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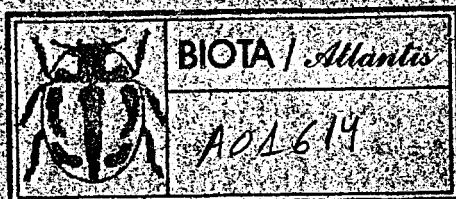
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REVISION OF THE SUBFAMILY BLACINAE FOERSTER
(HYMENOPTERA, BRACONIDAE)

by

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Blacus longipennis; Haeselbarth, 1973a: 130-132, figs. 47, 52, 56; 1975a: 30; Hellén, 1974: 16.
Blacus (Blacus) longipennis; Van Achterberg, 1976: 386, 387.
Blacus dubius Ruthe, 1861: 156.

Parasite of Anobiidae. Known from Europe (Austria (up to 1400 m), Bulgaria (Rhodopi Mts.), Czechoslovakia, Denmark, England, Finland, Hungary, Ireland, Netherlands (Putten (G.), Waarder, Vogelenzang), Norway, Poland, Scotland, Sweden, U.S.S.R. (Krasnodarskij district), West Germany).

Blacus (Blacus) maryi Hellén
 (figs. 160-171, 357)

Blacus maryi Hellén, 1958: 23; Haeselbarth, 1973a: 152-153, fig. 83; 1975a: 31.
Blacus (Blacus) maryi forma maryi; Van Achterberg, 1976: 227-228, figs. 306-311; Marsh, 1979: 267.
Blacus nidicola Hedqvist, 1974: 185-185, figs. 1A-D.
Blacus (B.) maryi forma nidicola; Van Achterberg, 1976: 226-227, figs. 300-305; Marsh, 1979: 267.

The typical form (*stematicum* and face dorsally smooth) is known from Europe (Austria, Finland, Italy (2200 m, collected on alpine meadow), Switzerland) and the Nearctic region: Canada (Alberta; British Columbia (1200 m)) and U.S.A. (Colorado, ca. 2900 m).

The form *nidicola* (*stematicum* and face dorsally punctate-rugose) is known from Sweden (Lapland, in nest of *Bombus lapponicus* F.) and the Nearctic region: Canada (Manitoba; Yukon Territory).

Blacus (Blacus) masoni Van Achterberg
 (figs. 232-238)

Blacus (Blacus) masoni Van Achterberg, 1976: 235, figs. 378-384; Marsh, 1979: 267; Sarazin, 1985: 1185.

The biology is unknown, but has been reared from Bombus-nest in Canada. Known from Canada (Alberta, British Columbia, Manitoba, Quebec) and U.S.A. (California (Siskiyou Co., ca. 1800 m, CAS), Colorado, Wisconsin).

Blacus (Blacus) modestus Haeselbarth
 (figs. 315, 318, 319)

Blacus modestus Haeselbarth, 1973a: 132-133, figs. 49, 54; 1975a: 30.
Blacus (Blacus) modestus; Van Achterberg, 1976: 241.

A seldomly collected species, known from Europe (Austria, Bulgaria (Rhodopi Mts.), Denmark, West Germany).

Blacus (Blacus) nivalis spec. nov.
 (figs. 302-309, 311, 313)

Material. — Holotype, ♀, (Museo Insular de Ciencias Naturales, Santa Cruz de Tenerife); "Canary Isl.: Tenerife, on snowfield at Mt. Teide, 26.II.1984, N.P. Ashmole, RMNH'86". Paratype, 1 ♀, (RMNH), topotypic, but 15.II.1984.

Holotype, ♀, length of body and of fore wing both 1.7 mm.

Head. — Antennal segments 17, antenna somewhat widened apically (fig. 302), length of third, fourth and penultimate segments 3.5, 2.5, and 1.2 times their width, respectively (figs. 302, 304); length of maxillary palp 0.6 times height of head; frons smooth, largely glabrous; OOL : diameter of ocellus : POL = 14:5:15; length of eye in dorsal view 1.2 times temple (fig. 306); face smooth; malar suture absent; length of malar space twice basal width of mandible.

Mesosoma. — Length of mesosoma 1.5 times its height; pronotal sides smooth dorsally and medially, rugose anteriorly and with some crenulae posteriorly (fig. 302); precoxal sulcus smooth, shallowly impressed (fig. 302); notaui smooth, distinct anteriorly and obsolescent posteriorly (fig. 313); mesoscutal lobes rather convex, and sparsely setose; scutellum smooth, its lateral carina absent; propodeal tubercles minute, indistinct (fig. 302); surface of propodeum largely smooth anteriorly, with some superficial sculpture (fig. 313).

Wings. — Fore wing: first discal cell acute anteriorly (fig. 303); 1-CU1 : 2-CU1 = 1:8; parastigma small (fig. 303); 2-M absent, only as unpigmented trace (fig. 303); marginal cell longer than of *instabilis* (figs. 303, 354); r about as long as width of pterostigma; 2-R1 absent; SR1 slightly curved (fig. 303).

Legs. — Hind coxa smooth, except for an oblique carina (fig. 302); length of femur, tibia, and basitarsus of hind leg 5.4, 10.3, and 7 times their width, respectively (figs. 307, 309).

