

# ANNALES ZOOLOGICI

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## Revision of European species of the subtribe *Endaseina* (*Hymenoptera, Ichneumonidae*), I

[With 21 Text-figures]

**Abstract.** This is a revision of European species of the genera *Amphibulus* KRIECHBAUMER and *Glypticnemis* FOERSTER, with keys to the genera of *Endaseina* and to the species of *Glypticnemis* FOERST. A list of European species of *Medophron* FOERSTER is added. Two lectotypes are selected, 5 new synonyms ascertained and one new combination is proposed.

The subtribe *Endaseina* consists of about 8 genera distributed almost all over the world. TOWNES (1970) recognized in Europe 6 genera as belonging to the subtribe *Endaseina*: *Grasseiteles* AUBERT, *Charitopes* FOERSTER, *Medophron* FOERSTER, *Endasys* FOERSTER, *Glypticnemis* FOERSTER and *Amphibulus* KRIECHBAUMER. Inclusion the *Grasseiteles* AUB. and *Charitopes* FOERST. to the *Endaseina* seems to be not clear. Recently (1983) TOWNES proposed to transfer the genus *Charitopes* FOERST. to the subtribe *Mastrina*. The genera *Medophron* FOERST., *Endasys* FOERST., *Glypticnemis* FOERST. and *Amphibulus* KRIECHB. differ from *Grasseiteles* AUB. and *Charitopes* FOERST. in having the second recurrent vein meeting subdiscoidal vein at a right or obtuse angle, and the scapus is often cylindrical with truncation almost transverse. These series of genera belong to two very distinct morphological groups. Thus, to the subtribe *Endaseina* belong 4 genera in Europe.

### KEY TO EUROPEAN GENERA OF THE SUBTRIBE *ENDASEINA*

1. Hind edge of mesoscutum without transverse break. Prescutellar transverse groove without median longitudinal ridge. Parasitoids of *Dytiscidae* (*Coleoptera*). . . . . . *Medophron* FOERST

- . Hind edge of mesoscutum with a transverse break just in front of the prescutellar transverse groove. Prescutellar transverse groove with a strong median longitudinal ridge dividing the groove into two halves. . . . . 2.
- 2. Prepectal carina approaching the anterior edge of mesopleurum near the middle of hind edge of pronotum, then continuing dorsad toward subtegular ridge (Fig. 3.). Host unknown. . . . . *Amphibulus* KRIECH.
- . Prepectal carina reaching directly the subtegular ridge (Fig. 15) . . . . . 3.
- 3. Lower tooth of mandible slightly or distinctly shorter than upper tooth. Spurs of hind tibia inserted approximately at the apex, the apical truncation of hind tibia nearly transverse. Outer face of tibia without unusually strong bristles. Parasitoids of *Sympyta* (*Hymenoptera*). . . . . *Endasys* FOERST.
- . Lower tooth of mandible distinctly longer than upper tooth. Spurs of hind tibia inserted far before the apex, the apical truncation of hind tibia very oblique (Figs. 18–21). Outer face of tibia with numerous strong bristles. Parasitoids of *Sympyta* (*Hymenoptera*). . . . . *Glyphicnemis* FOERST.

### ***Medophron* FOERSTER, 1868**

*Baryntica* FOERSTER, 1868: 184. Type-species: *Stylocryptus elegans* SCHMIEDEKNECHT

[= *Medophron nigripes* (THOMSON)]. Designated by PERKINS 1962.

Full synonymy see: TOWNES 1970: 81 and TOWNES 1983: 176.

This genus is Holarctic. In America 13 species. In Europe about 10 species: *Medophron crassicornis* (ASHMEAD) (= ? *Aclastus setosus* HELLEN, *M. nigerrimus* (HEDWIG) (TOWNES 1983: 75 and 185); *M. armatus* (THOMSON), *M. caudatulus* (DALLA TORRE) (= *Phygadeuon caudatus* THOMSON), *M. flavitorsis* (DALLA TORRE) (= *Phygadeuon flavipes* THOMSON), *M. recurvus* (THOMSON) (FITTON 1982: 90); *M. mixtus* (BRIDGMAN) (HORSTMANN 1972: 220); *M. caudatus* (ROMAN), *M. afflictor* (GRAVENHORST) (= *Phygadeuon nigrita* GRAVENHORST, *Medophron ater* BRISCHKE) (SAWONIEWICZ 1984: 316), *M. nigriceps* (THOMSON) (= *Stylocryptus elegans* SCHMIEDEKNECHT).

### ***Medophron nigriceps* (THOMSON, 1883), comb. n.**

*Acanthocryptus nigriceps* THOMSON, 1883: 868. — Lectotype (♂) here designated: "Hossmo 4/6 70", "Kalmar", "*Acanthocryptus nigriceps* THOMS. 1883, Syntype ♂, det. M. G. FITTON 1978", Coll. THOMSON, Lund (ZIL) (FITTON 1982: 10). Syntype (♂): "var. 1". "*Phygadeuon quadrispinus* var. 1" from Coll. GRAVENHORST in Wrocław (UW) is an *Endasys* sp. Examined in 1983.

*Stylocryptus elegans* SCHMIEDEKNECHT, 1932: 54 (SAWONIEWICZ 1984: 316). Syn. n. Examined in 1983.

Material examined: 1 ♀ and 2 ♂♂. Sweden: Småland (lectotype of *A. nigriceps* THOMS., ZIL), Poland: Trzciianne near Mońki (IZPAN), GDR: Thüringen (holotype of *S. elegans* SCHMIEDEKN., Coll. MN).

*Amphibulus* KRIECHBAUMER, 1893

*Amphibulus* KRIECHBAUMER, 1893: 122. Type species: *Amphibulus gracilis* KRIECHBAUMER. Monobasic.

*Amphibulus*: TOWNES 1970: 84. Description of genus, figs. This genus is Neotropical and Palearctic. In Europa 1 species.

