst. Hymenopt. Dipteral. 5: 133, ♂

*Lampronota suerinensis*: SCHMIEDEKNECHT, 1907, Opusc. Ichneum. 3 (Fasc. 17): 1334

Characteristics of the holotype: Labels: Schwerin; a blue rimmed label *Lampronota suerinensis* Brauns, Zool. Mus. Berlin. Male. Front wing 5.2 mm. Head missing. Pronotum polished, upper margin punctured, epomia weak. Mesoscutum polished, with robust punctures on median lobe and subadpressed hairs. Notauli strong, meeting in center. Scutellum polished, without lateral carina. Propodeum with all longitudinal carinae strongly developed. Mesopleurum polished, with widely placed punctures in proximal part. Prepectal carina running up to subtegular ridge, not reaching margin. Wings weakly smoky. No areolet present. Nervellus intercepted below the middle, discoidella strong. Legs sturdily built. Front femur 2.5 as long as wide, front tibia inflated. Middle femur 2.6 as long as wide. Hind femur 3.0 as long as wide, hind tibia inflated in apical part. All tarsi robust, especially the hind tarsi. Claws long and apically very slender. First tergite with rough sculpture, spiracles at 0.4 of length. Median dorsal, dorso-lateral and ventrolateral carinae well defined. All following tergites polished, about 1.8 as wide as long.

Material examined. – DDR: ♂, Schwerin, Zool. Mus. Berlin (holotype).

*Cylloceria striolata* (Hellén)

*Lampronota melancholica* (Grav.) var. *striolata* Hellén, 1915, Acta Soc. F. Fl. Fenn. 40, N6: 48,  
♀♂

*Lampronota striolata* Hellén, 1937, Notul. ent. 17: 12

*Cylloceria striolata*: JUSSILA, 1965, Ann. Univ. Turkuensis A, II (34): 101

Characteristics of a female: Labels: Suomi Inl Utsjoki, 10. VII. 1961, 3596, coll. R. Jussila. Front wing 7.6 mm. Palpi brown. Proximal half of mandibles widely punctured, teeth not clearly separated. Clypeus flat, fuscous, 2.0 as wide as long. Face 2.0 as wide as long, towards malar space polished, medial and upper part punctured. Frons impressed. Vertex polished, finely punctured. Occipital carina closed. Gena polished, as wide as eye. Antenna slender, postannellus 8.0 as long as wide, extremely long. Pronotum somewhat striately sculptured, epomia not defined. Mesoscutum polished, widely and finely punctured. Notauli defined to about the center. Scutellum somewhat convex, lateral carina developed to about the middle. Mesopleurum highly polished, prepectal carina present to about the middle of pronotal margin, not reaching margin. Propodeum closely and finely sculptured, carinae not developed. Front wing without areolet. Nervellus intercepted slightly below the middle. All coxae black, polished. Femora, tibiae and tarsi brownish reddish. First tergite without carinae, closely somewhat longitudinally sculptured, spiracle at 0.35 of length. Apex of first sternite at about 0.28 of length. Second tergite with fine sculpture, somewhat longitudinally proximally, towards apex more polished. Third tergite coriaceous proximally, polished towards apex. Following tergites polished, with very fine sculpture. Ovipositor long, about twice the length of hind tibia beyond apex of gaster. Fig. 2.



Fig. 2. Ovipositor tip of *Cylloceria striolata* (Hellén). After JUSSILA (1965).

Characteristics of a male: Labels: Suomi Inl Utsjoki, 14. VII. 1961, coll. R. Jussila, 3772, det. R. Jussila. Front wing 8.1 mm. Greater part of mandible with strong punctures and long hairs, upper tooth wider. Clypeus flat. Vertex broad. Gena polished, widely punctured. Postannellus slender, 8.0 as long as wide. Apex of third flagellar segment and base of fourth with deep semicircular notch. Pronotum with wrinkled sculpture, epomia not defined. Mesoscutum polished, widely punctured, notauli strong. Propodeum closely sculptured, with pleural and weak lateral longitudinal and median longitudinal carinae. Mesopleurum polished, widely and finely punctured, some longitudinal striation below subtegular ridge. Prepectal carina to about the middle of pronotal margin. Nervellus intercepted slightly below the middle. Coxae polished, with close subadpressed hairs, especially the middle. First tergite closely and roughly sculptured, spiracles at 0.36 of length. Median dorsal carinae only proximally indicated. Third and fourth tergites proximally with some longitudinal sculpture.

Material examined. — Finland: ♀, Suomi, Inari Lapland, Utsjoki, 10. VII. 1961, 3596; ♂, ib. 14. VII. 1961, 3772, coll. R. Jussila.

### *Cylloceria fusciventris* (Hellén)

*Lampronota fusciventris* Hellén, 1940, *Enumeratio insectorum Fenniae II*, Hymenoptera 2, Terebrantia. Helsinki

*Cylloceria fusciventris*: JUSSILA, 1965, Ann. Univ. Turkuensis A, II (34): 102

Characteristics of a male: Labels: Hoi: Eidfjord 880 m, Norge, 21. VII. 1967, coll. Jussila; det. Jussila. Front wing 6.5 mm. Head black. Palpi yellowish brown. Clypeus flat, 2.2 as wide as long. Face about 2.1 as wide as long. Ocelli somewhat elevated above level of vertex. Gena polished, with rather long subadpressed hairs. Postannellus slender, 7.0 as long as wide. Apex of third flagellar segment and base of fourth with a deep, semicircular notch. Pronotum dorsally with irregular sculpture. Mesoscutum polished, with strongly developed notauli, meeting in center. Scutellum without lateral carina. Propodeum with all longitudinal carinae defined, lateral areas with transverse striation. Most of the mesopleurum polished, prepectal carina to about the middle of pronotal margin. Nervellus intercepted slightly above the middle. All coxae fuscous. First tergite fuscous, roughly sculptured, median dorsal carinae developed to about 0.6 of length. Spiracles at 0.3 of length. Second tergite reddish, coriaceous and with longitudinal striation. Following tergites reddish to orange, for the greater part polished.

Characteristics of a female: Labels: Suomi, Lappland, Enontekiö, 7. VII. 1974, coll. C. J. Zwakhals. Front wing 6.2 mm. Palpi brown. Upper tooth of mandible wider than lower. Clypeus about 2.2 as wide as long, somewhat impressed. Face and malar space coriaceous to slightly more rough sculpture. Vertex and gena polished with rather closely implanted, subadpressed hairs. Proximal flagellar segments slender, postannellus 9.0 as long as wide. Pronotum with irregular sculpture, epomia present. Mesoscutum with strong notauli, meeting in center and with subadpressed hairs. Propodeum with all longitudinal carinae, roughly sculptured. Mesopleurum polished, prepectal carina to about the middle of pronotal margin. Nervellus intercepted somewhat above the middle. Hind coxae ventrally with shallow punctures. First tergite, except for the medial apical margin, with regular rough sculpture, spiracles at 0.4 of length, fuscous. Second tergite proximally coriaceous, apical half orange brown. Following tergites orange brown, polished. Ovipositor about the length of gaster beyond apex of abdomen.

Material examined. – Finland: ♀, Suomi, Lappland, Enontekiö, 7. VII. 1974, coll. Zwakhals. Norge: ♂, Hoi: Eidfjord, 880 m, 21. VII. 1967, coll. Jussila.

*Cylloceria melancholica* (Gravenhorst)

*Ichneumon melancholicus* Gravenhorst, 1820, Monographia ichneumonum Pedemontanae regionis. Mém. Acad. Sci. Torino 24: 372, ♂

*Cylloceria nigra*: SCHIØDTE, 1839, Mag. Zool. (2) 1: 23, ♀ (a male specimen belongs to *C. caligata*)

*Lampronota melancholica*: SCHMIEDEKNECHT, 1907, Opusc. Ichneum. 3 (Fasc. 17): 1333

*Cylloceria melancholica*: JUSSILA, 1965, Ann. Univ. Turk. A, II, 34: 101

*Lampronota fracticornis*: FITTON, 1976, Bull. Br. Mus. nat. Hist. (Ent.) 32 (8): 334, ♀

Remark. – From my investigations of two SCHIØDTE specimens of *Cylloceria marginator* Schiødte I infer the conclusion that these represent a form of *C. melancholica*, perhaps a geographical subspecies.

Characteristics of the lectotype of *Ichneumon melancholicus*: Labels: a green tag (original?) with hyroglyph. Lectotype label of TOWNES 1964. Male. Front wing 7.0 mm.

Head black. Mandibles and clypeus reddish brown. Upper margin of clypeus convex, medial and apical part somewhat impressed and polished. Antennal scrobes large, rather impressed, polished, reaching upto median ocellus. Vertex somewhat impressed beyond ocelli. Occipital carina weakly arched upward. Antenna of body length, post-annellus 6.5 as long as wide. Apex of third flagellar segment with a notch, another in base of fourth. Mesoscutum with strong notauli, with close and rather rough punctures. Propodeum roughly sculptured, with median dorsal and pleural carinae present. Petiolar area indicated. Entire thorax with close, rather long hairs. Front wing without areolet. Nervellus intercepted in the middle. All coxae fuscous. Legs yellowish orange. Hind tibia orange. First tergite 1.7 as long as wide, with rugulose sculpture, basally with very weak indication of median dorsal carinae. Following tergites coriaceous. Gaster fuscous.

Description of the female: Front wing 6.7–7.4 mm. Palpi brown. Mandibles brown, upper tooth slightly wider. Base of mandible slightly wider than malar space, apex 0.5 the width of base. Lower margin of mandible flange like. Clypeus 2.6 as wide as long, basal 0.3 sculptured, remaining part polished and somewhat impressed. Face roughly sculptured. Frons impressed, for the most polished, taken up by antennal scrobes. Post-annellus 7.6–9.5 as long as wide. Occipital carina closed. Gena as wide as eye, polished. Thorax black. Epomia present. Pronotum with a regular pattern of somewhat circularly arranged wrinkles. Median lobe of mesoscutum strongly convex, notauli developed as deep sutures. Propodeum with rough sculpture, median longitudinal, lateral longitudinal, pleural carinae and petiolar area defined. Front wing without areolet. Nervellus intercepted somewhat above the middle. Discoidella strong. Prepectal carina to about the middle of pronotal hind margin. Immediately beyond prepectal carina a zone of longitudinal wrinkles and punctures. Coxae brownish to black. Hind coxa coriaceous. Legs orange, hind tibia brownish. First tergite fuscous, 1.5 as long as wide, with close, rough sculpture, no traces of carinae. Following tergites fuscous, with coriaceous sculpture. Hind margins of tergites two to five brownish. Ovipositor about the length of gaster.

Description of the male: Front wing 5.4–7.5 mm. Apex of third flagellar segment with a notch, another in base of fourth. Further characters conform the female. Hind tibia in some specimens orange.

Material examined. – ♂, the Gravenhorst lectotype, no labels (TOWNES, 1964) Wrocław. Austria: ♂, Scheffau, Tirol, 800 m, 25. VII. 1958 (leg. David Townes) Townes; ♀, Steiermark, 1500 m, 1. VIII. 1950, Kalbling (leg. Heinrich) Townes; ♂, Steierm. 1400 m, 13. VIII. 1950, Kalbling (leg. Heinrich) Townes; ♂, Steierm. Admont, Kaiser- au, 1200 m, 30. VI. 1950 (leg. Heinrich) Townes; 3♀, Allgäu, 1100 m, Osterach Tal, 1–15. VII. 1949 (leg. Heinrich) Townes. Czechoslovakia: ♀, Starkoc, Boh. VII. 1961 (leg. Maček) Townes. DDR: ♂, Schwerin VII (ex Berlin) Townes; ♀♂, Eberswalde, 5–6. VII. 1964 (leg. Townes) Townes. Denmark: ♀, *Cylloceria nigra*: Schiødte, ex coll. Schiødte; København. Eire: ♂, Beirne, Co. Kerry, 5. VIII. 1940, Townes. Finland: 2♂, Helsinki, 14. VIII. 1968 (leg. H. & M. Townes) Townes. France: 3♂, Col du Lou- tarat, 2000 m (H. Alpes), 30. VII. 1971; ♂, Briancon, 1400 m (H. Alpes), 1. VIII. 1971 (coll. Zwakhals). Germany: ♂, München, Forstenrieder Park, 10. VIII. 1958 (coll. Haeselbarth); ♀, Hann. Münden, B. 11. VII. 1967 (coll. Haeselbarth); ♂, Lippoldshausen, B/20. V. 1967 (coll. Haeselbarth); ♀, Wiershausen, 18. VI. 1966 (coll. Haeselbarth); ♂, Schliersee, Byn 750 m, 29. VII. 1958 (leg. David Townes) Townes; 2♂, 2♀ Hamburg, Hahnheide b. Trittau, V., 5. VII. 1946 (leg. Heinrich) Townes. Italia: ♂, Sarntal (Bol- zano), 1250 m, 22. VI. 1976 (coll. Zwakhals); 2♂, St. Peter, Ahrntal, Südtirol, 2200 m, K/26. VIII. 1967 (coll. Haeselbarth); 39 specimens, Pizzighettone, V. VI. VII. 1973 (leg. Franco Frilli) Townes; ♀, Pizzighettone, 23. IX. 1973 (leg. Franco Frilli) Townes; 2♂, Naturns, 500–1000 m, 13.–15. VII. 1958 (leg. David Townes) coll. Townes; 7♂, Fran- zensfeste, 1000 m, 6–8. VII. 1958 (leg. David Townes) coll. Townes. Netherlands: 4♀, 4♂, Ede, VII, VIII. 1970 (coll. Zwakhals); ♂, Den Dolder (Utr.), 12. V. 1946 (leg. Ver- hoeff) Townes; 8♂, Asperen (Z. H.), VII. 1972 (coll. Zwakhals); ♂, Venlo, 18. VII. 1975 (leg. van Aartsen) (coll. Zwakhals); 4♂, 2♀, Venlo, V, VI, VII, VIII. 1942 (leg. Teunissen) coll. Townes; ♂, Schayk (N. Br.), 22. VII. 1943 (leg. Teunissen) Townes. Sverige: 38 specimens, Skåne, VII–VIII. 1969, Malaise trap (leg. Bo Svensson) coll. Townes; 9 specimens, Ljungby, 17. VIII. 1958, 150 m (leg. David Townes) coll. Townes; 3♀, Messaure, 13. VII.–18. VIII. 1972 (leg. K. Müller) Townes; ♂, Gammalsäter fjället, 770 m, Dalarna, Transtrand, 1976 (coll. van Rossem); ♂♀, Torne Tr. (Lapland) (leg. Malaise) (det. Roman) Townes. UdSSR: ♂, Moscow, 14. VI. 1964 (leg. H. Townes) coll. Townes.

