

A TAXONOMIC STUDY OF THE *MYOSOMA* GENUS-GROUP
WITH DESCRIPTION OF *AMYOSOMA CAVEI* SP. N.
FROM HONDURAS (HYMENOPTERA: BRACONIDAE:
BRACONINAE: BRACONINI)

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In 1846 BRULLÉ described the genus *Myosoma* accompanied by the description of five new species. In 1900 KRIECHBAUMER proposed the new genus *Acanthobracon* on the basis of the new species *A. lagopus*. In 1902, 1906 and 1913 SZÉPLIGETI described six new *Myosoma* species, four of them originally in the genus *Bracon*. The current taxonomic status of the above species is discussed: some are synonymized and others remain valid. The new species: *Amyosoma cavei* is described from Honduras. Redescriptions are presented for nine species: *Amyosoma chinense* (SZÉPLIGETI, 1902), *Compsobraconoides ruber* (BRULLÉ, 1846) comb. n., *Myosoma brullei* SZÉPLIGETI, 1906, *M. errans* (SZÉPLIGETI, 1902), *M. fuscipenne* BRULLÉ, 1846, *M. hirtipes* BRULLÉ, 1846, *M. lagopus* (KRIECHBAUMER, 1900), *M. rubriventre* BRULLÉ, 1846 and *Myosomatoides fasciatus* (BRULLÉ, 1846) comb. n. *Acanthobracon lagopus* KRIECHBAUMER, 1900 is revalidated and transferred into the genus *Myosoma*: *M. lagopus* (KRIECHBAUMER) comb. n. Four new combinations are proposed: *Compsobraconoides melanocheirus* (SZÉPLIGETI, 1906), *C. ruber* (BRULLÉ, 1846), *C. surinamensis* (SZÉPLIGETI, 1906) and *Myosomatoides fasciatus* (BRULLÉ, 1846) originally described in the genus *Bracon* by SZÉPLIGETI and in the genus *Myosoma* by BRULLÉ, respectively. Six new synonyms are established: (1) *Compsobraconoides ruber* (BRULLÉ, 1846) (*Myosoma*) sen. syn. = *Bracon peruvianus* SZÉPLIGETI, 1904 jun. syn. and *Bracon rufator* SZÉPLIGETI, 1906 jun. syn. (2) *Myosoma fuscipenne* BRULLÉ, 1846 sen. syn. = *Bracon chontalensis* CAMERON, 1900 jun. syn. (3) *Myosoma lagopus* (KRIECHBAUMER, 1900) (*Acanthobracon*) sen. syn. = *Bracon errothus* SZÉPLIGETI, 1902 jun. syn. (4) *Myosomatoides fasciatus* (BRULLÉ, 1846) (*Myosoma*) sen. syn. et comb. n.; = *Ipo-bracon pennipes* MYERS, 1931 jun. syn. (5) *Myosoma chinense* (SZÉPLIGETI, 1902) (*Bracon*) sen. syn. = *Bracon puellaris* SZÉPLIGETI, 1902 jun. syn. A key is included for the *Myosoma* genus-group: genera *Amyosoma* VIERECK, *Myosoma* BRULLÉ and *Myosomatoides* QUICKE as well as a key for the six *Myosoma* species discussed here. With 97 original figures.

Key words: redescription, synonymization, new species, new combination, key compilation

INTRODUCTION

The genus *Myosoma* was set up by BRULLÉ in 1846 (p. 450–454) to contain five new species from the Neotropics: *M. fasciatum*, *M. fuscipenne*, *M. hirtipes*, *M. rubriventre* and *M. rubrum*. Years later KRIECHBAUMER (1900: 100–102) proposed the genus *Acanthobracon* with the description of the new species *A. lagopus* (KRIECHBAUMER); though it was subsequently synonymized with *M. hirtipes*

BRULLÉ by SCHULZ (1903: 253–254). SZÉPLIGETI, on the other hand, described six new species of *Myosoma* in 1902, 1906 and 1913 (in 1902 still in the genus *Bracon*): *M. brullei*, *M. chinense*, *M. errans*, *M. errotus*, *M. luteum* and *M. puellare*. In the present work ten species assigned to the genus *Myosoma* by BRULLÉ, KRIECHBAUMER and SZÉPLIGETI are discussed and rearranged. *Amyosoma cavei* sp. n. is described on the basis of two female specimens.

TAXONOMIC PART

Abbreviations – The following abbreviations are applied in the redescriptions of the species as well as in the identification key to the three genera of the *Myosoma* genus-group and to the six species of the genus *Myosoma* (after VAN ACHTERBERG 1993: 4–5):

Eye: OOL = ocellar-ocular line, i.e. shortest distance between hind ocellus and compound eye; POL = postocellar line, i.e. shortest distance between hind two ocelli.

Fore wing: *m-cu* = recurrent vein; *r* = first section of the radial vein; *l-M* = basal vein; *2-SR* = first transverse cubital vein; *3-SR* = second section of the radial vein; *SRI* = third section of the radial vein; *l-SR+M* = first section of the cubital vein.

Hind wing: *l-r-m* = basella vein.

Surface sculpture terminologies are used following EADY (1968) and HARRIS (1979).

Compsobraconoides ruber (BRULLÉ) **comb. n.**, male new (Figs 1–13)

Myosoma rubrum BRULLÉ, 1846: 453 (1 ♀), type locality: “la Guyane (Surinam)”, female holotype (present designation) in Muséum National d’Histoire Naturelle, Paris; examined. – SHENEFELT 1978: 1708 (literature up to 1904).

Bracon peruvianus SZÉPLIGETI, 1904: 183 (3 ♂♂), type locality: “Peru: Mercapata”, male lectotype (and one male paralectotype; designated by J. PAPP 1969 in QUICKE 1991: 172) in Magyar Természettudományi Múzeum, Budapest; one male paralectotype in Nationaal Natuurhistorisch Museum, Leiden by exchange); examined, **syn. n.** – SZÉPLIGETI 1906: 590 (in key). SHENEFELT 1978: 1524 (as valid species, literature up to 1906). QUICKE 1991: 172 (“belongs to an undescribed genus of the *Compsobraconoides* group”, type depository).

Bracon rufator SZÉPLIGETI, 1906: 592 (1 ♀), type locality: “Paraguay: Asuncion”, female holotype (designated by J. PAPP 1969 in QUICKE 1991: 173) deposited in Magyar Természettudományi Múzeum, Budapest; examined, **syn. n.** – SHENEFELT 1978: 1534 (as valid species, literature up to 1906).

Compsobraconoides rufator (SZÉPLIGETI): QUICKE 1991: 173 (comb. n., type depository).

On the taxonomy of the genus *Compsobraconoides* QUICKE, 1989 – The genus was proposed by QUICKE (QUICKE & SHARKEY 1989: 338 in key and 341 description) on the basis of one new species, *C. robustus* QUICKE, by several female

and male specimens taken in Mexico. The genus is nearest to *Compsobracon* ASHMEAD, the two genera are distinguished by the features in the following key:

- 1 (2) Scape in lateral view longer dorsally than ventrally (Fig. 1a in QUICKE & SHARKEY 1989: 353; Fig. 1). Basal lobe of claws pointed (Fig. 5)
Compsobraconoides QUICKE, 1989
- 2 (1) Scape in lateral view shorter dorsally than ventrally (Fig. 1b l.c.). Basal lobe of claws not pointed
Compsobracon ASHMEAD, 1900

Designation of the female holotype of *Myosoma rubrum* – (first label, printed) “Museum Paris / EY0000001662”; (second round label, handwriting) “Surinam / Laschen”; (third label) “Museum Paris” (printed) / “Surinam / Leschenault” (handwriting); (fourth label, handwriting) “Myosoma / rubrum Br.”; fifth label is the holotype card attached by me, sixth label is with the actual name *Compsobraconoides ruber* (BRULLÉ) (det. J. PAPP 2009). – Holotype is in fairly good condition: (1) pinned by the mesoscutum (near to left tegula); (2) head, mesosoma and fore legs more or less dirty; (3) apical end of left fore wing and right hind wings deficient; (4) missing: flagellum and tarsus of left middle leg.

The examination of the female holotype of *Myosoma rubrum* proved to represent the genus *Compsobraconoides* QUICKE, 1989 considering its following features: (1) face rugulose, laterally with a pair of vertical shallow grooves margined by weak carinae (cf. Fig. 31 in QUICKE 1997: 163); (2) hypopygium in lateral view pointed (Fig. 10). Otherwise like *Bracon*. Also new combinations are: *Compsobraconoides melanocheirus* (SZÉPLIGETI, 1906) (*Bracon*) and *Compsobraconoides surinamensis* (SZÉPLIGETI, 1916) (*Bracon*).

Designation of the male lectotype of *Bracon peruvianus* – (first label, printed) “Marcapata / Peru”; second label is the lectotype card, third label is with the inventory number “1521” and the fourth label is with the actual name *Compsobraconoides ruber* (BRULLÉ) (det. J. PAPP 2009). – Lectotype is in good condition: (1) micropinned by mesosoma (through prescutellar furrow), micropin covered with copper vitriol crystals; (2) both flagelli distally deficient (right flagellum with 19 and left flagellum with 26 flagellomeres); (3) tarsomeres 3–5 of left hind leg missing; (4) left fore wing damaged apically.

The male paralectotype of *Bracon peruvianus* is with similar labels and in fairly good condition.

Designation of the female holotype of *Bracon rufator* – (first label, printed) “Paraguay / Vezényi”; (second label) “Asuncion /1904.” (printed) “XI. 4.” (handwriting); third label is the holotype card; fourth label is with the inventory number “1524”; fifth and sixth labels are with the actual name *Compsobraconoides ruber* (BRULLÉ) (det. QUICKE 1989 and J. PAPP 2009). – Holotype is in good condition: (1) pinned by mesoscutum (near to right tegula); (2) right flagellum apically deficient; (3) pair of fore wings damaged at parapterostigma.

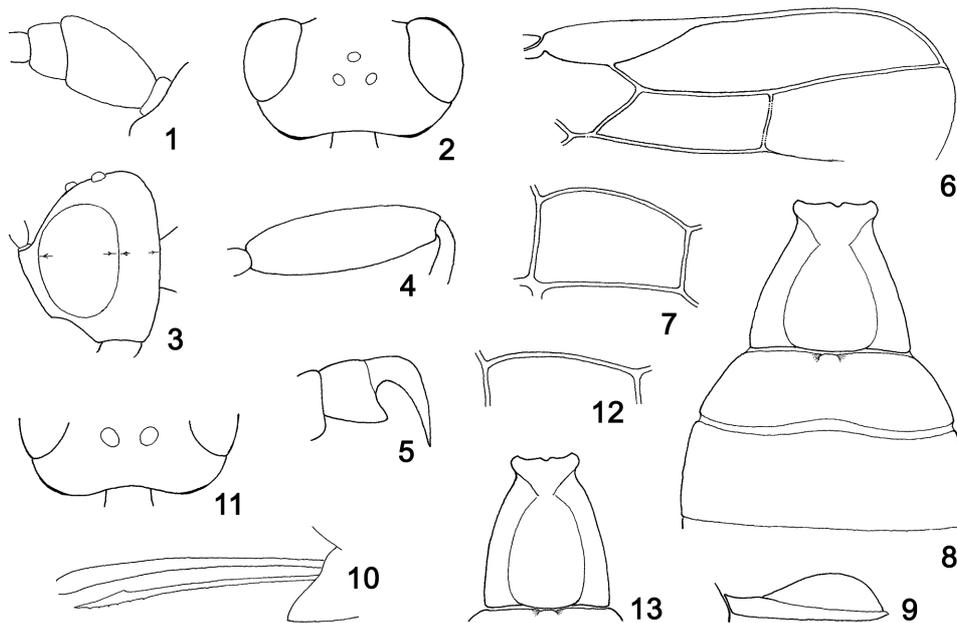
Redescription of the female holotype of *Myosoma rubrum* – Body 6.5 mm long. Antenna as long as body and with 38 antennomeres. Scape in lateral view pyriform, dorsally longer than ventrally (Fig. 1). First 5–6 and penultimate two flagellomeres slightly longer than broad, rest of

flagellomeres slightly transverse. – Head in dorsal view transverse (Fig. 2), 1.8 times as broad as long, eye somewhat protruding and 2.3 times longer than temple, temple receded, occiput weakly excavated. Ocelli medium-sized, elliptic, OOL 1.6 times as long as POL. Eye in lateral view 1.4 times as high as wide and 2.2 times wider than temple (Fig. 3, see arrows). Eye in frontal view converging ventrally; face rugulose and laterally with a vertical and shallow groove margined by a weak pair of carinae (cf. Figs 30–31 in QUICKE 1997: 163). Horizontal diameter of oral opening somewhat longer than shortest distance between opening and eye. Head, except face and cheek, polished.