*Amphibulus gracilis* KRIECHBAUMER, 1893

*Amphibulus gracilis* KRIECHBAUMER, 1893: 122, ♂. This species is not present in the KRIECHBAUMER's collection in München.

*Cratocryptus bispinus* THOMSON, 1894: 2117, ♂. Syn. ROMAN 1925: 9, SCHMIEDEKNECHT 1925: 3129. — Holotype (♂) FITTON (1982: 24): "Norrl.", "bispinus m", Coll. THOMSON, Lund (ZIL). Examined in 1982.

*Stylocryptus bispinus*: THOMSON 1896: 2385.

*Stylocryptus aertsi* HABERMEHL: 1926: 330, ♀. Syn. n. — Holotype (♀): "... Köln 31/10 23 Aerts", "Stylocryptus aertsi HABERM. ♀", Coll. HABERMEHL, Frankfurt/M. (NMS). Examined in 1984.

HELLÉN (1957: 136) had supposed *S. aertsi* HAB. to be synonym of *A. gracilis* KRIECHB.

♀♂. Body smooth and polished. Face in ♀ with strong and dense punctures, in ♂ with fine punctures; frons with strong and dense punctures, below transversely strigose; clypeus, tempora, mesoscutum and mesopleurum with more or less scattered, strong punctures; tergites in ♂ partly finely pustulate. All body with thick and long silvery hairs, in ♂ abdomen almost without hairs, eye with sparse and scattered hairs.

Head in ♀ weakly roundly narrowed behind the eyes, in ♂ strongly narrowed behind the eyes, almost straight; eye in ♀ small, in ♂ large; tempora in ♀ broad strongly widened downwards, in ♂ narrowed downwards (Figs 1, 2); transverse eye diameter 1.4–1.5 (♀) and ca 0.8 (♂) as long as smallest tempora; clypeus weakly separated from the face, its apical margin in ♀ obliquely truncate, flat, in ♂ strongly upturned, clypeus index = 0.5; oral carina higher than genal carina, genal carina meeting the oral carina well behind the base of the mandible; cheek 1.1–1.2 (♀) and ca 0.5 (♂) as long as basal width of mandible, in ♂ cheek with the groove; HO: OOL = 1: 2 (♀) and 0.9–1.0 (1.4) (♂)<sup>1</sup>.

Antennae in ♀ with 22–23 segments, middle segments transverse; in ♂ with 35–37 segments, tyloids narrow, in 14–17 (13–18) segments; postannellus index = 1.7–1.9 (♀) and 3.0–3.2 (♂).

Thorax. Notaulus distinct, extending behind basal half of mesoscutum, prepectal carina approaching the anterior edge of mesopleurum near the middle of hind edge of pronotum, continuing dorsad toward subtegular ridge (Fig. 3).

Propodeum. Spiracles of average size, oval, its index = 1.3–1.5; areola

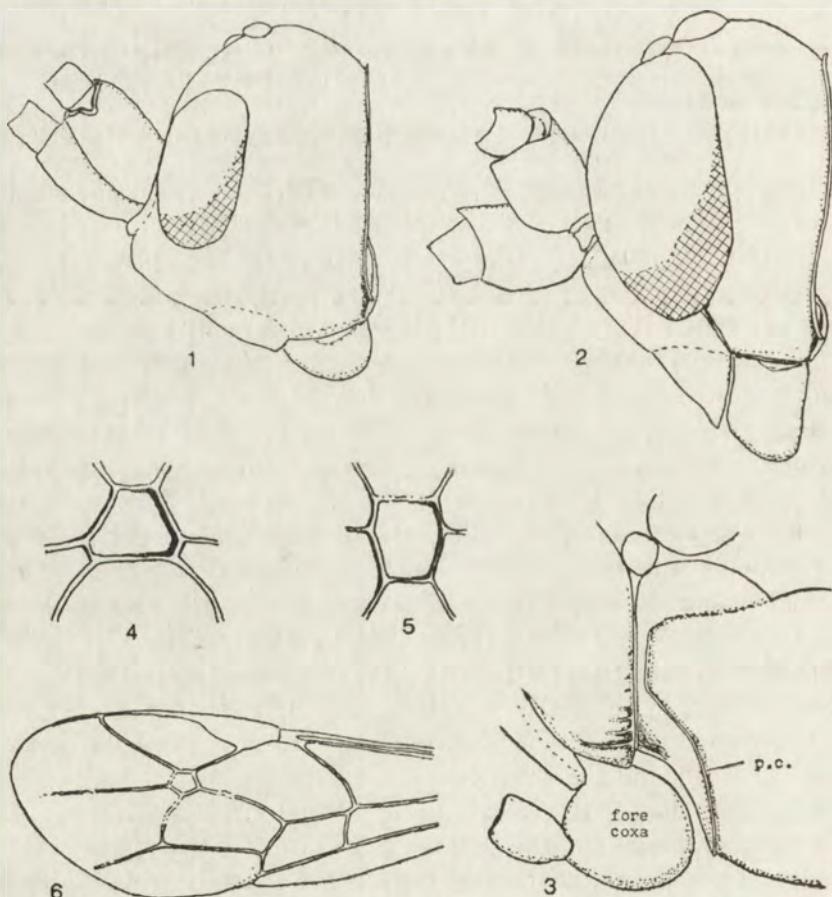
<sup>1</sup> Denotations and morphology in accordance with the previous paper (SAWONIEWICZ 1980).

hexagonal, in ♀ distinctly narrowed anterioad, costula beyond the middle (Fig. 4), in ♂ weakly narrowed backwards, sometimes fused with basal area, costula weak, before the middle (Fig. 5), its index = ca 0.8 (♀) and 0.9–1.2 (♂), apophysis very high and sharp, lying far beyond the middle, in ♂ in 0.75 of propodeum.

Legs. Hind femur in ♀ slightly thickened, in ♂ more slender, its index == (3.6) 3.8–3.9 (♀) and 5.5–6.2 (♂); tibiae without strong bristles.