*Cylloceria melancholica* f. *marginator* Schiødte

*Cylloceria marginator* Schiødte, 1839, Mag. Zool. (2) 1: 24, ♀♂

Characteristics of a female from Schiødte's collection: Labels: ♀, Nordsjol; Danmark ex coll. Schiødte; Zool Mus. København. Front wing 7.4 mm. Postannellus 7.4 as long as wide. Occipital carina slightly dipped dorsally. Epomia present. Pronotum with a regular pattern of somewhat circularly arranged ridges. Mesoscutum with close punctures, deep and long notauli. Medial lobe strongly convex. Propodeum with rough sculpture, median longitudinal, lateral longitudinal, pleural carinae and petiolar area present. Front wing without areolet. Nervellus intercepted somewhat above the middle. Discoidella strong. Prepectal carina to about the middle of pronotal hind ridge. Mesopleu-

rum with a zone of strong punctures beyond prepectal carina, reaching to about the middle. Coxae brown. Hind coxa coriaceous. Legs orange, hind tibia brownish. First tergite black, 1.5 as long as wide, with close, rough sculpture, no trace of carinae. Following tergites brown, with fine coriaceous sculpture. Hind margin of tergites two to five yellowish. Ovipositor rather curled, but about as long as gaster.

Characteristics of a male specimen from Schiødte's collection. Labels: ♂, Nordsjol; Danmark ex coll. Schiødte; Zool. Mus. København. Front wing 7.0 mm. Apex of third flagellar segment with a notch, another in base of fourth. Further characteristics conform the female. Hind tibia orange. Gaster brownish. Hind margins of tergites not yellowish.

Material examined. – Denmark: ♀♂, Nordsjol (coll. Schiødte) København; 2♀, 2♂, Danmark, ex coll. Schiødte, Townes. Eire: ♀, Beirne, Co. Wicklow, 22.VIII. 1940 Townes. France: 2♀, Briancon (H. Alpes), 1. VIII. 1971 (coll. Zwakhals). Germany: ♂, Glonn (Oberbayern), Heidelbeere, 27. VI. 1971 (coll. Haeselbarth); ♀, Hamburg (Rissen), 14. VII. 1945 (leg. Heinrich) Townes. Sverige: 2♀, 2♂, Forsakar, Skåne, 7–8. VI. 1964 (leg. M. Townes & C. West) Townes; ♂, Ljungby, 17. VIII. 1958, 150 m (leg. David Townes) Townes. No locality: ♀, coll. H. Rhd Townes; ♀, leg. Heinrich Townes.

*Cylloceria melancholica* f. *altior* (Heinrich)

*Chalinoceras altior* Heinrich, 1953, Bonn. Zool. Beitr. 4 (1–2): 151–152

Characteristics of the lectotype. Labels: Stm., Kreuzkogel, Südhang 1800 m, 2. VIII. 1950, leg. G. Heinrich, coll. H. Townes, Type nr 54. Female. Front wing 6.9 mm. The specimen agrees with *C. melancholica*, except for the longer ovipositor. The ratio of the ovipositor with the length of gaster is 6.5:5.5 (5.5:5.5 in *C. melancholica* f. *melancholica*). The other characters given by HEINRICH are not tenable when compared with a series of *C. melancholica*.

Material examined. – Austria: ♀, lectotype and ♀ paralectotype, Steiermark, Kreuzkogel, Südhang 1800 m, 2. VIII. 1950 (leg. G. Heinrich) Townes. Netherlands: ♀, Venlo, 1. IX. 1942 (leg. Teunissen) Townes. Sverige (?): ♀, O. G., Hagl. 10. VII. Townes.

*Cylloceria simplicicornis* (Strobl) (species inquirenda)

*Lampronota simplicicornis* Strobl, 1901, Mitt. Nat. Ver. f. Steierm. 38: 37–38, ♂

Of the holotype of this species the gaster and the antennae are lacking. The head is damaged. The specimen is indeterminable. It has no label, but Prof. MORGE (Eberswalde) wrote me: „Die Art *Lampronota simplicicornis* Strobl ist als ‘simplex m.’ etikettiert. Das Exemplar ist aber zweifellos der Typus; denn es gibt auch nach Strobls handgeschriebenen Hauptkatalog nur dieses eine Exemplar von dieser Art“.

### Genus *Aniseres*

*Aniseres* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 92

*Aniseres*: STROBL, 1903, Mitt. Nat. Ver. f. Steierm. 40: 138

*Aniseres*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 29): 2244

*Aniseres*: TOWNES, 1971, The Genera of Ichneumonidae Part 4: 193

*Aniseres*: AUBERT, 1977, Spixiana 1 (2): 148

Remark. Of *Aniseres lubricus* I have only seen the male holotype. The species described by STROBL (*Aniseres subalpinus*) is placed under *Pantisarthrus*.

### Key to species

1. Scapi touching. Clypeus about 2.5 as wide as long, not protruding.  
*A. pallipes* Först. (page 108).
- Scapi widely separated. Clypeus square, rather convex, apical margin strongly protruding.  
*A. lubricus* Först. (page 109).

### *Aniseres pallipes* Förster

*Aniseres pallipes* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 93

*Aniseres pallipes*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 29): 2245

*Aniseres pallipes*: AUBERT, 1977, Spixiana 1 (2): 148

Characteristics of the lectotype: Labels: Aachen. Lectotype AUBERT, 1977. Male. Front wing 4.0 mm. Clypeus 2.5 as wide as long. Anterior tentorial pits not pronounced as in *A. lubricus*. Face polished, somewhat convex. Antennal sockets not so widely separated as in *A. lubricus*, but slightly elevated. Postannellus shorter than following segment. Frons less pronounced as in *A. lubricus*. Lateral ocelli on the edge of vertex. Thorax polished, black. Legs yellow. Part of cubitus between intercubitus and second recurrent vein 0.66 of recurrent vein. Discoidella not present. Nervellus not intercepted. Scutellum without closed carina. Propodeum with median longitudinal carinae present. Apical transverse carina strong. First gastral segment with glymma. Spiracles in front of middle. Second segment with apical margin yellow. Tergites three, four and five yellow.

Description of the male: Front wing 3.6–4.0 mm. Palpi white. Mandible whitish, lower tooth shorter. Clypeus convex, somewhat protruding, apical margin slightly curved in. Face and clypeus polished, with widely placed rather long hairs. Antennal sockets slightly elevated, scapi touching. Postannellus very short, almost square, shorter than following segment. Tyloids lacking. Frons, vertex, temple and gena polished. Pronotum polished, epomia present. Mesoscutum polished, notaui short and weak, with a carina on dorsal side. Scutellum convex, polished. Propodeum with no basal transverse carina. Median longitudinal carinae proximally weak. Apical transverse carina strong. Part of cubitus between intercubitus and second recurrent vein about 0.5 of recurrent vein. Intercubitus almost obsolete. Nervellus not intercepted. Discoidella obsolete. Legs, including coxae yellow. Hind tibia slightly inflated, with rather strong

setae. First tergite somewhat hunched, median dorsal carinae almost to apex. Glymma present. Following tergites polished. Second tergite with yellow apical margin. Third tergite yellow.

Description of the female. Front wing 4.0 mm. Characters of head similar to those of male. Postannellus about as long as following segment. Characters of thorax corresponding with male. Spiracle of first segment of gaster at about 0.4 of length. Hind end of first sternite in front of spiracle. First tergite medially raised. Gaster beyond segment three strongly compressed. Ovipositor long, about 0.4 of length of front wing, tip long and slender, without notch.

Material examined. – Germany: ♂, lectotype, Aachen; ♂, Aachen; ♂, Lousberg, Aachen, 17.X; ♂, Vien (all coll. Förster, München). U.S.A.: ♂, Mount McKinley, 1600 ft, 6.VIII. 1954, Alaska, leg. David Townes; 2♀, 1♂, Crabtree Mds NC, Yancey Co. 3600 ft, 21–22.VIII. 1950, H. M. D. & J. Townes; ♀♂, Phantom Vy Col. RMNP 9400 ft, 8–10.VIII. 1948, H. M. G. D. & J. Townes; ♀, Spring Br. Pa., 27.VIII. 1945, H. K. Townes; ♀, Huron Mts. Mich., 20.VII. 1959, Henry Townes; ♀, Lost River St. Pk. Hardy Co., W. Va, 5.VII. 1953, leg. Karl V. Krombein. U.S.S.R.: ♀, Moscow, 13.VI. 1964, leg. H. K. Townes (all collection Dr. H. Townes, Ann Arbor, Mich. U.S.A.).

### *Aniseres lubricus* Förster

*Aniseres lubricus* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 93

*Aniseres lubricus*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 29): 2245

*Aniseres lubricus*: AUBERT, 1977, Spixiana 1 (2): 148

Characteristics of the holotype: Labels: Aachen. Lectotype AUBERT 1977. Male. Front wing. 3.7 mm. Clypeus large, square, length 0.6 of distance between clypeal base and antennal socket. Anterior tentorial pits lying in malar space, large. Face polished, wider than high. Antennal sockets rather widely separated. Postannellus shorter than following segment. The frons lies horizontally, lateral ocelli on the edge of vertex, almost looking backwards. Occiput steeply sloping. Mesoscutum polished. Notauli not visible (damage). Scutellar fossa broad and deep. Scutellum with closed carina, distally steeply sloping. Propodeum with median longitudinal carinae weak, apical transverse carina strong. Legs slender, yellow. Apical part of hind femur somewhat swollen. Front wing without areolet. Part of cubitus between intercubitus and second recurrent vein 0.7 of second recurrent vein. Discoidella not present. Nervellus not intersected, vertical. First gastral segment with almost parallel sides, median dorsal carinae developed in apical half. Medially the tergite is somewhat convex. Sculpture rough. Spiracles in the middle (damaged). Second tergite with apical margin yellow. Third tergite with proximal part yellow.

Material examined. – ♂, Germany: Aachen (holotype) (lectotype AUBERT, 1977) (coll. Förster, München).

### Genus *Pantisarthrus*

*Pantisarthrus* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 109

*Plectiscus* subgenus *Pantisarthrus*: THOMSON, 1888, Opusc. ent. 38 (Fasc. 12): 1298 & 1309

*Pantisarthrus*: STROBL, 1903, Mit. Nat. Ver. f. Steierm. 40: 136, 138

*Pantisarthrus*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2239

*Pantisarthrus*: JUSSILA, 1965, Ann. Univ. Turkuensis A, II (34): 110

*Pantisarthrus*: TOWNES, 1971, The Genera of Ichneumonidae Part 4: 193

*Pantisarthrus*: AUBERT, 1977, Spixiana 1 (2): 147

Remark.—Three species in this genus were originally described by FÖRSTER (*P. inaequalis*, *P. luridus* and *P. ochropus*). FÖRSTER separated these on the length of the first part (abscissula) of the radius in the hind wing in comparison with the part beyond the nervus recurrens. In TOWNES (1969) (fig. 3) these sections are dg and gh of radiella. This character is difficult to actualize, as particularly the length of gh is comparative. SCHMIEDEKNECHT (1911) took up FÖRSTER's distinguishing character but also introduced a new aspect, the shape of the first tergite. On application of these two differentia, with a reasonable number of specimens, there is some indication of three taxa (*P. inaequalis*, *P. luridus* and *P. dispar* nov. spec.). However, identification of one or two specimens with the following key may not lead to proper results.

Finally STROBL (1903) described two species. There is some evidence that *P. rudepunctatus* Strobl might prove to be a distinct species, but up to now only the holotype is available, being in bad condition. The "punctures" which STROBL mentioned (blatternnarbig) are very difficult to perceive. The lectotype of STROBL's second species, *P. pseudoochropus* (♀) is a doubtful specimen of *P. inaequalis*.

#### Key to the species

1. Second tergite and following polished and with some, not very obvious, robust, irregularly placed punctures. Mesoscutum strongly convex, pre-scutellar groove conspicuously deep.  
*P. rudepunctatus* Strobl (page 112).  
— Second tergite and following polished, without punctures . . . . . 2
2. Section gh of radiella (Fig. 3) in hind wing not present. First tergite 2.0–2.6 as long as wide.  
*P. dispar* nov. spec.  
— Section gh of radiella present. First tergite 1.4–2.3 as long as wide . . . . . 3
3. Section gh of radiella equal to or slightly shorter than section dg. First tergite 1.8–2.3 as long as wide.  
*P. inaequalis* Förster (page 110).  
— Section gh of radiella longer than section dg. First tergite 1.4–2.0 as long as wide.  
*P. luridus* Förster (page 111).