Mesosoma in lateral view 1.5 times as long as high, polished. Notaulix distinct, smooth. – Hind femur 2.7 times as long as broad medially (Fig. 4). Hind tibia and tarsus equal in length. Claw with relatively small basal lobe and downcurved (Fig. 5).

Fore wing as long as body. Pterostigma (Fig. 6) four times as long as wide and issuing *r* somewhat proximally from its middle, *r* 0.9 times as long as width of pterostigma. Second submarginal cell long, 3–*SR* twice longer than 2–*SR*; *SR* faintly bent, 1.35 times as long as 3–*SR* and reaching tip of wing. First discal cell: 1–*M* one-fifth longer than *m-cu*, 1–*SR-M* bent (Fig. 7).

First tergite (Fig. 8) slightly broader behind than long, scutum in lateral view domed (Fig. 9). Third tergite one-third (or 1.5 times) longer than second tergite, suture between them bisinuate (Fig. 8). Every tergite polished. Hypopygium pointed, ovipositor sheath as long as hind tibia + basitarsus combined, end of ovipositor finely serrate (Fig. 10).



Figs 1–13. *Compsobraconoides ruber* (BRULLÉ), comb. n. – 1–10: female holotype, 11–13: male: 1 = scape and pedicel in outer-lateral view, 2 = head in dorsal view, 3 = head in lateral view, 4 = hind femur, 5 = claw, 6 = distal part of right fore wing, 7 = first discal cell of right fore wing, 8 = tergites 1–3, 9 = first tergite in lateral view, 10 = hypopygium and ovipositor apparatus, 11 = temple in dorsal view, 12 = vein 1–*SR-M* of first discal cell of fore wing, 13 = first tergite

Head and mesosoma reddish yellow, metasoma testaceous. Antenna black, palpi brown. Tegula light reddish yellow. Fore legs blackish brown, middle and hind legs blackish. Wings evenly brown fumous, pterostigma and veins brown.

Deviating features of the female (female holotype of *C. rufator*). – Body 6 mm long. Antenna with 40 antennomeres. Hind femur 2.9 times as long as broad medially. First tergite as long as broad behind. Legs with more light coloured pattern.

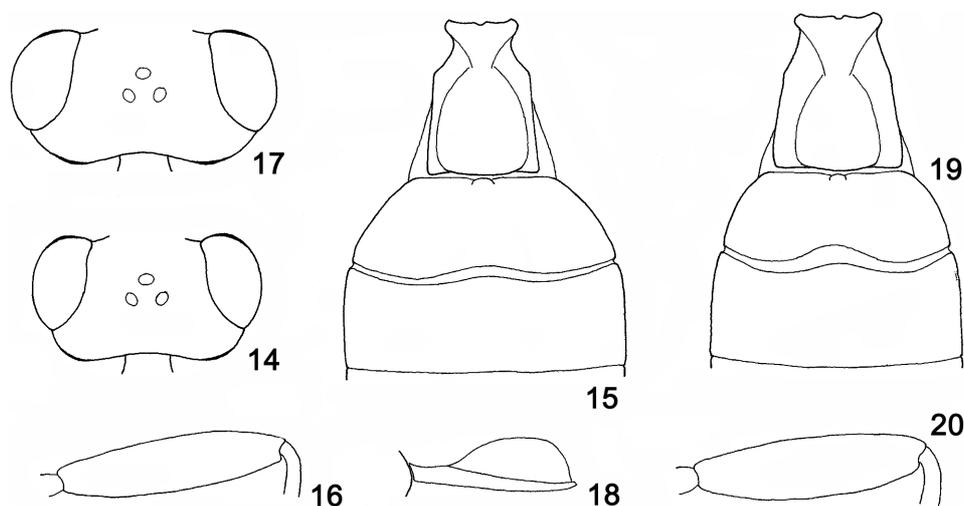
Description of the male (lectotype and two paralectotypes) of *C. peruvianus*. – Similar to the female. Body 6–7 mm long. Antenna with 40 antennomeres. Temple in dorsal view rounded-receded (Fig. 11). Hind femur 3.3 times as long as broad. Fore wing: *l-SR-M* of first discal cell less bent (Fig. 12). First tergite 1.2 times longer than broad behind (Fig. 31). Ultimate nine flagellomeres yellow.

Host unknown.

Distribution – Paraguay, Peru, Surinam.

Taxonomic position – *Compsobraconoides ruber* is near to *C. melanocheirus* (SZÉPLIGETI) and *C. surinamensis* (SZÉPLIGETI) by their more or less posteriorly broadening first tergites (Figs 8, 13, 15, 19), the three species are separated by a few features keyed:

- 1 (4) Head in dorsal view slightly less transverse, 1.8 times as broad as long, temple somewhat less receded (Figs 2, 14). Scutum of first tergite in lateral view somewhat less domed (Fig. 9). Suture between tergites 2–3 bisinuate (Figs 8, 15).



Figs 14–20. *Compsobraconoides melanocheirus* (SZÉPLIGETI) comb. n. – female holotype: 14 = head in dorsal view, 15 = tergites 1–3, 16 = hind femur. 17–20. *Compsobraconoides surinamensis* (SZÉPLIGETI) comb. n., female lectotype: 17 = head in dorsal view, 18 = first tergite in lateral view, 19 = tergites 1–3, 20 = hind femur

- 2 (3) Third tergite one-third longer than second tergite (Fig. 8). Hind femur 2.7–2.9 times as long as broad (Fig. 4). First tergite slightly broader behind than long (Fig. 8) to as broad as long. Metasoma testaceous. ♀: 6–6.5 mm
C. ruber (BRULLÉ, 1846) **comb. n.**
- 3 (2) Tergites 2–3 equal in length (Fig. 15). Hind femur 4.2 times as long as broad (Fig. 16). First tergite 1.25 times as long as broad behind (Fig. 15). Metasoma reddish yellow. ♀: 5 mm
C. melanocheirus (SZÉPLIGETI, 1906) **comb. n.**
- 4 (1) Head in dorsal view slightly more transverse, 1.9 times as broad as long, temple somewhat more receded (Fig. 17). Scutum of first tergite in lateral view more domed (Fig. 18). Suture between tergites 2–3 more bisinuate (Fig. 19). First tergite 1.2 times as long as broad behind (Fig. 19). Hind femur 3.7 times longer than broad (Fig. 20). Fore wings brown fumous, distally with a wide hyaline streak. Ultimate 11 flagellomeres yellow (antenna with 38 antennomeres, rest of antenna black). ♀: 7 mm
C. surinamensis (SZÉPLIGETI, 1906) **comb. n.**

THE *MYOSOMA* GENUS–GROUP

Within the tribe Braconini the *Myosoma* genus-group is distinguished by the following features: 1.) First tergite very long and narrow, two to five times as long as broad behind (Fig. 83 in QUICKE 1997: 172; Figs 29, 46, 56) 2.) Second tergite considerably transverse, i.e. 3.3–4 times as broad behind as long medially, laterally narrowing (Figs 37, 46, 65, 81, 91, 97). 3.) Second submarginal cell long, i.e. 3–SR at least 1.5–1.6 times, frequently more than twice, longer than 2–SR (Figs 26, 34, 42, 53, 62, 71, 79, 89, 95).

The genus-group comprises three genera: *Amyosoma* VIERECK, *Myosoma* BRULLÉ and *Myosomatoides* QUICKE. The three genera and the species of *Myosoma* and *Myosomatoides* are separated by the features keyed:

- 1 (4) Second tergite with a distinct mid-longitudinal ridge (Fig. 4 in QUICKE 1994: 229). Hind femur and tibia flattened (Fig. 3 in QUICKE l.c.; Fig. 94). The two *Myosomatoides* species are keyed after QUICKE (1994: 230)
Myosomatoides QUICKE, 1994
- 2 (3) Wings uniformly brown. (= *myersi* QUICKE, 1994 **syn. n.**, = *pennipes* MYERS, 1931)
M. fasciatus (BRULLÉ, 1846)

- 3 (2) Wings largely hyaline with apical third of the forewing brown (Fig. 1 in QUICKE l.c.) *M. pennipes* (WESTWOOD, 1882)
- 4 (1) Second tergite without ridge. Hind femur and tibia not flattened (Figs 24, 32, 40, 51, 60, 69, 77, 87).
- 5 (6) Hind femur and tibia with short hairs as usually in Braconinae (Fig. 32). Vein *Ir-m* of hind wing weakly bent (Figs 36, 45) to almost straight (Fig. 44). See the key to the six species of the genus *Amyosoma* in VAN ACHTERBERG & POLASZEK (1996: 21). The seventh species, *A. cavei* sp. n., runs to *A. rufescens* (QUICKE et INGRAM, 1993) with the help of this key, the distinction of these two species is presented at *M. (A.) cavei* sp. n.
Amyosoma VIERECK, 1913
- 6 (5) Hind femur and hind tibia with long hairs (Figs 24, 51, 69, 87). Vein *Ir-m* of hind wing distinctly bent (Figs 64, 73) *Myosoma* BRULLÉ, 1846
- 7 (10) Fore wing: Second submarginal cell relatively short, i.e. *3-SR* 1.5–1.6 times longer than *2-SR*; *SRI* 1.5–1.7 times longer than *3-SR* (Figs 79, 89). Temple in dorsal view strongly rounded to receded (Figs 75, 82, 85).
- 8 (9) First tergite twice longer than broad behind, scutum clearly broadening posteriorly (Fig. 91). Head in dorsal view relatively more transverse, 1.7 times as broad as long, temple strongly rounded (Fig. 85). Vein *SRI* of fore wing approaching tip of wing (Fig. 89). ♀: 6 mm. – Brazil
M. rubriventre BRULLÉ, 1846
- 9 (8) First tergite five times as long as broad behind, scutum less broadening posteriorly (Fig. 81). Head in dorsal view relatively less transverse, 1.6 times as broad as long, temple receded (Figs 75, 82). Vein *SRI* of fore wing reaching tip of wing (Fig. 79). ♀: 8–8.5 mm. – Colombia
M. lagopus (KRIECHBAUMER, 1900)
- 10 (7) Fore wing: Second submarginal cell relatively long, i.e. *3-SR* 1.8–2 times longer than *2-SR*; *SRI* 1.1–1.3 times longer than *3-SR* (Figs 26, 53, 62, 71). Temple in dorsal view rounded to less rounded (Figs 22, 49, 58, 67).
- 11 (14) Second submarginal cell very long, *3-SR* 2.4–2.6 times as long as *2-SR* (Figs 26, 53). Head in dorsal view a bit more transverse, 1.7 times as broad as long (Figs 22, 49)

- 12 (13) Eye in dorsal view slightly less protruding and 1.5 times as long as temple (Figs 38–39). Hind femur less thick, 3.8 times as long as broad medially (Fig. 40). Metasoma black, second tergite laterally reddish. Fore wing brown fumous, distally (beyond pterostigma) subhyaline. ♀: 8 mm. – Bolivia
M. brullei SZÉPLIGETI, 1906
- 13 (12) Eye in dorsal view slightly more protruding and 1.6 times as long as temple (Fig. 49). Hind femur thick. 2.9 times as long as broad medially (Fig. 51). Metasoma testaceous, tergites 6–8 black. Fore wing brown fumous, basally subhyaline. ♀: 10 mm. – Brazil
M. errans (SZÉPLIGETI, 1902)
- 14 (11) Second submarginal cell long, 3–SR 1.8–1.9 times as long 2–SR (Figs 62, 71). Head in dorsal view a bit less transverse (Figs 58, 67).
- 15 (16) Basal lobe of claw deep (Fig. 70). Eye in dorsal view 1.7 times longer than temple (Fig. 67). Scape in outer-lateral view longer than broad apically (Fig. 66). Metasoma reddish. ♀: 8.5 mm. – Ecuador
M. hirtipes BRULLÉ, 1846
- 16 (15) Basal lobe of claw less deep (Fig 61). Eye in dorsal view 1.4 times longer than temple (Fig. 58). Scape in outer-lateral view cubic-form, i.e. as long as broad apically (cf. Fig. 48). Metasoma testaceous, apically black. ♀: 9 mm. – Brazil, Belize
M. fuscipenne BRULLÉ, 1846

Taxonomic remarks – 1.) The genera *Amyosoma* VIERECK, 1913 and *Myosoma* BRULLÉ, 1846 were considered as two valid taxa, however, recently QUICKE & INGRAM (1993: 317) and BELSHAW *et al.* (2001: 423) formally considered them congeneric. However, the genus *Amyosoma* is a valid genus accepting VAN ACHTERBERG & POLASZEK's (1996: 20) point of view on the distinction of the two genera in question.

