

A Synopsis of the Bracon Fabr. Species of the Carpathian Basin, Central Europe (Hymenoptera, Braconidae)

II. Subgenus Bracon Fabr.

By J. PAPP, Veszprém

Originally the species of the subgenus were arranged by FAHRINGER (1928) into his section *Striobracon* within the subgenus *Bracon* FABR. (see also PAPP 1966/a). TOBIAS (1959, p. 896) elevated the section *Striobracon* to a subgeneric rank. In this new arrangement, the name "*Striobracon*" must be changed to *Bracon* FABR., because the type-species (*B. minutator* FABR.) of the genus *Bracon* FABR. is also that of the nominate subgenus.

The following marks characterize the subgenus *Bracon* FABR. Tergites 2—5 (—7) always rugose or at least rugulosed. Sculpture of tergites usually gradually weakening posteriorly. Extense and strength of sculpture of high specific value. Body varying, of stout or normal shape. Parapsides usually hardly distinct. Furrow between tergites 2—3 generally bicurved, with a fine crenulation. Ovipositor of variable length.

Type-species: *Bracon minutator* FABR.

The serial numbers preceded by abbreviations in brackets (e. g. Hym. Typ. No 313) refer to the entries of type-specimens in the Catalogue of Hymenoptera in the respective collection of the Hungarian Natural History Museum, Budapest.

Until now, 23 *Bracon*-species were found in the Carpathian Basin. The species might be keyed as follows:

- 1 (8) Tergites 3—6 with a transverse furrow before hind edge (*B. minutator* FABR.-group).
- 2 (5) Tergites 1—2 striato-rugulose. Thorax stout.
- 3 (4) Proportion of thoracic length, height, and width as 13: 8.5: 6 (Fig. 18). Body stout (Fig. 2). Antennae 28—33-jointed. Parapsides impressed but not deep. Cu_2 twice longer than wide. Abdomen twice broader than thorax. Ovipositor about as long as body. Head, antennae, palpi, and thorax black, abdomen yellow. Margin of eye and mandible reddish. Tergites 1—4 with a black spot. Legs black with light parts (femora and tibiae). 5 mm. West Palearctic Region

13. B. (B.) *minutator* FABR.

- a (b) Tergites without any black spot, sculpture of tergites fine
minutator var. *trucidator* (MARSH).
- b (a) Tergites with a wide median black streak
minutator var. *maculiger* var. n.

- 4 (3) Proportion of thoracic length, height, and width as 13:7:5.5 (Fig. 23). Body reddish-yellow. Antennae, palpi, rostrum, spot around ocelli black. Body stout (Fig. 3). Head somewhat cubic. Antennae 30–34-jointed. Parapsides almost indistinct. Cu_2 2–2.5 times longer than wide. Abdomen almost twice broader than thorax. Tergite usually with a medio-longitudinal carinula. Ovipositor somewhat longer than body. Body reddish-yellow. Antennae, palpi, rostrum, spot around ocelli, central part of pronotum, prosternum, hind part of lateral lobes of mesonotum, propodeum, and 1st tergite black. Legs black with reddish tibiae. 3.4–5.2, usually 4.5 mm. Europe, USSR
16. **B. (B.) nigripedator** NEES
- Thorax almost black, legs reddish-yellow, coxae and trochanters black
- nigripedator** var. **rufipes** var. n.
- 5 (2) Tergite rugose.
- 6 (7) Body conspicuously stout (Fig. 26). Antennae 28–30- (♀♀) and 38–40-jointed (♂♂). Proportion of thoracic length, height, and width as 12:11:6.5. Parapsides finely impressed. Cu_2 twice longer than broad. Tergites 2–7 granularly rugose, tergites 3–6 with a fine transverse furrow at hind margin. Ovipositor as long as body. Body yellow. Scape and pedicel reddish-yellow, flagellum brownish-black. Apex of mandible black. Legs yellow. Last joint of tarsi and all claws dark. Ovipositor black. Wings fumous. Stigma yellow, veins brown. 5.5 mm. Hungary
21. **B. (B.) sculpturator** SZÉPL.
- 7 (6) Body conspicuously stout (Fig. 15). Antennae with 28–32 joints. Proportion of thoracic length, height, and width as 12:6.5:4.8. Parapsides very finely impressed. Cu_2 2.5–3 times longer than broad. Tergites 1–2 roughly rugose, further tergites rugose. Transverse furrow on hind margin of tergites 3–6 very fine. Ovipositor usually somewhat shorter than body. Body and legs reddish-yellow. Antennae and ovipositor black. Wings fumous, stigma yellow, veins brown. 3–4.8 mm, usually 4.2 mm. West-Palaearctic Region
18. **B. (B.) pectoralis** Wesm.
- Body minute, 3.5 mm. Thorax with black pattern
- pectoralis** var. **maculatus** var. n.
- 8 (1) Tergites 3–6 without any furrow before hind edge.
- 9 (10) Proximal half of stigma yellow (*B. semiflavus* THOMS.-group). Body of normal form (Fig. 25). Proportion of thoracic length, height, and width as 12:7.5:3.5. Parapsides finely impressed or almost indistinct. Antennae shorter than body, 26–30-jointed. Cu_2 2.5–2.8 times longer than wide. Propodeum without any carina. Scutum of tergite 1 almost smooth, tergite 2 rugose, further tergites with a somewhat finer rugosity. Ovipositor longer than body. Body yellowish-red. Thorax with black pattern. Legs blackish-brown, tibiae yellowish-red. 4–4.5 mm. Sporadically in Europe
20. **B. (B.) semiflavus** THOMS.
- 10 (9) Stigma usually dark, at least with a basal light spot.
- 11 (18) Thorax and abdomen elongate, abdomen longer than head and thorax together. Head cubic or somewhat cubic. Ovipositor usually longer than body (*B. leptus* MARSH.-group).
- 12 (13) Thorax rather black. Tergites 1–2 rugose, further ones granularly rugose (Fig. 17). Proportion of thoracic length, height, and width as 13:7:3.8. Antennae 28–32-jointed. Cu_2 2.5–3 times longer than wide, r_3 ending before apex of wing. Propodeum without any carina. Abdomen hardly wider than thorax. Ovipositor somewhat longer than body. Head black, except for yellow face. Legs black, femora and tibiae yellowish-red, tergite 1 and spot of tergite 2 black.
- [11. **B. (B.) leptus** MARSH.
- 13 (12) Thorax rather yellowish-red.

- 14 (15) Proportion of thoracic length, height, and width as 12.5: 6.5: 4 (Fig. 27). Body somewhat elongate (Fig. 16). Antennae shorter than body, 28–31-jointed. Tergites 1–2 striato-rugose, further ones granularly rugose. Cu_2 3–3.5 times longer than wide. Abdomen somewhat longer than head and thorax together. Ovipositor longer than, or as long as, body. Body yellowish-red. Thorax and 1st tergite with black spots. Legs rather yellowish-red. Wings fumous, stigma yellow, veins brown. 4.5–5.5 mm. Hungary, Rumania, USSR

19. **B. (B.) rufipalpis** SZÉPL.

- 15 (14) Proportions of thorax and sculpture of tergites different.

- 16 (17) Second tergite somewhat shorter than third, striato-rugose, further tergites granularly rugulose (Fig. 7). Head cubic, as wide as thorax. Antennae 24-jointed. Abdomen wider than thorax, elongato-elliptic. Ovipositor shorter than body, about as long as abdomen (2.1 mm). Cu_2 3 times longer than broad, r_1 emitted proximally from middle of stigma, r_3 ending before apex of wing. Body and legs yellow. Antennae brownish-black. Palpi and rostrum brown. Mesosternum black. Hind tarsus brownish. Wings almost hyaline, stigma yellow, veins yellowish-brown. Ovipositor black. 3.5 mm. USSR, Hungary

5. **B. (B.) chivensis** TEL.

- 17 (16) Second tergite as long as third, striato-rugulose, further ones granularly rugulose (Fig. 24). Head somewhat cubic, almost as wide as thorax. Antennae 25-jointed. Abdomen hardly wider than thorax, highly elongato-elliptic. Ovipositor longer than body (5 mm). Cu_2 3–3.5 times longer than broad. Body reddish-yellow. Vertex, 3 spots on mesonotum, and sternal part dark brown. Legs rather reddish-yellow. 3 mm. Hungary

17. **B. (B.) obscuricornis** SZÉPL.

- 18 (11) Thorax and abdomen not elongate, abdomen never longer than head and thorax together. Head usually transverse. Ovipositor shorter than body.

- 19 (22) Propodeum rugose (and not finely rugose or rugulose as in the *B. variegator* NEES-group), of a variable size (*B. fulvipes* NEES-group).

- 20 (21) Body somewhat elongate; however, ratio of thorax and abdomen as 1:1.25. Proportion of thoracic length, height, and width as 9:5:2.8. Thorax shorter than abdomen, latter only slightly broader than thorax, elongato-elliptic. Cu_2 2.4 times longer than broad. Face with a similar rugulosity as in *B. fulvipes* NEES. Tergites 1 rugose, tergites 2–7 rugulose, this sculpture somewhat rougher than in *B. fulvipes*. Ovipositor shorter than half of abdomen. Body reddish-yellow. Antennae brownish. Mesonotum beside tegulae with a very little black spot. Propodeum, 1st tergite, and a broad streak on tergites 2–5, black. Wings subhyaline, stigma and veins yellowish-brown. Legs yellow. 3 mm. Hungary, USSR

3. **B. (B.) alutaceus** SZÉPL.

