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KEY TO THE GENERA OF THE PALAEARCTIC OXYTORINAE, WITH THE DESCRIPTION OF THREE NEW GENERA (HYMENOPTERA: ICHNEUMONIDAE)

by

G. VAN ROSSEM

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A revised key to the Palaearctic genera of the subfamily Oxytorinae (Hymenoptera: Ichneumonidae) is given. Three new genera are described: *Pantomima* gen. nov. (type-species: *Pantomima festata* spec. nov.), *Fetialis* gen. nov. (type-species: *Fetialis alacris* spec. nov.), and *Epitropus* gen. nov. (type-species: *Epitropus insolitus* spec. nov.). A tentative key to the females of the subgenus *Eusterinx* Förster, 1868 is included and one new species, *Eusterinx (E.) fabulosa* spec. nov., is described.

G. van Rossem, Berkenlaan 25, 6711 RM Ede, The Netherlands.

INTRODUCTION

This paper is part of a series of papers of the Ichneumonid subfamily Oxytorinae (Van Rossem, 1974-88), or Microleptinae (s.l. as named by Townes (1969, 1971)). The Oxytorinae is still probably a "wastebasket" group (Townes, 1971) and is one of the most difficult of the Ichneumonid subfamilies to define, as the genera have very diverse appearances. The subfamily is world-wide in distribution and the species are usually small and delicate, occurring in very moist habitats. Their hosts are mainly Mycetophilidae, but rearing records are scanty.

The terminology is based on Townes (1969) and the key to the genera is a modification of the key by Townes (1971) to include the three new genera and the genera described since 1971 (Van Rossem, 1974-1988). For the bibli-

ographic references to genera not further dealt with in this paper, see previous publications of the author (Van Rossem, 1974-88).

REVISED KEY TO THE PALAEARCTIC GENERA OF OXYTORINAE

1. Hind margin of apical truncation of scapus membranous and in dried specimens somewhat infolded, the scapus inflated (compare item 23) and with a very oblique apical truncation (fig. 1). Areolet absent. Ovipositor shorter than apical truncation of gaster. First tergite long and approximately straight, its spiracle at or in front of middle *Megastylus* Schiødte
 - Hind margin of apical truncation of scapus not membranous (fig. 4). Otherwise not entirely as above 2
2. Second recurrent vein with one bulla 3
 - Second recurrent vein with two bullae 6
3. Head strongly protuberant just below antennal sockets (figs. 2, 4). Apical fringe on hind side of hind tibia dense, its upper end slanted basad. Nervulus usually distad of basal vein by about 0.65 of its length. (Subfamily Microleptinae; Wahl, 1986) *Microleptes* Gravenhorst
 - Head not strongly protuberant below antennal sockets. Apical fringe on hind side of hind tibia not unusually dense, its upper end not slanted basad. Nervulus approximately opposite basal vein 4
4. First abdominal segment rather stout, 1.1 to 2.1 times as long as wide (fig. 3). Areolet absent (fig. 6). Ovipositor not widened and flattened
 - *Hemiphanes* Förster
 - First abdominal segment slender, 2.4 to 3.6 times as long as wide, its sternite ending behind the middle 5
5. Clypeus very conspicuous, trapezoid in shape, 1.8 times as wide as long (fig. 5). Mandibular teeth of the same length. Female unknown
 - *Epitropus* gen. nov.
 - Clypeus about 2.8 times as wide as long (fig. 8). The lower mandibular tooth shorter than upper tooth. Ovipositor sheath very broad, almost flat (fig. 7) *Oxytorus* Förster
6. Apex of first sternite in front of the middle of its tergite, the sternite not fused with its tergite 7
 - Apex of first sternite at or behind the middle of its tergite, the sternite usually fused with its tergite 20
7. Face protuberant (fig. 10). [Arolet of front wing absent. Ovipositor hardly surpassing end of gaster (fig. 9). Flagellar segments of female short and wide (fig. 10)] *Hyperacmus* Holmgren