Wings. Stigma unbroad, with radius before its middle, areolet closed, second recurrent vein meeting subdiscoidal vein at a right angle (Fig. 6).

Abdomen. First segment in ♀ with median dorsal carinae, in ♂ elongate, with almost parallel sides, spiracles in median part projecting laterally, median dorsal carinae very weak to absent, first segment index = 1.7–1.9 (♀) and 3.8–4.2 (♂), postpetiolus index = 0.8 (♀) and 1.9–2.1 (♂).



Figs 1–6. — *Amphibulus gracilis* Kriechb.: 1–2 – head, lateral view: 1 – ♀, 2 – ♂; 3 – thorax in part (p. c. – prepectal carina), lateral view; 4–5 – areola: 4 – ♀, 5 – ♂; 6 – fore wing, ♂.

Ovipositor straight, 1.4 as long as hind tibia, nodus weak.

Coloration black.

♀. Antenna brown-black with white ring, clypeus and mandible yellow-brown; hind corner of pronotum, tegula, and legs red-yellow, coxae more or less brown; apex of scutellum and postscutellum brown, abdomen brown-black at middle.

♂. Mandible at middle, hind corner of pronotum, tegula, and legs red-yellow; coxae, hind tibia, and hind tarsus more or less brown or black.

Length of body: 5.5–7.5 mm. (♀) and 6–9 mm. (♂); length of fore wing: 5–6 mm. (♀) and 5.1–7.5 mm. (♂).

Biology. Adults occur in August to October/November. Host unknown.

Material examined: 4 ♀♀ and 37 ♂♂. Sweden: Norland (ZIL, holotype of *C. bispinus* THOMS.); Finland: Espo, Vantaa, Helsinki (IZPAN); Poland: Łomna and Brwinów near Warszawa, Bieszczady (Liszna and Łubne) (IZPAN); FRG: Köln (holotype of *S. aertsi* HAB. — NMS) (BM), Benringersdorf (BC), Alfeld, Einbeck, Hannover (HC); British Isles: Boxmoor (TC, BM), no data (BM).

### *Glyphicnemis* FOERSTER, 1868

*Glyphicnemis* FOERSTER, 1868: 181. Type-species: *Phygadeuon vagabundus* GRAVENHORST.

Monotypically included and designated by ASHMEAD 1900.

*Gnathocryptus* THOMSON, 1873: 520. Type-species: *Phygadeuon vagabundus* GRAVENHORST.

Monotypic and original designation.

*Semiodes* HARRINGTON, 1894: 247. Type-species: *Semiodes seminiger* HARRINGTON [= *Glyphicnemis mandibularis* (CRESSON)]. Monotypic.

*Glyphicnemis*: TOWNES 1970: 75. Description of genus, figs.

The European species of *Glyphicnemis* FOERST. were revised by several authors (THOMSON 1883, SCHMIEDEKNECHT 1905, 1932, MORLEY 1905, HABERMELH 1912, 1916). Nevertheless, the discrimination of species, particularly males, remained difficult, and their synonymy not fixed.

This is a Holarctic genus. In Nearctics several species. In Europe 4 species. Parasitoids of cocoons of *Symphyta* (Hymenoptera).

#### KEY TO EUROPEAN SPECIES OF THE GENUS *GLYPHICNEMIS* FOERST.

1. Stigma of fore wing broad, radius in its middle, postnervulus distinctly intercepted below the middle (Fig. 13); clypeus, mandible in the middle, tegula, all the coxae, and trochanters white-yellow . . . . . 1. *G. clypealis* (THOMS.), ♀♂
- . Stigma of fore wing narrower, radius before its middle, postnervulus arched, not intercepted (Fig. 14); clypeus black, mandible and tegula brown-black, coxae and trochanters red, brown to black . . . . . 2.

2. Females. . . . . 3.  
 —. Males. . . . . 5.  
 3. Hind tibia narrow, with fine raspel-like surface (Fig. 19); propodeal spiracle small and subcircular, its index = 1.3–1.5 (Fig. 16); head in hind view — Fig. 8; small species: 4–5 mm . . . . . 2. *G. atrata* (STROBL), ♀.  
 —. Hind tibia broad (Figs 20, 21), with strong raspel-like surface; head in hind view — Figs 9, 10; propodeal spiracle large and usually strongly elongate (Fig. 17), its index = 1.5–2.1; larger species length 5–9 mm.  
 4. Oral and genal carinae normal, of identical height (Figs 9, 11); hind tibia — Fig. 20; antenna without white ring. . . . . 3. *G. vagabunda* (GRAV.), ♀.  
 —. Oral carina at the base of mandible distinctly higher than genal carina (Figs 10, 12); hind tibia — Fig. 21; antenna with white band. . . . . 4. *G. profligator* (FABR.), ♀.  
 5. Antenna without tyloids. . . . . 3. *G. vagabunda* (GRAV.), ♂.  
 —. Antenna with tyloids in 11–17 segments. . . . . 6.  
 6. Pronotum below with 2 distinct carinae (Fig. 15), oral carina at the base of mandible distinctly higher than genal carina, frons usually strongly punctured, propodeal spiracle large, areola transverse. . . . . 4. *G. profligator* (FABR.), ♂.  
 —. Pronotum below without distinct carinae, oral and genal carinae of similar height, frons with fine and scattered punctures, propodeal spiracle small, areola as long as broad. . . . . 2. *G. atrata* (STROBL), ♂.

### 1. *Glypticnemis clypealis* (THOMSON, 1883)

*Stylocryptus (Gnathocryptus) clypealis* THOMSON, 1883: 870. — Lectotype (♂) by designation of AUBERT (1966: 129): “Ört” (= Ortofta), Coll. THOMSON, Lund (ZIL). Examined in 1979.

