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**A revision of the *Bracon* (subgenera *Bracon* s.str.,
Cyanopterobracon, *Glabrobracon*, *Lucobracon*, *Osculobracon*
subgen. n., *Pigeria*) species described by SZÉPLIGETI from the
western Palaearctic Region
(Hymenoptera: Braconidae, Braconinae)**

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Abstract: Sixteen valid *Bracon* species by SZÉPLIGETI belonging to the subgenera detailed in the title are revised (type designations, redescrptions, nearest allies, synonyms). Fortyfive *Bracon* species names by SZÉPLIGETI are acknowledged as junior synonyms of non-Szépligeti's (i.e. of six authors's) valid species. The new subgenus *Osculobracon* is set up, its type species is *Bracon osculator* NEES and further ten Holarctic species are assigned to it. *B. abbreviator* NEES and *B. minutor* (FABRICIUS) are redescrbed; a neotype for *B. abbreviator* is designated. Five new synonyms are established: *Bracon novus* SZÉPLIGETI 1901 = *B. maculifer* SZÉPLIGETI 1901, jun. name; *Bracon rugulosus* SZÉPLIGETI 1901 = *B. neglectus* SZÉPLIGETI 1904 and *B. spurnensis* HINCKS 1951, jun. names; *Bracon sabulosus* SZÉPLIGETI 1896 = *Glabriolum turkestanum* FAHRINGER 1934, jun. name; *Bracon subrugosus* SZÉPLIGETI 1901 = *B. tryptanum* FAHRINGER 1927, jun. name. A checklist of the *Bracon* species (valid and synonymous names) by SZÉPLIGETI was compiled. With 358 original figures.

Key words: SZÉPLIGETI, type designation, redescription, nearest ally, synonymization, checklist.

Introduction

Eighty-eight *Bracon* species were described by SZÉPLIGETI (1896a, b, 1901a, b, c, 1904, 1906) from the western Palaearctic Region: the majority (or the type material) of 86 species originated from the historical Hungary or the Carpatho-Pannonian zoogeographic district and two species from the European part of Russia (Kazan) and from Israel (Haifa), respectively. The 88 *Bracon* species by SZÉPLIGETI are arranged into six subgenera: *Bracon* s.str., *Cyanopterobracon* TOBIAS 1957 (= *Rostrobracon* TOBIAS 1957), *Glabrobracon* FAHRINGER 1927, *Lucobracon* FAHRINGER 1927, *Osculobracon* subgenus novum and *Pigeria* Van ACHTERBERG 1985. (The subgenus *Orthobracon* FAHRINGER 1927 is considered as identical with *Glabrobracon*.)

In the paper of SZÉPLIGETI's *Bracon* species (PAPP 2005) the species of the subgenus *Lucobracon* were revised. Five species remained valid and eleven species names proved to be junior synonyms. One species, *B. ochraceus* SZÉPLIGETI 1896 (= *B. gracilis*

SZÉPLIGETI 1901), belonging to *Lucobracon*, was considered earlier as identical with *B. flagellaris* THOMSON 1894 (PAPP 2004). Recently, subsequent to the appearance of the cited papers, the species *B. ochraceus* was revalidated, i.e. it is not identical with *B. flagellaris*. In the present paper this species is also redescribed as an addition to the previous paper (PAPP 2005). Further details see at *B. ochraceus*.

In the same paper (PAPP 2005), furthermore, it was omitted the indication of the taxonomic status of *B. crassiusculus* SZÉPLIGETI 1901. Additionally to this paper: the name *B. crassiusculus* is an objective junior synonym of *Bracon (Lucobracon) larvicida* WESMAEL 1838.

In the present paper a revision of the *Bracon* species by SZÉPLIGETI is presented which species are assigned to five subgenera: *Bracon* s.str., *Cyanopterobracon*, *Glabrobracon*, *Osculobracon* subg. n. and *Pigeria*. The revised species are divided in two groups: 1.) The sixteen valid *Bracon* species completed with their synonymous names; 2.) The eighteen valid species by the authors DALLA-TORRE, FABRICIUS, MARSHALL, NEES, SPINOLA and WESMAEL completed with their synonymous names (the majority of them by SZÉPLIGETI).

Besides the valid species by SZÉPLIGETI two further species are added which were described by two authors: *B. abbreviator* NEES 1834 and *B. minutator* (FABRICIUS 1798). a) A neotype was set up for the species *B. abbreviator* serving for it the female lectotype of *B. rufigaster* SZÉPLIGETI 1901b) The type species of the genus *Bracon* FABRICIUS 1804 is *Ichneumon minutator* FABRICIUS 1798 (by the International Commission of Zoological Nomenclature, 1945, Opinion no. 162). This species was misinterpreted by a few authors, hence its redescription and the assignment of its taxonomic position is highly timely. Further comments and details on the two species are presented at the respective species.

Valid *Bracon* species by SZÉPLIGETI

(completed with their synonymous names)

From the 88 *Bracon* species by SZÉPLIGETI 16 species are valid ones (besides the five species belonging to the subgenus *Lucobracon*, cf. PAPP 2005) and revised in the present paper. The species are representing five subgenera, subsequently enumerated accordingly:

Subgenus *Bracon* s.str.: *B. alutaceus*, *B. corruptor*, *B. obscuricornis*, *B. rugulosus* and *B. subrugosus*.

Subgenus *Cyanopterobracon*: *B. fallax* and *B. sabulosus*.

Subgenus *Glabrobracon*: *B. fumatus*, *B. hemiflavus*, *B. hyalinipennis*, *B. maroccanus*, *B. marshalli*, *B. novus* and *B. subsinuatus*.

Subgenus *Lucobracon*: *B. ochraceus*.

Subgenus *Osculobracon*: *B. cingulator*.

In this chapter the sixteen valid SZÉPLIGETI's *Bracon* species are revised: type designations and conditions, redescrptions, taxonomic positions, nearest allies. The species are arranged alphabetically.

To the 16 valid species a fairly few, i.e. eight, synonymous species names by SZÉPLIGETI,

and two names by FAHRINGER and one name by HINCKS, are attached, they are listed according to the valid or senior species names:

B. fumatus: *B. brunneipennis* jun. name.

B. hyalinipennis: *B. coloratus* jun. name.

B. novus: *B. maculifer* jun. name and syn.n.

B. ochraceus: *B. gracilis* jun. name.

B. rugulosus: *B. neglectus* and *B. spurnensis* HINCKS, jun. names and syn.n.

B. sabulosus: *Glabriolum turkestanum* FAHRINGER, syn.n.

B. subrugosus: *B. quinque maculatus*, *B. subglaber* (jun. names), *B. sulcatulus* (suppressed synonymy) and

B. trypetanus FAHRINGER (jun. name and syn. n.).

Abbreviations — In the redescription the following abbreviations are applied (after Van ACHTERBERG 1993: 4-5):

Fore wing: m-cu = transverse medio-cubital vein; r = first section of the radial vein; 1-M = basal vein; 2M = third section of the cubital vein; 1-R1 = first section of the metacarpal vein; 2-M = third section of cubital vein; 2-SR = first transverse cubital vein; 1-SR-M = first section of the cubital vein; 3-SR = second section of the radial vein; SR1 = third section of the radial vein.

***Bracon (Glabrobracon) abbreviator* NEES (Figs 1-14)**

Bracon abbreviator NEES 1834: 75 ♀♀ (syntype series ? ♀, destroyed), type locality: "e Sudetis" (Poland). - SZÉPLIGETI 1901: 265 (in key, in Hungarian) and 1904 (1901): 176-177 (in key, in German). FAHRINGER 1927: 269 (in key) and 372 (redescription), assigned to "Section *Orthobracon*". TELENGA 1936: 176 (in key), 299 (redescription) (in Russian) and 379 (in key, in German). PAPP 1969: 321 (in key) and 322 (distribution, taxonomic remark), assigned to the subgenus *Lucobracon*. SHENEFELT 1978: 1615 (assigned to subgenus *Lucobracon*, literature up to 1969). TOBIAS 1986: 137 (in key, in Russian).

Bracon abscissor NEES 1834: 75 ♀♂ (syntype series ?1 ♀ + ?2 ♂, destroyed), type locality: ♀: ?Sickershausen (Germany), ♂♂: "Sudetis" (Poland) and "Magno-Ducatu Badensi" (Germany). - SZÉPLIGETI 1901: as valid species 266 as "abscissor" (in key, in Hungarian) and 1904 (1901): 185, 189 as "abscissor" (in key, in German). FAHRINGER 1927: as valid species 288, 295 (♀), 303, 306 (♂) (in key), 1928: 433 (redescription) assigned to "Section *Glabrobracon*". TELENGA 1936: as valid species 146 (♀), 155 (♂) (in key), 194 (redescription) (in Russian) and 348 (♀), 358 (♂) (in German). SHENEFELT 1978: as valid species (literature up to 1974). Van ACHTERBERG 1982: 137 (as synonym of *B. minutator* FABRICIUS). TOBIAS 1986: 129 (in key, as synonym of *B. minutator*, in Russian).

Bracon eutrephes MARSHALL 1897: 73 ♀♀ (type series: ?1 ♀), type locality: "Iles Baléares (Palma de Mallorca)" (Spain), female lectotype in Hungarian Natural History Museum, Budapest; examined. - SZÉPLIGETI 1901: as valid species 266 (in key, in Hungarian) and 1904 (1901): 185 (in key, in German). FAHRINGER 1927: as valid species 288 (in key) and 1928: 457 (redescription), assigned to "Section *Glabrobracon*". TELENGA 1936: as valid species 145 (in key), 193 (redescription) (in Russian) and 347 (in key, in German). SHENEFELT 1978: 1569 (as valid species, literature up to 1956). PAPP 2003: 139 (type depository, synonymization);

Braco oostmaeli WESMAEL 1838: 57 ♀♀ (syntype series 1 ♀), type locality: "dans les bruyères d'Oostmael, dans la Campine" (Belgium), female holotype (present designation) in Institut royal des Sciences naturelles de Belgique, Bruxelles; examined. - THOMSON 1894: 1815 (as synonym of *B. abscissor* NEES). SHENEFELT 1978: 1555 (as synonym of *B. abscissor*, literature up to 1945).

Braco regularis WESMAEL 1838: 44 ♂ (syntype series 4 ♂), type locality: "environs de

Bruxelles" (Belgium), male lectotype (and two male paralectotypes, present designations) in Institut royal des Sciences naturelles de Belgique, Bruxelles; examined. - THOMSON 1894: 1815 (as synonym of *B. abscissor* NEES). SHENEFELT 1978: 1555 (as synonym of *B. abscissor*, literature up to 1953).

Bracon rufigaster SZÉPLIGETI 1901a: 264 (in key) and 279 (description) (in Hungarian), 1904 (1901): 176 (in key) and 181 (description) (in German) ♀ (syntype series 2 ♀ ♀), type locality: "Fonyód" (holotype) and "P.-Maróth" (=Pilismarót, paratype) (Hungary), female lectotype (and one female paralectotype) in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: as valid species 252 (in key) and 369 (redescription), assigned to "Section *Lucobracon*". TELENGA 1936: as valid species 170 (♀, in key) and 269 (redescription) (in Russian) and 372 (in key, in German), assigned to *Orthobracon*. TOBIAS 1961: 167 as synonym of *B. abscissor* NEES 1986: 129 as synonym of *B. minutator* FABRICIUS. SHENEFELT 1978: 1555 (as synonym of *B. abscissor* NEES after TOBIAS l.c., literature up to 1961). PAPP 2004: 180 (type designation and depository, as synonym of *B. minutator*: misidentification).

Type designations: Designation of the female neotype of *Bracon abbreviator* NEES identical with the female lectotype of *Bracon rufigaster* SZÉPLIGETI: (first label, printed) "Fonyód / Szépligeti"; second label is the lectotype card of *B. rufigaster* given by me (in 1968); third label is the inventory number 1394; fourth label is the neotype card of *B. abbreviator* NEES. - Neotype (or lectotype) is in fairly good condition: (1) micropinned; (2) left flagellum distally deficient. - The designation of the female neotype of *B. abbreviator* NEES was needed because (1) the destruction of the Nees Collection at the end of the second world war and (2) its unambiguous distinction from the two species (*B. curticaudis* SZÉPLIGETI, *B. minutator* FABRICIUS) standing very near to it. The selection of the lectotype of *B. rufigaster* for the neotype status is justified by its matching in all respects to the original description of *B. abbreviator* by Nees (l.c.). After the description of *B. abbreviator* by NEES in 1834 the species have been described again by WESMAEL (1838) and by MARSHALL (1897) under the names *oostmaeli*, *regularis* (by Wesmael) and *eutrephe*s (by Marshall). The type series of *B. oostmaeli* and *B. eutrephe*s are in poor condition, on one hand, and the type series of *B. regularis* is based on three male specimens, on the other - namely the three type series are inappropriate to select of them the neotype specimen.

Designation of the female paralectotype of *B. rufigaster* SZÉPLIGETI: (first label, printed) "P.-Maróth / Szépligeti" (=Pilismarót, Hungary); second label is the paralectotype card given by me (in 1968); third label is with the inventory number 1395; fourth label is with the actual name *B. abbreviator* NEES given by me. - Paralectotype is in fairly poor condition: (1) pinned by mesosoma; (2) right flagellum missing, left flagellum apically deficient; (3) missing: right fore leg (except coxa), tarsomeres 2-5 of right middle and hind legs, tibiae + tarsi of left middle and hind legs.

Designation of the female lectotype of *Bracon eutrephe*s MARSHALL: (first label attached by me in 1989, my manuscript) "Spain / Iles Baléares / Palma de Mallorca"; (second label medio-longitudinally with a red line) "eutrephe M." (handscript) / "Coll. Marshall" (printed); third label is the lectotype card given by me (in 1990); fourth label is with the inventory number 10556; fifth label is with the actual name *B. abbreviator* NEES given by me. - Lectotype is in rather poor condition: (1) micropinned; (2) body more or less mouldy; (3) antennae (except left scape + pedicel) and tarsomeres 4-5 of right hind leg missing.

Designation of the female lectotype of *Bracon oostmaeli* WESMAEL: (first label, printed) "Coll. Wesmael"; (second label, printed) "2083"; (third label, printed red) "Type";

(fourth label) "*Braco oostmaeli mihi* ♀" (handscript) "det. C. Wesmael" (printed); fifth label is with the locality name "Belgique / Oostmael / Campine" given by me (with my handscript); sixth label is the lectotype card attached by me; seventh label is with the actual name *B. abbreviator* NEES given by me; - Lectotype is in fairly poor condition: (1) micropinned (micropin thick); (2) head missing; (3) missing: right fore wing, right fore leg, tarsomeres 3-5 of left fore leg.

Designation of the male lectotype of *Braco regularis* WESMAEL: (first label, printed) "Coll. Wesmael"; (second label, printed) "2057"; (third label, printed red) "Type"; (fourth label) "*Braco regularis mihi* ♂" (handscript) "det. C. Wesmael" (printed); fifth label is with the locality name "Belgique / Bruxelles" given by me (with my handscript); sixth label is the lectotype card attached by me; seventh label is with the actual name *B. abbreviator* NEES given by me. - Lectotype is in fairly good condition: (1) micropinned; (2) flagelli apically deficient; (3) right hind leg (except coxa + trochanters) missing.

Designation of the two male paralectotypes of *Braco regularis* WESMAEL: labels 1-5 and 7-8 are identical to those of the lectotype; sixth label is the paralectotype card attached by me. - Two paralectotypes are in fairly good (1♂) and fairly poor (1♂) condition: (1) micropinned; (2) flagelli apically deficient; (3) metasoma and fore pair of legs (except coxae + trochanters) missing (1♂).

Material examined (47♀ + 21♂♂): Hungary: 24♀ + 15♂♂ from 18 localities. Slovakia: 1♀ + 1♂ from two localities. Romania (Transylvania): 3♀ from three localities. Slovenia: 1♀. England: 1♀ + 1♂ from two localities. Germany: 3♀ + 1♂ from four localities. Austria: 1♀. Czech Republic: 2♀ from two localities. Spain: 2♀ from two localities. Italy: 1♀. Macedonia: 1♀. Greece: 4♀ from four localities. Cyprus: 1♀. Israel: 1♀. Jordan: 1♂. Georgia: 1♂. Armenia: 1♀. Algeria: 1♀.

Description of the female neotype of *Bracon abbreviator* NEES (identical with the female lectotype of *Bracon rufigaster* SZÉPLIGETI): Body 4 mm long. Antenna about as long as body and with 33 antennomeres (right antenna); left antenna deficient: with 12 flagellomeres. First flagellomere 1.5 times and penultimate flagellomere 1.75 times as long as broad, flagellum proximo-distally slightly attenuating (Fig. 1). - Head in dorsal view (Fig. 2) transverse, 1.8 times as broad as long, eye 1.75 times longer than temple, temple rounded, occiput excavated. Eye in lateral view 1.45 times as high as wide and 1.8 times wider than temple (Fig. 3, see arrows). Horizontal diameter of oral opening 1.4 times as long as shortest distance between opening and compound eye (Fig. 4). Head polished, face very faintly subrugulose.

Mesosoma in lateral view nearly 1.6 times as long as high, polished. Notaulix distinct, shallow. Propodeum polished, around lunule with short striolae and issuing a short and weak carina. - Hind femur fairly thick, nearly 2.8 times as long as broad medially (Fig. 5). Claw downcurved, its basal lobe fairly large and of peculiar form (Fig. 6).

Fore wing as long as body. Pterostigma (Fig. 7) 2.6 times as long as wide and issuing *r* from its middle, *r* 0.6 times as long as width of pterostigma; 3-SR 1.25 times as long as 2-SR, SR1 straight, 1.8 times longer than 3-SR and reaching tip of wing; 1-R1 clearly 1.5 times as long as pterostigma. First distal cell less high, 1-M 1.8 times longer than m-cu, 1-SR-M just bent and 1.45 times as long as 1-M (Fig. 8).

First tergite (Fig. 9) broad, somewhat broader behind than long, beyond pair of spiracles weakly broadening, scutum with a transverse carina, its lateral margin anteriorly with subcrenulae, otherwise uneven to polished. Second tergite transverse, 3.2 times as broad

behind as long laterally, antero-medially rugulose (Fig. 9). Suture between tergites 2-3 bisinuate and fairly deep, smooth. Third tergite 1.4 times longer than second tergite, together with further tergites polished. Hypopygium pointed, ovipositor sheath short, as long as hind tarsomeres 1-4 combined (Fig. 10).

Ground colour of head and mesosoma black, metasoma reddish yellow. Scape and pedicel black, flagellum brownish black. Orbits faintly rusty. Oral opening, mandible and mouthparts yellow. Cheek rusty. Pronotum and tegula darkening reddish yellow. Scutum anteriorly black. Legs reddish yellow, fifth tarsomere brownish. Wings brownish fumes, pterostigma and veins faintly opaque brown.

Redescription of the female paralectotype of *Bracon rufigaster* SZÉPLIGETI: Similar to the female lectotype of *B. rufigaster* or female neotype of *B. abbreviator*. Body 4.5 mm long. Left flagellum apically damaged and with 29 antennomeres (right flagellum missing). Pterostigma 2.5 times as long as wide.

Variable features of the females (47 ♀ ♀) of *B. abbreviator*: Body (3.5-)3.8-4.2(-4.5) mm. Antenna with 29-35, usually with 31-33, antennomeres. Exceptionally flagellomeres 2.1-2.2 times as long as broad (2 ♀ ♀). Head in dorsal view rarely about 1.9 times as broad as long. Hind femur 2.7-2.9, usually 2.8 times, as long as broad medially (Fig. 11). Pterostigma 2.5-2.6 times, exceptionally three times (3 ♀ ♀), as long as wide. First tergite very broad, 1.25 times broader behind than long, beyond pair of spiracles clearly broadening (4 ♀ ♀) (Fig. 12); transverse carina of scutum sometimes shortened on lateral side of scutum (Fig. 13).

Variable features of the males (21 ♂ ♂) of *B. abbreviator*: Similar to the female. Body 3.5-4(-4.5) mm long. Antenna as long as to somewhat longer than body and with (29-)33-38 antennomeres. Flagellomeres 1.8-2(-2.2) times as long as broad. Head in dorsal view 1.75-1.9 times as broad as long. First tergite slightly longer to somewhat broader behind than long, with more or less broadening sides beyond pair of spiracles, rarely (3 ♂ ♂) parallel-sided (Figs 14). Mesosoma black, pronotum rarely with faint rusty suffusion. Tegula yellow to brownish. Scutum of first tergite black to partly black. Metasoma apically blackish to black. Hind coxa more or less black to blackish.

Bracon (Glabrobracon) abbreviator var. *abscissor* (NEES 1834): The variety differs from the nominate form by a few colour features: (1) tergites with a median row of black maculae to forming a black streak, (2) hind pair of coxae partly to (almost) entirely black, (3) femuri-tibiae with variable black(ish) pattern.

Hosts: *Anthonomus pomorum* LINNAEUS (Col. Coleophoridae), *Lipara lucens* MEIGEN (Dipt. Chloropidae), *Cephus pygmaeus* LINNAEUS (Hym., Cephidae), *Coleophora troglodytella* DUPONCHEL (Lep. Coleophoridae), *Pandemis heparana* HÜBNER, *Rhyacionia buoliana* DENIS & SCHIFFERMÜLLER (Lep. Tortricidae), *Cochylis posterna* ZELLER (Lep. Cochylidae), *Pennisetia hylaeiformis* LASPEYRES (Lep. Sesiidae); *Mesapamea secalis* LINNAEUS, *Oria musculosa* HÜBNER, *Sesamia nonagrioides* LEFEBRE (Lep. Noctuidae).

Distribution: western Palaearctic Region.

Remarks: Within the subgenus *Glabrobracon* the species *B. abbreviator* is nearest to *B. minutator* (FABRICIUS) and *B. curticaudis* SZÉPLIGETI viewing their common features as the short ovipositor sheath; the three species are separated by the features keyed:

- 1(2) Eye in dorsal view 1.3-1.4 times as long as temple (Fig. 15). Hind femur less thick, 3.3-3.5 times as long as broad medially (Fig. 16). First tergite as long as broad behind and subparallel-sided, second tergite polished, at least (and exceptionally) antero-medially uneven-subrugulose (Fig. 17). Claw as in Fig. 18. Tergites black, only laterally rusty to reddish yellow, yellow. ♀: 4-4.5(-5) mm, ♂: (3.2-)3.5-4.5 mm *B. (Gl.) minutator* (FABRICIUS 1798)
- 2 (1) Eye in dorsal view 1.6-1.8 times as long as temple (Figs 2, 89). First tergite broader behind than long and posteriorly with diverging sides, second tergite more or less rugulose (Figs 9, 97). Claw as in Figs 6, 94. Hind femur variably 2.8-3.3 times as long as broad medially (Figs 9, 97).
- 3 (4) Temple in dorsal view strongly rounded (Fig. 2). First tergite with a transverse carina across scutum (Fig. 9). Hind femur slightly thick, 2.7-2.9 times as long as broad (Fig. 5). Claw less downcurved, its basal lobe less pointed (Fig. 6). Legs reddish yellow. ♀ ♂: 3.5-4.5 mm *B. (Gl.) abbreviator* NEES 1834
- 4 (3) Temple in dorsal view rounded (Figs 89, 99). First tergite without transverse carina across scutum (Fig. 97). Hind femur slightly less thick, 3-3.3 times as long as broad (Fig. 93). Claw more downcurved, its basal lobe more pointed (Fig. 94). Legs black. ♀: (3-)3.5-4.5 mm, ♂: 3.4 mm *B. (Gl.) curticaudis* SZÉPLIGETI 1901

***Bracon (Bracon) alutaceus* SZÉPLIGETI (Figs 24-40)**

Bracon alutaceus SZÉPLIGETI 1901a: 184 (in key) and 272 (description) (in Hungarian), 1904 (1901): 159, 162 (in key) and 172 (description) (in German) ♀ (syntype series one female), type locality: "P.-Maróth" = Pilismarót (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. — FAHRINGER 1927: as valid species 233 (in key) and 1928: 312 (redescription), assigned to "Section *Striobracon*". TELENGA 1936: as valid species 159 (in key) and 235 (redescription) (in Russian), 361 (in key, in German). PAPP 1968: 193 (as valid species in key) and 197 (taxonomic comment). SHENEFELT 1978: 1464 (as valid species, literature up to 1974). TOBIAS 1986: 129 (in key, as synonym of *B. longicollis* WESMAEL, in Russian). PAPP 2004: 171 (as valid species, type designation and depository).

Bracon (Orthobracon) pallidalatus TOBIAS 1957: 495 (description, in Russian) ♀ (type series 22 females), type locality: Kamisin (European Russia), female holotype ("type") and 21 paratypes in Zoological Institute, Sankt Petersburg; one female paratype (in Museum Budapest) examined. — TOBIAS 1961: 168 (synonymization with *B. alutaceus*). SHENEFELT 1978: 1464 (as synonym of *B. alutaceus*, literature up to 1961).

Bracon pygmaeus NIEZABITOWSKI 1910 (nec PROVANCHER 1880): 62 (18) (description) ♀ (syntype series ?), type locality: "Rytro" or "Żegiestów" (Poland), syntype series supposedly deposited in Zakład Ekologii i Ochrony Środowiska WSP, Kielce, Poland; not examined, the junior synonymy of *B. pygmaeus* is supposed albeit not confirmed lacking authentic specimen. — TELENGA 1936: 250 (as synonymy of *B. polonicus* FAHRINGER)

Bracon (Striobracon) polonicus FAHRINGER 1927: 240, 252 (in key), 333 (description); new name for *B. pygmaeus* NIEZABITOWSKI 1910 nec PROVANCHER 1880.

Type designation: Designation of the female lectotype of *B. alutaceus*: (first label, printed) "P. Maróth / Szépligeti" (Hungary); second label is my lectotype card, third label is with the inventory number 320. - Lectotype is in good condition: (1) micropinned, micropin pierced basal part of right wings; (2) right antenna deficient apically and with 22 antennomeres, (3) left fore wing glued on a separate small card attached to the pin.

Material examined (34 ♀♀ + 4 ♂♂): Hungary: 17 ♀♀ from 17 localities and 1 ♂. Serbia (Voivodina): 1 ♀. Czech Republic: 3 ♀♀ + 3 ♂♂ from 4 localities. Slovakia: 1 ♀. England: 2 ♀♀ from 2 localities. Sweden: 2 ♀♀ from 2 localities. Denmark: 1 ♀. Germany: 1 ♀. Austria: 1 ♀. Poland: 1 ♀. Bulgaria: 1 ♀. Cyprus: 1 ♀. European Russia: 1 ♀ paratype from the type locality Kamisin. China ("Turkestan"): 1 ♀.

Redescription of the female lectotype of *B. alutaceus*: Body 3.1 mm long.

Antenna (left antenna) about as long as body and with 31 antennomeres. First flagellomere clearly twice as long as broad, further flagellomeres indistinctly attenuating so that penultimate flagellomere twice as long as broad (Fig. 24). - Head in dorsal view (Fig. 25) less transverse, 1.76 times as broad as long, eye clearly twice as long as temple, temple strongly rounded, occiput weakly excavated. Eye in lateral view 1.5 times as high as wide somewhat ventrally, eye one-fourth wider than temple (Fig. 26, see arrows). Oral opening as wide horizontally as shortest distance between opening and compound eye (Fig. 27). Head polished, face laterally subrugulose.

Mesosoma in lateral view 1.6 times as long as high, polished. Notaulix faintly distinct. Propodeum striate, anteriorly uneven to smooth, medio-longitudinal keel distinct (Fig. 28). - Hind femur fairly thick, 2.6 times as long as broad medially (Fig. 29). Claw down-curved, its basal lobe distinct (Fig. 30).

Fore wing as long as body. Pterostigma (Fig. 31) less wide, 3.3 times as long as wide and issuing r from its middle; 3-SR 1.38 times as long as 2-SR, SR1 straight, 1.7 times as long as 3-SR and reaching tip of wing; 1-R1 1.6 times as long as length of pterostigma. First discal cell less high, 1-M 1.66 times as long as m-cu, 1-SR-M 1.3 times as long as 1-M (Fig. 32).

First tergite strongly broadening posteriorly (Fig. 33), 1.25 times as broad behind as long, evenly broadening posteriorly; scutum behind rugose, laterally with striate elements, lateral margin of scutum crenulate, lateral part of tergite rugose. Second tergite 2.7 times as broad behind as long and a bit longer than third tergite. Second tergite antero-medially rugose, otherwise rugulose; further tergites with somewhat weakening granulo-rugulosity (Fig. 33). Suture between tergites 2-3 distinct, almost straight, smooth (Fig. 33). Ovipositor sheath short, as long as hind tarsomeres 1-4 + half of 5th tarsomere combined.

Ground colour of body reddish yellow. Scape brownish yellow, flagellum brown. Palpi yellow. Propodeum and first tergite entirely, second tergite medially black. Median spots of tergites 3-5 brown to light brown. Legs yellow, fifth tarsomeres brownish. Wings subhyaline, pterostigma and veins opaque light brown.

Variable features of the females (34 ♀ ♀): Similar to the female lectotype. Body (2.8-)3-3.3(-4) mm long. Antenna with (27-)31-38(-40) antennomeres. Head in dorsal view (1.65-)1.7-1.78 times as broad as long (Fig. 34). Sculpture of propodeum restricted medially. Hind femur 2.5-2.7 times as long as broad medially (Fig. 35). Pterostigma somewhat wide (Fig. 36), three times as long as wide; second submarginal cell long, 3-SR 1.35-1.4 times as long as 2-SR. First tergite rarely as long as broad behind. Second tergite sometimes distinctly longer than third tergite (Fig. 38). Sculpture beyond first tergite rarely clearly weakening posteriorly (Fig. 38, left half in figure) or second tergite with stronger sculpture (Fig. 38, right half in figure). Ovipositor sheath as long as hind tibia or hind tibia + hind basitarsus combined. Pterostigma usually yellow. Black pattern of body more or less diminishing, i.e. ground colour of body more reddish yellow or, less usually, blackish to black pattern more extending (var. *polonicus* FAHRINGER).

Redescription of the males (4 ♂ ♂): Similar to the female. Body 2.5-3 mm long. Head in dorsal view (Fig. 34) 1.66 times as broad as long. Hind femur 2.9-3.3 times

as long as broad medially (Fig. 35). Pterostigma 3.3-3 times as long as wide; r as long as width of pterostigma, second submarginal cell narrow hence relatively long, 3-SR 1.28 times length of 2-SR (Figs 36, 39). First tergite narrow, somewhat longer than broad behind, second and third tergites less wide (Fig. 40).

H o s t : unknown.

D i s t r i b u t i o n : Europe, China ("Turkestan").

R e m a r k : Within the subgenus *Bracon* the species *Bracon alutaceus* SZÉPLIGETI is nearest to *B. fulvipes* NEES, viewing the sculpture of the tergites and propodeum, the alar venation and colour of the body, they are distinguished by subtle features not easy to recognize:

- 1 (2) Propodeum striate (Fig. 28). First tergite of female somewhat broader behind than long (Fig. 33), rarely as long as broad behind. Claw curved (Fig. 30). Head in dorsal view 1.7-1.8 times as broad as long, eye not protruding (Figs 25, 34). Second submarginal cell of fore wing usually long, 3-SR 1.35-1.4 times as long as 2-SR (Figs 31, 39). Pterostigma yellow, rarely light brown. ♀: (2.8-)3-3.3(-4) mm, ♂: 2.5-3 mm *B. (B.) alutaceus* SZÉPLIGETI 1901
- 2 (1) Propodeum rugose (Fig. 41). First tergite as long as broad (Fig. 42) or, less frequently, more or less longer than broad behind. Claw less downcurved (Fig. 43). Head in dorsal view 1.8-1.9(-2) times as broad as long, eye usually somewhat protruding (Fig. 44). Second submarginal cell of fore wing usually less long, 3-SR 1.2-1.3 times as long as 2-SR (Fig. 45). Pterostigma brown to dark brown. ♀: (2.5-)3-4.5(-5) mm, ♂: 2.5-3.5(-4) mm *B. (B.) fulvipes* NEES 1834

Description of the new subgenus *Osculobracon*

Genus *Bracon* FABRICIUS 1804

Subgenus *Osculobracon* subgenus novum

Type species: *Bracon osculator* NEES 1811.

S u b g e n e r i c d i f f e r e n c e s : (1) In all respects identical with the subgenus *Glabrobracon* except metasomal chitinization from the third tergite: hind half to two-thirds / three-fourths of tergites weakly chitinized (or weakly sclerotized), i.e. tergites here membranous (or desclerotized) and its colour whitish or yellowish. Second tergite usually polished, less usually (weakly) sculptured (Fig. 54). (2) Claws of fifth tarsomeres faintly curved (Fig. 51, 70).

A total of eleven *Bracon* species are assigned to the new subgenus *Osculobracon*:

B. (O.) cingillus TOBIAS 2000 - Japan, Asiatic Russia (Primorski Krai)

B. (O.) cingulator SZÉPLIGETI 1901 - Palaearctic Region

B. (O.) ciscaucasicus TELENGA 1936 - Palaearctic Region

B. (O.) juncicola ASHMEAD 1889 - Canada, U.S.A.

B. (O.) koreanus PAPP 1998 - Korea, Asiatic Russia

B. (O.) melanopsis ASHMEAD 1891 - Canada, U.S.A.

B. (O.) osculator NEES 1811 - Palaearctic Region

B. (O.) pelliger TOBIAS 1961 - Kazakhstan

B. (O.) repetekiensis TOBIAS 1967 - Turkmenia

B. (O.) subcingillus TOBIAS 2000 - Asiatic Russia (Primorski Krai)

B. (O.) venustus TELENGA 1936 - South Europe, southern part of European Russia, Georgia

***Bracon (Osculobracon) cingulator* SZÉPLIGETI (Figs 46-58, 60-64)**

Bracon cingulator SZÉPLIGETI 1901c: 267 (in key) and 280 (description) (in Hungarian), 1904 (1901): 185 (in key) and 191 (description) (in German) ♀, type locality: "Rußland: Kasan", female holotype in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: 289 (in key) and 1928: 446 (redescription), assigned to "Section Glabrobracon". TELENGA 1936: 146 (in key) and 197 (redescription) (in Russian), 348 (in key, in German). SHENEFELT 1978: 1577 (as *Bracon osculator* ab. *cingulator*: after PAPP 1966: 190, literature up to 1966). TOBIAS 1986: 135 (as valid species in key, in Russian). TOBIAS & BELOKOBYLSKIJ 2000: 145 (as valid species in key, in Russian). PAPP 2004: 172 (as valid species, type designation and depository).

Type designation: Designation of the female holotype of *B. cingulator*: (first label, printed) "Rossia / Kasan" (above the label) [18]"96 6/16" (reverse on label, hand-script); (second label, printed) "Exp. Zichy / leg. CSIKI"; third label is my holotype card, fourth label is with the inventory number 1327. - Holotype is in fairly good condition: (1) glued ventrally on a rectangular card; (2) left antenna damaged, i.e. with nine flagellomeres; (3) right fore wing missing; (4) legs 1-2 more or less hardly seen owing to the mounting.

Material examined: (41♀♀ + 34♂♂): Hungary 32♀♀ + 21♂♂ from 24 localities. Romania, Transylvania: 3♂♂ from three localities. Slovakia: 1♀. Croatia: 1♀ + 1♂ from two localities. Germany: 1♀. Norway: 1♂. Nederland: 1♂. Austria: 1♂. Italy (Sardagna): 1♂. Bulgaria: 1♂. Tunisia: 1♂. Turkmenia: 1♂. Korea: 6♀♀ + 2♂♂ from six localities.

Redescription of the female holotype of *Bracon cingulator*: Body 2.6 mm long. Right antenna as long as body and with 28 antennomeres. First three flagellomeres 2.7 times and penultimate flagellomere 2.1 times as long as broad (Fig. 46). - Head in dorsal view (Fig. 47) 1.7 times as broad as long, eye clearly twice as long as temple, temple receded, occiput weakly excavated. Eye in lateral view almost 1.5 times as high as wide, temple ventrally broadening and one-third (or 0.6 times) less wide than eye (Fig. 48, see arrows). Oral opening (seen somewhat less well owing to the mounting) 1.6 times wider horizontally than shortest distance between opening and compound eye (Fig. 49). Head polished.

Mesosoma in lateral view 1.5 times as long as high, polished. Notaulix distinct, shallow. Propodeum polished, around lunule with short rugulae. - Hind femur 3.5 times as long as broad distally (Fig. 50). Claw weakly downcurved (Fig. 51).

Fore wing about as long as body. Pterostigma (Fig. 52) 2.8 times as long as wide and issuing r from its middle; r as long as width of pterostigma; 3-SR 1.36 times length of 2-SR, SR1 straight, 1.6 times as long as 3-SR and reaching tip of wing; 1-R1 1.7 times length of pterostigma (Fig. 52). First discal cell less high, 1-M 1.6 times as long as m-cu, 1-SR-M 1.45 times as long as 1-M (Fig. 53).

First tergite (Fig. 54) characteristic in form: broadest anteriorly between pair of spiracles, beyond spiracles narrowing, tergite 1.4 times as long as broad between spiracles and 1.9 times as long as broad behind, polished. Second tergite antero-laterally, further tergites nearly entirely desclerotized; third tergite almost twice as long as second tergite, suture

between tergites 2-3 indistinct (Fig. 54). Hypopygium pointed, ovipositor sheath as long as hind tarsomeres 1-3 combined, end of ovipositor pointed (Fig. 55).

Body black, desclerotized part of tergites straw yellow. Antenna blackish. Oral organs yellow, inner margin of eye rusty. Tegula blackish. Legs yellow, hind coxa basally brownish. Wings faintly fumous, pterostigma brown, veins yellowish to light brown.

Variable features of the females (41 ♀ ♀). Similar to the female holotype. Body (2-)2.4-3 mm long. Antenna with (22-)24-34 antennomeres. Head in dorsal view 1.8-1.9(-2) times as broad as long, temple rarely less receded (Fig. 60). Mesosoma in lateral view 1.5-1.8 times as long as high. Hind femur 3.4-3.5 times as long as broad, frequently broadest medially (Fig. 56). Second submarginal cell of fore wing short, 3-SR somewhat longer than 2-SR (3 ♀ ♀, Fig. 57). First tergite frequently less narrowing (Fig. 58). Legs more or less darkening to black(ish) (melanic form).

Description of the male (34 ♂ ♂): Similar to the female. Body 1.8-3 mm long. Antenna more or less longer than body and with 22-29(-36) antennomeres. Flagellomeres more than twice (2.1-2.4 times) as long as broad. Head in dorsal view (1.7-)1.8-2 times as broad as long, temple less receded (Fig. 61) to receded (Fig. 47). Hind femur usually broadest medially (Fig. 56). Second submarginal cell as in female (Fig. 52) or rarely long; 3-SR 1.5 times as long as 2-SR, SR1 1.5 times length of 3-SR and r sometimes issuing proximally from middle of pterostigma (Fig. 62). First tergite beyond spiracles either narrowing (Figs 54, 58) or with parallel sides, breadth of tergite variable (Figs 63, 64). Legs variably yellow to darkening brownish to blackish. Wings subfumous to fumous.

Hosts: *Coleophora saponariella* HEEGER (Lep. Coleophoridae), *Biselachista utionella* FREY (Lep. Elachistidae), *Millieria dolosana* HERRICH-SCHAEFFER (Lep. Choreutidae).

Distribution: European part of Russia, Hungary, Romania, Slovakia, Croatia, Germany, Moldavia, Korea.

