

A remarkable new species of *Leptacis* Förster, 1856 from Denmark (Hymenoptera, Platygastridae)

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Buhl, P. N.: A remarkable new species of *Leptacis* Förster, 1856 from Denmark (Hymenoptera, Platygastridae).
Ent. Meddr 78: 29-32. Copenhagen, Denmark 2010. ISSN 0013-8851.

A new species, *Leptacis seticeps*, is described and illustrated, and its affinities discussed. Its characteristic feature is long setae on the compound eyes, a character hitherto only described from a few exotic species of this large genus.

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Dansk sammendrag

En bemærkelsesværdig ny *Leptacis*-art fra Danmark

Leptacis er en slægt af galmygsnyltende småhvepse, som i Skandinavien er repræsenteret af 13 kendte arter. Forfatteren vegetationsketsjede i 2002 i Horreby Lyng på Falster et eksemplar en hidtil ukendt markant art, der her beskrives som *L. seticeps* sp. nov. Den karakteriseres især af de langt behårede facetøjne – en karakter, som ellers kun kendes hos nogle få tropiske arter. Desuden bl.a. af stumpet tilspidset scutellum, lang randbehandling på vingerne og ringe kropsstørrelse (0,8 mm lang).

Leptacis is a large cosmopolitan genus of small wasps which are egg-larval or egg-pupal parasitoids of gall midges (Diptera, Cecidomyiidae). About 190 species of *Leptacis* have been described worldwide, but only about 13 species are known from Scandinavia and about 22 from the entire Palaearctic region. Thus it was a rare event when in 2002 I swept a single female of an undescribed *Leptacis* species at a locality well known by Danish entomologists, Horreby Lyng on the Danish island of Falster just south of Zealand.

Horreby Lyng (54°49'N 12°00'E) is a 1.7 square km previously raised bog in a poorly drained glacial lake deposit. Peat and ditch digging and subsequent upgrowth of vegetation has turned it into a deciduous forest with swamps and peat banks. A small lot is cleared and a path system makes the site accessible. Horreby Lyng is known especially for its mushrooms and rare butterflies. Another interesting *Leptacis* species found there in large numbers (though not the type locality) is *L. ariadne* Buhl, 1999, and I have also collected a still undescribed species of the largest genus of Platygastridae, *Platygaster*, there.

Terminology: Standard abbreviations used are A1-A10 = antennal segments 1-10, OOL = distance between lateral ocellus and eye, LOL = distance between lateral and anterior ocelli, and T1-T6 = tergites 1-6.

Leptacis seticeps sp. nov.

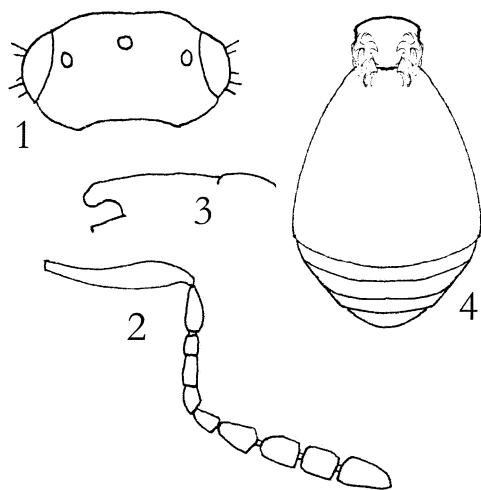
Material examined. Holotype female: Denmark, LFM, Horreby Lyng, 15.viii.2002, swept, P.N. Buhl leg. Deposited in the Zoological Museum, University of Copenhagen.

Diagnosis. A small species with strongly transverse sculpture on most of head, long setae on compound eyes, female A2 hardly shorter than A3-A4 combined, A9 very slightly elongate, and marginal cilia of fore wings 0.4 width of wing.

Description. Female. Body length 0.8 mm. Body black, T1 with brownish tint, basal half of A1 and legs including coxae light reddish-brown; mandibles and apex of A1 and A2-A6 darker reddish brown; distal 0.3 of hind tibiae very slightly darkened.