- Face normal (fig. 11) 8
- 8. Areolet of front wing present (*Entypoma* will key through both halves of the couplet) 9
- Areolet of front wing absent 14
- 9. Propodeum smooth, lacking basal and transverse carinae and sublateral carina absent or present only near hind end of propodeum. [Flagellar segments of female slender (fig. 11). Length of ovipositor 0.21-0.55 times length of front wing] *Aperileptus* Förster
- Propodeum not smooth, carinae present 10
- 10. Ovipositor not upcurved and its length 0.9-0.30 times length of front wing. [Small specimens, front wing 2.7-4.3 mm long. Postannellus 4.0-6.5 times as long as wide. Notaulus absent, weak or present. Mesoscutum and mesopleurum polished.] *Plectiscidea* Viereck
- Ovipositor upcurved 11
- 11. Prepectal carina and notaulus absent. Clypeus convex *Atabulus* Van Rossem
- Prepectal carina and notaulus (at least as a trace) present. Clypeus flat or convex 12
- 12. Clypeus convex. [Small specimens, front wing 2.7-3.5 mm long. Postannellus 4.0-5.5 times as long as wide. Pronotum, mesoscutum and mesopleurum highly polished. Notaulus obsolete. First abdominal segment 1.5-1.9 times as long as wide. Length of ovipositor 0.13-0.22 times length of front wing] *Plectiscidea* Viereck
- Clypeus flat 13
- 13. Thyridia present. Clypeus 2.3 times as wide as long. Ovipositor with a sharp subapical notch; (the only known specimen from the Alps at 2000 m) *Kentrotryphon* Strobl
- Thyridia absent. Clypeus 1.8-2.5 times as wide as long. Ovipositor with a weak subapical impression *Entypoma* Förster
- 14. Portion of cubitus between intercubitus and recurrent vein 0.21-0.38 times as long as recurrent vein (fig. 17) 15
- Portion of cubitus between intercubitus and recurrent vein 0.5-0.7 times as long as recurrent vein 19
- 15. Median lobe of mesoscutum strongly elevated, with an abrupt declivity towards pronotum (fig. 13). All fifth tarsal segments stout and with robust claws (fig. 15) *Pantomima* gen. nov.
- Median lobe of mesoscutum not elevated. All fifth tarsal segments normal, or fifth tarsal segments and claws robust in *Cylloceria* or only claws robust in *Entypoma* 16
- 16. Nervellus inclivous. Male flagellum with apex of third segment and base of fourth segment not notched on outer side 17

- Nervellus vertical or reclivous. Male flagellum with apex of third segment and base of fourth segment roundly notched on outer side 18
- 17. Clypeus 1.3-1.7 times as wide as long (fig. 16). Tip of mandible moderately twisted *Entypoma* Förster (in part)
- Clypeus about 3.0 times as wide as long (fig. 12). Tip of mandible hardly twisted *Allomacrus* Förster
- 18. Occipital carina broadly interrupted dorsally. Tip of mandible strongly twisted so that lower tooth is obliquely behind upper tooth. Front wing 3.0-4.7 mm long *Apoclima* Förster
- Occipital carina complete dorsally. Tip of mandible not twisted. Front wing 6.5-8.9 mm long *Cylloceria* Schiødte
- 19. Notaulus present (fig. 18), with a short vertical carina on its front side. Ovipositor sheath 1.4-2.6 times as long as hind tibia. First tergite 1.5-2.2 times as long as wide. Discoidella present *Aniseres* Förster
- Notaulus present or absent (fig. 20), when present without a vertical carina on its front side. Ovipositor sheath about 0.15 times as long as hind tibia. First tergite 1.9-3.6 times as long as wide. Discoidella present or absent *Pantisarthrus* Förster
- 20. Epipleura of tergites 2 and 3 not separated by a crease 21
- Epipleura of tergite 2, and usually also of tergite 3, separated by a crease 22
- 21. Clypeus very narrow, its foveae large or very large (fig. 14 and 19). Flagellar segments of female rather stout, the second flagellar segment about 4.0 times as long as wide *Dialipsis* Förster
- Clypeus and its foveae normal in shape. First tergite strongly mat, flat to somewhat arched dorsally. Flagellar segments of female slender, the second flagellar segment 4.2-6.0 times as long as wide *Plectiscidea* Viereck
- 22. Tip of mandible as seen from outer side, very narrow and with a single point, the tip twisted by 80° to 90° so that the lower tooth is inside, or the lower tooth sometimes lacking 23
- Tip of mandible, as seen from outer side, moderately narrow but with lower tooth visible. The tip not or only moderately twisted 24
- 23. Propodeum convex (fig. 22). Ovipositor 0.10-0.28 of the length of front wing. Scapus not especially large. Discoidella lacking *Eusterinx* Förster
- Propodeum depressed (fig. 23). Ovipositor hardly surpassing tip of gaster or beyond gaster maximally as long as second flagellar segment. In species with discoidella lacking the scapus is very large *Helictes* Haliday

