

A new species of *Dolichopus* (Dipt., Dolichopodidae) from Sweden

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This report presents an apparently undescribed species of *Dolichopus* found in one male and one female specimen on two separate localities in the North of Sweden. I should not myself have regarded it as very likely to find a *nova species* of this genus from this country. Although the genus is very large (67 species known to me from Sweden, including the new one), its taxonomy is more adequately known than is common among Diptera. This state of things depends largely on two conditions. Firstly, these flies are rather attractive objects for collectors on account of their generally pleasant appearance and the fascinating morphological peculiarities of the males. Secondly, these same secondary sex characters make the species in the male sex easy to distinguish and characterize and, of course, subsequently to identify. The dipterists of the last century and of the beginning of the present one have consequently left us the task of reducing the number of species, particularly by sorting out those described from abnormal specimens of already known species, rather than describing new ones from this part of the world.

Dolichopus lancearius n. sp.

Male. — Face dark brown, without hairs, somewhat narrower than third antennal segment. Front metallic dark green, without pollen. Palpi brownish black. Back of head metallic green with faint brown pollen. Postocular bristles all black. Antennae (fig. 1) black; third segment little longer than broad; arista inserted just beyond middle of the segment; tip of arista somewhat broadened and flattened in a lancetlike fashion.

Mesonotum blackish green with thin dark brown pollen, only notopleura lighter green with greyish white pollen. Pleurae mainly black with ground colour metallic green only in spots, particularly on mesopleurae; pollen dark grey, brown in spots. Prothoracal stigmata brownish black.

Abdomen metallic green with blue to coppery reflexions, incisures black; pollen greyish white, dark brown along lateral margins of tergites. Hypopygium (fig. 2) black with a faint green sheen in spots; pollen brownish grey; cerci brownish with black margins.

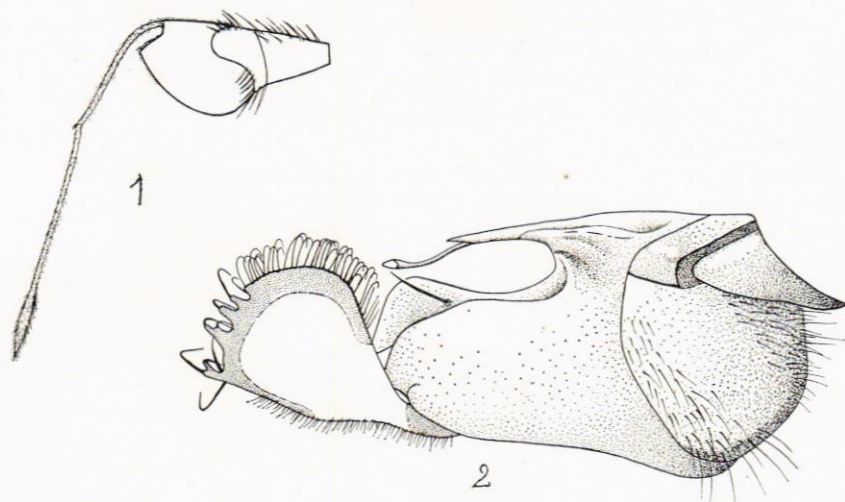


Fig. 1—2. *Dolichopus lancearius* n. sp., male holotype. Fig. 1. Antenna, from the outside. Fig. 2. Hypopygium, left lateral view.

Legs black, only femora at extreme tips, fore and middle tibiae wholly, hind tibiae except apical fourth, and basal four fifths of fore and middle basitarsi, dirty yellowish brown, more clearly yellowish only dorsally on hind tibiae; coxae with brownish grey pollen. Hind tibiae dorsally at apex with a lancet-shaped concavity, at the bottom of which stands an oblique row of dense light brown hairs. Fore tibiae with four anterodorsals, two posterodorsals, a small posteral, two or three posteroventrals. Middle femora with two preapical bristles; middle tibiae with six or seven anterodorsals, one dorsal, three or four posterodorsals, three anteroventrals; middle basitarsi with one dorsal bristle. Hind femora with two preapical bristles and along their apical halves with weak black posteroventral bristles as long as femur is thick; hind tibiae with seven or eight anterodorsals, one dorsal, seven posterodorsals, two anteroventrals and a row of fine ventral bristles; hind basitarsi with four dorsal bristles. Length of tarsal segments (in μ , the accuracy of measurement being about $\pm 10 \mu$): fore tarsus 725—275—200—150—250; middle tarsus 1250—700—525—375—250; hind tarsus 1125—1150—775—500—300.

Wings hyaline; costa very slightly swollen at tip of first vein; fourth vein bent forward just before middle of last section; no lobe at apex of sixth vein; anal angle fairly prominent. Calypters yellow with black marginal bristles. Halteres yellow.