Remarks: Within the subgenus *Osculobracon* the species *B. cingulator* is closely related to *B. osculator* NEES (this two species form a species-group together with further two species, *B. pelliger* TOBIAS and *B. repetekiensis* TOBIAS, under the name *osculator* species-group); the two species are distinguished by the features keyed:

- 1 (2) First tergite usually 1.8-1.9(-2) times, rarely 1.7 times, as long as broad behind, beyond spiracles more or less narrowing (Figs 54, 58) or (nearly) parallel-sided (Fig. 63, 64). Temple in dorsal view receded variably (Figs 47, 60, 61). Mesosoma in lateral view 1.5-1.8 times as long as high. Hind femur 3.4-3.5 times as long as broad either distally or medially and not parallel-sided (Figs 50, 56). Claw less downcurved, its basal lobe less distinct (Fig. 51). Legs usually yellow. ♀ ♂: (1.8-2-)2.4-3 mm.....*B. (Osc.) cingulator* SZÉPLIGETI 1901
- 2 (1) First tergite (1.2-)1.3-1.6(-1.7) times as long as broad behind, beyond spiracles parallel-sided (Figs 65, 66). Temple in dorsal view less receded to rounded (Figs 59, 67). Mesosoma in lateral view 1.2-1.4 times as long as high. Hind femur 3.7-3.8 times as long as broad medially and nearly parallel-sided (Fig. 68, 69). Claw more downcurved, its basal lobe distinct (Fig. 70). Hind two pairs of legs more or less blackish. ♀ ♂: (1.5-)2-3(-3.5) mm *B. (Osc.) osculator* NEES 1811

***Bracon (Bracon) corruptor* SZÉPLIGETI (Figs 71-80)**

Bracon corruptor SZÉPLIGETI 1901a: 184 (in key) and 274 (description), 1904 (1901): 160 (in key) and 168 (description) (in German) ♀ (syntype series 1 ♀), type locality: "Budapest" (Hungary), female holotype in Magyar Természettudományi Múzeum, Budapest; examined. -

FAHRINGER 1927: 237 (in key) and 313 (redescription) assigned to "Section Striobracon".
TELENGA 1936: 163 (in key), 253 (redescription) (in Russian) and 366 (in key, in German).
PAPP 1974: 425. SHENEFELT 1978: 1629 (as valid species, literature up to 1974). TOBIAS
1986: 125 (supposed synonymy with *B. intercessor* NEES). PAPP 2004: 173 (type designation
and depositary).

Type designation: Designation of the holotype of *Bracon corruptor*: (first label, printed) "Budapest / Szépliget"; (second label) [18]"97.VIII.2" (handscript) / "Szépliget" (printed); third label is my holotype card and the fourth label is with the inventory number 399. - Holotype is in good condition: (1) micropinned; (2) right flagellum deficient, i.e. with 17 flagellomeres.

Material examined: Besides the holotype further specimens unknown.

Redescription of the female holotype of *Bracon corruptor*: Body 3 m long. Left antenna somewhat shorter than body and with 23 antennomeres. First flagellomere 2.6 times, further flagellomeres feebly shortening and attenuating so that penultimate flagellomere 2.2 times as long as broad (Fig. 71). - Head in dorsal view transverse (Fig. 72), 1.8 times as broad as long, eye 1.75 times as long as temple, temple rather receded, occiput weakly excavated. Eye in lateral view 1.5 times as high as wide medially, eye 1.4 times as wide as temple (Fig. 73, see arrows). Oral opening somewhat wider horizontally than shortest distance between opening and compound eye (Fig. 74). Head polished, face subgranulose.

Mesosoma in lateral view 1.4 times as long as high, polished. Notaulix weakly distinct. Propodeum above lunule with short rugae-rugulae, otherwise polished. - Hind femur 3.1 times as long as broad medially (Fig. 75). Claw downcurved, its basal lobe distinct (Fig. 76).

Fore wing as long as body. Pterostigma (Fig. 77) 3.3 times as long as wide, issuing r from its middle, r as long as width of pterostigma; 3-SR one-fifth longer than 2-SR, SR1 straight, just twice as long as 3-SR and reaching tip of wing; 1-R1 clearly 1.5 times length of pterostigma. First discal cell less high, 1-M twice as long as m-cu, 1-SR-M weakly bent and 1.3 times as long as 1-M (Fig. 78).

First tergite (Fig. 79) as long as broad behind, beyond pair of spiracles subparallel-sided, scutum and lateral part of tergite rather longitudinally rugo-rugulose. Second tergite transverse, 3.2 times as broad behind as long laterally and a bit longer than third tergite. Second tergite rugulo-granulose; tergites 3-6 with weakening and medially with more and more (or tergites by tergites) restricting granularity (Fig. 79). Suture between tergites 2-3 bisinuate, subcrenulate. Hypopygium relatively small, pointed; ovipositor sheath long, as long as hind tibia + tarsomeres 1-4 combined; end of ovipositor sheath less pointed and that of ovipositor pointed (Fig. 80).

Ground colour of body blackish with rich light pattern. Antenna dark brown. Margin of eye faintly rusty, face below scape light testaceous, mandible and clypeus yellow, palpi pale yellow. Pronotum + prosternum, mesoscutum testaceous, latter medially (between notaulices) brown. Mesopleuron rusty. Tegula yellow. Tergites laterally (their declivous part) yellowish. Legs yellow, distal end of hind tibia and all tarsi feebly fumous. Wings subhyaline, pterostigma yellow, veins light brownish.

Male and host unknown.

Distribution: Hungary.

Remarks: Within the subgenus *Bracon* s.str. the species *B. corruptor* is nearest to *B. tenuicornis* WESMAEL considering their tergites with weakening sculpture, long ovi-

positor sheath, rather receded temple and yellow pterostigma; however, the two species are clearly distinguished by a few features keyed:

- 1 (2) First tergite as long as broad behind, more rugo-rugulose; second and third tergites with somewhat less rough sculpture (Fig. 79). Head in dorsal view 1.8 times as broad as long, eye 1.75 times length of temple (Fig. 72). Claw slightly greater and less downcurved (Fig. 76). Hind femur 3.1 times as long as broad medially (Fig. 75). Pterostigma issuing *r* from its middle (Fig. 77). Propodeum polished, only above lunule with short rugulae (cf. Fig. 223). Body blackish with rich yellow to testaceous pattern. ♀: 3 mm..... *B. (B.) corruptor* SZÉPLIGETI 1901
- 2 (1) First tergite somewhat (Fig. 81) to 1.3 times as long as broad behind, less rugo-rugulose; second and third tergites with somewhat rougher sculpture (Fig. 82). Head in dorsal view 1.7 times as broad as long, eye 2-2.2 times length of temple (Fig. 83). Claw slightly less great and more downcurved (Fig. 84). Hind femur 2.8-2.9 times as long as broad medially (Fig. 85). Pterostigma issuing *r* proximally from its middle (Fig. 86). Propodeum frequently with medio-longitudinal carina (Fig. 87). Body brownish black to black. ♀: 2.8-3.2 mm, ♂: 2.2 mm.....
..... *B. (B.) tenuicornis* WESMAEL 1838

Bracon corruptor is also near to *B. scutellaris* WESMAEL within the subgenus *Bracon* s.str., the two species are very similar to each other and they are separated by a few features as follows:

- 1 (2) Sculpture of tergites weaker: tergites 1-2 rugulose, tergites 3-6 granulose to subgranulose (Fig. 79). Claw slightly less downcurved (Fig. 76) Temple in dorsal view rather receded (Fig. 72). Pterostigma pale yellow. ♀: 3 mm.....
..... *B. (B.) corruptor* SZÉPLIGETI 1901
- 2 (1) Sculpture of tergites stronger (or less weak): second tergite rugo-rugulose, further tergites with gradually weakening sculpture (Fig. 19). Claw downcurved (Fig. 20). Temple in dorsal view rounded (Fig. 21). Pterostigma light brownish. ♀: 2.8-3.2 mm.....
..... *B. (B.) scutellaris* WESMAEL 1838

***Bracon (Glabrobracon) curticaudis* SZÉPLIGETI (Figs 88-103)**

Bracon curticaudis SZÉPLIGETI 1901a: 265 (in key) and 279 (description) (in Hungarian); 1904 (1901): 179 (in key) and 183 (description) (in German) ♀, type locality: "Budapest" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: 253 (in key) and 350 (redescription), assigned to "Section Lucobracon". TELENGA 1936: 170 (in key), 270 (redescription) (in Russian) and 373 (in key, in German), assigned to Section Orthobracon. PAPP 1974: 427. TOBIAS 1976: 71 (in key) and 1986: 128 (in key) (as synonym of *B. terebella* WESMAEL). SHENEFELT 1978: 1630 (as valid species, literature up to 1974). PAPP 2004: 173 (type designation and depository).

Type designation: Designation of the female lectotype of *Bracon curticaudis*: (first label, my manuscript) "Budapest / Farkasvölgy / V 27, leg. MOCSÁRY" (reverse is the original label with abbreviated collecting data and with MOCSÁRY's manuscript; second label is the lectotype card; third label is with the inventory number "1396". - Lectotype is in good condition: (1) glued on pointed card by the left mesopleuron (partly) + metapleuron; (2) left flagellum missing; (3) ovipositor sheaths somewhat glueish.

Material examined (16♀ + 2♂♂): Hungary: 5♀ + 2♂♂ from five localities. Scotland: 1♀. Sweden: 1♀. Finland: 1♀. Germany: 1♀. Bulgaria: 3♀ from three localities. Turkey: 4♀ from three localities.

Redescription of the female lectotype of *Bracon curticaudis*: Body 3.8 mm long. Antenna somewhat shorter than body and with 29 antennomeres. First flagellomere nearly 1.4 times and penultimate flagellomere 1.7 times as long as broad, flgellum faintly attenuating (Fig. 88). - Head in dorsal view (Fig. 89) transverse, 1.8 times as broad as

long, eye 1.35 times as long as temple, temple rounded, occiput excavated. Eye in lateral view 1.4 times as high as wide and 1.3 times (or one-fourth) wider than temple (Fig. 90, see arrows). Horizontal diameter of oral opening 1.5 times as long as shortest distance between opening and compound eye (Fig. 91). Head polished, face laterally subgranulose.

Mesosoma in lateral view 1.4 times as long as high, polished. Notaulix distinct, shallow. Propodeum polished, close around lunule with a short carina issuing a few short rugulae (Fig. 92). - Hind femur 3.3 times as long as broad medially and less parallel longitudinally (Fig. 93). Claw downcurved, its basal lobe fairly large and pointed (Fig. 94).

Fore wing as long as body. Pterostigma (Fig. 95) fairly wide, 2.35 times as long as wide and issuing r just distally from its middle, r 0.6 times as long as width of pterostigma; 3-SR 1.3 times as long as 2-SR, SR1 straight, nearly 1.8 times longer than 3-SR and approaching tip of wing; 1-R1 1.5 times as long as pterostigma. First discal cell less high, 1-M nearly 1.7 times longer than m-cu, 1-SR-M just bent and also nearly 1.7 times as long as 1-M (Fig. 96).

First tergite (Fig. 97) broad, somewhat broader behind than long, beyond pair of spiracles weakly broadening, tergite laterally from scutum with crenulae, scutum polished and posteriorly with weak striolate elements. Second tergite 3.2 times as broad behind as long laterally, antero-medially rugulose (Fig. 97). Suture between tergites 2-3 bisinuate, fairly deep, smooth. Third tergite a bit longer than second tergite. Hypopygium pointed, ovipositor sheath short and as long as tarsomeres 1-2 combined (Fig. 98).

Ground colour of body black. Antenna black, flagellum with faint brownish tint. Orbit partly rusty. Oral organs brownish. Tegula blackish, parategula brown. Metasoma reddish yellow, first tergite entirely and tergites 5-6 almost entirely black, tergites 2-4 medially weakly blackish. Legs black, femora apically and hind tibia basally rusty. Wings brownish subfamous, pterostigma brown, veins light brown.

Variable features of the females (17 ♀ ♀). Similar to the female lectotype. Body (3-)3.5-4 mm long. Antenna with 27-31 antennomeres. Temple in dorsal view a bit more rounded (Fig. 99, 3 ♀ ♀). Hind femur 3.1-3.3 times as long as broad medially, less usually not subparallel longitudinally (Fig. 100). Pterostigma 2.35-2.6 times as long as wide. First tergite as long as broad behind, beyond pair of spiracles just broadening (Fig. 101, 4 ♀ ♀).

Description of the male (2 ♂ ♂): Similar to the female. Body 3.4 mm long. Antenna about as long as body and with 33 antennomeres. 1-R1 rather reaching tip of wing (Fig. 102). First tergite just broader behind than long, beyond pair of spiracles clearly broadening (Fig. 103). Corporal colouration similar to that of the female.

Host: unknown.

Distribution: Scotland, Sweden, Finland, Germany, Hungary, Bulgaria and Turkey.

Remarks: Within the subgenus *Glabrobracon* the species *Bracon curticaudis* is nearest to *B. terebella* WESMAEL, the two species are distinguished by the following features keyed:

- 1 (2) First tergite somewhat broader behind than long, beyond pair of spiracles broadening-sided, second tergite antero-medially uneven-rugulose (Fig. 97). Suture between tergites 2-3 distinct, bisinuate, deep (Fig. 97). Head in dorsal view slightly more transverse, 1.8 times as broad as long (Fig. 89). Claw as in Fig. 94. SR1 of fore wing approaching tip of wing (Fig. 95). Tergites medially dark coloured. ♀: (3-)3.5-4.5 mm, ♂: 3.4 mm. – Europe *B. (Gl.) curticaudis* SZÉPLIGETI 1901
- 2 (1) First tergite somewhat longer than broad behind, beyond pair of spiracles parallel-sided, second tergite polished (Fig. 104). Suture between tergites 2-3 less distinct, weakly bisinuate to almost straight, less deep (Fig. 104). Head in dorsal view slightly less transverse, 1.7 times as broad as long (Fig. 105). Claw as in Fig. 106. SR1 of fore wing reaching tip of wing (Fig. 107). Tergites usually widely dark coloured. ♀ ♂: (2-)3-4.5 mm. – Palearctic Region.....*B. (Gl.) terebella* WESMAEL 1838

Bracon curticaudis is also near to *B. abbreviator* NEES considering their short ovipositor sheath, the distinction between the two species is presented at the latter species.

***Bracon (Cyanopterobracon) fallax* SZÉPLIGETI (Figs 108-124)**

Bracon fallax SZÉPLIGETI 1901a: 268 (in key) and 281 (description) (in Hungarian), "♀" = ♂; 1904 (1901): 188 (in key) and 192 (description) (in German) ♂, type locality: "Budapest" (Hungary), male lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: 305 (in key) and 1928: 459 (redescription), assigned to "Section Glabrobracon", ♂. TELENGA 1936: 154 (in key) and 226 (redescription) (in Russian), 356 (in key, in German) ♂. TOBIAS 1961: 154 (redescription, in Russian); 1986: 121 (in key, assigned to subgenus *Cyanopterobracon*), in Russian). SHENEFELT 1978: 1552 (literature up to 1969). PAPP 2004: 174 (type designation and depository).

Bracon (Glabrobracon) olgae TELENGA 1936: 145 (in key) and 189 (description) (in Russian), 347 (in key and 384 (description) (in German) ♀, type locality: "Kazakhstan, Bezirk Mugodzhary", female ?lectotype in Zoological Institute, Sankt Petersburg; not examined. - TOBIAS 1958: 90 and 1959: 894 (as synonym of *B. falsus* KOKUJEV). SHENEFELT 1978: 1553 (as synonym of *B. falsus*, literature up to 1954).

Bracon falsus KOKUJEV 1913: 162 (description) ♂, type locality: "Ross. or.: prov. Samara" (Russia), male ?holotype in Zoological Institute, Sankt Petersburg; not examined. - FAHRINGER 1927: 305 (in key) and 1928: 459 (as valid species, redescription), assigned to "Section Glabrobracon". TELENGA 1936: 145 (♀), 154 (♂) (in key) and 189 (as valid species, redescription) (in Russian), 346 (♀), 356 (♂) (in key, in German). TOBIAS 1961: 154 (as synonym of *B. fallax*). SHENEFELT 1978: 1552 (as valid species, literature up to 1966).

Bracon (Cyanopterobracon) oculatus TOBIAS 1957: 481 (description, in Russian) ♀, type locality: "Gissarskiy khr.: Zevar" (Tadzhikistan), female holotype (and one female paratype) in Zoological Institute, Sankt Petersburg; not examined. - TOBIAS 1958: 91 in key, in Russian). SHENEFELT 1978: 1554 (as valid species, literature up to 1962). PAPP 1997: 125 (synonymization in key).

Type designation: Designation of the holotype of *Bracon fallax*: (first label, printed) "Budapest / Szépliget"; second label is my holotype card and third label is with the inventory number 1372. - Holotype is in good condition: (1) pinned by mesosoma; (2) right flagellum apically deficient; (3) tarsomeres 2-5 of left middle leg missing.

Material examined (17♀♀ + 4♂♂): Hungary: 8♀♀ + 1♂ from eight localities. Slovakia: 2♀♀ from two localities. Romania (Transylvania): 2♀♀ from one locality. Cyprus: 1♀. Italy (Sicily): 1♀. Morocco: 1♀ + 1♂ from one locality. Turkey: 1♂. Georgia: 1♂. Kazakhstan: 1♀.

Redescription of the male holotype of *Bracon fallax*: Body 4.8 mm long. Left antenna somewhat longer than body and with 45 antennomeres. Scape in lateral view globose (Fig. 108). First flagellomere hardly 1.2 times as long as broad apically, further flagellomeres subcubic, i.e. somewhat longer than broad, last 14-15 flagellomeres attenuating so that penultimate flagellomere twice as long as broad (Fig. 109). - Head in

dorsal view transverse (Fig. 110), 1.76 times as broad as long, eye 1.25 times length of temple, temple rounded, occiput excavated. Eye in lateral view 1.6 times as high as wide somewhat ventrally, temple slightly (i.e. 0.8 times) less wide than eye (Fig. 111, see arrows). Oral opening somewhat wider horizontally than shortest distance between opening and compound eye (Fig. 112). Head polished and, except eye, hairy (hairs about as long as ultimate flagellomere).

Mesosoma in lateral view 1.6 times as long as high, polished, mesoscutum hairy (similar to that of head). Notaulix weakly distinct. Propodeum fully polished. - Hind femur 3.1 times as long as broad somewhat distally (Fig. 113). Claw downcurved, its basal lobe distinct (Fig. 114).

Fore wing as long as body. Pterostigma (Fig. 122) 3.3 times as long as wide and issuing *r* proximally from its middle; *r* as long as width of pterostigma, 3-SR 1.5 times as long as 2-SR; SR1 straight, 1.35 times as long as 3-SR and approaching tip of wing; 1-R1 1.25 times length of pterostigma. First discal cell less high, 1-M 1.6 times as long as *m-cu*, 1-SR-M 1.3 times as long as 1-M (Fig. 115).

First tergite (Fig. 116) as long as broad behind, beyond pair of spiracles faintly broadening, lateral part of tergite fairly wide, scutum slightly more convex. Second tergite transverse, 3.25 times as broad behind as long laterally, third tergite 1.65 times length of second tergite; suture between tergites 2-3 bisinuate, smooth, deep (Fig. 116). Every tergite polished.

Body bicolorous. Antenna blackish. Head black, mandible brownish yellow, palpi brown, rostrum black. Hairs bronze-coloured. Mesosoma black, mesoscutum testaceous with three faintly dark coloured maculae on mesoscutal lobes. Pronotum rusty. Tegula reddish yellow. Metasoma reddish yellow. Legs bicoloured, coxae + trochanters blackish to dark brownish, hind tibia apically and tarsi 2-3 blackish brown, fore tarsus brown, otherwise legs reddish yellow to testaceous. Wings brown fumous, pterostigma and veins brown.

Variable features of the males (4♂♂). - Similar to the male holotype. Body 4-4.5 mm long. Temple slightly more rounded (1♂, Fig. 117) or head 1.7 times as broad as long (1♂, Figs 118). Hind femur 2.9 times as long as broad somewhat distally (1♂, Fig. 120). Pterostigma 2.7 times as long as wide and 3-SR 1.3 times as long as 2-SR (1♂, Fig. 123). Mesosoma entirely black (1♂), pronotum laterally reddish bellow (1♂), legs with extended black to blackish pattern (1♂).

Description of the females (17♀♀). - Similar to the male holotype. Body 4.8-6, usually 5.5-6 mm long. Antenna about as long as body and with 41 (2♀♀), 42 (1♀), 45 (2♀♀) and 49 (1♀) antennomeres. - Head in dorsal view 1.7-1.9 times as broad as long, eye 1.25-1.3 times as long as temple, temple more or less rounded (Figs 118, 120). - Mesosoma in lateral view 1.5-1.65 times as long as high. Hind femur 2.8-2.9(-3) times as long as broad somewhat distally or just medially (2♀♀). - First tergite usually somewhat broader behind than long or as long as behind (2♀♀), beyond pair of spiracles more or less broadening (Figs 116, 124). - Pterostigma (Figs 122, 123) 2.8-3.3(-4) times as long as wide and issuing *r* proximally from its middle or just from its middle (2♀♀); 3-SR 1.25-1.4 times length of 2-SR (Figs 122) or 3-SR slightly longer than 2-SR (Fig. 123). - First tergite slightly broader behind than long (Fig. 124) or, less usually, as long as broad behind (Fig. 116), third tergite 1.2-1.3 times as long as second tergite. Hypopygium small, pointed, ovipositor sheath somewhat shorter to somewhat longer than hind tarsus (Fig. 121).

Host unknown.

Distribution : Steppe- and forest-steppe zones of the western Palearctic Region and South Europe.

Remarks : Within the subgenus *CyanopteroBracon* the species *B. fallax* is nearest to *B. sabulosus* SZÉPLIGETI and *B. urinator* (FABRICIUS) viewing their hairy head and mesoscutum and the more or less long rostrum; the three species are distinguished by the features keyed:

- 1 (2) Suture between tergites 2-3 less deep and straight (Fig. 125). Claw less downcurved and its basal lobe hardly distinct (Fig. 126). Scape in lateral view less globose (Fig. 127). Hind femur 3.5-3.6 times as long as broad medially and nearly parallel-sided (Fig. 128). Ovipositor sheath long, at least as long as hind tibia + tarsus combined (Fig. 129). Antenna with usually less than 40 antennomeres (♀ ♀). Mesosoma variably coloured: (almost) entirely black to (nearly) entirely reddish yellow, testaceous. ♀: 3.5-7.5 mm, ♂: 3-6.5(-7).....*B. (Cyan.) urinator* (FABRICIUS 1798)
- 2 (1) Suture between tergites 2-3 deep and bisinuate (Fig. 116, 124). Claw downcurved and its basal lobe distinct (Fig. 114). Scape in lateral view globose (Fig. 108). Hind femur 2.9-3.1 times as long as broad and less parallel-sided (Fig. 113, 119). Ovipositor sheath less long to short, shorter than hind tibia + tarsus combined (Figs 121). Antenna more than 40 antennomeres.
- 3 (4) First tergite as long as broad behind (♂) or somewhat broader behind than long (♀), beyond pair of spiracles more or less broadening (Figs 116, 124). Eye in dorsal view 1.25-1.3 times as long as temple, temple relatively less rounded (Figs 110, 117, 118, 120). Basal lobe of claw less large and less pointed (Fig. 114). First discal cell less high, 1-SR-M 1.3 times as long as m-cu (Fig. 115). Hind femur reddish yellow, at most with dark pattern. ♀: 4.8-6 mm, ♂: 4-4.8 mm.....*B. (Cyan.) fallax* SZÉPLIGETI 1901
- 4 (3) First tergite 1.3-1.4 times as long as broad behind, beyond pair of spiracles parallel-sided (or at most slightly broadening) (Figs 308, 314). Eye in dorsal view 1.3 times (♂) and (1.3-)1.5-1.6 times as long as temple, temple relatively more rounded (Figs 301, 310). Basal lobe of claw large and clearly pointed (Fig. 305). First discal cell fairly high, 1-SR-M somewhat longer than 1-M (Fig. 307). Hind femur black, at most with light pattern. ♀: 5.5-8 mm, ♂: 5-7 mm.....*B. (Cyan.) sabulosus* SZÉPLIGETI 1896

***Bracon (GlabroBracon) fumatus* SZÉPLIGETI (Figs 130-136)**

Bracon fumatus SZÉPLIGETI 1901a: 264 (in key) and 278 (description) (in Hungarian); 1904 (1901): 178 (in key) and 182 (description) (in German) ♀ ♂, type locality: "Budapest" (Hungary), female lectotype (and 11 ♀ + 6 ♂ paralectotypes) in Magyar Természettudományi Múzeum, Budapest; 1 ♀ + 1 ♂ paralectotypes in Biosystematic Research Institute, Ottawa and 1 ♀ paralectotype in Museum für Naturkunde, Berlin as exchange material; examined. - FAHRINGER 1927: 249 (♀), 258 (♂) (in keys) and 354 (redescription), assigned to "Section Lucobracon". TELENGA 1936: 169 (♀), 178 (♂) (in keys) and 266 (redescription) (in Russian); 372 (♀), 381 (♂) (in keys, in German) ♀ ♂, assigned to section Luco-/Orthobracon. SHENEFELT 1978: 1633 (female lectotype designated after PAPP 1974, literature up to 1974). TOBIAS 1986: 142 (in key, in Russian). PAPP 1999: 277 (lectotype and paralectotypes designations, redescription, synonymy); 2004: 175 (type depository).

Bracon brunneipennis SZÉPLIGETI 1901a: 268 (in key) and 282 (description) (in Hungarian); 1904 (1901): 188, 190 (in key) and 193 (description) (in German) ♀, type locality: "Budapest" (Hungary), female lectotype (and 9 ♀ paralectotypes) in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: as valid species 292, 296 (in key) and 1928: 440 (redescription) ♀, assigned to "Section GlabroBracon". TELENGA 1936: as valid species 148 (♀), 154 (♂) (in keys) and 203 (redescription) (in Russian), 350 (♀), 357 (♂) (in keys, in German). TOBIAS 1976: 67 (in key, as synonym of *B. fumatus*); 1986: 142 (as synonym of *B. fumatus*). SHENEFELT 1978: 1559 (as valid species, literature up to 1936). PAPP 1999: 277 (as synonym of *B. fumatus*); 2004: 172 (type depository).

Supplementary additions to the redescription of *B. fumatus* (PAPP 1999: 277-282):

(1) Head in dorsal view 1.66 times (Fig. 130) to 1.53 times (Fig. 131) as broad as long. Eye in dorsal view one-fifth (Fig. 130) to just longer (Fig. 131) than temple; temple more rounded than in Fig. 26 (in PAPP 1999: 278). Hind femur 3.3-3.4 times as long as broad just distally (Figs 132). Claw as in Fig. 134.

(2) Variabilities of tergites 1-3: (a) Tergites 1-3 as in Fig. 32 (in PAPP l.c.); (b) Third tergite antero-medially more weakly rugulose-uneven than second tergite (Fig. 136); (c) Second tergite medially rather longitudinally rugulose, third tergite usually smooth, or basally rugulose-uneven (Fig. 135) or sculptured as under (b); (d) Fairly exceptionally tergites 1-3 entirely polished.

(3) *Bracon brunneipennis* is a dark form of the nominate *B. fumatus*: brown to blackish maculae of head and mesosoma more extended, tergites medially with light to dark brown maculae of variable extension.

H o s t unknown.

D i s t r i b u t i o n : Hungary, Ukraine, Kazakhstan (PAPP l.c.); France (1 ♀: Vaucluse, Les Constants), Spain (1 ♂: Catalonia, Tibidabo), Serbia (2 ♂♂: Kosovo, Peć), Tunisia (1 ♂: Nakta), Turkey (1 ♀: Kırklarelli, Lüleburques), Cyprus (1 ♀: Yermasoyia).

R e m a r k s : Within the subgenus *Glabrobracon* the species *B. fumatus* is nearest to *B. brunescens* FAHRINGER & SCHMIEDEKNECHT, *B. dolichurus* MARSHALL and *B. hilarellus* SCHMIEDEKNECHT; the distinction of the four species is presented in PAPP (l.c).

***Bracon (Glabrobracon) hemiflavus* SZÉPLIGETI (Figs 137-147)**

Bracon hemiflavus SZÉPLIGETI 1901a: 268 (in key: couple-leads 37, 48) and 281 (description) (in Hungarian), 1904 (1901): 187 (in key) and 192 (description) (in German) ♀, type locality: "Budapest" (Hungary), female holotype in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: 291 (in key) and 1928: 464 (redescription), assigned to "Section Glabrobracon". TELENGA 1936: 148 (♀), 154 (♂) (in keys), 202 (redescription) (in Russian) and 350 (♀), 357 (♂) (in keys, in German). SHENEFELT 1978: 1573 (as synonym of *B. maculiger* after PAPP 1966: 386, literature up to 1969). TOBIAS 1986: 133 (in key, in Russian). PAPP 2004: 175 (type depository).

Bracon turcmenus TELENGA 1936: 148 (in key), 204 (redescription) (in Russian) and 350 (in key), 389 (description) (in German) ♀, type locality: "Turkmenien, Aschabad", female lectotype in Zoological Institute, Sankt Petersburg; not examined. - TOBIAS 1958: 98 and 1986: 133 (in key, as synonym of *B. hemiflavus*). SHENEFELT 1978: 1573 (as synonym of *B. maculiger* WESMAEL).

T y p e d e s i g n a t i o n : Designation of the female lectotype of *Bracon hemiflavus*: (first label, printed) "K.Tétény / Szépligeti" (Kistétény is currently a district of Budapest); (second label) [18]99.VI.6." (handwritten) / "Szépligeti" (printed); third label is my lectotype card and fourth label is with the inventory number "1328". - Lectotype is in less good condition: (1) micropinned by mesosoma left-laterally; (2) right flagellum missing, left flagellum deficient; (3) left pair of wings missing; (4) missing: tarsomeres 4-5 of right middle leg, tarsomeres 2-5 of right hind leg and fifth tarsomere of left middle leg.

M a t e r i a l e x a m i n e d (22 ♀♀ + 12 ♂♂). - Hungary: 6 ♀♀ + 2 ♂♂ from eight localities. Slovakia: 1 ♂. Croatia: 1 ♂. Macedonia: 1 ♀. Romania: 1 ♀. Greece: 1 ♂. France: 1 ♀. Spain: 1 ♀. Italy: 2 ♀♀ from two localities. Cyprus: 3 ♀♀ + 4 ♂♂ from five localities. Israel: 1 ♀. Syria: 1 ♀. Turkey: 2 ♀♀ from one locality. Iran: 1 ♀ + 3 ♂♂ from one locality. Turkmenistan: 2 ♀♀ from one locality.

R e d e s c r i p t i o n of the female lectotype of *Bracon hemiflavus*: Body 5 mm long. Left antenna deficient, flagellum with 15 flagellomeres. First flagellomere 1.2 times and 15th flagellomere cubic, i.e. just broader than long. (According to the original description antenna with 32 antennomeres, Szépligeti l.c.) - Head in dorsal view (Fig. 137) transverse, 1.8 times as broad as long, eye 1.35 times as long as temple, temple rounded, occiput excavated. Eye in lateral view clearly 1.5 times as high as wide and almost 1.4 times wider than temple, temple evenly wide beyond eye (Fig. 138, see arrows). Oral opening one-fifth wider horizontally than shortest distance between opening and compound eye (Fig. 139). Head polished. Face laterally finely uneven.

Mesosoma in lateral view 1.5 times as long as high, polished. Notaulix just distinct. Propodeum polished. - Hind femur almost 3.6 times as long as broad medially (Fig. 140). Claw clearly downcurved, its basal lobe fairly large (Fig. 141).

Fore wing as long as body. Pterostigma (Fig. 142) nearly 2.7 times as long as wide and issuing *r* slightly proximally from its middle; *r* just one-third shorter than width of pterostigma; 3-SR 1.65 times as long as 2-SR, SR1 straight, 1.3 times longer than 3-SR and approaching tip of wing; 1-R1 clearly 1.5 times length of pterostigma (Fig. 142). First discal cell fairly high, 1-M twice as long as *m-cu*, the two veins parallel with each other; 1-SR-M just bent and 1.26 times length of 1-M (Fig. 143).

First tergite (Fig. 144) broad, i.e. as long as broad behind, pair of spiracles near before its middle, beyond spiracles almost parallel-sided. Second tergite 3.1 times as wide behind as long laterally and as long as third tergite; suture between tergites 2-3 bisinuate, deep and almost smooth. Every tergite polished. Hypopygium pointed, ovipositor sheath long, as long as hind tarsus + tibia + two-thirds of hind femur (Fig. 145).

Ground colour of body blackish brown to black with much reddish yellow to testaceous pattern. Oral organs with palpi brown. Light coloured: margin of eye and cheek, pronotum, imaginary line of notaulix, tegula, tergites laterally; sternites yellowish. Legs brown; light to yellowish brown: fore tibia + tarsus, proximal half of middle tibia and proximal two-thirds of hind tibia. Wings brownish fumous, pterostigma brown with a great basal yellow spot, veins brown to light brown.

Variable features of the female (22 ♀ ♀): Similar to the female lectotype. Body 4.8-5.2 mm, usually 5 mm, long. Antenna about as long as head, mesosoma and two-thirds of metasoma combined. Antenna with (22-)26-32(-34) antennomeres. First flagellomere 1.2-1.3 times as long as broad, further flagellomeres gradually shortening so that middle 12-16 flagellomeres subcubic to cubic, last 8-10 flagellomeres attenuating so that penultimate flagellomere 1.1-1.2(-1.3) times as long as broad. - Head in dorsal view usually 1.8 times, exceptionally 1.75-1.9 times, as broad as long. Hind femur (3.1-)3.3-3.6 times as long as broad medially (Fig. 146). 3-SR 1.5-1.6 times as long as 2-SR. First tergite exceptionally either with broadening sides beyond pair of spiracles, or somewhat longer than broad behind (Fig. 147), or slightly shorter than broad behind; second tergite exceptionally with fine longitudinal striation. Ovipositor sheath shorter than to as long as body. Colour of body usually as in lectotype, less usually ground colour of body reddish yellow to testaceous with a few dark pattern.

R e d e s c r i p t i o n of the male (12 ♂ ♂): Similar to the female. Body 3.5-4(-4.5) mm long. Antenna shorter than body and with 26-36 antennomeres. Flagellomeres either similar to those of the female or flagellomeres 1.3-1.4 times longer than broad. Head in dorsal view 1.7-1.8 times as broad as long. Hind femur 2.9-3.3 times as long as broad

medially, nearly evenly broad. First tergite either as long as broad behind or 1.1-1.2 times longer than broad behind. Ground colour of body either blackish to black with light pattern or reddish yellow with dark pattern, rarely body (with legs) entirely black (melanic form).

New hosts: (1) *Gortyna xanthenes* GERMAR (Lep. Noctuidae). (2) *Larinus flavescens* GERMAR and *Rhinocyllus conicus* FRÖLICH (Col. Curculionidae).

Distribution: western Palaearctic Region.

Remarks: Within the subgenus *Glabrobracon* the species *B. hemiflavus* is nearest to *B. lividus* TELENGA and *B. chrysostigma* GREESE considering their more or less reddish yellow body, form of first tergite and fairly long ovipositor sheath; the three species are distinguished by the features keyed:

- 1 (2) Temple in dorsal view more or less receded (Fig. 148). Claw more long and its basal lobe slightly more pointed (Fig. 149). First tergite 1.1-1.2 times as long as broad behind, margin of scutum crenulate (Fig. 150). Pterostigma brown to light brown, wings hyaline. ♀ ♂: 3.5-4 mm *B. (Gl.) lividus* TELENGA 1936
- 2 (1) Temple in dorsal view rounded (Fig. 137). Claw less long and its basal lobe less pointed (Figs 141, 151). First tergite of variable length, margin of scutum not crenulate (Figs 144, 152, 153).
- 3 (4) Second submarginal cell of fore wing less long, 3-SR 1.2-1.3 times as long as 2-SR, SR1 reaching tip of wing (Fig. 154). Basal lobe of claw not pointed, large (Fig. 151). First tergite 1.1-1.3 times as long as broad behind (Figs 152, 153). Pterostigma yellow, wings subhyaline to faintly fumous. ♀ ♂: 3.5-(-5.5) mm *B. (Gl.) chrysostigma* GREESE 1928
- 4 (3) Second submarginal cell of fore wing long, 3-SR 1.5-1.6 times as long as 2-SR, SR1 approaching to almost reaching tip of wing (Fig. 142). Basal lobe of claw pointed, less large (Fig. 141). First tergite as long as broad behind (Fig. 144), exceptionally slightly longer (Fig. 147) or broader. Pterostigma bicoloroured: brown basally with a great yellow spot (Fig. 142). ♀ ♂: 3.5-5.2 mm *B. (Gl.) hemiflavus* SZÉPLIGETI 1901

***Bracon (Glabrobracon) hyalinipennis* SZÉPLIGETI (Figs 155-159)**

Bracon hyalinipennis SZÉPLIGETI 1901a: 269 (in key) and 282 (description) (in Hungary), 1904 (1901): 190 (in key) and 195 (description) (in German) ♀, type locality: "Budapest" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: 296 (in key) and 1928: 464 (redescription), assigned to "Section *Glabrobracon*". TELENGA 1936: 148 (in key), 204 (redescription) (in Russian) and 350 (in key, in German). PAPP 1966: 392 (as synonym of *B. variator* Nees). SHENEFELT 1978: 1586 (as *B. variator* ab. *hyalinipennis* after PAPP 1966: 378, literature up to 1974). TOBIAS 1986: not mentioned. PAPP 1997: 121 (sp. rev., lectotype designation, redescription), 2004: 176 (type depository).

Bracon coloratus SZÉPLIGETI 1901a: 268 (in key) and 281 (description) (in Hungary), 1904 (1901): 188 (in key) and 193 (description) (in German) ♂, type locality: "Deliblát" (=Deliblato, Serbia: Voivodina, up to 1920 Hungary), male lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: as valid species 305 (in key) and 1928: 447 (redescription), assigned to "Section *Glabrobracon*". TELENGA 1936: as valid species 154 (in key), 227 (redescription) (in Russian) and 357 (in key, in German). SHENEFELT 1978: 1563 (as valid species, literature up to 1936). PAPP 1997: 121 (lectotype designation, synonymization), 2004: 172 (type depository).

Remark: In 1966 the name *B. hyalinipennis* was placed in synonymy with *B. variator* (PAPP 1966: 392) on one hand and, on the other, in the key, constructed to the subgeneric *Glabrobracon* species, it received the status *B. variator* ab. *hyalinipennis*

(PAPP 1966: 378). The re-examination of the lectotypes of both taxa helped to reveal that *B. hyalinipennis*, known only by the female, is representing a valid species and *B. coloratus*, known only by the male, is a synonymous name of *B. hyalinipennis*. This new taxonomic status (revalidation, synonymization) was expounded recently completed with its description (PAPP 1997: 121-123). Under the chapter name *Bracon* (*Glabrobracon*) *delusor* SPINOLA the species *B. hyalinipennis* was differentiated in a key from its nearest allies as *B. delusor* SPINOLA, *B. dissolutus* PAPP, *B. instabilis* MARSHALL and *B. minutator* (FABRICIUS) (PAPP 1997: 117-121). A recent examination has shown that *B. hyalinipennis* is also near to *B. chrysostigma* GREESE, their distinction, as an addition to the earlier differentiation, is presented as follows:

- 1 (2) Claw a bit less downcurved, its basal lobe small and less blunt apically (Fig. 155). Hind femur less broadening distally (Fig. 159). Temple in dorsal view recessed (Fig. 156, 157). Pair of spiracles of first tergite just before middle of tergite (Fig. 158). Head and mesoscutum black with little rusty to yellow pattern. ♀ ♂: 2.5-3.5 mm
..... *B. (Gl.) hyalinipennis* SZÉPLIGETI 1901
- 2 (1) Claw a bit more downcurved, its basal lobe large and blunt apically (Fig. 151). Hind femur more broadening distally (Figs 161-162). Temple in dorsal view less recessed (Fig. 160). Pair of spiracles of first tergite clearly before middle of tergite (Figs 152, 153). Head, pronotum and mesoscutum frequently reddish yellow or testaceous, less frequently with more or less blackish to black pattern. ♀ ♂: 3.5-5(-5.5) mm
..... *B. (Gl.) chrysostigma* GREESE 1928

***Bracon* (*Glabrobracon*) *maroccanus* SZÉPLIGETI (Figs 163-174)**

Bracon maroccanus SZÉPLIGETI 1906: 588 ♀ ♀ (syntype series 1 ♀), type locality: "Marocco: Tanger", female holotype (present designation) in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: 262 (in key) and 402 (redescription) assigned to "Section Orthobracon". TELENGA 1936: not mentioned. SHENEFELT 1978: 1640 (literature up to 1927). TOBIAS 1986: not included. PAPP 2004: not included.

