

Taxonomic notes on the species of *Mesoleius* s. l., *Hyperbatus* and *Phaestus* in the museums of Stockholm, Lund and Munich (Hymenoptera: Ichneumonidae, Ctenopelmatinae)

D.R. Kasparyan

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Two new synonymies are established as a result of a revision of the types in the genus *Mesoleius* s. l. For 5 species lectotypes are designated. 2 species are restored from synonymy. Keys to the Palaearctic species of *Hyperbatus* and *Phaestus* are given.

D.R. Kasparyan, Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, St.Petersburg 199034, Russia.

The types of species described by A.E. Holmgren, A. Roman (Mus. Stockholm, NHRS), C.G. Thomson (Mus. Lund, ZIL), and J. Kriechbaumer (Mus. München) in the genera *Mesoleius* s. l. (including *Hyperbatus*) and *Phaestus* are examined.

Campodorus contiguus (Roman, 1909) (*Mesoleius*) [lectotypum designavi: ♀ (without left hind leg and one antenna), "LuL" (= Lule Lapmark), 16/8 1904, A. Roman, "*Mesoleius contiguus* n. sp. typ ♀"; paralectotypi: 1 ♀, "LuL", 16/8 1904, A. Roman, "var", and 1 ♀ "Sarek", 22/7 1907, Poppius; both paralectotypes are determined by me as *Campodorus stenocerus* (Thomson, 1895) (*Spudaeus*)]. The lectotype differs from *C. stenocerus* in the black colour of abdomen. Both species are closely related to *C. hyperboreus* (Holmgren, 1855) and may be are synonymous with it. The species name is misprinted as "*continuus*" in Aubert (1976).

Smicrolis parvicar (Thomson, 1895) [*Syndipnus* (*Smicrolis*)] = *Mesoleius parumpictus* Roman, 1909, **syn. n.** [lectotypum designavi: ♂, "LuL", 17.8.1904 (A. Roman), "*Mes. (Gemoph.) parumpictus* n. sp. Typ ♂"; paralectotypi: 3 ♂ (2 ♂ without abdomen), 16, 17, 21.8.1904 (A. Roman)] = *M. parumpictus* var. *infusca* Roman, 1909, **syn. n.** [holotypus: ♂, "LuL", 17.8.1904 (A. Roman)].

Syndipnus polyblastoides (Kriechbaumer, 1897) (*Mesoleius*), **comb. n.**; syntypi exami-

navi: 3 ♀, 2 ♂, all of them belong to *Syndipnus*.

Otlophorus rufogibbosus (Kriechbaumer, 1897) (*Mesoleius*), **comb. n.**; holotypum examinavi: ♂, "M. Pasing 7.8.84 Krchb." (Mus. München); perhaps a junior synonym of *O. pulverulentus* (Holmgren, 1855).

Campodorus signator (Roman, 1909) (*Mesoleius*), **sp. dist.**; lectotypum designavi: ♀, "TLp" (= bei See Torne Trask), 7.8.1903 (A. Roman) (Mus. Stockholm). This species was synonymized with *C. patagiatus* Holmgren, 1876 and *C. modestus* Holmgren, 1876 (Aubert, 1976), but it differs from both species in having black coxae, a pair of yellow spots on mesonotum, light reddish yellow, almost unicolourous hind tibiae and more elongate hind femora (6 times as long as wide).

Campodorus tenebrosus (Roman, 1909) (*Mesoleius*); lectotypum designavi: ♀, "LuL", 18.8.1904 (A. Roman).

Genus **Hyperbatus** Foerster, 1868

Thomson (1895: 2049) was the first who designated the boundaries of this group (as species group inside *Mesoleius* s. l.). His understanding of the composition of this group was quite correct.