- 21 (20) Body of normal shape (Fig. 1), rather stout as compared with *B. alutaceus*. Proportion of thoracic length, height, and width as 12:7.5:5. Cu_2 2–2.6 times longer than broad. Thorax about as long as abdomen, latter conspicuously broader than thorax. Face along margin of eyes and under scapes with a very fine rugulosity (Fig. 10). Tergite 1 rugose, tergite 2 centrally rugose, otherwise, together with further tergites, transversely rugulose (Fig. 11). Ovipositor of varying length, usually about as long as abdomen. Body reddish or reddish-yellow. Vertex, occiput, propodeum, mesosternum, 1st tergite, and median anterior spot on 2nd tergite black. Wings fuscous, stigma and veins dark brown. Stigma sometimes with a basal light spot. Legs reddish-yellow, claws black. 3–3.5 mm. Palearctic Region

8. **B. (B.) fulvipes** NEES

- 22 (19) Propodeum usually smooth and shiny, at most with a short and striated carina or with a very fine rugulosity.

- 23 (28) Propodeum with carina and a short and oblique striation alongside it (Fig. 28) (*B. nigratus* WESM.-group), except for entirely yellow *B. mediostriatus* sp. n.

- 24 (25) Radial cell (or r_3) reaching apex of wing. Propodeum (Fig. 28) with oblique and short striation along medio-longitudinal line. Proportion of thoracic length, height, and width as 12:8:5.5. Face with fine rugulosity beside eye. Parapsides impressed but not deep. Cu_2 2.5 times longer than broad. Tergite 1 rugose, scutum almost smooth, tergites 2–3 rugose, further ones rugose but somewhat finer (Fig. 29). Ovipositor about half as long as abdomen. Body yellowish-red. Propodeum, metapleura, mesosternum, tergite 1, and a median spot on tergite 2 black. Coxae 2–3 with a black pattern. Ovipositor dark. Wings fuscous, stigma and veins yellowish-brown. 3.5 mm. Hungary, USSR

22. **B. (B.) suspectus** SZÉPL.

- 25 (24) Radial cell (or r_3) terminating before apex of wing (Fig. 22).
- 26 (27) Body relatively short and stout. Head transverse, but tempora behind eye not so constricted as usually. Antennae somewhat longer than body. Thorax somewhat shorter than abdomen. Propodeum smooth and shiny, with a carinula, and along it with very fine short oblique striae. Cu_2 short, 1.7 times longer than broad. Tergite 1 rugose, tergite 2 rugoso-striate, further tergites with a gradually finer ruguloso-striation (Fig. 21). Ovipositor shorter than half of abdomen. Body and antennae black. Tergite 2 and further tergites laterally brownish-red. Legs blackish or brownish-yellow, coxae black (♀ ♀). Wing fuscous, stigma and veins blackish-brown. 2.6–3 mm. Europe

15. **B. (B.) nigratus** WESM.

- 27 (26) Body of normal form. Head cubic. Antennae shorter than body. Propodeum smooth, shiny, with a fine oblique striation along median longitudinal line (and not along carinula). Cu_2 twice longer than broad. Tergite 1 roughly rugose, tergite 2 medially rugose, rugosity laterally finer, further ones with a fine rugulosity (Fig. 5). Ovipositor shorter than length of abdomen. Body dark yellowish-red. Vertex around ocelli, occiput, 3 spots on mesonotum, scutellum, propodeum, prosternum, mesosternum, meso- and metapleura, tergite 1, streak of tergites 2–3, and further tergites black. Legs brownish-black. Black pattern sometimes less extensive (vertex, thorax, tergites 4–7, legs). 3.5–4 mm. Central Europe

2. **B. (B.) aestivalis** SZÉPL.

- 28 (23) Propodeum always smooth and shiny, rarely (and exceptionally) with a very fine sculpture.

- 29 (34) Body short, usually 2.5 mm, at most 3 mm (*B. variegator* SPIN.-group).

- 30 (31) Tergite 2 gradually rugose, further tergites granularly rugulose (Fig. 35). Abdomen ovato-elliptic, almost twice longer than thorax. 1st tergite very dispersely punctate, of a characteristic outline. Cu_2 short, 1.6 times longer than broad, r_3 ending before apex of wing (Fig. 34). Propodeum finely rugulose (♀ ♀) or very finely rugulose (♂ ♂), without any carina. Body reddish-yellow or orange-yellow, with a rich black pattern. Extense of black colour highly varying. Legs blackish or orange-brown. End of all femora and proximal half of all tibia light. 2.5–3 mm. Europe, USSR

23. **B. (B.) variegator** SPIN.

— Body almost black

variegator var. **melanosoma** (SZÉPL.)

- 31 (30) At least 2nd tergite striato-rugose (Fig. 32).

- 32 (33) Thorax somewhat elongate, proportion of its length, height, and width as 8:3.9:4. Propodeum rugose along medio-longitudinal line (Fig. 31). Tergite 1 punctato-rugose, tergite 2 striato-rugose, further ones with a finer rugosity (Fig. 32). Body yellow. 2.7–2.8 mm. Yugoslavia

12. **B. (B.) mediostriatus** sp. n.

- 33 (32) Thorax of normal form, proportion of its length, height, and width as 8:4.2:3. Thorax and abdomen of equal length. Propodeum smooth and shiny, without any carina or striation. Cu_2 short, 1.8 times longer than broad, r_3 ending before apex of wing. Abdomen elongato-elliptic, not broader than thorax. Tergites 1–2 rugose, further ones with a gradually finer rugosity. Body reddish-yellow. Vertex,

3 spots of mesonotum, mesosternum, propodeum, tergites 1 and 5-7 black. Legs reddish-yellow, apex of third tibia and tarsi fumous. Male not known from the Carpathian Basin. 2.2 mm. Algeria, Italy, Hungary

6. *B. (B.) crocatus* SCHMIED.

34 (29) Body of normal length, always over 3 mm.

35 (38) Body relatively elongate, Cu_2 long, its length to breadth ratio over 2.5.

36 (37) Tergite 1 rugulose, tergite 2 striato-rugose, further tergites with a transverse rugulosity (Fig. 19). Parapsides finely but distinctly impressed along its entire course. Head transverse, contracted behind eye. Width of head greater than that of thorax. Antennae 30-35-jointed. Cu_2 3 times longer than broad (Fig. 20). Body yellowish-red. Spot of mesonotum beside tegulae, propodeum, and mesosternum black. Further parts or entire thorax eventually dark. Tergite 1 dark. Legs yellow. 3-3.5 mm. Central Europe

14. *B. (B.) mixtus* SZÉPL

37 (36) Tergite scarcely rugulose, tergite 2 somewhat longitudinally rugose, further tergites with a fine transverse striation (Fig. 4). Parapsides almost indistinct. Head transverse. Width of head equal to that of thorax. Antennae 27-28-jointed. Cu_2 2.8 times longer than broad. Body black, abdomen reddish-yellow, except medio-anterior black spot on tergite 2. Legs yellow, coxae 2-3 blackish. 3-3.3 mm. Hungary

1. *B. (B.) adjectus* SZÉPL.

38 (35) Body of normal form or relatively somewhat stout. Cu_2 not so long, its length to breadth below 2.5.

39 (42) Body of normal form.

40 (41) Proportion of thoracic length, height, and width as 11:7:4.5 (Fig. 14). Sculpture of tergites (2nd tergite!) somewhat rougher than that of *B. erythrosticktus* (Fig. 13). Propodeum smooth and shiny, sometimes with a basal carina and along it with a short transverse striation. Ovipositor of varying length yet never longer than abdomen. Body yellowish-red. Antennae dark brown. Palpi tending to yellow, dark yellow, brownish-yellow. Mesosternum, propodeum, coxae 2-3 at least partly, tergite 1, and median streak of tergites 2-4 black. Wings hyaline, subhyaline, or fuscous. Stigma and veins dark, stigma frequently with light proximal spot (or entirely light). Legs reddish-yellow. 3-5 mm. Europe, Central Asia

10. *B. (B.) intercessor* NEES

a (b) Body rather dark

intercessor var. *fallaciosus* (SZÉPL.)

b (a) Head and thorax black, abdomen light

intercessor var. *maidli* (FAHR.)

41 (40) Proportion of thoracic length, height, and width as 11:7.2:4.7. Sculpture of tergites (2nd tergite!) finer than that of *B. intercessor* (Fig. 9). Propodeum smooth and shiny, with a fine transverse striation, without any carina. Ovipositor somewhat longer than half abdomen. Body vivid yellowish-red. Mesosternum, propodeum, tergite 1, and medio-proximal spot of tergite 2 black. Legs and palpi yellow. Antennae brownish. 3.5-5 mm. Europe

7. *B. (B.) erythrosticktus* MARSH.

42 (39) Body relatively stout.

