# An aberrant species of *Megaselia* (Diptera: Phoridae) from the Far East of Russia

## M.V. Michailovskava

Michailovskaya, M.V. 2008. An aberrant species of Megaselia (Diptera: Phoridae) from the Far East of Russia. Zoosystematica Rossica, 7(1): 105-106.

Megaselia collariata sp. n. is described. It is first species from Russia which is sibling to species of the subsection of aberrant species of the genus Megaselia.

M.V. Michailovskaya, Gornotayozhnoe, Ussuriysk District, Primorskiy krai, 692533 Russia. E-mail: marinam@utl.ru

#### Introduction

Among phoridae, collected in the south of Primorsky Territory, unusual specimens of scuttle – flies are found out. Its have a number of specific characteristics: at them is absent vein  $R_{2+3}$ , very long anal tube with precisely differentiated "collar" in the basis, lobes of hypandrium are well developed. Presence of these features carries these specimens to a small subsection of genus Megaselia numbering no more of 10 species from Palearctic and South East Asia. The specimens caught in Primorskiy Krai are described below as species new to a science.

## Megaselia collariata sp.n. (Figs 1-4)

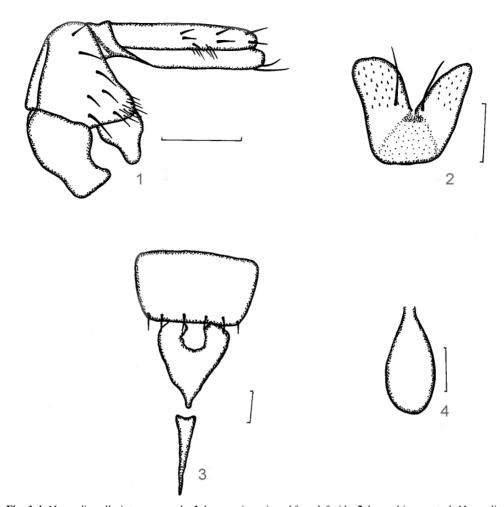
Holotype. ♀, Russia, Primorsk Terr., 18 km SE Ussuriysk, 43.66°N 132.25°E, Gornotayzchoe, 1-10.VII.1999 (leg. Michailovskaya), deposited in collection Gornotayzchnoe DVO RAN.

Paratypes. Russia, Primorsk Terr.: 1 of,18 km SE Ussuriysk, 43.66°N, 132.25°E, Gornotayzchoe, 21-31.VIII.2000; 7 \, same data as in holotype, but 11-31.VIII. 2000; 3 9, same data as in holotype, but 24-31.VIII.2001. Malaise traps (leg. Michailovskaya), deposited in collection Gornotayzchnoe DVO RAN.

Diagnosis The combination of a bare mesopleuron, short costal index and only two strong scutellar bristles placed this species in Group VIII of Borgmeier's keys to Australasian and Oriental Region species of Megaselia (Borgmeier 1967) and run to couplets 3 on page 92. Other costal ratio and absolutely other structure of hypopigium is distinguishes two species (M. orbata Borgmeier and M. abstinens Borgmeier) of this couplets from a new species. New species did not run out in Lundbeck's key and the key to British species of Megaselia (Lundbeck 1922, Disney 1989). In the keys for species *pygmaea* – complex of Disney (Disney 1988) this species runs to couplets 1, where it runs out as Megaselia abludens Schmitz, but the latter has a wide frons, small spherical hypopigium and short anal tube. The distinct "collar" between the epandrium and the anal tube, elongated anal tube, unforked  $R_{4+5}$  means it resembles M. torautensis Disney and M. bruesi Disney, which is immediately distinguished by its bare mesopleuron and short costa and from M. torautensis Disney by the yellow haltere also.

Etymology The name refers to the "collar" at base of anal tube.

Description Male. From brown and about as wide as high with fine microsetae. Both pairs of supra-antennal bristles robust, the lower pair subequal to or a little shorter than upper pair. Antials about midway between upper supraantennals and anterolateralis, latter higher on frons than antials. Third antennal segment pale brown, spherical with dorsal arista. Proboscis with yellow labrum. Thorax brown. Each side of scutum with a humeral bristle, two notopleurals (no notopleural cleft) an intra-alar, a postalar and a prescutellar dorsocentral bristle. Scutellum with two robust bristles. Mesopleuron bare. Abdomenal tergites brown with short hairs (II-V), but those at rear of tergite 6 longer than rest. Hypopigium brown, anal tube yellow. Anal tube is distinctly longer than length of dorsal face of epandrium. There is distinct "collar" between the epandrium and the anal tube (Fig. 1). Hypandrium with two developed lobes and two strong bristles in base (Fig. 2). Front and middle legs yellow. Hind legs more brownish. Spines of the hind tibial combs all simple. Hind femur with 4-5 very long hairs below basal half which clearly longer than those of antero-ventral row in apical half. Hind and middle tibia with post-dorsal row of hairs. Wings. Length 1.2 mm. Costal index 0.33. Costal ratio 2: 1. Vein R<sub>4+5</sub> unforked. Costal cilia 0.04mm. Axillary



Figs 1-4. Megaselia collariata sp. n., male; 1, hypopygium viewed from left side; 2, hypandrium ventral; Megaselia collariata sp. n., female; 3, abdominal tergites V-VII; 4, Dufour`s crop mechanism. Scale: 0.1 mm.

ridge with two bristles which are clearly longer than costal cilia. Vein Sc obscure and ending well before to R<sub>1</sub>. There is hair at base of vein R<sub>4+5</sub>. Membrane almost colorless. Haltere with brown stem and yellow knob.

Female. Head similar to male, but lower supraantennals shorter and thinner than upper pair. Labrum large. Thorax as male. Abdominal tergites brown and I-VI all clearly wider than long (Fig. 3). Dufour's crop mechanism about 2.3 x as long as greatest breadth and strongly convex behind (Fig. 4). Venter with hairs. Legs as male. Wings 1.02 mm long, costal index 0.33, costal ratio 2: 1.3, costal cilia 0.05 mm.

#### Acknowledgments

I am grateful Dr R.H.L. Disney (University of Cambridge, England) for sending phorid literature.

The work on Phoridae was financially supported by the DVO RAN (grant no. 06-04-96023).

### References

Borgmeier, T. 1967. Studies on Indo-Australian phorid flies based mainly on material of the Museum of Comparative Zoology and the United States National Museum. Part II. *Studia Entomologica, Petropolis* 10: 81-276.

Disney, R.H.L. 1989. Scuttle Flies – Diptera Phoridae Genus Megaselia. Handbook for the Indentification of British Insects, 10(8): 1-155.

Disney R.H.L. 1988. The Palaeactic species resembling Megaselia pygmaea (Diptera, Phoridae), including two new species. Annales Entomologici fennici 54: 153-161.

Lundbeck, W. 1922. Phoridae – Diptera Danica 6: 69-455.

Received 5 April 2008, accepted 10 June 2008.