2.) *Ichneumon mutator* FABRICIUS, 1775 was rearranged by BRULLÉ (1846: 453) into the genus *Myosoma*; recently QUICKE & INGRAM designated it as the type species of their new genus *Poecilobraconoides* QUICKE *et* INGRAM, 1993. Furthermore, the species *Iphiaulax bipartitus* SZÉPLIGETI, 1905 is conspecific with *P. mutator* (FABRICIUS) (QUICKE 1991: 175) distributed in Australia.

3.) The sixth species of the genus *Myosoma*, *M. luteum*, described by SZÉPLIGETI in 1913 was placed in the genus *Cratocnema* SZÉPLIGETI, 1914 (QUICKE 1991: 184, PAPP 2000: 155). Concerning the new combination (*Cratocnema lutea*) QUICKE (l.c.) pointed out: "Very aberrant species of *Cratocnema*..." As a result of the examination of the female lectotype of *Myosoma luteum* I confirm QUICKE's statement with the supplementary comment that it does not represent the genus *Cratocnema* but, perhaps, it belongs to an undescribed genus.

4.) The present taxonomic status of the *Myosoma* species by CAMERON see the checklist in Appendix.

***Amyosoma cavei* sp. n.**
(Figs 21–29)

Material examined (2 ♀♀) – Female holotype + one female paratype: Honduras, Olancho, 15°50' N / 85°51' W, taken with Malaise trap in lowland gallery forest, August 1995 (holotype) and 1 February 1996 (paratype), leg. R. CAVE. – Holotype is deposited in the Zoologisk Museum, Lund and the paratype in Magyar Természettudományi Múzeum, Budapest, Hym. Typ. No. 11711. Holotype and paratype are in good condition: (1) glued on a pointed card by their right mesopleuron, (2) right antenna apically deficient (paratype).

Etymology – The new species, *Amyosoma cavei*, is dedicated to its collector, Mr. R. CAVE.

Description of the female holotype. – Body 6 mm long. Antenna as long as body and with 58 antennomeres. First flagellomere 1.2 times longer than broad, further 7–8 flagellomeres shorter (Fig. 21), middle flagellomeres cubic and penultimate 12–13 flagellomeres somewhat longer than broad; flagellum distally slightly attenuating. – Head in dorsal view transverse (Fig. 22), 1.6 times as broad as long, eye twice longer than temple, temple weakly rounded. Ocelli middle-sized, faintly elliptic, OOL more than twice length of POL. Eye in lateral view 1.5 times as high as wide, temple above 0.7 times as wide as eye and ventrally narrowing (Fig. 23, see arrows). Horizontal diameter of oral opening one-third longer than shortest distance between opening and eye. Head polished, face laterally very finely granulate.

Mesosoma in lateral view 1.7 times as long as high, polished. Notaulix feebly distinct, smooth. – Hind femur 3.5 times as long as broad medially, its hairs dense, of usual length and adpressed (Fig. 24). Hind femur and tibia not flattened, i.e. usual in form. Inner spur of hind tibia 0.33 times length of basitarsus. Hind tarsus a bit longer than hind tibia. Claw downcurved, its basal lobe wide (Fig. 25).

Fore wing somewhat longer than body. Pterostigma (Fig. 26) 4.4 times as long as wide, issuing *r* from its middle and *r* as long as width of pterostigma. Second submarginal cell less long, 3–*SR* 1.5 times length of 2–*SR*; *SRI* faintly bent, 1.4 times longer than 3–*SR* and approaching tip of wing; *cu-a* subinterstitial (i.e. just postfurcal). First discal cell low, 1–*M* 1.5 times length of *m-cu*, 1–*SR-M* bent and almost twice as long as 1–*M* (Fig. 27). – Hind wing: 1*r-m* faintly bent (Fig. 28).

First tergite (Fig. 29) twice longer than broad behind, its scutum broadening posteriorly, together with further tergites polished. Third tergite medially somewhat longer than second tergite, second tergite laterally narrowing, suture between tergites 2–3 straight, smooth and deep (Fig. 29). Ovipositor sheath long, i.e. as long as hind tibia + tarsus combined.

Antenna, head, mesosoma and legs black, metasoma testaceous. Wings evenly brown fumous, pterostigma blackish, venation proximo-distally brown to blackish brown.

Description of the female paratype – Similar to the female holotype. Body 6.5 mm long. Antenna with 55 antennomeres. Head in dorsal view 1.7 times as broad as long. Hind femur 3.7 times as long as broad medially. Pterostigma four times as long as wide and issuing *r* slightly proximally from its middle. First tergite 2.3 times longer than broad behind.

Male and host unknown.

Distribution – Honduras.

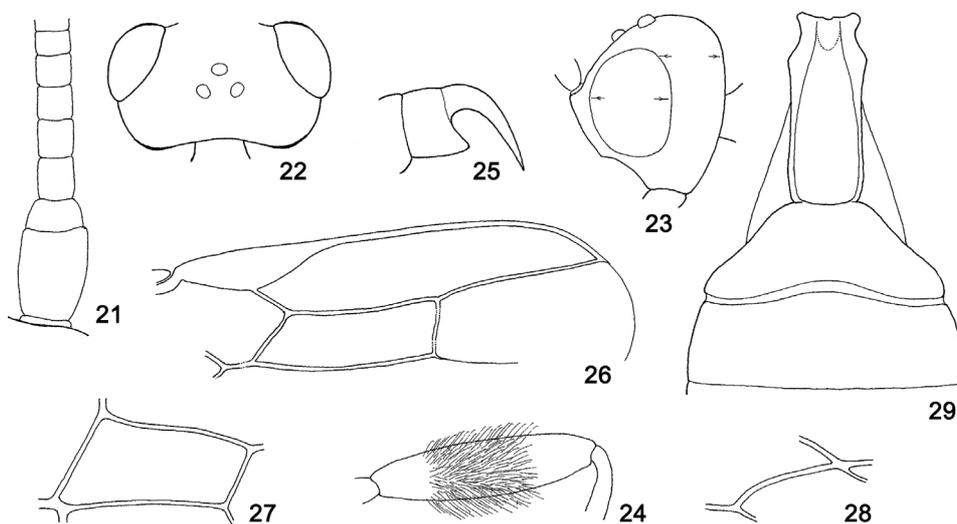
Taxonomic position – The new species, *Amyosoma cavei*, runs to *A. rufescens* (QUICKE et INGRAM) (Australia) with the help of VAN ACHTERBERG & POLASZEK's key (1996: 21), the two species seem to be very near to each other, i.e. only a few features were to be established on the basis of either the key in question or of the original description of *A. rufescens* despite the distant zoogeographic distributions (Honduras / Australia):

- 1 (2) Fore wing: second submarginal cell long, 3-SR 2.7 times as long as 2-SR, pterostigma 4.4 times as long as wide (Fig. 26). Ovipositor sheath long, twice longer than hind tibia. Hind femur 3.5 times as long as broad medially (Fig. 24). Mesosoma black, metasoma entirely testaceous. Fore pair of legs black. Wings brown fumous. ♀: 6–6.5 mm. – Honduras

A. cavei sp. n.

- 2 (1) Fore wing: second submarginal cell less long, 3-SR 1.8 as long as 2-SR, pterostigma 3.1 times as long as wide. Ovipositor sheath short, shorter than (i.e. about half length of) hind tibia. Hind femur 3.2 times as long as broad. Mesosoma testaceous, metasomal tergites bright orange, last three tergites black. Fore pair of legs yellow. Wings pale brown. ♀: 5.7 mm (Fig. 2 in QUICKE & INGRAM 1993: 305) – Australia

A. rufescens (QUICKE et INGRAM, 1993)



Figs 21–29. *Amyosoma cavei* sp. n.: 21 = scape, pedicel and flagellomeres 1–5, 22 = head in dorsal view, 23 = head in lateral view, 24 = hind femur with indication of its hairs, 25 = claw, 26 = distal part of right fore wing, 27 = first discal cell of right fore wing, 28 = vein *Ir-m* of hind wing, 29 = tergites 1–3

Amyosoma chinense (SZÉPLIGETI)
(Figs 29–37)

Bracon chinensis SZÉPLIGETI, 1902: 39 ♂ (1 ♀), type locality: “China”, male holotype (designated by J. PAPP 1969 in QUICKE 1991: 171) in Magyar Természettudományi Múzeum, Budapest; examined. – SHENEFELT 1978: 1561 (literature up to 1970).

Bracon (Amyosoma) chinensis: WATANABE 1932: 65.

Myosoma chinense (SZÉPLIGETI, 1902): QUICKE & WHARTON 1989: 1 and 4 (comb. n.). Maetô 1992: 714 (M. “chinensis”, host record)

Amyosoma chinense (SZÉPLIGETI, 1902): VAN ACHTERBERG & POLASZEK 1996: 21–22 (in key, comb. n., synonyms, redescription).

Amyosoma chilonis VIERECK, 1913: 640 ♀♂ (at least 1 ♀ + 2 ♂♂), type locality: “Taihoku, Formosa” (Taiwan), female lectotype (present designation) in National Museum of Natural History, Washington; examined. – WATANABE 1932: 65 (synonymy with *A. chinense*). SHENEFELT 1978: 1562 (as synonym of *Bracon (Glabrobracon) chinensis*). VAN ACHTERBERG & POLASZEK 1996: 22 (as synonym of *A. chinense*).

Bracon puellaris SZÉPLIGETI, 1902: 40 ♀ (1 ♂), type locality: “Borneo” (Indonesia), female holotype (designated by J. PAPP 1969 in Quicke 191: 172) in Magyar Természettudományi Múzeum, Budapest; examined, **syn. n.** – SHENEFELT 1978: 1528 (as valid species, literature up to 1904).

Myosoma puellaris (SZÉPLIGETI, 1902): QUICKE 1991: 172 (comb. n.).

Taxonomic remark – The two specimens (male and female) described by SZÉPLIGETI (1902: 39–40) under the names *Bracon chinensis* (♂) and *Bracon puellaris* (♀), respectively, are conspecific, its valid name is *Amyosoma chinense* (SZÉPLIGETI). VAN ACHTERBERG & POLASZEK (1996) assigned the species *chinense* in this genus.

