

A new genus, four new species and a new name in Ichneumonidae (Hymenoptera) from Greenland

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A new ichneumonid (Hymenoptera) genus, *Groenlabus* gen. n of the subfamily Ichneumoninae and four new ichneumonid species, *Otlophorus vibei* sp. n. and *Campodorus ultimus* sp. n. of the subfamily Ctenopelmatinae, *Bathyplectes glacialis* sp. n. of the subfamily Campopleginae and *Groenlabus thulensis* sp. n. (Hymenoptera: Ichneumonidae) from Greenland are described and illustrated. In addition, a new name, *micropennis* is given to the ichneumonid species *Stenomacrus brevipennis* Jussila, 1996 of the subfamily Orthocentrinae.

Dansk resumé

En ny slægt af Ichneumonidae (Hymenoptera), *Groenlabus* gen. n. i underfamilien Ichneumoninae og fire nye ichneumonide-arter, *Otlophorus vibei* sp. n. og *Campodorus ultimus* sp. n. i underfamilien Ctenopelmatinae, *Bathyplectes glacialis* sp. n. i Campopleginae og *Groenlabus thulensis* sp. n. (Hymenoptera: Ichneumonidae) fra Grønland beskrives og illustreres. Desuden bliver et nyt navn, *micropennis* givet til ichneumonide-arten *Stenomacrus brevipennis* Jussila, 1996 i underfamilien Orthocentrinae

KEYWORDS: Ichneumonid wasps, Greenland, new genus, new species, new name

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Introduction

Among the material of Greenlandic Ichneumonidae (Hymenoptera) in the collection of the Zoological Museum, University of Copenhagen, Denmark, have been found one new genus within its species of the subfamily Ichneumoninae, and three other new species, two species of the subfamily Ctenopelmatinae and one species of the subfamily Campopleginae. In addition, a new name, *micropennis*, was given to the ichneumonid species *Stenomacrus brevipennis* Jussila, 1996.

Methods

All observations were made with a Euromex ZT-45 stereomicroscope usually at magnification of 40 to 45X. Three different ways of illumination were used: incident and transmitted illumination (6 volt 1.2 ampere) of the microscope and Euromex cold-light illuminator EK-1 with two-fibre optic light conductors. All measurements were made by using the Euromex measuring eyepiece SWF 10X/20 at magnification of 45X.

The terminology is according to Richards 1956, Fitton et al. 1988 and Gauld 1991.

Results and descriptions

Otlophorus vibi Jussila, sp. n. (Ctenopelmatinae: Mesoleiini)

Diagnosis (holotype male)

Length about 8.0 mm. Frons, face and malar space strongly punctate, not polished, rest of head polished with distinct punctures; temple not narrowed behind eyes; malar space about 0.8 x width of mandible; clypeus moderately convex, strigose, not shining, its width equal to its length; mandible long, lower tooth as long as upper tooth; flagella broken. Mesoscutum polished with shallow punctures, notaulus weak; propleuron strigose, mesopleuron polished with strong punctures, dorsal part strigose, speculum polished; propodeum partly smooth and polished, partly strigose, median longitudinal carina, transverse carinae and costula distinct (Fig. 1). Areolet of fore wing without vein 3rs-m; in hind wing abscissa of vein Cu between M+Cu and cua distinctly antefurcal (Fig. 2). Length of hind femur about 3.8 times its breadth. Metasoma rather stout basally and rather long, polished without distinct punctures; median dorsal carinae of tergite 1 distinct and well separated reaching to behind the spiracle, its dorso-lateral carina complete.

Black; yellowish only on three basal sternites of metasoma.

The holotype resembles *O. ephippiger* (Holmgren, 1876) but the metasomal tergites of the latter species are more or less mat and the legs ferruginous except for their blackish coxae, trochantera and hind tibiae and tarsi.

Biology

Otlophorus species are koinobiont parasitoids of Symphyta (Hymenoptera), allowing the host to continue its development for some time after being parasitized.

Etymology

The specific name is given in honour of Mr. Christian Vibe who collected Ichneumonidae extensively in Greenland.

Material examined

The holotype male: Greenland, NW: Thule 11.VII.1940 (Chr. Vibe) (coll. Zoological Museum, University of Copenhagen).