#### *Pantisarthrus inaequalis* Förster

*Pantisarthrus inaequalis* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 110 (Lectotype AUBERT 1969)

*Pantisarthrus ochropus* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 110 (Lectotype AUBERT 1969)

*Pantisarthrus pseudochropus* Strobl, 1903, Mitt. Nat. Ver. f. Steierm. 40: 137. (Lectotype AUBERT, 1977)

*Aniseres subalpinus* Strobl, 1903, Mitt. Nat. Ver. f. Steierm. 40: 138 (Lectotype AUBERT, 1977)

*Pantisarthrus inaequalis*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2240

*Aniseres subalpinus*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 29): 2245

Characteristics of the female. Length front wing 3.0–3.6. Clypeus convex, protruding. Anterior tentorial pits open. Malar space wide, with groove. Face wide, polished. Frons and vertex polished, somewhat convex. Lateral ocelli lying on margin of steeply sloping postocciput. Occipital carina present. Epomia weak. Mesoscutum polished, convex. Notauli absent. Scutellum with lateral carina almost running to apex. Propodeum with apical transverse carina well developed. Front wing without areolet. Portion of cubitus between intercubitus and second recurrent vein about 0.5 of second recurrent vein. Section gh of radiella of hind wing equal to or shorter than section dg. First tergite 1.8–2.3 as long as wide, coriaceous. Spiracles at about 0.3 of length. Median dorsal carinae present. Other tergites polished. Ovipositor short, about 0.16 of length hind tibia.

Characteristics of the male. No important differences with female. Length front wing 3.0–3.6 mm. Antenna without tyloids. Postannellus shorter than second flagellar segment, second shorter than third.

Characteristics of the lectotype of *Aniseres subalpinus* Strobl: Labels: Admont, 21. VII. 1898, ♂, Strobl. Lectotype AUBERT 1977. Male. Front wing 2.9 mm. STROBL misidentified this specimen as *Aniseres* due to the fact that FÖRSTER in his key had placed this genus against the single character "first flagellar segment shorter than second". FÖRSTER had never seen males of *Pantisarthrus*.

Material examined. – Austria: ♀, lectotype *P. pseudochropus* Strobl, Admont, 4. VI. (CDCS); ♂, *P. grossepunctatus* Strobl (?), Adm. Alpen, 5. VII. (CDCS); ♂, lectotype of *Aniseres subalpinus* Strobl, Admont, 21. VII. 1898 (CDCS). Germany: ♀, lectotype of *P. inaequalis* Förster, Lousberg (bei Aachen), 1. VII. (coll. Förster, München); ♀, lectotype of *P. ochropus* Förster (coll. Förster, München); ?, Wiesen (Spessart), 31. V. 1961 (coll. Haeselbarth).

Netherlands: 2♂, Asperen, IX & XI. 1972; 3♀, Asperen, 27. VIII., 25. X., 8. XI. 1972; ♂♀, Asperen, IX & X. 1973; 2♀, Nunspeet, 17. VI., 3. VII. 1975; ♀, Markele, 28. XII. 1974 (all coll. Zwakhals). Sverige: ♂, Stöllet (Värmland), 30. VI.–19. VII. 1975 (coll. van Rossem).

### *Pantisarthrus luridus* Förster

*Pantisarthrus luridus* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 110 (Lectotype ♀, AUBERT, 1969)

*Pantisarthrus ochropus* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 110 (♀, Aachen)

*Pantisarthrus luridus*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 29): 2241

Characteristics of male and female. Length front wing 3.0–3.6 mm. Section dg of radiella in hind wing about 0.6 of length section gh. First tergite 1.4–2.0 as long as wide.

Material examined. – Austria: ♀ specimen of *P. pseudochropus* Strobl, no label (CDCS); ♀, no labels, label AUBERT *P. grossepunctatus* Strobl (?) (CDCS). Italia: ♂,

St. Peter (Ahrntal) prov. Bolzano, 1300 m, CD. 31. VII. 1966 (coll. Haeselbarth). Germany: ♀, lectotype *P. luridus*, Lousberg (bei Aachen), 27. X. (coll. Förster, München); ♀, Altenberg, 25. V. (coll. Förster, München); ♀, Aachen (*P. ochropus* Förster) (coll. Förster, München)\*. Netherlands: 3♂, Asperen, IX, X. 1972; ♀, 12. IX. 1972; ♀, 18. X. 1973 (all coll. Zwakhals). Sverige: 2♀, Norrl. (coll. Thomson, Lund) (identif. uncertain).

*Pantisarthrus rudepunctatus* Strobl

*Pantisarthrus rudepunctatus* Strobl, 1903, Mitt. Nat. Ver. f. Steierm. 40: 137–138, ♀ (Lectotype AUBERT, 1977)

*Pantisarthrus rudepunctatus*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2240, ♀

Characteristics of the holotype: Labels: Styriae alp, Strobl, 23. VI. 1898, ♀ (an original label); lectotype AUBERT 1977 (it is a holotype, only one specimen was described). Female. Front wing 3.0 mm. Palpi brown. Clypeus convex. Anterior tentorial pits open. Malar space wide. Face and frons polished. Antennae broken off beyond pedicel. Occipital carina closed. Epomia present, strong. Mesoscutum strongly convex, polished, its hind part rather steeply sloping into deep prescutellar groove. The lateral carina of scutellum is connected with the lateral margin of mesoscutum running over a transparent lamina in the region of the deep prescutellar groove. This character is also present in the other *Pantisarthrus* species, but here it is more strongly developed. Propodeum small and narrow in comparison with large mesoscutal part of thorax. Apical transverse carina strong. Front wing without areolet. Portion of cubitus between intercubitus and second recurrent vein 0.46 of second recurrent vein. Section dg of radiella in hind wing about 0.5 of length section gh. Nervellus vertical, not intercepted. Legs slender, comparatively long. First tergite 2.4 as long as wide, coriaceous, with widely placed erect hairs. Median dorsal carinae weak. Spiracles at about 0.3 of length. Following tergites polished, with some not very obvious, robust, irregularly placed punctures. Ovipositor about the length of hind basitarsus beyond apex of gaster.

Material examined. – Austria: ♀, holotype of *P. rudepunctatus* Strobl, Styriae alp, Strobl, 23. VI. 1898 (Lectotype label AUBERT, 1977) (CDCS).

*Pantisarthrus dispar* nova species

Description of the female. – Length front wing 2.8–3.2 mm. Mandible rather narrow, two teeth, the lower shorter and slightly inturned. Clypeus (in some specimens with brownish colour) strongly convex, protruding, apical margin truncate. Malar space wide, with a groove. Clypeus, face and gena with long, widely placed erect hairs. Postannellus slightly shorter than following segment, 4 times as long as wide. Antenna with close adpressed hairs. Occipital carina closed, genal carina somewhat outwardly bent beyond mandible. Head polished. Pronotum black, yellowish brown or yellow, polished. Epomia present. Mesoscutum strongly convex, polished. Mesopleurum polished, prepectal carina weak, ending at about 0.5 of width mesopleurum, not reaching margin. In hind wing gh absent, except for a stub. Legs brown, long and slender. Index hind femur 7.0. Apical transverse carina of propodeum developed. Median longi-

\* identification of this specimen as *P. luridus* not definite.

tudinal carinae present. First tergite coriaceous, 2.0–2.6 as long as wide. median dorsal carinae present. Following tergites polished, with subadpressed, widely placed transverse rows of hairs. Ovipositor short, about the length of postannellus.

Characteristics of the male. Not differing much from the female. Length front wing 2.7–3.3 mm. Postannellus short, shorter than following segment.

Material examined. – Austria: ♀, Tirol, Aschbach, 1400 m, 25. VIII. 1975 (coll. Zwakhals). Germany: ♀, Reiter Alm, 850 m, Heidelb. 3. VIII. 1970; ♀, Geierlambach, Heidelb., 10. IX. 1970; ♂, Wiershausen, Cb, 14. VIII. 1966 (all coll. Haeselbarth). Italia: ♀, Sarntal, 1250 m, Prov. Bolzano, 22. VI. 1976 (coll. Zwakhals). Netherlands: ♀, Ede, 8. XI. 1970 (holotype); 2♀, Ede, 15. IX. 1970; 2♀, Ede, 1. XI., 8. XI. 1970; ♂, Nunspeet, 13. VII. 1975; ♀, Asperen (Prov. Zd Hol.), 10. X. 1972; 2♀, Asperen, 27. VIII. 1973 (one specimen with pronotum reddish); ♀, Asperen, 31. VIII. 1973 (pronotum reddish); 2♀, Asperen, 29. IX., 18. X. 1973 (one specimen pronotum reddish) (all coll. Zwakhals). Sverige: ♀, violet tag with pencil hieroglyphs, red rimmed bos label “*inaequalis*” (coll. Thomson, Lund). All specimens, except for the holotype were labelled paratype.

### Genus *Dialipsis*

*Dialipsis* Förster, 1868, Verh. naturh. Ver. preuss. Rheinl. 25: 171

*Dialipsis*: FÖRSTER, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 83

*Plectiscus* (subgenus *Dialipsis*): THOMSON, 1888, Opusc. ent. 38 (Fasc. 12): 1298

*Parentypoma* Strobl, 1901, Verh. Mitt. Siebenb. Ver. Naturw. Hermannstadt 50: 71

*Dialipsis*: STROBL, 1903, Mitt. Nat. Ver. f. Steierm. 40: 133

*Dialipsis*: SCHMIEDEKNACHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2223

*Dialipsis*: AUBERT, 1964, Bull. mens. Linn. de Lyon 33: 57

*Dialipsis*: TOWNES, 1971, The Genera of Ichneumonidae Part 4: 195

Remark. – According to TOWNES, 1971 all species described in *Dialipsis* by FÖRSTER, 1871 are synonymous of *D. exilis*, including *Plectiscus communis* Förster, 1871, *Plectiscus (Dialipsis) crassipes* Thomson, 1888 and *Parentypoma femoratum* Strobl, 1901. See also AUBERT, 1964.

### *Dialipsis exilis* Förster

*Dialipsis exilis* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 83, ♀♂

Characteristics of the lectotype: Labels: none. Lectotype label of the present author.

Female. Front wing 2.5 mm (a very small specimen).

Characteristics of the female. Front wing 2.5–3.7 mm. Maxillary palps reaching beyond coxa, whitish yellow. Mandibels and clypeus yellow. Upper mandibular tooth wider and longer than lower. Anterior tentorial pits very large, forming a deep hollow below apical margin of face. The strongly convex clypeus is coming out nose like, base invisible by overhanging margin of face. Face weakly convex, polished. Vertex polished. Occipital carina complete. Gena beyond mandibular base concave, giving mouth-parts a snout like appearance. Epomia weak. Mesoscutum steeply rising from pronotum, convex, polished. Notaulices defined to about 0.5 the distance to center of mesoscutum. Mesopleurum polished. Prepectal carina reaching to somewhat dorsal of ventral corner of pronotum, distant from edge. Median longitudinal carina of propodeum

reaching directly to weak apophysis. Area superomedia not present. Lateral longitudinal carina and pleural carina defined. Arolet present. Nervellus not intercepted. Hind femur about 4.4 as long as wide. Fringe of hind tibia long and dense. First tergite with longitudinal wrinkling, postpetiole in some specimens polished, without glymma. Hind end of first sternite at about 0.6 of length segment. Following tergites polished. Ovipositor sheath 1.1–1.2 as long as hind tibia.

Characteristics of the male. Front wing 2.3–3.6 mm. With respect to the main characters the male does not differ much from the female. Tyloids (longitudinal carinae) on flagellar segments 4 to 7. Longitudinal wrinkling of first tergite often on postpetiole.

Distribution. — The species is common in Western Europe. I saw specimens from the Netherlands, Germany (coll. Haeselbarth) and Italy (Merano and Riva s. Garda) (coll. Haeselbarth).

### Genus *Laepserus*

*Laepserus* Förster, 1868, Verh. naturh. Ver. preuss. Rheinl. 25: 205.

*Gnathochoris* Förster, 1868, Verh. naturh. Ver. preuss. Rheinl. 25: 152.

*Blapticus*: THOMSON, 1888, Opusc. ent. 38 (Fasc. 12).

*Blapticus*: STROBI 1903 Mitt Nat Ver f Steierm 40: 113.

*Acroblapticus* Schmiedeknecht, 1911, Opusc. Ichneum. 4 (Fasc. 28); 2173.

*Acrobiapticus* Schmiedeknecht, 1911, Opusc. Ichneum. 4 (Fasc. 28): 217.  
*Blapticus*: SCHMIEDEKNECHT 1911, Opusc. Ichneum. 4 (Fasc. 28): 217.

*Blapticus*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 21/6  
*Cathartes*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 21/2

Gnathochoris: SCHMIEDERNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28).

<sup>1</sup>  $R = 1 - \frac{R^L}{R^U}$ , where  $R^L$  is the 1969 index and  $R^U$  is the 1971 index.

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1. Front wing without areolet. Second tergite coriaceous and with longitudinal

#### *L. flaviguttata* (Förster) (page 115)

- 2

  - Front wing with areolet . . . . .
  - 2. Subgenital plate slender, about 1.4\* as long as wide, with distinct warty-like implantations of long setae along apical margin (Plate 2, figs. 6 & 7). First and second tergite with longitudinal striation. Hind femur slender, 5.3 as long as wide.  
*L. xanthocephalus* (Strobl) (page 120).
  - Subgenital plate wider (0.33–0.5 or 0.7–0.8 as long as wide) . . . . . 3
  - 3. Subgenital plate 0.7–0.8 as long as wide, with distinct warty-like implantations of setae along apical margin. Paramere serrated (Plate 2, figs. 4 & 5).  
*L. restrictus* nov. spec. (page 121).
  - Subgenital plate 0.33–0.5 as long as wide . . . . . 4

\* length measured from proximal margin to apical margin

4. Greater part of frons fuscous, lower part of inner orbits of frons yellow. Mesosternum fuscous. Subgenital plate: Plate 1, figs. 1–5.  
*L. dentifer dentifer* (Thomson) (page 119).

— Frons up to ocelli yellow. Mesosternum and front part of mesopleurum yellow. Subgenital plate: Plate 1, figs. 6–8.  
*L. dentifer f. crassulus* (Thomson) (page 119).

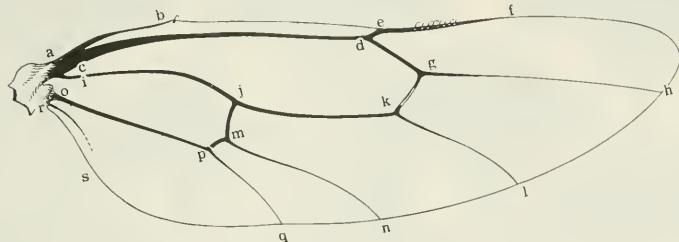


Fig. 3. Hind wing of an ichneumonid. dgh = radiella. jmp = nervellus. mn = discoidella. After TOWNES (1969).