Type designation: Designation of the female holotype of *B. maroccanus*: (first label, my manuscript) "Marocco / Tanger" (after Szépligeti l.c.); second label is my holotype card and the third label is with the inventory number 11000. - Holotype is in poor condition: (1) glued by the right legs 1-2 and by the right margin of the metasoma on a quadratic-formed card, middle femur + tibia less visible owing to the mounting; (2) flagelli missing except first flagellomere of left antenna; (3) both pairs of wings missing; (4) missing: right hind tibia, left fore (except coxa) and middle legs; tarsus of right hind leg and left hind leg (except coxa) glued separately on the quadratic card. - The holotype specimen was quite recently found in among the partly unnamed and partly provisionally named *Bracon* material of the Museum Budapest.

Material examined (2 ♀ ♀): Female holotype from Morocco (Tanger). One female from Spain, Malaga, Torremolinos, May 1978, leg. G. E. Bohart. One female from Greece (Crete).

Redescription of the female holotype of *Bracon maroccanus*: Body 4 mm long. First flagellomere 2.8 times as long as broad apically. - Head in dorsal view transverse (Fig. 163), 1.8 times as broad as long, eye 1.7 times as long as temple, temple recessed, occiput weakly excavated. Eye in lateral view 1.4 times as high as wide, temple beyond eye evenly wide and 0.6 times as wide as eye (i.e. eye 1.6 times wider than temple) (Fig. 164, see arrows). Oral opening somewhat wider horizontally than shortest distance between opening and compound eye (Fig. 165). Head polished.

Mesosoma in lateral view 1.6 times as long as high, polished. Notaulix evenly distinct. Propodeum polished, medio-longitudinally with a carina, along carina rugulose (Fig.

166). - Hind femur 1.6 times as long as broad medially (Fig. 167). Claw downcurved, its basal lobe large (Fig. 168).

Wings missing, its description is given at the description of the female specimens.

First tergite (Fig. 169) as long as broad behind and evenly broadening posteriorly, margin of scutum with crenulae, hind part of scutum rugose, otherwise first tergite polished. Second tergite transverse, 2.85 times as broad behind as long laterally; suture between tergites 2-3 bisinuate, subcrenulate; third tergite a bit longer than second tergite. Second tergite medially rugose, otherwise together with further tergites polished. Hypopygium truncate, pointed. Ovipositor sheath long, as long as hind tibia + tarsus. Posterior end of ovipositor sheath and ovipositor as in Fig. 170.

Ground colour of head + mesosoma black, that of metasoma reddish yellow. Scape, pedicel and first flagellomere blackish. Face, cheek and oral organs reddish yellow. Macula at upper part of eye reddish yellow. Pronotum reddish yellow with dark coloured suffusion. Tegula yellow. First tergite entirely black, further tergites with a median black streak. Legs yellow, hind tibia apically and tarsi entirely brownish fumous.

Deviating features of two females: Similar to the female holotype. Body 3.5 mm long. Antenna as long as body and with 28 antennomeres. First flagellomere 2.8 times, second flagellomere 2.3 times and penultimate flagellomere 1.6 times as long as broad apically (Fig. 171). Fore wing about as long as body. Pterostigma (Fig. 172) 2.5 times as long as wide and issuing r from its middle; r one-third shorter than width of pterostigma, 3-SR 1.6 times as long as 2-SR; SR1 straight, 1.7 times length of 3-SR and reaching tip of wing; 1-R1 1.7 times length of pterostigma. First discal cell fairly high, 1-M 2.1 times as long as m-cu, 1-SR-M almost straight and 1.3 times as long as 1-M (Fig. 173). First tergite less broadening beyond pair of spiracles (Fig. 174).

Male and host: unknown.

Distribution: Morocco, Spain, Greece.

Remarks: Within the subgenus *Glabrobracon* the species *B. maroccanus* is near to *B. fuscicoxis* Wesmael considering their receded temple, long ovipositor apparatus and evenly broadening first tergite, however, the distinction between the two species is presented as follows:

- 1 (2) Claw downcurved, its basal lobe large (Fig. 168). Second tergite rugose only medially, suture between tergites 2-3 bisinuate, subcrenulate (Fig. 169). Head black, face, cheek, oral organs and tegula reddish yellow to yellow. Tergites reddish yellow, medially with black streak, first tergite entirely black. ♀: 3.5-4 mm.....*B. (Gl.) maroccanus* SZÉPLIGETI 1906
- 2 (1) Claw less downcurved, its basal lobe small (Fig. 175). Second tergite rugulose of variable extense, suture between tergites 2-3 straight, smooth (Fig. 176, 177). Head entirely and tegula black. Metasoma black, tergites 2-3 variably reddish yellow or rusty. ♀: 3-3.6 mm.....*B. (Gl.) fuscicoxis* WESMAEL 1838

SZÉPLIGETI (l.c.) stated that *B. maroccanus* is near to *B. (Gl.) dallatorrei* SZÉPLIGETI, however, the two species are less so near to each other than *B. fuscicoxis*; the two species are separated by the features keyed:

- 1 (2) Head in dorsal view 1.8 times as broad as long, temple receded (Fig. 163). Propodeum with a medio-longitudinal carina, along it rugulose (Fig. 166). Hind femur thin, 3.8 times as long as broad (Fig. 167). Claw downcurved, its basal lobe large (Fig. 168). First tergite broadening posteriorly, suture between tergites 2-3 bisinuate, second tergite medially rugose (Figs 169, 174). Flagellomeres of female long, 2.6-1.8 times as long as broad (Fig. 171). Head black, face, cheek and oral organs reddish yellow. ♀: 3.5-4 mm.....*B. (Gl.) maroccanus* SZÉPLIGETI 1906
- 2 (1) Head in dorsal view 1.6-1.7 times as broad as long, temple fairly strongly rounded (Fig. 178). Propodeum posteriorly rugo-rugulose (Fig. 179). Hind femur thick, 2.5-2.7 times as long as broad (Fig. 180). Claw moderately downcurved, its basal lobe of usual size (Fig. 181). First tergite beyond pair of spiracles faintly broadening, suture between tergites 2-3 straight, second tergite medio-basally striolate (Fig. 182). Flagellomeres of female less long, i.e. 1.4-1.1 times as long as broad (Fig. 183). Head yellowish brown to blackish. ♀: 2.5-3.5 mm. (= *B. facialis* THOMSON 1895).....*B. (Gl.) dallatorrei* SZÉPLIGETI 1901

***Bracon (Glabrobracon) marshalli* SZÉPLIGETI (Figs 184-204)**

Bracon obscurator NEES sensu MARSHALL 1885 (nec NEES 1834): 16 (in key) and 45 (no. 35, description) ♀ ♂ (existing authenticated specimens?), type locality: England (material originating from the FITCH's and BIGNELL's Collection, both naturalists reared the braconid specimens from the hosts *Paulernis fulviguttella* ZELLER and *Homoesa sinuella* FABRICIUS, taken certainly in England). - SHENEFELT 1978: not mentioned.

Bracon marshalli SZÉPLIGETI 1901a: 270 (in key, in Hungarian) and 1914 (1901): 191 (in key, in German) ♀ ♂ (syntype series: three males, female latent), type locality: Budapest, Óbuda (Hungary), male lectotype (and four male paralectotypes) in Magyar Természettudományi Múzeum, Budapest; examined. - TELENGA 1936: as valid species 151 (♀), 156 (♂) (in key), 215 (redescription) (in Russian) and 353 (♀), 359 (♂) (in key, in German). PAPP 1966: 387 (as synonym of *B. obscurator* NEES). SHENEFELT 1978: 1575 (as synonym of *B. obscurator* NEES after PAPP l.c., literature up to 1969). TOBIAS 1986: 133 (as synonym of *B. obscurator*). PAPP 1991: 73 (sp. rev., in Hungarian), 2000: as valid species 232 (in key) and 249 (type designation (partly), redescription, nearest allies), 2004: 177 (type designation and depository).

R e m a r k s on the type series of *Bracon marshalli* (after PAPP 2000: 249, partly modified): SZÉPLIGETI (1901: 270) described his species on the basis of female and male specimens ("♀ ♂"). The precise number of the syntype specimens and the locality name(s) were not indicated by him, i.e. the species has been described within the key and its detailed description was not presented in the traditional way. The species name "marshalli" was applied to the species "Br. obscurator Marsh. (non Nees)" (Szépligeti l.c.) or as a new name (nomen novum) for *B. obscurator* Nees sensu Marshall (1885: 45). This taxonomic procedure explains the omission of the description. At present three male specimens (male lectotype and two male paralectotypes) of *B. marshalli* are housed in the Hungarian Natural History Museum, these three males belong unambiguously to the original syntype series, reliable female specimen(s) was (were) not found (further two male paralectotypes are representing *B. atrator* NEES, see also PAPP 2004: 177). The three males were collected by Szépligeti in the localities "Budapest Óbuda" (15 April 1896, two males) and "Ungvár" (since 1945 Uzhgorod, Ukraine: Podkarpaty, one male, its designation see subsequently); the locality labels were partly handwriting by Szépligeti, thus the three specimens in question are considered as authentic ones. Furthermore, the three males were placed under the name "*Bracon marshalli* SZÉPL." in the collection set up by SZÉPLIGETI himself and, consequently, I name-labelled them accordingly (in the years 1960ies Szépligeti's original braconid collection was re-arranged by me). One male was designated as the lectotype and the two males as the paralectotypes, Hym. Typ. Nos

1340 (lectotype), 1341 and 11014 (paralectotypes) (PAPP 2004: 177). The latter male paralectotype (no. 11014) is herewith designated: (first label) "Ungvár" (with Szépliget's handwriting) / "Szépliget" (printed); (second label with my handwriting) "Kárpátalja /Ukraine"; (third label) "Bacon marshalli Szépl." (with my handwriting) / "det. Szépliget" (printed); fourth label is the paralectotype card, fifth label is with the inventory number 11014.

The three male type specimens are in poor condition. The lectotype no. 1340: (1) micropinned; (2) left antenna deficient, i.e. with 12 antennomeres; (3) metasoma missing. The paralectotype no. 1341: (1) micropinned, (2) head, left fore wing, left fore leg and metasoma missing. The paralectotype no. 11014: (1) micropinned, pin pricked through left fore and right hind wings hence fore left wing medially somewhat damaged, (2) metasoma missing.

The female and male specimens, serving for the subsequent re-description, were selected scrupulously by me (and re-named by me as *B. marshalli*) from among the huge material accumulated in the Hungarian Natural History Museum and named mainly by routine identification as *B. obscurator*, a species very similar to *B. marshalli*.

Material examined (19♀ + 47♂): Hungary: 8♀ + 31♂ from 21 localities. Slovakia: 1♀. Romania (Transylvania): 2♀ from two localities. Slovenia: 1♂. Serbia (Kosovo): 1♂. Croatia: 2♂ from two localities. Bulgaria: 2♂ from two localities. Greece: 1♂. Italy: 1♀ + 1♂ from two localities. Cyprus: 1♂. Portugal: 1♂. England: 1♀ + 2♂ from three localities. Norway: 1♀. Denmark: 1♀ + 1♂ from two localities. Sweden: 2♂ from two localities. Finland: 1♀. Germany: 1♀ + 1♂ from two localities. Switzerland: 1♂. Mongolia: 1♀.

Description of the female (19♀) (after PAPP 2000, partly modified): Body (1.6-)1.8-2.2(-2.7) mm long. Antenna as long as body or somewhat shorter to somewhat longer, with (16-)18-23(-27) antennomeres. First flagellomere 1.7-1.8 times and penultimate flagellomere 1.4-1.5(-1.6) times as long as broad (Fig. 184). - Head in dorsal view (Fig. 185, 186) less transverse or subcubic, 1.65-1.8 times as broad as long, eye 1.4-1.5 times as long as temple, temple less rounded to rounded. Eye in lateral view 1.3-1.4 times as high as wide and 1.4-1.5 times wider than temple, temple beyond eye evenly wide (Fig. 187, see arrows). Horizontal diameter of oral opening one-sixth longer than shortest distance between opening and compound eye (Fig. 188). Head polished.

Mesosoma in lateral view 1.35-1.4 times as long as high, polished. Notaulix faintly distinct. Propodeum polished, close around lunule either with rugulae (Fig. 189) or rugulose (Fig. 190). - Hind femur 3-3.5 times as long as broad just medially (Figs 191, 192). Claw downcurved, its basal lobe fairly large (Fig. 193).

Fore wing somewhat to one-fourth longer than body. Pterostigma (Fig. 194) 2.8-3 times as long as wide and issuing *r* either proximally from its middle or just from its middle, *r* shorter than width of pterostigma, 3-SR 1.3-1.4 times as long as 2-SR, SR1 straight, 1.6-1.8 times length of 3-SR and approaching (i.e. not reaching) tip of wing; 1-R1 about 1.5 times as long as length of pterostigma. First discal cell less high, 1-M 1.7-2 times as long as m-cu, 1-SR-M 1.5 times as long as 1-M (Fig. 195).

First tergite quadrate (Fig. 196), as long as or somewhat longer than broad behind, beyond pair of spiracles parallel-sided or, less usually, just broadening posteriorly. Tergites 2-3 equal in length, suture between them straight to just bisinuate, shallow to moderately deep, smooth (Fig. 196). Second tergite antero-medially rarely rugulo-subrugulose (Fig. 198). Hypopygium pointed; ovipositor sheath variable in length: as long as

hind tibia to hind tibia + tarsomeres 1-2(-5) combined, hypygium and ovipositor sheath as in Fig. 199.

Body black. Antenna black to brownish black, scape usually black. Palpi brown, rarely yellow(ish). Tergites sometimes dark brown. Legs black or (dark) brown, at most fore femur apically, fore tibia variably, base of tibiae 2-3 brownish to brownish yellow. Wings subhyaline to weakly fumous, pterostigma and veins brownish.

Description of the male lectotype of *B. marshalli* (its metasoma missing): Body (head + mesosoma) 1.2 mm long. Antenna somewhat longer than head + mesosoma combined and with 14 antennomeres. First flagellomere 2.1 times, second flagellomere twice and penultimate flagellomere 1.5 times as long as broad. - Head in dorsal view (Fig. 200) less transverse or subcubic, 1.6 times as broad as long, eye somewhat longer than temple, temple rounded, occiput excavated. Eye in lateral view just 1.6 times as high as wide and slightly wider than temple (Fig. 201, see arrows). Horizontal diameter of oral opening one-third longer than shortest distance between opening and compound eye (Fig. 202). Head polished.

Mesosoma in lateral view 1.66 times as long as high, polished. Notaulix distinct. Propodeum polished, close around lunule with rugulae or rugulose (Figs 189, 190). - Hind femur 3.1 times as long as broad medially. Claw less downcurved than that of female, its basal lobe a bit greater than that of female (Fig. 197).

Fore wing clearly one-third longer than head + mesosoma combined. Pterostigma (Fig. 203) three times as long as wide and issuing r from its middle, r as long as width of pterostigma, second submarginal cell fairly long, 3-SR 1.2 times as long as 2-SR; SR1 staright, almost twice longer than 3-SR and approaching tip of wing; 1-R1 1.8 times length of pterostigma. First discal cell fairly high, 1-M 1.5 times as long as m-cu, 1-SR-M 1.25 times as long as 1-M (Fig. 204).

Antenna, head and mesosoma dark brown, legs brown. Palpi and tegula brown. Wings subhyaline, pterostigma and veins light brown.

Deviating features of the two male paralectotypes: Similar to the male lectotype. Antenna with 23 antennomeres. Flagellomeres 1-2 2.3 times and penultimate flagellomere 2.2 times as long as broad. Head in dorsal view 1.75 times as broad as long, eye 1.5 times as long as temple. Mesosoma in lateral view 1.35 times as long as high. Hind femur 3.3-3.5 times as long as broad medially (Figs 191, 192).

Variable features of the males (47♂♂): Similar to the male types. Body (1.6-)1.8-2.1(-2.3) mm long. Antenna more or less longer than body and with (16-)21-24(-30) antennomeres. Head in dorsal view exceptionally 1.8-1.9 times as broad as long (3♂♂). Hind femur 3.1-3.5(-3.7) times as long as broad medially. First discal cell high (Fig. 204) to less high (Fig. 195). First tergite 1.1-1.3 times as long as broad behind and beyond pair of spiracles either parallel-sided (cf. Fig. 196) or weakly broadening. Second tergite rarely antero-medially rugo-rugulose or subrugulose (cf. Fig. 198).

Hosts: *Trachys* sp. (Col. Buprestidae). *Cydia nigricana* FABRICIUS (Lep. Tortricidae). *Myopites inulae* RÖSLER (Dipt. Trypetidae).

Distribution: Europe.

Remarks: Within the subgenus *Glabrobracon* the species *B. marshalli* stands nearest to *B. obscurator* NEES, the specific distinction between them is restricted to a few features keyed:

- 1 (2) First tergite as long as to somewhat longer than broad behind (♀) and 1.1-1.3 times as long as broad behind (♂) (Fig. 196, cf. Fig. 205). Head in dorsal view subcubic, (1.5-)1.6-1.7 times as broad as long (Figs 185, 186, 200). Claw somewhat less downcurved and slightly less pointed, its basal lobe less large (Figs 193, 197). Legs black to brown with a few brown to yellowish brown pattern. ♀: (1.6-)1.8-2.2(-2.7) mm, ♂: (1.6-)1.8-2.1(-2.3) mm *B. (Gl.) marshalli* SZÉPLIGETI 1901
- 2 (1) First tergite 1.4-1.8 times (♀) and 1.6-1.9(-2.2) times (♂) as long as broad behind (Figs 205, 206). Head in dorsal view transverse, (1.7-)1.8-2(-2.2) times as broad as long (Fig. 207). Claw downcurved and slightly more pointed, its basal lobe large (Fig. 208). Legs black to blackish with more or less yellowish to yellow pattern on femora + tibiae. ♀: (2-)2.5-3.5(-5) mm, ♂: (1.8-)2.2-3.3(-4.5) mm *B. (Gl.) obscurator* NEES 1811

***Bracon (Glabrobracon) minutator* (FABRICIUS) (Figs 209-219)**

Ichneumon minutator FABRICIUS 1798: 225 ♀, type locality: "Halaë Saxonum Dom." (Germany), female lectotype (designated by Van ACHTERBERG 1982: 137) in Zoological Museum, Copenhagen; examined.

Bracon minutator (FABRICIUS 1798): FABRICIUS 1804: 110 (type species of the genus *Bracon*: Van ACHTERBERG l.c.). MARSHALL 1888: 96. SZÉPLIGETI 1904 (1901): 159 (in key) and 165 (redescription, misinterpreted). FAHRINGER 1927: 240 (♀), 247 (♂) (in key) and 326 (redescription, misinterpreted), assigned to "Section Striobracon". TELENGA 1936: 158 (♀), 168 (♂) (in key), 233 (redescription) (in Russian) and 361 (♀), 371 (♂) (in key, in German, misinterpreted). TOBIAS 1958: 93 (in key, in Russian, misinterpreted), assigned to subgenus *Bracon* s.str.; 1986: 129 (in key, in Russian, misinterpreted). PAPP 1968: 191 (in key), 203 (taxonomic remark, misinterpreted), 1990: 277 (first correct subgeneric assignment: assigned to subgenus *Glabrobracon*). SHENEFELT 1978: 1511 (synonyms, literature up to 1974). TOBIAS & BELOKOBILSKIJ 2000: 135 (in key, in Russian, misinterpreted: assigned to subgenus *Bracon* s.str.).

Bracon tener SZÉPLIGETI 1904: 189 (in key) and 194 (description) (in German) ♀, type locality: "P.-Maróth" (=Pilismarót, Hungary), female lectotype (and three female paralectotypes) in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: as valid species 294 (in key) and 1928: 489 (redescription), assigned to "Section Glabrobracon". TELENGA 1936: as valid species 146 (in key), 196 (redescription) (in Russian) and 348 (in key, in German). PAPP 1966: as valid species 377 (in key) and 390 (redescription, type designations). SHENEFELT 1978: 1582 (as valid species, literature up to 1966). TOBIAS 1986: 134 (as valid species in key, in Russian). PAPP 2004: 182 (type designations and depository, as jun. syn. of *B. minutator*).

Type designation: Designation of the female lectotype of *Bracon minutator*: (first label) "minutator" (original handwriting by Fabricius?); second label is the lectotype card by Van Achterberg 1980; third label is with the locality name "Germania / Halaë Saxonum" adopted after Fabricius l.c. and attached by me. - Lectotype is in fairly good condition: (1) pinned by mesosoma, pin fairly thick and pricked on a polyporus stage; (2) body and wings somewhat dirty and with (mouldy?) filaments; (3) left flagellum missing, right flagellum deficient, i.e. only with 12 flagellomeres.

Remarks on the lectotype of *B. minutator*: (1) The species *B. minutator*, together with *B. urinator*, are the first two species described by FABRICIUS in 1798 originally in the genus *Ichneumon* and later, in 1804, he transferred them into the genus *Bracon* which genus has been created by him. - (2) Van ACHTERBERG (l.c.) pointed out that in the Fabricius Collection (Copenhagen) the type series of *B. minutator* consists of four female specimens of which the first female is representing the true *B. minutator*; the rest of the three females (without original labels) are not conspecific and were identified by me as follows: 1 ♀: *B. caudiger* NEES, 1 ♀: *B. subrugosus* SZÉPLIGETI and 1 ♀: *B. variator* NEES

(this latter specimen is representing a light or albanic form of the nominate *B. variator* viewing its metasoma with yellow ground colour and tergites medially with a row of dark maculae). - (3) The female lectotype of *B. tener* is identical with the female lectotype of *B. minutator*, consequently, several specific features observed somewhat less well on the lectotype of *B. minutator* were quasi controlled on those of the lectotype of *B. tener*.

Designation and condition of the types (female lectotype and three female paralectotypes) of *B. tener* SZÉPLIGETI see in PAPP 2004: 182.

Material examined (67 ♀♀ + 38 ♂♂): Hungary: 52 ♀♀ + 28 ♂♂ from 39 localities. England: 2 ♀♀ from two localities. France: 3 ♂♂ from two localities. Denmark: 1 ♀. Sweden: 2 ♀♀ from two localities. Germany: 1 ♀ + 1 ♂ from two localities. Switzerland: 2 ♀♀ from two localities. Czech Republic: 1 ♀. Italy: 1 ♀ + 1 ♂ from two localities. Serbia (Kosovo): 1 ♀ + 1 ♂ from one locality. Bulgaria: 2 ♀♀ + 2 ♂♂ from four localities. Cyprus: 1 ♂. Algeria: 1 ♀. Jordan: 1 ♀. Armenia: 1 ♀ + 1 ♂ from two localities.

Redescription of the female lectotype of *B. minutator*: Body 4.2 mm long. First flagellomere 1.8 times and twelfth flagellomere 1.3 times as long as broad. - Head in dorsal view (Fig. 209) transverse, 1.8 times as broad as long, eye 1.35 times as long as temple, temple rounded, occiput weakly excavated. Eye in lateral view 1.6 times as high as wide and just wider than temple (Fig. 210, see arrows). Horizontal diameter of oral opening 1.25 times as long as shortest distance between opening and compound eye (Fig. 211). Head polished, face laterally uneven.

Mesosoma in lateral view 1.5 times as long as high, polished. Notaulix hardly distinct. Propodeum polished, lunule with a short keel, around it with rugulae. - Hind femur 3.1 times as long as broad medially (Fig. 212). Claw downcurved and fairly long, its basal lobe large (cf. Fig. 6).

Fore wing as long as body. Pterostigma (Fig. 213) 2.85 times as long as wide, issuing r from its middle; r clearly 0.6 times as long as width of pterostigma; second submarginal cell fairly long, 3-SR 1.25 times as long as 2-SR, SR1 straight, 1.8 times longer than 3-SR and approaching tip of wing; 1-R1 almost 1.5 times as long as length of pterostigma. First discal cell usual in size, 1-M almost 1.8 times longer than m-cu, 1-SR-M just bent and nearly 1.3 times as long as 1-M (Fig. 214).

First tergite (Fig. 215) as long as broad behind, before pair of spiracles strongly and beyond them weakly broadening, scutum smooth, shiny and with a weak and short pair of carinae. Second tergite transverse, 2.9 times as wide behind as long laterally, third tergite a bit longer than second tergite, suture between them bisinuate, smooth. Second and further tergites polished. Ovipositor sheath short, as long as hind tarsomeres 1-2 combined.

Head and mesosoma black. Antenna blackish. Oral opening and mandible yellowish, palpi brown. Tergites reddish yellow with a row of black to blackish maculae. Legs light reddish yellow, coxae black, femora 1-2 basally and tibiae 2-3 apically blackish to dark brown. Wings subfamous, pterostigma and veins light brown.

Variability of the females (67 ♀♀): Similar to the female lectotype. Body 4-4.5(-5) mm long. Antenna about as long as body and with 29-33 antennomeres. First flagellomere 1.6-1.8 times and penultimate flagellomere 1.5-1.7 times as long as broad, flagellum proximo-distally slightly attenuating (Fig. 216). Head in dorsal view (Fig. 217) 1.8-1.9 times, usually 1.8 times, as broad as long, eye 1.3-1.4 times longer than temple, temple

rounded (Figs 209, 217) to less rounded (cf. Fig. 15). Hind femur 3.1-3.3 times as long as broad medially (cf. Fig. 16, Fig. 212). First tergite parallel-sided, third tergite longer than second tergite (cf. Fig. 17). Tergites 2-3 or tergite 2 rarely rugulose (Fig. 218) to rugose. Pair of carinae of scutum frequently missing, or, rarely, distinct (cf. Figs 17, Fig. 215). Hind femur proximally blackish (4♀♀) or black pattern of legs more extended than in the female lectotype. Black maculae of tergites of variable extend to almost entirely black tergites (9♀♀).

Description of the males (38♂♂): Similar to the females. Body (3.2-)3.5-4.5 mm long. Antenna somewhat longer than body and with (26-)30-35 antennomeres. Flagellomeres 1.8-2.4 times longer than broad. Hind femur 3-3.3 times as long as broad medially or somewhat distally. First tergite usually somewhat longer than broad behind, its sides either slightly broadening (Fig. 219) or parallel. Legs frequently with less black(ish) pattern.

Host uncertain: SHENEFELT (1978) listed 9 lepidopterous, 7 dipterous and 2 coleopterous host species, all are in need to be confirmed owing to the misinterpretation of the braconid parasitoid *B. minutator*.

Distribution: Europe.

Remarks: Within the subgenus *Glabrobracon* the species *B. minutator* is nearest to *B. abbreviator* NEES, *B. curticaudis* SZÉPLIGETI and *B. terebella* WESMAEL viewing their common feature the short ovipositor apparatus; the four species are distinguished with the following key:

- 1 (2) Eye in dorsal view 1.3-1.4 times as long as temple (Figs 209, 217). First tergite as long as broad behind, second tergite polished (Fig. 215), at least (and exceptionally) antero-medially uneven-subrugulose (Fig. 218). Claw as in Fig. 18. Hind femur less thick, 3.1-3.5 times as long as broad medially (cf. Fig. 16, Fig. 212). Tergites reddish yellow to rusty, medially with a row of dark brown to black(ish) maculae or with a median dark streak. ♀: 4-4.5(-5) mm, ♂: (3.2-)3.5-4.5 mm *B. (Gl.) minutator* (FABRICIUS 1798)
- 2 (1) Eye in dorsal view 1.6-1.8 times as long as temple (Figs 2, 89, 105). First tergite either broader behind than long (*B. abbreviator*, *B. curticaudis*) or longer than broad behind (*B. terebella*); Second tergite either more or less rugulose (Figs 9, 97) or polished (Fig. 104) (*B. abbreviator*, *B. curticaudis* / *B. terebella*). Claw as in Figs 6, 94, 106.
- 3 (4) Temple in dorsal view strongly rounded (Fig. 2). First tergite with a transverse distinct carina across scutum (Fig. 9). Hind femur slightly thick, 2.7-2.9 times as long as broad (Figs 5, 11). Claw slightly less downcurved, its basal lobe less pointed (Fig. 6). Legs reddish yellow. ♀♂: 3.5-4.5 mm..... *B. (Gl.) abbreviator* NEES 1834
- 4 (3) Temple in dorsal view rounded (Figs 89, 105). First tergite without transverse carina across scutum (Figs 97, 104). Hind femur less thick, 3-3.3 times as long as broad (Fig 93). Claw slightly more downcurved (Figs 94, 106). Legs more or less black.
- 5 (6) First tergite somewhat broader behind than long, beyond pair of spiracles with broadening sides (Fig. 97). Suture between tergites 2-3 distinct, bisinuate, deep; third tergite 1.3-1.4 times longer than second tergite (Fig. 97). Head in dorsal view slightly more transverse, 1.8 times as broad as long (Fig. 89). Claw as in Fig. 94. SR1 of fore wing approaching tip of wing (Fig. 95). Tergites medially dark coloured. ♀: (3-)3.5-4.5 mm, ♂: 3.4 mm..... *B. (Gl.) curticaudis* SZÉPLIGETI 1901
- 6 (5) First tergite somewhat longer than broad behind, beyond pair of spiracles parallel-sided (Fig. 104). Suture between tergites 2-3 less distinct, weakly bisinuate to almost straight; third tergite a bit longer than second tergite (Fig. 104). Head in

dorsal view slightly less transverse, 1.7 times as broad as long (Fig. 105). Claw as in Fig. 106. SR1 of fore wing reaching tip of wing (Fig. 107). Tergites usually widely dark coloured. ♀ ♂: (2-)3-4.5 mm.....*B. (Gl.) terebella* WESMEAL 1838

***Bracon (Glabrobracon) novus* SZÉPLIGETI (Figs 220-238)**

Bracon novus SZÉPLIGETI 1901a: 263 (in key) and 278 (description) (in Hungarian); 1904 (1901): 176 (in key) and 181 (description) (in German) ♀ (syntype series 1 ♀), type locality: "Budapest" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: 252 (in key) and 364 (redescription) assigned to "Section Lucobracon", ♀. TELENGA 1936: 172 (in key), 281 (redescription) (in Russian) and 375 (in key, in German). SHENEFELT 1978: 1642 (literature up to 1974). TOBIAS 1986: 137 (as synonym of *B. epitriptus* MARSHALL). PAPP 2004: 178 (type designation and depository).

Bracon maculifer SZÉPLIGETI 1901a: 264 (in key) and 279 (description) (in Hungarian); 1904 (1901): 177 (in key) and 181 (description) (in German) ♀ (syntype series 1 ♀), type locality: "Budapest" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined, syn. n. - FAHRINGER 1927: as valid species 255 (in key) and 361 (redescription), assigned to "Section Lucobracon", ♀. TELENGA 1936: as valid species 174 (in key), 288 (redescription) (in Russian) and 377 (in key, in German). SHENEFELT 1978: 1642 (literature up to 1974). TOBIAS 1986: 137 (as synonym of *B. epitriptus* MARSHALL).

Type designation: Designation of the female lectotype of *B. novus*: (first label, printed) "Budapest / Szépligeti" (Hungary); second label is my lectotype card, third label is with the inventory number 1404. - Lectotype is in good condition: (1) micropinned; (2) left antenna deficient distally, i.e. with 15 flagellomeres; (3) wings slightly creased, fore pair of wings somewhat torned.

Material examined (16 ♀ ♀ + 3 ♂ ♂): Hungary: 11 ♀ ♀ + 1 ♂ (from 12 localities). Slovakia: 1 ♀. Romania (Transylvania): 2 ♂ ♂ (from two localities). Austria (Niederösterreich): 1 ♀. Czech Republic: 1 ♀. Germany: 1 ♀. Italy, "Südtirol": 1 ♀.

Redescription of the female lectotype of *B. novus*: Body 3.3 mm long. Antenna about as long as body and with 31 antennomeres. First flagellomere twice, second flagellomere a bit shorter than twice and penultimate flagellomere 1.7 times as long as broad; flagellomeres apically slightly obliquely truncate (Fig. 220). - Head in dorsal view transverse (Fig. 221), 1.87 times as broad as long, eye more than twice as long as temple, temple receded, occiput weakly excavated. Eye in lateral view 1.3 times as high as wide, eye 2.5 times as wide as temple, temple evenly wide beyond temple (Fig. 222, see arrows). Oral opening 1.4 times wider horizontally than shortest distance between opening and eye (cf. Fig. 282). Head polished.

Mesosoma in lateral view 1.4 times as long as high, polished. Notaulix distinct as shallow sulcus. Propodeum polished, around lunule with short oblique rugae (Fig. 223). - Hind femur 2.9 times as long as broad distally (Fig. 224). Fifth tarsomere less than twice as long as fourth tarsomere in hind tarsus (Fig. 225). Claw deeply downcurved, its basal lobe small (Fig. 226).

Fore wing about as long as body. Pterostigma (Fig. 227) less wide, 2.8 times as long as wide and issuing r from its middle, r 0.7 times as long as width of pterostigma; 3-SR somewhat longer than 2-SR, SR1 straight, almost twice as long as 3-SR and reaching tip of wing; 1-R1 1.75 times length of pterostigma. First discal cell fairly high, 1-M clearly 1.8 times as long as m-cu, 1-SR-M almost straight and 1.25 times as long as 1-M (Fig. 228).

First tergite (Fig. 229) just broader behind than long, beyond pair of spiracles moderately broadening, scutum posteriorly rather longitudinally rugo-rugulose, lateral margin of

scutum crenulate. Second tergite transverse, 2.6-2.7 times as broad behind as long laterally and slightly longer than third tergite. Fore two-thirds of second tergite longitudinally rugo-rugulose, further tergites polished. Suture between tergites 2-3 weakly bisinuate, subcrenulate (Fig. 229). Hypopygium pointed, ovipositor sheath as long as hind tibia + half basitarsus combined, ovipositor apically pointed (Fig. 230).

Ground colour of body black with much light pattern. Scape ochreous, pedicel ochreous with brownish suffusion, flagellum brown, proximally with ochreous tint. Oral part yellow, palpi straw yellow. Margin of compound eye rusty to faintly rusty. Mesoscutum postero-medially and upper part of pronotum ochreous to yellowish; tegula yellow. Tergites laterally reddish yellow. Legs yellow, tarsi weakly brownish fumous. Wings faintly subhyaline, pterostigma light brown, veins yellowish brown.

Variable features of the females (16 ♀ ♀): Similar to the female lectotype. Body 3.2-3.8 mm long. Antenna with 28-32 antennomeres. Flagellomeres sometimes slightly less long (7 ♀ ♀). Head in dorsal view less transverse, 1.75-1.8 times as broad as long (3 ♀ ♀); temple slightly less receded (Fig. 231). Propodeum above lunule with a fairly thick and short keel, around it with short rugulae (2 ♀ ♀, Fig. 232). Hind femur 3-3.1 times as long as broad somewhat distally (5 ♀ ♀, Fig. 233). Extension of the sculpture on second tergite variable, in extreme form restricted to antero-medially and less strong (Fig. 234). Ovipositor sheath as long as hind tibia + basitarsus combined. Metasoma (except first tergite) reddish yellow, i.e. blackish to black streak restricted medially (var. *maculifer* SZÉPLIGETI). Mesoscutum (6 ♀ ♀) and almost entire pronotum and mesopleuron reddish yellow to yellow (4 ♀ ♀).

Description of the males (3 ♂ ♂): Similar to the female lectotype and to females. Body 3-3.8 mm long. Antenna as long as body and with 32-34 antennomeres (2 ♂ ♂). Head in dorsal view 1.8 times as broad as long. Eye somewhat less than twice as long as temple (Fig. 235). Oral opening 1.4-1.5 times wider horizontally than shortest distance between opening and compound eye. Propodeum with a short keel and rugulae (Fig. 236). Hind femur 3.3-3.5 times as long broad somewhat distally (Fig. 237). First tergite somewhat longer than broad behind, second tergite distinctly longer than third tergite (Fig. 238) and either similarly sculptured to that of female (Figs 234) or second tergite entirely and third tergite basally rugo-striate. Second tergite nearly reddish yellow, i.e. only medially blackish. Legs yellow (2 ♀ ♀), femora 2-3 brown (1 ♂).

Host unknown.

Distribution: Hungary, Slovakia, Romania (Transylvania), Czech Republic, Germany, Austria, Italy (South Tyrol).

Remarks: Within the subgenus *Glabrobracon* the species *B. novus* is related to *B. crassungula* THOMSON, the two species are very similar to each other and they are differentiated by a few features keyed:

- 1 (2) Temple in dorsal view receded (Figs 221, 231). Fifth tarsomere less than twice as long as fourth tarsomere of hind leg (Fig. 225). Claw downcurved (Fig. 226). Second tergite longer than third tergite (Figs 229, 238). Pterostigma 2.8-3 times as long as wide (Fig. 227). ♀ ♂: 2.8-3.4 mm.....*B. (Gl.) novus* SZÉPLIGETI 1901
- 2 (1) Temple in dorsal view rounded (Fig. 239). Fifth tarsomere twice as long as fourth tarsomere of hind leg (Fig. 240). Claw less downcurved (Fig. 241). Third tergite somewhat longer than second tergite (Fig. 242). Pterostigma 3-3.6 times as long as wide. ♀ ♂: 3-3.8 mm.....*B. (Gl.) crassungula* THOMSON 1894

***Bracon (Bracon) obscuricornis* SZÉPLIGETI (Figs 243-253)**

Bracon obscuricornis SZÉPLIGETI 1896b: 287 (description, in Hungarian), 361 (description, in German) ♀ (syntype series 1 ♀), type locality: "Budapest: Sashegy" (Hungary); 1901: 182 (in key, in Hungarian), 1904 (1901): 158 (in key, in German), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: 236 (in key), 320 (redescription), assigned to "Section Striobracon". TELENGA 1936: 157 (in key), 229 (redescription) (in Russian), 360 (in key, in German). PAPP 1968: 206 (type designation). SHENEFELT 1978: 1519 (as valid species, literature up to 1968). TOBIAS 1986 (as synonym of *B. leptus*, in key). TOBIAS & BELOKOBYLSKIY 2000: 123 (as synonym of *B. leptus*, in key). PAPP 2004: 179 (as valid species, type depositary).

Type designation: Designation of the female lectotype of *B. obscuricornis*: (first label, printed) "Budapest / Sashegy"; (second label) [1]"895. IX 14." (handwriting) / "Szépligeti" (printed); third label is the lectotype card, fourth label is with the inventory number "359". - Lectotype is in good condition: micropinned by the propodeum.

Material examined (6 ♀ ♀): Hungary: ♀ lectotype + 2 ♀ ♀ from three localities (Budapest, Gyula, Tompa). Italy: Trieste, 3 ♀ ♀.