Campodorus ultimus Jussila, sp. n. (Ctenopelmatinae: Mesoleiini)

Diagnosis (holotype female)

Length about 4.5 mm. Head pustulate, more or less mat; vertex narrowing behind eyes; malar space about 0.8 the width of mandible; clypeus wide and short (width about 2.1 the length), its profile somewhat swollen in its middle and apical margin rather shallowly hollowed (Fig. 3); teeth of mandible equally wide; antenna with 28 flagellomeres, length-to-thickness ratio of 1st flagellomere about 4.2, 2nd 2.8, 7th 2.2 and penultimate about 1.2. Mesoscutum densely pustulate, not shining, notaulus reaching about 0.3 the distance to scutellum; pro- and mesopleuron pustulate to rugose, mat, speculum polished; propodeum mat with distinct median carinae, length-to-width ratio of area superomedia about 2.0. Areolet of fore wing without vein 3rs-m; in hind wing abscissa of vein Cu between M+Cu and cua distinctly antefurcal (as in Fig. 2). Length of hind femur about 4.4 its breadth. Metasomal terga 1 and 2 more or less mat, the following terga smooth and shining; length of tergum 1 about 2.0 its apical width, median dorsal carinae weak, reaching about 0.4 the distance to apex.

Black; yellowish on clypeus, mandible (except for brownish teeth), ventral side of flagellum, hind corner of pronotum and tegula. Legs brownish to yellowish brown, yellowish on basal and apical parts of hind femur. Metasomal tergum 1 black, the following terga more or less yellowish brown with yellow apical margins.

The holotype resembles *C. fennicus* (Jussila, 1965) from Finnish Lapland (Jussila 1965) but its metasomal tergum 1 is narrower (in *fennicus* its ratio is 1.3); in the hind wing the abscissa of the vein Cu between M+Cu and cua is strongly antefurcal and its coxae are lighter. About other *Campodorus* species from Greenland, see Jussila 1996.

Biology

Campodorus species are koinobiont parasitoids of Symphyta (Hymenoptera).

Etymology

The specific name “ultimus” is Latin for “extreme, furthest”.

Material examined

The holotype female: Greenland, found from *N*, labelled “Dansk Pearyland Exp. Bórlum Elv's dal” 5.VIII.1949 (T. Andersen) (coll. Zoological Museum, University of Copenhagen).

***Bathyplectes glacialis* Jussila, sp. n. (Campopleginae: Limneriini)**

Diagnosis (holotype female)

Length about 2.0 mm. Head densely punctate, mat; vertex not narrowing behind eyes; malar space about as long as the width of mandible; clypeus not wide (width about 1.6 the length), its profile somewhat swollen, densely punctate and mat, apical margin narrowly smooth and shiny; mandible with upper tooth a little wider than under tooth; antenna with 18 flagellomeres, length-to-thickness ratio of 1st flagellomere about 2.5, 2nd 2.3, 7th 1.6 and penultimate about 1.2. Mesoscutum densely punctate and mat, notaulus lacking, speculum smooth and polished; propodeum quite short, densely punctate and mat, area basalis quadrate, carinae otherwise distinct but area superomedia and petiolaris confluent, area superomedia widening distally (Fig. 4). Areolet of fore wing nearly symmetric, its upper side sessile (as in Fig. 5); in hind wing abscissa of vein Cu between M+Cu and cua not broken and nearly opposite. Length of hind femur about 5.0 the breadth. Metasoma more or less smooth and shining, only terga 1 and 2 punctate and less shining; postpetiole with slightly curved sides.

Blackish to black. Legs orange, blackish on coxae, trochantera, trochantelli, base of hind femur, middle and hind femora except for light tips, middle and hind tibiae except for yellowish bases and middle parts, and middle and hind tarsi.

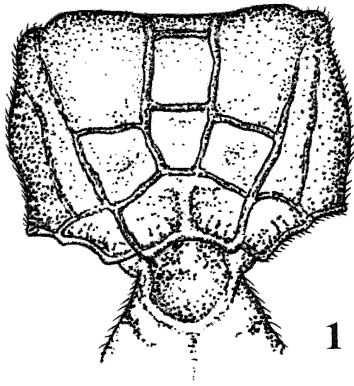
The holotype resembles mainly the European *B. stenostigma* (Thomson, 1887) but in the latter species the head is narrowing behind eyes, the speculum is less smooth and polished, and the area superomedia is less widening apically (see Horstmann 1974).