♀♂. Body smooth and polished, with silvery hairs; face in ♀ with very dense, contiguous punctures, in ♂ besides granulate and almost mat; clypeus and mesoscutum with single punctures; frons and temple with very fine, scattered punctures; mesopleurum in ♀ almost completely smooth; abdomen in ♀ completely smooth, in ♂ first two tergites finely granulate.

Head with the temples roundly narrowed behind the eyes (in ♀ weakly and in ♂ strongly), transverse eye diameter ca 0.9 (♀) and 1.6–1.7 (♂) as long as smallest tempora; clypeus distinctly separated from the face, its apical margin obliquely truncate (truncate part ca 0.2 of clypeus length, mat), clypeus index = ca 0.4 (♀) and 0.4–0.5 (♂); oral and genal carinae of identical height (Fig. 7); cheek 0.6 (♀) and 0.2–0.3 (♂) as long as basal width of mandible; HO : OOL = 1 : 2.0–2.2 (♀) and 1.2–1.5 (♂).

Antennae in ♀ with 20 segments, thickening from the middle, middle segments transverse; in ♂ 24–28 segments, with tyloids in 11–16 segments; postanellus index = 1.9 (♀) and 2.3–2.6 (♂).

**Thorax.** Epomia and lower carinae of pronotum weak, notaulus in ♀ strong only at the base of mesoscutum, in ♂ deep, reaching to 0.5 of mesoscutum length.

Propodeum. Spiracle rather subcircular, small, its index = 1.2–1.4 (♀) and 1.2–1.5 (♂); areola hexagonal, in ♀ almost as long as broad (its index = 0.9–1.1), in ♂ weakly elongate (index = 1.2–1.3).

Legs. Hind femur swollen, particularly in ♀, its index = 2.5 (♀) and 3.3–3.5 (♂), hind tibia — Fig. 18, median second trochanter distinctly separated from femur.

Wings. Stigma broad, radius in its middle, areolet closed, postnervulus distinctly intercepted below the middle (Fig. 13).

Ovipositor straight, 0.5–0.6 as long as hind tibia nodus weak.

Coloration black.

♀. Clypeus, mandible in the middle, legs, and abdomen from postpetiolus, yellow-red; coxae, trochanters, and tibiae in the middle, paler; antenna tricoloured: basal segments yellow-red, middle white, and the apex brown; median parte of face, mesoscutum partly, and scutellum partly, brown.

♂. Antenna at the base, legs, and abdomen from postpetiolus, yellow-red; clypeus, mandible in the middle, coxae, and trochanters white-yellow, abdomen more or less brown.

In ♀ and ♂ veins of the wings yellow-brown, tegula white-yellow.

Length of body: 4.5–4.8 mm., length of fore wing: 3.5–4.0 mm.

Biology. Adults occur in July and August. Host unknown.

Material examined: 23 ♀♀ and 26 ♂♂. Sweden: Skåne (Ortofta) (lectotype, ZIL), Skåne (TC); Finland: Helsinki (IZPAN); Poland: Warszawa (Park Łazienki), Holy Cross National Park (Bielnik), Bieszczady (Komaničza) (IZPAN), Dolny Śląsk (UW); FRG: Schlersee (TC), Schleswig Holstein (ZMK), "Germany" (BM); Denmark: Sønderborg, Hulerød (ZMK), British Isles: Hereford (Hay), no data (BM).

## 2. *Glyphicnemis atrata* (STROBL, 1901)

*Stylocryptus atratus* STROBL, 1901: 219. — Lectotype (♂) by designation of OEHLENKE: "Styl. atratus ... 24/8 99 ♂"; — paralectotype (1 ♂) here designated: "Kreuzkogel 17/7 96. ♂". Coll. STROBL, Admont (SC). Examined in 1980.

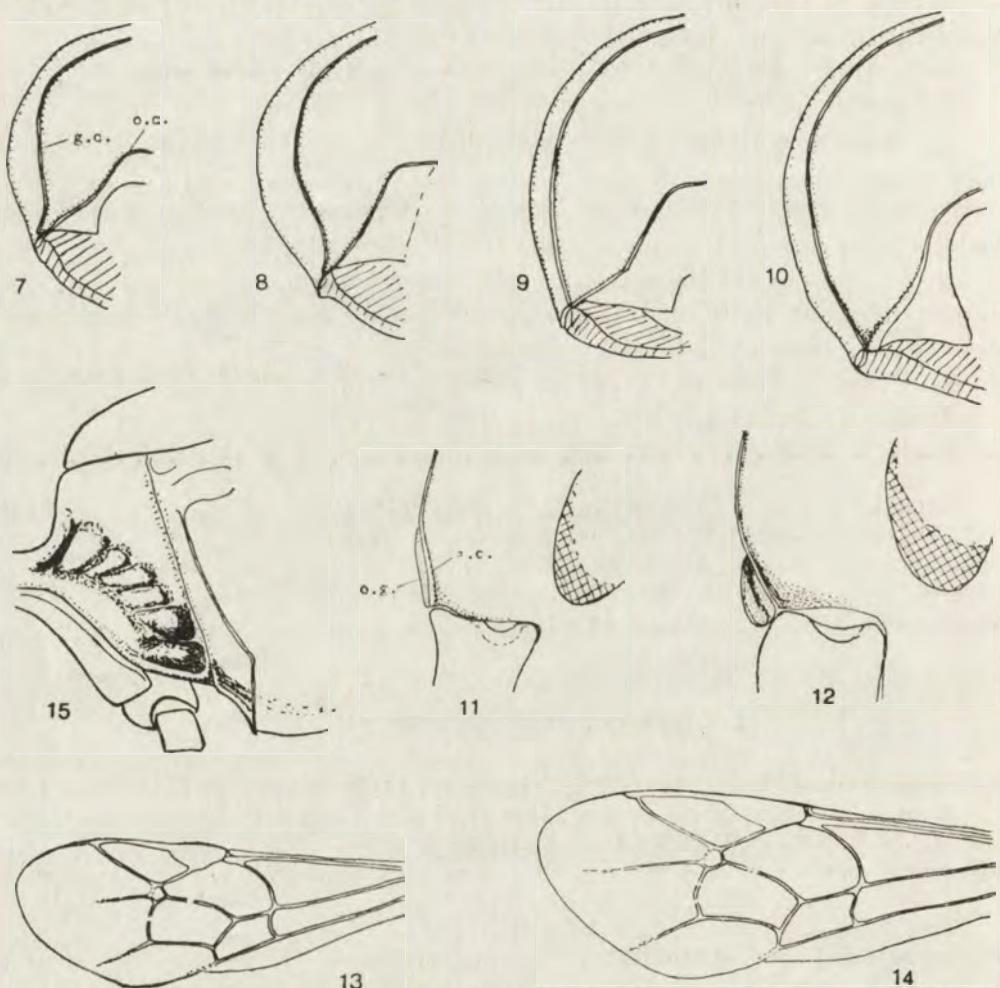
*Stylocryptus senilis* GRAVENHORST var. *alpina* STROBL, 1901: 219. *Syn. n.* — Holotype (♂): "Styriae alp. STROBL.", "Styl. senilis ... 15 8 ♂", Coll. STROBL, Admont (SC). Examined in 1980.

