

Two Notes on Chalcid Flies.

By
J. P. Kryger.

I. *Wesenbergia occulta* n. g., n. sp.

True heteromerous chalcid-flies (i. e. heteromerous as to each specimen) have until now not been known to occur in Europe. To be sure a kind of heteromery is present in the *Tetracampini* as far as the males belonging to this group have 4-jointed tarsi (on all legs), the females however 5-jointed. But anything similar to the heteromerous beetles, in which all individuals are provided with 5 tarsal joints on fore and middle legs, but 4 on the hind legs, has hitherto not been described, and it was scarcely to expect that such species should be discovered in our part of the world. Therefore I was highly surprised to catch a veritable heteromerous chalcid fly during my sweepings in the spring 1930. And into the bargain, the fly turned out to be heteromerous in another way than the beetles mentioned, as its fore and hind tarsi were 5-jointed and its middle tarsi 4-jointed.

The fly caught in 1930 was a female, but the following year (1931) I was lucky enough to catch a male in just the same locality in which I got the female, and this male proved not to be heteromerous, but to have 5-jointed tarsi on all legs.

This new genus represents a valuable addition to the chalcid fly system; it may be outlined in the following way:

Wesenbergia n. g.

Antenna of male 13-jointed, consisting of scape, pedicellus, 1 annellus, 7 funicular joints and a 3-jointed club.

Antenna of female 12-jointed, consisting of scape, pedicellus, 1 annellus, 7 funicular joints and a 2-jointed club.

Head triangular; eyes small, ocelli forming an acute-angled triangle; face, front and vertex wide.

Thorax long; prothorax short, mesothorax twice as long as prothorax; parapsidal furrows distinct. Scutellum large, oval; meta-thorax small.

Abdomen sessile, long, boatshaped, as wide as thorax but longer than head and thorax together. Ovipositor strong and a little protruding.

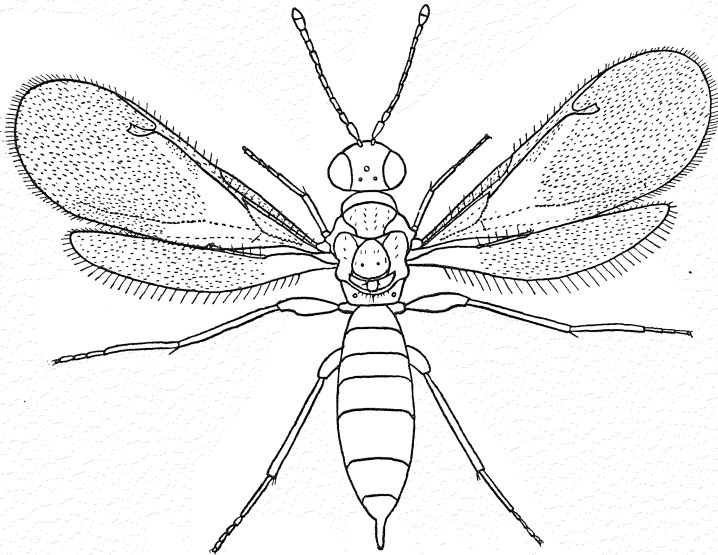


Fig. 1. *Wesenbergia occulta* n. g. n. sp. ♀.

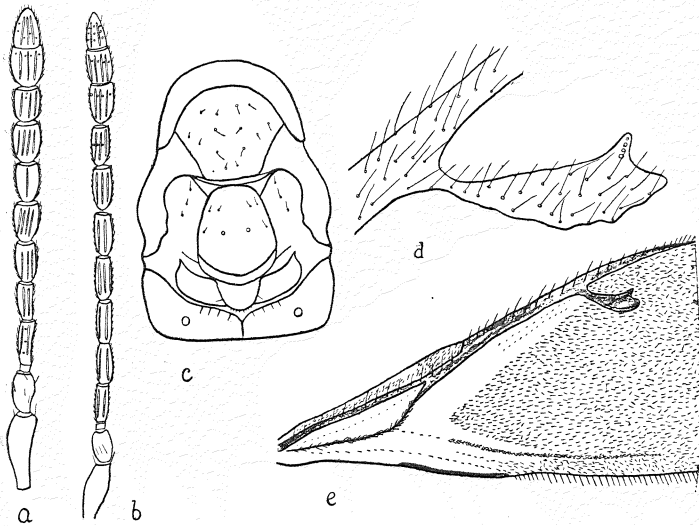


Fig. 2. *Wesenbergia occulta* n. g. n. sp.
 a Antenna of female; b do. of male; c Thorax; d Stigma; e Fore wing.