43 (44) Head somewhat transverse, a little wider than thorax. Antennae about as long as body, 36-40-jointed. Parapsides distinct. Cu_2 twice longer than broad (Fig. 6). Abdomen shorter than head and thorax together, ovato-elliptic. Tergite 1 rugose, anterior half of scutum almost smooth and shiny. 2nd tergite striato-rugose, further ones with transverse rugulosity. Body and legs yellowish-red, thorax (mesosternum and propodeum), hind two coxae, 1st tergite, and medio-anterior spot of 2nd tergite black. 4.5-5 mm. Hungary, European USSR

4. *B. (B.) bisinuatus* SZÉPL.

- 44 (43) Head (Fig. 12) somewhat cubic. Antennae somewhat shorter (♀), or as long as body (♂), 28–32-jointed. Parapsides finely distinct. Cu_2 2.5 times longer than broad. Abdomen about as long as head and thorax, ovato-elliptic. Tergites 1–2 roughly rugose, further ones evenly rugose. 2nd tergite somewhat longer than 3rd. Body and legs reddish-yellow, thorax (prosternum, mesosternum, two spots on mesonotum beside tegulae, propodeum), tergite 1, and median anterior spot on tergite 2 black. 4–4.2 mm. Hungary, Yugoslavia, Rumania, European USSR

9. *B. (B.) fumigatus* SZÉPL.

Bracon (B.) adjectus SZÉPL. (Fig. 4)

Bracon adjectus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, 19, p. 168, ♀.

Bracon (Striobracon) adjectus: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 253.

Bracon duplicatus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, 19, p. 171, ♀, **syn. n.**

Bracon nitidiusculus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, 19, p. 172, ♀, **syn. n.**

Range: Until now collected only in the Carpathian Basin (Hungary). Rare.

Remarks. — 1. The holotype (Iváncsa, Hungary, 1 ♀, leg. ?) is in the Hungarian Natural History Museum, Budapest (Hym. Typ. No. 313).

2. The holotypes of the above synonyms are also in the Hungarian Natural History Museum, Budapest. Their data are as follows. *B. duplicatus* SZÉPL.: Svábhegy (=Szabad-sághegy), Budapest, 5 June 1899, 1 ♀, leg. SZÉPLIGETI (Hym. Typ. No. 314); *B. nitidiusculus* SZÉPL.: Fonyód, 1 ♀, leg. SZÉPLIGETI (Hym. Typ. No. 315).

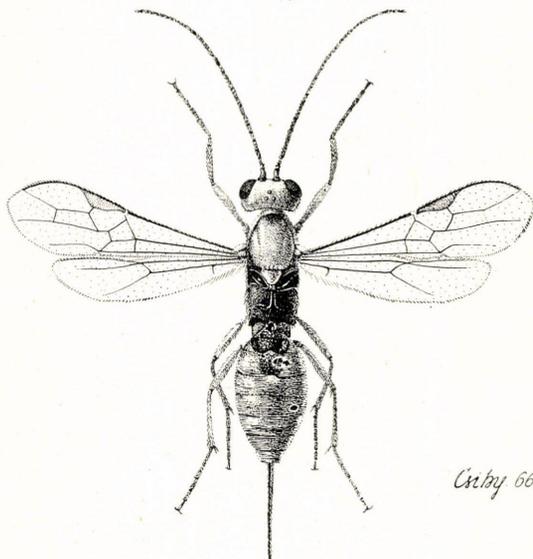


Fig. 1. *Bracon fulvipes* NEES ♀.

Bracon (B.) aestivalis SZÉPL., ♂ new (Fig. 5)

Bracon aestivalis SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, 19, p. 170, ♀.

Bracon (Striobracon) aestivalis: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 259

Bracon congruus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, 19, p. 169, ♀ (partim) **syn. n.**

Range: Hungary, Czechoslovakia, Rumania, Yugoslavia. Rare in the Carpathian Basin.

Remarks. — 1. The holotype is in the Hungarian Natural History Museum, Budapest. Its data: Újbánya = Novi Bana, Czechoslovakia, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 316.

2. The type-specimens of the above junior synonym (*B. congruus* SZÉPL.) are in the Hungarian Natural History Museum, Budapest. I designate one, conspecific with *aestivalis* SZÉPL., as paralectotype (Peszér, 2 June 1895, 1 ♂, leg. SZÉPLIGETI, Hym. Typ. No. 319). The further two type-specimens (1 lectotype: Hym. Typ. No. 317 and 1 paralectotype: Hym. Typ. No. 318) of *Bracon congruus* SZÉPL. are synonymous with *B. confinis* SZÉPL. (subgenus *Orthobracon* (FAHR.) TOB.).

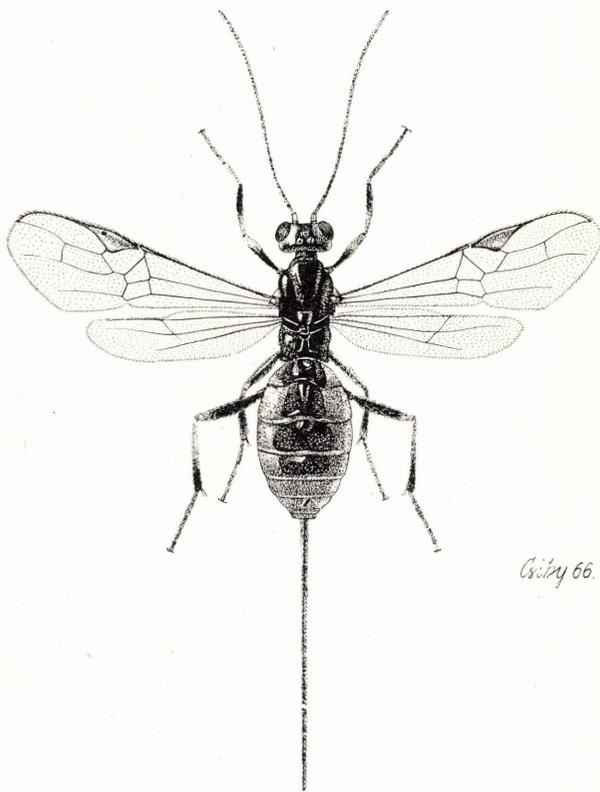


Fig. 2. *Bracon minutator* FABR. ♀.

Bracon (*B.*) *alutaceus* SZÉPL.

Bracon alutaceus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, **19**, p. 172, ♀.

Bracon (*Striobracon*) *alutaceus*: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 235.

Bracon (*Orthobracon*) *alutaceus*: 1961 TOBIAS, Horae Soc. Entom. Un. Sov., 48, p. 168.

Range: Hungary, USSR (Ukraine, Kazakhstan, Tadzhikistan).

Remarks. — 1. The holotype (Hym. Typ. No. 320) of *B. alutaceus* SZÉPL. was discussed also by TOBIAS (1961, p. 168), and deposited in the Hungarian Natural History Museum, Budapest.

2. This species is very similar to *B. fulvipes* NEES. An examination of a series of this species will probably reveal its synonymy with the respective NEES-species.

Bracon (B.) bisinuatus SZÉPL. (Fig. 6)

Bracon bisinuatus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, 19, p. 171, ♀.

Bracon (Striobracon) bisinuatus: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 263.

Range: Hungary, European USSR. Presumably an euryök-eremophilous species. It was collected from the end of May till the beginning of September.

Remarks. — 1. The type-specimens (4 ♀) are in the Hungarian Natural History Museum, Budapest. One of them is the lectotype (Gellérthegey, Budapest, 25 June 1895, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 321), the other three are paralectotypes (Gellérthegey, Budapest, 10 Sept. 1895, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 322; Budapest, 2 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 323 and 324).

2. A further specimen also served for the original description of *B. bisinuatus* SZÉPL. Its data are as follows: Húvösvölgy, Budapest, 24 Aug. 1898, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 325. I designate this specimen also as a paralectotype of *B. bisinuatus* SZÉPL. but it actually represents *B. intercessor* NEES.

Bracon (B.) chivensis TEL. (Fig. 7)

Bracon (Striobracon) chivensis TELENGA, 1936, Faune de l'USSR V. nr. 2 (1), p. 228 & 393, ♀.

Range: USSR (Turkmenia), Hungary. In the Carpathian Basin, a female specimen was found recently in the Eastern Pannonicum (Gyula). New to the faune of the Carpathian Basin and Hungary.

Bracon (B.) crocatus SCHMIED. (Fig. 8)

Bracon crocatus SCHMIEDEKNECHT, 1895, Illustr. Wochenschr. Entom., 1, p. 541, ♀ ♂
Bracon (Luco- (Ortho-) bracon) crocatus: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1) p. 282.

Range: Algeria, Italy, Hungary. Two males found in the Carpathian Basin; new to the fauna of Hungary.

Bracon (B.) erythrodictus MARSH. (Fig. 9)

Bracon erythrodictus MARSHALL, 1895, Trans. Entom. Soc. London, p. 17, ♀.

Bracon (Striobracon) erythrodictus: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 248, ♀ ♂.

Bracon subtilis SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, 19, p. 167, ♀, **syn. n.**
Bracon suspectus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, 19, p. 170, ♀ (**partim**)

Range: Europe (England, Austria, Hungary, Yugoslavia), USSR (European USSR, Trans-Caucasus, Turkmenia, Kazakhstan). Sporadically in the Carpathian Basin (Pannonicum, Matricum). Presumably an euryök-eremophilous species.

