

A new species of *Melieria* (Diptera: Ulidiidae) from the Republic of Dagestan (Russia)

Новый вид рода *Melieria* (Diptera: Ulidiidae) из Республики Дагестан (Россия)

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Melieria daghestanica sp. nov. from Dagestan (Russia) is described. The new species resembles *M. parmensis* Rondani, 1869 (from Italy, Austria and Transcaucasia) and *M. pseudosystata* Kameneva, 1997 (from Turkmenistan and Tajikistan) but differs from them in the following combination of characters: apical crossband reaching subapical spot, spots on stigma and *dM-Cu* crossvein fused into an oblique crossband, subbasal crossband extending from R_1 to Cu_p , first flagellomere yellow, gena yellow with a brown spot ventral of eye margin.

Описан новый вид *Melieria daghestanica* sp. nov. из Дагестана (Россия). Новый вид близок к *M. parmensis* Rondani, 1869 (из Италии, Австрии и Закавказья) и *M. pseudosystata* Каменева, 1997 (из Туркменистана и Таджикистана), но отличается от них следующим комплексом признаков: апикальная поперечная перевязь крыла соединяется с субапикальным пятном, пятна на стигме и на жилке *dM-Cu* образуют единую косую перевязь, суббазальная перевязь крыла расположена между жилками R_1 и Cu_p , первый флагелломер желтый, щеки желтые с коричневым пятном ниже края глаза.

Key words: picture-winged flies, taxonomy, Diptera, Ulidiidae, *Melieria*, new species

Ключевые слова: мухи-улииды, таксономия, Diptera, Ulidiidae, *Melieria*, новый вид

INTRODUCTION

The genus *Melieria* Robineau-Desvoidy, 1830 (Otitinae: Otitini) includes 38 species (predominantly Holarctic and Nearctic, with at least one species in northern Africa) in three subgenera: *Melieria* (s. str.), *M. (Phaeosoma)* and *M. (Hypochra)*. The subgeneric position of three Palearctic species, *M. parmensis* Rondani, 1869, *M. clara* Kameneva, 1997 and *M. pseudosystata* Kameneva, 1997, was not established (Kameneva, 1997, 2000; Kameneva & Korneyev, 2006).

Melieria are grey tomentose flies with the first flagellomere moderately to strongly acute; arista never bare, with short to very long hairs; antennal groove well developed;

gena moderately high; 2–7 dorsocentral setae; acrostichal setae arranged in 2–6 more or less regular rows; 1–2 supraalar setae; 4 scutellar setae; vein R_1 setulose dorsally, along apical third; apices of veins R_{4+5} and M never approximated; phallus long, spinulose; surstylus with 2–5 prenisetae, and spermathecae elongate, wrinkled (Kameneva, 1997).

While studying the material of Ulidiidae in the collection of Zoological Institute in St Petersburg, the author recognized several specimens belonging to a new species described below. The new species resembles *M. parmensis* from Italy, Austria and Transcaucasia and *M. pseudosystata* from Turkmenistan and Tajikistan. These three

species are distinct from other *Melieria* by the short and weak presutural *dc* (no more than twice as long as neighbouring setulae), the gena 0.20–0.25 times as high as eye, one distinct *sa* seta, four rows of *ac* setae, the arista moderately long and pubescent, flagellomere 1 acute, and the distance between the veins *R-M* and *dM-Cu* smaller than the length of *dM-Cu*.

MATERIAL AND METHODS

The specimens listed in this paper are deposited at the Zoological Institute of the Russian Academy of Sciences, St Petersburg, Russia. The morphological terminology follows White et al. (1999). Series of photographs were taken at different focal planes using a Stemi SV11 Apo Carl Zeiss stereomicroscope and an Olympus CX41 microscope and then stacked using CombinezM software (Hadley, 2007).

TAXONOMIC ACCOUNT

Order **DIPTERA**

Family **ULIDIIDAE**

Subfamily **OTITINAE**

Tribe **OTITINI**

Melieria Robineau-Desvoidy, 1830

Melieria daghestanica sp. nov.

(Figs 1a–e, 2a–d)

Holotype. Male; **Russia**, “Daghestan, 10 km YuZ / Magaramkenta, dolina / Samura [In Russian. Republic of Daghestan, 10 km SW of Magaramkent, valley of Samur]”, 17 June 1983, leg. E.P. Nartshuk.

Paratypes. Seven males, 3 females, same data as for holotype; 1 male, same data as for holotype but 16 June 1964.

Diagnosis. The new species resembles *M. parmensis* Rondani, 1869 from Italy, Austria and Transcaucasia and *M. pseudosystata* Kameneva, 1997 from Turkmenistan and Tajikistan, differing in the following combination of characters: apical crossband reaching subapical spot (extending from

apical third of vein R_1 to middle of cell r_{4+5}) as in *M. parmensis* (fused into entire apical band in *M. pseudosystata*); spots on stigma and *dM-Cu* crossvein fused into an oblique crossband as in *M. pseudosystata* (separate in *M. parmensis*); subbasal crossband extending from R_1 to Cu_1 as in *M. parmensis* (extending from *C* to middle of cu_2 cell in *M. pseudosystata*); first flagellomere yellow as in *M. parmensis* (yellowish brown in basal half in *M. pseudosystata*); gena yellow, with a brown spot ventral of eye margin (gena completely yellow in *M. pseudosystata* and *M. parmensis*).