24. Areolet absent; intercubitus short or obliterated by approximation or touching of radial and cubital vein (fig. 21) *Proclitus* Förster
 – Areolet present, or if absent the intercubitus moderately long (fig. 24) 25
25. Claws of hind tarsus exceptionally large (fig. 30). [Hind femur 3.5 times as long as wide. Clypeus 1.6 times as wide as long. Inner margins of eyes of both sexes converging to clypeus. Length of ovipositor about 0.12 times length of front wing] *Catstenus* Förster
 – Claws of hind tarsus of normal size 26
26. Ovipositor upcurved (fig. 25) (but females of two species unknown). Clypeus flat, groove between face and clypeus often slightly developed. [Flagellum without tyloids. In *G. flavipes*, *G. dentifer* and *crassulus* the hind femur is stout (3.0 times as long as wide)] *Gnathochoris* Förster
 – Ovipositor not upcurved (female of *Fetialis* gen. nov. unknown). Groove between face and clypeus present 27
27. Males; tyloids absent 28
 – Females 30
28. Pronotum with two ivory coloured elevations and a groove between. Face below antennal sockets protuberant. [Conspicuous groove between the antennal sockets present] *Phosphoriana* Van Rossem
 – Pronotum without elevations. Face not protuberant 29
29. Malar space wide, 0.53 times width of face. Second tergite polished. [Female unknown] *Fetialis* gen. nov.
 – Malar space narrow, 0.18-0.23 times width face. Second tergite with sculpture, coriaceous and with longitudinal striation. [Of three species the male is unknown] *Symplecis* Förster
30. Females with inner eye margins strongly convergent to clypeus (fig. 31). [Postannellus of moderate length or up to 6.3-7.0 times as long as apically wide. Notaulus present, but often short. Most of the ovipositor concealed within the large subgenital plate (sixth sternite). In two species the length of the ovipositor is respectively 0.16 and 0.27 times length of front wing beyond the apex of gaster] *Symplecis* Förster
 – Females with inner eye margins parallel 31
31. Postannellus conspicuously slender, 7.0-9.0 times as long as apically wide. Mesoscutum with strong and deep notauli, meeting in center. Second tergite with rough sculpture *Phosphoriana* Van Rossem
 – Postannellus less than 7.0-9.0 times as long as wide (there is one *Plectiscidea* species with a postannellus of 7.0 times). Notaulus not conspicuously strong. Second tergite not with rough sculpture 32
32. Clypeus with upper margin curved upward, the remaining part im-

- pressed. Scapus subcylindrical (fig. 29). Sternaulus absent. Tyloids (in the male) on flagellar segments 6-8 (of two species the male is unknown) ..
 *Proeliator* Van Rossem
- Clypeus convex. Scapus spheroid (fig. 32). Sternaulus short, but present. Tyloids frequently on flagellar segments 5-7 (males are not determinable) *Plectiscidea* Viereck

DESCRIPTION

***Pantomima* gen. nov.**

Front wing 2.4-4.3 mm long. Mandible with the two teeth of equal length and not twisted. Clypeus 2.0-2.3 times as wide as long, the basal half somewhat convex, the rest gradually more flattened. Occipital carina complete. Scapus ovoid, pedicel large. Flagellum slender, no tyloids present. Front part of median lobe of mesoscutum strongly elevated and with an abrupt declivity towards pronotum. Propodeum long, with median longitudinal carinae, apical transverse carina and pleural carinae. Portion of cubitus between intercubitus and second recurrent vein 0.28-0.38 as long as recurrent vein. Areolet absent, the intercubitus almost obliterated. All fifth tarsal segments stout and with robust claws. First tergite 1.5-1.7 times as long as apically wide, with a glymma. The apex of first sternite in front of the middle. The median dorsal carinae strong. Length of ovipositor 0.16-0.18 times length of front wing, with a very slender tip.

This is a Palaearctic genus with one western species, *Pantomima festata*, which is the type species. There may be one more species in Japan, described by me in 1988 as *Entypoma feralis*. The material is in the Townes collection and needs to be re-examined.

Etymology: "pantomima" is the Latin for "ballet dancer." Gender: feminine.

***Pantomima festata* spec. nov.**

(figs. 13, 15)

Material. — Holotype, ♀. Sweden: Sundsvall, 30-VII.1963, coll. Hinz (Einbeck, B.R.D.). Two paratypes: 1 ♂ and 1 ♀. West Germany, Bayern, Allgäu, Burgberg, 800 m, 21.VIII.1985, leg. Haeselbarth (München), but ♀ in the Rijksmuseum van Natuurlijke Historie, Leiden.

Holotype, ♀: Front wing 4.35 mm long. Mandible brown. Clypeus polished, fuscous, 2.0 times as wide as long. Face, frons, vertex and gena black, polished. Scapus and pedicel ventrally yellow. Flagellum slender. Pronotum polished, black, epomia present. Front part of median lobe of mesoscutum strongly elevated (fig. 13). Mesoscutum, highly polished. Notaulus obsolete, but there is a short, weak carina on the mesoscutal margin. Propodeum almost completely polished, with only a weak pleural carina present. Portion of cubitus between intercubitus and second recurrent vein 0.38 as long as second recurrent vein. Second recurrent vein with two bullae. Nervellus inclivous. Front and middle coxae and trochanters ivory in colour, other parts of front and middle legs yellow. Hind coxae and femur brown, hind tibia yellowish with a brown spot at 0.6 of the length, apical part brown. All fifth tarsal segments stout with robust claws (fig. 15). First abdominal segment 1.7 times as long as apically wide, the spiracles at 0.38 of the length. First tergite black and polished. Glymma shallow. The sternite ending at 0.38 of the length. The other tergites polished and fuscous. The second tergite with some weak oblique striation in the proximal corners, separating a weakly convex, polished center part. The third tergite also shows this character but without the oblique sculpture. Length of ovipositor 0.5 times long as hind tibia and 0.16 times length of front wing, not upcurved.