Redescription of the female lectotype of *B. obscuricornis*: Body 3.2 mm long. Antenna short, as long as head + mesosoma + tergites 1-2 combined and with 25 antennomeres. First flagellomere 2.4 times, further flagellomeres gradually shortening so that penultimate flagellomere 1.7 times as long as broad. - Head in dorsal view (Fig. 243) less transverse, 1.6 times as broad as long, eye somewhat longer than temple, temple moderately rounded, occiput weakly excavated. Eye in lateral view 1.7 times as high as wide, temple as wide as eye at upper part of eye, temple slightly narrowing ventrally (Fig. 244, see arrows). Oral opening one-quarter wider horizontally than shortest distance between oral opening and compound eye (Fig. 245). Head polished.

Mesosoma in lateral view 1.6 times as long as high, together with propodeum polished. Notaulix faintly distinct. - Hind femur nearly 3.3 times as long as broad medially (Fig. 246). Claw clearly downcurved, its basal lobe fairly large and truncate (Fig. 247).

Fore wing somewhat shorter than body. Pterostigma (Fig. 248) 2.7 times as long as wide and issuing r clearly proximally from its middle; r 0.66 times as long as width of pterostigma; second submarginal cell long, 3-SR twice as long as 2-SR, SR1 straight, 1.5 times longer than 3-SR and approaching tip of wing; 1-R1 1.5 times as long as pterostigma (Fig. 248). First discal cell fairly high, 1-M 1.75 times as long as m-cu, 1-SR-M straight and 1.2 times as long as 1-M (Fig. 249).

First tergite (Fig. 250) slightly broader behind than long, beyond pair of spiracles feebly broadening posteriorly, margin of scutum crenulate, scutum longitudinally strio-rugose. Second tergite slightly longer than third tergite, clearly twice as broad behind as long laterally. Suture between tergites 2-3 bisinuate, uneven. Second tergite longitudinally striate, further tergites slightly weakening rugose to rugulose (Fig. 250). Hypopygium clearly projecting beyond last tergite, pointed; ovipositor sheath long, somewhat longer than body, posterior end of ovipositor sheath and ovipositor as in Fig. 251.

Ground colour of body yellow with dark pattern. Vertex around ocelli and occiput brown. Three maculae of mesoscutum, mesopleuron and mesosternum brown, propodeum light brown. Second and fourth tergites with black maculae rather on their left part (secondary decolouration?). Wings feebly fumous, pterostigma yellow, veins brownish.

Variable features of the female (5 ♀ ♀): Similar to the female lectotype. Body 3-3.4 mm long. Antenna with 25-26 antennomeres. Head in dorsal view (Fig. 253) 1.57-1.66 times

as broad as long, temple less rounded (2♂♂). Pterostigma 2.5-2.7 times as long as wide, 3-SR nearly to fully twice as long as 2-SR. Tergites beyond first one with weaker sculpture (3♂♂ from Italy, Fig. 252). Three maculae of mesoscutum reduced to indistinct, mesosternum dark brown to blackish.

Male and host: unknown.

Distribution: Hungary, Italy.

Remarks: Within the subgenus *Bracon* s.str. the species *B. obscuricornis* is nearest to *B. leptus* MARSHALL viewing their more or less longer second tergite over third tergite, long ovipositor apparatus and the rugulose sculpture with a few striate elements on tergites 2-3; the two species differ from each other by subtle features keyed:

- 1 (2) Head in dorsal view (Figs 243, 253) less transverse, 1.57-1.66 times as broad as long. Second tergite slightly longer than third tergite, second tergite with less strong striae (Figs 250, 252). Hind femur 3.3 times as long as broad medially (Fig. 246). Basal lobe of claw truncate (Fig. 247). Second submarginal cell slightly narrower, pterostigma yellow (Fig. 248). Body yellow with more or less brown to blackish pattern on mesosoma. ♀: 3-3.4 mm *B. (B.) obscuricornis* SZÉPLIGETI 1896
- 2 (1) Head in dorsal view (Fig. 254) transverse, 1.7-1.8 times as broad as long. Second tergite 1.3-1.4 times longer than third tergite, second tergite with somewhat stronger striae (Fig. 255). Hind femur 3.1 times as long as broad distally (Fig. 256). Basal lobe of claw pointed (Fig. 257). Second submarginal cell of usual form, pterostigma brown, exceptionally and proximally more or less yellow (Fig. 258). Body reddish yellow to testaceous with much black to blackish pattern on head and mesosoma. ♀: (3-)3.5-5.5 mm *B. (B.) leptus* MARSHALL 1897

***Bracon (Lucobracon) ochraceus* SZÉPLIGETI (Figs 260-268)**

Bracon ochraceus SZÉPLIGETI 1896b: 289 (description, in Hungarian), 363 (description, in German) ♀ (syntype series 1♀), type locality: "Crkvenicza" (Croatia), female holotype (designated by PAPP in 1969) in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: 267 (in key), 408 (redescription), assigned to "Section Orthobracon". TELENGA 1936: 173 (in key), 282 (redescription) (in Russian) and 375 (in key, in German). PAPP 1969: 318 (in key), 331 (synonymization, type designation). SHENEFELT 1978: 1623 (literature up to 1969). TOBIAS 1986: 141 (in key, in Russian). PAPP 2004: 179 (type depositary, synonym of *B. flagellaris* THOMSON).

Bracon gracilis SZÉPLIGETI 1901a: 184 (in key), 272 (description) (in Hungarian), 1904 (1901): 162 (in key), 174 (description) (in German) ♀ (syntype series 1♀), type locality: "Budapest" (Hungary), female lectotype (designated by PAPP in 1968) in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: as valid species 267 (in key), 395 (redescription), assigned to "Section Orthobracon". TELENGA 1936: as valid species 162 (in key), 246 (redescription) (in Russian) and 364 (in key, in German). PAPP 1969: 331 (as new synonym of *B. ochraceus*). SHENEFELT 1978: 1623 (as synonym of *B. ochraceus* after PAPP l.c., literature up to 1969). TOBIAS 1986: 141 (as synonym of *B. ochraceus*).

Type designations: Designation of the female holotype of *B. ochraceus*: (first two labels) "Crkvenica" (printed) / "25. VI." (handwriting, according to the original description taken in the year 1892), "Croatia"; third label is the holotype card, fourth label is with the inventory number "1350", fifth label is with the actual name *B. (Lu) ochraceus* given by me in 2006. - Holotype is in fairly good condition: (1) micropinned, micropin covered with copper vitriol crystals, left fore leg partly "hidden" by the crystals; (2) both flagelli deficient; (3) tarsomeres 4-5 of right middle leg missing; (4) right hind wing missing.

Designation of the female holotype of *B. gracilis*: (first label, printed) "Budapest / Sas-

hegy"; (second label) [1]"896. VI. 17." (handwriting) "Szépligeti" (printed); third label is the holotype card, fourth label is with the inventory number "1351"; fifth label is with the actual name *B. (Lu.) ochraceus* SZÉPLIGETI given by me in 2006. - The holotype is in fairly poor condition: (1) micropinned laterally by mesosoma; (2) left antenna missing, right flagellum deficient distally; (3) metasoma broken and glued to propodeum; (4) left ovipositor sheath deficient (present its anterior fourth).

R e m a r k on the above type designations: (1) The species *B. ochraceus* was described in 1896, however, in his revisional paper SZÉPLIGETI (1901a) did not take it into consideration, i.e. it was not included in the key to the European species of the genus *Bracon*, on one hand, and a new species was described in 1901a by him under the name *B. gracilis*, on the other. The two descriptions unambiguously refer to the same species, the repeated description (under the new species name) is a taxonomic enigma. - (2) In my paper (PAPP 2004) I placed the names *B. gracilis* and *B. ochraceus* in synonymy with *B. flagellaris* THOMSON. A re-identification of these three taxa led me to the recognition that *B. ochraceus* (= *gracilis*) differs from *B. flagellaris* by subgeneric as well as a few specific features keyed:

- 1 (2) Oral opening less large, its horizontal diameter 1.4-1.5 times as long as shortest distance between opening and compound eye (subgeneric difference of *Glabrobracon*, Fig. 275). Tergites 2-3 polished, second tergite antero-medially striolate-substriolate (Fig. 276). Vein SR1 of fore wing reaching tip of wing (Fig. 277). Hind femur 3.3-3.4 times as long as broad (Fig. 278). ♀ ♂: 3.2-3.5 mm *B. (Gl.) flagellaris* THOMSON 1894
- 2 (1) Oral opening large, its horizontal diameter twice as long as shortest distance between opening and compound eye (subgeneric difference of *Lucobracon*, Fig. 262). Tergites 2-3 rugo-rugulose (Fig. 268). Vein SR1 of fore wing approaching tip of wing (Fig. 266). Hind femur 2.8-2.9 times as long as broad (Fig. 264). ♀ ♂: 2.2-3 mm *B. (L.) ochraceus* SZÉPLIGETI 1896

By this distinction the species *B. ochraceus* is revalidated. The synonymization explains the absence of *B. (Lu.) ochraceus* from the revision of the *Bracon* (*Lucobracon*) species by SZÉPLIGETI (PAPP 2005). The present revalidation is an addition to this revision.

M a t e r i a l e x a m i n e d (2♀ ♀ + 2♂ ♂): Two female holotypes of *B. ochraceus* (from Croatia) and *B. gracilis* (from Hungary). Croatia: 1♂. Spain: 1♂.

R e d e s c r i p t i o n of the female holotype of *B. ochraceus*: Body 3 mm long. Right antenna deficient, i.e. flagellum with 16 flagellomeres. First flagellomere twice and 16th flagellomere 1.2 times longer than broad, flagellomeres proximo-distally slightly thickening. According to the original description antenna with 28 antennomeres. - Head in dorsal view (Fig. 260) less transverse, nearly 1.6 times as broad as long, eye nearly 1.4 times as long as temple, temple rounded, occiput weakly excavated. Eye in lateral view (Fig. 261) 1.45 times as high as wide and one-fifth wider than temple, temple evenly wide beyond eye. Oral opening large, its horizontal width twice as long as shortest distance between opening and compound eye (Fig. 262). Head polished; face laterally just (or very finely) granulose.

Mesosoma in lateral view nearly 1.7 times as long as high, polished. Notaulix distinct, i.e. moderately deep and smooth. Propodeum polished, along its hind margin crenulate-shaped (Fig. 263). - Hind femur somewhat less than 2.6 times as long as broad distally (Fig. 264). Claw curved with distinct basal lobe as in Fig. 265.

Fore wing about as long as body. Pterostigma (Fig. 266) three times as long as wide and issuing r from its middle; r one-sixth shorter than width of pterostigma; 3-SR a bit longer

than 2-SR (i.e. second submarginal cell short), SR1 straight, almost twice as long as 3-SR and approaching tip of wing; 1-R1 somewhat less than 1.5 times as long as pterostigma (Fig. 266). First discal cell less high, 1-M almost 1.9 times as long as m-cu, the two veins not parallel with each other (Fig. 267).

First tergite (Fig. 268) as long as broad behind, beyond pair of spiracles weakly broadening, hind part of scutum rugo-rugulose with striate elements, margin of scutum crenulate. Second tergite clearly twice as broad behind as long laterally; tergites 2-3 equal in length, suture between them bisinuate, subcrenulate. Second and third tergite rugo-rugulose (Fig. 268), rest of tergites smooth and shiny. Hypopygium elongate and pointed, ovipositor sheath long, as long as hind femur + tibia + tarsus combined.

Ground colour of body reddish yellow with dark colour pattern. Dark brown: antenna, propodeum, scutum of first tergite and small antero-median macula on second tergite. Legs yellow, hind tibia apically and hind tarsus entirely brown. Wings subhyaline, pterostigma yellow, veins brownish yellow.

Deviating features of the female holotype of *B. gracilis*: Body 3 mm long. Temple in dorsal view somewhat less rounded (Fig. 269). Second submarginal cell somewhat less short, 3-SR 1.3 times as long as 2-SR (Fig. 270). Rugo-rugulosity of second tergite somewhat less strong (Fig. 271).

Description of the male (2♂♂). - Similar to the female. Body 2.2 mm (1♂) and 2.5 mm (1♂) long. Antenna as long as body and with 24 antennomeres (1♂). First flagellomere three times and penultimate flagellomere twice as long as broad. Sculpture of tergites 1-3 stronger, rest of tergites with gradually weakening rugulo-subrugulosity.

Host: unknown.

Distribution: Hungary, Croatia, Spain.

Remarks: Within the subgenus *Lucobracon* the species *B. ochraceus* is nearest to *B. fortipes* WESMAEL viewing their vein SR1 approaching tip of wing and ground corporal colour is reddish yellow; the distinctive features between the two species are keyed:

- 1 (2) Head in dorsal view transverse, 1.7-1.85 times as broad as long (Fig. 272). Tergites 2-3 broad, second tergite 3.3-3.5 times as broad behind as long laterally and somewhat shorter than third tergite (Fig. 273). Second submarginal cell long, 3-SR (1.25-)1.4 times length of 2-SR (Fig. 274). Pterostigma light brownish. ♀: (3-)3.5-4.3 mm, ♂: 2.8-3.5 mm..... *B. (Lu.) fortipes* WESMAEL 1838
- 2 (1) Head in dorsal view less transverse, 1.5-1.6 times as broad as long (Figs 260, 269). Tergites 2-3 less broad, second tergite twice as broad behind as long laterally, tergites 2-3 equal in length (Fig. 268). Second submarginal cell less long, 3-SR 1.1-1.3 times as long as 2-SR (Figs 266, 270). Pterostigma yellow. ♀: 3 mm, ♂: 2.2-2.5 mm..... *B. (Lu.) ochraceus* SZÉPLIGETI 1896

***Bracon (Bracon) rugulosus* SZÉPLIGETI (Figs 279-296)**

Bracon rugulosus SZÉPLIGETI 1901a: 262 (in key), 277 (description) (in Hungarian), 1904 (1901): 162 (in key), 172 (description) (in German) ♀ (syntype series 3♀♀), type locality: "P.-Maróth" (=Pilismarót, Hungary), female lectotype (and two female paralectotypes) in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: 238 (in key), 336 (re-description), assigned to "Sektion Striobracon". TELENGA 1936: 160 (in key), 242 (re-description) (in Russian) and 363 (in key, in German). PAPP 1969b: 200 (as synonym of *B. longicollis* WESMAEL); 1983: 333 (sp. rev.). SHENEFELT 1978: 1639 (as synonym of *B. longicollis* after PAPP l.c., literature up to 1969). PAPP 1983: 333 (sp. rev.). TOBIAS 1986: 129 (as synonym of *B. longicollis* in key, in Russian). PAPP 2004: 180 (as valid species, type designation and depository).

Bracon depressiusculus SZÉPLIGETI 1904 (1901): 178 (in key), 182 (description) (in German) ♀ (syntype series 1 ♀), type locality: "P.-Maróth" (=Pilismarót, Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: as valid species 266 (in key), 379 (redescription), assigned to "Section Orthobracon". Telenga 1936: 170 (in key), 270 (redescription) (in Russian) and 373 (in key, in German). PAPP 1969b: 200 (as *B. longicollis* var. *depressiusculus*). SHENEFELT 1978: 1640 (type designation, as *B. longicollis* var. *depressiusculus* after PAPP l.c., literature up to 1936). PAPP 2004: 173 (synonymization, type depository).

Bracon neglectus SZÉPLIGETI 1904 (1901): 162, as a variety ("var. ♀") of the nominate from *B. rugulosus* with black pattern on its legs and supplied with the preliminary name "B. neglectus m. ♀", locality not given; essentially a nomen nudum, syn. n. - SHENEFELT 1978: 1640 (as *B. longicollis* var. *neglectus*, literature up to 1936).

Bracon spurnensis HINCKS 1951: 232 ♀ ♂ (syntype series 1 ♀ + 2 ♂ ♂), type locality: "Spurn Peninsula, S.E. Yorks." (England), female holotype (and two male paralectotypes) in The Manchester Museum, Manchester; examined, n. syn. - SHENEFELT 1978: 1542 (as valid species, literature up to 1951). PAPP 1999c: 145 (synonymization). - Holotype and two paralectotypes are in good condition.

Type designations: Designation of the female lectotype of *B. rugulosus*: (first label, printed) "P.-Maróth /Szépligeti"; second label is the lectotype card, third label is with the inventory number "1401". - Lectotype is in good condition: micropinned, fore pair of wings medially torned by the pin.

Designation of the two female paralectotypes of *B. rugulosus*: One female (No. 1402) from Pilismarót, transferred to *B. longicollis* WESMAEL. Its condition is good: micropinned, both flagelli distally deficient, left fore leg (except coxa + trochanter) missing. One female (No. 1403) from Budapest "Palatinus" (handwriting) [1]895. VII. 18. /Szépligeti" (printed). Its condition is good: micropinned.

Designation of the female lectotype of *B. depressiusculus*: (first label, printed) "P.-Maróth" (=Pilismarót, Hungary) / "Szépligeti"; second label is the lectotype card, third label is with inventory number "1400", fourth label is with the actual name *B. rugulosus* Szépligeti given and attached by me. - Lectotype is in good condition: (1) micropinned; (2) right flagellum apically deficient.

Material examined (39 ♀ ♀ + 17 ♂ ♂): Hungary: 18 ♀ ♀ + 11 ♂ ♂ from 23 localities. Slovakia: 4 ♀ ♀ + 3 ♂ ♂ from four localities. Romania (Transylvania): 5 ♀ ♀ + 1 ♂ from three localities. England: 10 ♀ ♀ + 2 ♂ ♂ from six localities. Sweden: 2 ♀ ♀ from two localities. Armenia: 1 ♀.

Redescription of the female lectotype of *B. rugulosus*: Body 4 mm long. Antenna as long as body and with 34 antennomeres. First flagellomere 2.6 times as long as broad, further flagellomeres indistinctly shortening and attenuating so that penultimate flagellomere 1.75 times as long as broad (Fig. 279). - Head in dorsal view (Fig. 280) less than 1.8 times as broad as long, eye clearly one-fifth longer than temple, temple rounded, occiput excavated. Eye in lateral view 1.6 times as high as wide, temple ventrally broadening so that almost as wide as eye (Fig. 281, see arrows). Oral opening small, its horizontal diameter just shorter than shortest distance between opening and compound eye (Fig. 282). Head polished.

Mesosoma in lateral view elongate, twice as long as high, polished. Notaulix distinct. Propodeum with a medio-longitudinal keel, along keel striate, otherwise propodeum polished (Fig. 283). - Hind femur fairly thick, 2.6 times as long as broad medially (Fig. 284). Claw less downcurved, its basal lobe less large (Fig. 285).

Fore wing somewhat shorter than body. Pterostigma (Fig. 286) 2.8 times as long as wide and issuing r from its middle, r shorter than width of pterostigma; second submarginal

cell fairly long, 3-SR 1.4 times as long as 2-SR, SR1 straight and reaching tip of wing; 1-R1 nearly twice as long as pterostigma. First discal cell less high, 1-M 1.5 times as long as m-cu, 1-SR-M 1.4 times longer than 1-M (Fig. 287).

First tergite (Fig. 288) evenly broadening posteriorly, as long as broad behind, hind half of scutum rugose. Second tergite about three times as broad behind as long laterally, third tergite a bit longer than second tergite, suture between them distinct, bisinuate, smooth. Second tergite rather longitudinally rugose, third tergite subrugulose-uneven, fourth tergite uneven-smooth, further tergites polished. Hypopygium pointed, ovipositor sheath just shorter than hind tarsus, posterior end of ovipositor as in Fig. 289.

Antenna blackish. Head and mesosoma black. First tergite entirely blackish and further tergites with posteriorly widening pattern, tergites 2-5(-6) laterally reddish yellow. Oral part reddish yellow, palpi yellow. Margin of eye (or orbit) reddish. Tegula dark reddish. Sternites and legs yellow. Wings faintly fumous, pterostigma and veins brown to light brown.

Deviating features of the female paralectotype of *B. rugulosus*: Similar to the female lectotype. Body 4.1 mm long. Antenna with 37 (right one) and 38 (left one) antennomeres. Head in dorsal view (Fig. 280) subcubic, 1.7 times as broad as long.

Deviating features of the female lectotype of *B. depressiusculus*: Similar to *B. rugulosus*. Body 4.2 mm long. Antenna longer than body and with 38 antennomeres. Head in dorsal view (Fig. 280) 1.7 times as broad as long. Propodeum laterally from medio-longitudinal keel widely rugo-rugulose (Fig. 291). Hind femur 2.9 times as long as broad medially (Fig. 292). Pterostigma 3.3 times as long as wide.

Variable features of the female (39 ♀ ♀): Body (3.5-)3.7-4.3(-4.5) mm long. Antenna with (26-)32-38 antennomeres. Head in dorsal view 1.57-1.8 times as broad as long (Figs 280, 290). Sculpture medially on propodeum variably extending (Figs 283, 291). Hind femur 2.6-2.8 times as long as broad medially (Figs 292-293). First tergite usually as long as broad behind, rarely a bit either longer or shorter than broad behind. Tegula rarely reddish yellow.

Description of the male (17 ♂ ♂): Similar to the female. Body (2.5-)3-3.5 mm long. Antenna as long as body and with (27-)32-35(-40) antennomeres. Head in dorsal view 1.7-1.8 times as broad as long. Hind femur 2.9-3.3 times as long as broad (Figs 292, 294). First tergite either as long as (Fig. 295) or somewhat longer than broad behind, second tergite either as long as (Fig. 295) or longer than third tergite (Fig. 296). Tegula frequently reddish yellow or yellow.

Host: unknown.

Distribution: England, Sweden, Slovakia, Hungary, Romania (Transylvania), Armenia.

Remark: Within the subgenus *Bracon* s.str. the species *B. rugulosus* is very near to *B. longicollis* WESMAEL considering their common features as elongated mesosoma, sculpture of tergites and colour of body; the two species are separated by the features not easy to recognize:

- 1 (2) Head in dorsal view somewhat more transverse, 1.85-1.9(-2) times as broad as long, temple receded (Fig. 297). First tergite beyond pair of spiracles subparallel sided, usually somewhat longer than broad behind (Fig. 298). Hind femur 3-3.2 times (\varnothing ♀) and 3-3.5 times (δ ♂) as long as broad medially (Figs 299, 300). Sculpture of tergites 2-3 relatively less strong. Tegula usually reddish yellow. ♀ ♂: 3-5 mm *B. (B.) longicollis* WESMAEL 1838
- 2 (1) Head in dorsal view somewhat less transverse, 1.7-1.8 times as broad as long, temple rounded (Figs 280, 290). First tergite evenly broadening posteriorly, as long as broad to somewhat longer than broad behind (Figs 288, 295, 296). Hind femur 2.6-2.8 times (\varnothing ♀) and 2.9-3.3 times (δ ♂) as long as broad medially (Figs 292-294). Sculpture of tergites 2-3 relatively strong (Fig. 288). Tegula usually black to brown. ♀ ♂: 3.5-4.5 mm, ♂: 2.5-3.5 mm *B. (B.) rugulosus* SZÉPLIGETI 1901

***Bracon (Cyanopterobracon) sabulosus* SZÉPLIGETI (Figs 301-314)**

Bracon sabulosus SZÉPLIGETI 1896b: 293 (description in Hungarian), 367 (description in German) ♀ (syntype series 1 ♀), type locality: "Deliblat" (up to 1920 in Hungary, since 1920 Serbia: Voivodina), female holotype in Magyar Természettudományi Múzeum, Budapest; examined. - SZÉPLIGETI 1901: 268 (in key, in Hungarian), 1904 (1901): 188 (in key, in German). FAHRINGER 1927: 291 (in key), 1928: 488 (redescription), assigned to "Section Glabrobracon". TELENGA 1936: 145 (♀), 154 (♂) (in key), 190 (redescription) (in Russian) and 347 (♀), 356 (♂) (in key, in German). PAPP 1962: 355 (in key), 359 (redescription). SHENEFELT 1978: 1554 (literature up to 1969). TOBIAS 1986: 121 (in key, in Russian), assigned to subgenus *Cyanopterobracon*. PAPP 2004: 181 (type designation and depository).

Glabriolum turkestanum FAHRINGER 1934: 331 ♀, type locality: "Turkestan" (Turkmenia), female holotype in Naturhistorisches Museum, Wien; examined, syn. n. - SHENEFELT 1978: 1808 (as valid species, literature up to 1934).

Type designations: Designation of the female holotype of *B. sabulosus*: (first label) "Hungary" (printed) / "Deliblát / 1894. VII. 14. / leg. Biró" (locality label attached by me and with my handwriting); (second, original locality label) "Deliblat" (printed) / "14. VII." (handwriting); third label is the holotype card, fourth label is with the inventory number "1373", fifth label is the checking card attached by C. van ACHTERBERG 1980. - The holotype is in less good condition: (1) pinned; (2) both flagelli distally deficient; (3) distal part of right fore wing (including pterostigma) missing, right hind wing medially damaged.

Designation of the female holotype of *Glabriolum turkestanum*: (first label) "Turkestan" (SCHMIEDEKNECHT's handwriting); (second label) "turkestanus m. Type" (?FAHRINGER's handwriting); (third label) "Cyanopterus turcestanus n. sp." (FAHRINGER's handwriting) "det. Fahringer" (printed); fourth label is the holotype card attached by me; fifth label is with the actual name *Bracon sabulosus* given by me.

Material examined (8 ♀ ♀ + 5 ♂ ♂): Hungary: 1 ♀ + 1 ♂ from two localities. Romania (Transylvania): 1 ♂, Serbia: 1 ♀. Bulgaria: 2 ♂ ♂ from two localities. Greece: 1 ♀. Turkey: 2 ♀ ♀ + 1 ♂ from three localities. Jordan: 1 ♀. Turkmenia: 2 ♀ ♀ from one locality.

Redescription of the female holotype of *B. sabulosus*: Body 6 mm long. Antenna damaged, right antenna with 17 and left antenna with 31 antennomeres. Scape in lateral view globose. First flagellomere 1.5 times and 31th flagellomere cubic, i.e. as long as broad. - Head in dorsal view (Fig. 301) transverse, 1.76 times as broad as long, eye 1.4 times as long as temple, temple rounded, occiput excavated. Eye in lateral view 1.45 times as high as wide medially, temple 0.75 times as wide as eye or eye 1.3 times wider than temple (Fig. 302). Oral opening a bit wider horizontally than shortest distance between opening and compound eye (Fig. 303). Head polished and except eye, hairy (hairs about as long as first flagellomere).

Mesosoma in lateral view twice as long as high, polished, mesoscutum less hairy compared to that of head. Notaulix distinct, evenly deep. Propodeum fully polished. - Hind femur 3.1 times as long as broad distally (Fig. 304). Claw deeply downcurved, its basal lobe large and pointed (Fig. 305).

Fore wing shorter than body. Pterostigma (Fig. 306) 3.3 times as long as wide and issuing *r* from its middle; *r* slightly longer than width of pterostigma, 3-SR 1.2 times length of 2-SR, SR1 straight, 1.9 times as long as 3-SR and approaching tip of wing; 1-R1 1.5 times length of pterostigma. First discal cell fairly high, 1-M 1.8 times as long as m-cu, 1-SR-M somewhat longer than 1-M (Fig. 307).

First tergite (Fig. 308) 1.3 times longer than broad behind, beyond pair of spiracles parallel-sided, lateral part of usual width, scutum convex. Second tergite transverse, three times as broad behind as long laterally, third tergite 1.3 times as long as second tergite, suture between them bisinuate, smooth, deep. Every tergite polished. Hypopygium truncate and pointed, ovipositor sheath as long as hind tibia + half basitarsus (Fig. 309).

Ground colour of head and mesosoma black. Antenna blackish. Palpi brown, rostrum black. Mesoscutum testaceous. Tegula brown. Metasoma reddish yellow, apically black, hypopygium yellowish. Legs black, tibiae 2-3 and all tarsi dark brown to brown. Wings brown fumous, pterostigma and veins brown.

Variable features of the females (8♀): Similar to the female holotype. Body 5.5-8 mm, usually 6-7 mm, long. Antenna longer than body and with 52-68 antennomeres. First flagellomere 1.25-1.4 times as long as broad, further ones cubic, ultimate 10-11 flagellomeres attenuating so that penultimate flagellomere 1.5-1.75 times as long as broad. - Head in dorsal view (Figs 301, 310) 1.7-1.85 times as broad as long, eye (1.3-)1.5-1.6 times as long as temple, temple rounded. Hind femur 2.9-3.1 times as long as broad medially or just distally (Fig. 311). Pterostigma 3.3-3.6(-4) times as long as wide, 3-SR 1.2-1.4 times as long as 2-SR, SR1 1.9-2 times as long as 3-SR, 3-SR and 2-M somewhat diverging distally (Fig. 312). First tergite 1.3-1.4 times as long as broad, beyond pair of spiracles slightly broadening (2♀).

Description of the male (5♂): Similar to the female. Body 5-7 mm long. Antenna with 60-63 antennomeres. Head in dorsal view 1.65-1.7 times as broad as long, eye 1.3 times as long as temple, temple moderately rounded (Fig. 310). Pterostigma and second submarginal cell as in Fig. 313. First tergite 1.45-1.5 times as long as broad behind (Fig. 314).

Hosts: Tephritidae sp. (Dipt.) (TOBIAS 1986: 121).

Distribution: Hungary, Romania, Serbia, Bulgaria, Greece, Turkey, Jordan, European Russia, Ukraine, Azerbaijan, Kazakhstan, Turkmenia.

Remarks: Within the subgenus *Cyanopterobracon* the species *B. sabulosus* is nearest to *B. fallax* SZÉPLIGETI and *B. urinator* (FABRICIUS), the distinction of the three species is presented at *B. fallax*. - *B. sabulosus* is also near to *B. illyricus* MARSHALL viewing their globose scape, hairy head, claw clearly downcurved with pointed basal lobe; the two species are distinguished as follows:

- 1 (2) Fore wing: r issuing proximally from middle of pterostigma, 3-SR 1.5 times as long as 2-SR, 3-SR and 2-M parallel, SR1 1.5-1.65 times length of 3-SR and approaching tip of wing (Fig. 315). First tegite subparallel-sided (Figs 316, 317). Temple more rounded (Fig. 318). Hind femur nearly parallel-sided (Fig. 319). Mesosoma black, tergites yellow or reddish yellow and medially usually with a black streak. ♀: 6-7 mm, ♂: 4.5-7 mm *B. (Cyan.) illyricus* MARSHALL 1888
- 2 (1) Fore wing: r issuing from middle of pterostigma, 3-SR 1.2-1.4 times as long as 2-SR, 3-SR and 2-M somewhat diverging distally, SR1 1.9-2 times as long as 3-SR and less approaching tip of wing (Figs 306, 312, 313). First tegite parallel-sided (Figs 308, 314). Temple somewhat less rounded (Figs 301, 310). Hind femur less parallel-sided (Figs 304, 311). Mesosoma black, mesoscutum testaceous; metasoma reddish yellow, apically black, ♀: 5.5-8 mm, ♂: 5-7 mm *B. (Cyan.) sabulosus* SZÉPLIGETI 1896

***Bracon (Bracon) subrugosus* SZÉPLIGETI (Figs 320-332)**

Bracon subrugosus SZÉPLIGETI 1901a: 183 (in key), 272 (description) (in Hungarian), 1904 (1901): 159 (in key), 166 (description) (in German) ♀ (syntype series 1 ♀), type locality: "Budapest" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: 241 (in key), 342 (redescription), assigned to "Section Striobracon". TELENGA 1936: 158 (in key), 234 (redescription) (in Russian) and 361 (in key, in German). TOBIAS 1961: 155 (as synonym of *B. trucidator* MARSHALL); 1986: not mentioned. PAPP 1968: 203 (as synonym of *B. minutator* FABRICIUS, type designation); 2004: 181 (type depository, as synonym of *B. subglaber* SZÉPLIGETI).

Bracon quinqueaculatus SZÉPLIGETI 1901a: 265 (in key), 279 (description) (in Hungarian), 1904 (1901): 179 (in key), 183 (description) (in German) ♀ (type series 1 ♀), type locality: "Budapest" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: as valid species 250 (in key), 368 (redescription), assigned to "Section Lucobracon". TELENGA 1936: as valid species 169 (in key), 266 (redescription) (in Russian) and 372 (in key, in German). SHENEFELT 1978: 1624 (as valid species, literature up to 1936). PAPP 2004: 179 (synonymization as *B. subglaber* var. *quinqueaculatus*), type designation and depository).

Bracon subglaber SZÉPLIGETI 1901a: 183 (in key), 272 (description) (in Hungarian), 1904 (1901): as *B. subrugosus* var. *subglaber* 159 (in key), 166 (description) (in German) ♀ (type series 1 ♀), type locality: "Budapest" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: 342 as *B. subrugosus* var. *subglaber* after SZÉPLIGETI l.c. TELENGA 1936: 234 (as *B. subrugosus* var. *subglaber*). TOBIAS 1961: 158 (as synonym of *B. minutator* FABRICIUS under the valid name *B. subrugosus* var. *subglaber*; 1986: 124 (in key as valid species). SHENEFELT 1978: 1512 (as synonym of *B. minutator*, literature up to 1968). TOBIAS & BELOKOBYLSKIY 2000: 124 (in key as valid species). PAPP 2004: 181 (as valid species, type designation and depository).

Bracon sulcatulus SZÉPLIGETI 1896b: 200 (description, in Hungarian), 364 (description, in German) ♂ (type series 1 ♂), type locality: "Budapest: Lipótmező" (Hungary; "Lipótmező" a slip of pen, on label "Hüvösvölgy"). Male lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - SZÉPLIGETI 1901: as valid species 262 (in key, in Hungarian) and 1904 (1901): 163 (in key, in German). FAHRINGER 1927: as valid species 279 (in key), 424 (redescription), assigned to "Section Orthobracon". TELENGA 1936: as valid species 167 (in key), 264 (redescription) (in Russian) and 369 (in key, in German). PAPP 1968: 203 (as synonym of *B. minutator* FABRICIUS). SHENEFELT 1978: 1511 (as synonym of *B. minutator* after PAPP l.c., literature up to 1974). TOBIAS 1986: not mentioned. PAPP 2004: 182 (as *B. subglaber* var. *sulcatulus*, type condition and depository).

Bracon trypetanus FAHRINGER 1927: 268 (♀), 278 (♂) (in key), 429 (description) ♀ ♂ assigned to "Section Orthobracon", type locality: "Sachsen" (Germany), male lectotype in Naturhistorisches Museum, Wien; examined, **syn. n.** - TELENGA 1936: as valid species 177 (♀), 178 (♂) (in key), 299 (redescription) (in Russian) and 379 (♀), 381 (♂) (in key, in German). SHENEFELT 1978: 1649 (as valid species, lectotype designation, literature up to 1953).

R e m a r k s on type designation of *B. trypetanus*: In the Naturhistorisches Museum

(Wien) there is a male labelled (by Fahringer?) as "Holotypus", an unpublished designation. According to the original description (FAHRINGER l.c.) "*Parasit von Trypeta cylindrica* R. D. 2♀♀, 1♂ Sachsen (Deutschland, Schütze)". The two female specimens are not present in the Museum Wien. SHENEFELT (l.c.) indicates that "In Stockholm there are a ♀ and a ♂ carrying same labels" (these ♀ and ♂ not seen by me). The present synonymization is based on the original description as well as on the examination of the male type.

Type designations: Designation of the female lectotype of *B. subrugosus*: (first label, printed) "Budapest / Hűvösvölgy"; (second label) [1]"897. VIII. 28" (handwritten) / "Szépliget" (printed); third label is the lectotype card, fourth label is with the inventory number "358". Fifth label is with the actual name *Bracon subrugosus* (SZÉPLIGETI) given by me. - Lectotype is in good condition: (1) micropinned; (2) right flagellum missing, left flagellum deficient.

Designation of the female lectotype of *B. quinque-maculatus*: (first label) "Budapest / Szépliget" (printed) "Diósárok / 1896. IX 18." (handwritten, reverse the first label); second label is the lectotype card, third label is with the inventory number "375". Fourth label is with the actual name *Bracon subrugosus* var. *subglaber* (SZÉPLIGETI) given by me. - Lectotype is in fairly good condition: (1) micropinned laterally by mesosoma; (2) both flagelli missing; (3) pair of wings apically damaged.

Designation of the female lectotype of *Bracon subglaber*: (first label, printed) "Budapest / Mátyásföld"; (second label) [18]"97. VI. 3." (handwritten) / "Szépliget" (printed); third label is the lectotype card, fourth label is with the inventory number "376". Fifth label is with the actual name *Bracon subrugosus* var. *subglaber* (SZÉPLIGETI) given by me. - Lectotype is in fairly good condition: (1) micropinned; (2) both flagelli apically deficient; (3) right fore wing missing.

Designation of the male lectotype of *B. sulcatulus*: (first label, printed) "Budapest / Hűvösvölgy"; (second label) [1]"895. VIII 7." (handwritten) / "Szépliget" (printed); third label is the lectotype card, fourth label is with the inventory number "357". Fifth label is with the actual name *Bracon subrugosus* var. *sulcatulus* (SZÉPLIGETI) given by me. - Lectotype is in fairly good condition: (1) micropinned; (2) both flagelli distally deficient; (3) left fore wing missing. - Taxonomic remark see in the paragraph "Description of the male (27♂♂)".

Material examined: (442♀♀ + 236♂♂) - England: 4♀♀ + 3♂♂ from six localities. France: 2♀♀ + 2♂♂ from four localities. The Netherlands: 1♀. Germany: 8♀♀ + 5♂♂ from eight localities. Switzerland: 1♀ + 1♂ from one locality. Austria: 1♀ + 1♂ from two localities. Czech Republic: 4♀♀ + 3♂♂ from six localities. Poland: 1♀. Sweden: 1♀. Hungary: 364♀♀ + 203♂♂ from 211 localities. Slovakia: 14♀♀ + 3♂♂ from six localities. Romania: 35♀♀ + 12♂♂ from 13 localities. Italy: 1♀ + 2♂♂ from three localities. Bulgaria: 3♀♀ from three localities. Croatia: 1♀ + 1♂ from two localities. Turkey: 2♀♀ from two localities. Russia (European part): 1♀.

Redescription of the female lectotype of *B. subrugosus*: Body 4.6 mm long. Left flagellum deficient, i.e. with 18 flagellomeres. First flagellomere 1.7 times and 18th flagellomere 1.4 times as long as broad. According to the original description antenna with 30 antennomeres. - Head in dorsal view (Fig. 320) less transverse, 1.66 times as broad as long, eye nearly 1.8 times as long as temple, temple rounded, occiput weakly excavated. Eye in lateral view 1.6 times as high as wide and one-fifth wider than temple (Fig. 321, see arrows). Oral opening 1.5 times longer horizontally than shortest distance between opening and compound eye (Fig. 322). Head polished, face laterally subrugulose.

Mesosoma in lateral view 1.4 times as long as high, polished. Notaulix indistinct. Propodeum polished, around lunule with very short rugulae (Fig. 323). - Hind femur 3.3 times as long as broad medially, almost parallel-sided (Fig. 324). Claw downcurved, its basal lobe fairly large as in Fig. 325.

Fore wing as long as body. Pterostigma (Fig. 326) three times as long as wide and issuing *r* somewhat proximally from its middle; *r* nearly as long as width of pterostigma, 3-SR 1.65 times as long as 2-SR; SR1 straight, 1.5 times as long as 3-SR and rather approaching tip of wing; 1-R1 clearly 1.5 times as long as pterostigma. First discal cell high, 1-M twice longer than *m-cu*, two veins parallel with each other, 1-SR-M just bent and a bit longer than 1-M (Fig. 327).

First tergite (Fig. 328) somewhat broader behind than long, slightly broadening posteriorly, lateral part of tergite narrow, margin of scutum crenulate, scutum longitudinally striate-striolate. Second tergite 2.6 times as broad as long laterally, a bit longer than third tergite; second tergite rugose with striolate elements, third tergite rugulose-subrugulose with punctures (Fig. 328), further tergites with progressively finer sculpture. Suture between tergites 2-3 bisinuate and crenulate (Fig. 328). Hypopygium pointed, ovipositor sheath long, as long as body, posterior end of ovipositor apparatus as in Fig. 329.