Designation of the male holotype of *Bracon chinensis* – (First label, handwriting) “China”; (second label) “B. chinensis” (Szépligeti’s handwriting) “det. Szépligeti” (printed); third label is the holotype card, fourth label is with the inventory number “1279”, fifth label is with the actual name *Amyosoma chinense* Szépl. ♂ (det. J. Papp 2009), labels 3–5 attached by me. – Holotype is in fairly poor condition: (1) micropinned by mesosoma; (2) right flagellum apically deficient (i.e. with 19 flagellomeres or 21 antennomeres), left flagellum missing; (3) wings slightly damaged; (4) tarsomeres 2–5 of left hind leg missing.

Designation of the female holotype of *Bracon puellaris* – (First label, my handwriting) “Indonesia / Borneo”; (second label) “B. puellaris” (Szépligeti’s handwriting) “det. Szépligeti” (printed); third label is the holotype card, fourth label is with the inventory number “1280”, fifth label is with the actual name *Amyosoma chinense* Szépl. ♀ (det. J. Papp 2009), labels 3–5 attached by me. – Holotype is in good condition: (1) micropinned by mesosoma; (2) right flagellum apically deficient (i.e. with 22 flagellomeres or 24 antennomeres).

Designation of the female lectotype of *Amyosoma chilonis* – (First label, printed) “Taiholu / Formosa”; (second label, printed) “ex Chilo / simplex”; (third label) “July” (printed) “1911” (handwriting); (fourth label) “T S Shiraki / coll.”; (fifth red label) “Type / No.” (printed) “15329” (handwriting) / “U.S.N.M.” (printed); sixth label is the name label by (?)Viereck’s handwriting, seventh label is the lectotype card and eighth label is with the actual name *Amyosoma chinense* (Szépl.) (labels 7–8 attached by me). – Lectotype is in good condition: (1) glued on a pointed card by the left

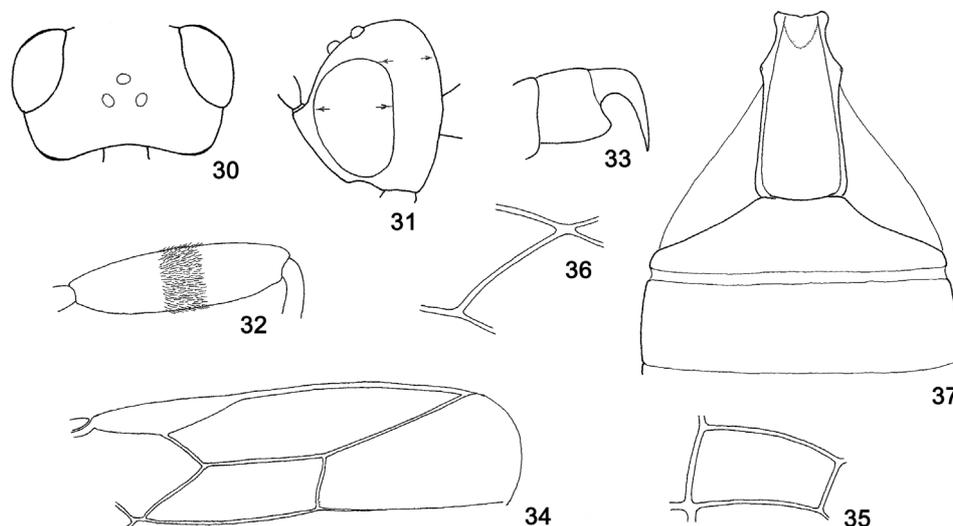
mesopleuron; (2) both flagelli missing; (3) left fore and hind legs glued on the card with the wasp itself; (4) intersternite (of metasoma) and middle pair of tarsi somewhat white mouldy.

Material examined (9 ♀♀ + 5 ♂♂).—1 ♀ + 1 ♂: North India, New Delhi, 1953, ex *Chilo zonellus* Swinhoe (Lep. Pyralidae), leg. et educ. G. W. Angelot. 1 ♀: South India, Coimbatore, Onragi, 19 VII 1913, Ponniah Coll. 1 ♀: China, Hangzhou, VIII 1965, leg. He Junhua. 4 ♀♀ + 2 ♂♂: Taiwan, Taipei, ex *Chilo suppressalis* Walker (Lep. Pyralidae), 1 ♂ 1 VIII 1971 and 4 ♀♀ + 1 ♂ 13 IX 1974, leg. et educ. K. C. Chou. 1 ♀: Taiwan, Taichung, ex *Zeuzera coffeae* Nietner (Lep. Cossidae), V 1983, leg. et educ. L. Y. Chou. 2 ♂♂: Japan, Yaron-to, sweeping paddy field, 26 X 1964, leg. F. Haramoto. 1 ♀: Vietnam, Ha Noi, Tu Liem, 27 IX 1989, leg. K. D. Long.

A concise redescription of *Amyosoma chinense* (SZÉPLIGETI) was presented by VAN ACHTERBERG & POLASZEK (1996: 22), subsequently complementary features are added to it based mainly on the female holotype of *A. puellaris* (SZÉPLIGETI).

Female: Body 4–5 mm long. Antenna about as long as body and with 32–39 antennomeres. Flagellomeres 1.3 to 1.8 times as long as broad (cf. Fig. 72 in VAN ACHTERBERG & POLASZEK 1996: 86). Head in dorsal view transverse, 1.6–1.8 times as broad as long, eye almost twice longer than temple, temple rounded (Fig. 30) eye in lateral view 1.5 times wider than temple (Fig. 31). Oral opening: its horizontal diameter (1.5–)1.6–1.7 times longer than shortest distance between opening and eye. Head polished, face finely granulose.

Mesosoma in lateral view 1.6–1.7 times as long as high, polished. Notaulix faintly distinct. Hind femur 2.9–3 times as long as broad with short and adpressed hairs (Fig. 32). Claw and its basal lobe as in Fig. 33.



Figs 30–37. *Amyosoma chinense* (SZÉPLIGETI), female holotype: 30 = head in dorsal view, 31 = head in lateral view, 32 = hind femur with indication of its hairs, 33 = claw, 34 = distal part of right fore wing, 35 = first discal cell of right fore wing, 36 = *1r-m* of hind wing, 37 = tergites 1–3

Fore wing as long as body. Pterostigma (Fig. 34) 2.6–3.3 times as long as wide and issuing r more or less proximally from its middle, r shorter than (rarely as long as) width of pterostigma. Second submarginal cell long, 1.6–1.75 times longer than $2-SR$, $SR1$ 1.3–1.4 times as long as $3-SR$ and rather approaching tip of wing. First discal cell narrow, $1-M$ 1.4–1.5 times as long as $m-cu$, $1-SR-M$ straight and 1.85–1.9 times length of $1-M$ (Fig. 35). – Hind wing: $1r-m$ straight to weakly bent (Fig. 36).

First tergite (Fig. 37) long, 2.2–2.6 times as long as broad behind, its margin laterally from scutum very narrow, together with further tergites polished. Tergites 2 and 3 transverse, third tergite either as long as or longer than second tergite (Fig. 37). Hypopygium pointed, ovipositor sheath shorter than to as long as hind tibia + basitarsus combined.

Corporal colour as in VAN ACHTERBERG & POLASZEK (l.c.) Melanic form: head and mesosoma rusty brown (1 ♀); albanic form: head and mesosoma brownish yellow or ochre (2 ♀♀).

Male: Similar to the female. Body 4–4.5(–5) mm long. Antenna as long as body and with 37–38 antennomeres. Melanic form: metasoma black (cf. VIERECK 1913: 640).

Distribution – Oriental and East Palaearctic Regions. Introduced into Afrotropics and Pacifics.

Taxonomic position – Considering VAN ACHTERBERG & POLASZEK's key (1996: 21) for the *Amyosoma* species the nearest two species to *M. (A.) chinense* are *M. (A.) leuzerae* ROHWER (Indonesia: Java) and *M. (A.) yanoi* (WATANABE) (Japan). The three species are very similar to each other, the differences among them restricted to minute lengths of the ovipositor sheath and somewhat variable colour pattern of the body.

Myosoma brullei SZÉPLIGETI
(Figs 38–47)

Myosoma brullei Szépligeti, 1906: 587 (1 ♀), type locality: “Bolivien: Mapiri”, female holotype (designated by J. PAPP in QUICKE 1991 l.c.) in Magyar Természettudományi Múzeum, Budapest; examined. – SHENEFELT 1978: 1707 (literature up to 1906). QUICKE 1991: 184 (type depository).

Designation of the female holotype of *Myosoma brullei* – (first label, printed) “Bolivia/Mapiri”; second label is the holotype card, third label is with the inventory number “1243” (2nd and 3rd labels attached by me); fourth label is with the actual name *Myosoma brullei* given by QUICKE 1989 (label reverse with “teste Papp J. 1991”). – Holotype is in fairly poor condition: (1) pinned by mesosoma (before prescutellar furrow); (2) both flagelli distally deficient; (3) right fore wing (proximal from pterostigma) somewhat deficient; (4) missing: tarsomeres 3–5 of left middle and right hind legs, pair of ovipositor sheaths.

Redescription of the female holotype of *Myosoma brullei* – Body 8 mm long. Both flagelli deficient distally: right flagellum with 31 and left flagellum with 39 flagellomeres. Scape in outer-lateral view dorsally just longer than ventrally and 1.35 times longer than broad apically; first flagellomere somewhat longer than broad, 2–6(–7)th flagellomeres shortening to transverse, i.e. slightly broader than long. – Head in dorsal view transverse (Figs 38–39), 1.7–1.8 times as broad as long, eye 1.5 times longer than temple, temple moderately rounded, eye slightly protruding. Ocelli just elliptic, OOL almost three times longer than POL. Eye in lateral view 1.3 times as high as wide, tem-

ple beyond eye 0.7 times as wide as eye and narrowing ventrally. Horizontal diameter of oral opening 1.6 times longer than shortest distance between opening and eye. Head polished and with long hairs.

Mesosoma in lateral view 1.7 times as long as high, polished. Notaulix almost indistinct. – Hind femur less thick, 3.8 times as long as broad medially and with long hairs (Fig. 40). Hind basitarsus as long as tarsomeres 2–4 combined. Legs hairy. Claw downcurved with wide and pointed basal lobe (Fig. 41).

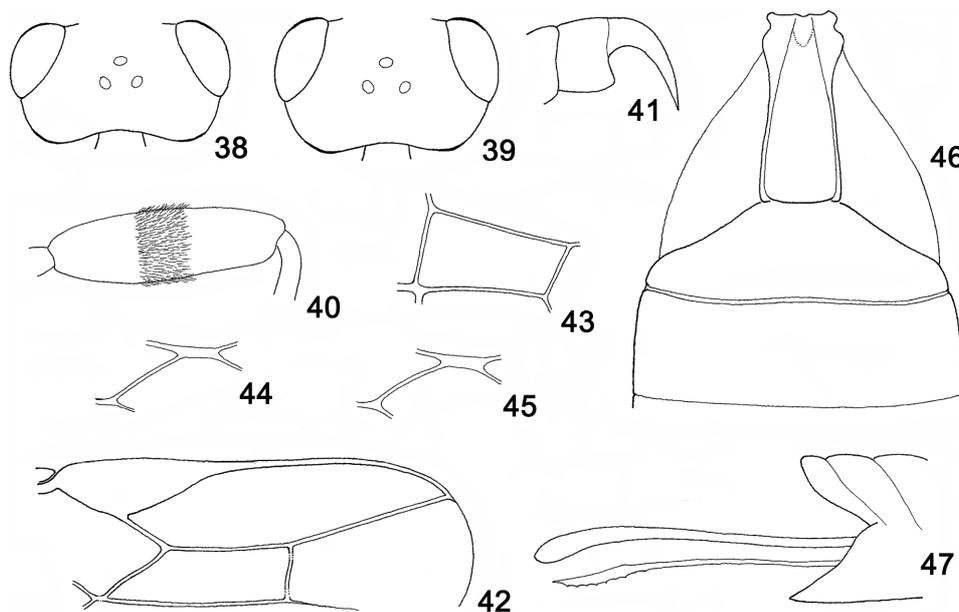
Fore wing as long as body. Pterostigma (Fig. 42) 2.8 times as long as wide and issuing *r* somewhat proximally from its middle, *r* 0.8 times length of pterostigma. Second submarginal cell long, 3–*SR* 2.6 times as long as 2–*SR*; *SRI* bent, reaching tip of wing, slightly longer than 3–*SR*. First discal cell: 1–*SR*–*M* 1.6 times longer the 1–*M*, 1–*M* and *m*–*cu* parallel (Fig. 43). – Hind wing: 1–*r*–*m* bent (Fig. 45) or straight (Fig. 44).