Etymology: “festatus” is the Latin for “adorned”.

Fetialis gen. nov.

A male specimen from Haeselbarth's collection can not be inserted into my key (1982) to the Palaearctic genera of Oxytorinae. The apex of the first sternite reaches behind the middle of the tergite. The epipleura of tergites 2 and 3 are separated by a crease. The mandible shows two teeth and the tip is not twisted. These characters would lead to item 24 (*Proclitus*), but the intercubitus is not obliterated. Eventually the only possibility could be the *Plectiscidea*, but this genus is excluded by several of the following characters.

Characteristics of the new genus. Antenna without tyloids. The first intercubitus long. The second intercubitus absent. The first abdominal segment slender, about 4 times as long as apical width. The apex of the first sternite at 0.55 the length of the tergite. The first tergite not mat, and longitudinally striated.

Type species: *Fetialis alacris* spec. nov. (by monotypy).

Etymology: “fetialis” is the Latin for “war herald”. Gender: masculine.

Fetialis alacris spec. nov.

(figs. 26-28)

Material. — Holotype, ♂: I (= Italy), BZ (= province of Bolzano), Selden Stieralm, 2100-2200 m, 16.VIII.1987, leg. and coll. Haeselbarth (München).

♂: Front wing 3.8 mm long. Maxillary palpus long, reaching mesosternum. Mandible not twisted, with two teeth, the lower tooth slightly shorter. Clypeus convex (fig. 27), with minute punctation. Face subpolished, with minute punctation. Malar space wide. Inner eye margins parallel. Frons polished, weakly convex. OOL wide. Antenna slender. Postanellus 7.5 times as long as apically wide. The entire head black. Pronotum polished, with a short epomia. Mesoscutum polished, with minute punctation, implantations of short setae. Notaulus strong. Propodeum with both transverse carinae strong, the median longitudinal carinae present but weak. Mesopleurum polished, with rather robust sternaulus (fig. 26). The prepectal carina reaching to the margin. The postpectal carina with an indistinct interruption in front of the middle coxa. The second recurrent vein with two bullae. Nervellus vertical and not intercepted. Legs yellowish orange, including the coxae. Hind femur and tibia light brown. All tarsi brown. All parts of legs slender. The first abdominal segment about 4 times as long as apically wide (fig. 28). The end of the first sternite at 0.55 of the length of the tergite. The first tergite with longitudinal striation. All tergites fuscous and polished. Second and third tergite with the epipleura separated by a crease. The second tergite has two rows of minute setae. The following tergites with widely placed setae, slightly longer towards apex of gaster.

Female unknown.

Etymology: "alacris" is the Latin for "fiery".

Epitropus gen. nov.

Mandibular teeth of the same length. Clypeus conspicuous, large, trapezoid, 1.8 times as wide as long, somewhat convex (fig. 5). Scape ovate. Tyloids on flagellar segments seven and eight. Notaulus short. Basal area of propodeum confluent with petiolar area. Front wing with the only very short bulla indistinct. Second intercubitus absent. All parts of legs slender. First gastral segment slender, about 3.6 times as long as apically wide. Glymma absent. First sternite ending in apical 0.3 of the length of its segment.

The genus reminds of *Oxytorus* but is especially different in the shape of the clypeus and the presence of tyloids.

The type species is *Epitropus insolitus* spec. nov., (by monotypy), based on a single male specimen in bad condition, poorly stuck on mounting slip and the antennae damaged.

Etymology: "epitropus" is the Latin for "overseer". Gender: masculine.

Epitropus insolitus spec. nov.
(fig. 5)

Material. — Holotype, ♂: Campi, Riva s. Garcia, 1000 m. C/7.VII. 1966 (coll. Haeselbarth).

Front wing 3.3 mm long. Apical half of mandible yellowish. Clypeus yellow. Medial part of face slightly convex, yellow. Frons, vertex and gena polished. Scape ovoid, ventrally yellowish. Epomia absent. Mesoscutum polished, with rather long, erect setae. Tegula and base of wing yellow. Propodeum sub-polished, with long setae. Median longitudinal carinae completely present. Mesopleurum polished (difficult to see in consequence of mounting). Nervellus intercepted below the middle, discoidella indistinct. Legs, including coxae yellow, in particular the tarsi. The first tergite black, with some coriaceous sculpture. The median dorsal carinae conspicuous on postpetiole. Colour of following tergites brown; the second, third and fourth tergites with a median yellow streak.

Female: unknown.

Etymology: "insolitus" is the Latin for "rare" or "strange".

Genus Eusterinx Förster

Eusterinx; Van Rossem, 1982:149-169 (description of type *Eusterinx pseudoligomera* Gregor).

Eusterinx; Van Rossem, 1987:88-98 (introduction of subgenera).

Eusterinx; Van Rossem, 1988:109-110.