*Glyphicnemis Suffolciensis* MORLEY, 1907: 67. *Syn. AUBERT* (1975:14). — Paralectotypes (7 ♀♀, 6 ♂♂) by designation of FITTON (1976:340): from the underside: "17 VI 99 Moulton" (3 ♀♀, 4 ♂♂), "24 VII 99 Farnham" (♀), sine locus (3 ♀♀, 1 ♂), all Coll. BM, London. Examined in 1984.

♀♂. Body smooth and polished, with silvery hairs; clypeus, face, and mesoscutum in the middle with strong punctures separated by less than 0.5 their diameter; frons in the middle closely punctured, at the sides with scattered

punctures; temple with scattered, large punctures; mesopleurum strongly punctured, longitudinally strigose; tergites with scattered, very fine punctures.

Head with the temple not widening behind the eye, slightly roundly narrowed; transverse eye diameter 1.0–1.1 (♀) and 1.5–1.8 (♂) as long as the smallest tempora; clypeus distinctly separated from the face, its apical margin obliquely truncate, clypeus index = ca 0.3 (♀) and 0.4 (♂); oral and genal carinae of similar height (Fig. 8); cheek 0.6–0.7 (♀) and 0.3–0.4 (♂) as long as basal width of mandible; HO : OOL = 1 : 1.6–1.8 (♀) and 1.4–1.6 (♂).

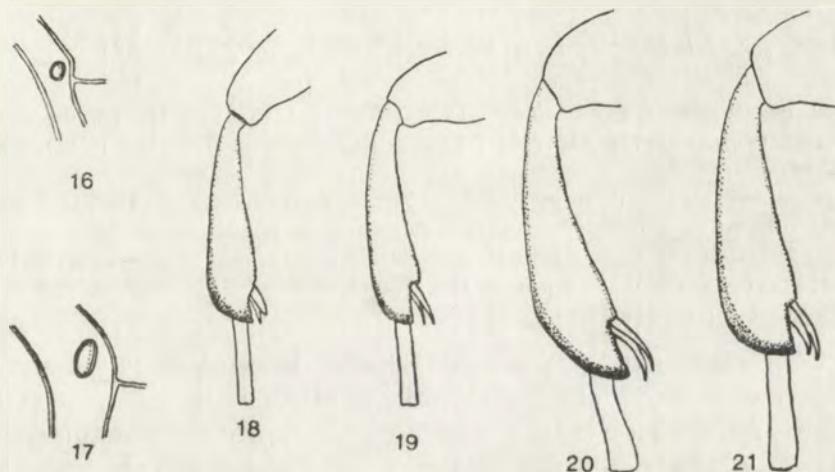


Figs. 7–15. — *Glyptinomis* spp. 7–10 — head in part (o. c. — oral carina, g. c. — genal carina), posterior view, ♀: 7 — *G. clypealis* (THOMS.), 8 — *G. atrata* (STROBL), 9 — *G. vagabunda* (GRAV.), 10 — *G. profligator* (FABR.); 11–12 — head, lateral view, ♀: 11 — *G. vagabunda* (Grav.), 12 — *G. profligator* (FABR.); 13–14 — fore wing, ♀: 13 — *G. clypealis* (THOMS.), 14 — *G. profligator* (FABR.); 15 — *G. profligator* (FABR.), ♂, thorax in part (pronotum), lateral view.

Antennae in ♀ with 22–24 segments, middle segments transverse; in ♂ with 26–27 (23–24) segments, with tyloids in 11–14 segments; postannellus index = 1.1–1.3 (♀) and 1.9–2.1 (♂).

**Thorax.** Lower part of pronotum without carinae; notaulus distinct only in the basal part of mesoscutum.

**Propodeum.** Spiracle rather subcircular, small, its index = 1.3–1.5 (♀) and 1.4–1.7 (♂) (Fig. 16); areola hexagonal, slightly transverse, sometimes as long as broad (index = 0.8–1.0).



Figs 16–21. — *Glyphicnemis* spp., ♀. 16–17 — Spiracles of propodeum: 16 — *G. atrata* (STROBL), 17 — *G. profligator* (FABR.); 18–21 — hind tibia: 18 — *G. clypealis* (THOMS.), 19 — *G. atrata* (STROBL), 20 — *G. vagabunda* (GRAV.), 21 — *G. profligator* (FABR.).

**Legs.** Hind femur swollen, its index = 2.5–2.7 (♀) and 3.2–3.9 (♂); all trochanters distinctly separated from femora; hind tibia narrow, with fine raspel-like surface (Fig. 19).

**Wings.** Stigma narrow, radius before its middle; areolet closed; postnervulus arched, not intercepted.

Ovipositor straight, ca 0.5 as long as hind tibia, nodus weak.