Fore wing: Subcosta longer than marginal vein; marginal vein wide and stout; radius short; stigma stout, boatshaped. Postmarginal vein long, only a little shorter than marginal and nearly twice as long as radius and stigma together. Position of medial vein indicated by a row of stout setæ; position of anal vein indicated by a row of smaller setæ. Subcosta with about 10 setæ. Discal ciliæ short.

Hind wing broad and stout.

Legs long and slender, especially middle and hind legs. In the male all tarsi 5-jointed; in the female fore and hind tarsi 5-jointed, but middle tarsi 4-jointed. Hind tibiæ with 2 spurs. Middle femora with a notch near the end, just as is the case with the hind femora of some *Callimomidae*.

The genus reminds in some respects of the *Callimomidae* and *Ormyridae*; for instance it has a 7-jointed funicle and a very short radius just like the *Callimomidae*, and a short ovipositor just like *Ormyrus*. The venation of the fore wing seems to me to represent a very generalized type within the Chalcidids.

The genus is named in honour of the famous Danish naturalist, Professor Dr. C. Wesenberg-Lund, who with great love and ability has yielded contributions to all branches of zoology, also to insect biology.

Genotype: *occulta* n. sp.

Wesenbergia occulta n. sp.

Colour: Head and thorax brown with greenish metallic tint, abdomen brown with dark copper tint, the whole animal shining.

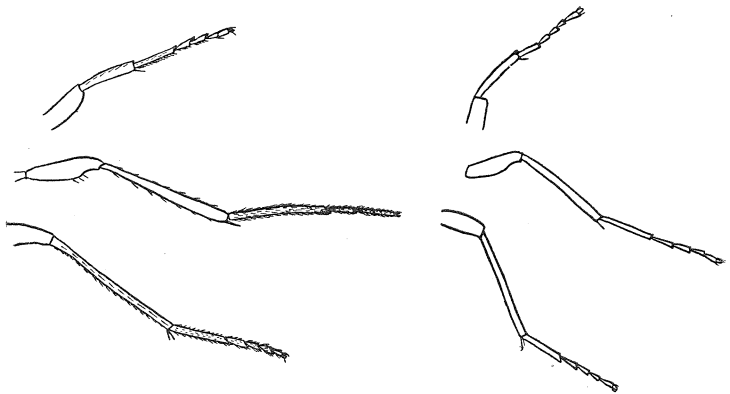


Fig. 3. *Wesenbergia occulta* n. g. n. sp. Legs of female (left) and male (right).

Scape, pedicellus and annellus pale brown, rest of antenna darker brown. Eyes and ocelli dark. Legs mainly dark brown, tibiæ and tarsi however paler brown, last tarsal joints dark brown. Wings slightly infuscated.

Male: Antennæ long and filiform, all joints rather small; scape short, pedicellus half as long as scape, annellus large, funicle joints equal in length, the first a trifle shorter than the rest, club joints as long as funicle joints; the whole antenna slightly widening towards the tip. Funicular and club joints with short hairs, but with long and strong sense organs.

Female: Antennæ a trifle shorter than in the male; scape short, pedicellus half as long as scape, annellus large, 1st to 7th funicular joints decreasing in length towards the tip, the first one 1¹/₂ times as long as the 7th. Also the female antenna widening towards the tip; 6th and 7th joint nearly twice as broad as the 1st.

Male: Length of animal 2,1 mm
 Length of antenna 1,35 mm
 Length of fore wing 1,9 mm

Female: Length of animal 2,5 mm
 Length of antenna 1,25 mm
 Length of fore wing 2 mm
 Length of ovipositor (protruding) 0,25 mm.