Head from above (Fig. 1) 1.9 times as wide as long, as wide as mesosoma, distinctly reticulate-coriaceous, on occiput and frons strongly transversely so; hyperoccipital carina absent but head moderately angled. OOL about equal to diameter of lateral ocellus; LOL = 3 OOL. Head in frontal view 1.25 times as wide as high, on vertex with about 22 distinct setae; eyes with scattered setae, the longest 20 μm (Fig. 5). Antenna (Figs 2 and 5) with A1 0.9 times as long as height of head, as long as interorbital space; A3-A4 combined hardly longer than A2, A4 1.8 times as long as A3; A9 1.1 times as long as wide; scape and flagellum distinctly setose with longest setae about 1.7 times as long as width of segments; the rather dense, general pubescence about half as long as width of segments.

Mesosoma 1.5 times as long as wide, higher than wide (16:14). Sides of pronotum reticulate-coriaceous (not longitudinally so) in upper anterior corner, rest smooth, in upper 0.4 with rather dense setae, in lower 0.6 bare. Mesoscutum evenly and rather densely setose, finely reticulate-coriaceous, in about posterior 0.3 longitudinally so; notauli very faintly indicated posteriorly; hind margin straight; scuto-scutellar grooves triangular, each with five long setae. Mesopleuron smooth except for a couple of longitudinal wrinkles just below tegula. Scutellum (Fig. 3) almost smooth, setose as mesoscutum, in dorsal view 1.3 times as long as wide, posteriorly with a thick semitransparent spine which is very slightly longer than propodeum, without lamella. Metapleuron smooth and bare, only with pilosity along hind margin. Propodeal carinae low, dark, parallel, distinctly separated, area between them smooth.



Figs 1-4. *Leptacis seticeps* sp. nov., female holotype, outline of: 1, head from above; 2, antenna; 3, scutellum and propodeum in lateral view (spine pointing to the left above propodeum); 4, metasoma from above.



Fig. 5. *Leptacis seticeps* sp. nov., female holotype. (Photo by use of Leica camera, Helicon Focus software and Leica M205A microscope, about 110 x magnification.)

Fore wing (Fig. 5) 0.9 times as long as entire body, 2.7 times as long as wide, very slightly infuscated and with darker margin, with fine and dense microtrichia except in bare basal 0.4; marginal cilia 0.4 width of wing. Hind wing (Fig. 5) 8.6 times as long as wide; marginal cilia about equal to width of wing.

Metasoma (Fig. 4) 0.8 times as long as head and mesosoma combined, 1.05 times as long as mesosoma, slightly narrower than this (13:14). T1 smooth and bare along middle, laterally with short and dense pubescence which continues on basal foveae of T2 which is smooth; apical tergites with microsculpture along hind margins, T6 dull all over.

Affinities. Runs to *L. fimbriata* Kieffer, 1917 (from Romania) in Kieffer's (1926) key, but this species has longer OOL, A2 relatively shorter and wider, longer and thinner scutellar spine, marginal cilia of fore wing shorter (one-third the width of wing), and T1 bare. Kieffer (1917) says nothing about setation of eyes on his species, the type material of which is unknown (Vlug, 1995), but among described *Leptacis* species this seems to be a character shared by only a few Oriental species; most similar to *L. antennalis* Buhl, 1997 from the Philippines, but this species has less sculptured head, distinctly more slender antennae, and more elongate wings than *L. seticeps*, cf. also Buhl (1997). Apart from the setation on head, the common North European species *L. laodice* (Walker, 1835) and *L. ozines* (Walker, 1835) differ from *L. seticeps* e.g. in having less transverse head sculpture, longer basal flagellar segments, darker and more pointed scutellar spine, shorter marginal cilia on wings, and in being larger in body size, cf. also Vlug (1985).

Etymology. The name refers to the characteristically setose head, especially the compound eyes.

Acknowledgement

I thank Dr Nikolaj Scharff very much for taking the photo.

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