Remarks. — 1. The above synonymy is based on the examination of the type-specimens. These forms are only individual colour variations without any taxonomical rank.

2. The holotype and paralectotype of the junior synonyms are in the Hungarian Natural History Museum, Budapest. The data of the two type-specimens are as follows: *B. subtilis* SZÉPL.: Budapest, 7 Aug. 1897, 1 ♀, leg. SZÉPLIGETI, holotype: Hym. Typ. No. 326; and *B. suspectus* SZÉPL.: Pilismarót, 1 ♀, leg. SZÉPLIGETI, paralectotype, Hym. Typ. No. 328.

Bracon (B.) fulvipes NEES (Figs. 1, 10–11)

Bracon fulvipes NEES, 1834, Hymen. Ichneum. affin. Monogr., I, p. 74., ♀ ♂.

Bracon (Striobracon) fulvipes: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 236.

Bracon (Orthobracon) fulvipes: 1961 TOBIAS, Horae Soc. Entom. Un. Sov., 48, p. 165–166.

Bracon carinatus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, 19, p. 166, ♀, (TOBIAS 1961, p. 165).

Range: One of the most frequent Bracon-species in the Palearctic Region.

Remarks. — 1. The holotype (1 ♀) of the junior synonym, *B. carinatus* SZÉPL., is in the Hungarian Natural History Museum, Budapest (Hym. Typ. No. 352). Designation by TOBIAS (1961, p. 166).

2. *B. carinatus* SZÉPL. was synonymized by TOBIAS (l. c.). Reexamining the holotype I established again that *B. carinatus* SZÉPL. is not even an individual deviation of *B. fulvipes* NEES.

3. TOBIAS relagated *B. fulvipes* NEES to the subgenus *Orthobracon* (FAHR.) TOB. Although the rugulosity is fine on tergites 2—7, this species belongs to the subgenus *Bracon* FABR. One of the most characteristic features of the subgenus is the rugosity of tergites 2—7.

4. According to TELENGA (1936, p. 248) and FISCHER (1965, p. 130) *B. elegans* SZÉPL. is a synonym of *B. erythrostictus* MARSH. *B. elegans* SZÉPL. is really a synonym name but with *B. intercessor* NEES (see there).

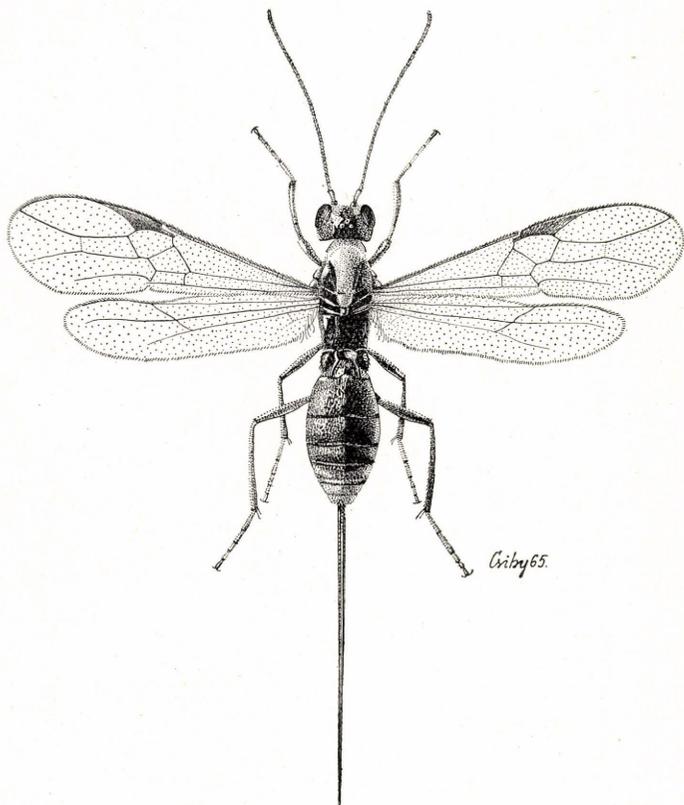


Fig. 3. *Bracon nigripedator* NEES ♀.

***Bracon fulvipes* var. *nigratus* var. n.**

Deviations from the nominate form: almost entire thorax, and tergites 2—4 with a broad and black streak (♀ ♀), tergites 2—4 also with a broad and black streak and tergites 5—7 black (♂ ♂). Length 3—4.5 mm. — From several low- and highland localities in the Carpathian Basin (PAPP 1967).

Bracon (B.) fumigatus Szépl., ♂ new (Fig. 12)

Bracon fumigatus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, **19**, p. 170, ♀.
Bracon (Striobracon) fumigatus: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 262.
Bracon rufipedator SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, **19**, p. 165, ♀ (**partim**).

Range: Hungary, Yugoslavia, Rumania, European USSR. Sporadically in the Carpathian Basin.

Remarks. — 1. The holotype (Zugliget, Budapest, 7 July 1897, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 329) is in the Hungarian Natural History Museum, Budapest.

2. One paralectotype of the type-specimens of *B. rufipedator* SZÉPL. is synonymous with *B. fumigatus* SZÉPL. Its data: Zugliget, Budapest, 7 June 1896, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 335.

Bracon (B.) intercessor NEES (Fig. 14)

Bracon intercessor NEES, Hymen. Ichneum. affin. Monogr., I, p. 71, ♀♂.
Bracon (Striobracon) intercessor: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 254.
Bracon bisinuatus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, **19**, p. 171, ♀ (**partim**).
Bracon dubiosus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, **19**, p. 169, ♀, **syn. n.**
Bracon elegans SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, **19**, p. 167, ♀, **syn. n.**
 (according to TELENGA (1936, p. 248) synonym with *B. erythrosticktus* Marsh.).
Bracon mixtus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, **19**, p. 167, ♀ (**partim**).
Bracon mundus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, **19**, p. 171, ♀♂, **syn. n.**
Bracon universitatis DALLA—TORRE, 1898, Catal. Hymen. IV: Braconidae, p. 293, ♀,
syn. n.

Range: Germany, Italy, Sweden, Austria, Hungary, European USSR, Trans-Caucasus, Kasakstan. Widely distributed in the Carpathian Basin, collected chiefly in lowlands (Pannonicum) and in the hilly regions (Matricum). It is on the wing from the end of April till the beginning of October, to be found most frequently during July, August, and September. Presumably a euryök-eremophilous species.

Remarks. — 1. The shape, sculpture, and colour of this species is extremely varying. This variability explains the above synonymy, which is based on the examination of the type-specimens, and the interpretation of the original description.

2. The *types* of the above junior synonyms are in the Hungarian Natural History Museum, Budapest. Their data are as follows. *B. bisinuatus* SZÉPL.: see there, remark 2. (paralectotype). *B. dubiosus* SZÉPL.: Óbuda, Budapest, 22 May 1895, 1 ♀, leg. SZÉPLIGETI (holotype, Hym. Typ. No. 350). *B. elegans* SZÉPL.: Pilismarót, 1 ♀, leg. SZÉPLIGETI (holotype, Hym. Typ. No. 351). *B. mixtus* SZÉPL.: see there, remark 2. (paralectotypes, Hym. Typ. No. 343—346). *B. mundus* SZÉPL.: Zugliget, Budapest, 20 June 1898, 1 ♀, leg. SZÉPLIGETI (lectotype, Hym. Typ. No. 336); Zugliget, Budapest, 24 August 1898, 1 ♀, leg. SZÉPLIGETI (paralectotype, Hym. Typ. No. 337); Zugliget, Budapest, 24 August 1898, 2 ♂, leg. SZÉPLIGETI (paralectotypes, Hym. Typ. No. 338—339).

Bracon intercessor var. fallaciosus (SZÉPL.)