Coloration black. In ♀ antenna in the middle, in ♀♂ middle tergites (sometimes only at the base and apex of tergites), apex of femora, and tibiae, red-yellow; veins of the wings dark-brown.

Variability. In ♂ hind tibia completely black; in ♀♂ middle tergites, femora, and tibiae, in ♀ also basis of antenna, completely red to red-yellow.

Length of body: 4–5 mm. (♀) and 4.0–6.5 mm. (♂); length of fore wing: 3.5–4.0 mm (♀) and 3.2–5.0 mm. (♂).

**Biology.** Adults occur in June/July – September. Host unknown. Mountain species.

Material examined: 75 ♀♀ and 67 ♂♂. Finland: Sauvo, Kariala, Tammela, Turku, St. Ylane, V. Vihti, Joutseno. Sa (JC), Helsinki (TC, IZPAN), Hirvensalmi, Espoo (IZPAN); British Isles: Moulton, Farnham (paralectotype of *G. suffolciensis* MORL.), Perthshire, Newcastleton, Skirwith, Banchory, Monks' Soham, Braemar, Rannoch, Yorkshire, Ingleton, Inkpen, Yorks, Kemsing (Kent) (BM), Inverness, Surrey, Leicester (TC); Austria: Kreuzkogel near Admont (SC), Karavanken (Kärnten) (HCZI), Brenner (HC), Vent (BC), Austria timberline (Rax) (TC); FRG: Berchtesgaden (Jennermassiv), Allgäu (TC); Italy: Kaltern, Courmayeur, Cervinia (HC), Gressoney (BC, HC), Grödner Joch, Valtournanche (BC), Unserfrau (TC), Timmelslücke (JC), Piemonte: Fenestrelle, Val Chisone, Val Maira -Val Traversella, Val Gesso, Olzio, Osseaux-Laux (SCSSLF); France: Col d'Ornon, Chantemerle (HC).

### 3. *Glypticnemis vagabunda* (GRAVENHORST, 1829)

*Phygadeuon vagabundus* GRAVENHORST, 1829a: 735. — Lectotype (♀) by designation of OEHLENKE (FRILLI 1974: 119): "f", Coll. GRAVENHORST, Wrocław (UW). Examined in 1981.

*Phygadeuon podagricus* GRAVENHORST, 1829b: 710. Syn. MARSHALL (1872: 34). This species is not present in the GRAVENHORST's collection in Wrocław.

*Stylocryptus brevis* GRAVENHORST forma *exannulata* HEDWIG, 1956: 236. Syn. n. Not examined, the synonymy of the form on the ground of original description and of opinion of HORSTMANN (1981: 72).

♀♂. Body smooth and polished, with bushy, brown hairs; head and thorax with strong punctures, usually separated by less than 0.5 their diameter; clypeus, face, frons, and sides of thorax usually with confluent punctures, besides, mesopleurum longitudinally strigose; coxae and abdomen only with fine and scattered punctures.

Head in ♀ with the temples weakly widening, roundly narrowed behind the eyes, in ♂ the temple slightly widening behind the eyes; transverse eye diameter 1 (♀) and 1.5 (♂) as long as smallest tempora; clypeus distinctly separated from the face, its apical margin obliquely truncate, mat, in ♂ with incision at the apex, clypeus index = 0.3 (♀) and 0.4 (♂); oral and genal carinae of similar height (Figs 9, 11); cheek 0.5 (♀) and 0.2 (♂) as long as basal width of mandible; HO : OOL = 1 : 2.1–2.2 (♀) and 1.4–1.8 (♂).

Antennae in ♀ with 26–28 segments, thickening in the middle, middle segments transverse; in ♂ with 30–33 segments, without tyloids; postannellus index = ca 1.4 (♀) and 1.8–1.9 (♂).

Thorax. Lower part of pronotum without distinct, longitudinal carinae; notaulus distinct only in the basal part of mesoscutum, in ♂ longer.

Propodeum. Spiracle large, elongated, its index = 1.5–1.8; areola hexagonal, slightly transverse, sometimes as long as broad (index = 0.7–1.0).

Legs. Hind femur thick, its index = 2.2–2.4 (♀) and 3.3–3.4 (♂); hind tibia broad (Fig. 20); middle second trochanter anteriorly fused with the femur.

Wings. Stigma narrow, radius before its middle; areolet closed; postnervulus arched, not intercepted (cf. Fig. 14).

Ovipositor 0.5–0.6 as long as hind tibia, nodus weak.

Coloration black. Abdomen without petiolus, femora at least at the apex, tibiae red; veins of the wings dark-brown; in ♀ flagellum of antenna at least in the middle red, in ♂ sometimes hind femur and first segment of abdomen almost all black.

Length of body: 6–9 mm., length of fore wing: 4–7 mm.

Biology. Adults occur in (June) July and August. Host unknown.

Material examined: 116 ♀♀ and 117 ♂♂. British Isles: Harwood, Cornworthy, Salisbury, Ashton, Warwick, Oxford, Colchester, Alum Bay, Kent (BM), Surrey (TC); Denmark: no data (ZMK); FRG: Würzburg (HCZI); France: Villars-Colmars, Monêtier-les-Bains, Vallonais, Chantemerle, Les-Deux-Alpes, Col d'Ornon (CH), Nantes (BM); Italy: Piemonte: Vol Chisone, San Benedetto Belbo, Finestra Ormea Pega, Osseaux Laux (SCSSLF), Valtournanche (BC), Val d'Aosta: Extrapierraz, Liguria: Colle di Nava (SCSSLF); Yugoslavia: Mojkovac (IZPAN); Bulgaria: Rila-Kloster (HC), Pisanec, East Bulgaria ("Orisare, Baraki") (IZPAN); Turkey: Dewe near Ispir (IZPAN).

#### 4. *Glyphicnemis profligator* (FABRICIUS, 1775)

*Ichneumon profligator* FABRICIUS, 1775: 334. — Lectotype (♀) here designated: "e", nec lectotype ♀ by designation of TOWNES. Coll. FABRICIUS, København (ZMK). Examined in 1983.