### Key to the females

Remark. — The females of *L. xanthocephalus* and *L. restrictus* are unknown.

1. Front wing without areolet. Second tergite with close longitudinal striation, hind margin polished. *L. flavipes* (Förster) (page 115).  
— Front wing with areolet ..... 2  
2. Second tergite coriaceous. *L. dentifer* (Thomson) (page 118).  
— Second tergite proximally with longitudinal striation, distal part polished. *L. meridionator* (Aubert)\*

*Laepsurus flavipes* (Förster) (new combination)

*Gnathochorisis flavipes* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 113

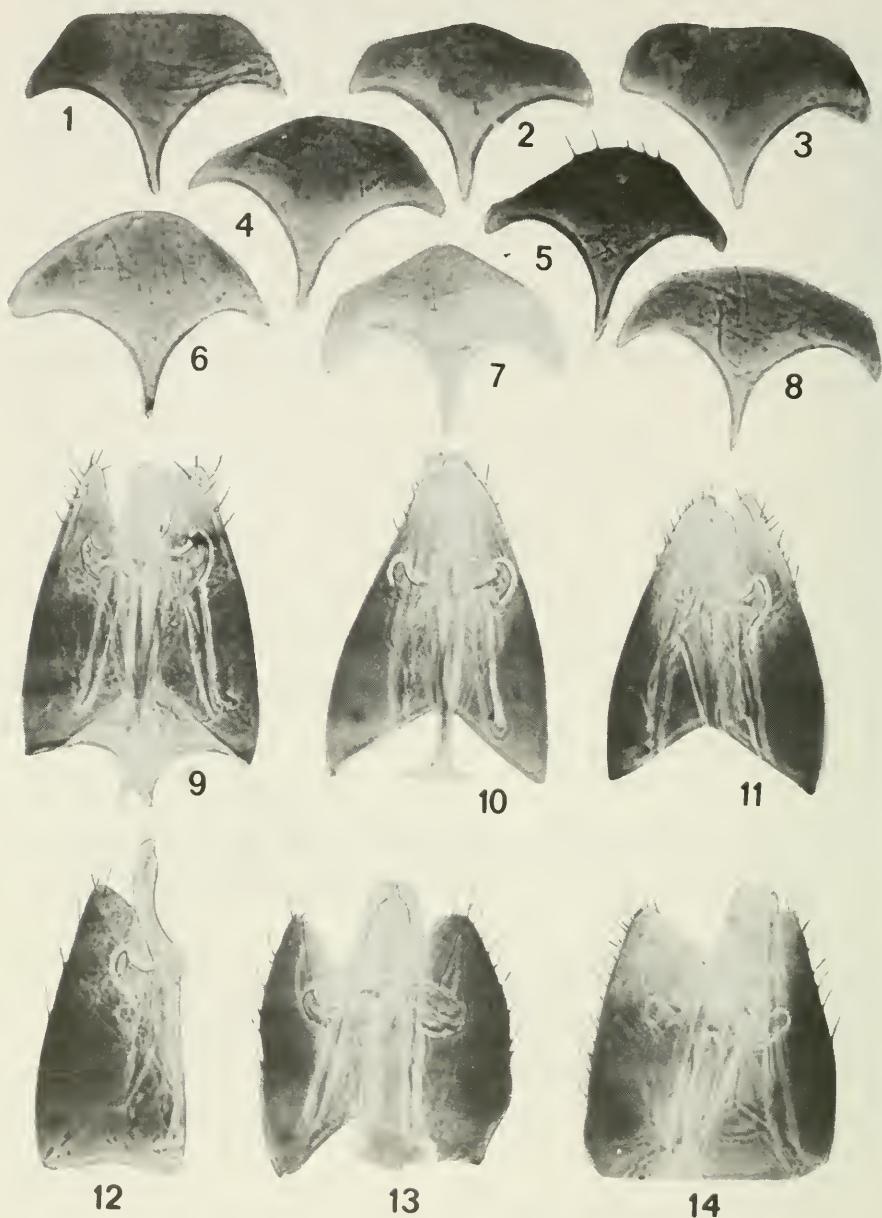
*Blapticus (Gnathochoris) flavipes*: THOMSON, 1888, Opusc. ent. 38 (Fasc. 12): 1291

*Gnathochoris flavipes*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2181

Remark. — It is not clear whether the specimens in Förster's collection are the types.

\* This species is not inserted.

Characteristics of the female. Front wing 3.6–4.0 mm. Palpi mandibles and clypeus whitish yellow. Teeth of mandible brown, of about equal length, the lower somewhat twisted. Clypeus flat, groove between face not clear. Malar space wide, about twice the width of mandibular base, with a groove. Lower gena broad, but temple behind the eye



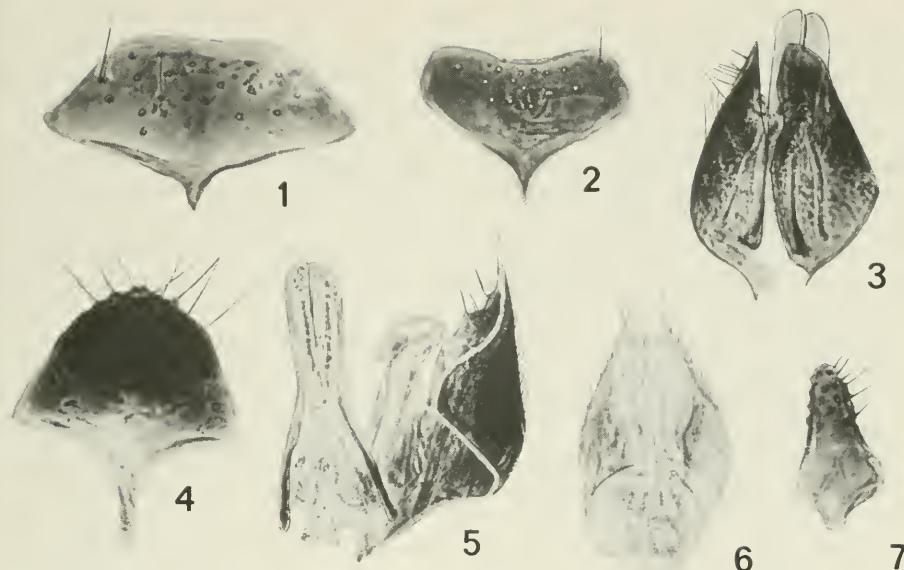


Plate 2 Fig. 1–2. Male subgenital plate of *Ephalmator*: 1, *E. subsimilis* nov. spec. (paratype), Italia, Prov. Bolzano, Sarntal, 1250 m, 26. VI. 1976, coll. Zwakhals; 2, *E. subsimilis* (paratype), Italia, Prov. Bolzano, Sarntal, 1250 m, 26. VI. 1976, coll. Zwakhals. Fig. 3, male genitalia of *E. subsimilis* (paratype), Italia, Prov. Bolzano, Sarntal, 1250 m, 26. VI. 1976, coll. Zwakhals. Fig. 4, subgenital plate of *L. restrictus* nov. spec. (paratype), Germany, Oberbayern, Umg. Gauting, 17. V. 1976, coll. Haeselbarth. Fig. 5, male genitalia of *L. restrictus*, Germany, Oberbayern, Umg. Gauting, 17. V. 1976, coll. Haeselbarth. Fig. 6, male genitalia of *L. xanthocephalus* (Strobl), no locality label, coll. Strobl (CDCS). Fig. 7, subgenital plate of *L. xanthocephalus*, no locality label, coll. Strobl (CDCS).

Plate 1 Fig. 1–8. Male subgenital plate of *Laepserus*: 1, *L. dentifer* (Thomson), Ede, 3. VI. 1971, coll. Zwakhals; 2, *L. dentifer*, Austria, Tirol, Aschbach, 1400 m, 6. VII. 1976, coll. Zwakhals; 3, *L. dentifer*, Germany, Dransfeld, A/ 15. V. 1966, coll. Haeselbarth; 4, *L. dentifer*, Austria, Aschbach, Tirol, 1400 m, 6. VII. 1976, coll. Zwakhals; 5, *L. dentifer*, Netherlands, Asperen, 15. VI. 1972, coll. Zwakhals; 6, *L. dentifer* f. *crassulus* Thomson, Italia, Merano, 700 m, F. 22. VII. 1966, coll. Haeselbarth; 7, *L. dentifer* f. *crassulus*, Italia, Merano, 700 m, 22. VII. 1966, coll. Haeselbarth; 8, *L. dentifer* f. *crassulus*, Germany, Witzenhausen, E/ 30. V. 1966, coll. Haeselbarth. Fig. 9–14. Male genitalia of *Laepserus*: 9, *L. dentifer* (Thomson), Austria, Tirol, Aschbach, 1400 m, 6. VII. 1976, coll. Zwakhals; 10, *L. dentifer*, Austria, Tirol, Aschbach, 1400 m, 6. VII. 1976, coll. Zwakhals; 11, *L. dentifer*, Germany, Dransfeld, A/ 15. V. 1966, coll. Haeselbarth; 12, *L. dentifer* f. *crassulus*, Germany, Witzenhausen, E/ 30. V. 1966, coll. Haeselbarth; 13, *L. dentifer* f. *crassulus*, Germany, Meensen, A/ 14. V. 1967, coll. Haeselbarth; 14, *L. dentifer* f. *crassulus*, Italia, Merano, 700 m, 22. VII. 1966, coll. Haeselbarth.

narrow. Postocciput steeply sloping beyond eye and ocelli. Pronotum polished, epomia little developed. Mesoscutum convex, with adpressed hairs. Notauli reaching center of mesoscutum. Scutellum rather convex. Mesopleurum polished, prepectal carina to the middle of mesopleural margin, not reaching the margin. Front wing without areola. Nervellus inclivous, intercepted low. Discoidella present. Propodeum polished, all carinae present. Apophyses strong. Legs including front and middle coxae yellow. Hind coxae brownish. Hind femur 2.8–3.3 as long as wide (stout), fringe of hind tibia short and open. First tergite about 1.8 as long as wide. All carinae strong. Spiracle at about 0.4 of length. No glymma present. Second tergite with longitudinal striation, apical margin polished. Following tergites polished and compressed. Ovipositor upcurved, about 0.5 as long as hind tibia.

Characteristics of the male. Front wing 3.0–3.2 mm. Palpi, mandibles, clypeus, face, lower inner frontal orbit and scapi yellow. Malar space wide, about the length of second flagellar segment, with a groove. Front wing without areolet. Nervellus inclivous, intercepted, discoidella present. Propodeum with all carinae, apophyses strong. All coxae yellow to brownish. Hind femur stout, about 3.2 as long as wide. First tergite with strong carinae, second tergite with close longitudinal striation, apical margin polished. On the whole closely conform to female.

Material examined. – Austria: ♀, Graz (coll. Strobl, CDCS). Germany: ♀, Mtzb. V 44.2; ♂, no labels (coll. Förster, München); ♀, Blankenburg (Thür.) leg. Schmiedeknecht (coll. E. Bauer, München); ♀, Harz, Thale, 2. VIII–9. IX. 1954, leg. K. Dorn (coll. E. Bauer, München). Italia: 3♂, Riva s. Garda, 350 m, F/3. VII. 1966 (coll. Haezelbarth). Netherlands: ♀, Radio Kootwijk, 15. VI. 1969 (coll. van Rossem); ♀, Ede, 12. VIII. 1970 (coll. Zwakhals); ♀, Ede, 17. V. 1971 (coll. Zwakhals); ♂, Ede, 1. IX. 1970 (coll. van Rossem). U.S.S.R.: ♀, Nizhniyaya Kuriya (15 km west of Perm), 1.–3. VIII. 1967, leg. W. J. Pulawski (coll. van Rossem).

Remark. – The separation of the males of the two species described by THOMSON viz. *Blaptilus dentifer* and *B. crassulus* is based on differences in colour pattern. There are no morphological features to distinguish the two. I tried to find characteristics in the male genitalia but this neither gave any indication (see Plate 1). Though I did not have as many females, differentiation of these could not demonstrate the certainty of two species. The obvious variation in colour of the males decided me to recognize *Laepserus dentifer* forma *crassulus* (Thomson).

#### *Laepserus dentifer* (Thomson) (new combination)

*Blaptilus dentifer* Thomson, 1888, Opusc. ent. XXXVIII (Fasc. 12): 1288, ♂  
*Acroblaptilus dentifer*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2174  
*Acroblaptilus debilis* Schmiedeknecht, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2175, ♀  
*Blaptilus dentifer*: JUSSILA, 1965, Ann. Univ. Turku A, II: 103

Characteristics of the lectotype: Labels: Pål. (= Pälö, Skåne). Lectotype TOWNES, 1958. Male. Front wing 3.4 mm. Palpi, mandibles, lower gena, clypeus, face and lower orbits of frons yellow. Greater part of frons fuscous, polished. Epomia not present. Proximal margin and dorsal top of pronotum yellow. Notauli represented by an impression at the edge of mesoscutum. Most of the thorax polished, fuscous, except for yellow tegulae and spot on proximal dorsal top of mesopleurum. Front and middle coxae yellow. Hind coxae brownish. Hind femur 3.3 as long as wide. First and second tergite coriaceous, margin of second polished.