Subgenus Eusterinx Förster

Recognition of species belonging to this Subgenus is difficult. A renewed tentative key to the females is inserted. An additional character is used, namely the length of the postocellar line in proportion to the length of the ocular ocellar line. One new species is proposed, viz., *Eusterinx (Eusterinx) fabulosa*. It is regretted that the definite identity of the female of *Eusterinx (Eusterinx) pseudoligomera* Gregor, 1941 is not completely distinct. Specimens under this name in the key are recognized by some characters not used when studying the Gregor type material. For a key to the males see Van Rossem (1987).

Tentative key to the females of species of the subgenus *Eusterinx* (females of *E. (E.) jugorum* (Strobl) and of *E. (E.) argutula* Förster are unknown)

1. Second tergite with longitudinal striation and often somewhat coriaceous sculpture. [Thyridia conspicuous. Length of ovipositor 0.16-0.18 times length of front wing. Postanellus 2.5 times as long as wide]
..... *E. (Eusterinx) subdola* Förster
- Second tergite without longitudinal sculpture 2
2. Ovipositor short, its length 0.12 times length of front wing. [Notauli indicated. Apex of first sternite at about 0.56 of the length of its tergite]
..... *E. (Eusterinx) oligomera* Förster
- Ovipositor longer than 0.12 times length of front wing 3
3. Thyridia large and conspicuous. [Mesopleurum polished. Apex of first sternite at 0.62 of the length of its tergite. Length of ovipositor 0.18-0.20 times length of front wing] *E. (Eusterinx) obscurella* Förster
- Thyridia not conspicuous or absent 4
4. Postocellar line not conspicuously narrow in proportion to ocular ocellar line (POL : OOL = 2.5 : 4.5). [Mesopleurum polished. Apex of first sternite at 0.53-0.57 of the length of its tergite. Length of ovipositor 0.18-0.20 times length of front wing] *E. (Eusterinx) fabulosa* spec. nov.
- Postocellar line conspicuously narrow in proportion to ocular ocellar line (POL : OOL = 2.5 : 5.0-8.3) 5
5. Postocellar line conspicuously narrow in proportion to ocular ocellar line (POL : OOL = 1.5 : 5.0). Notaulus present. Length of ovipositor 0.16 times length of front wing *E. (Eusterinx) fleischeri* Gregor
- Postocellar line narrow in proportion to ocular ocellar line (POL : OOL = 1.5 : 3.0-3.8). Notaulus absent or only indicated on margin of mesoscutum. Pronotum, mesoscutum, propodeum and lower half of mesopleurum with microsculpture. Apex of first sternite at 0.53-0.58 of the length of its tergite. Length of ovipositor 0.16-0.19 (0.21 in the paralectotype) times length of front wing *E. (Eusterinx) pseudoligomera* Gregor

***Eusterinx (Eusterinx) fabulosa* spec. nov.**

Material. — Holotype, ♀ and 1 paratype, ♀: West Germany, Oberbiberg near München, on *Vaccinium myrtillus* L., 21.VI.1970, leg. and coll. Haeselbarth, München. Paratype in Rijksmuseum van Natuurlijke Historie, Leiden.

Holotype, ♀: Front wing 1.9 mm long. Palpi, mandible and clypeus ivory in colour. Malar space wide, 0.4 times width of face. All parts of head polished.

The eye is small in proportion to the head. This gives the head a somewhat inflated impression. Width gena: width eye = 1:1. Postanellus 2.0 times as long as apically wide. The other flagellar segments all of about the same length, almost square in shape. Most of the thorax polished, only propodeum with some microsculpture. Notaulus almost obsolete. Prepectal and postpectal carinae obsolete. Propodeal carinae present, but very weak. The first tergite with weak microsculpture. The apex of the first sternite at 0.53 of the length of its tergite. Other tergites polished and brown in colour. Ovipositor about 0.18 of the length of front wing.

Etymology: "fabulosus" is Latin for "attributed to fairy tales".

Eusterinx (Eusterinx) pseudoligomera *Eusterinx pseudoligomera* (E.) Gregor

Gregor, 1941: 8.

Eusterinx (E.) *pseudoligomera*; Van Rossem, 1982: 168-169.

Material. — West Germany: ♀, Bayern, Kochel, 650-1150 m, 12.VII.1985; ♀, Obbayern, Umg. Andechs, 11.VI.1973. Italy: ♀, Recoaro, C. Campogrosso, 1500 m, 30.VI.1985; ♀, BZ, Feldthurns, 1200 m, 11.IX.1978 (all leg. and coll. Haeselbarth, München, but ♀ from surroundings of Andechs in the Rijksmuseum van Natuurlijke Historie, Leiden).