Ground colour of head and mesosoma black, that of metasoma yellow. Antenna black. Mandible, cheek, margin of eye and pronotum yellow. Tegula brown. Scutum of first tergite and tergites 2-4 medially brown. Legs dark brown, femora apically and tibiae basally yellow to yellowish. Wings brownish fumous, pterostigma brownish, vein light brown.

Variable features of the female (442 ♀): Body (3.5-)4.5-5.5 mm long. Antenna with 26-33, usually with 29-31, antennomeres. First flagellomere 1.6-1.7(-1.8) times and penultimate flagellomere 1.5-1.6(-1.7) times as long as broad, flagellum indistinctly attenuating. Head in dorsal view 1.65-1.75 times as broad as long. Hind femur 3.1-3.3(-3.4) times as long as broad. 3-SR 1.6-1.7 times as long as 2-SR, SR1 rather approaching, less frequently reaching, tip of wing. First tergite as long as broad behind, minute deviations feasible. Third and further tergites with weakening sculpture (nominate form) or second tergite with longitudinal striations, third and further tergites smooth and shiny (third tergite laterally sometimes uneven to subrugulose) (var. *subglaber*, Fig. 331). Median black maculae of tergites variably extending.

Description of the male (236 ♂): Similar to the female. Body 2.5-3.5(-4) mm long. Antenna nearly as long as body and with (23-)26-32 antennomeres. Head in dorsal view (1.6-)1.7-1.8 times as broad as long. Hind femur 2.9 (Fig. 330) - 3.3 times (Fig. 324) as long as broad. First tergite as long as broad behind to 1.2 times longer than broad behind (Fig. 332). Sculpture of tergites 1-3(-4) with more striate elements, second tergite clearly longer than third tergite (Fig. 332). Black colour of body usually more extended. -

Taxonomic remark: The form *B. sulcatulus* is an extreme variety of the male of *B. subrugosus*: tergites 2-5 with longitudinal striation and tergites with blackish to black suffusion (ground colour of tergites yellow). The variety (*B. subrugosus* var. *sulcatulus* SZÉPLIGETI) is known in Hungary, Slovakia, Czechia, Austria, Germany and Romania by a few male specimens. Albeit the name *sulcatulus* is a senior one over *subrugosus* by five years (see species quotations before) it is suppressed as the variety of the nominate form *subrugosus* viewing its extreme form and restricted to the male sex. This taxonomic consideration is in mutual understanding with TOBIAS's opinion (by personal discussion) who is a well-known expert of the Palaearctic species of the *Bracon* species.

Hosts (the sign "!" indicates the authenticity of the host): Lep.: *Paranthrene tabaniformis* ROTTENBURG, *Pennisetia hylaeiformis* LASPEYRES. (Aegeriidae), *Epichnopteryx sieboldi* ROTTENBURG (Psychidae), *Aethes williana* BRAHM (Tortricidae), *Metzneria lapella* LINNAEUS (Gelechiidae). - Dipt.: !*Chaetoriella jaceae* ROBINEAU-DESVOIDY, !*Noeeta pupillata* FALLÉN, *Sitarea scorzonerae* ROBINEAU-DESVOIDY, *S. lurida* LOEW, !*Tephritis leontodontis* DE GEER, !*Terellia serratullae* LINNAEUS (in heads *Cirsium vulgare*), !*Urophora cardui* LINNAEUS, !*U. jaceana* HERING, !*U. quadrifasciata* MEIGEN, !*U. solstitialis* LINNAEUS (Tephritidae) - Col.: *Ceutorhynchus fairmairi* BRISOUT DE BARNEVILLE (Curculionidae).

Distribution: Europe.

Remarks: Within the subgenus *Bracon* s.str. the species *B. subrugosus* is nearest to *B. trucidator* MARSHALL and *B. intercessor* NEES, the three species are distinguished by the features keyed:

- 1 (2) Temple in dorsal view receded (Fig. 333) to rounded-receded (Fig. 334). First tergite usually gradually broadening posteriorly (Fig. 335) or, less usually, somewhat less broadening beyond pair spiracles (Figs 336, 337). Tergites 3-5 before their hind margin without fine furrow (Fig. 335). Legs yellow or reddish yellow, body reddish yellow with more or less blackish to black pattern. ♀ ♂: 3-5(-6) mm *B. (B.) intercessor* NEES 1834
- 2 (1) Temple in dorsal view rounded (Figs 320, 338). First tergite beyond pair of spiracles parallel- (Fig. 328) to subparallel-sided (Fig. 332).
- 3 (4) Tergites 3-5 before their hind margin with fine furrow (Fig. 22). Notaulix distinct to just distinct (Fig. 23). First tergite anteriorly somewhat more narrowing (Fig. 22). Hind femur yellow, reddish yellow. ♀ ♂: (2.3-2.5-5(-6) mm *B. (B.) trucidator* MARSHALL 1888
- 4 (3) Tergites 3-5 before their hind margin without fine furrow (Fig. 328). Notaulix indistinct. First tergite anteriorly somewhat less narrowing (Fig. 328). Hind femur black. ♀: 3.5-5.5 mm, ♂: 2.5-3.5 mm *B. (B.) subrugosus* SZÉPLIGETI 1901

***Bracon (Glabrobracon) subsinuatus* SZÉPLIGETI sp. rev. (Figs 339-350)**

Bracon subsinuatus SZÉPLIGETI 1901a: 263 (in key), 278 (description) (in Hungarian), 1904 (1901): 176 (in key), 181 (description) (in German) ♀ (syntype series 1 ♀), type locality: "Budapest" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - FAHRINGER 1927: 252 (in key), 1928: 370 (redescription), assigned to "Section Lucobracon". TELENGA 1936: 173 (in key), 282 (redescription) (in Russian) and 375 (in key, in German). SHENEFELT 1978: 1625 (literature up to 1936). TOBIAS 1986: not mentioned. PAPP 2004: 182 (as synonym of *B. discoideus* WESMAEL, type designation and depository).

Type designation: Designation of the female lectotype of *B. subsinuatus*: (first label, printed) "Budapest / Zugliget" (Hungary); (second label) [18]"98. VI. 20." (handwritten) / "Szépligeti" (printed); third label is the lectotype card, fourth label is with the inventory number "1405". - Lectotype is in good condition: (1) micropinned; (2) pair of fore wings torned medially.

Material examined (29 ♀♀ + 17 ♂♂): Hungary: 11 ♀♀ + 5 ♂♂ from 14 localities. Slovakia: 1 ♀. Czechia: 1 ♀. Ukraine (Pod-Carpathians): 1 ♀ + 1 ♂ two localities. Bulgaria: 2 ♀♀ + 1 ♂ from three localities. Spain: 1 ♀. Ireland: 1 ♂. England: 6 ♀♀ from five localities. Scotland: 1 ♀ + 2 ♂♂ from two localities. The Netherlands: 1 ♀. Germany: 3 ♀♀ + 5 ♂♂ from five localities. Poland: 1 ♂. Sweden: 1 ♀. Finland: 1 ♂.

Redescription of the female lectotype of *B. subsinuatus*: Body 3.4 mm long. Antenna as long as body and with 33 antennomeres. First flagellomere almost 1.8 times and penultimate flagellomere nearly 1.6 times as long as broad. - Head in dorsal view

(Fig. 339) transverse, 1.8 times as broad as long, eye twice as long as temple, temple receded, occiput excavated. Eye in lateral view almost 1.4 times as high as wide and clearly twice as wide as temple, temple evenly broad beyond eye (Fig. 340, see arrows). Horizontal diameter of oral opening as long as shortest distance between opening and compound eye (Fig. 341). Head polished, face laterally with very fine hairpunctures.

Mesosoma in lateral view 1.6 times as long as high, polished. Notaulix faintly distinct. Propodeum along its hind margin with short rugae-rugulae (Fig. 342), otherwise polished. - Hind femur 3.1 times as long as broad somewhat proximally (Fig. 343). Claw less downcurved, basal lobe distinct but not large (Fig. 344).

Fore wing as long as body. Pterostigma (Fig. 345) 2.85 times as long as wide and issuing r slightly before its middle, r 0.7 times as long as width of pterostigma; second submarginal cell of usual length, 3-SR 1.35 times as long as 2-SR; SR1 just bent, twice as long as 3-SR and reaching tip of wing. First discal cell fairly high, 1-M 1.8 times as long as m-cu and nearly parallel with each other; 1-SR-M 1.4 times length of 1-M (Fig. 346).

First tergite (Fig. 347) 1.3 times as long as broad behind, beyond pair of spiracles weakly broadening, margin of scutum crenulate, scutum posteriorly striate. Second tergite 2.3 times wider behind than long laterally and distinctly, i.e. nearly 1.4 times, longer than third tergite medially; fore half of second tergite striate, otherwise together with further tergites polished (Fig. 347). Hypopygium small and pointed, ovipositor sheath as long as hind tibia + tarsomeres 1-2 combined (Fig. 348).

Body black with little light pattern. Scape reddish yellow, pedicel and flagellum brown. Inner margin of eye reddish yellow, vertex at eye rusty. Oral organs yellow, palpi pale yellow. Tegula yellow, pronotum laterally rusty. Legs yellow, middle coxa brown, hind coxa dark brown. Wings subhyaline, pterostigma brown and veins light brown.

Variable features of the females (29 ♀ ♀): Body 3-4 mm long. Antenna with 27-34, usually 30-32, antennomeres. Flagellomere 1.7-3 times as long as broad, length of flagellomeres in reverse proportion to number of flagellomeres. Head in dorsal view 1.75-1.9 times as broad as long. Hind femur 2.9-3 times as long as broad medially. Pterostigma usually 2.85-2.9 times, rarely 3.1-3.3 times, as long as wide. Body with yellow or reddish yellow pattern on head (face, vertex) and mesosoma (run of notaulix, pronotum, mesopleuron).

Description of the male (17 ♂ ♂): Similar to the female. Body 2.5-3(-3.2) mm long. Antenna as long as body and with 23-28(-35) antennomeres, flagellomeres 2.5-3 times as long as broad. Head in dorsal view 1.7-1.8(-1.9) times as broad as long, temple frequently less receded or rather rounded (Fig. 349). Hind femur 3.3-3.7 times as long as broad medially. Pterostigma 2.8-3.3 times as long as wide. First tergite 1.2-1.4 times as long as broad behind, more sculptured than that of female and beyond pair of spiracles either parallel-sided (Fig. 350) or slightly broadening (cf. ♀ Fig. 347). Body frequently with yellow or reddish yellow pattern.

Host: unknown.

Distribution: Europe.

Remarks: Within the subgenus *Glabrobracon* the species *B. subsinuatus* is nearest to *B. epitriptus* MARSHALL viewing their elongate mesosoma, less broadening first tergite and length of ovipositor sheath; the two species differ from each other by a few features keyed:

- 1 (2) Second tergite less long, usually slightly (rarely 1.3 times) longer than third tergite (Fig. 351). Head in dorsal view less transverse, 1.6-1.7 times as broad as long (Fig. 352). Basal lobe of claw less large (Fig. 353). Pterostigma issuing *r* usually proximally from its middle (Fig. 354). Tergites 2-3 usually entirely black, sometimes laterally yellow, pale yellow or reddish yellow. ♀ ♂: 2.5-3.5(-4.5) mm.....
.....*B. (Gl.) epitriptus* MARSHALL 1885
- 2 (1) Second tergite long, 1.3-1.4 times longer than third tergite (Fig. 347). Head in dorsal view transverse, 1.8-1.9 times as broad as long (Fig. 339). Basal lobe of claw relatively large (Fig. 344). Pterostigma issuing *r* usually from its middle (Fig. 345). Tergites 2-3 laterally reddish yellow, otherwise black. ♀ ♂: (2.5-)3-4 mm.....
.....*B. (Gl.) subsinuatus* SZÉPLIGETI 1901

The species *B. subsinuatus* was frequently identified as *B. discoideus* WESMAEL, i.e. the two species were not clearly differentiated (cf. PAPP 2004: 182). The recent examination of the types of both species in question made possible their unambiguous distinction:

- 1 (2) Second tergite somewhat (1.1-1.2 times) longer than third tergite (Fig. 355). Temple in dorsal view rounded (Fig. 356). Hind femur 3.6-3.8 times as long as broad (Fig. 357). Claw somewhat more downcurved (Fig. 358). ♀ ♂: 2.5-3 mm.....
.....*B. (Gl.) discoideus* WESMAEL 1838
- 2 (1) Second tergite 1.3-1.4 times longer than third tergite (Fig. 347). Temple in dorsal view rather receded (Fig. 339). Hind femur 3-3.1 times as long as broad (Fig. 343). Claw somewhat less downcurved (Fig. 344). ♀ ♂: 2.5-3.5 mm.....
.....*B. (Gl.) subsinuatus* SZÉPLIGETI 1901

SZÉPLIGETI's species names as junior synonyms of valid species names (senior synonyms)

Fairly high, namely fortyfive is the junior synonymous species names originally set up and described by SZÉPLIGETI in 1896-1904 and treated as valid species. These species names were placed in junior synonymy by the authors FAHRINGER (1927-1928), SZÉPLIGETI (1904), TELENGA (1936), TOBIAS (1961, 1986), PAPP (1966, 1968, 2004) and SHENEFELT (1978).

Summarizing the synonymizations the valid species are listed by their names with the mere indication of the number of the respective synonymous names by SZÉPLIGETI:

Bracon dichromus WESMAEL: one name, *B. dolichurus* MARSHALL: one name, *B. epitriptus* MARSHALL: two names, *B. fulvipes* NEES: one name, *B. immutator* NEES: one name, *B. intercessor* NEES: sixteen names, *B. larvicida* WESMAEL: one name, *B. leptus* Marshall: three names, *B. luteator* SPINOLA: three names, *B. mariae* DALLA-TORRE: one name, *B. nigriventris* WESMAEL: one name, *B. otiosus* MARSHALL: one name, *B. parvicornis* THOMSON: one name, *B. pectoralis* WESMAEL: three names, *B. picticornis* WESMAEL: one name, *B. piger* WESMAEL: three names, *B. truncator* MARSHALL: one name, *B. variator* NEES: two names and *B. variegator* SPINOLA: three names.

In the taxonomic part the valid species names as well as the synonyms are listed in alphabetic order. The essential bibliographic citations are given both for the valid species and for the synonymous names completed with the reasons of judgement of the synonymization.

The valid as well as the synonymous names by SZÉPLIGETI (and by other authors) are summarized in alphabetic order in the last chapter of the present paper under the title "Checklist of the *Bracon* FABRICIUS species by SZÉPLIGETI described from the western Palaearctic Region".

***Bracon (Glabrobracon) dichromus* WESMAEL**

Bracon dichromus WESMAEL 1838: 49 ♀, type locality: "environs de Liège" (Belgium), female holotype in Institut royal des Sciences naturelles de Belgique, Bruxelles; examined. - SHENEFELT 1978: 1565 (literature up to 1974). TOBIAS 1986: 134 (as synonym of *B. variator* NEES with question mark).

Bracon discretus SZÉPLIGETI 1901a: 268 (in key), 281 (description) (in Hungarian), 1904 (1901): 188 (in key), 193 (description) (in German) ♀, type locality: "Fonyód" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1566 (as synonym of *B. dichromus* WESMAEL after PAPP 1966: 382, literature up to 1966). PAPP 2004: 174 (type designation, depository and as synonym of *B. dichromus*).

R e m a r k : The identity of the two species-names under the valid name *B. dichromus* is based on the examination of the types of the two taxa; i.e. SZÉPLIGETI's name are junior synonym of *B. dichromus* senior name. The redescription, taxonomic position etc. of *B. dichromus* is planned to be presented in a revision of WESMAEL's *Bracon* species.

***Bracon (Glabrobracon) dolichurus* MARSHALL**

The synonymization of the junior name(s) *Bracon csikii* SZÉPLIGETI 1901 (and *B. monticola* KOKUJEV 1899) with the senior name *B. dolichurus* MARSHALL 1897 is presented in PAPP 1999a: 274; in this paper the redescription, taxonomic position and nearest ally of *B. dolichurus* is also given.

***Bracon (Glabrobracon) epitriptus* MARSHALL**

Bracon epitriptus MARSHALL 1885: 15 (in key), 35 (description) ♀♂, type locality: England (originally five localities were given), female lectotype in The Natural History Museum, London (3.c. 3) (further designations of the female and male paralectotypes are needed); three female paralectotypes in Magyar Természettudományi Múzeum (cf. PAPP 2003: 139, examined. - SHENEFELT 1978: 1569 (literature up to 1974).

Bracon pallidipes SZÉPLIGETI 1896: 292 (description, in Hungarian), 366 (as "pallipes": a slip of pen, description, in German) ♀, female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1568 (as synonym of *B. discoideus* WESMAEL after PAPP 1966: 384, literature up to 1974). PAPP 2004: 179 (as synonym of *B. discoideus*, type designation and depository).

R e m a r k : The junior synonymy of the name *B. pallidipes* with *B. epitriptus* senior name and valid species is based on the examination and comparison of the lectotype and paralectotype of the two taxa, respectively. The redescription, taxonomic position and nearest allies of *B. epitriptus* is planned to be presented in a revision of the European species of *Bracon*.

***Bracon (Bracon) fulvipes* NEES**

Bracon fulvipes NEES 1834: 74 ♀♂ (syntype series destroyed), type locality: "Sickershausen" (Germany) for female. - TOBIAS 1961: 165 (synonymy, redescription), SHENEFELT 1978: 1485 (literature up to 1974).

Bracon carinatus SZÉPLIGETI 1901a: 183 (in key), 272 (description) (in Hungarian), 1904 (1901): 159 (in key), 166 (description) (in German) ♀, female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1485 (as synonym of *B. fulvipes* after TOBIAS 1961: 165).

R e m a r k : *Bracon fulvipes* is a highly variable species considering its colour pattern, a few corporal measurements and sculpture of propodeum and tergites. The redescription

and taxonomic position of this species will be discussed in a paper of the European species of the genus *Bracon*.

***Bracon (Glabrobracon) immutator* NEES**

Bracon immutator NEES 1834: 76 ♀ ♂, type locality: "prope Sickershausen" (Germany), type series: many female and male syntypes, destroyed). - SHENEFELT 1978: 1636 (synonyms, aberrations, literature p to 1974). TOBIAS 1986: 129 (in key, in Russian).

Bracon hemirugosus SZÉPLIGETI 1901a: 261 (in key), 275 (description) (in Hungarian), 1904 (1901): 160 (in key), 168 (description) (in German) ♀. - SHENEFELT 1978: 1491 (as valid species, literature up to 1974). TOBIAS 1986: 125 (as synonym of *B. intercessor* NEES). PAPP 2004: 176 (type designation and depository, as synonym of *B. immutator*).

R e m a r k : The first reviser of *B. immutator* is WESMAEL (1838: 16), his series (9 ♀ ♀ + 9 ♂ ♂) of this species is considered as authentic identification and taxonomic statement. The study of the series resulted the establishment of the synonymy of SZÉPLIGETI's name *B. hemirugosus*. The redescription and taxonomic placement of *B. immutator* will be discussed in a paper of the *Bracon* species of Europe. *B. immutator* is a variable species viewing the sculpture of tergites 1-3 and, less variably, the colour of legs and tergites.

***Bracon (Bracon) intercessor* NEES**

Bracon intercessor NEES 1834: 71 ♀ ♂ (several female and male syntype specimens), locality: "prope Sickershausen" (Germany) for female and "Italia" for female + male (syntype series destroyed). - SHENEFELT 1978: 1494 (synonyms, literature up to 1974). TOBIAS 1986: 125 (in key, synonyms, in Russian).

Bracon adjectus SZÉPLIGETI 1901a: 261 (in key), 274 (description) (in Hungarian), 1904 (1901): 160 (in key), 168 (description) (in German) "♂" = ♀, type locality: "Ivánca" (Hungary), female holotype in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1462 (as valid species, literature up to 1968). TOBIAS 1986: 125 (in key, as new synonym of *B. intercessor*). PAPP 2004: 171 (type designation and depository, as synonym of *B. intercessor* var. *fallaciosus* SZÉPLIGETI).

Bracon bisinuatus SZÉPLIGETI 1901a: 184 (in key), 273 (description) (in Hungarian), 1904 (1901): 161 (in key), 171 (description) (in German) ♀, type locality: "Budapest" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1470 (as valid species, literature up to 1968). TOBIAS 1986: 125 (in key, as synonym of *B. intercessor*). PAPP 2004: 171 (type designation and depository, as synonym of *B. intercessor*).

Bracon dubiosus SZÉPLIGETI 1901a: 185 (in key), 274 (description) (in Hungarian), 1904 (1901): 160 (in key), 169 (description) (in German) ♀, type locality: "Budapest" (Hungary), female lectotype (and one female paralectotype) in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1495 (as synonym of *B. intercessor* after PAPP 1968: 200, literature up to 1968). TOBIAS 1986: not mentioned. PAPP 2004: 174 (type designations and depository, as synonym of *B. intercessor*).

Bracon elegans SZÉPLIGETI 1901a: 184 (in key), 273 (description) (in Hungarian), 1904 (1901): 160 (in key), 167 (description) (in German) ♀, type locality: "P.-Maróth" (=Pilismarót, Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1495 (as synonym of *B. intercessor* after PAPP 1968: 200, literature up to 1968). TOBIAS 1986: not mentioned. PAPP 2004: 174 (type designation and depository, as synonym of *B. intercessor*).

Bracon fallaciosus SZÉPLIGETI 1901a: 261 (in key), 274 (description) (in Hungarian), 1904 (1901): 161 (in key), 171 (description) (in German) ♀, type locality: "Budapest" (Hungary), female lectotype (and two female paralectotypes) in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1495 (as *B. intercessor* var. *fallaciosus* after PAPP 1968: 200, literature up to 1974). TOBIAS 1986: 125 (as synonym of *B. intercessor*). PAPP 2004: 174 (type designation and depository, as *B. intercessor* var. *fallaciosus* new status)).

- Bracon fulvus* SZÉPLIGETI 1896: 289 (description, in Hungarian), 1904 (1901): 160 (in key), 171 (description) (in German) ♀, type locality: "Budapest: Rákospalota" (Hungary), female lectotype (and one female paralectotype) in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1633 (as valid species, literature up to 1974). TOBIAS 1986: 125 (in key, as synonym of *B. intercessor*). PAPP 2004: 174 (type designation and depository, as synonym of *B. intercessor*).
- Bracon mixtus* SZÉPLIGETI 1901a: 184 (in key), 273 (description), 1904 (1901): 160 (in key), 167 (description) (in German) ♀, type locality: "P.-Maróth" (=Pilismarót, Hungary), female lectotype (and six female paralectotypes) in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1514 (as valid species, literature up to 1974). TOBIAS 1986: 125 (as new synonym of *B. intercessor*). PAPP 2004: 178 (type designation and depository, as *B. intercessor* var. *mixtus* new status).
- Bracon mundus* SZÉPLIGETI 1901a: 184 (♀), 262 (♂) (in key), 274 (description) (in Hungarian), 1904 (1901): 161 (♀), 163 (♂) (in key), 171 (description) (in German) ♀ ♂, type locality: "Budapest" (Hungary), female lectotype (and one female + two male paralectotypes) in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1495 (as synonym of *B. intercessor* after PAPP 1968: 200, literature up to 1968). TOBIAS 1986: not mentioned. PAPP 2004: 178 (type designation and depository, as *B. intercessor* var. *mundus* new status).
- Bracon nigropictus* SZÉPLIGETI 1901a: 261 (in key), 275 (description) (as valid species), 1904 (1901): 167 (description as *B. mixtus* var. *nigropictus*) ♀, type locality: "P.-Maróth" (=Pilismarót, Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1514 (as *B. mixtus* var. *nigropictus*, literature up to 1936). TOBIAS 1986: not mentioned. PAPP 2004: 178 (type designation and depository, as identical with *B. intercessor* var. *mixtus*).
- Bracon nitidiusculus* SZÉPLIGETI 1901a: 261 (in key), 275 (description) (in Hungarian), 1904 (1901): 161 (in key), 172 (description) (in German) ♀, type locality: "Fonyód" (Hungary), female holotype in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1462 (as synonym of *B. adjectus* after PAPP 1968: 196, literature up to 1968). TOBIAS 1986: 125 (in key, as synonym of *B. intercessor*). PAPP 2004: 178 (type designation and depository, as identical with *B. intercessor* var. *fallaciosus*).
- Bracon subtilis* SZÉPLIGETI 1901a: 184 (in key), 272 (description) (in Hungarian), 1904 (1901): 160 (in key), 167 (description) (in German) ♀, type locality: "Budapest" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1482 (as synonym of *B. erythrostictus* Marshall after PAPP 1968: 198, literature up to 1968). Tobias 1986: not mentioned. PAPP 2004: 182 (type designation and depository, as synonym of *B. intercessor*).
- Bracon suspectus* SZÉPLIGETI 1901a: 184 (in key), 273 (description), 1904 (1901): 161 (in key), 170 (description) (in German) ♀, type locality: "Budapest" (Hungary), female lectotype (and one female paralectotype) in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1544 (as valid species, literature up to 1971). TOBIAS 1986: 125 (in key, as new synonym of *B. intercessor*). PAPP 2004: 182 (type designation and depository, as synonym of *B. intercessor*).

Remark: *B. intercessor* is a highly variable species viewing its body length, several corporal measurements, sculpture of tergites and colour pattern. This high variability is well indicated by the fact that the different deviating forms were described as many as twenty species by a few authors (the most by SZÉPLIGETI). The Nees Collection (bracnids etc.) was destroyed at the end of the second world war; in the case of the species *B. intercessor* is particularly needed in the designation of the neotype to promote its unambiguous distinction from its nearest allies.

***Bracon (Lucobracon) larvicida* WESMAEL**

Bracon larvicida WESMAEL 1838: 41 ♀, type locality: "environs de Bruxelles" (Belgium), female lectotype (and three female paralectotypes) in Institut royal des Sciences naturelles de Bel-

gique, Bruxelles; examined. - SHENEFELT 1978: 1636 (literature up to 1974). TOBIAS 1986: 136 (in key).

Bracon crassiusculus SZÉPLIGETI 1901a: 265 (in key), 279 (description) (in Hungarian), 1904 (1901): 177, 178 (in key), 182 (description) (in German) ♀, type locality: "Pápa" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1619 (as synonym of *B. grandiceps* THOMSON after PAPP 1969: 325, literature up to 1974). TOBIAS 1986: not mentioned. PAPP 2004: 173 (type designation and depository, as synonym of *B. larvicida*).

R e m a r k : The junior synonymy of *B. crassiusculus* with the valid species (sen. syn.) of *B. larvicida* is based on the examination and comparison of the types of the two taxa in question. This synonymization was omitted in my previous paper (PAPP 2005) hence this complementation is an addition to it. The redescription and taxonomic placement of *B. larvicida* will be presented in a paper of WESMAEL's *Bracon* species.

***Bracon (Bracon) leptus* MARSHALL**

Bracon leptus MARSHALL 1897: 64 ♀ ♀, type locality: "Espagne (Barcelone)", female lectotype (designated by PAPP 2003: 140) in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1502 (synonymy), literature up to 1974). TOBIAS 1986: 125 (in key).

Bracon centaureae SZÉPLIGETI 1901a: as valid species 183 (in key), 271 (description) (in Hungarian), 1904 (1901): as variety of *B. minutator* FABRICIUS 159 (in key), 166 (description) (in German) ♀, type locality: "Budapest" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1502 (as variety or aberration of *B. leptus*, literature up to 1974). PAPP 2004: 172 (type designation and depository, as variety of *B. leptus*).

Bracon rufipalpis SZÉPLIGETI 1901a: 182 (in key), 270 (description) (in Hungarian), 1904 (1901): 158 (in key), 165 (description) (in German) ♀, type locality: "Budapest" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1534 (as valid species, literature up to 1974). TOBIAS 1986: 125 (as synonym of *B. leptus*). PAPP 2004: 180 (type designation and depository, identical with *B. leptus* var. *rufipediator*).

Bracon rufipediator SZÉPLIGETI 1901a: 182 (in key), 271 (description) (in Hungarian), 1904 (1901): 158 (in key), 165 (description) (in German) ♀, type locality: "Budapest" (Hungary), female lectotype (and four female paralectotypes) in Magyar Természettudományi Múzeum, Budapest; examined. - PAPP 1968: 206 (type designation, synonym of *B. rufipalpis*). SHENEFELT 1978: 1534 (as synonym of *B. rufipalpis* after PAPP l.c., literature up to 1968). PAPP 2004: 180 (type depository, as *B. leptus* var. *rufipediator* and one female paralectotype as synonym of *B. intercessor* NEES).

R e m a r k : The unusually long second tergite of *B. leptus* is a reliable feature to recognize it. The identity of SZÉPLIGETI's three taxa in question is based on this morphological feature. The redescription and taxonomic position of *B. leptus* is planned to preserve in a paper of the European species of *Bracon*.

***Bracon (Bracon) luteator* SPINOLA**

Bracon luteator SPINOLA 1808: 106 ♀, type locality: "montibus Orerii" (near Torino, Italy), syntype series ? and syntype series deposited in Museo Regionale di Scienze Naturali, Torino; not examined. - SHENEFELT 1978: 1504 (synonyms, variety and aberration, literature up to 1974). TOBIAS 1986: 123 (in key). TOBIAS & BELOKOBYSKI 2000: 124 (in key).

Bracon hypopygialis SZÉPLIGETI 1901a: as valid species 183 (in key), 271 (description) (in Hungarian), 1904 (1901): as *B. minutator* var. *hypopygialis* 159 (in key), 166 (description) (in German) ♀, type locality: "Budapest" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - TOBIAS 1961: 156 (as synonym of *B. nigripediator* NEES, type designation). SHENEFELT 1978: 1504 (as synonym of *B. luteator*, literature up to

1961). PAPP 2004: 176 (type designation and depository, as identical with *B. luteator* var. *nigripedator* NEES).

Bracon intermedius SZÉPLIGETI 1901a: as valid species 183 (in key), 272 (description) (in Hungarian), 1904 (1901): as *B. minutor* var. *intermedius* 159 (in key), 166 (description) ♀, type locality: "Budapest" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - TOBIAS 1961: 156 (as synonym of *B. nigripedator* NEES, type designation). SHENEFELT 1978: 1505 (as synonym of *B. luteator*, literature up to 1961). PAPP 2004: 176 (type designation and depository, as identical with *B. luteator*).

Bracon pilosulus SZÉPLIGETI 1901a: as valid species 183 (in key), 271 (description) (in Hungarian), 1904 (1901): as *B. minutor* var. *pilosulus* 159 (in key), 165 (description) ♀, type locality: "Budapest" (Hungary), syntype series (?one female) lost. - TOBIAS 1961: 156 (as synonym of *B. nigripedator* NEES). SHENEFELT 1978: 1505 (as synonym of *B. luteator*, literature up to 1961). PAPP 2004: 179 (fixation of the lost of syntype series, as identical with *B. luteator* var. *nigripedator*).

Remark: The three taxa by SZÉPLIGETI in question are objective junior synonyms of *B. luteator*. This identity was indicated by SZÉPLIGETI himself relegating them as varieties of *B. minutor* (FABRICIUS) (which species was misinterpreted for a long time and clarified its true taxonomic position in the present paper by a reliable distinction from *B. luteator*). The redescription and taxonomic position of *B. luteator* will be discussed in a revision of the European species of the genus *Bracon*.

***Bracon (Bracon) mariae* DALLA-TORRE**

Bracon semiflavus THOMSON 1894: 1842 (nec BRULLÉ 1846: 416) ♀, type locality: "Triest" (Italy), female lectotype in Zoologisk Museum, Lund; examined.

Bracon mariae DALLA-TORRE 1898: 278 replacement name for *B. semiflavus* THOMSON. - SHENEFELT 1978: 1507 (literature up to 1968). TOBIAS 1986: 125 (in key).

Bracon pygidialis SZÉPLIGETI 1901a: as valid species 182 (in key), 271 (description), 1904 (1901): as *B. mariae* var. *pygidialis* 165 (in key) ♀♂, type locality: "Budapest" (Hungary), female lectotype (and one male paralectotype) in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1507 (as *B. mariae* var. *pygidialis*, literature up to 1936). PAPP 2004: 179 (type designations and depository, as *B. mariae* var. *pygidialis*).

Remark: The identity of *B. pygidialis* (jun. syn.) with *B. mariae* was recognized by SZÉPLIGETI himself in 1904 (l.c.). The redescription and taxonomic position of *B. mariae* will be discussed in a revision of the European species of the genus *Bracon*.

***Bracon (Glabrobracon) nigriventris* WESMAEL**

Braco nigriventris WESMAEL 1838: 36 ♀, type locality: "environs de Bruxelles" (Belgium), female holotype in Institut royal des Sciences naturelles de Belgique, Bruxelles; examined. - SHENEFELT 1978: 1641 (literature up to 1974). TOBIAS 1986: 147 (in key). TOBIAS & BELOKOBYLSKIY 2000: 162 (in key).

Bracon indubius SZÉPLIGETI 1901a: 264 (in key), 278 (description) (in Hungarian), 1904 (1901): 178 (in key), 182 (description) (in German) ♀, type locality: "Budapest" (Hungary), type series partim: two female paralectotypes in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1642 (as *B. nigriventris* var. *indubius*, literature up to 1969). TOBIAS 1986: 147 (in key as synonym of *B. nigriventris*). PAPP 2004: 176 (type designation and depository, type series identical with six species).

Bracon subornatus SZÉPLIGETI 1901a: 263 (in key), 277 (description) (in Hungarian), 1904 (1901): 175 (in key), 180 (description) (in German) ♀, type locality: "Toplice" or "Toplice" (=Maroshévíz, Romania: Transylvania, before 1920 Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - PAPP 1969: 322 (in key) 329 (synonymization with *B. nigriventris*). SHENEFELT 1978: 1642 (as synonym of *B. nigriventris* after PAPP l.c., literature up to 1969). TOBIAS 1986: not mentioned. PAPP 2004: 181 (type designation and depository, as valid species).

R e m a r k : At present I am on the opinion that the names *B. indubius* (partim) and *B. subornatus* refer to WESMAEL's *B. nigriventris*. A future investigation will decide the identity or the validity of *B. subornatus* as true species.

***Bracon (Glabrobracon) otiosus* MARSHALL**

Bracon otiosus MARSHALL 1885: 42 ♀, type locality: (?)England ("Described from 3 specimens in Fitch's collection"), syntype series in The Natural History Museum, London; examined. - SHENEFELT 1978: 1559 (as synonym of *B. bipartitus* Wesmael, literature up to 1904). PAPP 1999c: 145 (as valid species).

Bracon explorator SZÉPLIGETI 1904 (1901) (not *B. explorator* SAY 1836): 189 (in key), 194 (description) (in German) ♀ ♂ (syntype series 6 ♀ ♀ + 1 ♂), type locality: "Siófok" (Hungary), female lectotype (and five female + one male paralectotypes) in Magyar Természettudományi Múzeum, Budapest; examined. - TOBIAS 1961: 162 (as synonym of *B. variator* NEES). SHENEFELT 1978: 1572 (as synonym of *B. maculiger* WESMAEL after PAPP 1966: 379). PAPP 1999c: 145 (as synonym of *B. otiosus*); 2004: 174 (as synonym with *B. otiosus*: female lectotype, four female + one male paralectotypes and with *B. piger* WESMAEL: partim: one female paralectotype, type designation and depository).

R e m a r k : The synonymization of *B. explorator* (jun. name) with *B. otiosus* is based on the examination of the types (*B. explorator*) and "Type" of *B. otiosus*, the types are quite identical.

***Bracon (Glabrobracon) parvicornis* THOMSON**

Bracon parvicornis THOMSON 1894: 1809 ♀, type locality: "Degeberga in Skåne" (Sweden), female lectotype (and one male paralectotype) in Zoologisk Museum, Lund; examined. - PAPP 1969: 183 (redescription, type designation). SHENEFELT 1978: 1579 (literature up to 1971). TOBIAS 1986: 133 (in key).

Bracon carbonarius SZÉPLIGETI 1901a: 270 (in key), 283 (description) (in Hungarian), 1904 (1901): 191 (in key), 196 (description) (in German) ♀ ♂, type locality: "Budapest" (Hungary), female lectotype (and two female + six male paralectotypes) in Magyar Természettudományi Múzeum, Budapest; examined. - PAPP 1966: as valid species 381 (redescription, type designation); 1969: 183 (synonymization). SHENEFELT 1978: 1560 (as valid species, literature up to 1966).

R e m a r k : The junior synonym of *B. carbonarius* with *B. parvicornis* (sen. syn.) was established by PAPP in 1969 (l.c.), however, SHENEFELT (l.c.) disregarded it. *B. parvicornis* will be discussed in a paper of the European species of the genus *Bracon*.

***Bracon (Bracon) pectoralis* WESMAEL**

Bracon pectoralis WESMAEL 1838: 12 ♀ ♂, type locality: "environs de Liège" (Belgique), female lectotype (and two female + one male paralectotypes) in Institut royal des Sciences naturelles de Belgique, Bruxelles; examined. - SHENEFELT 1978: 1523 (literature up to 1974). TOBIAS 1986: 124 (in key). TOBIAS & BELOKOBYLSKIJ 2000: 124 (in key).

Bracon fumigatus SZÉPLIGETI 1901a: 184 (in key), 273 (description) (in Hungarian), 1904 (1901): 161 (in key) and 170 (description) (in German) ♀, type locality: "Budapest" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1487 (as valid species after PAPP 1968: 200, literature up to 1968). TOBIAS 1986: 125 (in key as synonym of *B. intercessor* Nees). PAPP 2004: 175 (as *B. pectoralis* var. *fumigatus*, type designation and depository).

Bracon ochrosus SZÉPLIGETI 1896b: 290 (description, in Hungarian), 363 (description, in German) ♂, type locality: "Budapest: Budakeszi" (Hungary), male lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - PAPP 1968: 206 (synonymization). SHENEFELT 1978: 1523 (as synonym of *B. pectoralis* after PAPP l.c., literature up to 1968). PAPP 2004: 179 (type designation and depository, synonymy).

Bracon sulphurator SZÉPLIGETI 1896a: 168 (description, in Hungarian), 231 (description, in German) ♀ ♂, type locality: "Budapest" (Hungary), female lectotype (and three male paralectotypes) in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1543 (as valid species, literature up to 1971). PAPP 2004: 182 (type designation and depository, synonymy).

Remark: The forms of *B. ochrosus* and *B. sulphurator* are identical with the nominate form *B. pectoralis*; the form *B. fumigatus* is representing a dark coloured variety of the nominate form: *B. pectoralis* var. *fumigatus* (SZÉPLIGETI).

***Bracon (Glabrobracon) picticornis* WESMAEL**

Braco picticornis WESMAEL 1838: 42 ♀ ♂, type locality: "environs de Bruxelles" (Belgium), female lectotype (and four female + two male paralectotypes) in Institut royal des Sciences naturelles de Belgique, Bruxelles; examined. - SHENEFELT 1978: 1643 (literature up to 1974). TOBIAS 1986: 136 (in key).

Bracon versicolor SZÉPLIGETI 1901a: 263 (in key), 278 (description) (in Hungarian), 1904 (1901): 176 (in key), 180 (description) ♀, type locality: "P.-Maróth" (=Pilismarót, Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - SHENEFELT 1978: 1645 (listed nine aberrations and four varieties of the nominate form, as *B. picticornis* var. *versicolor* after PAPP 1974: 433, literature up to 1974). PAPP 2004: 183 (type designation and depository, as *B. picticornis* var. *versicolor*).

Remark: The var. *versicolor* SZÉPLIGETI differs from the nominate form *B. picticornis* WESMAEL by its light colour pattern. The redescription and taxonomic position of *B. picticornis* will be presented in a paper of WESMAEL's *Bracon* species.