Description of the female. Length of front wing 4.0–4.8 mm. Head fuscous. Palpi, mandibles, clypeus, lower part of gena, lower orbits of frons, scape and pedicel, yellow. In some specimens lower gena and lower orbits of frons are fuscous. Clypeus large, flat, about as wide as long, apically somewhat projecting. Groove between face obsolescent. Face flat, slightly convex below antennae, finely punctured, with subadpressed hairs, fuscous. In some specimens inner orbits of face yellow and face light brown. Frons polished, finely punctured, fuscous down to antennal sockets. Occipital carina present, meeting oral carina rather high up. Pronotum polished, epomia present but weak, light brownish to fuscous, dorsal top yellow, sometimes front margin yellowish. Mesoscutum finely punctured, with close adpressed hairs. Notauli represented by an impression at the front edge. Scutellum rather convex, lateral margin in some specimens to about 0.3 of length. Mesopleurum polished, entirely fuscous. Prepectal carina reaching to subtegular ridge. Mesosternum fuscous. Propodeum with all carinae, apophyses well developed. Front and middle coxae yellow, hind coxae brownish. Hind femur 3.3 as long as wide. First tergite coriaceous, with median dorsal, dorsolateral and ventrolateral carinae present. Spiracle at about 0.4 of length. Second tergite coriaceous for about 0.25 of length. Following tergites polished. Tergites fuscous with a broad yellowish band on apical margin of tergite two and front half of tergite three. Gaster compressed from third segment. Ovipositor about half the length of hind tibia, upcurved, with a strong subapical notch.

Material examined. – Considering the great number of specimens I have omitted the collecting dates. There is no indication of seasonal appearance.

*L. dentifer dentifer* (Thomson). Males only. In total 12 specimens.

Austria: 2♂, Tirol, Aschbach, 1400 m (coll. Zwakhals). Germany: Wiershausen; Ziegenhagen (Hessen); Dransfeld (coll. Haeselbarth). Netherlands: 4♂, Ede; Asperen (prov. Zd. Hol.) (coll. Zwakhals). Sverige: ♂, Pålssö (Skåne), lectotype label TOWNES 1958 (coll. Thomson); ♂, Scan sylv (coll. Thomson, Lund).

*L. dentifer*. 25 Female specimens.

Austria: Tirol, Aschbach, 1400 m (coll. Zwakhals). Germany: 2♀, Harz, Harzburg, Radautal (coll. Bauer, München); D. Obb. Hochstadt; D. Bay. Hohenschwangau, Wildsulz 1420–1560 m; Hann. Münden; Wiesen, Spessart; Witzenhausen; D. Bay. Ammergeb. Halbammertal, 900–1000 m; 2♀, Meensen (all coll. Haeselbarth); Allgäu, Riezlern, 1150 m (coll. Bauer, München). Italia: Selva Nera, 1400–2000 m, Funes (Prov. Bolzano) (coll. van Rossem). Sverige: Järnavik, Blekinge (coll. van Rossem). U.S.S.R.: Kurland, Jelowka, 21. VII. 1917, leg. S. G. Bischoff (nr 1341) *Acroblapticus debilis* Schmiedeknecht (not a type specimen) (Zool Mus. Berlin).

*Laepserus dentifer* forma *crassulus* (Thomson) (new combination)

*Blapticus crassulus* Thomson, 1888, Opusc. ent. XXXVIII (Fasc. 12): 1289, ♂

*Acroblapticus crassulus*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2175

*Blapticus crassulus*: JUSSILA, 1965, Ann. Univ. Turku A, II: 103

Characteristics of the lectotype: Labels: Ydd inge. Lectotype TOWNES 1964. *Gn. crassulus* Ths. det. Aubert. Male. Front wing 4.0 mm. Palpi, mandibles, clypeus, face, gena, frons (almost up to lower ocellus), scapus and pedicel, yellow. Epomia present, greater part of pronotum yellow and polished. Notauli, a weak impression at the edge of mesoscutum. Mesoscutum fuscous, with regularly placed fine punctures and adpressed hairs. Scutellum rather convex. Mesopleurum polished, for the greater part yellow, including mesosternum. Prepectal carina reaching to subtegular ridge. Front wing with closed areola. Propodeum fuscous, with all carinae and rather strong apophyses. Legs, including coxae for the greater part yellow. Hind femur, tibia and tarsi brownish. Hind femur 3.0 as long as wide. First and second tergite coriaceous, second tergite slightly striated and hind margin polished and yellow.

The following 40 specimens are all males. Germany: D. Bay. Rottenbuch; D. Bay. Herrsching; D. Bay. Ammergeb. Halbammertal; D. Bay. Peisenberg, Ammerleite; Dransfeld; Ziegenhagen, Hessen; Obb. Gauting; Obb. Glonn; Witzenhausen; Flintsbach Inn. B. 550 m, Taufkirchen (München); Lippoldshausen; Meensen; Widdersberg; Bramwald Nd Sachsen; Wiesen, Spessart (all coll. Haeselbarth); Harz, Harzburg, Radautal; Nieder-Weser Geb. (coll. E. Bauer, München). Italia: Merano, 700 m; Riva s. Garda, 500 m; Campi, Riva s. Garda, 100 m (coll. Haeselbarth). Sverige: ♂, Ydd inge, lectotype label TOWNES 1964 (coll. Thomson, Lund).

*Laepserus xanthocephalus* (Strobl) (new combination)

*Blapetus xanthocephalus* Strobl, 1903, Mitt. Nat. Ver. f. Steierm. 40: 113

*Blapetus xanthocephalus*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2176

Characteristics of the lectotype: Labels: an original green label: Seitenstellen, 27. VIII. ♂; lectotype label AUBERT 1975. Male. Front wing 3.1 mm. Palpi, mandibles, clypeus, face, lower orbits of frons and lower gena, yellow. Clypeus flat, 1.7 as wide as long. Malar space about as wide as mandibular base, with a groove. Gena narrow, half the width of eye. Postannellus 5.5 as long as wide. Tyloids absent. Pronotum polished, yellow. Mesoscutum convex, polished, finely and widely punctured, implantations of short subadpressed setae. Scutellum polished, without lateral carina. Propodeum polished, with all carinae, except for costula, area superomedia large, almost square. Mesopleurum polished, prepectal carina (damaged by pin) to upper 0.3 of pronotal margin, not quite reaching mesopleural margin. Front wing with areolet. Nervellus intercepted below the middle, discoidella not present. Propleurum 1, all coxae, and trochanters of front and middle legs whitish. Hind femur slender, 5.3 as long as wide. Fringe of hind tibia long and dense. First tergite with longitudinal striation, slender, 3.0 as long as wide. Second tergite with longitudinal striation, apical margin polished. Third tergite with some coriaceous sculpture, other tergites polished. Subgenital plate: Plate 2, fig. 7.

Female unknown.

Material examined. – Austria: ♂, lectotype, Seitenstellen, 27. VIII., lectotype AUBERT 1975; ♂, Admont, 24. VII. (and one remnant of other ♂); 2♂, Gesäuse, 18. VI. 1890; ♂, no locality label; ♂ (face medially fuscous), Admont, 16. VIII. All specimens from Strobl's collection, CDGS.

*Laepserus restrictus* nova species

Characteristics of the holotype: Labels: Germany, Oberbayern, Umg. Gauting, 17. V. 1976, coll. Haeselbarth. Holotype label of author. Male. Front wing 4.0 mm. Palpi and mandibles white, lower tooth shorter. Clypeus flat, about 1.5 as wide as long, groove between face obsolescent. Malar space wide, with a distinct groove. Face polished, with fine punctures, implantations of short hairs, fuscous. Frons and vertex polished. Postannellus 4.6 as long as wide. Antenna proximally and ventrally yellow brown. Gena polished. Pronotum polished, epomia not present, dorsal top yellow. Mesoscutum with close, subadpressed hairs, notauli proximally strong. Scutellum polished, no lateral margin. Front wing with areolet. Nervellus intercepted below the middle, inclivous. Discoidella weak. Mesopleurum polished, prepectal carina weak, to about the middle of pronotal margin, not reaching mesopleural margin. Front and middle coxae and trochanters white, hind coxae brown, ventrally whitish. Trochanters white. Legs slender. First tergite coriaceous, median dorsal carinae strong, almost to apex. Spiracles at 0.59 of length. Second tergite coriaceous and with weak longitudinal striation. Third tergite with some coriaceous sculpture proximally, for the greater part yellow, laterally with a fuscous spot. Fourth tergite polished, proximally and apically with a yellow band.

Male genitalia of a paratype. Plate 2, fig. 4, subgenital plate, different from *L. dentifer* in shape and with distinct warty-like implantations of setae along apex. Fig. 5, genitalia. Apex of paramere and lower margin distinctly serrated.

The specific name *restrictus* means „unobtrusive“.

Material examined. – Germany: ♂, Oberbayern, Umg. Gauting, 17. V. 1976, coll. Haeselbarth (holotype); ♂, Oberbayern, Umg. Gauting, 17. V. 1976, coll. Haeselbarth (paratype).

After going to press AUBERT described a new species *Blapticus meridionator* in Bull. Soc. Ent. Mulh. Janvier-Mars, 1980, p. 1.

*Ephalmator*, new genus\*

Characteristics of the type species, *Ephalmator subsimilis* nova species. Front wing 3.7–4.3 mm. Body slender, the gaster in the male elongate. Mandible not turned inward, lower tooth about 0.5 of the length upper tooth. Clypeus convex, about 1.5–1.8 as wide as long. Anterior tentorial pits rather small, open. Genal carina joining oral carina about the width of mandibular base (or somewhat more) beyond mandibular base. Occipital carina closed. Tyloids on flagellar segments 5–6–7, in the form of longitudinal carinae. They differ from those of *Entypoma* in place (*Entypoma* 3–6) and shape (*Entypoma* with a smooth flattened area). Epomia distinct. Notaulus obsolete in small specimens and somewhat more developed on frontal margin in some specimens. Propodeal carination similar to that of *Entypoma*, basal transverse carina absent. Prepectal carina to about the middle of hind margin of pronotum, but not reaching margin. Front wing

\* In a second paper a supplement to the key of Microleptinae (Oxytorinae) genera of Townes (1971) will be given.

with areolet. Nervellus vertical, discoidella almost obsolete. Legs slender. First gastral segment slender in the male. End of first sternite at the middle. Ovipositor 0.1 of length front wing beyond apex of gaster.

The generic name refers to the latin word for "dancer".

*Ephalmator subsimilis*, nova species

Characteristics of the holotype. Male. Labels: Italia, Bolzano, Sarntal, 1250 m, 20.VI.1976, leg. C. J. Zwakhals. Holotype label of the author. Front wing 3.7 mm. Palpi whitish. Mandible slender, lower tooth shorter, yellow. Clypeus 1.8 as wide as long, convex, yellow. Malar space about as wide as mandibular base. Face black, polished, with erect, widely placed, long hairs in orbits towards eyes. Frons polished. Occipital carina closed. Gena wide. Thorax black. Pronotum polished, epomia present. Mesoscutum convex, polished, notauli absent. Scutellum comparatively small, lateral margin weakly indicated to about half the length. Propodeum polished. Petiolar area to about half the length. Median longitudinal carinae present, but weak. Area superomedia and costula absent. Front wing with areolet. Nervellus not intercepted. Discoidella vaguely indicated. Mesopleurum polished, prepectal carina not reaching mesopleural margin. Legs, including coxae, yellow, slender. Hind femur 5.7 as long as wide. Fringe of hind tibia close. Hind tarsi brown. First gastral segment slender, about 3.0 as long as wide apically, spiracles at 0.4 of length. First tergite coriaceous. Second tergite polished, only proximally with some weak coriaceous sculpture, hind margin yellow. Following tergites for the greater part fuscous.

Male genitalia. Of two paratypes microscopic slides were made of the genitalia. Plate 2, fig. 1 and 2, subgenital plate. Fig. 3, genitalia.

Characteristics of the female. Labels: Austria, T., Pertisau, 1550 m, 12.VII.1977, leg. & coll. Haeselbarth. Paratype label of the author. Front wing 4.1 mm. Palpi white, long, reaching beyond coxae. Mandible with lower tooth shorter, not turned inward. Clypeus convex, apical margin truncate, rather protruding. Face polished, with widely spaced short hairs. Frons and vertex polished. Occipital carina closed. Pronotum polished, epomia distinct. Mesoscutum rather convex, notauli almost obsolete. A rather conspicuous character is the scutellar carina which does not run towards the apex, but closes directly behind the scutellar fovea. Propodeum coriaceous, basal transverse carina absent, median longitudinal carinae weak, apical transverse carina strong. Propodeum with rather conspicuous erect hairs. Mesopleurum polished, prepectal carina not reaching the margin. Lower front half of mesopleurum with subadpressed hairs. Legs slender, with rather close subadpressed hairs. Fringe of hind tibia close. First tergite coriaceous, median dorsal and dorsolateral carinae not present. Spiracles at 0.4 of length tergite. End of first sternite at 0.5 of length tergite. Lateral margins of first tergite with long hairs. Second tergite coriaceous, with a broad apical margin polished and yellow brown in colour. Following tergites with rather wide and shallow indentations, implantations of hairs. Third tergite for the greater part yellowish brown. Ovipositor 0.1 of length front wing behind apex of gaster.

The specific name *subsimilis* means "almost equal".

Material examined. — Italia: ♂, holotype, Sarntal, 1250 m (Prov. Bolzano), 20.VI.1976, leg. C. J. Zwakhals. Paratypes: ♂, Sarntal, 1250 m, 26.VI.1976, leg. Zwakhals; ♂, Sarntal, 1250 m, 24.VI.1976, leg. Zwakhals; ♂, Sarntal, 1250 m,

26. VI. 1976, leg. Zwakhals. Austria: ♂, Tirol, Aschbach, 1400 m, 16. VIII. 1975, leg. Zwakhals; ♀, T., Pertisau, 1550 m, 12. VII. 1977, leg. & coll. Haeselbarth; ♂, T., Hinterhornbach, 1200 m, 4. VIII. 1977, Wald und Waldwiesen, leg. & coll. Haeselbarth. Sverige: ♂, Dalarna, Transtrand, 1976, Gammalsäter fjället, 770 m, leg. G. van Rossem.