First tergite (Fig. 46) 2.6 times as long as broad behind, together with further tergites polished. Second tergite 3.3 times as broad behind as long medially, laterally narrowing; third tergite 1.25 times longer than second tergite (Fig. 47). Hypogium pointed, ovipositor sheath long, as long as hind tibia + tarsomeres 1–3 combined (Fig. 47).

Antenna, body and legs black. Mandible dark rusty. Cheek brownish yellow. Tergites 1–2 laterally reddish. Wings brown fumous, distally (beyond pterostigma) subhyaline.

Male and host unknown.

Distribution – Bolivia.



Figs 38–47. *Myosoma brullei* SZÉPLIGETI, female holotype: 38–39 = head in dorsal view, 40 = hind femur with indication of its hairs, 41 = claw, 42 = distal part of right fore wing, 43 = first discal cell right fore wing, 44–45 = vein 1–*r*–*m* of hind wing, 46 = tergites 1–3, 47 = hind end of metasoma with ovipositor apparatus

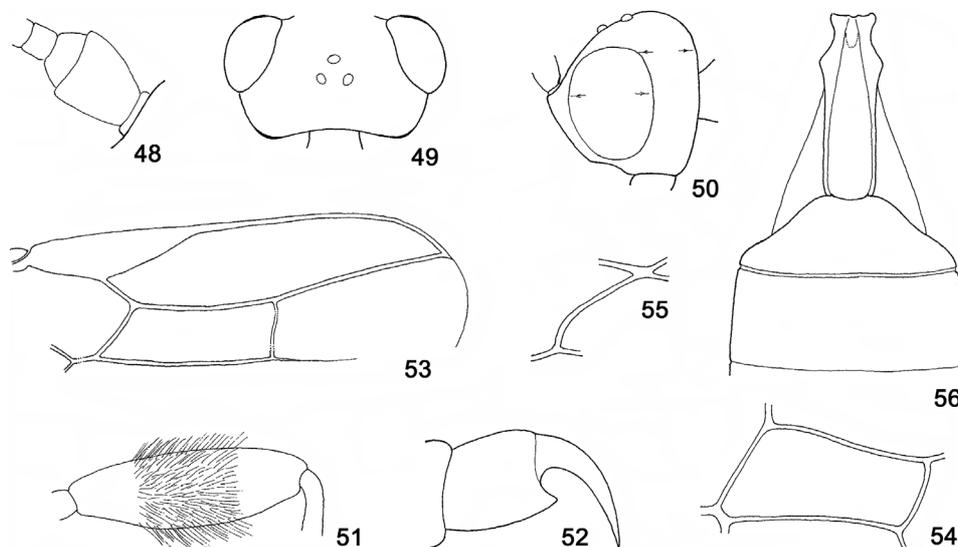
Taxonomic position – *Myosoma brullei* is nearest to *M. errans*, for their distinction see key-couplets 12 (13)–13 (12).

Myosoma errans (SZÉPLIGETI)
(Figs 48–56)

Bracon errans SZÉPLIGETI, 1902: 42 (1 ♀), type locality: “Brasilien: Fonteboa”, female holotype (designated by J. PAPP 1969 in QUICKE 1991: 172) in Magyar Természettudományi Múzeum, Budapest; examined. – SZÉPLIGETI 1904: 187 (in key).

Myosoma errans (SZÉPLIGETI): SZÉPLIGETI 1906: 588 (comb. n.). SHENEFELT 1978: 1707 (as valid species, literature up to 1906). QUICKE 1991: 172 (type depository).

Designation of the female holotype of *Bracon errans* – (First label, handwriting) “Fonteboa / Brasil”; (second label) “Br. errans” (Szépligeti’s handwriting) / “det Szépligeti” (printed); third label is the holotype card, fourth label is with the inventory number “1247”; fifth label is with the actual name, *Myosoma errans*, given by Szépligeti (in 1906). – Holotype is in fairly good condition: (1) pinned by the mesosoma; (2) left flagellum deficient (a piece of flagellum glued on a separate card), right antenna missing; (3) a small part of right fore wing (proximal from pterostigma) missing; (4) missing: tarsomeres 3–5 of right hind leg.



Figs 48–56. *Myosoma errans* (SZÉPLIGETI), female holotype: 48 = scape, pedicel and first flagellomere in outer-lateral view, 49 = head in dorsal view, 50 = head in lateral view, 51 = hind femur with indication of its hairs, 52 = claw, 53 = distal part of right fore wing, 54 = first discal cell of right fore wing, 55 = vein *Ir-m* of hind wing, 56 = tergites 1–3

Redescription of the female holotype of *Bracon errans* – Body 9 mm long. Scape in outer-lateral view cubic-form: as long dorsally as broad apically (Fig. 48). Left flagellum deficient: present first fifteen flagellomeres. – Head in dorsal view transverse (Fig. 49), 1.7 times as broad as long, eye somewhat protruding and 1.6 times longer than temple, temple rather receded. Ocelli small, almost round, OOL nearly three times longer than POL. Eye in lateral view 1.3 times as high as wide, temple beyond eye narrowing ventrally and eye 1.7 times wider than temple (Fig. 50, see arrows). Horizontal diameter of oral opening twice longer than shortest distance between opening and eye. Head polished, hairy.

Mesosoma in lateral view 1.6 times as long as high, polished. Notaulix faintly distinct anteriorly. – Hind femur thick, three times as long as broad medially (Fig. 51), together with hind tibia with long hairs. Hind basitarsus as long as tarsomeres 2–3 and half of 4th tarsomere combined. Basal lobe of claw deep as in Fig. 52.

Fore wing somewhat longer than body. Pterostigma (Fig. 53) 3.3 times as long as wide and insuing *r* somewhat proximally from its middle; *r* shorter than width of pterostigma, second submarginal cell long, 3–*SR* 2.4 times as long as 2–*SR*; *SRI* bent, almost 1.3 times longer than 3–*SR* and reaching tip of wing. First discal cell long and narrow, 1–*SR*–*M* S-form and 1.7 times as long as 1–*M* (Fig. 54). – Hind wing: 1*r*–*m* curved as in Fig. 55.

First tergite (Fig. 56) long and narrow, almost five times as long as broad behind; scutum distinctly narrow, laterally from scutum margin just distinct, together with further tergites polished. Second tergite transverse, 3.9 times as broad behind as long medially, laterally less narrowing; third tergite nearly 1.25 times longer than second tergite medially, suture between tergites 2–3 straight and fairly deep. Ovipositor sheath as long as hind tibia + basitarsus combined.

Antenna, head, mesosoma, legs and last three tergites black; metasoma testaceous. Head and mesosoma with weak rusty tint. Palpi black, mandible dark rusty; cheek brownish yellow. Wings light brownish fumous. Pterostigma dark brown, veins proximo-distally brownish yellow to brown.

Male and host unknown.

Distribution – Brazil.

Taxonomic position – *Myosoma errans* is nearest to *M. brullei*, for their distinction see the key-couplets 12 (13)–13 (12).

Myosoma fuscipenne BRULLÉ (Figs 57–65)

Myosoma fuscipenne BRULLÉ, 1846: 451 (1 ♀), type locality: “Hab. le Brésil”, female holotype (present designation) in Muséum National d’Histoire Naturelle, Paris; examined. – SHENEFELT 1978: 1708 (literature up to 1904).

Bracon chontalensis CAMERON, 1900: 322 (at least 1 ♀), type locality: “Nicaragua, Chontales”, male “Type” (= Lectotype) in The Natural History Museum, London; examined, **syn. n.** – SHENEFELT 1978: 1475 (literature up to 1904).

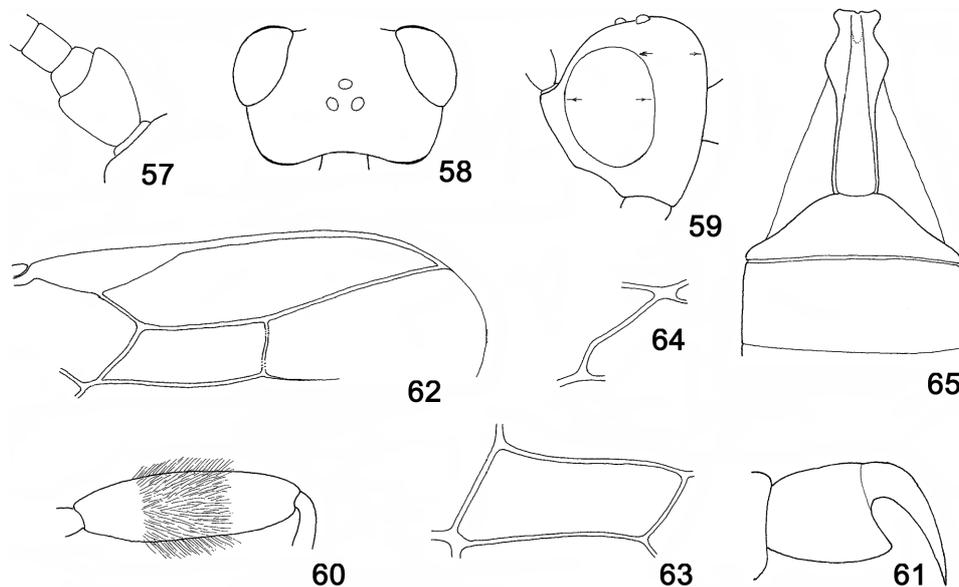
Designation of the female holotype of *Myosoma fuscipenne* – (First label, printed) “Museum Paris / EY0000001665”; (second label, printed) “Museum Paris / Brésil / Gaudichard 1833”; (third round label, handwriting) “2665 / 93”; (fourth label, handwriting) “Myosoma / fuscipenne Br.”; fifth label is the holotype card attached by me on a separate pin (holotype itself is on a very short pin). – Holotype is in fairly poor condition: (1) pinned by mesosoma on a short and fairly thick pin, body

somewhat dirty; (2) left flagellum deficient, right flagellum missing; (3) pair of ovipositor sheath missing; (4) left fore wing glued to tegula; (5) left middle leg glued on the first label.

Designation of the the "Type" (= Lectotype) of *Bracon chontalensis* – (First round label with red margin, printed) "Type" / H. T.; (second label, printed) "Chontales / Nicaragua. / Janson."; (third label, printed) "B.C.A. Hymen. I. / Bracon / chontales, / Cam."; fourth label is with the inventory number "3.c.463"; fifth great label with (Cameron's?) handwriting: "Bracon / chontalensis / Cam. Type / BCa 11322"; sixth label is with the actual name *Myosoma fuscipenne* BRULLÉ (det. J. Papp 2009). – Type is in fairly poor condition: (1) pinned by the mesosoma, mesoscutum somewhat dented; (2) head missing; (3) missing: right fore and middle (except coxa) legs, tarsus of left middle and tarsomeres 3–5 of right hind legs.

Material examined (3 ♀♀ + 1 ♂, in The Natural History Museum, London). – 1 ♀ + 1 ♂: British Honduras (=Belize), Augustine, ex larva *Hypsipyla grandella*, July 1968, F. D. Bennett collector. 2 ♀♀: ?U.S.A., "Cedar, Brigada Hill Res.", ex larva *Hypsipyla grandella*, March 1967, "Bracon sp. ?chontalensis Cam." (handwriting) "R. D. Eady 1967" (printed).