*Glyphicnemis profligator* auct., GRAVENHORST 1829, TRENTEPohl 1829, STEPHENS 1835, HABERMEHL 1912, 1916, SCHMIEDEKNECHT 1932, OEHlke 1966 (redescription).

*Ichneumon frequentorius* ZETTERSTEDT, 1838: 366. Syn. n. Not examined. I synonymize the name on the ground of opinion of HORSTMANN (1968: 311), who has recognised lectotype ♀ as identical with *G. profligator* auct.

nec *Ichneumon necator* FABRICIUS, 1776: 246, nomen dubium (HORSTMANN 1980: 155).

†*Stylocryptus* (*Glyphicnemis*) *profligator* FABR. var. *ruficoxis* HABERMEHL, 1916: 376. Not examined.

†*Stylocryptus* (*Glyphicnemis*) *profligator* FABR. var. *pygmaea* HABERMEHL, 1916: 376. Not examined.

*Glyphicnemis pygmaeus*: HEINRICH 1949: 120. Examined ♀ in 1984.

I have examined 4 ♀♀ (syntypes) of *Ichneumon profligator* in FABRICIUS' collection (ZMK):

1. *Ichneumon profligator* FABR. (= *G. profligator* auct.), lectotype here designated (♀): "e".
2. *Ichneumon profligator* FABR. sensu TOWNES (= *G. vagabunda* GRAV.), lectotype by designation of TOWNES (vide: HORSTMANN 1968: 311, FRILLI 1974: 190), ♀: "b".
3. *Aptesis abdominalis* (GRAV.): "f".
4. *Enclisis vindex* (TSCHEK.): "c" or "e".

The female designated by TOWNES as a lectotype of *I. profligator* FABR. is not correspond to the main part of an original description. TOWNES' lectotype belongs to *G. vagabunda* (GRAV.) the female of which has antenna without a white ring. FABRICIUS (1775) placed *I. profligator* in a group of species which females possess the antennae with a white ring each. In the thesis he gave the characteristics of the species on page 393: "... antennis fascia annulatis." and in the main part of description on page 347: "... antennis annulo albo." Lately,

other authors (including TRENTEPohl 1829 — the first reviser of FABRICIUS' types) have recognised that females of this species possess antennae with white rings. Because of the above mentioned problem, I designated a new lectotype which corresponds with original FABRICIUS' description (antenna with white ring): it is in conformity with the accepted interpretation for 200 years.

♀♂. Body smooth and polished, with bushy, brown hairs; clypeus, face, frons, and sides of thorax with strong punctures usually separated by less than 0.5 their diameter (usually with confluent punctures), besides, mesopleurum longitudinally strigose; mesoscutum in the middle strongly punctured, at sides much weakly; abdomen in ♀ almost completely smooth, in ♂ with fine, scattered punctures.

Head in ♀ with the temples weakly widening, in ♂ weakly narrowed, behind the eyes roundly narrowed; transverse eye diameter 1.1–1.2 (♀) and 1.6–2.0 (♂) as long as smallest tempora; clypeus distinctly separated from the face, its apical margin obliquely truncate (truncation ca 0.2 of clypeus length), clypeus index = ca 0.3 (♀) and ca 0.4 (♂); oral carina at the base of mandible distinctly higher than genal carina (Figs 10, 12) and strongly shifted under the basis of mandible; cheek 0.4–0.5 (♀) and 0.2–0.3 (♂) as long as basal width of mandible; HO : OOL = 1 : 1.7–1.8 (♀) and 1.2–1.5 (♂).

Antennae in ♀ with 21–24 segments, thickening in the middle, middle segments transverse; in ♂ with 26–30 segments, with tyloids in 12–17 segments; postannellus index = 1.1–1.5 (♀) and 1.5–2.0 (♂).

Thorax. Pronotum with epomia and 2 distinct, longitudinal carinae below (Fig. 15), in ♂ more distinct; notaulus reaching 0.3 (♀) and 0.5 (♂) of mesoscutum length.

Propodeum. Spiracle large, elongate (Fig. 17), its index = 1.8–2.1 (♀) and 1.5–1.8 (♂); areola hexagonal, transverse, its index = 0.5–0.6.

Legs. Hind femur thick, its index = 2.1–2.4 (♀) and 3.1–3.4 (♂); hind tibia broad (Fig. 21); middle second trochanter not fused with the femur.

Wings. Stigma narrow, radius before its middle; areolet closed; postnervulus arched, not intercepted (Fig. 14).

Ovipositor 0.6 as long as hind tibia, nodus weak.

Coloration black. Second trochanters, femora, tibiae, abdomen from postpetiolus, red; fore tibia red-yellow; anteriorly mandible brown-black; hind tarsus brown; veins of the wing brown, stigma yellow-brown; in ♂ postannellus from underside yellowish.

Length of body: 5–8 mm; length of fore wing: 4–7 mm.

Variability. Frons with more or less strong punctures to fine and scattered; coloration of legs from all red to almost black.

Biology. Adult form occurs from June to September. Parasitoids of cocoon of *Sympyta* (*Hymenoptera*): *Diprion pini* L., *Neodiprion sertifer* GEOFFR., *Nematus acuminatus* THOMS., *N. crassus* FALL., *Pontania viminalis* L., and *Pteronidea salicis* L. (THOMPSON 1957).