### Genus *Symplicis*

*Symplicis* Förster, 1868, Verh. naturh. Ver. preuss. Rheinl. 25: 151

*Symplicis* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 118

*Symplicis*: THOMSON, 1888, Opusc. ent. 38 (Fasc. 12): 1285

*Symplicis*: STROBL, 1903, Mitt. Nat. Ver. f. Steierm. 40: 112

*Symplicis*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2169

*Symplicis*: AUBERT, 1968, Bull. Soc. Ent. de Mulhouse. Mai-Juin: 37–38

*Symplicis*: TOWNES, 1971, The Genera of Ichneumonidae. Part 4: 201

### Key to species

- |   |   |
|---|---|
| 1. Wing without areolet . . . . .   | 2 |
| – Wing with areolet . . . . .   | 3 |
| 2. Ovipositor not beyond apex of gaster.<br><i>S. infavorabilis</i> nov. spec. (page 126).  |   |
| – Ovipositor beyond apex of gaster. Length 0.16 of length front wing.<br><i>S. invisitata</i> nov. spec. (page 126).  |   |
| 3. Mandibles, clypeus, face and sometimes pronotum white to whitish brown. Postannellus about 3.5–6.3 as long as wide. Frons polished. Mesoscutum regularly and finely punctured, with adpressed hairs. Mesopleurum polished. Propodeum with all carinae. First tergite coriaceous. Second tergite coriaceous and with striation. Following tergites more polished. Ovipositor short, not beyond tip of gaster.<br><i>S. bicinctulata</i> (Grav.) (page 123). |   |
| – Mandibles white. Clypeus brownish. Face and pronotum black.<br><i>S. bicinctulata</i> f. <i>alpicola</i> Förster (page 125 ).   |   |

### *Symplicis bicinctulata* (Gravenhorst)

*Mesoleptus bicinctulatus* Gravenhorst, 1829, Ichneum. Europ. 2: 107, ♀♂, no. 65

*Symplicis bicinctulatus*: AUBERT, 1968, Bull. Soc. Ent. de Mulhouse (mai-juin): 37

*Blapticus leucostomus* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 83, ♂

*Blapticus*: TOWNES, 1971, The Genera of Ichneumonidae. Part 4: 200

*Symplicis alpicola* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 119, ♀

*Symplicis alpicola*: THOMSON, 1888, Opusc. ent. 38 (Fasc. 12): 1287

*Symplicis alpicola*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2172

*Symplicis xanthostoma* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 119, ♀

*Symplicis xanthostoma*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2172

*Symplecis zonaria* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 120, ♀

*Symplecis zonaria*: THOMSON, 1888, Opusc. ent. 38 (Fasc. 12): 1287, ♀♂

*Symplecis facialis* Thomson, 1888, Opusc. ent. 38 (Fasc. 12): 1286, ♀♂

*Symplecis facialis*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2171, ♀♂.

*Symplecis basalis* Brischke, 1880, Schrift. naturf. Ges. Danzig N. F. 4: 146 (Type lost, species inquirenda)

Characteristics of the holotype of *Mesoleptus bicinctulus* Gravenhorst: Labels: holotype label TOWNES, 1964. A green tag. A white label: *Symplecis* (not original). Female. Front wing 3.6 mm. Clypeus and face yellow. Eyes strongly convergent. Frons polished. Antennae missing. Pronotum whitish. Propodeum with all carinae. Second tergite with longitudinal striation. Following tergites polished. Tip of ovipositor not beyond apex of gaster.

Characteristics of the female: Front wing 3.2–4.4 mm. Palpi, mandibles and clypeus white. Eyes strongly converging towards clypeus. Scape, pedicel, front and middle coxae yellowish to brown. Postannellus about 4.6 as long as wide. Frons polished. Pronotum for the greater part whitish to light brown. Mesoscutum polished, with minute punctures (implantations of adpressed hairs). Notauli short but well defined. Propodeum with all carinae and long, widely placed hairs. Hind coxae yellow to fuscous and with alutaceous sculpture. Other parts of legs reddish brown to yellowish. Hind femur 5.0–6.5 as long as wide. First and second tergite alutaceous, second tergite with fine striation and apical margin yellow. Third tergite yellow with fuscous band in the middle. Following tergites fuscous. The ovipositor (sometimes difficult to see) not beyond apex of gaster.

Characteristics of the male: Front wing 3.5–3.8 mm. Palpi, mandibles (only teeth brown), scape and pedicel, front and middle coxae and trochanters white. Clypeus slightly wider than long, white. Scape and pedicel weakly inflated, relatively large. Face with weak punctures, implantations of rather long hairs. Frons polished. Distal margin of pleuron 1 (meeting front coxa) in some specimens white. Mesoscutum polished, with fine punctures, implantations of adpressed hairs. Notauli short, well defined. Propodeum with all carinae and rather long hairs. Hind coxae brown, with alutaceous sculpture. All legs reddish. Hind femur 5.0–6.0 as long as wide. First and second tergite alutaceous, second tergite with fine striation and apical margin yellow. Third tergite polished, for the greater part yellowish to brownish with fuscous spots laterally. Apical tergites fuscous.

For comparison I append the following short descriptions of type specimens of species identical with *S. bicinctula*.

Under the name *Blapticus leucostomus*, FÖRSTER only described a male, connecting females were never found. The specimen is identical with *S. bicinctula*.

Characteristics of the holotype of *Blapticus leucostomus* Förster: Labels: Lousberg 3.X. Lectotype AUBERT. Male. Front wing 3.4 mm. Palpi, mandibles and clypeus whitish. Mandible with lower tooth shorter, not twisted. Malar space about as wide as mandibular base. Clypeal groove between face not present. Mesoscutum convex and steeply rising from pronotum. Notauli short. Front wing with areolet. Nervellus intercepted below the middle. Mesopleurum polished. Legs yellow, including front and middle coxae. Hind coxae brownish. Fringe of hind tibia long and close. Spiracles of first segment at 0.5 of length. Hind end of first sternite at 0.7 of length (this does not

agree with item 23, page 183, TOWNES). First and second tergite coriaceous, following tergites polished. Apical margin of second, third and fourth tergite yellow.

Characteristics of the holotype of *Symplicis xanthostoma* Förster: Labels: Lousberg 15.X. Holotype label of the present author. Female. Front wing 3.2 mm. Eyes strongly convergent towards clypeus. Clypeus white, slightly wider than long. Postannellus 6.3 as long as wide. Front wing with areolet. Nervellus weakly intercepted, no discoidella present. Legs yellow, hind coxae with sculpture. Hind femur 5.7 as long as wide. Apex of first sternite in 0.3 apical part of segment. Spiracle about in the middle. Second tergite striate.

Characteristics of the lectotype of *Symplicis facialis* Thomson: Labels: Dgb (= Degerberga, Skåne, Sverige), a red rimmed box label "facialis". Lectotype label of the present author. Female. Front wing 4.0 mm. Palpi, mandibles and clypeus white. Eyes strongly convergent towards clypeus. Front wing with areolet. Nervellus intercepted low, discoidella very weak. Front and middle coxae white, hind coxae brownish. Hind femur 4.7 as long as wide. First tergite coriaceous, spiracle at 0.6 of length. Second tergite coriaceous and somewhat striated. Two paralectotypes were labelled: both ♀♀, labels: "Deg" and Dgb (Degerberga).

#### *Symplicis bicingulata* (Grav.) f. *alpicola* Förster

In *S. bicingulata* specimens occur with brown clypeus, face and pronotum. These agree with *S. alpicola* Förster.

Characteristics of the holotype of *Symplicis alpicola* Förster: Labels: Splügen. Holotype label AUBERT, 1967. Female. Front wing 3.7 mm. Eyes strongly convergent towards clypeus. Clypeus brownish. Postannellus 5.0 as long as wide. Front wing with areolet. Nervellus intercepted below the middle, discoidella weak. Front and middle coxae brown, hind coxae black with sculpture. Striation on postpetiole and proximally on second tergite.

Characteristics of the holotype of *Symplicis zonaria* Förster: Labels: Aachen. Holotype label of the present author. Female. Front wing 3.2 mm. Eyes convergent towards clypeus. Clypeus brown. Postannellus 3.5 as long as wide. Front wing with areolet. Nervellus intercepted below the middle, discoidella present. Postpetiole more or less roughly striated. Second tergite proximally striated.

Material examined. – Germany: ♀, holotype of *Symplicis zonaria* Förster, Aachen (coll. Förster, München). Switzerland: ♀, holotype of *Symplicis alpicola* Förster, Splügen (coll. Förster, München).

Remark. The other specimens of *S. bicingulata* f. *alpicola* are inserted in *S. bicingulata*.

Material examined. – ♀, holotype of *Mesoleptus bicingulatus* Gravenhorst (Wrocław). Finland: ♂, Suomi V Sauvo, Karuna 669: 25, 30. VII. 1969; ♀, Suomi V Sauvo, Karuna 669: 25, 2. VIII. 1969; ♀, Suomi Inl Utsjoki, 13. VII. 1969 (coll. R. Jussila.). Italia: ♀, Unser Frau in Schnals (Südtirol), 1600 m, 14. VII. 1966; ♂, St. Peter, Ahrntal (Südtirol), 1200 m, 25. VIII. 1967; ♂, Martelltal (Südtirol), 2100 m, 16. VII. 1966; ♂, Merano, 700 m, 22. VII. 1966; ♂, Riva s. Garda, 350 m, 24. IV. 1966; ib. 500 m, 3. VII. 1966; ♂, Campi, Riva s. Garda, 1000 m, 7. IX. 1967 (all coll. Haeselbarth). Germany: ♀, holotype *S. xanthostoma* Förster, Lousberg 15.X. Aachen (coll. Förster, München); ♂, holotype *Blapticus leucostomus* Förster, Lousberg 3.X. Aachen (coll.

Förster, München): ♀, Hohenschwangau D. Bay. Säulingweg, 1120–1300 m, 16. VII. 1974; ♂, Hohenschwangau D. Bay. 830–1050 m, 16. VII. 1974; ♀, Dransfeld, 6. V. 1967; ♂, Zederhaus (Lungau), 2100 m, 25–27. VII. 1969; ♂♂ from Wiershausen, Glonn Oberbayern, Dransfeld, Meensen, Degerndorf (Inn) (all coll. Haeselbarth); ♀, Oberbayern, Garmisch, 700 m, 11. VIII. 1954 (coll. E. Bauer, München); ♀♂, Harz, Harzburg, Radautal, IX. 1946 (coll. Bauer, München); ♀, Nd Spessart, Lochmühle, 17–22. IX. 1971 (coll. van Rossem). Netherlands: 35 ♀♀ and 12 ♂♂, Asperen (Prov. Zd Hol.) Malaise trap (coll. Zwakhals); ♀♂ Ede (coll. Zwakhals); ♀♂ Nunspeet (coll. Zwakhals). Sverige: ♀, lectotype *S. facialis* Thomson and 2 paralectotypes, Degerberga (Skåne) (Museum Lund); ♀♂, Lappland, Abisko, 600 m, 25. VII–15. VIII. 1953 (A. Schulte, coll. München).

#### *Symplicis infavorabilis* nova species

Characteristics of the holotype: Holland, Asperen, 30. V. 1972, leg. C. J. Zwakhals. Female. Front wing 3.0 mm. Head black. Eyes convergent towards clypeus, almost touching clypeal margin. Clypeus about as wide as long, brownish yellow. Palpi yellow. Face polished, with sparse, erect hairs. Antennal base yellowish. Frons polished. Thorax brown. Mesoscutum with short notauli and adpressed hairs. Tegulae almost white. Mesopleurum polished, prepectal carina present. Propodeum with all carinae. Front wing without areolet. Legs, including coxae, yellowish brown. Hind femur 5.5 as long as wide. First tergite coriaceous. Second tergite striate, distal 0.3 part polished, yellow. Ovipositor not beyond apex of gaster.

Material examined.—Netherlands: ♀, holotype, Asperen (Prov. Zd Hol.), 30. V. 1972; ♀, Asperen, 30. V. 1972; ♀, Asperen, 1. VIII. 1972; ♀, Asperen, 11. VIII. 1972; ♀, Asperen, 5. X. 1972; 2♀, Asperen, 18. X. 1972; ♀, Asperen, 17. VI. 1973; ♀, 5. VII. 1973 (paratypes) (all from coll. Zwakhals).

#### *Symplicis invisitata* nova species

Characteristics of the holotype: Sverige, Messaure, 18. VII. 1971, leg. Karl Müller. Collection Henry Townes, Ann Arbor. Female. Front wing 4.1 mm. Labium, labial palpi and maxillary palpi white. Mandibles yellow, teeth of the same length. Clypeus yellowish, about 1.5 as wide as long. Eyes strongly converging, malar space very narrow. Face polished, brown, with yellowish spots under antennal sockets towards eye margin. Antennal scape subcylindric, brownish. Pedicel large. Postannellus slender. Frons and vertex polished. Pronotum polished, brown, front margin and dorsal hind edge whitish. Epomia present. Pleuron 1 brown. Mesoscutum coriaceous, notauli short but well developed anteriorly. Scutellum polished. Front wing without areolet. Nervellus inclivous, intercepted low, but discoidella absent. Tegulae and wing base white. Propodeum with all carinae present and with rather long, widely placed hairs. Mesopleurum highly polished. Prepectal carina to about the middle of pronotal margin, but not reaching mesopleural margin. Front coxae whitish, middle and hind coxae more brown. Front and middle legs yellow. Middle femora slender. Hind femora, tibiae and tarsi light brown and with rather close subadpressed hairs. Apical fringe of hind tibia close. First gastral tergite coriaceous, spiracles at 0.57 of length. Median dorsal carinae almost obsolete. Second tergite fuscous, coriaceous and with apical margin yellow. Fol-

lowing tergites polished, with widely placed rather long hairs. Third tergite broadly yellow in anterior part and with apical margin yellow. Sternites 1, 2, 3 and 4 white, with widely placed white hairs, their implantations fuscous, giving a rather striking character. Following sternites brown. Ovipositor long, 0.16 of length front wing (about 0.5 of length hind tibia). In other species of *Symplicis* the ovipositor is concealed within subgenital plate.

The name *invisitata* is from the Latin for "uncommon".