Redescription of the female holotype of *Myosoma fuscipenne* – Body 9 mm long. Antennae: right flagellum missing, left flagellum deficient, i.e. with 16 flagellomeres. Scape in outer-lateral view slightly longer dorsally than broad apically (Fig. 57). First flagellomeres gradually shortening, first flagellomere somewhat longer than broad, rest of 13 flagellomeres transverse. – Head in dorsal view transverse (Fig. 58), nearly 1.5 times as broad as long, eye nearly 1.4 times longer than temple, temple less rounded. Ocelli medium sized, almost round, OOL three times longer than POL. Eye in



Figs 57–65. *Myosoma fuscipenne* BRULLÉ, female holotype: 57 = scape, pedicel and first flagellomere in outer-lateral view, 58 = head in dorsal view, 59 = head in lateral view, 60 = hind femur with indication of its hairs, 61 = claw, 62 = distal part of right fore wing, 63 = first discal cell of right fore wing, 64 = vein *Ir-m* of hind wing, 65 = tergites 1–3

lateral view nearly 1.4 times as high as wide and just 1.3 times wider than temple, temple narrowing ventrally (Fig. 59, see arrows). Horizontal diameter of oral opening 1.5 times longer than shortest distance between opening and eye. Head smooth, shiny, hairy.

Mesosoma in lateral view 1.4 times as long as high, polished. Notaulix faintly distinct. Hind femur 3.1 times as long as broad medially (Fig. 60). Hind basitarsus as long as tarsomeres 2–4 combined. Claw and its basal lobe deep as in Fig. 61.

Fore wing almost twice longer than body. Pterostigma (Fig. 62) 3.6 times as long as wide and issuing *r* somewhat proximally from its middle; *r* just longer than width of pterostigma. Second submarginal cell long, 3–SR twice length of 2–SR; SRI 1.4 times longer than 3–SR, straight and approaching tip of wing. First discal cell long and low, 1–SR–M faintly S-form and twice as long as 1–M (Fig. 63). – Hind wing: 1*r*–*m* bent (Fig. 64).

First tergite (Fig. 65) long and narrow, five times as long as broad behind, together with further tergites polished. Second tergite four times as broad behind as long medially, laterally narrowing. Third tergite 1.6 times longer medially than second tergite, not narrowing laterally. Ovipositor sheath longer than hind tibia.

Scape and pedicel black, flagellum dark brown. Head black. Mesosoma reddish with black(ish) pattern on pronotum, prosternum, middle lobe of mesoscutum, scutellum and axille. Metasoma testaceous, apically black. Legs 1–2 reddish, leg 3 dark reddish. Wings brown fumous, pterostigma light brown, veins brownish.

Deviating features of three females – Body 6 mm (1 ♀) and 8–8.5 mm (2 ♀♀) long. Head in dorsal view 1.5–1.6 times as broad as long. Hind femur 3.3 times (1 ♀) and 3.7 times (1 ♀) longer than broad medially. Fore wing: second submarginal cell less long, 3–SR 1.65–1.7 times as long as 2–SR (2 ♀♀). Metasoma reddish with much black(ish) pattern.

Deviating features of two males – Body 4–5 mm long. Head in dorsal view 1.6 times as broad as long (1 ♂). Hind femur 3.5 times (1 ♂) and 4 times (male Type of *B. chontalensis*) as long as broad somewhat distally. Fore wing: second submarginal cell long, 3–SR almost 1.65 times (1 ♂) and 1.9 times (male Type of *B. chontalensis*) longer than 2–SR. Metasoma reddish with much black(ish) pattern (1 ♂).

Host – *Hypsipyra grandella* Zeller (Lep. Pyralidae).

Distribution. – Brazil, Belize, ?U.S.A. (“Cedar”).

Taxonomic position – *Myosoma fuscipenne* is nearest to *M. hirtipes* BRULLÉ, for their distinction see key-couplets 15 (16)–16 (15).

Myosoma hirtipes BRULLÉ (Figs 66–73)

Myosoma hirtipes BRULLÉ, 1846: 451 ♀ (1 ♀), type locality: “l’Amérique méridionale”, female holotype (designated by VAN ACHTERBERG 1978, in litt.), in Muséum National d’Histoire Naturelle, Paris; examined. – VIERECK 1914: 97 (type species of *Myosoma*). SHENEFELT 1978: 1708 (literature up to 1914).

Designation of the female holotype of *Myosoma hirtipes* – (First label, printed) “Museum Paris / EY000000166”; (second label) “Museum Paris” (printed) “Cayame / Leprieur 302 1899” (handwriting, “Cayame” = Cayambe in Ecuador); (third label, handwriting) “Myosoma / hirtipes Br.”; fourth label is the holotype card attached by VAN ACHTERBERG in 1978. – The holotype is in poor

condition: (1) pinned by mesosoma; (2) missing: both flagelli, fore right wing and metasoma; (3) left fore wing torned medially.

Redescription of *Myosoma hirtipes* – Body ?8 mm long. Scape broad, in outer-lateral view 1.25 times as long dorsally as broad apically, dorsally longer than ventrally (Fig. 66). – Head in dorsal view less transverse (Fig. 67), 1.6 times as broad as long, eye 1.7 times longer than temple, temple less rounded (Fig. 67). Ocelli less large, elliptic, OOL twice longer than POL. Eye in lateral view 1.4 times as high as wide, temple beyond eye 0.7 times as wide as eye and narrowing ventrally (Fig. 68, see arrows). Horizontal diameter of oral opening twice longer than shortest distance between opening and eye. Head polished, face just uneven, shiny.

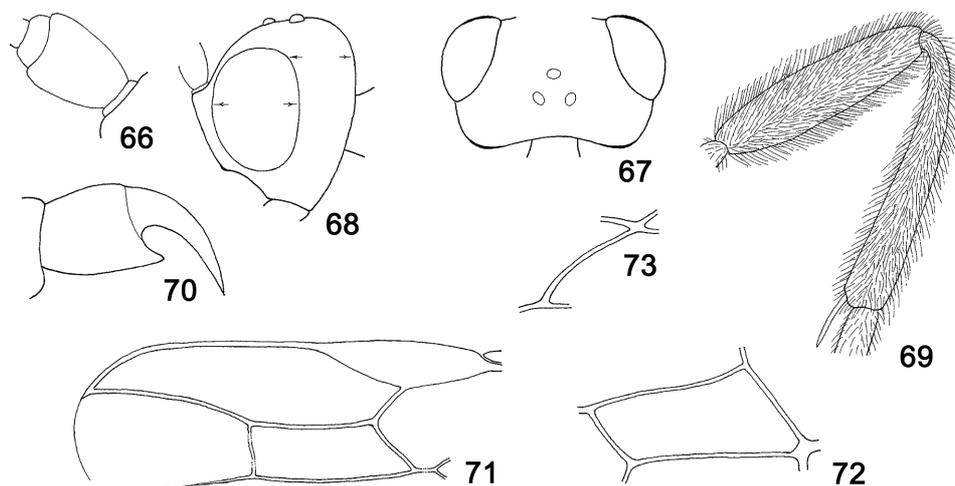
Mesosoma in lateral view 1.8 times as long as high, polished. Notaulix faintly distinct anteriorly, smooth. – Hind femur 3.5 times as long as broad medially and together with hind tibia with long hairs (Fig. 69). Hind basitarsus as long as tarsomeres 2–3 combined. Claw downcurved and its basal lobe wide and pointed as in Fig. 70.

Fore wing twice longer than head and mesosoma combined. Pterostigma (Fig. 71) 3.3 times as long as wide and issuing *r* somewhat proximally from its middle, *r* 0.8 times as long as width of pterostigma. Second submarginal cell long, 3–*SR* 2.1 times as long as 2–*SR*; *SR*1 bent, reaching tip of wing and 1.25 times longer than 3–*SR*. First discal cell: 1–*SR*–*M* twice longer than 1–*M*, 1–*M* and *m*–*cu* almost parallel (Fig. 72). – Hind wing: 1*r*–*m* curved (Fig. 73).

Metasoma missing.

Scape, head, mesosoma and legs black. Metasoma entirely reddish. Long hairs of hind femur and tibia also black. Inner side of hind coxa, femur and tibia rusty. Fore wing: proximal half subhyaline, distal half brown fumous (medially less fumous).

Distribution – Ecuador.



Figs 66–73. *Myosoma hirtipes* BRULLÉ, female holotype: 66 = scape and pedicel in outer-lateral view, 67 = head in dorsal view, 68 = head in lateral view, 69 = hind femur and tibia with hairs, 70 = claw, 71 = distal part of left fore wing, 72 = first discal cell of left fore wing, 73 = vein 1*r*–*m* of hind wing

Taxonomic position – *Myosoma hirtipes* is nearest to *M. fuscipenne*, distinction of the two species is presented in the key-couplets 15 (16)–16 (15).

Myosoma lagopus (KRIECHBAUMER) **sp. rev. et comb. n.**
(Figs 74–83)

Acanthobracon lagopus KRIECHBAUMER, 1900: 103 ♀ (1 ♀), type locality: “Zwischen Bodega central und Honda am Rio Magdalena (Columbien)”, female holotype (designated by “Zoologische Staatssammlung München”) in Museum München; examined. – SCHULZ 1903: 253 (synonymized with *M. hirtipes* BRULLÉ, 1846). SHENEFELT 1978: 1708 (as synonym of *M. hirtipes* after SCHULZ l.c., literature up to 1903).

Bracon errotus SZÉPLIGETI, 1902: 43 ♀ (1 ♀), type locality: “Venezuela: Merida”, female holotype (designated by J. PAPP 1969 in QUICKE 1991: 172) in Magyar Természettudományi Múzeum, Budapest; examined, **syn. n.** – SZÉPLIGETI 1904: 187 (in key).

Myosoma errotus (SZÉPLIGETI): SZÉPLIGETI 1906: 588 (comb. n.). SHENEFELT 1978: 1708 (as valid species, literature up to 1906).

Designation of the female holotype of *Acanthobracon lagopus* – (First label, handwriting) “Bodega central de Honda”; (second label, handwriting) “Bodega central / und Honda / am Rio Magda- / lena, Columbien / Therese v. Bayern”; (third label, reverse second label) “Bisher war nur des ♂ / n. als Fundort / «Amer. mer.» bekannt”; fourth label is the holotype card, fifth and sixth labels are with the valid (“recte”) name *Myosoma hirtipes* Brullé ♀ (the two labels are with two different handwriting). – Holotype is in fairly good condition: (1) pinned by mesosoma; (2) head glued to mesosoma; (3) metasoma, right hind coxa and right hind leg glued separately on hind part of first label; (4) right antenna missing; (5) right fore tibia less visible (glued to head).

Designation of the female holotype of *Bracon errotus* – (First label, my handwriting) “Venezuela / Merida”; (second quadratic label, reverse the first label) “539/128”; (third label) “Br. errotus” (Szépligeti’s handwriting) / “det. Szépligeti” (printed); (fourth label) “Myosoma errotus (Szépl.) ♀ (my handwriting) “det. Szépligeti” (printed) “1906” (my handwriting); fifth label is the holotype card, sixth label is with the inventory number “1248”; seventh label is with the actual name *Myosoma lagopus* KRIECHBAUMER (det. J. Papp 2009), specimen compared with the female holotype of *M. lagopus*. Labels 1 and 4 to 7 attached by me. – Holotype is in good condition: (1) pinned by mesosoma (before prescutellar furrow); (2) left flagellum damaged; (3) right fore wing damaged proximally from pterostigma.