Length 6.5 mm.

Female. — Face brownish grey, about twice as broad as third antennal segment. Third antennal segment as long as broad; arista of normal shape, gradually tapering towards tip.

Abdomen metallic bluish green.

Hind tibiae with no concavity dorsally at apex. Fore tibiae with three or four posteroventrals. Middle tibiae with seven or eight anterodorsals, two

anteroventrals. Hind femora without posteroventral bristles. Length of tarsal segments: fore tarsus 750—250—200—150—200; middle tarsus 1200—600—475—300—250; hind tarsus 1100—1000—675—400—300.

Wings slightly infuscated; costa hardly enlarged at tip of first vein.

Length 6.0 mm.

In other respects in accordance with description of male holotype.

Holotype. — ♂. *Hlsl.* Ovanåker, Storsvedmyran, 25.VII.1964, leg. L. Hedström. In the collections of the Zoological institute, Uppsala.

Allotype. — ♀. *Lu. lpm.* Jokkmokk, Vuollerim, 29.VI.1960, leg. P. Brinck, S. Ulfstrand, K. G. Wingstrand. In the collections of the Zoological institute, Lund.

Habitat. — The male holotype was collected at the edge of a marsh pool. The pool was partly bordered by floating masses of *Sphagnum*. Among the phanerogams of the surrounding marsh vegetation were noted *Scheuchzeria*, *Carex rostrata*, *C. lasiocarpa*, *C. limosa* and *C. canescens*, *Rhynchospora alba*, *Trichophorum alpinum* and *T. caespitosum*, *Hammarbya paludosa*, *Utricularia intermedia* and *U. minor*, *Drosera anglica*, *Menyanthes*, and *Pedicularis palustris*. Other Dolichopodid species collected at the same locality are *Dolichopus discifer* Stann., *D. fraterculus* Zett., *D. punctum* Meig. (in Sweden previously not known north of Östergötland), *D. lepidus* Staeg., *D. annulipes* Zett., *Hercostomus aerosus* Fall., *Hydrophorus albiceps* Frey, *H. borealis* Lw, *Xiphandrium lanceolatum* Lw, *X. umbripennis* Frey (previously in Sweden not known south of Jämtland but later found as far south as Uppland, Roslagsbro), *Syntormon tarsatus* Fall., *Achalcus cinereus* Walk. (previously not known north of Uppland), *Chrysotus kowarzi* Lundb., *Campsicnemus compeditus* Lw, *Ectomus alpinus* Hal., and *Telmaturgus tumidulus* Radd. (in Sweden previously only from one locality in Skåne).

The locality where the female allotype was collected is described by Professor Brinck (*in litt.*) in the following manner (in my translation):

"The locality is situated at the outskirts of the small community, not far from the road, thus in an area strongly affected by cultivation. The tarn is eutrophic, in fact to no small extent through the influence of man.

Description: size 25×100 meters, water-lilies, *Menyanthes*, *Myriophyllum*. At the edges, which are principally covered by thickets of *Salix*, are tussocks of *Carex* and *Sphagnum*. Shallow, bottom muddy. Generally speaking the environment is eutrophic, a condition that is reflected in the composition of the fauna."

At the same locality were also collected two other species of Dolichopodidae, *Dolichopus plumipes* Scop. and *D. zetterstedti* Stenh.

There are obviously some traits in common between the two localities. But our experience is, of course, still much too limited to permit any generalizations as to the typical habitat of the species.

Diagnosis. — In Lindner: Fliegen der palaearktischen Region (Stackelberg 1930) the species belongs under the "II. Gruppe (*Melanodolichopus* Frey)" and in the key to the males of this group it runs down to couplet 26, which may be changed in the following way to include the new species:

26. f₂ mit 2 Präapikalborsten 26 a
— f₂ mit 1 Präapikalborste 27

- 26 a. Cerci schwarzbraun. Arista einfach *D. campestris* Meig.
 — Cerci licht braun mit schwarzem Rande. Arista am Ende lanzettförmig erweitert
D. lancearius n. sp.

In the corresponding key to the females it runs down to couplet 13, which should be changed in the following manner:

13. f_2 mit 2 Präapikalborsten 13 a
 — f_2 mit 1 Präapikalborste 14
 13 a. 1. Glied der Mitteltarsen oben ohne Borste. Kleinere Art: 4 mm
D. campestris Meig.
 — 1. Glied der Mitteltarsen oben mit einer Borste. Grössere Art: 6 mm
D. lancearius n. sp.

Acknowledgements

I wish to express my gratitude to Professor Per Brinck and Mr. Hugo Andersson of the Zoological institute, Lund, for giving me the opportunity to study the female allotype and for their kind help with information about its locality of capture.