***Bracon (Pigeria) piger* WESMAEL**

Braco piger WESMAEL 1838: 48 ♀, type locality: "la plaine de Mon-Plaisir, près du Bruxelles" (Belgium), female lectotype (and one female paralectotype, present designations) in Institut royal des Sciences naturelles de Belgique, Bruxelles; examined. - SHENEFELT 1978: 1580 (literature up to 1974). TOBIAS 1986: 134 (in key). TOBIAS & BELOKOBYLSKIJ 2000: 164 (in key).

Bracon explorator SZÉPLIGETI 1904 (1901): 189 (in key), 194 (description) (in German) ♀ ♂, type locality: "Siófok" (Hungary), one female paralectotype (from Siófok, cf. PAPP 2004: 174) identical with *B. piger*, further specimens (female lectotype, four female + one male paralectotypes) identical with *B. otiosus* MARSHALL: see also this species, types in Magyar Természettudományi Múzeum, Budapest; examined. - TOBIAS 1961: 162 (as synonym of *B. variator* NEES). PAPP 1966: 386 (as synonym of *B. maculiger* WESMAEL). SHENEFELT 1978: 1572 (as synonym of *B. maculiger* after PAPP l.c., literature up to 1966). PAPP 2004: 174 (type designation and depository, as synonym of *B. piger*, partim: 1 ♀ paralectotype).

Bracon rotundatus SZÉPLIGETI 1901a: 270 ("rotundator" in key), 282 (description) (in Hungarian), 1904 (1901): 190 (in key), 195 (description) (in German) ♀, type locality: "Budapest" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - TOBIAS 1961: 162 (as synonym of *B. variator* NEES). SHENEFELT 1978: 1587 (as synonym of *B. variator* Nees after TOBIAS l.c., literature up to 1967). PAPP 2004: 179 (type designation and depository, as valid species).

Bracon rotundulus SZÉPLIGETI 1904 (1901): 190 (in key), 195 (description) (in German) ♀ ♂, type locality: "Budapest" (Hungary), female lectotype (and two female paralectotypes) in Magyar Természettudományi Múzeum, Budapest; examined. - TOBIAS 1961: 162 (as synonym of *B. variator* NEES). PAPP 1966: 378 (as synonym of *B. variator*). SHENEFELT 1978: 1587 (as synonym of *B. variator* after TOBIAS l.c., literature up to 1967). PAPP 2004: 180 (type designation and depository, as *B. variator* var. *rotundulus*).

Remark: 1.) The synonymization of the names *B. explorator* (partim), *B. rotundatus* and *B. rotundulus* is based on the examination of the types of the taxa in question inclu-

ding that of *B. piger* too. Their identity with *B. maculiger* (PAPP 1966), *B. praecox* (TELENGA 1936) and *B. variator* (PAPP 1966, SHENEFELT 1978, TOBIAS 1961) is rejected. The redescription, taxonomic position etc. of *B. piger* is planned to be presented in a revision of WESMAEL's *Bracon* species. - 2.) The subgenus *Pigeria* was set up by Van ACHTERBERG (1985) originally as a new genus closely related to *Bracon*. I consider this taxon but a subgenus of the genus *Bracon*.

***Bracon (Bracon) trucidator* MARSHALL**

Bracon trucidator MARSHALL 1888: 93 ♀ ♂, type locality: "Italie septentrionale (Canonica d'Adda)", female lectotype (and one female + one male paralectotypes, present designations) in Museo Civico di Storia Naturale "Giacomo Doria", Genova; examined. - TOBIAS 1961: 155 as valid species (redescription, synonyms). PAPP 1966: 205 (as synonym of *B. minutator*). SHENEFELT 1978: 1513 (as *B. minutator* var. *trucidator*, literature up to 1974). TOBIAS 1986: 123 (in key, valid species).

Bracon pannonicus SZÉPLIGETI 1904 (1901): 159 (in key), 166 (description) (in German) ♀, type locality: "Budapest" (Hungary), female holotype in Magyar Természettudományi Múzeum, Budapest; examined. - TOBIAS 1961: 155 (synonym with *B. trucidator*). PAPP 1966 (type designation, as synonym with *B. minutator*). SHENEFELT 1978: 1512 (as synonym of *B. minutator*, literature up to 1968). PAPP 2004: 179 (type designation and depository, as synonym of *B. trucidator*).

R e m a r k : The holotype specimen of *B. pannonicus* (jun. name) is identical in every specific feature with the nominate form *B. trucidator* (sen. name). The redescription, taxonomic position and the recognition by identification key of *B. trucidator* is planned to be presented in a revision of the European species of *Bracon*.

***Bracon (Glabrobracon) variator* NEES**

Bracon variator NEES 1811: 7 ♀ ♂, type locality: ?Sickershausen (Germany), syntype series: many female and male specimens, destroyed. Nees 1834: 77 ♀ ♂ (redescription). - TOBIAS 1961: 162 (redescription, synonyms). SHENEFELT 1978: 1584 (literature up to 1974). TOBIAS 1986: 134 (in key). TOBIAS & BELOKOBYLSKIJ 2000: 143 (in key).

Bracon breviventris SZÉPLIGETI 1901a: 268 (in key), 282 (description) (in Hungarian), 1904 (1901): 188 (in key), 194 (description) (in German) ♀, type locality: "Pápa" (Hungary), female lectotype (and two female paralectotypes) in Magyar Természettudományi Múzeum, Budapest; examined. - TOBIAS 1961: 164 (as synonym of *B. maculiger* WESMAEL). SHENEFELT 1978: 1572 (as synonym of *B. maculiger* after TOBIAS l.c., literature up to 1966). TOBIAS 1986: 134 (in key, as synonym of *B. variator*). PAPP 2004: 172 (female lectotype: as synonym of *B. dichromus* WESMAEL, two female paralectotypes: as synonym of *B. variator* var. *maculiger*).

Bracon collinus SZÉPLIGETI 1896: 292 (description, in Hungarian), 366 (description, in German) ♀, type locality: "Budapest" (Hungary), female lectotype (and one female paralectotype) in Magyar Természettudományi Múzeum, Budapest; examined. - SZÉPLIGETI 1904 (1901): 190 (in key, in German). PAPP 1966: 392 (as synonym of *B. variator*). SHENEFELT 1978: 1585 (as synonym of *B. variator*, literature up to 1966). TOBIAS 1986: not mentioned. PAPP 2004: 172 (type designation and depository).

R e m a r k : The forms *B. breviventris* and *B. collinus* are representing variety of *B. variator* var. *maculiger* (WESMAEL). It seems remarkable to point out that the species *B. variator* is highly variable considering its colour pattern, length of ovipositor apparatus and a few corporal measurements (on head, alar venation, tergites). The describer E. V. NEES (l.c.) himself has perceived this extreme variability denominating the many colour forms with Latin and Greek letters. - Besides SZÉPLIGETI's two species there have been

described further species too which proved identical with *B. variator* (*B. bipartitus* WESMAEL, *B. cieslikii* NIEZABITOWSKI, *B. collaris* TELENGA, *B. guttator* PANZER, *B. kotulai* NIEZABITOWSKI, *B. maculiger* Wesmael, *B. minutator* SPINOLA, *B. ornatulus* TELENGA, *B. rimulator* NIEZABITOWSKI). The redescription, taxonomic position etc. of *B. variator* is planned to be presented in a revision of WESMAEL's *Bracon* species as the first reviser of *B. variator*).

***Bracon (Bracon) variegator* SPINOLA**

Bracon variegator SPINOLA 1808: 118 ♀ ♂, type locality: "montibus Oreri" (near Torino, Italy), syntype series in Museo Regionale di Scienza Naturali, Torino (cf. C. CASORALI & R. CASORALI MORENO 1980: 52). - NEES 1834: 89 (redescription). SHENEFELT 1978: 1613 (as *Habrobracon variegator*, synonyms, literature up to 1974). TOBIAS 1986: 119 (in key).

Bracon melanosoma SZÉPLIGETI 1901a: 261 (♀), 263 (♂) (in key), 276 (description) (in Hungarian), 1904 (1901): 162 (♀), 164 (♂) (in key), 172 (description) (in German) ♀ ♂, type locality: "P.-Maróth" (=Pilismarót, Hungary), female lectotype (and two female paralectotypes) in Magyar Természettudományi Múzeum, Budapest; examined. - TOBIAS 1961: 153 (as synonym of *Habrobracon nanulus* SZÉPLIGETI). PAPP 1968: 210 (as *B. variegator* var. *melanosomus*). SHENEFELT 1978: 1614 (as synonym of *Habrobracon variegator*, literature up to 1968). TOBIAS 1986: not mentioned. PAPP 2004: 177 (type designation and depository, synonym of *B. variegator*).

Bracon micros SZÉPLIGETI 1901a: 270 (in key), 283 (description) in Hungarian, 1904 (1901): 191 (in key), 196 (description) (in German) ♀, type locality: "Szár" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - TOBIAS 1961: 153 (as synonym of *Habrobracon nanulus*). SHENEFELT 1978: 1641 (as valid species, literature up to 1974). TOBIAS 1986: not mentioned. PAPP 2004: 177 (type designation and depository, as synonym of *B. variegator*).

Bracon nanulus SZÉPLIGETI 1901a: 261 (in key), 276 (description) (in Hungarian), 1904 (1901): 162 (in key), 172 (description) (in German) ♀, type locality: "Budapest" (Hungary), female lectotype in Magyar Természettudományi Múzeum, Budapest; examined. - TOBIAS 1961: 153 (as valid species, redescription under the name *Habrobracon nanulus*). SHENEFELT 1978: 1614 (as synonym of *B. variegator*, literature up to 1974). TOBIAS 1986: 119 (as synonym of *B. variegator*). PAPP 2004: 178 (type designation and depository, as synonym of *B. variegator*).

Remark: Similar to *B. variator* the species *B. variegator* is also a highly variable one viewing its colour pattern, corporal size and sculpture of body. The forms described as three species by Szépligeti are but variabilities within the scope of *B. variegator* (the name by SPINOLA indicates its variability). The redescription, taxonomic position and promoting its recognition by identification key is planned to be presented in a revision of the European species of *Bracon*.

Checklist of the *Bracon* FABRICIUS species by SZÉPLIGETI described from the western Palearctic Region

Applied subgeneric name abbreviations: Br = *Bracon*, Cyan = *Cyanopterobracon*, Gl = *Glabrobracon*, Lu = *Lucobracon*, Osc = *Osculobracon* and Pig = *Pigiera*

The synonymous names are either between parenthesis (...) or under the valid names preceded by an equals sign (=)

abbreviator NEES 1834 Gl
 = *abscissor* NEES 1834
 = *eutrephe* MARSHALL 1897
 = *oostmaeli* WESMAEL 1838

= *regularis* WESMAEL 1838
 = *rufigaster* SZÉPLIGETI 1901
 (*abscissor* NEES 1834) = *abbreviator* NEES 1834 sen. syn. Gl
 (*adjectus* SZÉPLIGETI 1901) = *intercessor* NEES 1834 sen. syn. Br
 (*aestivalis* SZÉPLIGETI 1901) = *erraticus* WESMAEL 1838 sen. syn. Lu
alutaceus SZÉPLIGETI 1901 Br
 = *pallidalatus* TOBIAS 1957
 ?= *pygmaeus* NIEZABITOWSKI 1910 nec PROVANCHER 1880
 = *polonicus* FAHRINGER 1927
 (*bilineatus* THOMSON 1894) = *trucidator* MARSHALL 1888 sen. syn. Br
 (*bisinuatus* SZÉPLIGETI 1901) = *intercessor* NEES 1834 sen. syn. Br
 (*breviventris* SZÉPLIGETI 1901) = *variator* NEES 1811 sen. syn. Gl
 (*brunneipennis* SZÉPLIGETI 1901) = *fumatus* SZÉPLIGETI 1901 sen. syn. Gl
 (*carbonarius* SZÉPLIGETI 1901) = *parvicornis* THOMSON 1894 sen. syn. Gl
 (*carinatus* SZÉPLIGETI 1901) = *fulvipes* NEES 1834 sen. syn. Br
 (*centaureae* SZÉPLIGETI 1901) = *leptus* MARSHALL 1897 sen. syn. Br
 (*cieslikii* NIEZABITOWSKI 1901) = *variator* NEES 1811 sen. syn. Gl
cingulator SZÉPLIGETI 1901 Gl
 (*collaris* TELENGA 1936) = *variator* NEES 1811 sen. syn. Gl
 (*collinus* SZÉPLIGETI 1896) = *variator* NEES 1811 sen. syn. Gl
 (*coloratus* SZÉPLIGETI 1901) = *hyalinipennis* SZÉPLIGETI 1901 sen. syn. Lu
 (*confinis* SZÉPLIGETI 1901) = *erraticus* WESMAEL 1838 sen. syn. Lu
 (*congruus* SZÉPLIGETI 1901) = *erraticus* WESMAEL 1838 sen. syn. Lu
corruptor SZÉPLIGETI 1901 Br
 (*crassiusculus* SZÉPLIGETI 1901) = *larvicida* WESMAEL, sen. syn. 1838 Lu
curticornis SZÉPLIGETI 1901 Gl
 (*csikii* SZÉPLIGETI 1901) = *dolichurus* MARSHALL 1897 sen. syn. Gl
 (*curiosus* SZÉPLIGETI 1901) = *fortipes* WESMAEL 1838 sen. syn. Lu
 (*depressiusculus* SZÉPLIGETI 1901) = *longicaudis* WESMAEL 1838 sen. syn. Br
dichromus WESMAEL 1838 Gl
 = *discretus* SZÉPLIGETI 1901
 (*discretus* SZÉPLIGETI 1901) = *dichromus* WESMAEL 1838 sen. syn. Gl
dolichurus MARSHALL 1897 Gl
 = *csikii* SZÉPLIGETI 1901
 (*dubiosus* SZÉPLIGETI 1901) = *intercessor* NEES 1834 sen. syn. Br
 (*duplicatus* SZÉPLIGETI 1901) = *intercessor* NEES 1834 sen. syn. Br
 (*elegans* SZÉPLIGETI 1901) = *intercessor* NEES 1834 sen. syn. Br
epitriptus MARSHALL 1885 Gl
 = *melanogaster* SZÉPLIGETI 1901
 = *pallidipes* SZÉPLIGETI 1901
erraticus WESMAEL 1838 Lu
 = *aestivalis* SZÉPLIGETI 1901
 = *confinis* SZÉPLIGETI 1901
 = *congruus* SZÉPLIGETI 1901
 = *similis* SZÉPLIGETI 1901
 = *ventricosus* SZÉPLIGETI 1901
 (*eutrephe* MARSHALL 1897) = *abbreviator* NEES 1834 sen. syn. Gl
 (*explorator* SZÉPLIGETI 1904) = *otiosus* MARSHALL 1885 sen. syn. Gl
 (*explorator* SZÉPLIGETI 1901 partim) = *piger* WESMAEL 1838 sen. syn. Gl
 (*fallaciosus* SZÉPLIGETI 1901) = *intercessor* NEES 1834 sen. syn. Br
fallax SZÉPLIGETI 1901 Cyan
 = *falsus* KOKUJEV 1913
 = *oculatus* TOBIAS 1957
 = *olgae* TELENGA 1936
 (*falsus* KOKUJEV 1913) = *fallax* SZÉPLIGETI 1901 sen. syn. Cyan

femoralis BRULLÉ 1832 Lu
 = *palaestinensis* SZÉPLIGETI 1901
fortipes WESMAEL 1838 Lu
 = *curiosus* SZÉPLIGETI 1901
 = *lautus* SZÉPLIGETI 1901
 = *semirugosus* SZÉPLIGETI 1901
fulvipes NEES 1834
 = *carinatus* SZÉPLIGETI 1901
 (*fulvus* SZÉPLIGETI 1896) = *intercessor* NEES 1834 sen. syn. Br
fumarius SZÉPLIGETI 1901 Lu
fumatus SZÉPLIGETI 1901 Gl
 = *brunneipennis* SZÉPLIGETI 1901
 (*fumigatus* SZÉPLIGETI 1901) = *pectoralis* WESMAEL 1838 sen. syn. Lu
fumigidus SZÉPLIGETI 1901 Lu
 = *indubius* var. 1. (partim) et var. 2. SZÉPLIGETI 1901
 (*globiceps* SZÉPLIGETI 1901) = *sphaerocephalus* SZÉPLIGETI 1901 sen. syn. Lu
 (*gracilis* SZÉPLIGETI 1901) = *ochraceus* SZÉPLIGETI 1896 sen. syn. Lu
guttator PANZER 1805 nom. obl. = *variator* NEES 1811 Gl
hemiflavus SZÉPLIGETI 1901 Gl
 = *turcmenus* TELENGA 1936
 (*hemirugosus* SZÉPLIGETI 1901) = *immutator* NEES 1834 sen. syn. Gl
 (*hilaris* MARSHALL 1897) = *trucidator* MARSHALL 1888 sen. syn. Br
hungaricus (SZÉPLIGETI 1896) (*Pseudovipio*) L
 = *longiventris* SZÉPLIGETI 1901
 = *xanthostigma* (KOKUJEV 1904)
hyalinipennis SZÉPLIGETI 1901 Gl
 = *coloratus* SZÉPLIGETI 1901
 (*hypopygidialis* SZÉPLIGETI 1901) = *luteator* SPINOLA 1808 sen. syn. Br
illyricus MARSHALL 1888 Cyan
 = *kriechbaumeri* SZÉPLIGETI 1901
immutator NEES 1834 Gl
 = *hemirugosus* SZÉPLIGETI 1901
 (*indubius* SZÉPLIGETI 1901, partim) = *nigriventris* WESMAEL 1838 sen. syn. Gl
 (*indubius* var. 1. (partim) et var. 2. SZÉPLIGETI 1901) = *fumigidus* SZÉPLIGETI 1901
 sen. syn. Lu
 (*indubius* var. 1. SZÉPLIGETI 1901 partim) = *titubans* WESMAEL 1838 Gl
intercessor NEES 1834 Br
 = *adjectus* SZÉPLIGETI 1901
 = *bisinuatus* SZÉPLIGETI 1901
 = *dubiosus* SZÉPLIGETI 1901
 = *duplicatus* SZÉPLIGETI 1901
 = *elegans* SZÉPLIGETI 1901
 = *fallaciosus* SZÉPLIGETI 1901
 = *fulvus* SZÉPLIGETI 1896
 = *mixtus* SZÉPLIGETI 1901
 = *mundus* SZÉPLIGETI 1901
 = *nigropictus* SZÉPLIGETI 1901
 = *nitidiusculus* SZÉPLIGETI 1901
 ? = *ruficoxis* SZÉPLIGETI 1896
 = *rufipedor* SZÉPLIGETI 1901 (partim)
 = *rufiscapus* SZÉPLIGETI 1901
 = *subtilis* SZÉPLIGETI 1901
 = *suspectus* SZÉPLIGETI 1901
 (*intermedius* SZÉPLIGETI 1901) = *luteator* SPINOLA 1808 sen. syn. Br
 (*kriechbaumeri* SZÉPLIGETI 1901) = *illyricus* MARSHALL 1888 Cyan

larvicida WESMAEL 1838 Lu
 = *crassiusculus* SZÉPLIGETI 1901
 (*lautus* SZÉPLIGETI 1901) = *fortipes* WESMAEL 1838 sen. syn. Lu
leptus MARSHALL 1897 Br
 = *centaureae* SZÉPLIGETI 1901
 = *rufipalpis* SZÉPLIGETI 1901
 = *rufipedator* SZÉPLIGETI 1901
 (*longiventris* SZÉPLIGETI 1901) = *hungaricus* (SZÉPLIGETI 1896) (*Pseudovipio*) sen. syn. Lu
luteator SPINOLA 1808 Br
 = *hypopygidialis* SZÉPLIGETI 1901
 = *intermedius* SZÉPLIGETI 1901
 = *pilosulus* SZÉPLIGETI 1901
 (*maculifer* SZÉPLIGETI 1901) = *novus* SZÉPLIGETI 1901 sen. syn. Br
mariae DALLA TORRE 1898 Br
 ? = *pygidialis* SZÉPLIGETI 1901
maroccanus SZÉPLIGETI 1906 Gl
marshalli SZÉPLIGETI 1901 Gl
 (*melanogaster* SZÉPLIGETI 1901) = *epitriptus* MARSHALL 1885 sen. syn. Gl
 (*melanosoma* SZÉPLIGETI 1901) = *variegator* SPINOLA 1808 sen. syn. Br
 (*micros* SZÉPLIGETI 1901) = *variegator* SPINOLA 1808 sen. syn. Br
minutator (FABRICIUS 1798) (*Ichneumon*) Gl
 = *tener* SZÉPLIGETI 1901
 (*minutus* SZÉPLIGETI 1901) = *osculator* NEES 1811 sen. syn. Osc
 (*miroides* TOBIAS 1957) = *mirus* SZÉPLIGETI 1901 sen. syn. Lu
mirus SZÉPLIGETI 1901 Lu
 = *miroides* TOBIAS 1957
 = *xyletini* HEDQVIST 1973
 (*mixtus* SZÉPLIGETI 1901) = *intercessor* NEES 1834 sen. syn. Br
 (*mundus* SZÉPLIGETI 1901) = *intercessor* NEES 1834 sen. syn. Br
 (*nanulus* SZÉPLIGETI 1901) = *variegator* SPINOLA 1808 sen. syn. Br
 (*neglectus* SZÉPLIGETI 1904) = *rugulosus* SZÉPLIGETI 1901 sen. syn. Br
nigriventris WESMAEL 1838 Gl
 = *indubius* SZÉPLIGETI 1901 partim
 (*nigropictus* SZÉPLIGETI 1901) = *intercessor* NEES 1834 sen. syn. Br
 (*nitidiusculus* SZÉPLIGETI 1901) = *intercessor* NEES 1834 sen. syn. Br
novus SZÉPLIGETI 1901 Gl
 = *maculifer* SZÉPLIGETI 1901
obscuricornis SZÉPLIGETI 1896 Br
ochraceus SZÉPLIGETI 1896 Lu
 = *gracilis* SZÉPLIGETI 1901
 (*ochrosus* SZÉPLIGETI 1896) = *pectoralis* WESMAEL 1838 sen. syn. Br
 (*oculatus* TOBIAS 1957) = *fallax* SZÉPLIGETI 1901 sen. syn. Cyan
 (*olgae* TELENGA 1936) = *fallax* SZÉPLIGETI 1901 sen. syn. Cyan
 (*oostmaeli* WESMAEL 1838) = *abbreviator* NEES 1834 Gl
 (*ornatulus* TELENGA 1936) = *variator* NEES 1811 Gl
osculator NEES 1811 Osc
 = *minutus* SZÉPLIGETI 1901
otiosus MARSHALL 1885 Gl
 = *explorator* SZÉPLIGETI 1904
 (*palaestinensis* SZÉPLIGETI 1901) = *femoralis* BRULLÉ 1832 sen. syn. Lu
 (*pallidalatus* TOBIAS 1957) = *alutaceus* SZÉPLIGETI 1901 sen. syn. Br
 (*pallidipes* SZÉPLIGETI 1901) = *epitriptus* MARSHALL 1885 sen. syn. Gl
 (*pannonicus* SZÉPLIGETI 1901) = *trucidator* MARSHALL 1888 sen. syn. Br
parvicornis THOMSON 1894 Gl

= *carbonarius* SZÉPLIGETI 1901
pectoralis WESMAEL 1838 Br
 = *fumigatus* SZÉPLIGETI 1901
 = *ochrosus* SZÉPLIGETI 1896
 = *sulphurator* SZÉPLIGETI 1896
picticornis WESMAEL 1838 Gl
 = *versicolor* SZÉPLIGETI 1901
piger WESMAEL 1838 Pig
 = *explorator* SZÉPLIGETI 1901 partim
 = *rotundatus* SZÉPLIGETI 1901
 = *rotundulus* SZÉPLIGETI 1904
(pilosulus SZÉPLIGETI 1901) = *luteator* SPINOLA 1808 sen. syn. Br
(polonicus FAHRINGER 1927) = *alutaceus* SZÉPLIGETI 1901 sen. syn. Br
(?pygidialis SZÉPLIGETI 1901) = *mariae* DALLA TORRE 1898 sen. syn. Br
(?pygmaeus NIEZABITOWSKI 1910) = *alutaceus* SZÉPLIGETI 1901 sen. syn. Br
(quinquemaculatus SZÉPLIGETI 1901) = *subrugosus* SZÉPLIGETI 1901 sen. syn. Br
(regularis WESMAEL 1838) = *abbreviator* NEES 1834 sen. syn. Gl
(rimulator NIEZABITOWSKI 1901) = *variator* NEES 1811 sen. syn. Gl
(rotundatus SZÉPLIGETI 1901) = *piger* WESMAEL 1838 sen. syn. Pig
(rotundulus SZÉPLIGETI 1904) = *piger* WESMAEL 1838 sen. syn. Pig
?ruficoxis SZÉPLIGETI 1896 ? = *intercessor* NEES 1834 sen. syn. Br
(rufigaster SZÉPLIGETI 1901) = *abbreviator* NEES 1834 sen. syn. Gl
(rufipalpis SZÉPLIGETI 1901) = *leptus* MARSHALL 1897 sen. syn. Br
(rufipedor SZÉPLIGETI 1901 partim) = *intercessor* NEES 1834 sen. syn. Br
(rufipedor SZÉPLIGETI 1901 partim) = *leptus* MARSHALL 1897 sen. syn. Br
(rufiscapus SZÉPLIGETI 1901) = *intercessor* NEES 1834 sen. syn. Br
rugulosus SZÉPLIGETI 1901 Br
 = *neglectus* SZÉPLIGETI 1904
 = *spurnensis* HINCKS 1951
(?rytrensis NIEZABITOWSKI 1910) = *variator* NEES 1811 sen. syn. Gl
sabulosus SZÉPLIGETI 1896 Cyan
 = *turkestanum* (FAHRINGER 1934) (*Glabriolum*)
(semirugosus SZÉPLIGETI 1901) = *fortipes* WESMAEL 1838 sen. syn. Lu
(similis SZÉPLIGETI 1901) = *erraticus* WESMAEL 1838 sen. syn. Lu
sphaerocephalus SZÉPLIGETI 1901 Lu
 = *globiceps* SZÉPLIGETI 1901
(spurnensis HINCKS 1951) = *rugulosus* SZÉPLIGETI 1901 sen. syn. Br
(subglaber SZÉPLIGETI 1901) = *subrugosus* SZÉPLIGETI 1901 sen. syn. Br
(subornatus SZÉPLIGETI 1901) = *titubans* WESMAEL 1838 sen. syn. Gl
subrugosus SZÉPLIGETI 1901 Br
 = *quinquemaculatus* SZÉPLIGETI 1901
 = *subglaber* SZÉPLIGETI 1901
 = *sulcatulus* SZÉPLIGETI 1896
 = *tauricus* TELENGA 1936
 = *trypetanus* FAHRINGER 1927
subsinuatus SZÉPLIGETI 1901 Gl
(subtilis SZÉPLIGETI 1901) = *intercessor* NEES 1834 sen. syn. Br
(sulcatulus SZÉPLIGETI 1896) = *subrugosus* SZÉPLIGETI 1901 sen. syn. Br
(sulphurator SZÉPLIGETI 1896) = *pectoralis* WESMAEL 1838 sen. syn. Br
(suspectus SZÉPLIGETI 1901) = *intercessor* NEES 1834 sen. syn. Br
(tauricus TELENGA 1936) = *subrugosus* SZÉPLIGETI 1901 sen. syn. Br
(tener SZÉPLIGETI 1904) = *minutator* (FABRICIUS 1798) sen. syn. Gl
(terebrator SZÉPLIGETI 1901) = *titubans* WESMAEL 1838 sen. syn. Gl
titubans WESMAEL 1838 Gl
 = *indubius* var. 1. SZÉPLIGETI 1901 (partim)

= *subornatus* SZÉPLIGETI 1901
 = *terebrator* SZÉPLIGETI 1901
trucidator MARSHALL 1888 Br
 = *bilineatus* THOMSON 1894
 = *hilaris* MARSHALL 1897
 = *pannonicus* SZÉPLIGETI 1901
 (*trypetanus* FAHRINGER 1927) = *subrugosus* SZÉPLIGETI 1901 sen. syn. Br
 (*turkmenus* TELENGA 1936) = *hemiflavus* SZÉPLIGETI 1901 Gl
 (*turkestanum* FAHRINGER 1934) = *sabulosus* SZÉPLIGETI 1896 sen. syn. Cyan
variator NEES 1811 Gl
 = *breviventris* SZÉPLIGETI 1901
 = *cieslikii* NIEZABITOWSKI 1910
 = *collaris* TELENGA 1936
 = *collinus* SZÉPLIGETI 1901
 = *guttator* PANZER 1805 nom. obl.
 = *ornatulus* TELENGA 1936
 = *rimulator* NIEZABITOWSKI 1910
 ?= *rytensis* NIEZABITOWSKI 1910
variegator SPINOLA 1808 Br
 = *melanosoma* SZÉPLIGETI 1901
 = *micros* SZÉPLIGETI 1901
 = *nanulus* SZÉPLIGETI 1901
 (*ventricosus* SZÉPLIGETI 1901) = *erraticus* WESMAEL 1838 sen. syn. Lu
 (*versicolor* SZÉPLIGETI 1901) = *picticornis* WESMAEL 1838 sen. syn. Gl
 (*xanthostigma* KOKUJEV 1904) = *hungaricus* (SZÉPLIGETI 1896) (*Pseudovipio*) sen.
 syn. Lu
 (*xyletini* HEDQVIST 1973) = *mirus* SZÉPLIGETI 1901 sen. syn. Lu

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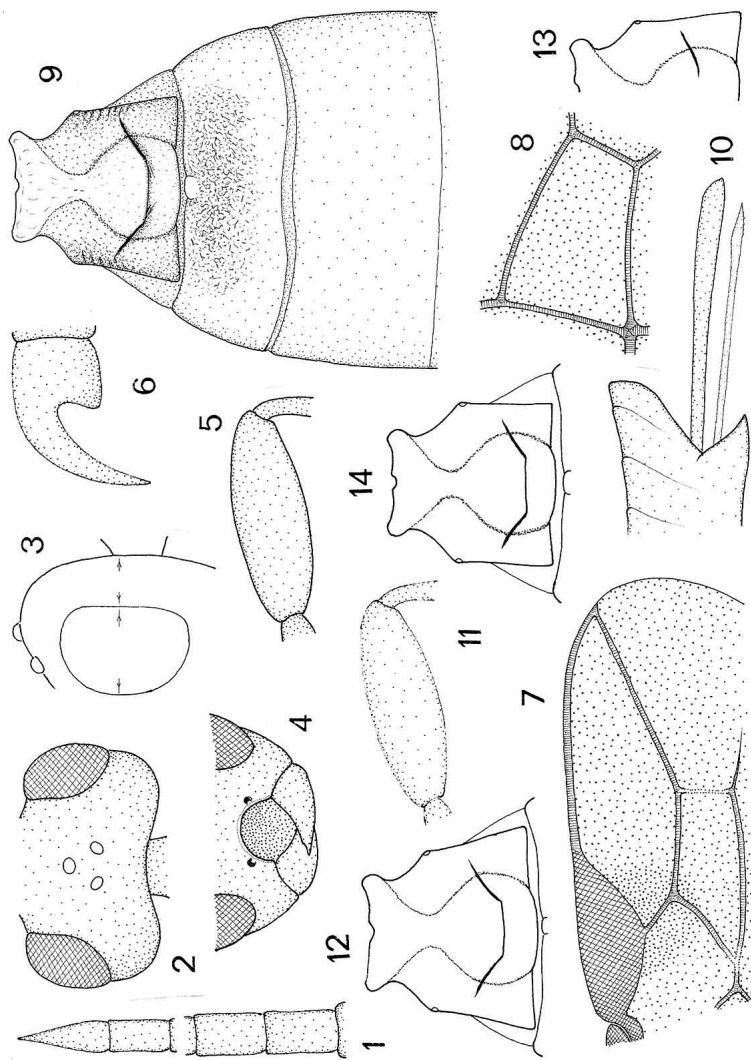
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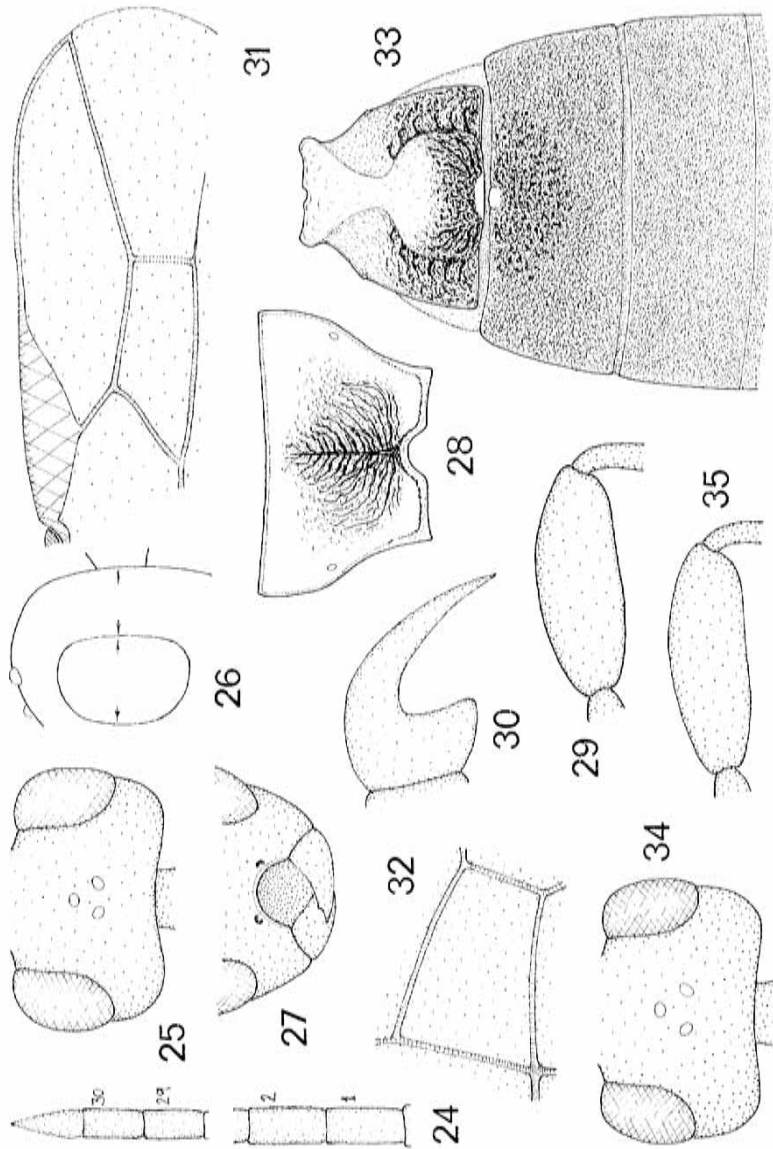
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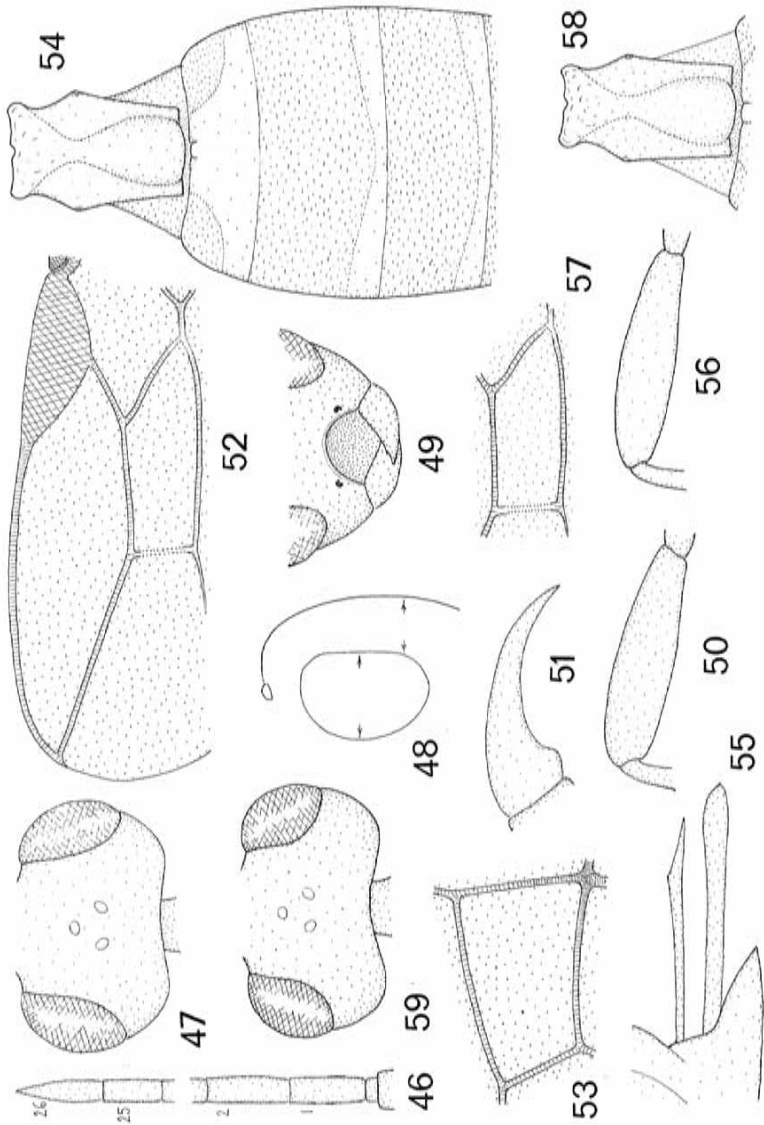
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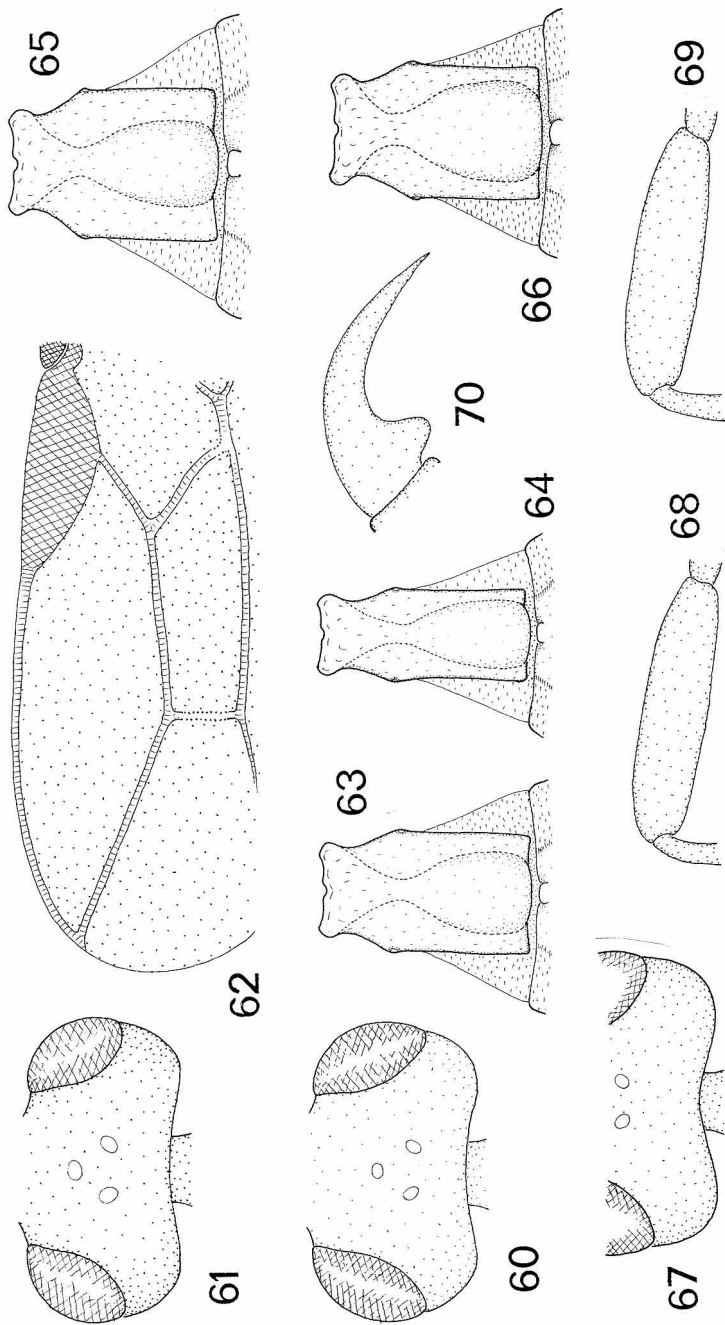
Figs 1-14. *Bracon abbreviator* NEES 1834 (♀ neotype: Figs 1-10): (1) flagellum: first two and penultimate flagellomeres, (2) head in dorsal view, (3) head in lateral view, (4) ventral half of head in frontal view, (5) hind femur, (6) claw, (7) distal part of right fore wing, (8) first discal cell, (9) first tergite: ♀, (10) posterior half of metasoma with ovipositor apparatus, (11) hind femur: ♀, (12) first tergite: ♀, (13) right half of first tergite: ♀, (14) first tergite: ♂.