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REFERENCES

- Gregor, F., 1941. Středoevropské Druhy Rodu *Eusterinx* (Först.) Thoms. — *Entomologické listy* 4: 5-8.
- Rossem, G. van, 1974. The Gravenhorst, Schiødte and Foerster types, belonging to the genus *Megastylus* Schiødte, 1838, with key to the species. — *Tijdschrift voor Entomologie* 117: 273-285.
- Rossem, G. van, 1980. A Revision of some Western Palaearctic Oxytorine genera, including two new genera *Phosphorus* and *Ephalmator*. — *Spixiana*, Supplement 4: 79-135.
- Rossem, G. van, 1982. A Revision of some Western Palaearctic Oxytorine Genera. Part II Genus *Eusterinx*; *Proeliator* new genus; *Ephalmator* a synonym of *Plectiscidea*; *Dicolus*. — *Spixiana* 5: 149-170.
- Rossem, G. van, 1983. A Revision of Western Palaearctic Oxytorine Genera. Part III Genus *Proclitus*. — *Contributions of the American Entomological Institute* 20: 153-165.
- Rossem, G. van, 1983. A Revision of Western Palaearctic Oxytorine Genera. Part IV Genus *Megastylus*. — *Entomofauna* 4: 121-132.

- Rossem, G. van, 1985. A Revision of Western Palaearctic Oxytorine Genera. Part V Genus *Aperileptus*. — *Spixiana* 8(2): 145-152.
- Rossem, G. van, 1987. A Revision of Western Palaearctic Oxytorine Genera. Part VI Genera: *Hemiphanes*; *Oxytorus*; *Apoclima*; *Cylloceria* (new revision); *Proclitus*; *Pantisarthrus*; *Plectiscidea*; *Gnathochorisis*; *Eusterinx* (new revision); *Helictes*, *Phosphoriana* (nomen novum); *Proliator* and *Megastylus*. — *Tijdschrift voor Entomologie* 130: 49-108.
- Rossem, G. van, 1988. A Revision of Palaearctic Oxytorine Genera. Part VII Genera: *Hemiphanes*; *Hyperacmus*; *Entypoma*; *Atabulus* new genus; *Allomacrus*; *Cylloceria*; *Aniseres*; *Proclitus*; *Plectiscidea*; *Symplecis*; *Eusterinx*; *Megastylus* and *Microleptes* (*Microleptinae*). — *Tijdschrift voor Entomologie* 131: 103-112.
- Townes, H., 1969. The Genera of Ichneumonidae, part 1. — *Memoirs American Entomological Institute* 11: 1-300.
- Townes, H., 1971. The Genera of Ichneumonidae, part 4. — *Memoirs American Entomological Institute* 17: 1-372.
- Wahl, D.B., 1986. Larval structures of oxytorines and their significance for the higher classification of some Ichneumonidae. — *Systematic Entomology* 11: 117-127.