Material examined. – Sverige: ♀, holotype, Messaure, 18.VII.1971, leg. Karl Müller (coll. Townes, Ann Arbor).

### *Symplicis beaumontor* Aubert

*Symplicis beaumontor* Aubert, 1968, Bull. Soc. Ent. de Mulhouse (mai–juin): 37–38, ♀♂

Characteristics of the female: Front wing 3.6–4.1 mm. Palpi brown. Mandible turned inwards, lower tooth facing oral cavity. Clypeus convex. Inner margins of eyes strongly convergent, mutual distance at clypeus 0.3 of distance at lower ocellus. Face, frons, vertex and temple polished. Antennal scrobes obsolete. Ocelli minute, separated from eye margin at  $2.1 \times$  their diameter. Eye surface with sparse, short setae. Postanellus about 7.0 as long as wide. Mesoscutum polished, with adpressed hairs. Notauli strong at prescutal margin, further obsolete. Propodeum with all carinae. Mesopleurum polished. Front wing with areolet. Nervellus intercepted low, no discoidella present. Legs slender, hind femur 5.7–6.7 as long as wide. Hind coxae coriaceous. Spiracles of first gastral segment at 0.6 of length. Hind end of first sternite at 0.68 of length. First tergite polished to somewhat coriaceous, median dorsal carinae not developed. Second tergite finely coriaceous, base of third tergite coriaceous, following tergites polished. Apex of ovipositor not beyond tip of gaster.

Characteristics of the male. Front wing 3.7 mm. Palpi brown. Mandible brown, not turned inwards, lower tooth shorter than upper. Clypeus convex, polished, protruding. Malar space narrow. Eyes converging towards clypeus. Face fuscous, polished, with erect, long hairs. Frons and vertex polished. Antenna without tyloids. Pronotum polished, epomia obsolete. Mesoscutum polished, with subadpressed hairs. Notauli short, with carina. Propodeum with irregular sculpture, all carinae present, except costula. Area superomedia long and narrow. Mesopleurum polished. Front wing with aerolet. Nervellus intercepted low, discoidella obsolete. Legs brown, slender. Middle and hind coxae fuscous, with regular sculpture. Spiracles of first gastral segment at 0.6 of lenght. Second tergite somewhat coriaceous and proximally with some longitudinal striation. Following tergites polished, brown and with long erect hairs.

Material examined. Switzerland: ♂♀, paratypes, Valais, La Pierraz, 2000 m, 5.IX.1956, leg. J. de Beaumont, coll. J. F. Aubert. Italia: ♀, St. Peter, Ahrntal, Südtirol, 1800 m, Jb/26. VIII. 1967, coll. Haeselbarth.

## Species inquirenda

*Symplicis defectiva* Strobl

*Symplicis defectiva* Strobl, 1903, Mitt. Nat. Ver. f. Steierm. 40: 112–113

Of the holotype (label AUBERT, 1969) of this species the gaster is lacking. The specimen is indeterminable.

## Genus *Catastenus*

*Catastenus* Förster, 1868, Verh. naturh. Ver. preuss. Rheinl. 25: 170

*Catastenus*: FÖRSTER, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 74

*Catastenus*: THOMSON, 1888, Opusc. ent. 38 (Fasc. 12): 1291

*Catastenus*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2184

*Catastenus*: TOWNES, 1971, The genera of Ichneumonidae part 4: 202

### *Catastenus femoralis* Förster

*Catastenus femoralis* Förster, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 75

*Catastenus femoralis*: THOMSON, 1888, Opusc. ent. 38 (Fasc. 12): 1292

*Catastenus femoralis*: STROBL, 1903, Mitt. Nat. Ver. f. Steierm. 40: 116

*Catastenus femoralis*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2185

There are only two *Catastenus* specimens in the Förster collection.

Characteristics of the lectotype: Labels: Aachen. Lectotype label of the present author. Female. Front wing 3.25 mm. Eyes strongly convergent. Mesoscutum polished. Propodeum without area superomedia. Apical transverse carina well developed. Hind femur about 4.0 as long as wide. Hind fifth tarsal segment widened, claws large with conspicuous bristles. First tergite slender, slightly widened. Apical margins of tergites yellow. First, second and third tergites coriaceous. Ovipositor short, as long as first tarsal segment of hind leg.

Characteristics of the paralectotype: Labels: Aachen ♂, 21 gl. Paralectotype label of the present author. Male. Front wing 3.0 mm. Palpi and mandible white, teeth brown, lower tooth shorter and somewhat turned inward. Clypeus brown, flat, about 1.6× wider than long. Face polished, with relatively long hairs. Frons and vertex polished. Eyes strongly convergent. Malar space about half as wide as width of postanellus. Scape yellow. Postanellus 3.0 as long as wide. Flagellum with close hairs. Back of head and pronotum not visible, as head is glued to thorax. Mesoscutum polished, scutellum rather convex, carina only at base. Mesopleurum polished. Propodeum with all carinae, but no area superomedia defined. Legs yellow, including front and middle coxae. Hind coxae and hind femur brownish. Hind femur 3.2 as long as wide, tibia stout, both with long adpressed hairs. Claws of hind leg large with long and slender arolium reaching beyond tip of claws and with a ventrally placed brment slender, coriaceous, without median dorsal carinae. Spiracles at 0.4 of length. End of first sternite at about 0.77 of length. Second tergite coriaceous, following tergites more polished. Tergites two to five with apical margin yellow.

Description of the female. Front wing 3.2–3.5 mm. Head black. Eyes strongly convergent. Width between eye margins at clypeal base about the length of fourth antennal segment. Malar space narrow, about as wide as width postannellus. Mandibular teeth brown. Palpi white. Clypeus somewhat wider ( $1.6 \times$ ) than long. Face with setiferous punctures. Frons polished. Scape, pedicel and postannellus yellowish brown. Thorax black with pleuron one and front part of pronotum brown. Mesoscutum with setiferous punctures and notalices poorly developed. Propodeum with all carinae, in certain specimens tdnal carinae lacking. Front wing without areolet. Prepectal carina present. Mesopleurum polished. Front and middle coxae and trochanters white to whitish yellow. Remaining parts of front and middle legs yellow and slender. Middle femur 6.6 as long as wide. Hind coxae more robust, proximally brown, coriaceous. Hind femur robust, 3.5–3.8 as long as wide. Also hind tibia robust. Hind fifth tarsal segment widened, claws large with long and slender arolium reaching beyond tip of claws and attended with a ventrally placed bristly lobe. Tergites one, two and three coriaceous. Fourth tergite proximally coriaceous. Tergites two, three and four with broad apical margin yellow. Ovipositor about as long as second tarsal segment of hind leg.

Material examined. – Austria: ♀, Walchsee, Tirol, 800 m, 4. VI. 1968 (coll. Haeselbarth); 2♂, Aschbach, Tirol, 1400 m, 6. VII. 1976 (coll. Zwakhals). Germany: ♀♂, Aachen (lectotype & paralectotype) (coll. Förster, München); ♀, Reither Alm, 1100 m, Heidelbeere (coll. Haeselbarth); ♀, D., Bay., Rottenbuch, 3. VI. 1974 (coll. Haeselbarth); ♀, Oberbiberg bei München, Heidelbeere (coll. Haeselbarth); ♂, Flintsbach, Inn. B., 550 m, 2. VIII. 1968 (coll. Haeselbarth); ♂, München, Grünwalder Forst, 26. VII. 1958 (coll. Haeselbarth). Italia: ♂, Campi, Riva s. Garda, 1000 m, C/7. VII. 1966 (coll. Haeselbarth). Netherlands: ♀, Nunspeet, 3. VIII. 1975 (coll. Zwakhals).

### *Phosphorus*, new genus

The available specimens examined, agree with the generic key of TOWNES (1971, page 180–183) only as far as item 24, but the ovipositor is obviously too long to fit the descriptions of *Symplicis* and *Catastenus*. A second character is the parallel running inner margins of the eye in the female as compared with the strongly converging inner eye margins of *Symplicis* and *Catastenus* females.

The species was originally described by STROBL (1903) in the genus *Entypoma*, but this is not tenable on the ground of item 7 in TOWNES' key, as the apex of the first sternite lies behind the middle of its tergite.

The characters of the genus are given in the following description of STROBL's holotype of *Entypoma rugosissimum*.

There is a single known species. It occurs in Austria and Germany.

Type species: *Phosphorus rugosissimus* (Strobl, 1903).

Male unknown.

The generic name refers to the latin word for morning star.

*Phosphorus rugosissimus* (Strobl) (new combination)

*Entypoma rugosissimum* Strobl, 1903, Mitt. Nat. Ver. f. Steierm. 40: 114, ♀

Characteristics of the holotype: Labels: an original green label Johnsbachern 3. VIII. 1885, ♀. Type label AUBERT, 1975. Female. Front wing 5.0 mm. Palpi whitish. Mandibles yellow, length of teeth equal. Clypeus about 2.0 as wide as long, flat, upper half fuscous, lower part yellow. Malar space narrow, about 0.3 of width mandibular base. Face polished, dark brown. Inner margins of eyes parallel. Frons and vertex polished, fuscous. Hind ocellus about 1.5 of its diameter from eye margin. Postannellus about 7.0 as long as wide. Pronotum for the greater part polished, front margin conspicuously broad, dorsally with a groove, on both sides flanked by a carina. Mesoscutum steeply rising, polished, with strong notauli, meeting in center. Propodeum with rough irregular to transverse sculpture. Pleural and lateral longitudinal carinae more or less present, median longitudinal carinae absent. Apical transverse carina strong, lying near to orifice. Front wing with areolet. Nervellus intercepted below the middle. Discoidella present. Mesopleurum polished. Prepectal carina strong, reaching to middle of pronotal hind margin. Front and middle coxae whitish, hind coxae brown. Hind femur about 4.0 as long as wide. Hind tibia very long and slender, slightly shorter than length of thorax. First tergite long and slender, about 3.0 as long as wide at apex, with rough sculpture, spiracles at about 0.76 of length. Tergites two and three with rough sculpture and broad apical yellow margin. Ovipositor long, about the length of hind femur beyond apex of gaster.

Characteristics of a female: Labels: Germany: ♀, Flintsbach Inn. B. 550 m, 2. VIII. 1968 (coll. Haeselbarth). Front wing 5.0 mm. Head black. Clypeus almost 2.0 as wide as long. Face with some irregular sculpture. Frons polished. Hind ocellus 1.5 of its diameter from eye margin. Postannellus 9.0 as long as wide, slender. Following three flagellar segments also slender. Thorax black. Mesoscutum with strong and deep notauli, meeting in center, median lobe convex. Front wing with areolet. Propodeum with lateral longitudinal, pleural and apical transverse carinae defined. Prepectal carina reaching subtegular ridge. Upper part of mesopleurum polished. Front and middle coxae and trochanters whitish yellow. Remaining parts of front and middle legs brown. Hind coxae fuscous. Hind femur robust, brown, 4.3 as long as wide. Claws of hind tarsus robust. Gaster black, with apical margins of all tergites yellow. Spiracles of first segment at 0.76 of length. First and second tergite with rough sculpture, following tergites gradually more smooth. Ovipositor long, 0.25 of length front wing.

Material examined. – Austria: ♀, holotype of *Entypoma rugosissimum* Strobl, type label AUBERT 1975; Johnsbachgraben, 3. VIII. 1885. STROBL (CDCS, Museum Admont). Germany: ♀, Flintsbach, Inn. B. 550 m, 2. VIII. 1968 (coll. Haeselbarth).

Remark. – The genus *Phosphorus* can be inserted into the key to *Microleptine* genera of TOWNES (1971, page 180–183) as follows.

24. Ovipositor 0.35–0.50 as long as hind tibia. Much of the basal part of sheath and of the ovipositor concealed within subgenital plate. Front wing 2.8–4.7 mm long. Females with inner eye margins converging . . . . . 25
- Ovipositor obvious, about the length of hind femur beyond apex of gaster. Front wing 5.0 mm. Females with eye margins parallel.

*Phosphorus* new genus (page 129).

25. Hind femur about 4.5 as long as deep. Clypeus about 1.3 as wide as long.  
Claws of hind tarsus moderately large. All regions except Australian Region. 20  
*Symplicis* (page 123).
- Hind femur about 3.5 as long as deep. Clypeus about 1.6 as wide as long.  
Claws of hind tarsus exceptionally large. Holarctic Region . . . . . 21  
*Catastenus* (page 128).

### Supplement on the genus *Eusterinx*

*Eusterinx* Förster, 1868, Verh. naturh. Ver. preuss. Rheinl. 25: 172  
*Eusterinx*: FÖRSTER, 1871, Verh. naturh. Ver. preuss. Rheinl. 28: 107  
*Catomicrus* Thomson, 1888, Opusc. ent. 38 (Fasc. 12): 1285  
*Catomicrus*: STROBL, 1903, Mitt. Nat. Ver. f. Steierm. 40: 116  
*Strobilia* Schmiedeknecht, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2182  
*Eusterinx*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 2186  
*Eusterinx*: AUBERT, 1968, Bull. Soc. Ent. de Mulhouse (mai-juin): 37–41  
*Eusterinx*: TOWNES, 1971, The Genera of Ichneumonidae. Part 4: 202–203

In the material from the collections of Haeselbarth and Zwakhals there were several interesting specimens which agreed with the type of *Catomicrus alpigenus* Strobl, 1903. One species of *Eusterinx* is described as a new species in the subsequent section.

#### *Eusterinx alpigena* (Strobl)

*Catomicrus alpigenus* Strobl, 1903, Mitt. Nat. Ver. f. Steierm. 40: 116.  
*Strobilia alpigena*: SCHMIEDEKNECHT, 1911, Opusc. Ichneum. 4 (Fasc. 28): 218

Characteristics of the holotype of *Catomicrus alpigenus*: Labels: *Catomicrus alpigenus* m. 8/6 99, Styriae alp. Strobl. Holotype label of the present author. Female. Front wing 3.3 mm. Mandible single pointed. Propodeum with strong apophyses. No discoidella present. First, second, third and fourth tergite with fine longitudinal striation. Ovipositor about 0.2 of length front wing.