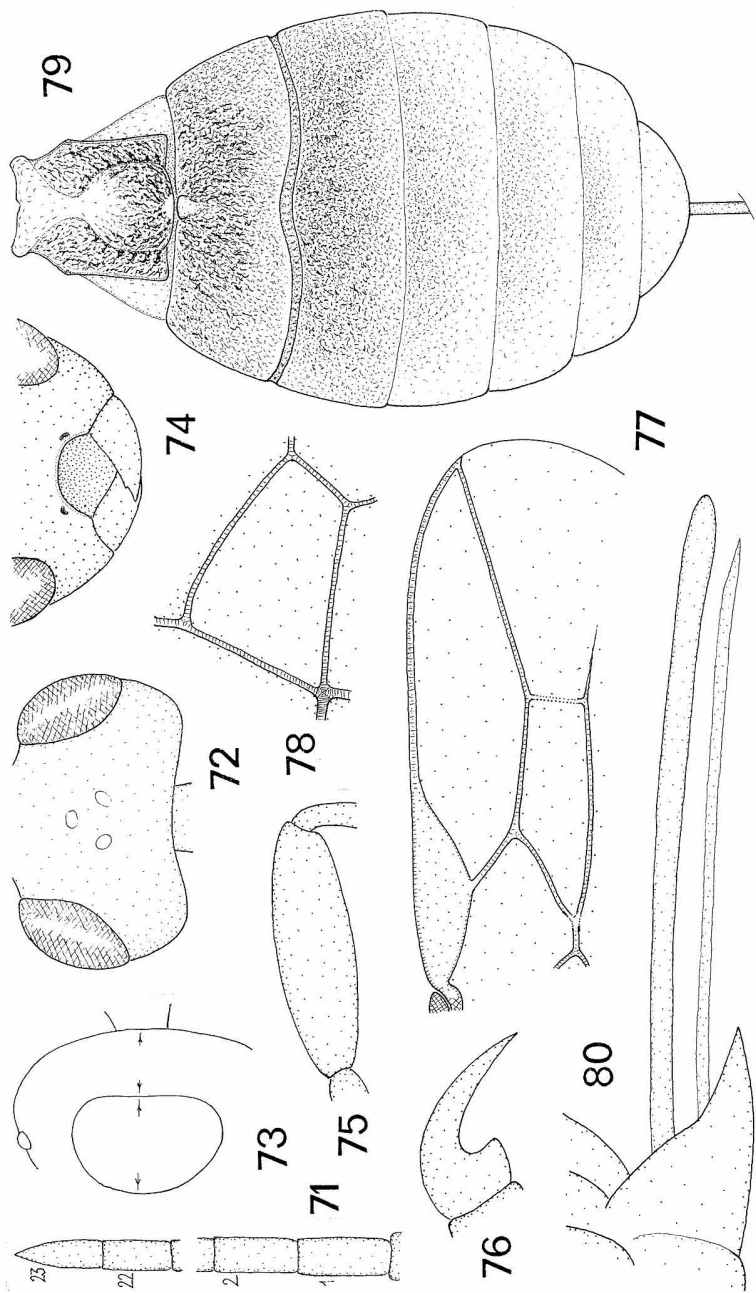
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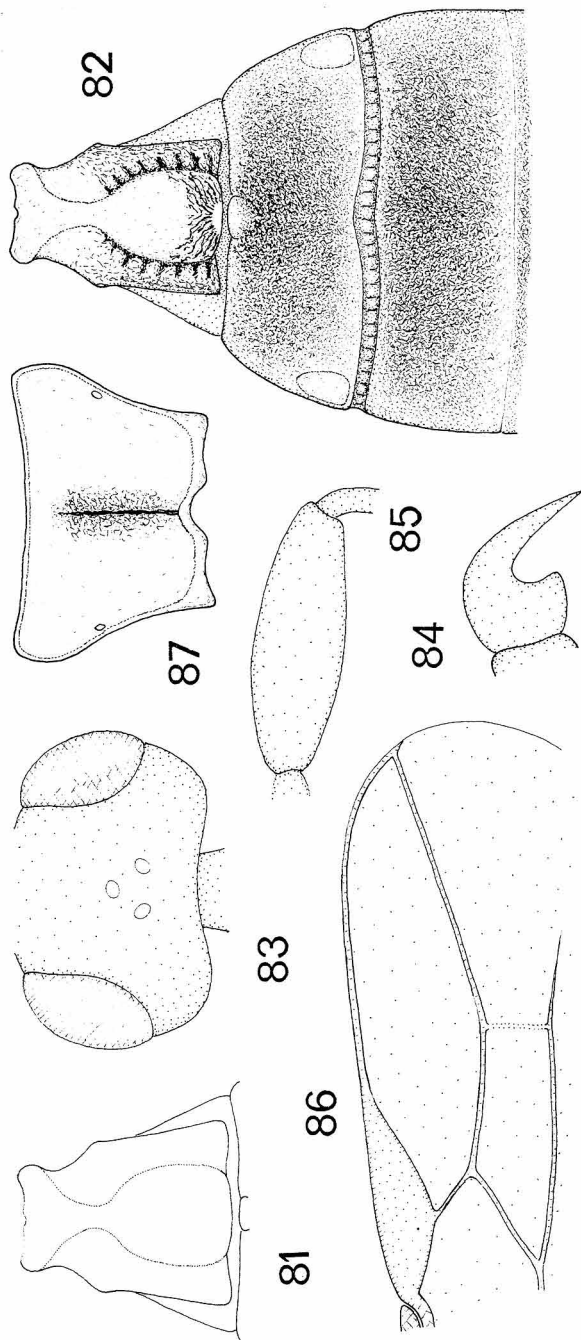
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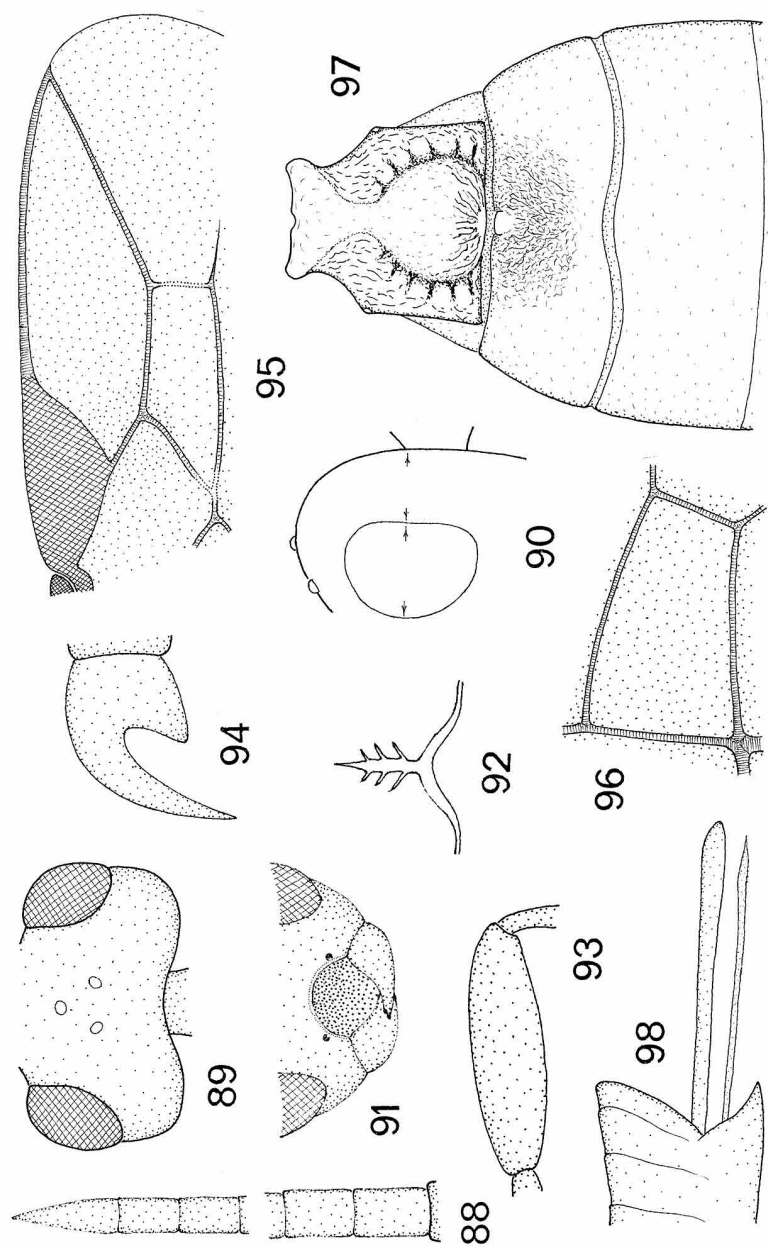
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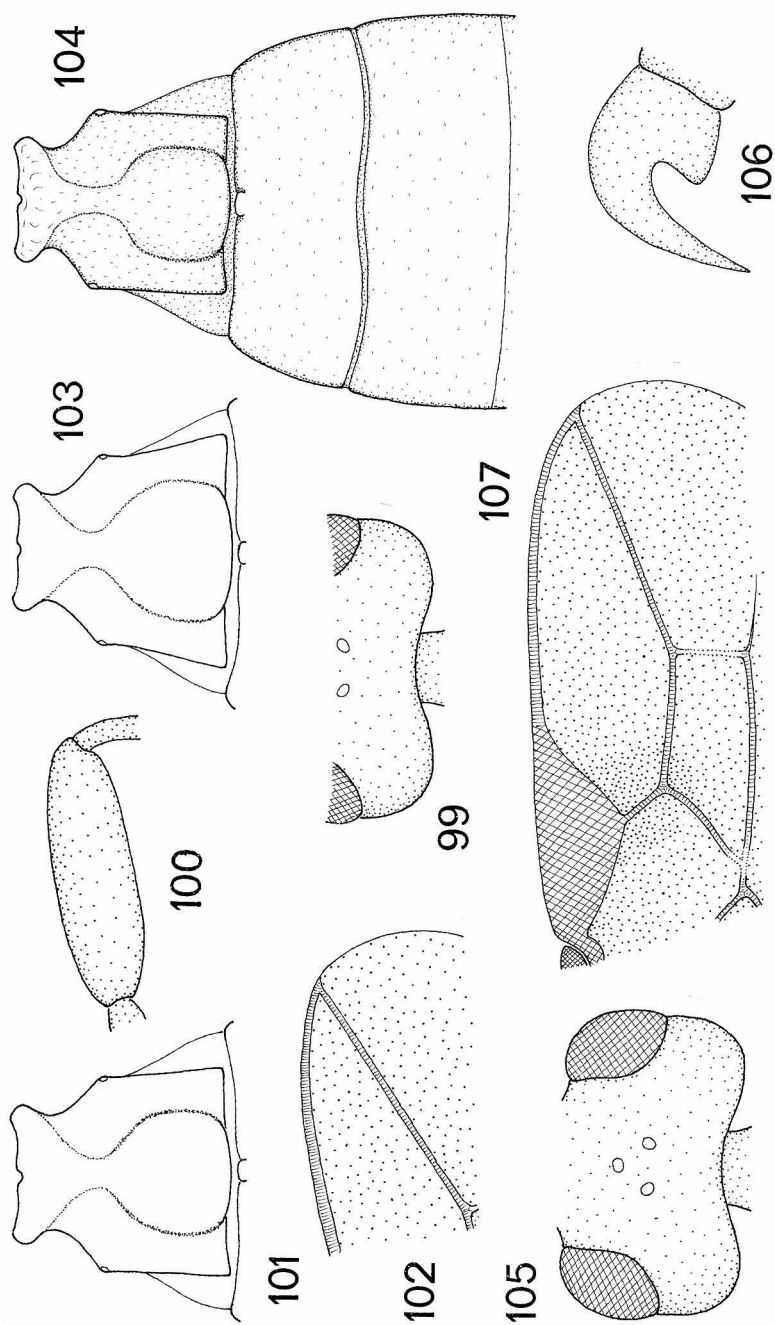
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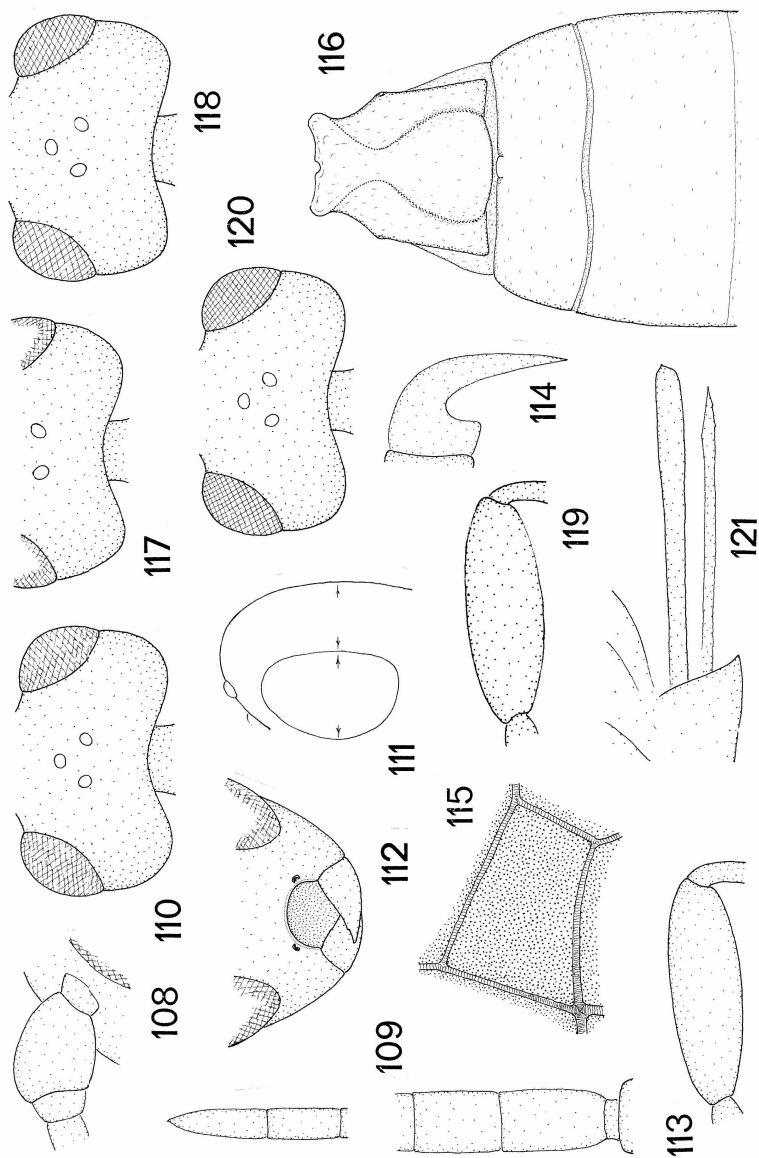
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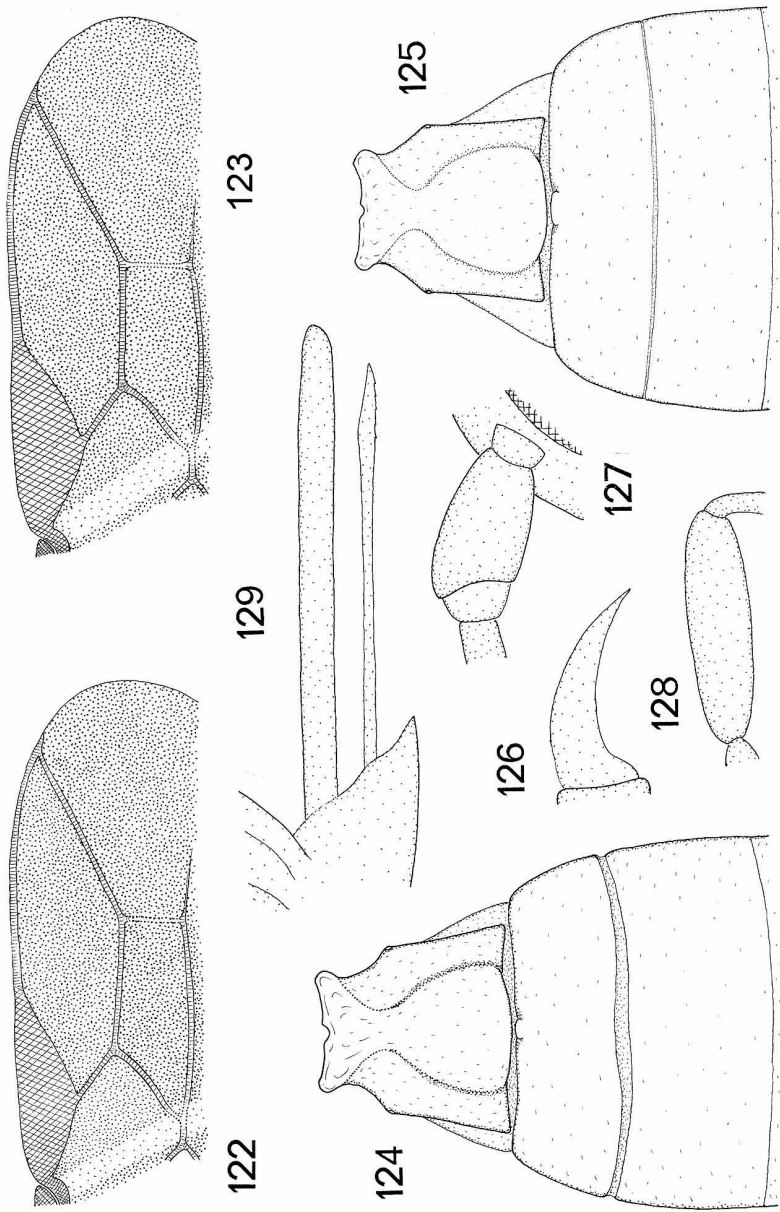
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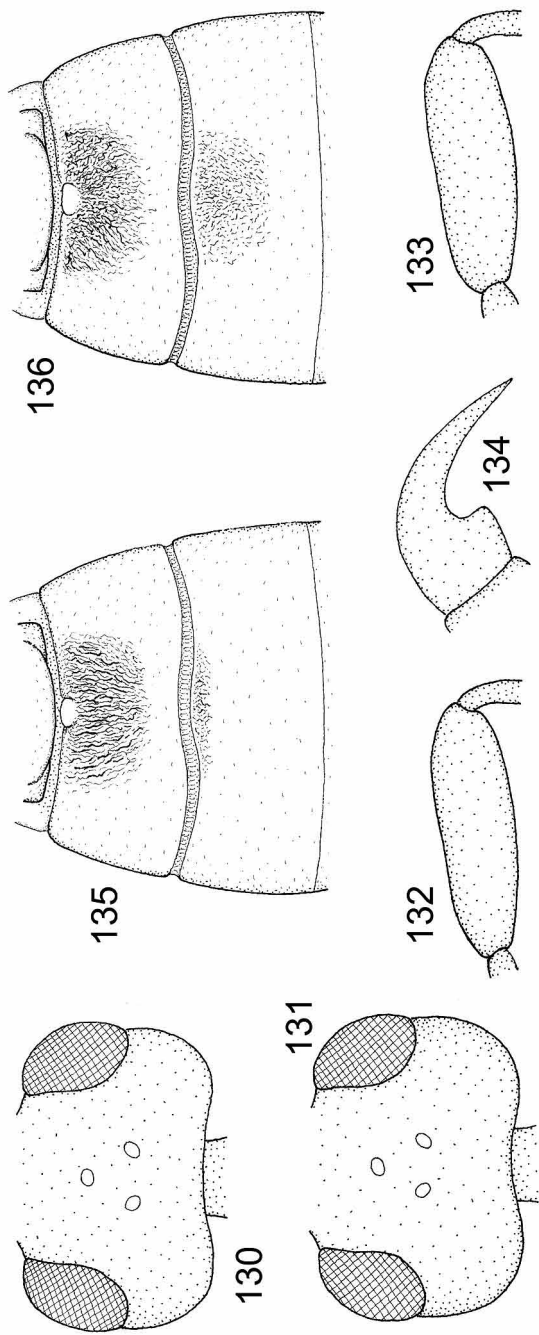
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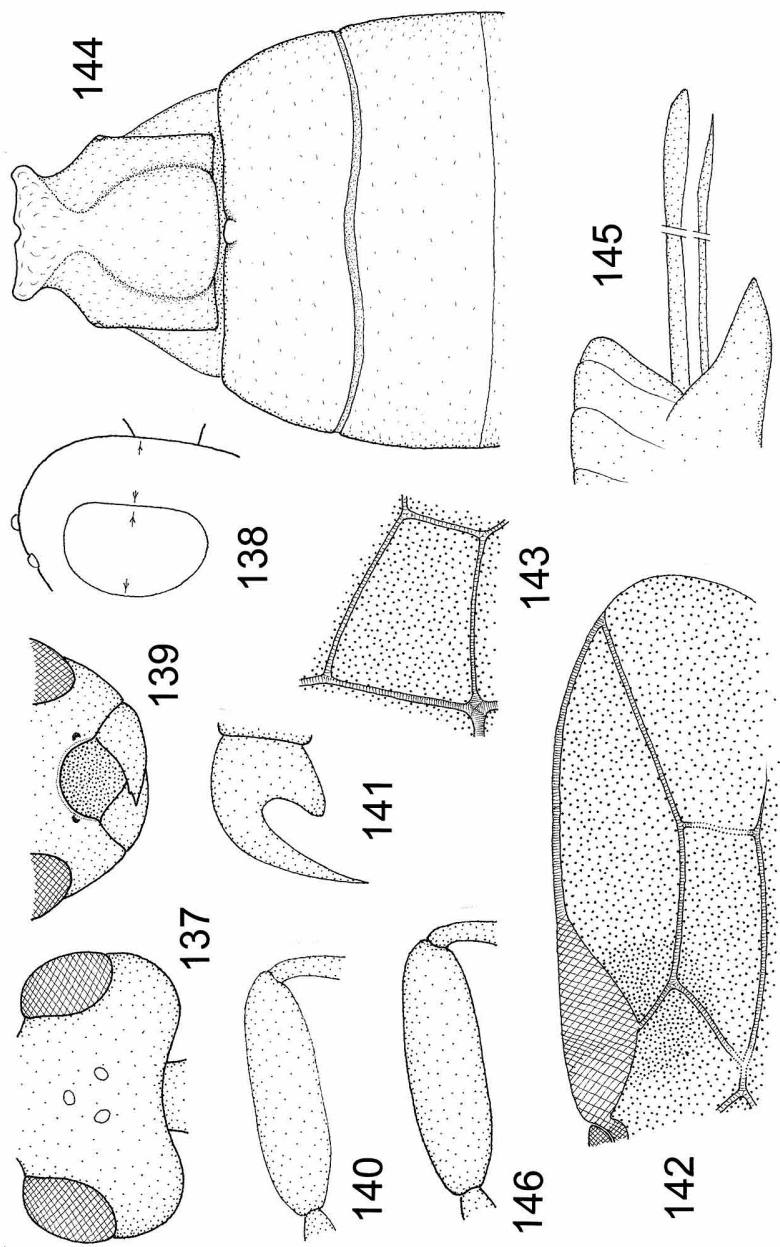
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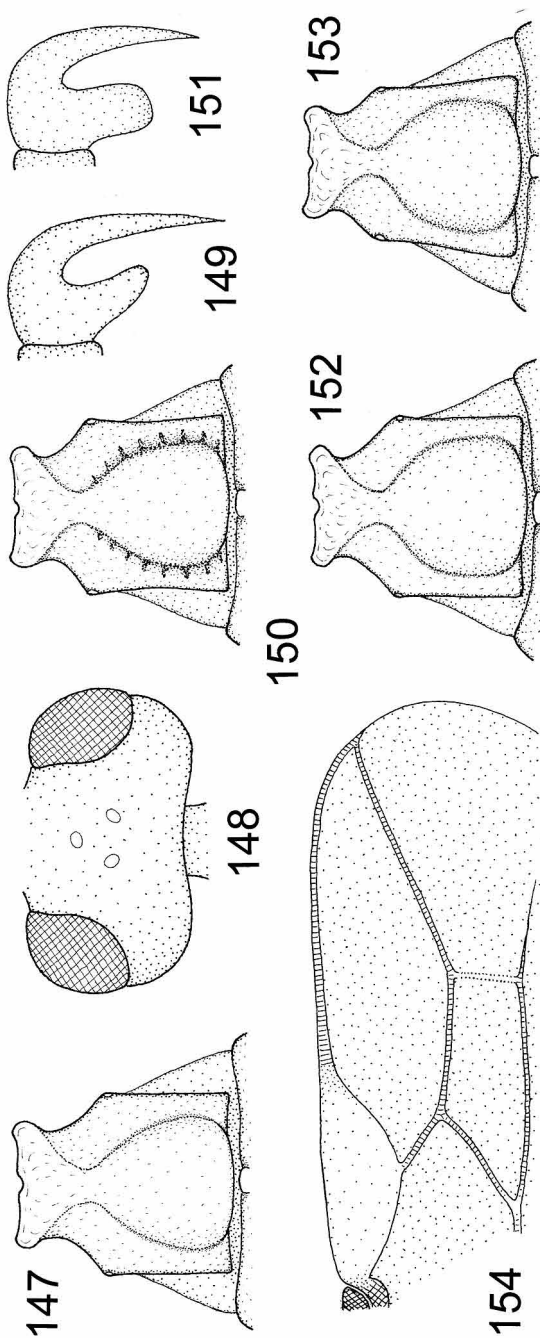
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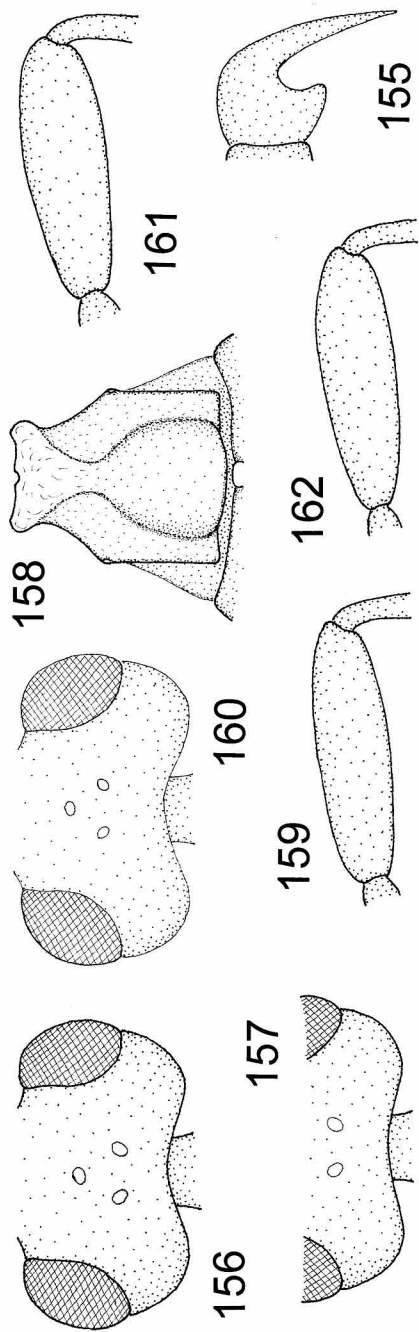
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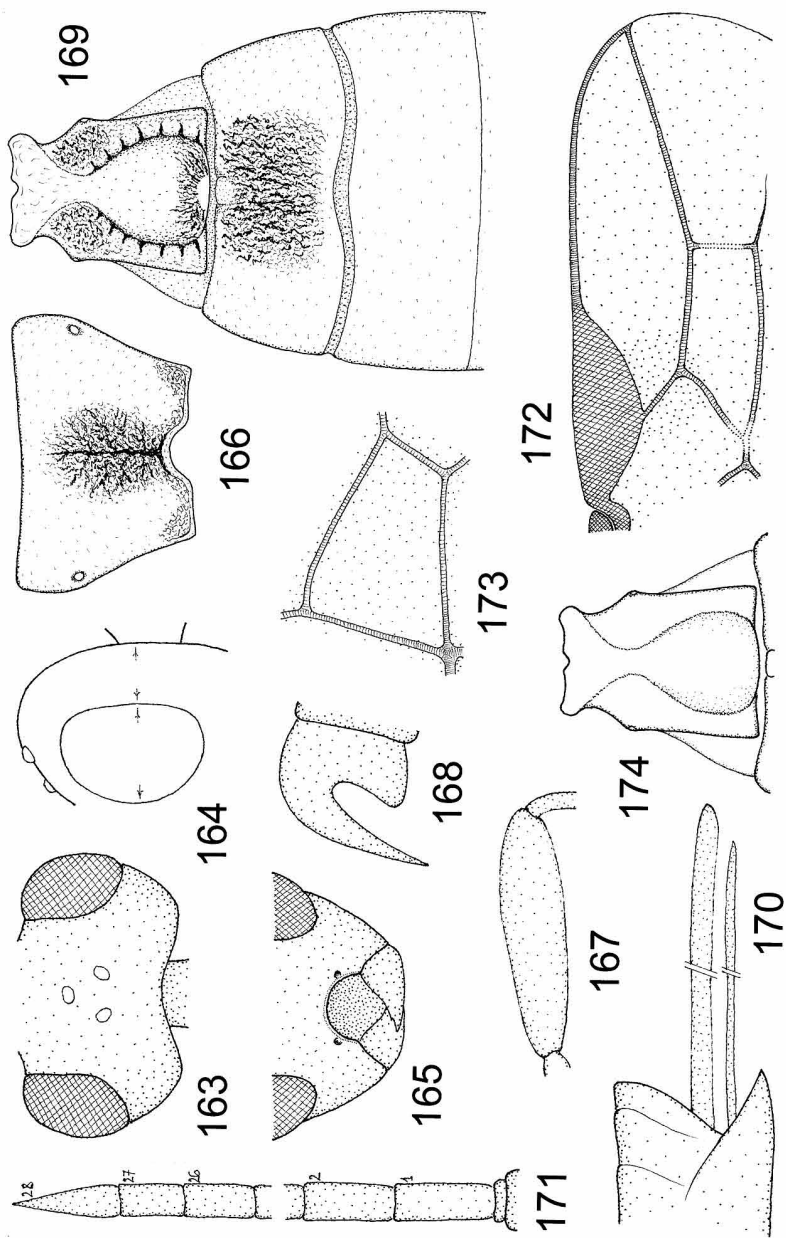
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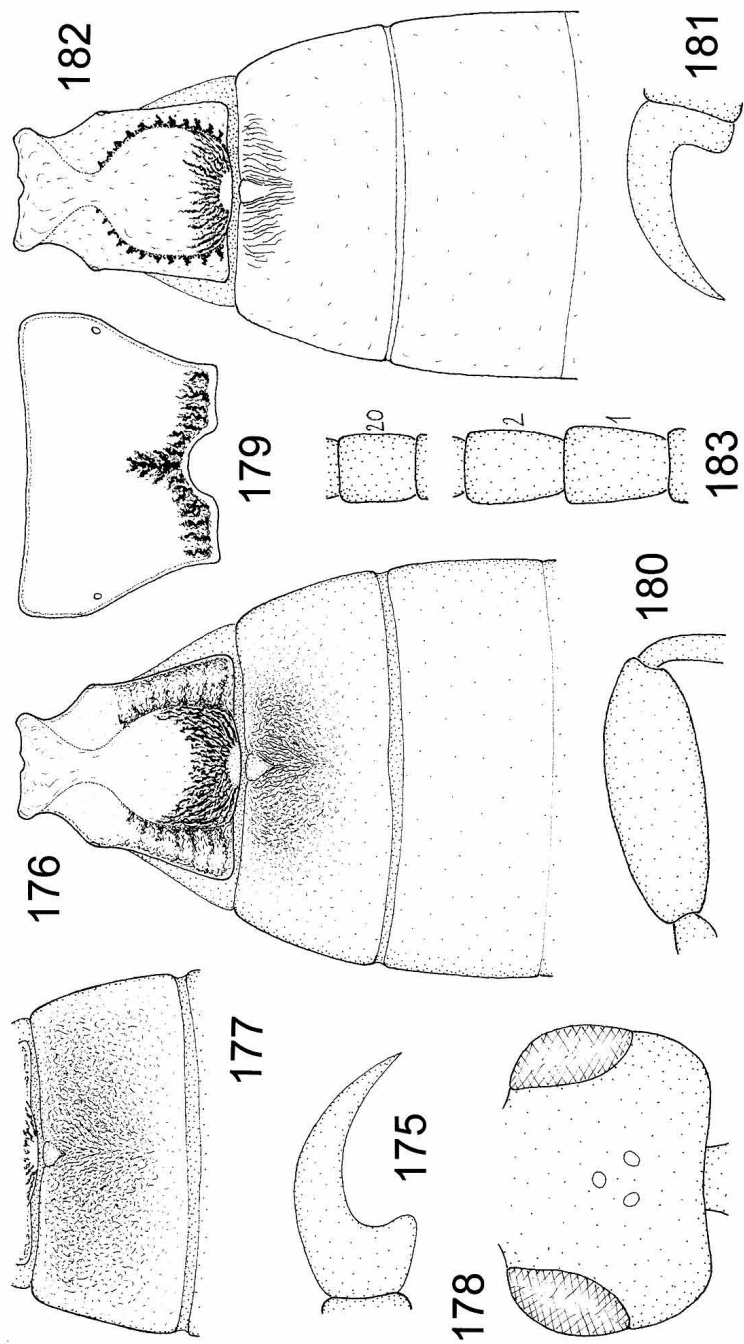
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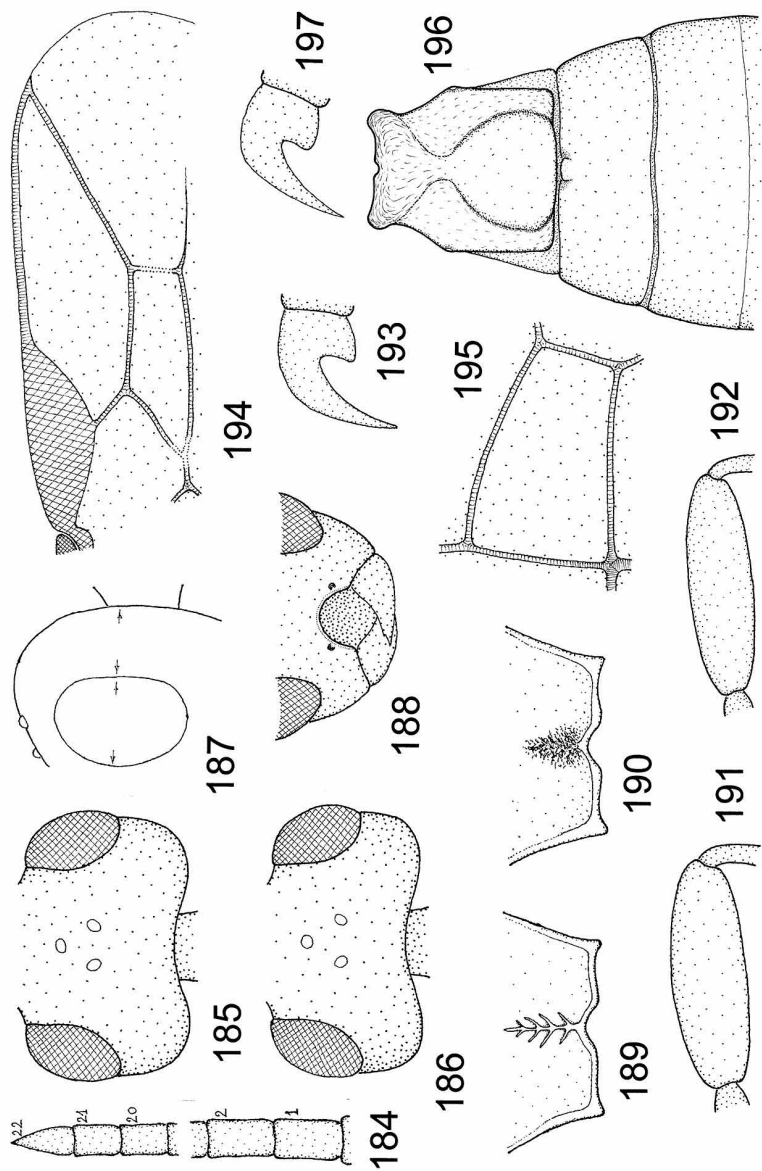
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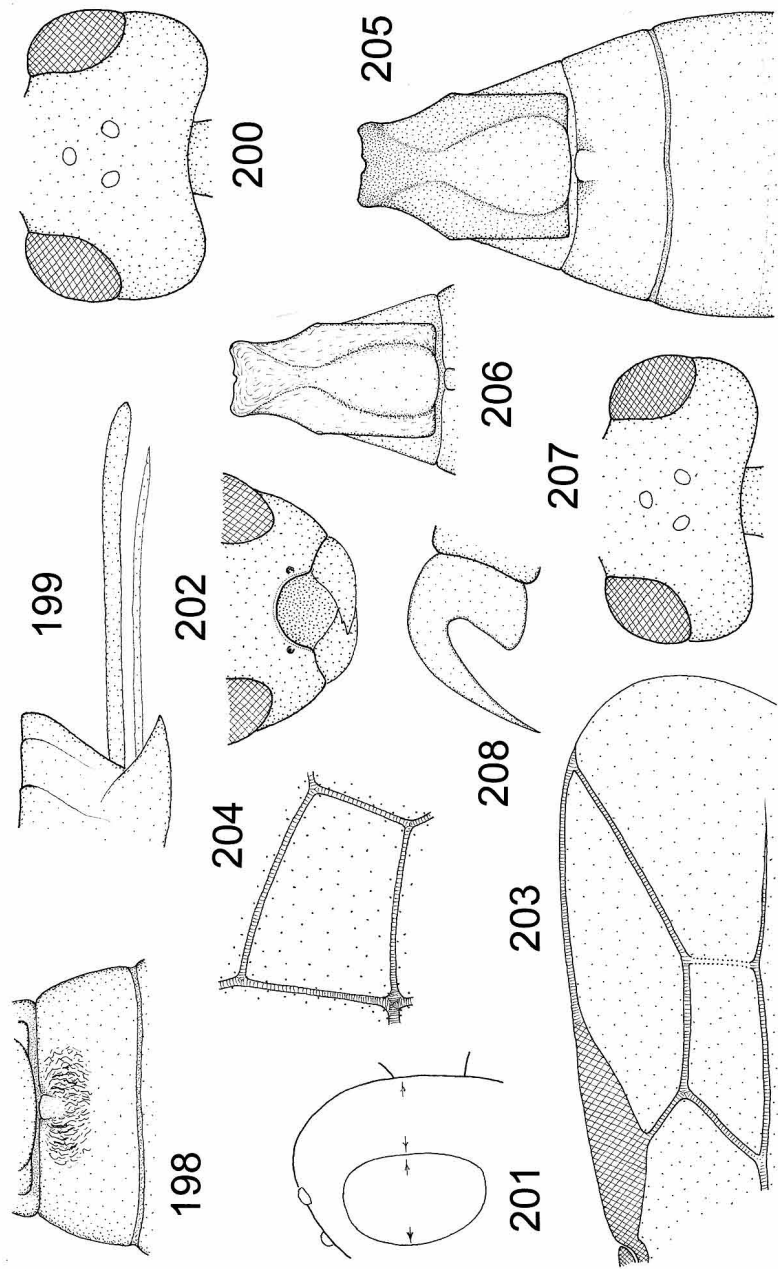
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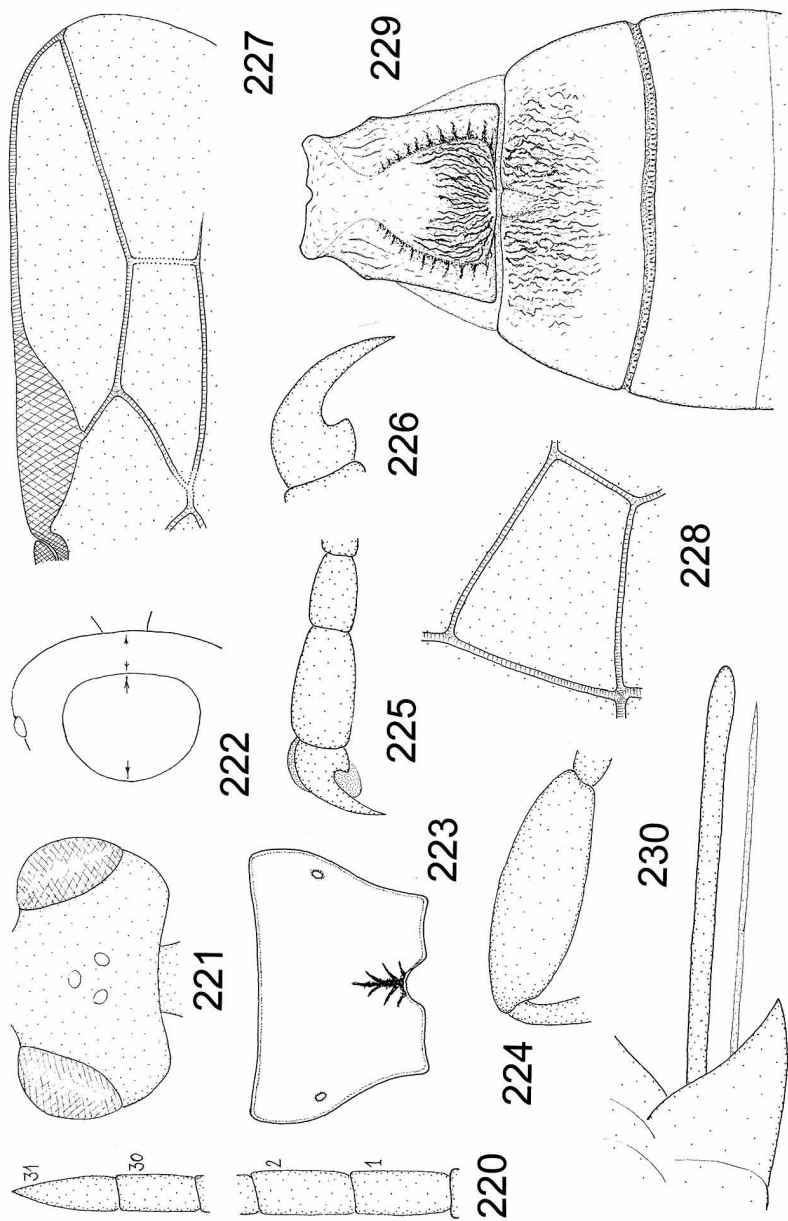
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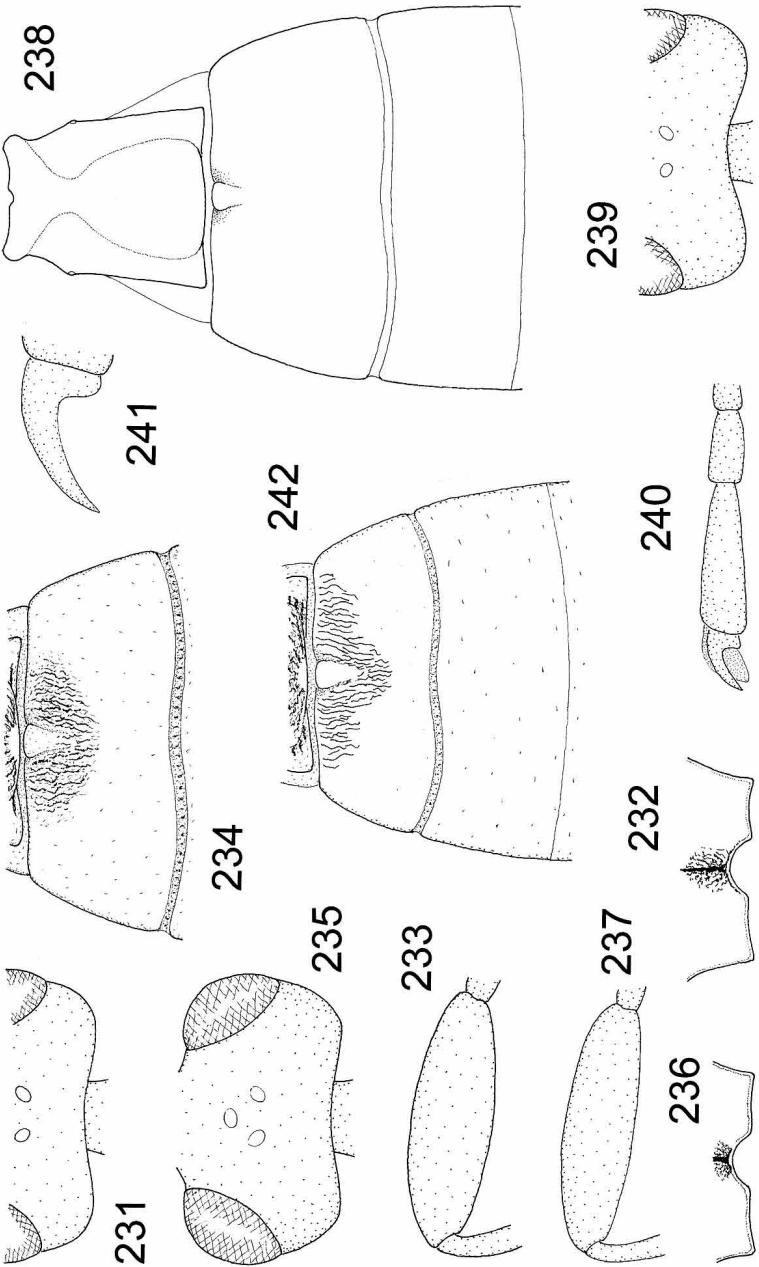
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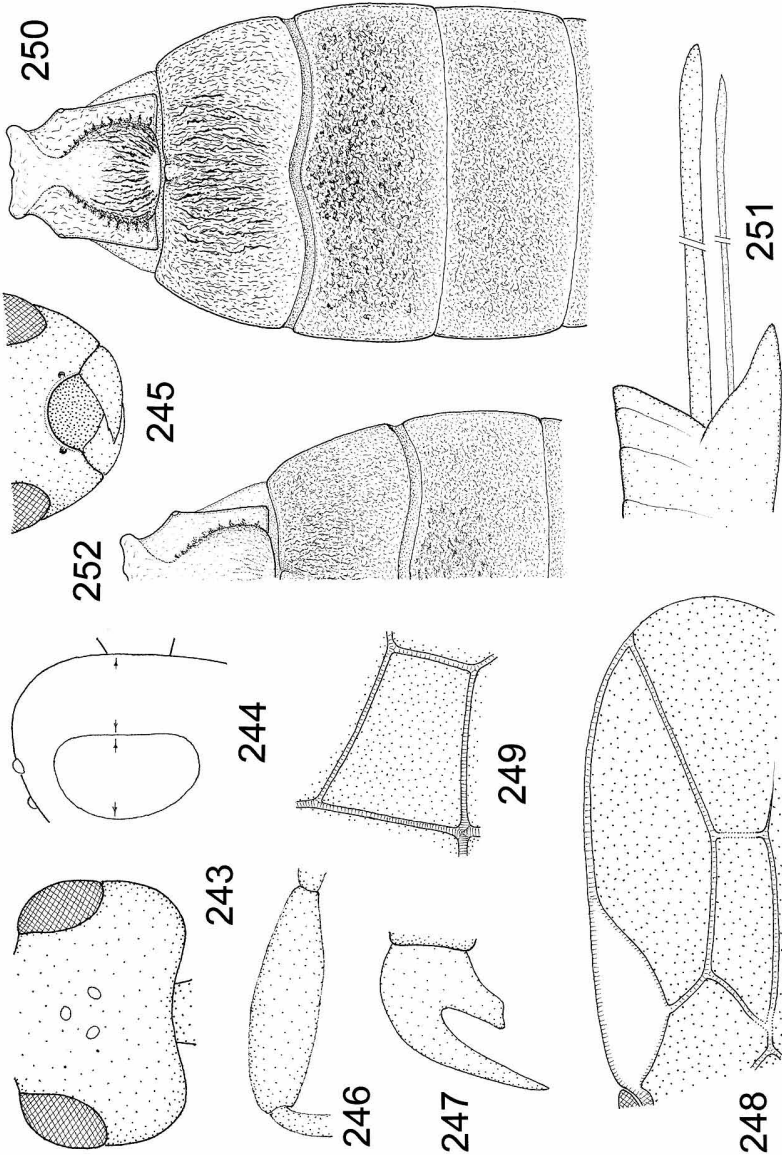
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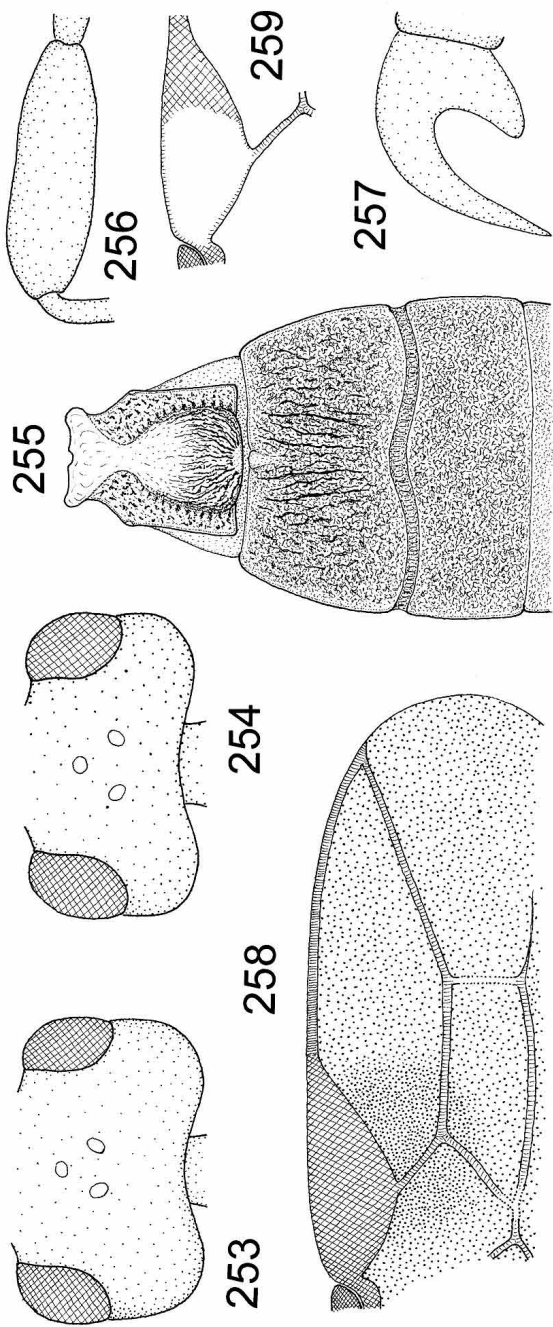