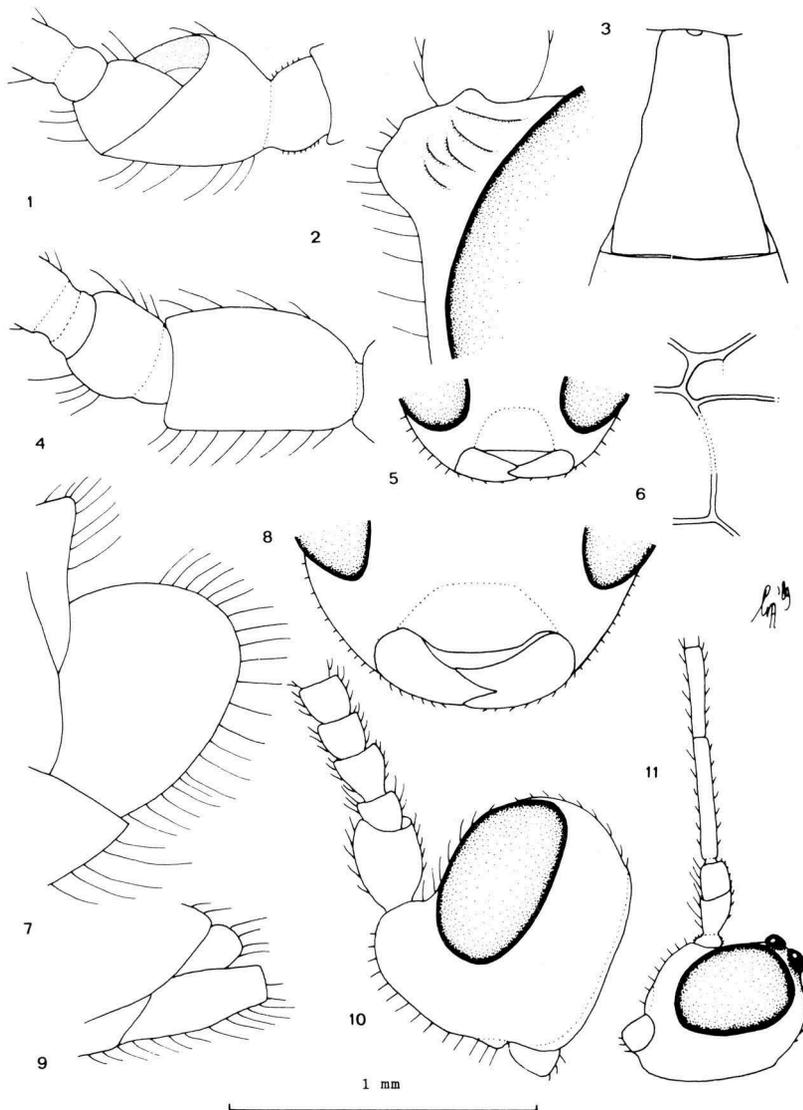


Fig. 1. *Megastylus tenellus* Van Rossem, ♀, Austria, Zwieselberg; figs. 2, 4. *Microleptes glabriventris* (Thomson), ♀, Sweden, Boda Kyrkby; figs. 3, 6. *Hemiphanes performidatum* Van Rossem, paratype, ♀, USSR, Barabash-Levada; fig. 5. *Epitropus insolitus* gen. nov., spec. nov., holotype, ♂, Italy, Campi; figs. 7, 8. *Oxytorus luridator* (Gravenhorst), ♀, Netherlands, Ede; figs. 9, 10. *Hyperacmus crassicornis* (Gravenhorst), ♀, USSR, Azerbaydszhan, Gosmalyan; fig. 11. *Aperileptus albipalpus* (Gravenhorst), ♀, West Germany, Burgberg. 1, 4. scapus, outer lateral aspect; 2. dorsal part of face, lateral aspect; 3. first tergite, dorsal aspect; 5, 8. clypeus, frontal aspect; 6. second recurrent vein; 7, 9. ovipositor sheath, lateral aspect; 10, 11. head and base of antenna, lateral aspect. 1, 2, 4: 2.3 ×; 3, 5, 6, 8, 10, 11: scale-line (=4 ×); 9: 1.5 ×.