Redescription of the female holotype of *Acanthobracon lagopus* – Body 8.5 mm long. Left antenna about as long as body and with 49 antennomeres (right antenna missing). Scape in outer-lateral view 1.5 times as long dorsally as broad apically, dorsally longer than ventrally (Fig. 74). Flagellomeres 1–3 1.25 times, 1.08 times 1 times as long as broad, respectively, further flagellomeres transverse (i.e. slightly broader than long), penultimate three flagellomeres cubic. Flagellum distally indistinctly attenuating, hairy. – Head in dorsal view less transverse (Fig. 75), 1.6 times as broad as long, eye 1.6 times longer than temple, temple receded. Ocelli middle-sized, elliptic, OOL slightly more than three times longer than POL (Fig. 75). Eye in lateral view 1.5 times as high as wide, temple beyond eye 0.7 times as wide as eye and narrowing ventrally (Fig. 76, see arrows). Horizontal diameter of oral opening 2.6 times longer than shortest distance between opening and eye. Head polished, face weakly uneven.

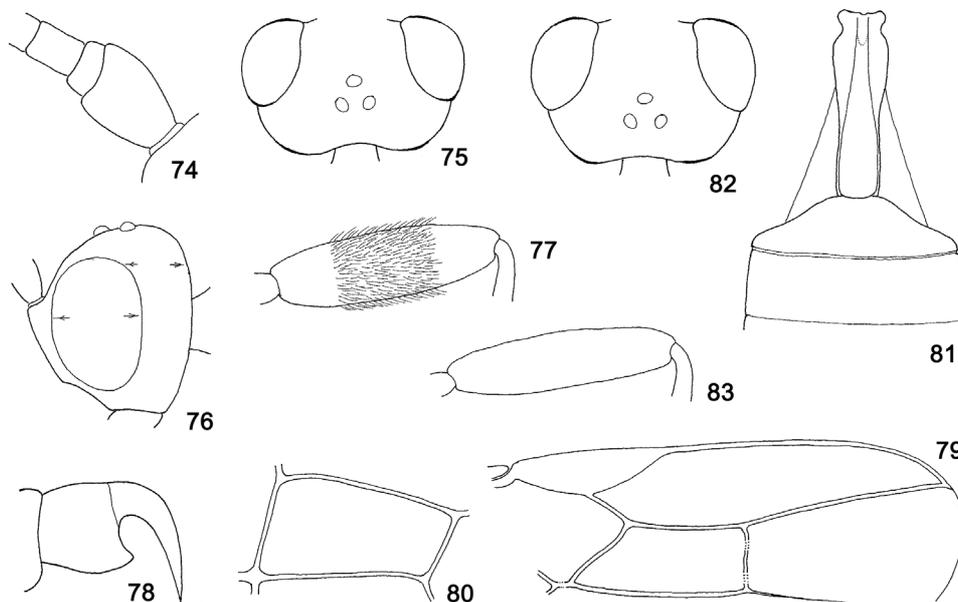
Mesosoma in lateral view 1.5 times as long as high, polished. Notaulix distinct, smooth. – Hind femur 3.3 times as long as broad medially and with fairly long hairs (Fig. 77). Hind basitarsus as long as tarsomeres 2–4 combined. Claw downcurved and with wide and somewhat pointed basal lobe (Fig. 78).

Fore wing as long as body. Pterostigma (Fig. 79) 3.3 times as long as wide and issuing *r* from its middle, *r* as long as width of pterostigma. Second submarginal cell short, 3–*SR* 1.6 times length of 2–*SR*; *SRI* almost straight, reaching tip of wing and 1.7 times longer than 3–*SR*. First discal cell: 1–*SR*–*M* weakly bent and almost twice longer than 1–*M*, 1–*M* and *m*–*cu* not parallel (Fig. 80). – Hind wing: 1*r*–*m* curved like that of *M. hirtipes* (cf. Fig. 73).

First tergite (Fig. 81) five times as long as broad, scutum moderately broadening posteriorly, together with further tergites polished. Second tergite transverse and laterally narrowing, four times broader behind than long medially; third tergite as long as second tergite (Fig. 81). Ovipositor sheath long, as long as hind tibia + half basitarsus combined.

Antenna, had, mesosoma, legs and ovipositor sheath black, metasoma reddish. Mandible dark rusty. Upper margin of pronotum rusty. Hairs of legs black. Wings brown fumous, pterostigma and veins brown.

Deviating features of one female (holotype of *M. errotus*).–Body 8 mm long. Head in dorsal view 1.5 times as broad as long (Fig. 82). Hind femur four times as long as broad medially (Fig. 83). Fore wing: 3–*SR* 1.5 times as long as 2–*SR*, *SRI* 1.6 times longer than 3–*SR*. Outer orbit (of eye) rusty, pronotum and lateral lobe of mesoscutum with faint rusty suffusion.



Figs 74–83. *Myosoma lagopus* (KRIECHBAUMER), comb. n., female holotype: 74–81, female holotype of *M. errotus* SZÉPL.: 82–83: 74 = scape, pedicel and first flagellomere in outer-lateral view, 75 = head in dorsal view, 76 = head in lateral view, 77 = hind femur with indication of its hairs, 78 = claw, 79 = distal part of right fore wing, 80 = first discal cell of right fore wing, 81 = tergites 1–3, 82 = head in dorsal view, 83 = hind femur

Male and host unknown.

Distribution – Colombia, Venezuela.

Taxonomic position – Since SCHULZ's synonymization (l.c.) the name *A. lagopus* was suppressed as conspecific with *M. hirtipes* (SHENEFELT 1978). The examination of the holotypes of the two taxa, *M. hirtipes* and *M. lagopus* albeit very near to each other, shows two valid species. Their distinction is presented as follows:

- 1 (2) Second submarginal cell long, 3–SR twice as long as 2–SR (Fig. 71). Hind femur with long hairs (Fig. 69). Temple in dorsal view less rounded (Fig. 67). Fore wing: proximal half of subhyaline, distal half brown fumous. ♀: 78 mm
M. hirtipes BRULLÉ, 1846
- 2 (1) Second submarginal cell less long, 3–SR 1.6 times as long as 2–SR (Fig. 79). Hind femur with less long hairs (Fig. 77). Temple in dorsal view re-
ceded (Figs 75, 82). Fore wing evenly brown fumous. ♀: 8–8.5 mm
M. lagopus (KRIECHBAUMER, 1900)

The species is also near to *M. rubriventre*, for their distinction see key-cou-
plets 8 (9)–9 (8).

Myosoma rubriventre BRULLÉ
(Figs 84–93)

Myosoma rubriventre BRULLÉ, 1846: 452 (1 ♀), type locality: “le Brésil”, female holotype (present designation) in Muséum National d’Histoire Naturelle, Paris; examined. – SHENEFELT 1978: 1709 (literature up to 1904).

Designation of the female holotype of *Myosoma rubriventre* – (First label, printed) “Museum Paris / EY0000001664”; (second label) “Museum Paris” (printed) / “Brésil / Dalalande” (handwriting); (third round label, handwriting) “Brésil / Delalande”; (fourth label, handwriting) “Myosoma / rubriventre”; fifth label is the holotype card. – Holotype is in fairly poor condition: (1) pinned by mesosoma on a short and thick pin; (2) right flagellum missing, left flagellum apically deficient; (3) fore pair of legs (except left coxa) glued on a separate small card; (4) left hind leg (except coxa and trochanters) missing; (5) head and mesosoma (and partly legs) dirty.

Redescription of the female holotype – Body 6 mm long. Scape short, dorsally longer than ventrally and as long dorsally as broad apically (Fig. 84). Left flagellum deficient distally and with 28 flagellomeres. First 3–4 flagellomeres shortening, rest of flagellomeres transverse. – Head in dorsal view transverse (Fig. 85), 1.7 times as broad as long, eye 1.7 times longer than temple, temple rounded. Ocelli middle-sized, almost round, OOL 3.5 times longer than POL. Eye in lateral view 1.3 times as high as wide and just less than twice wider than temple, temple evenly broad beyond eye (Fig. 86, see arrows). Oral opening large, twice longer horizontally than shortest distance between opening and eye. Head polished.

Mesosoma in lateral view 1.6 times as long as high, polished. Notaulix faintly distinct. – Hind femur 4.3 times as long as broad, parallel-sided, together with hind tibia with relatively short hairs (Fig. 87). Hind basitarsus as long as tarsomeres 2–4 combined. Claw as in Fig. 88.

Fore wing one-fourth longer than body. Pterostigma (Fig. 89) 3.2 times as long as wide and issuing *r* just distally from its middle; *r* shorter than width of pterostigma. Second submarginal cell less long, 3–*SR* 1.65 times as long as 2–*SR*; *SR*1 1.5 times longer than 3–*SR*, indistinctly bent and approaching tip of wing. First discal cell less long and rather wide, 1–*SR*–*M* bent and 1.7 times as long as 1–*M* (Fig. 90). – Hind wing: 1–*r*–*m* curved as in Fig. 73.

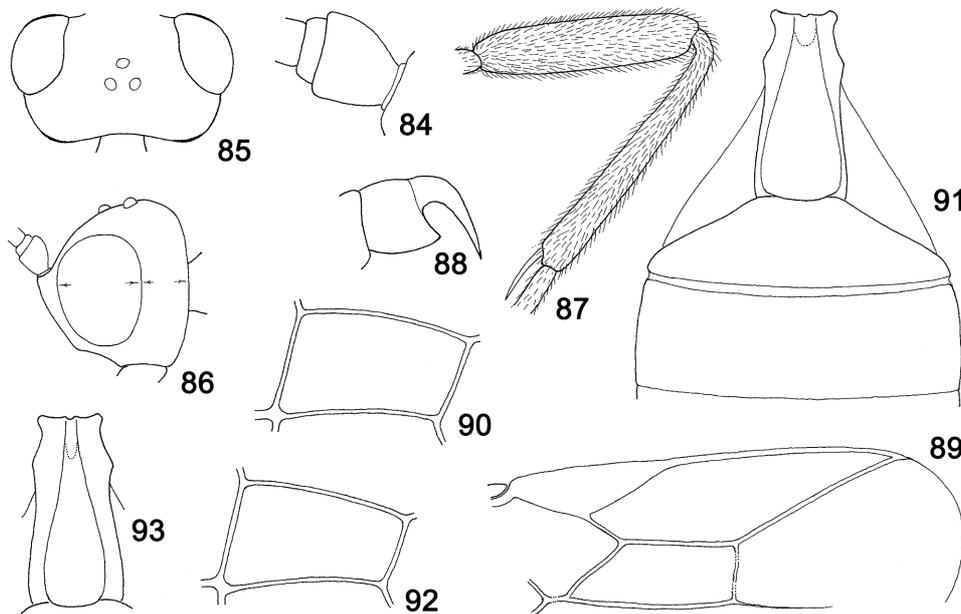
First tergite (Fig. 91) twice longer than broad behind, scutum clearly widening posteriorly, i.e. margin laterally from scutum narrow. Second tergite 3.5 times as broad behind as long medially, laterally narrowing. Third tergite slightly longer than second tergite (Fig. 91). Tergites polished. Ovipositor sheath as long as hind tibia + half basitarsus.

Antenna, head, mesosoma and legs black, metasoma reddish. Wings brown fumous, pterostigma and veins blackish brown.

Description of the male (1 ♂: Peru, Pachitea, in Museum Budapest) – Similar to the female. Body 6 mm long. Antennae deficient: left flagellum missing, right flagellum with 24 antennomeres. Fore wing: pterostigma issuing *r* from its middle, 3–*SR* 1.5 times as long as 2–*SR*. First discal cell slightly narrower: 1–*SR*–*M* twice as long as 1–*M* (Fig. 92). Scutum of first tergite less widening posteriorly (Fig. 93). Metasoma reddish, its ultimate two tergites black.

Host unknown.

Distribution – Brazil, Peru.