Etymology

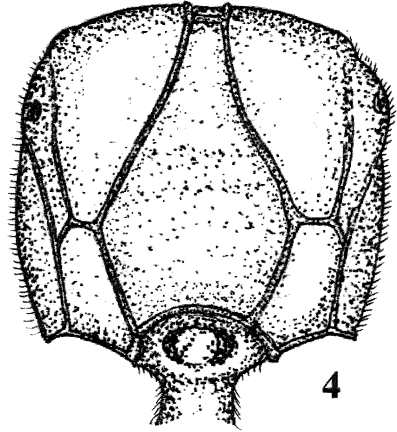
The specific name “glacialis” is Latin for “glacier”.

Biology

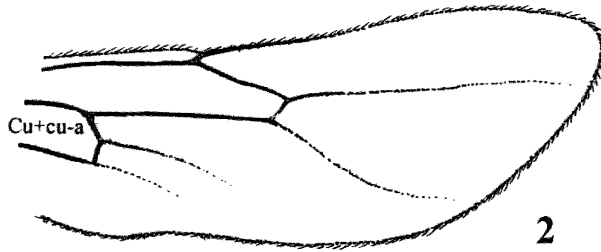
Bathyplectes species are predominantly endoparasitoids of Curculionidae (Coleoptera) or Coleophoridae (Lepidoptera).



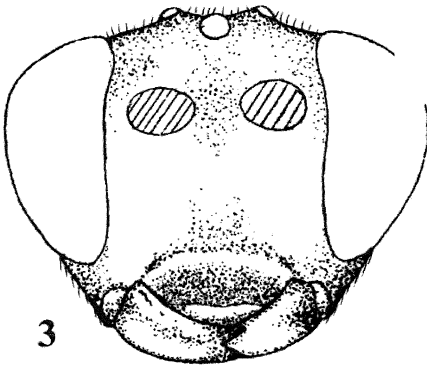
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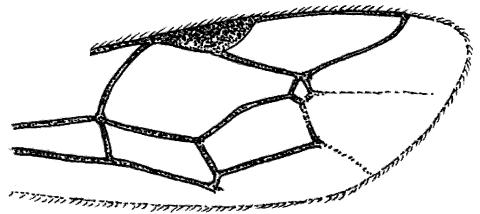
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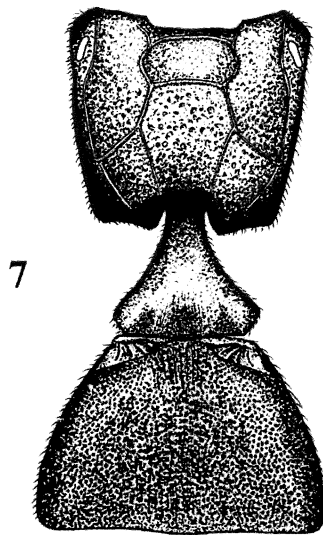
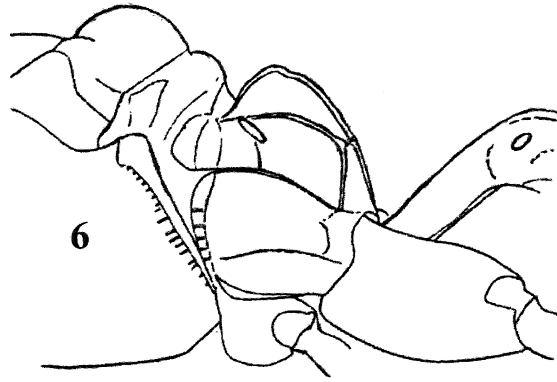


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Figs 1-2. *Otlophorus vibei* sp. n. Fig. 1. Propodeum, dorsal view. Fig. 2. Right hind wing. Fig. 3. Face of *Campodorius ultimus* sp. n. Fig. 4. Propodeum of *Bathyplectes glacialis* sp. n., dorsal view. Fig. 5. Right fore wing of *Bathyplectes glacialis* sp. n.