Hyperbatus aemulus (Holmgren, 1855) (*Mesoleius*); Aubert, 1976 (*Campodorus*);

Kasparyan, 1997 (*Hyperbatus*). *Material*. Sweden, Stockholm: ♀, lectotypus (design. Hinz, 1972), "Hlm", "Bhn"; ♀, "15/6 36 Rn" ("*orbitalis* Ths." Roman det.) (NHRS); Switzerland: ♀, Col de Mosses, 9.VII.1976 (Hinz) (Mus. München); Russia: 2 ♀, Murmansk Prov. (Lavna River, Seidozero); ♀, Tyumen' Prov. (Polar Urals, Kharp); ♀, Krasnoyarsk Terr. (Taimyr, Talnakh).

Hyperbatus orbitalis (Thomson, 1895) (*Mesoleius*), **sp. dist.** This species was considered (Aubert, 1976) as junior synonym of *M. segmentator* Holmg. I believe that *H. orbitalis* is a separate species differing from *H. segmentator* in the following characters: (1) more elongate first and second flagellar segments, their combined length 1.35-1.5 times height of compound eye (1.17 in the type of *M. segmentator*); (2) longer genae (cheeks 0.4-0.55 as long as basal width of mandible); (3) lighter coloration; (4) finer punctures on mesopleura. *Material*. Sweden, Lapland: ♀, lectotypus (design. Aubert, 1976), "Lap." (ZIL); 2 ♀, "S. Lp. 16/7 39", "21/6 31" (NHRS); Russia: 2 ♀, Murmansk Prov., Nikel', Shuoni River; ♀, St. Petersburg; ♀, Smolensk Prov., Natl. Park "Smolenskoe poozer'e".

Hyperbatus segmentator (Holmgren, 1855) (*Mesoleius*), ♀ = *solitarius* Holmgren, 1876 (*Mesoleius*), ♂. *Material*. Sweden: ♀, lectotypus of *M. segmentator* (design. Aubert, 1976), "Sm", "Bhn"; 16 additional specimens (NHRS); ♂, lectotypus of *M. solitarius* (design. Hinz, 1972) and 2 ♂ paralectotypi, "Hlm", "Bhn"; Germany: ♀, Einbeck (Mus. München); Russia: ♀, Yaroslavl' Prov. (Berditsyno); ♀, Sakhalin Prov. (Kunashir Island).

Hyperbatus sternoxanthus (Gravenhorst, 1829) (*Tryphon*) (type lost) = *Mesoleius pulchellus* Holmgren, 1855 (type lost), = *M. languidulus* Holmgren, 1855 (Thomson, 1895). *Material*. Sweden: ♀, lectotypus of *M. languidulus* (design. Hinz, 1972) and ♂ paralectotypus: "Sm" "Bhn"; 2 ♀, "Sm" and "Hlm"; Germany: ♀, Einbeck, ex *Platycampus luridiventris* Fall., 27.VII.1974 (Hinz) (Mus. München); Russia: 2 ♀, Yaroslavl' Prov. (Zhedenovo). [In the collection of Schmiedeknecht (Berlin), under *M. sternoxanthus* there are different species of *Anoncus* only].

Mesoleius subtilis Holmgren, 1855 (? type lost). Aubert considered this species in *Hyperbatus*. Such peculiarities as the smooth mesopleuron, black face with lateral yellow

spots and small size show its similarity to (?) or conspecificity with) *H. aemulus*.

Key to the European species (females)