Figs 84–93. *Myosoma rubriventre* BRULLÉ, female holotype: 84–92 and male: 93–94: 84 = scape and pedicel in outer-lateral view, 85 = head in dorsal view, 86 = head in lateral view, 87 = hind femur and tibia with hairs, 88 = claw, 89 = distal part of right fore wing, 90 = first discal cell of right fore wing, 91 = tergites 1–3, 92 = first discal cell of male, 93 = first tergite of male

Taxonomic position – *Myosoma rubriventre* is nearest to *M. lagopus* (KRIECHBAUMER), for their distinction see key-couplets 8 (9)–9 (8).

Myosomatoides fasciatus (BRULLÉ) **comb. n.**
(Figs 94–97)

Myosoma fasciatum BRULLÉ, 1846: 454 (1 ♀), type locality: “la Guyane (Surinam)”; female holotype (present designation) in Muséum National d’Histoire Naturelle, Paris; examined. – SHENEFELT 1978: 1708 (literature up to 1904).

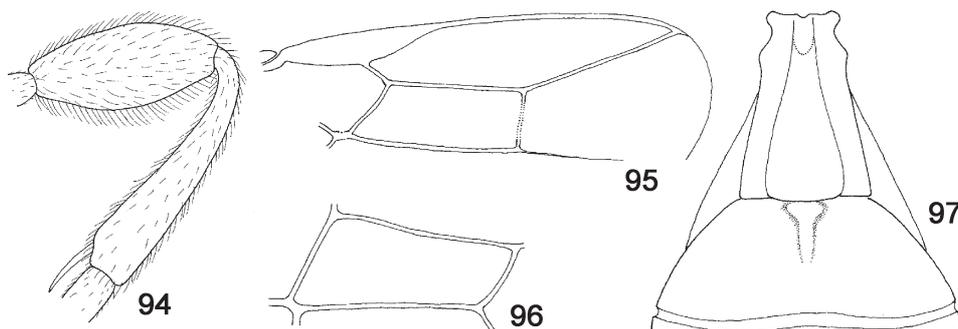
Ipobracon pennipes MYERS, 1931: 272 ♀ (1 ♀), type locality: “British Guiana: Berbice”, female “Type” (=Holotype) in Natural History Museum, London; examined, **syn. n.**

Iphiaulax pennipes (MYERS): SHENEFELT 1978: 1787 (literature up to 1967).

Myosomatoides myersi QUICKE, 1994: 230 (new name for *Myosoma pennipes* Myers nec *Myosoma pennipes* WESTWOOD, 1882, taxonomy, in key, distribution).

Designation of the female holotype of *Myosoma fasciatum* – (First label, printed) “Museum Paris / EY0000001663”; (second label) “Museum Paris” (printed) “Surinam / Leschenault” (handwriting); (third label, handwriting) “Myosoma fasciata Br.”; fourth label is the holotype card attached by me. – Holotype is in poor condition: (1) ventral side of body, legs and back side of left hind wing dirty; (2) missing: head, tarsomeres 3–5 of right fore leg, tarsomeres 2–5 of right hind leg, tarsus of left hind leg; (3) left hind wing somewhat creased longitudinally. – Remark: In his original description BRULLÉ (l.c.) indicated: “La tête manque.”

Designation of the female “Type” (=Holotype) of *Ipobracon pennipes* MYERS.–(First round label with red frame) “Type / H.T.”; second label is with the inventory number “3.c.418”; (third label) “D 115.53” (handwriting) / “Brit. Guiana / Berbice” (printed) / “Myers 12. IV. 29” (handwriting); (fourth label, handwriting) “ex / Dietraea sp.”; (fifth label, handwriting) “Ipobracon / pennipes / Myers type”; sixth label is the presentation card and seventh label is with the actual name *Myosomatoides fasciatus* (BRULLÉ) (det. J. Papp 2009). – “Type” is in fairly good condition: (1) pinned by the mesosoma, (2) missing: both flagelli and tarsus of right middle leg.



Figs 94–97. *Myosomatoides fasciatus* (BRULLÉ), **comb. n.**, female holotype: 94 = hind femur and tibia with hairs, 95 = distal part of right fore wing, 96 = first discal cell of right fore wing, 97 = tergites 1–3

Redescription of the female holotype of *Myosoma fasciatum* – Body, i.e. meso- and metasoma (head missing) 5 mm long. Mesosoma in lateral view 1.5 times as long as high, polished. Notaulix indistinct. Hind femur 2.5 times as long as broad medially, together with tibia with long hairs, femur and tibia laterally flattened (Fig. 94; Fig. 3 in Quicke 1994: 229).

Fore wing longer than meso- and metasoma combined. Pterostigma (Fig. 95) 4.7 times as long as wide and issuing *r* somewhat distally from its middle, *r* shorter than width of pterostigma. Second submarginal cell long, 3–*SR* 2.1 times as long as 2–*SR*; *SRI* 1.2 times longer than 3–*SR*, straight and reaching tip of wing. First discal cell long and narrow, 1–*SR*–*M* 1.9 times as long as 1–*M* (Fig. 96).

First tergite (Fig. 97) 1.4 times as long as broad behind, broadening posteriorly, together with further tergites polished. Second tergite transverse, 2.4 times as broad behind as long laterally, laterally not narrowing, its medio-longitudinal ridge extending to fore half of tergite. Suture between tergites 2–3 bisinuate (Fig. 97). Hypopygium pointed, ovipositor sheath as long as hind tibia and slightly widening posteriorly.

Mesosoma and tergites 1–2 testaceous, tergites 3–5 testaceous with wide blackish band behind, further tergites blackish. Legs also blackish. Wings evenly brown fumous, pterostigma and veins brown.

Complementary description of the head – The female “Type” of *Ipobracon pennipes* is conspecific with the female holotype of *M. fasciatus*. Head of the latter type is missing whereas head of the type of *pennipes* is present; subsequently its description is presented: Body 6 mm long. Scape in outer-lateral view as in Fig. 84. Head in dorsal view transverse (cf. Fig. 85), 1.7 times as broad as long, eye 1.8 times longer than temple, temple rounded. Ocelli middle-sized, elliptic, OOL twice longer than POL. Eye in lateral view almost 1.5 times as high as wide and 1.5 times wider than temple, temple beyond eye evenly broad. Horizontal diameter of oral opening as long as shortest distance between opening and eye. Head polished, face laterally finely-densely subgranulose, black. Cheek faintly reddish, palpi brown.

Distribution – Surinam (*M. fasciatus*); Argentina, Brazil, Colombia, Ecuador, Guayana, Paraguay (*M. myersi*).

Taxonomic position – QUICKE (1994) assigned the species *Myosoma pennipes* WESTWOOD to the genus *Myosomatoides* QUICKE, 1994. In his short key the only specific distinction between *M. fasciatus* (BRULLÉ) (= *M. myersi*) and *M. pennipes* (WESTWOOD) is the colour pattern of the fore wing: uniformly brown fumous vs hyaline and only the apical third brown fumous, respectively. The short original description of *Myosoma pennipes* by WESTWOOD (1882) does not allow for further comments on the characteristics of this species.

APPENDIX

Checklist of the *Amyosoma* VIERECK, *Myosoma* BRULLÉ and *Myosomatoides* QUICKE species (after YU *et al.* 2005, modified and rectified)

Currently 13 species are assigned in the genus *Amyosoma*, 8 species in the genus *Myosoma* and 2 species in the genus *Myosomatoides*. The majority of the

species are distributed in the Neotropic / Nearctic Region, the rest of the species in the Indo–Australian and Ethiopian Region.

Amyosoma VIERECK, 1913 (type species: *Bracon chinense* SZÉPLIGETI, 1902)
brevicarinatum (CAMERON, 1902) – Malaysia, Sarawak
cavei **sp. n.** – Honduras
chinense (SZÉPLIGETI, 1902) (*Bracon*) – Cosmopolitan
= *chilone* VIERECK, 1913
= *puellare* (SZÉPLIGETI, 1902)
durango MASON, 1978 – USA: Arizona
eumystax MASON, 1978 – USA: Florida, Georgia, Texas. Mexico
flavistigma VAN ACHTERBERG, 1996 – Australia
impexum MASON, 1978 – USA: Arizona, Texas
leuzerae ROHWER, 1918 – Indonesia: Java
longicarinatum (CAMERON, 1902) – Malaysia: Sarawak
longius MASON, 1978 – USA: New Mexico, Texas
nyanzaensis QUICKE et WHARTON, 1989 – Kenya
rufescens QUICKE et INGRAM, 1993 – Australia: Capital Territory, Queensland
yanoi WATANABE, 1960 – China, Japan

Myosoma BRULLÉ, 1846 (type species: *Myosoma hirtipes* BRULLÉ, 1846)
brullei SZÉPLIGETI, 1906 – Bolivia
errans SZÉPLIGETI, 1902 – Brazil
(*errotum* SZÉPLIGETI, 1902, jun. syn.) = *lagopus* (KRIECHBAUMER, 1900)
sen. syn.
[*fasciatum* BRULLÉ, 1846: replaced in *Myosomatoides* QUICKE, 1994,
see present paper]
forticarinatum CAMERON, 1902 – Malaysia: Sarawak
fuscipenne BRULLÉ, 1846 – Brazil, Belize, ?USA: “Cedar”
= *chontalensis* (CAMERON, 1900) (*Bracon*) **syn. n.**
hirtipes BRULLÉ, 1846 – Colombia, Ecuador
lagopus (KRIECHBAUMER, 1900) (*Acanthobracon*) – Colombia, Venezuela
= *errotus* (SZÉPLIGETI, 1902) (*Bracon*) **syn. n.**
pilosipes ASHMEAD, 1894 – St. Vincent Island
rubriventre BRULLÉ, 1846 – Brazil, Peru
[*rubrum* BRULLÉ, 1946: replaced in *Compsobraconoides* QUICKE, 1989,
see present paper]

Myosomatoides QUICKE, 1994 (type species: *Myosoma pennipes* WESTWOOD, 1882)
fasciatus (BRULLÉ, 1846) (*Myosoma*) – Argentina, Brazil, Colombia,
 Ecuador, Guayana, Paraguay, Surinam
 = *myersi* QUICKE, 1994
 = *pennipes* (MYERS, 1931) (*Ipobracon*) **syn. n.**
pennipes (WESTWOOD, 1882) (*Myosoma*) – Brazil, Peru

Taxonomic remark – Further six species were either originally described or replaced in the genus *Myosoma*; their present taxonomic status is listed as follows (i.e. they are excluded from *Myosoma*; details see in SHENEFELT's catalogue 1978):

Bracon ferax SMITH, 1865: replaced in *Myosoma* by BALTAZAR, 1972 and in *Calcaribracon* QUICKE, 1986 by QUICKE 1986

Myosoma fuscipenne CAMERON, 1902: replaced in *Atanycolus* FOERSTER, 1862 by BALTAZAR 1972

Myosoma luteum SZÉPLIGETI, 1913: replaced in *Cratocnema* SZÉPLIGETI, 1914 by QUICKE 1991

Ichneumon mutator FABRICIUS, 1775: replaced in *Myosoma* by BRULLÉ, 1846 and in *Pycnobraconoides* QUICKE, 1993 by QUICKE & INGRAM 1993

Bracon (Myosoma) penetrans SMITH, 1862: replaced in *Iphiaulax* FOERSTER, 1862 by VAN ACHTERBERG & O'TOOLE 1993

Myosoma trichiura CAMERON, 1902: replaced in *Atanycolus* FOERSTER, 1862 by BALTAZAR 1972

*

Acknowledgements – It is for me a pleasant duty to express my sincere thank to the curatorial colleagues helping my taxonomic work: Dr. G. BROAD and Dr. D. L. J. QUICKE (Natural History Museum, London), Dr. R. KULA (National Museum of Natural History, Washington), Dr. E. HAESELBARTH and Dr. S. SCHMIDT (Staatliche Naturwissenschaftliche Sammlungen Bayerns, München). The two referees, Dr. D. L. J. QUICKE and Dr. B. SHARANOWSKI, considerably rectified my manuscript both its content and linguistically by their comments and suggestions.

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Revised version received July 26, 2011, accepted November 25, 2011, published May 10, 2012