Figs 6-7. *Groenlabus thulensis* sp. n. Fig. 6. Propodeum, lateral view. Fig. 7. Propodeum and metasomal segments 1-2, dorsal view.

Material examined

The holotype female: Greenland, S: Narsarsuaq 28.V.1949 (Chr. Vibe) (coll. Zoological Museum, University of Copenhagen).

***Groenlabus* Jussila, gen. n. (Ichneumoninae: Eurylabini)**

Type species

Groenlabus thulensis sp. n.

Diagnosis

Body moderately stout. Head distinctly narrowed behind compound eyes; clypeus of moderate size, quite flat and without apical teeth, mandible and maxillary palp normal, genal carina joining hypostomal carina distinctly away from the base of mandible; antennal sclerite laterally not strongly raised; occipital carina rounded on its middle part.

Apical truncation of antennal scape very oblique; flagellum filiform, flagellomeres not long and thin. Pronotum, mesoscutum and mesopleuron strongly and closely punctate, notaulus distinct; scutellum convex (Fig. 6), without lateral carinae; mesopleuron without sternaulus. Propodeum rather short and, viewed laterally, evenly rounded, with small dentipal teeth (Fig. 6), its surface conspicuously rough; areola distinctly transverse (Fig. 7), costula lacking but other carinae strong. Vein Cu+cu-a of hind wing postfurcal. Petiolar segment of metasoma smooth and shiny with rougher lateral sides, petiole conspicuously flattened, centrally distinctly broader than high, lateral carinae weak; postpetiole broad, with distinct dorso-medial and dorso-central pits, median field with weak longitudinal striae (Fig. 7); gastrocoelus deep, adjacent to the base of tergite 2; thyridium separated from base of tergite 2 by less than its width; suture between tergites 2 and 3 deep; sternites 2-4 with median longitudinal fold.

This genus belongs to the tribus Eurylabini and is near the genus *Eurylabus* Wesmael, 1844. However, the head is more narrowing behind the compound eyes, the notauli are distinct, the propodeum has a more steeply descending posterior part (Fig. 6), and it has smaller dentipal teeth and transverse areola (Fig. 7). The petiole has weak carinae, the postpetiole has distinct dorso-medial and dorso-central pits, the median field has weak longitudinal striae (Fig. 7); the metasoma is broader than in *Eurylabus* males.

Biology

Hosts are probably medium-sized Lepidoptera.

Etymology

The generic name "*Groenlabus*" is a combination of the terms "Groenland" and "Eurylabus".

***Groenlabus thulensis* Jussila, sp. n.**

Diagnosis (holotype female)

Length about 15.0 mm, length of fore wing about 7.0 mm. Head strongly and closely punctate; temple distinctly narrowed behind compound eyes; malar space about as long as basal width of mandible; clypeus quite flat. Antennal flagellum filiform (but apices of both flagellae broken), length-to-thickness ratio of 1st flagellomere about 1.5, 2nd 1.7, 10th 1.0 and 15th about 0.9; distinct tyloids on flagellomeres 8-17. Pronotum, mesoscutum and mesopleuron strongly and closely punctate, the punctures separated by their own diameters; notaulus reaching about 0.4 the distance to scutellum. Length of hind femur about 4.4 its width, coxae distinctly punctate. Length-to-width ratios of metasomal tergite 2 about 0.65 and tergite 3 about 0.45.

Black; reddish brown to brownish red on apex of mandible, palpi, scutellum, apical margin of postpetiole, basal margin, lateral areas and apical margin of tergite 2 and basal margin of tergite 3. Legs light except for black coxae and trochantera.

Etymology

The specific name "thulensis" refers to the district of discovery.

Material examined

The holotype male: Greenland, NW: Thule 3.VI.1924 (P. Freüchen) (coll. Zoological Museum, University of Copenhagen). The tribus Eurylabini is new to the Nearctic region.

Stenomacrus micropennis n. n.

Stenomacrus micropennis nomen novum = *brevipennis* Jussila, 1996: 152. The name *brevipennis* is a junior secondary homonym of *Stenomacrus brevipennis* (Ashmead, 1902) [*Synopsis brevipennis* Ashmead 1902: Wash. Acad. Sci., Proc. 4: 226, ♀].

This species is endemic to Greenland (Jussila 1996).

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