- 1(4). Ovipositor sheath light yellow. Cheek 0.33-0.55 times as long as basal width of mandible. First and second flagellar segments 1.25-1.5 times as long as maximum diameter of eye. First tergite 1.8-1.9 times as long as wide.
- 2(3). Head and thorax black (face on orbits with small yellow spots). Mesopleuron almost smooth, without obvious punctures, sometimes with small irregular wrinkles or partly with very thin granulation ***H. aemulus*** Holmgren, 1855
- 3(2). Face, cheeks and lower part of mesothorax entirely yellow; mesonotum with a pair of anterolateral yellow spots. Mesopleuron distinctly punctured ***H. orbitalis*** Thomson, 1895
- 4(1). Ovipositor sheath brownish. Cheek 0.25-0.33 times as long as basal width of mandible. First and second flagellar segments 1.15-1.33 times as long as maximum diameter of eye. First tergite 1.5 (in *H. segmentator*) to 2.0 times (in *H. sternoxanthus*) as long as wide.
- 5(6). Mesopleuron in lower half usually reddish, coarsely and densely punctured in most part of surface; speculum small. Mesosternum black. Face with yellow spots. Flagellum with 28 segments (in type) . . ***H. segmentator*** Holmgren, 1855
- 6(5). Mesopleuron in lower half yellow, almost smooth, with very fine punctures; speculum very large, polished. Mesosternum reddish yellow. Face yellow. Flagellum with 32 segments (in the type of *languidulus*) ***H. sternoxanthus*** Gravenhorst, 1829

Genus *Phaestus* Foerster, 1868

The genus belongs to Pionini and includes small ichneumonids (fore wing about 3.5 mm long). It differs from most other ctenopelmatus in the short first flagellar segment (about 0.9 times as long as the second segment). The genus contains two European species. Both species are parasites of mining sawflies (Fenusini).

Phaestus anomalus (Brischke, 1871: 89) (*Grypocentrus*) (type lost); Brischke, 1871: 89 (♂); 1878: 94 (♀); Morley, 1911: 314; Schmiedeknecht, 1912: 2486; Meyer, 1936: 135; Teunissen, 1948: 21 (*Phaestus*; = *heterocerus*); 1953: 29; Townes, 1970: 74, fig. 69 (♂); Kasparyan, 1981b: 325; Sawoniewicz, 1982: 26; 1986: 131. - *heterocerus* Thomson, 1895: 2017, ♀ ♂ (*Phaestus*) [lectotypum examinavi (label. H. Townes, 1958; design. Fitton, 1982: 70): ♀, "Pal" (ZIL)]. *Material*. Sweden: ♀, lectotype of *Ph. heterocerus*; Ukraine: ♀, Kherson Prov., W of Melitopol', 24.V.1974 (Kasparyan).

Phaestus nigriventris Roman, 1937: 3 [lectotypum designavi: ♀, "Typ", "Stockholm, Djurgården 13/5 36 Roman"; paralectotypi: ♂, "Allotyp", on the same pin with lectotype; 1 ♀, 1 ♂, on one pin, same data (NHRS)]. Other material examined (NHRS): Stockholm, 3 ♀, 2 ♂, 1937 (Roman) and 19 specimens, 10. and 13.V.1938 (Malaise).

Key to the European species

- 1(2). Clypeus on lower margin with dense brush of ventrally projecting long hairs. Mandible darkened. Flagellum in female 1.2 times as long as hind wing, yellowish, 23-segmented, all segments longer than wide. 1st-2nd tergites rugosely punctate. Hind femora black. 3rd-8th tergites and apical part of 2nd tergite reddish. Host: *Fenus* on *Quercus* **Ph. anomalus** (Brischke, 1871)
- 2(1). Clypeus on lower margin without dense brush of long hairs. Mandible yellow. Flagellum in female 0.75-0.8 times as long as hind wing, blackish, 19-20-segmented in ♀ and 24-segmented in ♂, apical eight segments transverse (except last segment). Hind femora red. All tergites smooth and black (2nd-3rd tergites in ♀ blackish brown). Host: *Hinatara recta* Thoms. on *Acer platanoides* (Altenhofer, 1980: 252; Pschorn-Walcher & Altenhofer, 1989: 45) **Ph. nigriventris** Roman, 1937

Addendum

Polyblastus pallicoxa Thomson, 1888, lectotypum designavi: ♀, "Palsio"; this specimen was examined and redescribed by me (Kasparyan, 1973, 1981a); [paralectotypi: 4♀, 1♂, "Palsio"; all paralectotypes belong to *Polyblastus nanus* Kasp.] (Mus. Lund).

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