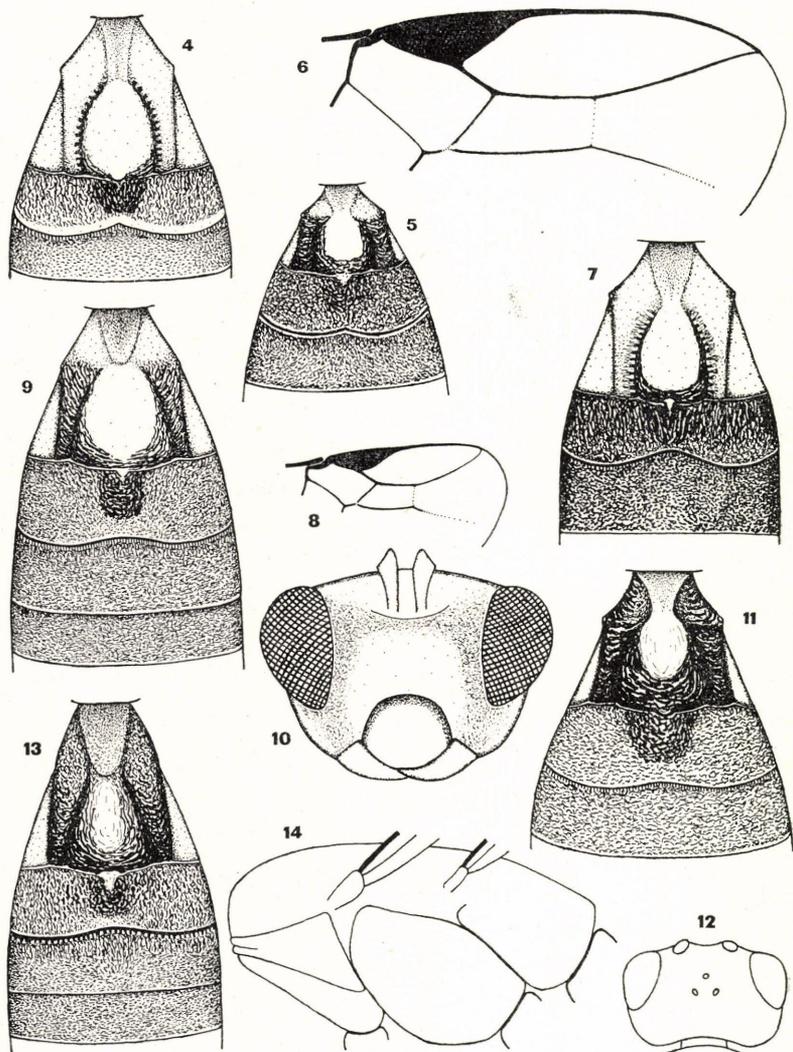
Bracon fallaciosus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, **19**, p. 171—172, ♀,
syn. n.
Bracon (Striobracon) fallaciosus: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 261.
Bracon haemirugosus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, **19**, p. 168, ♀
 (**partim**).

Deviations from the nominate form: Body dark (black, brownish-black), face, margin around eye, tergites 2—7 laterally, and all sternites yellowish-red. — Hungary, European USSR. Found in several localities in the Carpathian Basin.

Remarks. — 1. The types of the variety are in the Hungarian Natural History Museum, Budapest. Their data are as follows. *B. fallaciosus* SZÉPL.: Hűvösvölgy, Budapest,

30 May 1897, 1 ♀, leg. SZÉPLIGETI (lectotype, Hym. Typ. No. 347); Hűvösvölgy, Budapest, 24 August 1898, 1 ♀, leg. SZÉPLIGETI (paralectotype, Hym. Typ. No. 348); Ördögárok, Budapest, 26 August 1899, 1 ♀, leg. SZÉPLIGETI (paralectotype: synonymous with the nominate form, Hym. Typ. No. 349).

2. One of the type-specimens of *B. haemirugosus* SZÉPL. (subgenus *Orthobracon*) is synonymous with the above variety. Its data are: Budapest, 14 August 1898, 1 ♀, leg. KERTÉSZ (paralectotype, Hym. Typ. No. 373).



Figs. 4—14. Fig. 4. *Bracon adjectus* SZÉPL. ♀♂, tergites 1—3; fig. 5 *B. aestivatis* SZÉPL. ♀♂, tergites 1—3; fig. 6. *B. bisinuatus* SZÉPL. ♀♂, part of venation of fore wing; fig. 7. *B. chivenis*. TEL. ♀, tergites 1—3; fig. 8. *B. crocatus* SCHMIED. ♂, part of venation of fore wing; fig. 9. *Bs. erythrostictus* MARSH. ♀♂, tergites 1—4; fig. 10. *B. fulvipes* NEES ♀♂, head in front; fig. 11. *B. fulvipes* NEES ♀♂, tergites 1—3; fig. 12. *B. fumigatus* SZÉPL. ♀♂, head from above; fig. 13. *B. intercessor* NEES ♀♂, tergites 1—4; fig. 14. *B. intercessor* NEES ♀♂, thorax in lateral view

Bracon intercessor var. **maidli** (FAHR.)

Bracon maidli FAHRINGER, 1924, Ann. Naturhist. Mus. Wien, **38**, ♀, p. 101, **syn. n.**
Bracon (Glabrobracon) maidli: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 211.

Deviations from the nominate form: Head and thorax black, only margin of eye and vertex laterally yellowish-red. — Yugoslavia, Hungary, USSR (Kasakhstan). Sporadically in the Carpathian Basin.

Holotype in the Naturhistorisches Museum, Vienna.

Bracon (B.) leptus MARSH. (Fig. 17)

Bracon leptus MARSHALL, 1897, Spec. Hymen. d'Europe et d'Algérie, V. nr. 2, p. 64, ♀.
Bracon (Striobracon) leptus: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 227, ♀ ♂.
Bracon (s. str.) *leptus*: 1961 TOBIAS, Horae Soc. Entom. Un. Sov., **48**, p. 160.

Range: Spain, Hungary, USSR (Ukraine, Kasakhstan, Turkmenia, Tadzikhistan, Usbekhistan, Siberia). Sporadic in the Carpathian Basin, collected most frequently in the Matricum. It is on the wing from the end of April till the end of October.

In the Hungarian Natural History Museum (Budapest), there is a female specimen of *B. leptus* MARSH. This specimen was collected in the "terra typica" ("Spain"), its label had been written by MARSHALL, after having halved the label by a red longitudinal line. Although MARSHALL never indicated any specimen by a designation „Type”, our exemplar can still be identified as the holotype on the above considerations (Hym. Typ. No. 353).

Bracon (B.) mediotriatus sp. n. ♂ (Figs. 30–33)

♂. Body somewhat elongate. Head (Fig. 30) cubic, tempora as wide as breadth of eye. Face with a very fine rugulosity, hairy. Eye relatively small, not protruding from the outline of head. Ocelli on an equilateral triangle, base somewhat longer than sides. Palpi of normal length. Antennae somewhat longer than body (1: 0.92), 31-jointed, joints longer than broad, but apically gradually shortening.

Thorax elongate, ratio of its length, height, and width as 8: 3.9: 3. Proportion of breadth of head and thorax as 1: 0.8. Propodeum (Fig. 31) rugose along centro-longitudinal line, otherwise with very fine and disperse punctures. Upper quarter of mesopleura with a linear impression, centro-posteriorly (adjacent to margin) with a dimple.

Fore wing shorter than length of body (2 mm). Cu_2 short, 1.7 times longer than broad, r_3 somewhat curved, ending before apex of wing (Fig. 33).

Legs of normal form, but femora and tibiae somewhat short and swollen (resembling the subgenus *Lucobracon* (FAHR.) Tob.). Spur of 3rd tibia shorter than half length of metatarsus.

Abdomen (Fig. 32) somewhat elongato-elliptic, not broader than thorax, with pubescence. Tergite 1 punctato-rugose, tergites 2–3 striato-rugose, further tergites with a gradually narrowing rugulosity. Furrow between tergites 2–3 hardly bicurved, without any crenulation. All sternites smooth and shiny.

Head yellow, thorax and abdomen reddish-yellow. Antennae brown, palpi vivid yellow, apex of mandible dark. Spot beside tegulae black. Anterior and posterior margins of metanotum black. Propodeum blackish along centro-longitudinal rugosity.

Mesosternum black. Tarsi brown, claws blackish. Wings hyaline. Stigma yellow, veins brownish-yellow.

Length 2.7–2.8 mm, alar expanse 4.5 mm.

♀ and host unknown.

Type locality: Novi (Yugoslavia), 1900, 2♂ (1 ♂ holotype: Hym. Typ. No. 354, 1 ♂ paratype: Hym. Typ. No. 355), leg. G. HORVÁTH. Holotype and paratype in the Hungarian Natural History Museum, Budapest.

The new species stands nearest to *B. crocatus* SCHMIED., and *B. nomas* TOB., but differs from both by the following features: cubical form of head, hardly distinct parapsides, rugosity of propodeum, venation of wing, sculpture of tergites.

Remarks. — 1. Antennae of paratype damaged, right antenna with 7, left one with 11, joints.

2. Originally, the paratype was identified by SZÉPLIGETI as "*B. pectoralis* var. *unicolor* SZÉPL." (SZÉPLIGETI 1901, p. 158).

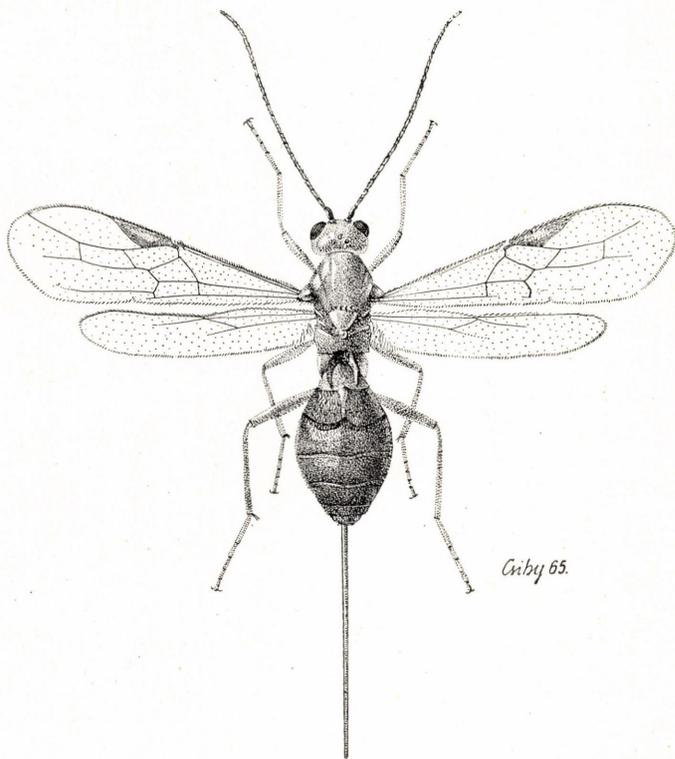


Fig. 15. *Bracon pectoralis* WESM. ♀

***Bracon* (B.) *minutator* FABR. (Figs. 2, 18)**

Bracon minutator FABRICIUS, 1804, Syst. Piez., p. 110, ♀♂.