**Material examined:** 522 ♀♀ and 353 ♂♂. Norway: Loen (TC); Sweden: Skåne (Scan.), Örtofta (Ört.) (in Coll. Thomson — ZIL as G. vagabunda Grav.) Skåne (TC), Kronlund (JC), Näsäker, Rasbokil, Karlstad, Stavby, Fägelvik, Uppsala (UU); Finland: Espoo, Helsinki (IZPAN), Vinpeli, Kemi (JC); Poland: Gdańsk (ZMK), Gdańsk — Górk Wschodnie, Szczecin, near Szczecin (Gardziec, Goleniów, Karpinka, Pustkowie), "Pomorze", Szwajcaria near Koszalin, Borówki near Sepólno, Lipowa Góra near Giżycko, Gutkowo near Olsztyn, Rubcowo near Mikaszówka, Gaj near Niegów, Brodnica, Ostrów near Itawa, Białystok, Katrynska near Białystok, Trzcianne near Moński, near Warszawa (Podkowa L., Brwinów, Łomna, Truskaw, Chylice, Czechów, Koszajec, Radziejowice, Hamernia, Jedwabno), Warszawa (Suburban areas: Ursynów, Bialoleka, Jelonki, Mokotów, near Vistula; Parks: CMZR, Ogród Saski, Łazienki, Królikarnia, Park Kultury; Town centre: Wilcza st.), Rogów near Koluszki, Holy Cross Mountains (Porąbki, Łysa Góra, Bielnik, Rosochy, Suchedniów), Szklarska Poręba near Jelenia Góra, Pilchowice near Lwówek Śl., Jeziorno near Ratyń, "Ślask", Ząbkowice Śl., Tarnów, Grodziszczne near Oława, Nisko near Rzeszów, Pieniny (Krościenko, Niedzica, Stolarzówka), Bieszczady (Komaniča, Duszačin-Prełuki, Solina — G. Jawor) (IZPAN); USSR: Lithuania ("Wezkukkul") (TC), near Tomsk; Czechoslovakia: N. Mest, Starkoc, near Prague (TC); Austria: Schefau (TC), Imst, Hallein (HC); Switzerland: Luzern (BM), Col des Mosses (HC); GDR: Harz O. (ZMK), Schandau, Triptis/Thür., Falkenberg, near Leipzig (Zöbigker, Börtewitz) (IZPAN), Eberswalde (TC); FRG: Bildhausen, Bayr. Wald, Reinbek, Schliersee, Göttingen, Jennermassiv (Berchtesgaden) (TC), Kiel, Würzburg, Pobüller (Bauernwald), Nortorf, Schleswig Holstein (Habel) (HCZI), Stadtoldendorf, Einbeck, Stolzenau, Meissner, Celle, Münster, Göttingen, Hannover, Northeim (HC), Bayr. Voralp. Kloooaschau (IAZ), Schlossberg, Nürnberg, Schwarzwald (Welteneu) (BC), Augsburg, Schwarzwald (ZMK); Denmark: Silkeborg, Strandby, Hansted, Gjern Aa, Hammel, Humlebaek, Hulerød, Funder, Sønderborg (ZMK), no data (TC, ZMK); Belgium: Trooz; British Isles: Kerry (TC), Salisbury, Cornworthy, London, Southwold, Bramford, Braemar, Glamorgan, Swanage, Chobham, Harwood, Southorpe, Hastings, Soham, Oxon, Kent, Cambs, Oundle, Hythe (BM), Inverness, Dublin, Surrey, Leicester (TC); France: Col-des-Montetes, Villars Colmars, Les-Deux-Alpes, Chantemerle (HC); Italy: Pizzighettone, Naturns, Franzenfeste (TC), Torino (Vinovo), Piemonte: San Benedetto Belbo, Vel Tene, Sau Mauro, Liguria: Vere, Altave fium Borni (SCSSLF); Bulgaria: Godec, Plovdiv (HC), East Bulgaria ("Orisare, Baraki") (IZPAN).

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Many collections of *Ichneumonidae* in Europe and USA were examined. They are denoted by the following symbols as used in this contribution:

BC — BAUER Collection, Wendelstein, Federal Republic Germany,

BM — British Museum (Natural History), London, England,

HC — HINZ Collection, Einbeck, Federal Republic Germany,

HCZI — HORSTMANN Collection, Zoologisches Institut der Universität Würzburg, Federal Republic Germany,

IAZ — Institut für Angewandte Zoologie, München, Federal Republic Germany,

IZPAN — Institut Zoologii, PAN, Warszawa, Poland,

JC — JUSSILA Collection, Paattinen, Finland,

NMS — Natur-Museum und Forschungs-Institut, Senckenberg, Frankfurt/M., Federal Republic Germany,

SC — STROBL Collection, Admont, Austria,

SCSSLF — SCARAMOZZINO Collection, Servizio Sperimentazione e Lotta Fitosanitaria, Torino, Italy,

TC — TOWNES Collection, Ann Arbor, Michigan, United States of America,  
 UU — University of Uppsala, Sweden,  
 UW — Uniwersytet Wrocławski, Muzeum Przyrodnicze, Poland,  
 ZIL — Zoological Institute, Lunds Universitet, Sweden,  
 ZMK — Zoologisk Museum, København, Denmark.

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## STRESZCZENIE

[Tytuł: Rewizja europejskich gatunków podplemienia *Endaseina* (*Hymenoptera, Ichneumonidae*), I]

Praca zawiera rewizję europejskich gatunków rodzajów *Amphibulus* KRIESCH. i *Glypticnemis* FOERST. oraz klucze do oznaczania rodzajów podplemienia *Endaseina* i gatunków rodzaju *Glypticnemis*, nadto wykaz europejskich gatunków rodzaju *Medophron* FOERST. Wyznaczono 2 lektotypy, stwierdzono 5 nowych synonimów i wprowadzono jedną nową kombinację.

## РЕЗЮМЕ

[Заглавие: Ревизия европейских видов из подтрибы *Endaseina* (*Hymenoptera, Ichneumonidae*), I]

Работа содержит ревизию европейских видов из родов *Amphibulus* KRIESCH. и *Glypticnemis* FOERST., а также ключ для определения родов из подтрибы *Endaseina* и видов рода *Glypticnemis*, кроме того перечень европейских видов из рода *Medophron* FOERST. Обозначены 2 лектотипы, коинстатировано 5 новых синонимов и введена одна новая комбинация.

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