Locality: Wet meadow along an acclivity with spruces, Strødam (North Sealand), Denmark.

Capture dates: ♂ ¹⁰/₅ 1931, ♀ ⁴/₅ 1930.

Types: 1 ♂ and 1 ♀ (two slides in balsam) in Zoological Museum, Copenhagen.

II. A new species of *Pholidoceras* Mercet and description of an apparent gynandromorphic specimen belonging to the same species. (Encyrtini).

In Fauna Iberica. Himenopteres. Fam. Encirtidos. Por R. G. Mercet (Madrid 1921), the author describes (p. 95—104) the genus *Pholidoceras* comprising 4 species all natives of Spain. Neither Förster (Hym. Stud. II H. Aachen 1856) nor Mayr (Die Europ. Encyrt. Verh. Zool. bot. Gesell. Wien XXV B) mentions a fly resembling the genus *Pholidoceras*, and it could then be supposed, that this genus was a native of southern hemispheres. But this is absolutely not the case. The author of these lines and his friend Mr. O. Bakkendorf has at many occasions swept specimens belonging to the genus. Some of these specimens belong to a species not mentioned in Mercet's book and consequently

they are here described as a new species. Perhaps I ought to have taken occasion to create a new genus, because the club of the female antennæ is 2-jointed while in Mercet's genus the club is 3-jointed. But as my specimens in all other respects fits the genus *Pholidoceras* very well, I have not laid too much stress on the difference of the antennal club.

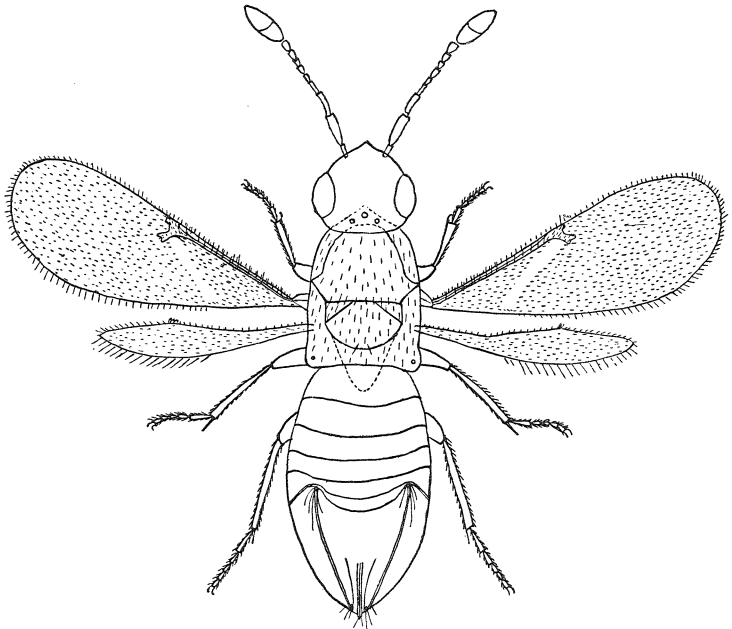


Fig. 4. *Pholidoceras jarli* n. sp. ♀.

***Pholidoceras jarli* n. sp.**

♂: dark yellow-brown; scapus and pedicellus a little lighter, all tarsi darker. Head scarcely as wide as thorax, sparingly provided with short hairs. Eyes dark-red, ocelli in a very obtuse triangle. Scapus nearly twice as long as pedicellus, which is pearshaped. No annelli. 1' funicle joint a trifle longer than pedicellus, the last 5 nearly of equal length, the 6th yet the longest. All funicle joints of nearly equal width, more than twice as long as wide. Scape, pedicellus and club with short hairs, funicle as well as clavus with long curved hairs in irregular whorls. 6th funicle joint provided with 6 spatula-formed hairs resembling scales on butterfly wings. Clavus with a few ridged sense organs.

Thorax one and a half times as long as the head, smooth, without sculpture, sparingly provided with short hairs. Scutellum with 2 rather stout spines at the tip.

Abdomen longer than head and thorax together. Segmentation rather difficult to distinguish in consequence of the mounts being almost transparent. Cerci near the middle of the abdomen.