Metasoma. — Length of first tergite 1.4 times its apical width, largely smooth, but longitudinally rugose medio-posteriorly (fig. 305), dorsal carinae distinct and close to apex of tergite; second tergite smooth as remainder of metasoma; length of ovipositor sheath 0.19 times fore wing, 0.8 times hind femur and 1.6 times first tergite.

Colour. — Black or blackish brown; antenna (except pedicellus, and annellus), hind coxa largely and metasoma (after first tergite), dark brown; fore and middle femora basally, hind femur largely, tibiae (except base), fore and middle tarsi, and hind telotarsus, more or less infuscated; annellus and palpi yellowish; wing membrane slightly infuscated.

Variation. — Length of fore wing 1.6-1.7 mm, length of first metasomal tergite 1.3-1.4 times its apical width and length of ovipositor sheath of both specimens 0.19 times fore wing.

Note. Closely related to *leptostigma* but *leptostigma* has more slender hind femur (fig. 310), first tergite extensively sculptured (fig. 314), third antennal segment more robust (about 3 times its width, fig. 312), eye somewhat larger (fig. 312), wider marginal cell of fore wing (fig. 373), vein cu-a of fore wing more distally situated (fig. 373) and (sparsely) sculptured precoxal sulcus.

Blacus (Blacus) nigricornis Haeselbarth
(figs. 332, 337, 339)

Blacus nigricornis Haeselbarth, 1973a: 141-142, figs. 65, 68, 73; 1975a: 31.
Blacus (Blacus) nigricornis; Van Achterberg, 1976: 241.

Parasite of Nitidulidae (*Meligethes* sp.). Known from Europe (Czechoslovakia, England, France, Hungary, Ireland, Italy, Netherlands (Asperen, Leiden, Meijendel (dunes), Oostvoorne (id.), Putten (G.), Rijs (F.), St. Pietersberg, Wijster), Sweden) and Asia Minor (Turkey).

Blacus (Blacus) paganus Haliday
(figs. 262-268, 320, 321, 351, 356, 1228)

Blacus paganus Haliday, 1835: 122, Haeselbarth, 1973a: 124-125, figs. 53, 117; 1975a: 30; Hellén, 1974: 16; Tobias, 1976: 116; Papp, 1983: 442.
Blacus (Blacus) paganus; Van Achterberg, 1976: 238-239, figs. 371-377, 388, 389; Marsh, 1979: 267.
Blacus brevicornis Ruthc, 1861: 146.

In the Haliday Collection (NMI) are 8 ♀ and 4 ♂ of *B. paganus*; 2 ♀ are excluded (from box 28). One ♀ is here designated lectotype; from box 8 with a label written by Haliday "June 15, 1834", and it is a specimen from Ireland. Paratypes (all box 8): 2 ♂ + 1 ♀ on one card, 2 ♂ separately mounted, 1 ♀ dissected on a card and with "Bl. paganus" in Haliday's handwriting and 3 ♀, all most likely from Ireland. The lectotype agrees with the usual interpretation.

Biology unknown but once collected from *Bombus*-nest together with *Antherophagus nigricornis* (F.) (Cryptophagidae). Known from Europe (Austria (up to 1400 m), Bulgaria (Rhodopi Mts.; Rila Mts., up to 1800 m), Czechoslovakia, Denmark, East Germany, Finland, France, Hungary, Ireland, Italy (up to 1350 m), Netherlands (Nunspeet, Waarder, Wijster), Sweden, U.S.S.R. (Latviya, Gruzijskaja S.S.R.), West Germany (Mainz (CNC)), Mongolia, and the Nearctic region: Canada (Alberta, British Columbia, Manitoba, Quebec) and U.S.A. (Georgia, North Carolina).

Blacus (Blacus) pappianus Haeselbarth
(figs. 329, 340, 343-345, 1237)

Blacus pappianus Haeselbarth, 1973a: 148-149, figs. 70, 71, 91, 115, 119; 1975a: 31.
Blacus (Blacus) pappianus; Van Achterberg, 1976: 240.

A seldomly collected species, known from Europe (Austria, Hungary, Italy, Spain (Torremolinos, Canary Islands (RMNH)), U.S.S.R. (Ukraina)).

Blacus (Blacus) procerus Haeselbarth
(figs. 347, 348)

Blacus procerus Haeselbarth, 1973a: 149-150, figs. 72, 82.
Blacus (Blacus) procerus; Van Achterberg, 1976: 241.

A seldomly collected species, known from Europe (Czechoslovakia) and Asia (Kazakhstan).

Blacus (Blacus) radialis Haeselbarth
(figs. 353, 1227)

Blacus radialis Haeselbarth, 1973a: 126, fig. 50.
Blacus (Blacus) radialis; Van Achterberg, 1976: 241-242.

Known from South Palaearctic area (U.S.S.R. (Kazakhstan), Nepal (1800-2700 m)) and Japan (Nagano Pref., Shimashima-dani, 1300-1600 m (ELF)).

Blacus (Blacus) rufescens Ruthe
(figs. 327, 330, 334)

Blacus rufescens Ruthe, 1861: 141; Haeselbarth, 1973a: 147-148, figs. 90, 118, 120.