Bracon (s. str.) *minutator*: 1961 TOBIAS, Horae Soc. Entom. Un. Sov., 48, p. 158.

Bracon pannonicus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, 19, p. 166, ♀ (TOBIAS 1961, p. 155).

Bracon subrugosus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, **19**, p. 166, ♀ (TOBIAS 1961, p. 155).

Bracon sulcatulus SZÉPLIGETI, 1896, Term. Füzet., **19**, p. 290 & 364, ♂, **syn. n.**

Bracon tauricus TELENGA, 1936, Faune de l'USSR, V. nr. 2 (1), p. 207 & 389, ♂ ♀ (TOBIAS 1961, p. 155).

Bracon trucidator MARSHALL, 1888, Spec. Hymen. d'Europe et d'Algérie, IV. nr. 1, p. 92, ♀ ♂, **syn. n.**

Range: West Palearctic Region. A frequent species in the Carpathian Basin (chiefly in the Pannonicum). It is on the wing from May till September, most frequent from July till middle of September. Presumably a euryök-eremophilous species with a mesophilous inclination.

Remarks. — 1. As regards the measurements of the body, the sculpture of the tergites and the colour of the body, a highly varying species. TOBIAS (1961, p. 158—159) differentiates a light and a dark form on the base of the Russian populations.

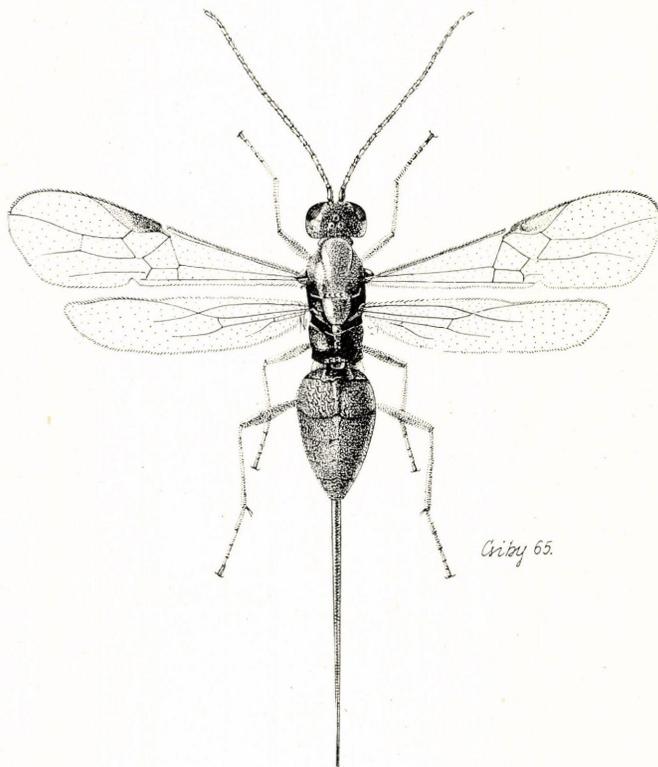


Fig. 16. *Bracon rufipalpis* SZÉPL. ♀

2. The holotypes of SZÉPLIGETI's above species are junior synonyms of *B. minutator* FABR. and are in the Hungarian Natural History Museum, Budapest. Their data are as follows. *B. pannonicus* SZÉPL.: Zugliget, Budapest, 28 August 1898, 1 ♀, leg. SZÉPLIGETI (holotype, Hym. Typ. No. 356); *B. sulcatulus* SZÉPL.: Hűvösvölgy, Budapest, 7 August 1895, 1 ♂, leg. Szépligeti (holotype, Hym. Typ. No. 357); *B. subrugosus* Szépl.: Hűvösvölgy, Budapest, 28 August 1897, 1 ♀, leg. SZÉPLIGETI (holotype, Hym. Typ. No. 358).

Bracon (B.) minutator var. **maculiger** var. n.

Deviation from the nominate form: Tergites with a broad median black streak, laterally yellow. Legs black, only base of hind femur yellow. — Collected in several localities in the Carpathian Basin.

Bracon (B.) minutator var. **trucidator** (MARSH.)

Deviations from the nominate form: Tergites without any black spot. Sculpture of tergites usually fine. Collected in several localities in the Carpathian Basin.

TOBIAS (1961, p. 155—156) considers this taxon as a species. On the base of his description, together with MARSHALL's original description (l. c.) and examining specimens identified as *B. trucidator* MARSH. by SZÉPLIGETI and TOBIAS, it can be established now that this form is only a variety of *B. minutator* FABR., since the differences against the nominate form are only infraspecific value.

The holotype of *B. subrugosus* SZÉPL. represents this variety.

Bracon (B.) mixtus SZÉPL. (Figs. 19—20).

Bracon mixtus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, **19**, p. 167, ♀

Bracon (Striobracon) mixtus: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 252.

Range: Central Europe (Hungary, Czechoslovakia, Yugoslavia).

Remarks. — 1. The type-specimens are in the Hungarian Natural History Museum, Budapest. I designate them as lectotype and paralectotypes. The data of the lectotype are: Pilismarót, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 340. The data of the paralectotypes: Rákos, Budapest, 15 August 1896, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 341; Svábhegy, Budapest, 12 June 1897, 1 ♀, SZÉPLIGETI, Hym. Typ. No. 342. — Right antenna with 16 joints on lectotype. Antenna of paralectotype from Svábhegy, Budapest (Hym. Typ. No. 342) damaged, right flagellum missing, left one with 14 joints.

2. Four further specimens served also for the original description of the taxon *B. mixtus* SZÉPL. The data of these paralectotypes are as follows: Sashegy, Budapest, 17 June 1896, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 343; Szépilona, Budapest, 21 August 1895, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 344; Pilismarót, 1 ♀, leg. SZÉPLIGETI (= *B. mixtus* var. *nigropictus* SZÉPL.), Hym. Typ. No. 345; Gellérthegy, Budapest, 18 June 1896, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 346. According to my examination, however, their systematical state must be changed, because they represent *B. intercessor* NEES (see also there).

3. It must be remarked also here that, according to TELENGA (1936, p. 252), this species is similar to *B. erythrostickus* MARSH., but this similarity may not mean conspecificity.

Bracon (B.) nigratus WESM. (Figs. 21—22)

Braco (!) nigratus WESMAEL, 1838, Nouv. Mém. Acad. Sci. Bruxelles, **11**, p. 34, ♀♂.

Bracon (Striobracon) nigratus: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 243.

Range: Belgium, England, Sweden, Germany, Hungary, Rumania, USSR. A widely distributed species in Europe, but nowhere frequent. In the Carpathian Basin, it was collected in 10 hilly and mountainous, and 2 lowland, localities.

Bracon (B.) nigripedator NEES (Figs. 3, 23)

Bracon nigripedator NEES, 1834, Hymen. Ichneum. affin. Monogr., I. p. 116, ♀♂.

Bracon (Striobracon) nigripedator: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 230.

Bracon (s. str.) *nigripedator*: 1961 TOBIAS, Horae Soc. Entom. Un. Sov., **48**, p. 156.

Range: South, Central, and East Europe (Spain, Italy, Albania, Yugoslavia, Hungary, Austria, USSR: Ukraine, Turkmenia, Azerbeidsan). Sporadically in the Carpathian Basin.

Bracon (B.) nigripedator var. rufipes var. n.

Deviations from the nominate form: Thorax almost black, legs reddish-yellow, coxae and trochanters black, tarsi fumous red. — Sporadically in the Carpathian Basin (PAPP 1967).

Bracon (B.) obscuricornis SZÉPL. (Fig. 24)

Bracon obscuricornis SZÉPLIGETI, 1896, Term. Füz., **19**, p. 287 & 361, ♀.

Bracon (Striobracon) obscuricornis: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 229.

Range: Known from Hungary (holotype).

Remarks. — 1. The holotype is in the Hungarian Natural History Museum, Budapest. Its data are as follows: Sashegy, Budapest, 14 Sept. 1895, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 359. Only this single specimen is known.

2. TOBIAS (1961) synonymized this species both with *B. pectoralis* WESM. (p. 158), and *B. leptus* MARSH. (p. 160). Examining the type, I established that *B. obscuricornis* is a distinct species and differs from both by well defined characters.

Bracon (B.) pectoralis WESM. (Fig. 15)

Bracon pectoralis WESMAEL, 1838, Mouv. Mém. Acad. Sci. Bruxelles, **11**, p. 12, ♀♂.

Bracon (s. str.) *pectoralis*: 1961 TOBIAS, Horae Soc. Entom. Un. Sov., **48**, p. 157.

Bracon ochrosus SZÉPLIGETI, 1896, Term. Füz., **19**, p. 290 & 363, ♂.