♀: Somewhat lighter in colour than the ♂. Scape and pedicellus lighter and all tarsi darker than the body. 1. and 2. funicle joints longer than wide, cylindrical, 3.—6. funicle joints cup-shaped, increasing in width, the 6. being the widest, all wider than long, club 2-jointed. All antennal joints with short sense hairs, the club with some ridged sense organs. Ovipositor very short and weak, slightly protruding. Phragma prolonged only a short distance into the abdomen and has absolutely no connection with the ovipositor.

Length: ♂ 1 mm, ♀ 1,5 mm.

Many ♂♂ and ♀♀ swept in a wet meadow with grasses, sedgegrasses, *Spiraea*, *Carduus oleraceus* etc.

8.—14. August 1927.

Strødam, North Sealand

Types: 1 ♂ and 1 ♀ on slides in balsam. Zool. Museum, Copenhagen.

Named in honour of the sculptor and estate owner Axel Jarl, who with great liberality has given the zoologist admittance to his estate.

From among numerous specimens of *Ph. jarli* caught 8. 8. there was a ♀ which is well worth mentioning. By a superficial investigation the animal conveys the impression that we here have a gynandromorphic specimen in hand. But a closer examination reveals that it really is a female with abnormal antennæ (and head). The specimen has a well-developed ovipositor, which in no way differs from the ovipositor of a normal female.

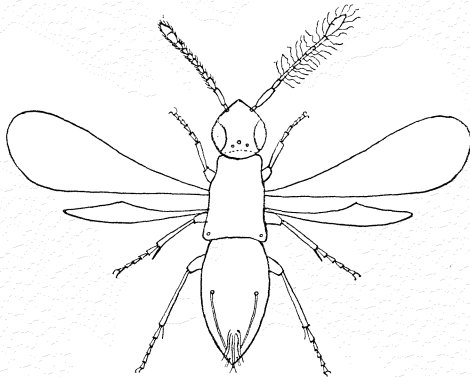


Fig. 5. *Pholidoceras jarli* n. sp.
Gynandromorphic specimen.

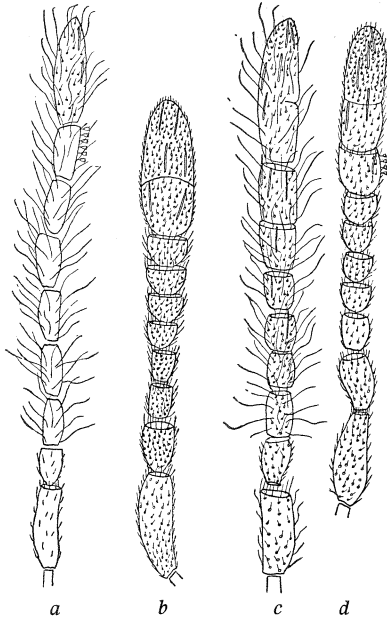


Fig. 6. *Pholidoceres jarli* n. sp.
Antenna of male (a), female (b), and gynandromorphic specimen (c—d; c right antenna (male), d left antenna (female)).

such organs. In the normal ♂ ant. the clavus only has short sensehairs, in the abnormal ♂ ant. all the joints have such hairs and moreover funicle and clavus have the long curved hairs. The abnormal ♀ ant. does not exhibit many varieties. The 6. funicle has got the spatula-formed sense organs, which always are found in the normal ♂ ant.

The right part of the head is in the abnormal specimen darker coloured than the left, corresponding with the colour in normal males and females.

The specimen on a slide in balsam, Zool. Mus., Copenhagen.

The right antenna is a male antenna and the left is a female one, but neither of them is formed as a normal male or female antenna. The last funicle joint in the genera *Pholidoceras* Mercet, *Doliphoceras* Mercet, and *Philoponectroma* Brèthes is in the males provided with a number of spatula-formed senseorgans, which never are found in any other chalcid fly. The male antenna in the here mentioned specimen has no such senseorgans. Clavus, which in the normal ♂ antenna is unjointed, has here a distinct notch, surely the first trace of a 2-jointed club, just as the female club. In the normal ♂ antenna only the clavus is provided with ridged sense organs, in the abnormal also 3.—6. funicle joint have