Characteristics of the female: Front wing 3.1–3.6 mm. Head black. Mandible single pointed. Eyes convergent towards clypeus, not touching clypeal margin. Malar space present. The anterior tentorial pit (clypeal fovea) is situated in a conspicuous depression between eye margin and clypeus. Clypeus black to brown, somewhat convex, about as wide as long. Face and frons polished. Thorax black. Mesoscutum with strong notaulices, meeting centrally. Front wing without areolet. No discoidella present. Propodeum with area superomedia distally open. Strong apophyses present. Front and middle legs yellowish to brownish, including coxae. Hind coxae coriaceous and black. Hind femur 5.0 as long as wide. Gaster black, hind margins of tergites 2, 3 and 4 brown. Spiracle of first segment at 0.7 of length. First tergite with strong striation, second and third tergite with gradually weaker striation. Ovipositor long, about 0.2 of length front wing.

Characteristics of the male: Front wing 3.2–3.6 mm. Head black. Eyes not convergent. Malar space present. Clypeus black, apically somewhat brown, slightly wider than long, somewhat convex. The anterior tentorial pit is lying in a depression between eye margin and clypeus. Face and frons with setiferous punctures. Eighth antennal

segment ventrally with a somewhat concave and smooth area. Thorax black. Mesoscutum slightly hunched, with strong notaulices meeting centrally and adpressed hairs. Front wing without areolet. No discoidella present. Propodeum with all carinae and strong apophyses. Prepectal carina present. Mesopleurum polished. Front coxae brownish. Middle and hind coxae coriaceous and fuscous. Front and middle legs ochreous yellow. Hind femur brown, robust, 4.4 as long as wide and with conspicuous adpressed hairs. The thorax ventrally, including coxae, with adpressed hairs. Median sternal groove (mesolcus) deep. Gaster black. Spiracles of first segment at 0.5 of length. First tergite with strong striation, on second and third tergite gradually weaker. Tergites two, three and four coriaceous.

Material examined. Austria: ♀, holotype *Catomicrus alpigenus* Strobl, 8. VI. 1899, Styriae alp. (Strobl coll. Admont). Germany: ♀, Lippoldshausen G/, 21. V. 1967; ♂, Lippoldshausen G/, 21. V. 1967 (coll. Haeselbarth). Netherlands: ♂, Asperen (Prov. Zd Hol.), 21. V. 1973; ♀, Asperen, 1. VI. 1973 (both coll. Zwakhals).

### *Eusterinx inaequalis* nova species

Characteristics of the holotype: Labels: Holland, Asperen (prov. Zd Hol.), 28. VI. 1972, leg. C. J. Zwakhals. Holotype label of author. Female. Front wing 3.2 mm. Head black. Large eyes strongly convergent towards clypeus, touching clypeal margin. Mandible single pointed, lower tooth not visible. Clypeus about as wide as long, ventrally somewhat protruding, with sparse vertical hairs. Palpi yellow. Face polished with sparse, vertical hairs. Scape and pedicel yellow. Frons polished. Thorax brownish black. Mesoscutum with strong, deeply impressed notaulices, meeting centrally and with conspicuous transverse ridges. Prescutum margin turning inward and towards the notaulices. Prescutum coriaceous. Mesoscutum with adpressed hairs. Tegulae brownish. Prepectal carina well developed, reaching pronotal margin somewhat below wing base. Mesopleurum polished. Propodeum with all carinae. Front wing with areolet. Discoidella not present. Front and middle coxae yellow. Hind coxae brown, coriaceous. Remaining parts of front and middle legs yellow. Hind legs brown. Hind femur 6.4 as long as wide. The most conspicuous character of this species is the sculpture of the second and third tergite. Proximal 0.75 part of second tergite coriaceous and striate, distal part polished. About 0.5 part of third tergite striate, distal part polished. The two different parts of the third tergite are separated by a conspicuous suture, almost giving the impression of two tergites. There is a weak indication of such a suture on tergite four. Ovipositor long, 0.6 as long as hind femur.

Remark. The name is from *inaequalis*, alluding to the inequality of the tergite sculpture.

Characteristics of a paratype: Labels: Holland, Asperen, 27. VIII. 1972, leg. C. J. Zwakhals. Paratype label of the author. Male. Front wing 3.0 mm. Head black. Eyes slightly converging, not touching clypeal margin. Malar space present. Clypeus brown, about 2× as wide as long, proximal margin somewhat incurved. Palpi yellow, long, reaching beyond front coxae. The conspicuous sculpture of the tergites is the same as in the female, but in the male the tergites 2, 3, 4 and 5 have these striking features.

Material examined. Italia: ♂, paratype, Riva s. Garda, 800 m, B. 7. IX. 1967 (coll. Haeselbarth). Netherlands: ♀, holotype, Asperen, 28. VI. 1972 (coll. Zwakhals); ♀, paratype, Asperen, 6. VIII. 1972 (coll. Zwakhals); ♂, paratype, Asperen, 27. VIII. 1972 (coll. Zwakhals).

## Zusammenfassung

Wiederbeschreibungen westpaläarktischer Arten nachfolgender Gattungen werden gegeben: *Microleptes* Gravenhorst; *Hemiphanes* Förster; *Oxytorus* Förster; *Hyperacmus* Holmgren; *Entypoma* Förster; *Allomacrus* Förster; *Apolcima* Förster; *Cylloceria* Schiodte; *Aniseres* Förster; *Pantisarthrus* Förster; *Dialipsis* Förster; *Laepserus* Förster; *Symplecis* Förster und *Catastenus* Förster.

Der Gattungsname *Laepserus* Förster wird anstatt von *Blapticus* Förster eingeführt. Die Typusart von *Blapticus* erwies sich als eine Art von *Symplecis*.

Ein Nachtrag zur Gattung *Eusterinx* wird gegeben.

Zwei neue Gattungen werden aufgestellt und zwar *Phosphorus* mit *Entypoma rugosissimum* Strobl, 1903 als Typusart und *Ephalmator* mit *E. subsimilis* nova species als Typusart.

Die folgenden neuen Arten werden beschrieben: *Hemiphanes townesi*; *Pantisarthrus dispar*; *Laepserus restrictus*; *Ephalmator subsimilis*; *Symplecis invisitata*; *Symplecis infavorabilis* und *Eusterinx inaequalis*.

*Cylloceria marginator* Schiodte und *Chalinoceras altior* Heinrich werden als Formen von *Cylloceria melancholica* Gravenhorst aufgefaßt. *Blapticus crassulus* Thomson, 1888 wird als eine Form von *Laepserus dentifer* (Thomson, 1888) betrachtet.

Holotypen und Lectotypen verschiedener Arten werden festgelegt.

## References

- AUBERT, J. F. 1964: Révision des travaux concernant les Ichneumonides de France et 4e supplément au Catalogue de Gaulle. – Bull. mens. Soc. Linn. de Lyon 33: 57–65
- — — 1968: Révision des travaux concernant les Ichneumonides de France et 6e supplément au Catalogue de Gaulle. – Bull. mens. Soc. Linn. de Lyon 37: 133–144
- — — 1968: Révision du Genre *Eusterinx* Först. et descriptions d'autres Ichneumonides Microleptinae inédites. – Bull. Soc. Ent. Mulh. Mai–juin: 37–41
- — — 1970: Révision des travaux concernant les Ichneumonides de France et 7e supplément au Catalogue de Gaulle. – Bull. mens. Soc. Linn. de Lyon 39 (9): 271–280
- — — 1975: Révision des *Aperileptus* Först. et *Plectiscidea* Vier. (*Plectiscus auct.*) de FÖRSTER et de STROBL. – Opusc. Zool. 138: 1–8
- — — 1977: Révision des Ichneumonides *Proclitus* Foerst., *Pantisarthrus* Foerst., *Aniseres* Foerst. et *Halictes* Hal. – Spixiana 1 (2): 141–149
- BRAUNS, S. 1905: Die Gattung *Lampronota* Hal. – Zeitschr. syst. Hym. Dipt. 5: 132–134
- BRISCHKE, C. G. 1880: Die Ichneumoniden der Provinzen West- und Ostpreußen. – Schrift. naturf. Ges. Danzig N. F. 4 (Heft 4): 108–210
- FITTON, M. G. 1976: The Western Palaearctic Ichneumonidae of British Authors. – Bull. Br. Mus. nat. Hist. (Ent.) 32 (8): 301–373
- — — M. G. & I. D. GAULD 1976: The family-group names of the Ichneumonidae (excluding Ichneumoninae). – Systematic Entomology 1: 247–258
- — — 1978: Further notes on family-group names of Ichneumonidae. – Systematic Entomology 3: 245–247
- FÖRSTER, A. 1868: Synopsis der Familien und Gattungen der Ichneumonen. – Verh. naturh. Ver. preuss. Rheinl. 25: 135–221
- — — 1871: Übersicht der Gattungen und Arten der Familie der Plectiscoiden. – Verh. naturh. Ver. preuss. Rheinl. 28: 71–123

- GRAVENHORST, J. L. C. 1820: Monographia ichneumonum Pedemontanae regionis. – Mem. Acad. Sci. Torino 24: 275–388  
— — 1829: Ichneumonologia Europaea 1 (31): 1–830 Vratislaviae.  
— — 1829: Ichneumonologia Europaea 2 (2): 1–989
- HEINRICH, G. 1953: Ichneumoniden der Steiermark. – Bonn. Zool. Beitr. 4 (Heft 1–2): 151–152
- HELLÉN, W. 1915: Beiträge zur Kenntnis der Ichneumoniden Finnlands I Subfamilie Pimplinae. – Acta Soc. Fauna Flora fenn. 40 (6): 48  
— — 1937: Für die Fauna Finnlands neue Ichneumoniden II Cryptinae, Pimplinae. – Notul. ent. 17: 5–13  
— — 1940: Enumeratio insectorum Fenniae II. Hymenoptera 2. Terebrantia. Helsinki.
- JUSSILA, R. 1965: The Ichneumonidae of the Kevojoki Area in Inari Lapland (Finland). – Ann. Univ. Turkuensis A (II) 34: 1–186
- HOLMGREN, A. E. 1856: Monographia Tryphonidum Sueciae. – K. Svenska Vet. Akad. Handl. N. F. 1 (2): 305–394  
— — 1881: Novas species insectorum cura et labore A. E. Nordenskiöldii e Novaia Semlia coactorum: 13
- KERRICH, G. J. 1939: Systematic Notes on the Oxytorina. – Opusc. ent. 4: 126–128
- MEYER, N. F. (Th.) 1936: Tableaux analytiques de la Faune de l' URSS. Leningrad. Tryphoninae 6: 1–356
- MUESBECK, C. F. W., K. V. KROMBEIN & H. K. TOWNES 1951: Hymenoptera of America North of Mexico. – Agric. Monograph (Washington) 2: 1–1420
- PERKINS, J. F. 1962: On the Type Species of FOERSTERS Genera. – Bull. Br. Mus. nat. Hist., Entomology 2 (8): 385–438
- ROMAN, A. 1923: Ichneumonids reared from Diptera Nematocera. – Ent. Mon. Mag. 59: 71–76
- ROSSEM, G. VAN 1974: The GRAVENHORST, SCHIØDTE and FOERSTER Types, belonging to the Genus *Megastylus* Schiødte, 1838, with Keys to the Species. – Tijdschr. Ent. 117: 273–285. Pl. 1
- SCHMIEDEKNECHT, O. 1907: Opuscula Ichneumonologica. Pimplinae. 3 (17): 1281–1360  
— — 1911: Opuscula Ichneumonologica. Plectiscina. 4 (28 & 29): 2161–2271  
— — 1912: Opuscula Ichneumonologica. Tryphoninae. 5 (32): 2483–2562  
— — 1924: A short summary of the section Tryphonides Prosopi. – Ent. Mon. Mag. 60: 45–48  
— — 1925: Opuscula Ichneumonologica. Tryphoninae. 5 (40): 3123–3202
- SCHIØDTE, J. C. 1838: Ichneumonidarum, ad faunam Daniae pertinentium, genera et species novae. – Rev. Zool. Soc. Cuvierienne 1: 140  
— — 1839: Ichneumonidarum, ad Faunam Daniae pertinentium, genera et species novae, descriptio. – Mag. Zool. D'anat. Comp. et de Pal. II: 1–..., Pl. 6–10
- STROBL, G. 1901: Hymenoptera aus Ungarn und Siebenbürgen. Gesammelt von Professor Gabriel Strobl und Professor Thalhammer. – Verh. Mitt. Siebenb. Ver. Naturw. Hermannstadt 50: 43–79  
— — 1903: Ichneumoniden Steiermarks. – Mitt. Nat. Ver. f. Steierm. 40: 43–142
- THOMSON, C. G. 1877: Bidrag till kännedom om Sveriges pimpler. – Opusc. ent. 27 (Fasc. 8): 732–777  
— — 1883: Bidrag till kännedom om Skandinaviens tryphoner. – Opusc. ent. 32: 387–936  
— — 1888: Bidrag till Sveriges insectfauna. – Opusc. ent. 37 (Fasc. 12): 1202–1265  
— — 1888: Försök till gruppering af slägteret *Plectiscus* (Grav.). – Opusc. ent. 38 (Fasc. 12): 1266–1318
- TOWNES, H., 1967: Taxonomic notes on *Kentrotryphon*, *Ktenostilpnus* and *Parentypoma* – Proc. Ent. Soc. Wash. 69 (1): 58–59  
— — 1969: The Genera of Ichneumonidae, part 1. – Mem. Amer. Ent. Inst. 11: 1–300. Pl. 1–134. Ann Arbor

— — 1971: The Genera of Ichneumonidae, part 4. – Mem. Amer. Ent. Inst. 17: 1–372. Pl. 1–217.

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VIERECK, H. L. 1914: Type species of the Genera of Ichneumon flies. – U. S. Nat. Mus. Bull. 83:  
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