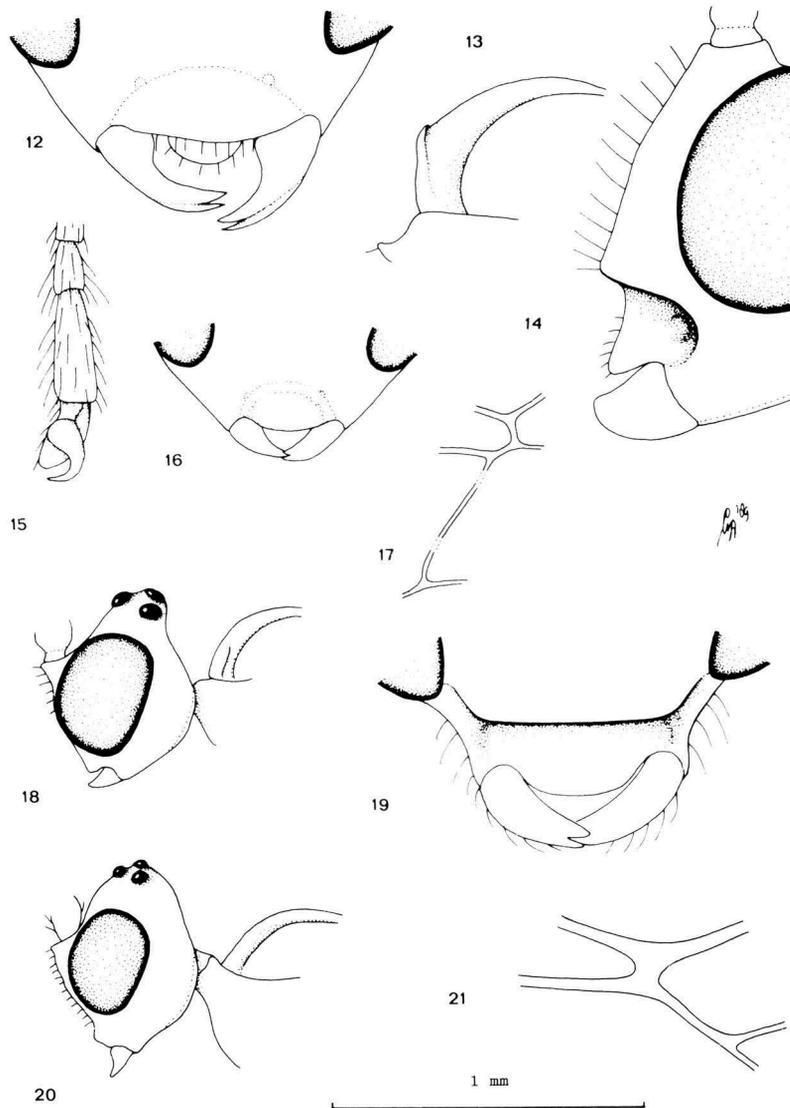


Fig. 12. *Allomacrus arcticus* (Holmgren), ♀, Sweden, Fjätervölen, Idre; figs. 13, 15. *Pantomima festata* gen. nov., spec. nov., paratype, ♂, West Germany, Burgberg; figs. 14, 19. *Dialipsis exilis* Förster, ♂, Italy, Ustecchio; figs. 16, 17. *Entypoma suspiciosum* (Förster), ♂, Netherlands, Asperen; fig. 18. *Aniseres pallipes* Förster, ♂, Sweden, Värmland, Transtrand; fig. 20. *Pantisarthrus luridus* Förster, ♂, Norway, Lom-Lia; fig. 21. *Proclitus praetor* (Haliday), ♀, Netherlands, Ede. 12,16,19. clypeus, frontal aspect; 13. mesoscutum, lateral aspect; 14. clypeus, lateral aspect; 15. hind tarsal claw; 17. second recurrent vein of left front wing; 18,20. head and mesoscutum anteriorly, lateral aspect; 21. first intercubitus of front wing. 12:1.5 ×; 13,16,18,20: scale-line (=1 ×); 14,15,17,19,21: 2.3 ×.

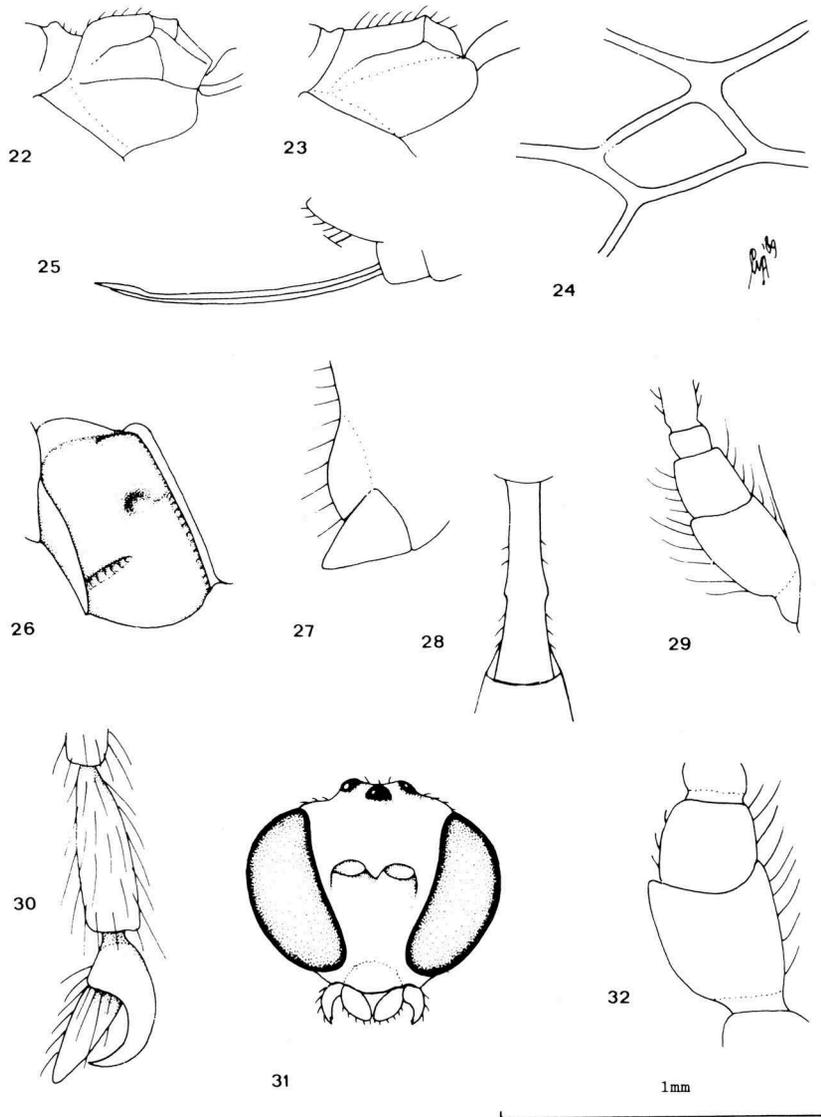


Fig. 22. *Eusterinx tenuicincta* (Förster), ♂, Italy, Spertental (Tirol); fig. 23. *Helictes borealis* Holmgren), ♂, Netherlands, Ede; figs. 24,25. *Gnathochorisis crassulus* (Thomson), ♀, Italy, Funes (Bolzano); figs. 26—28. *Fetialis alacris* gen. nov., spec. nov., holotype, ♂, Italy, Sulden Stieralm (Bolzano); fig. 29. *Proeliator proprius* Van Rossem, ♀, paratype, West Germany, Nd Spessart; fig. 30. *Catastenus femoralis* Förster, ♀, Italy, Garda Rocca; fig. 31. *Symplecis bicingulata* (Gravenhorst), ♀, West Germany, Nd Spessart; fig. 32. *Plectiscidea collaris* (Gravenhorst), ♀, Italy, Ustecchio. 22,23,25,26,28: scale-line (= 1 ×); 24, 27, 29, 30, 32:2.3 ×; 31:0.7 ×.