Range: West Palearctic Region (England, Belgium, France, Spain, Italy, Germany, Austria, Hungary, Yugoslavia, USSR: Bielorussia, Ukraine, Georgia, Azerbeidsan; North Africa). In the Carpathian Basin, it occurs in several districts: it was collected most frequently in Matricum. It is on the wing from the end of May till middle of September, most frequent in August. Presumably a euryök-eremophilous species.

Remark. — The holotype of *B. ochrosus* SZÉPL. is in the Hungarian Natural History Museum, Budapest. Its data: Budakeszi, 31 July 1895, 1 ♂, leg. SZÉPLIGETI, Hym. Typ. No. 360.

Bracon (B.) pectoralis var. maculatus var. n.

Deviations from the nominate form: Body minute. Prosternum and mesosternum black. Lateral lobes of mesonotum beside tegulae, propodeum, and 1st tergite indistinctly black. Length 3.5 mm. — Found in three highland localities in the Carpathian Basin (PAPP, 1967, p. 600).

Bracon (B.) rufipalpis SZÉPL., ♂ new (Figs. 16, 27)

Bracon rufipalpis SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, **19**, p. 165, ♀.

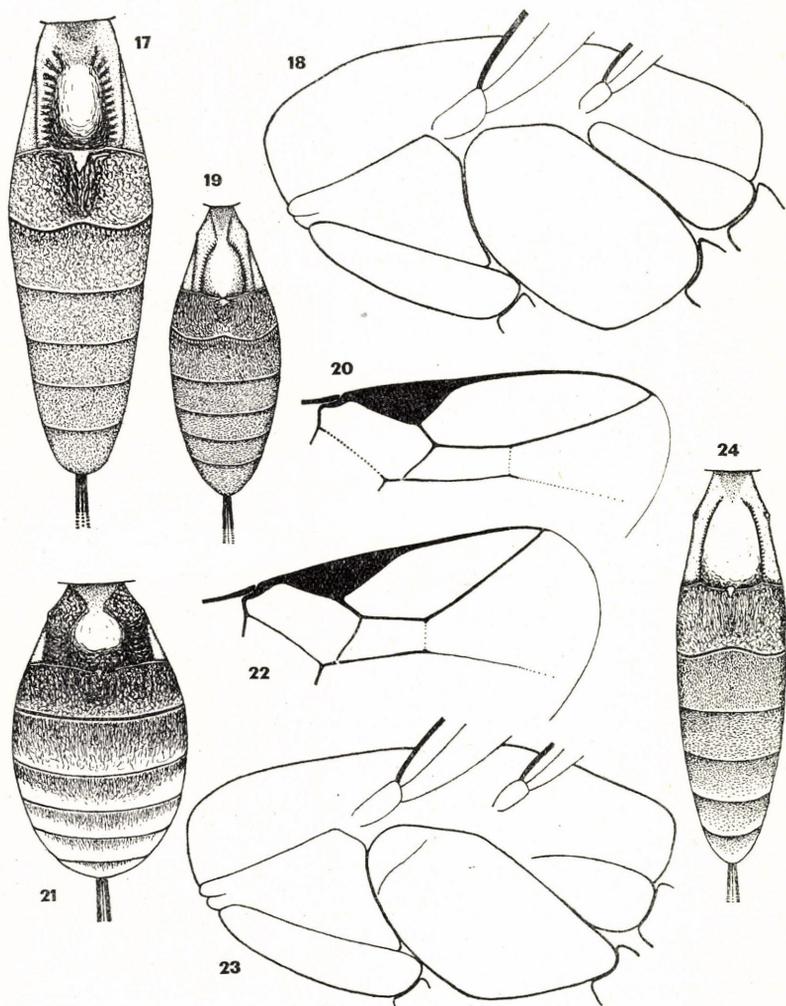
Bracon (Striobracon) rufipalpis: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 231.

Bracon rufipedator SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, **19**, p. 165, ♀.

Range: Hungary, Austria, Rumania, USSR (Ukraine, Georgia, Kasakhstan, Usbekhistan), Mongolia. In the Carpathian Basin, collected mostly in the Matricum. It is on wing from the end of May till the beginning of October, found most frequent in July and August.

Remarks. — 1. The holotype of *B. rufipalpis* SZÉPL. is in the Hungarian Natural History Museum, Budapest. Its data are as follows: Budapest, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 361.

2. The lectotype and paralectotypes of *B. rufipedator* SZÉPL. are also in the Hungarian Natural History Museum, Budapest. Their data are as follows: Sashegy, Budapest, 14 Sept. 1895, 1 ♀, leg. SZÉPLIGETI, lectotype: Hym. Typ. No. 330; Svábhegy, Budapest,



Figs 17—24. Fig. 17. *Bracon leptus* MARSH. ♀, abdomen; fig. 18. *B. minutator* FABR. ♀♂, thorax in lateral view; fig. 19. *B. mixtus* SZÉPL. ♀, abdomen; fig. 20. *B. mixtus* SZÉPL. ♀♂, part of venation of fore wing; fig. 21. *B. nigratus* WESM. ♀, abdomen; fig. 22. *B. nigratus* WESM. ♀♂, part of venation of fore wing; fig. 23. *B. nigripedator* NEES ♀♂, thorax in lateral view; fig. 24. *B. obscuricornis* SZÉPL. ♀, abdomen

4 August 1899, 2 ♀, leg. SZÉPLIGETI, paralectotypes: Hym. Typ. No. 331—332; Siófok, 1 ♀, leg. SZÉPLIGETI, paralectotype: Hym. Typ. No. 333; Budapest, 1 ♀, leg. SZÉPLIGETI, paralectotype: Hym. Typ. No. 334. Though *B. rufipedator* SZÉPL. represents more characteristically this taxon, the description of *B. rufipalpis* SZÉPL. precedes that of *B. rufipedator* SZÉPL. I select *B. rufipalpis* as the senior synonym to represent the taxon in question.

3. A further specimen served also for the original description of *B. rufipedator* SZÉPL. This specimen is a junior synonym of *B. fumigatus* SZÉPL. Its data: Zugliget, Budapest, 7 June 1896, 1 ♀, leg. SZÉPLIGETI, paralectotype: Hym. Typ. No. 335.

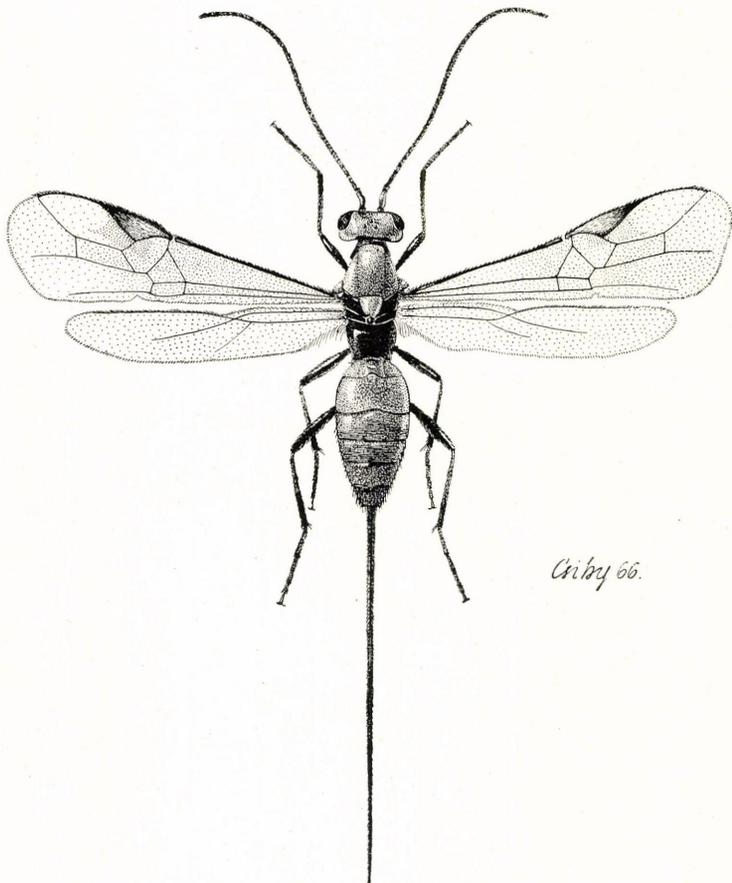


Fig. 25. *Bracon semijlavus* THOMS. ♀

4. TOBIAS (1961, p. 160) synonymized both taxons (*B. rufipalpis* SZÉPL. and *B. rufipedator* SZÉPL.) with *B. leptus* MARSH. Examining the types of the three species I can not concur with his opinion. *B. rufipalpis* SZÉPL. differs by good morphological features (outline and colour of body, sculpture of tergites, cf. key) from *B. leptus* MARSH., and therefore I retain these two taxa as two distinct species.

***Bracon (B.) sulphurator* SZÉPL. (Fig. 26)**

Bracon sulphurator SZÉPLIGETI, 1896, Term. Füz., 19, p. 168 & 231, ♀ ♂.

Cyanopterus sulphurator: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 137, ♀ ♂.

Range: Until now collected only in the Carpathian Basin (Hungary).