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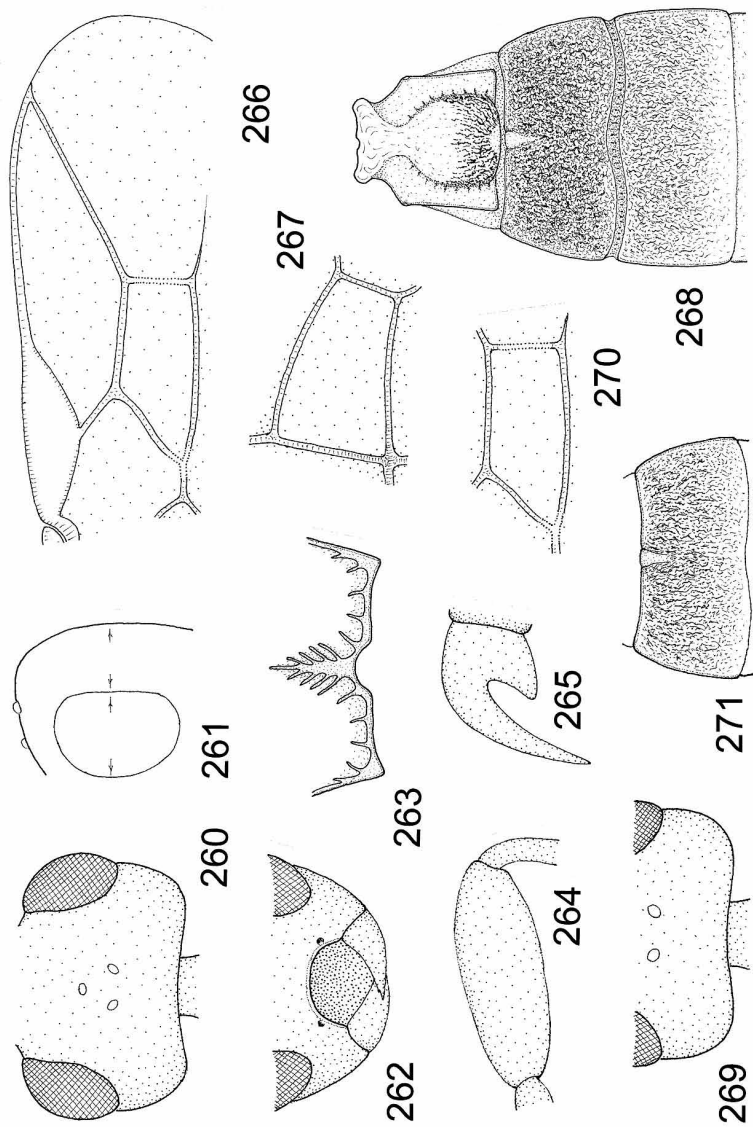
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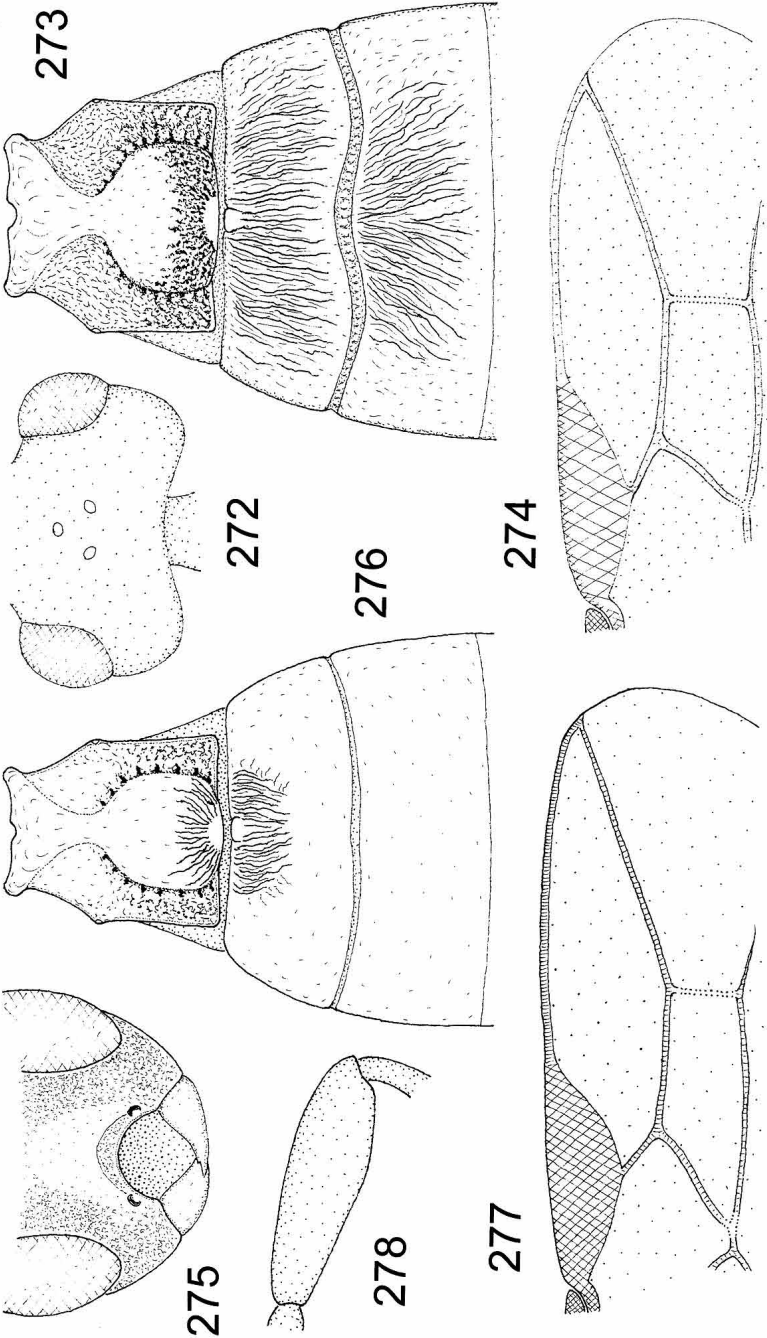
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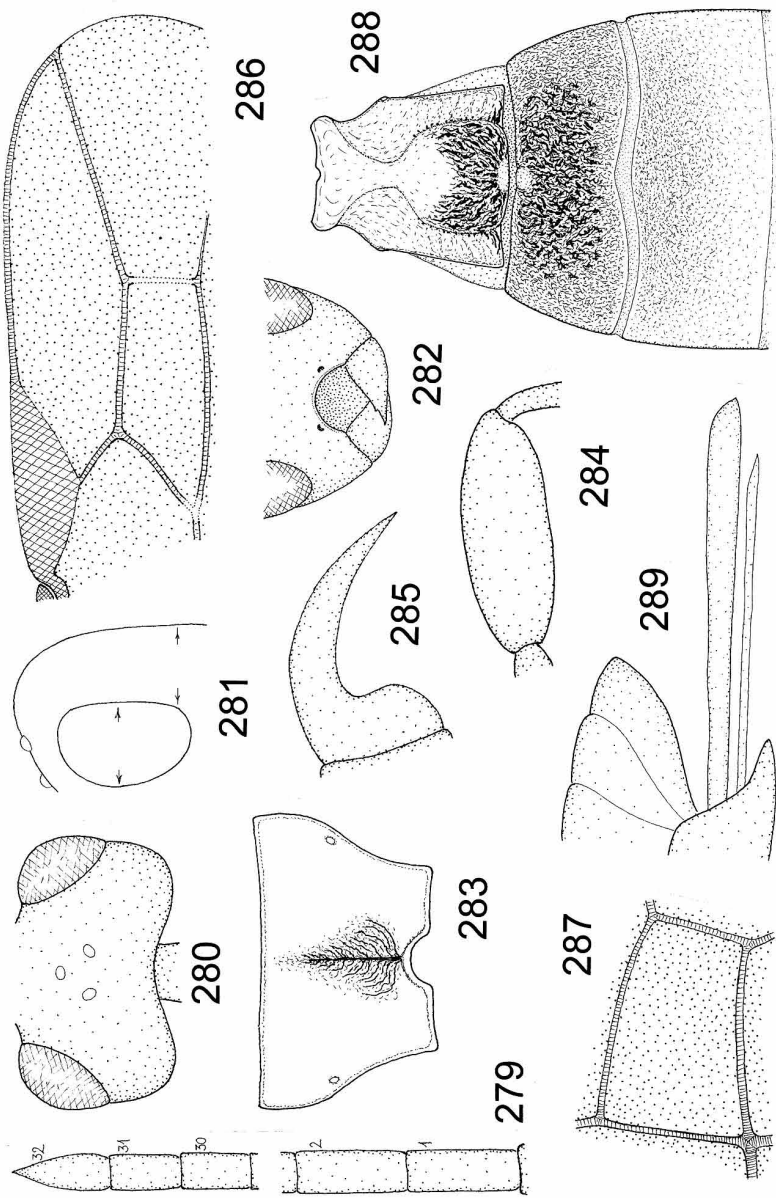
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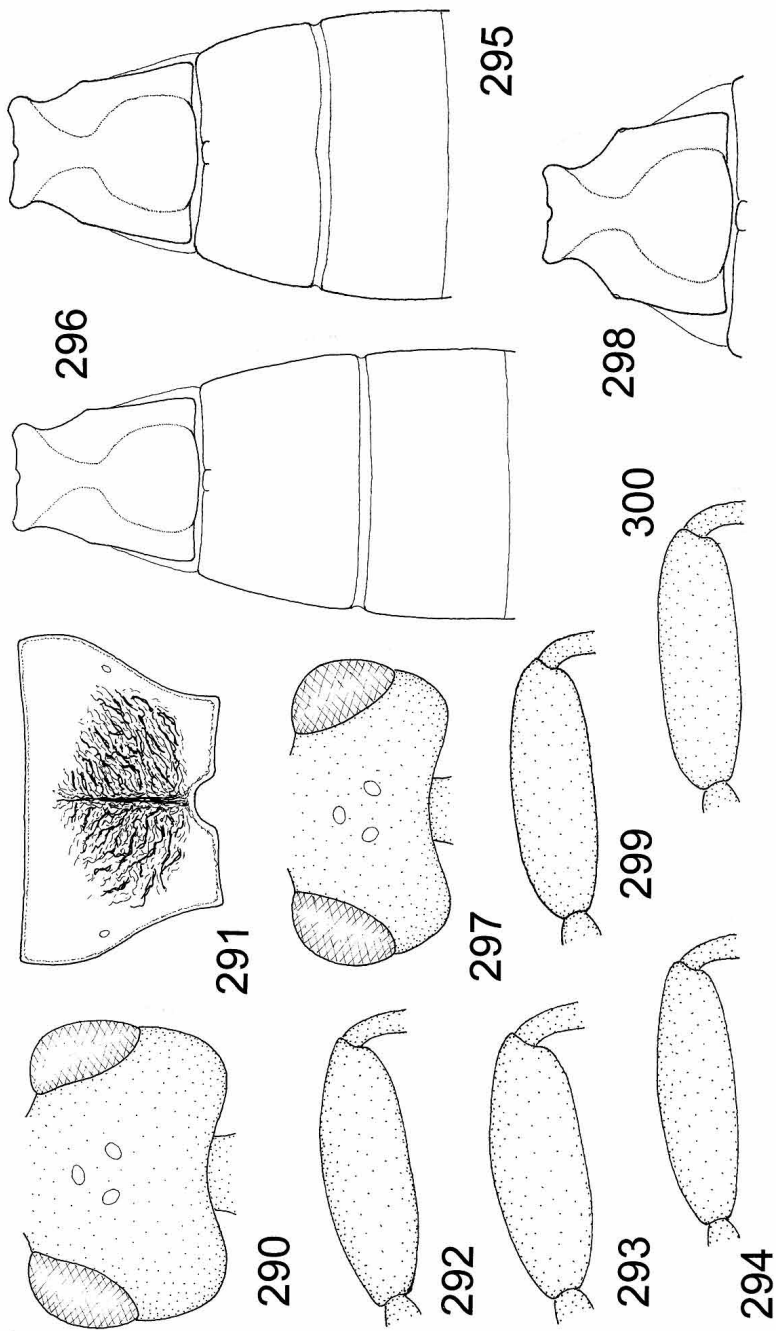
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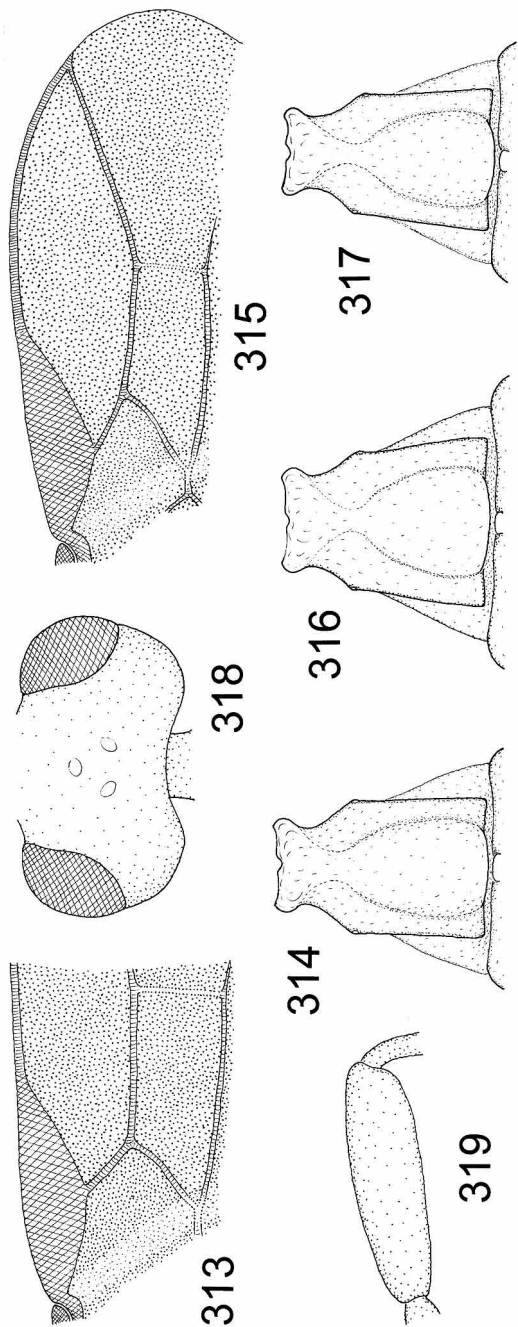
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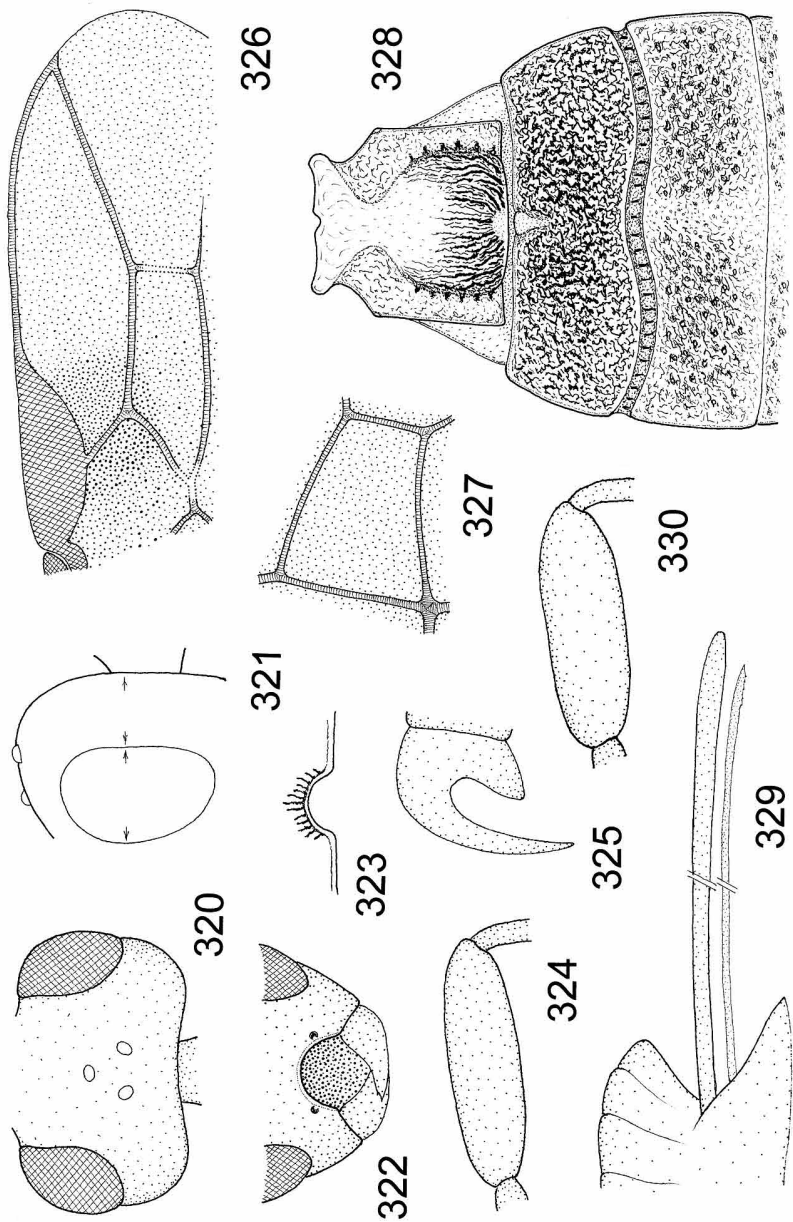
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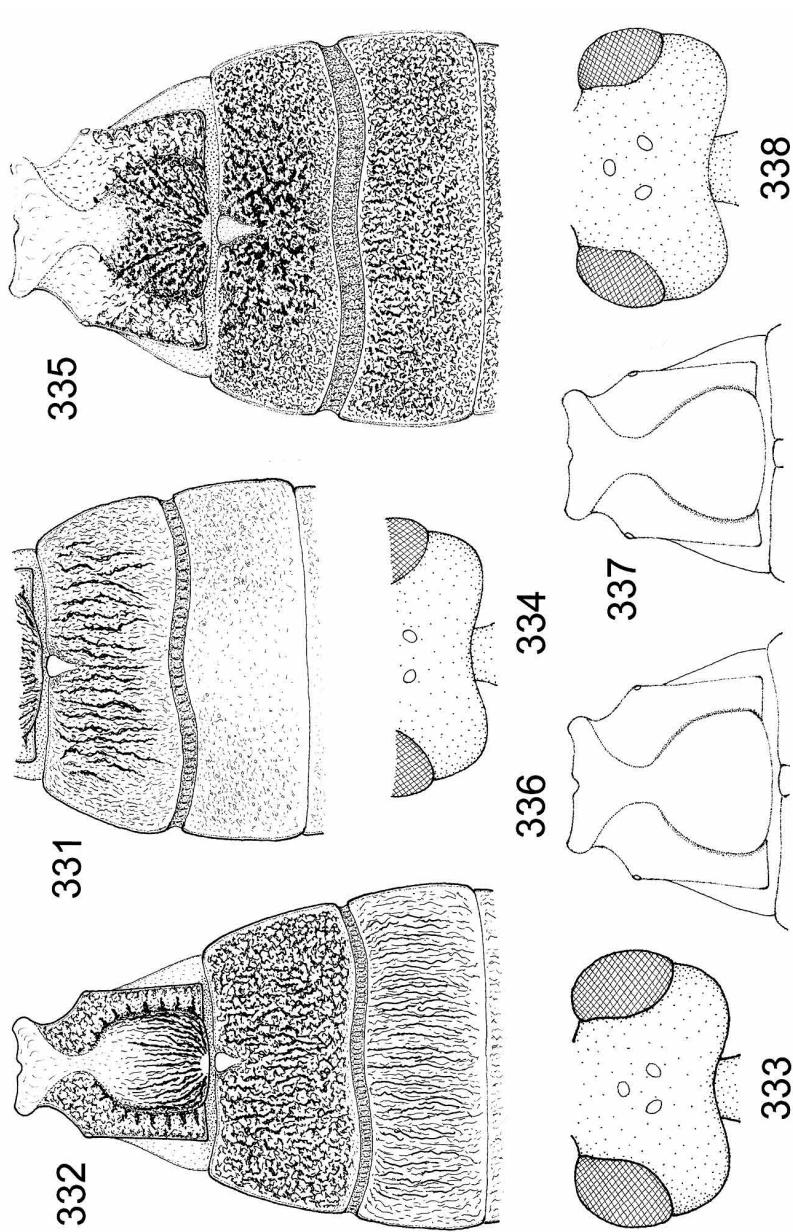
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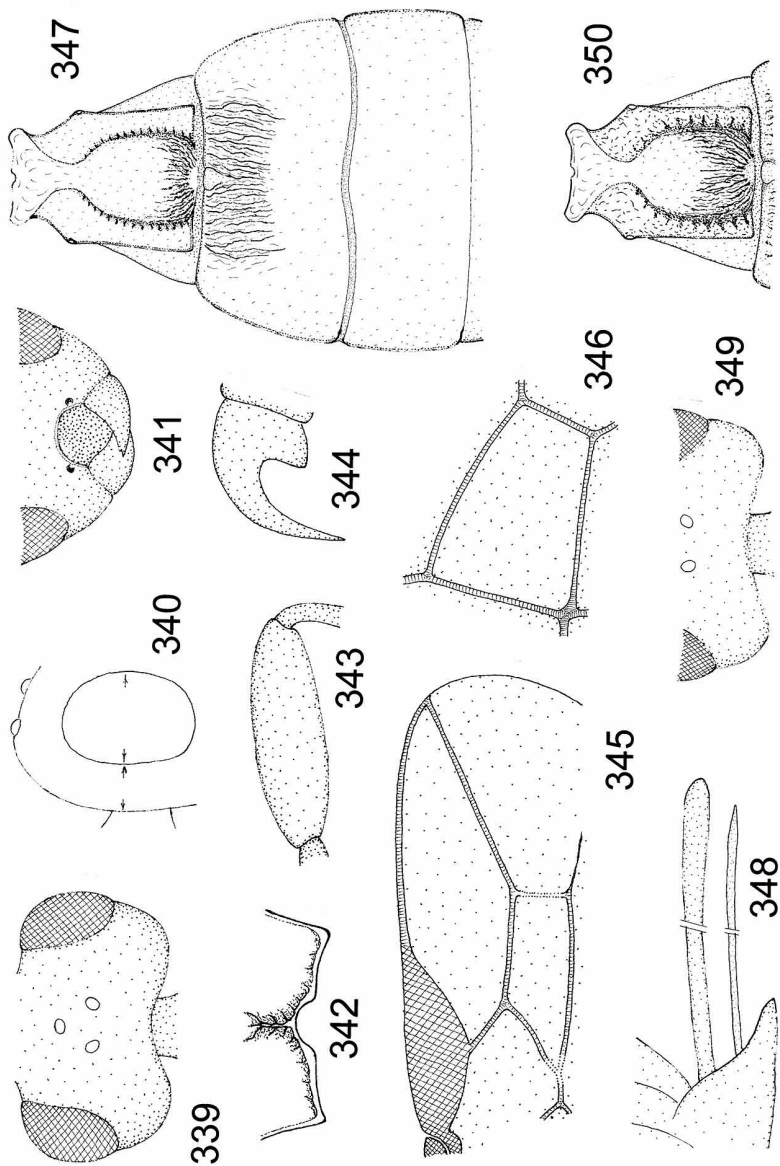
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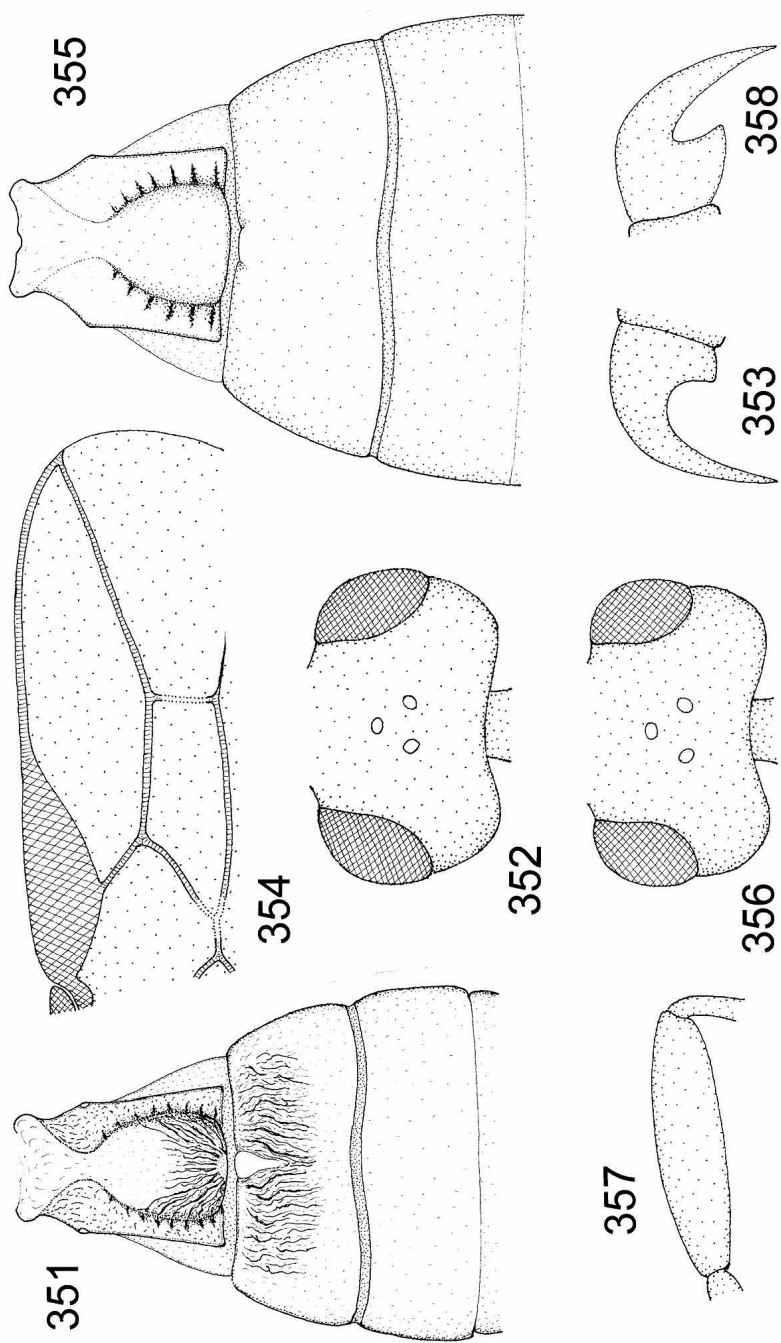
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Figs 331-338. *Bracon subrugosus* SZÉPLIGETI 1901: (331) tergites 2-3: ♀, (332) tergites 1-3: ♂, (333) head in dorsal view: ♀, (334) temple in dorsal view: ♀, (335) tergites 1-3: ♀, (336-337) first tergite: ♀ (336) and ♂ (337). - *Bracon intercessor* MARSHALL 1888: (338) = head in dorsal view.



Figs 339-350. *Bracon subminiatus* SZÉPLIGETI 1901 (♀ lectotype: 339-348): (339) head in dorsal view, (340) head in lateral view, (341) ventral half of head in frontal view, (342) lower half of propodeum, (343) hind femur, (344) claw, (345) distal part of right fore wing, (346) first discal cell, (347) tergites 1-3, (348) hind end of female metasoma, (349) temple in dorsal view: ♂, (350) first tergite: ♂.



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