Remark. — The type-specimens are in the Hungarian Natural History Museum, Budapest. Their data are as follows: Lectotype: Budapest, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 362. Paralectotypes: Budapest, 3 ♂, leg. SZÉPLIGETI, Hym. Typ. No. 363–365.

Bracon (B.) suspectus SZÉPL. (Figs. 28—29)

Bracon suspectus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, 19, p. 170, ♀.

Bracon (Striobracon) suspectus: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 263.

Range: Hungary, USSR (Ukraine, Trans-Caucasus). Rare in the Carpathian Basin.

Remark. — The holotype is in the Hungarian Natural History Museum, Budapest. Its data are as follows: Zugliget, Budapest, 9 Sept. 1896, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 327.

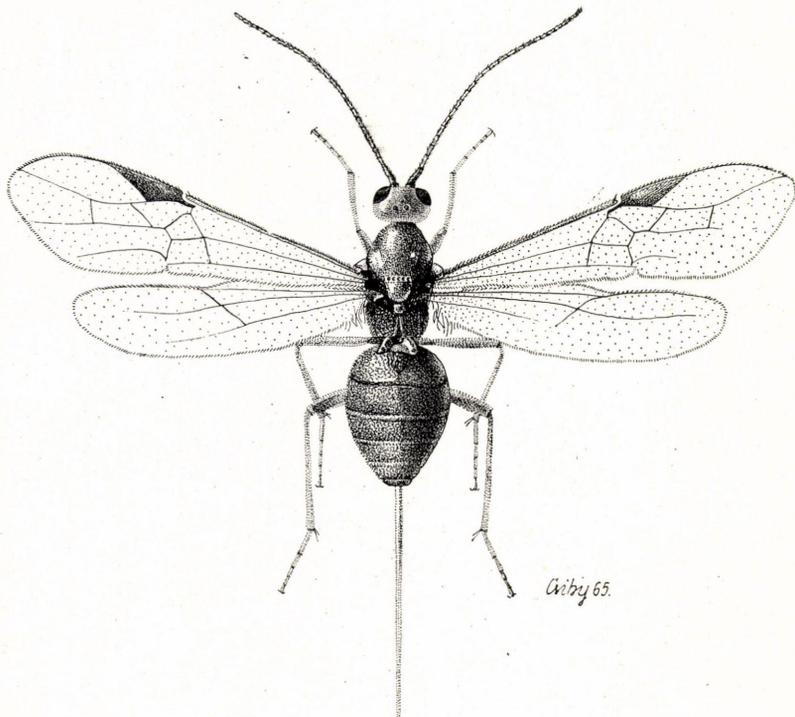


Fig. 26. *Bracon sulphurator* SZÉPL. ♀

Bracon (B.) variegator SPIN. (Figs. 34—35)

Bracon variegator SPINOLA, 1808, Insecta Ligur., II, p. 115, ♀♂.

Bracon (Striobracon) variegator: 1936 TELENGA, Faune de l'USSR, V. nr. 2 (1), p. 238.

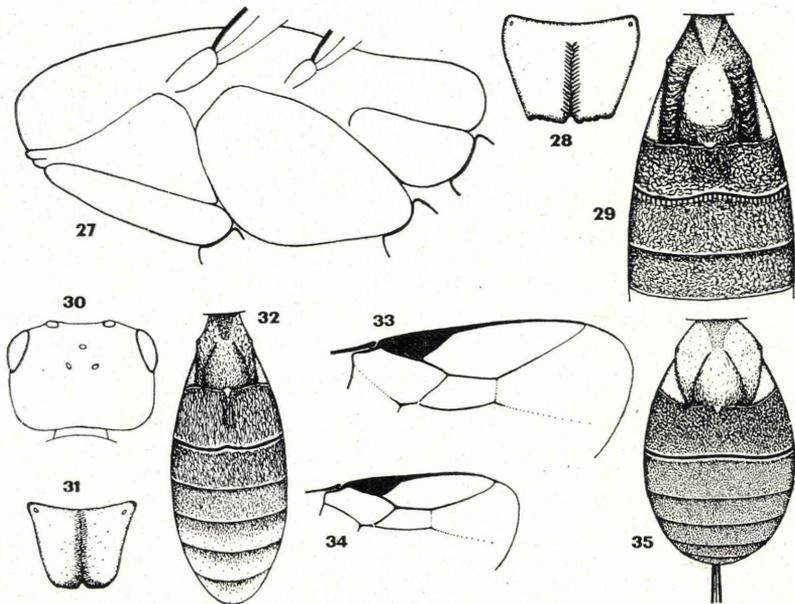
Bracon nanulus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, 19, p. 172, ♀, **syn. n.** (TOBIAS 1961, p. 153).

Bracon melanosomus SZÉPLIGETI, 1901, Math. Naturw. Ber. Ungarn, 19, p. 172, ♀♂.

Range: Europe. Collected only in some hilly and highland localities in the Carpathian Basin.

Remarks. — 1. The holotype of *B. nanulus* is in the Hungarian Natural History Museum, Budapest. Its data are as follows: Svábhegy, Budapest, 12 June 1897, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 366.

2. The type-specimens of *B. melanosomus* SZÉPL. are also in the Hungarian Natural History Museum, Budapest. Their data are as follows. Lectotype: Pilismarót, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 367. Paralectotypes: Pilismarót, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 368; Gellérthegy, Budapest, 27 May 1896, 1 ♀, leg. SZÉPLIGETI, Hym. Typ. No. 369; Svábhegy, Budapest, 2 Sept. 1899, 1 ♂, leg. SZÉPLIGETI, Hym. Typ. No. 370.



Figs. 27—35. Fig. 27. *Bracon rufipalpis* SZÉPL. ♀♂, thorax in lateral view; fig. 28. *B. suspectus* SZÉPL. ♀, propodeum; fig. 29. *B. suspectus* SZÉPL. ♀, tergites 1—4; fig. 30—33. *B. mediotriatus* sp. n.: fig. 30. head from above, fig. 31. propodeum, fig. 32. abdomen, fig. 33. part of venation of fore wing; fig. 34. *variegator* SPIN. ♀♂, part of venation of fore wing; fig. 35. *B. variegator* SPIN. ♀. abdomen

3. According to TOBIAS (1961, p. 153), *B. nanulus* SZÉPL. is a *Habrobracon*-species. Examining the holotype, I have to transfer this taxon to the genus *Bracon* FABR. because r_2 is longer than cuq_1 (Fig. 34), but together with *B. melanosomus* SZÉPL. I must draw it in as a junior synonym of *B. variegator* SPIN., since the differences against the nominate form are only of infraspecific value.

Bracon (*B.*) *variegator* var. *melanosomus* (SZÉPL.)

Deviations from the nominate form: Body almost entirely black. Mandible, upper part of face, margin around eye, proximal basis of parapsides, two spots on upper part of mesopleura, and all sternites yellowish. — Sporadically in the Carpathian Basin.

Remark. — Only one paralectotype (Hym. Typ. No. 369) of *B. melanosomus* SZÉPL. and *B. nanulus* SZÉPL. deviates from the nominate form, and belong to the above variety.

- References:** 1. FAHRINGER, J.: *Opuscula braconologica*, I. (Wien, 1928, 606 pp.). — 2. FISCHER, M.: Die europaischen Arten der Gattung *Opius* Wesm. Teil I a (Hymenoptera, Braconidae) (Ann. Mus. Civ. Stor. Nat. Genova, 70, 1958, p. 33—70). — 3. FISCHER, M.: Die Bracon-Arten des Burgenlandes (Hymenoptera, Braconidae) (Wiss. Arb. Burgenland, 32, 1965, p. 125—138). — 4. HELLÉN, W.: Zur Kenntnis der Braconiden (Hym.) Finnlands I. (Acta Soc. Fauna et Flora, 56, 1927, p. 1—59+1 Karte). — 5. HELLÉN, W.: Zur Kenntnis der Braconidae: Cyclostomi Finnlands (Not. Entom.,

- 37, 1957, p. 33—52). — 6. PAPP, J.: A Synopsis of the Bracon F. Species of the Carpathian Basin, Central Europe (Hymenoptera, Braconidae), I. Subgenus *Glabrobracon* (Fabr.) Tob. (Ann. Hist.-nat. Mus. Nat. Hung., 58, 1966, p. 363—394). — 7. PAPP, J.: A Kárpát-medence Bracon Fabr. fajainak faunakatalógusa és etológiai adatai (Hym., Braconidae) 2. Faunistic Catalogue and Ethological Data of the Bracon Fabr. Species in the Carpathian Basin (Hym., Braconidae) 2. (Cat. Hym. XXI) (Folia Entom. Hung., 20, 1967, p. 589—603). — 8. SZÉPLIGETI, G.: Übersicht der Gattungen und Arten der palaearktischen Braconiden (Math. Naturw. Ber. Ungarn, 19, 1901, p. 145—203). — 9. Теленга, Н. А.: Braconidae (Hymenoptera) (in фауна СССР, V. вып. 2, ч. 1., 1936, стр. 403). — 9. Тобиас, В. И.: К систематике и биологии родов Bracon F., Habrobracon Ashm. (Hymenoptera, Braconidae) (Труды Всес. Энтом, Общ, 48, 1961, стр. 129—180).