Description. *Male* (Figs 1a–e, 2c–d). Head ratio (length: height: width) = 1.0: 1.6: 1.4. Frons 1.1–1.3 times as long as wide, conspicuously narrowed posteriorly. Ocellar triangle, vertical plate, frontorbital plate and occiput yellow, densely grey tomentose. Frontal vitta (mesofrons) yellow, with 12 proclinate setae posterior to lunula, 6–7 laterocline setae at frontorbital plate and 10–15 reclinate setae medially. Two pairs of orbital setae, anterior seta 1.7–2.0 times as long as surrounding setae and 0.25–0.33 times as long as posterior one. Parafacial yellow, sparsely grey tomentose, with a row of 5–6 brownish setulae. Gena yellow, with brown spot ventral of eye margin; gena slightly grey tomentose, 0.2 times as high as eye. Eye 1.7 times as high as long. Face yellow, medially slightly grey tomentose, 1.6 times as high as wide. Facial carina conspicuously developed, antennal groove rather deep. Scape and pedicel light yellow, with moderately sparse thin brown setulae. First flagellomere yellow, gradually tapered apically, moderately acute at apex, whitish microtrichose. Arista moderately long pubescent, yellow in basal third, yellow-brown in apical two-thirds. Clypeus brown, grey tomentose, 0.1 times as high as face. Palpus narrow, yellow, with black setae; other mouthparts brown, shining.

Thorax brown, sparsely grey tomentose. Scutum 1.4 times as long as wide. Postpronotal lobe and scutellum reddish brown, sparsely tomentose. Two posterior *dc* 2.5–

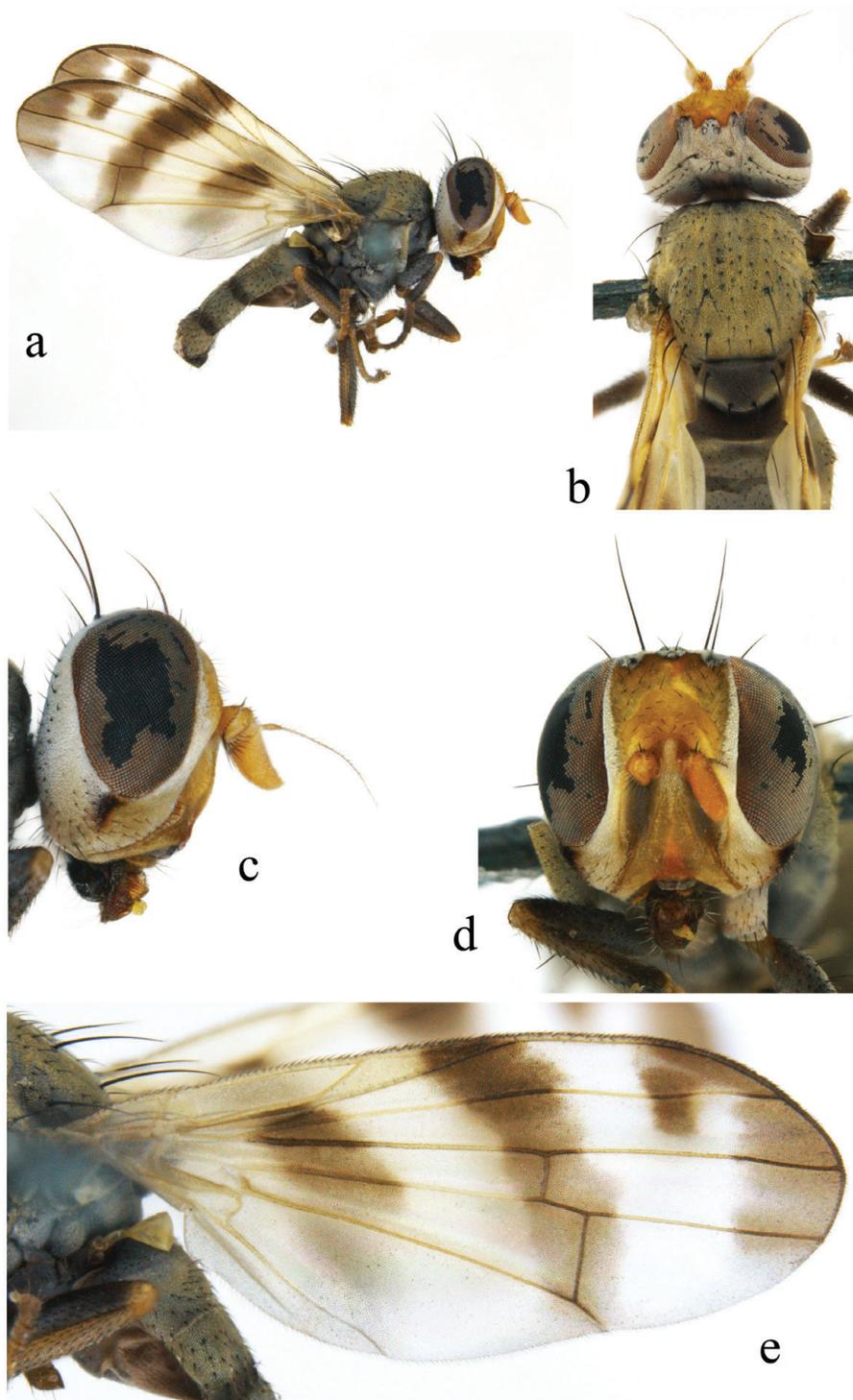


Fig. 1. *Melieria daghestanica* sp. nov., male (holotype): a, habitus, lateral view; b, head and thorax, dorsal view; c, head, lateral view; d, head, anterior view; e, wing.

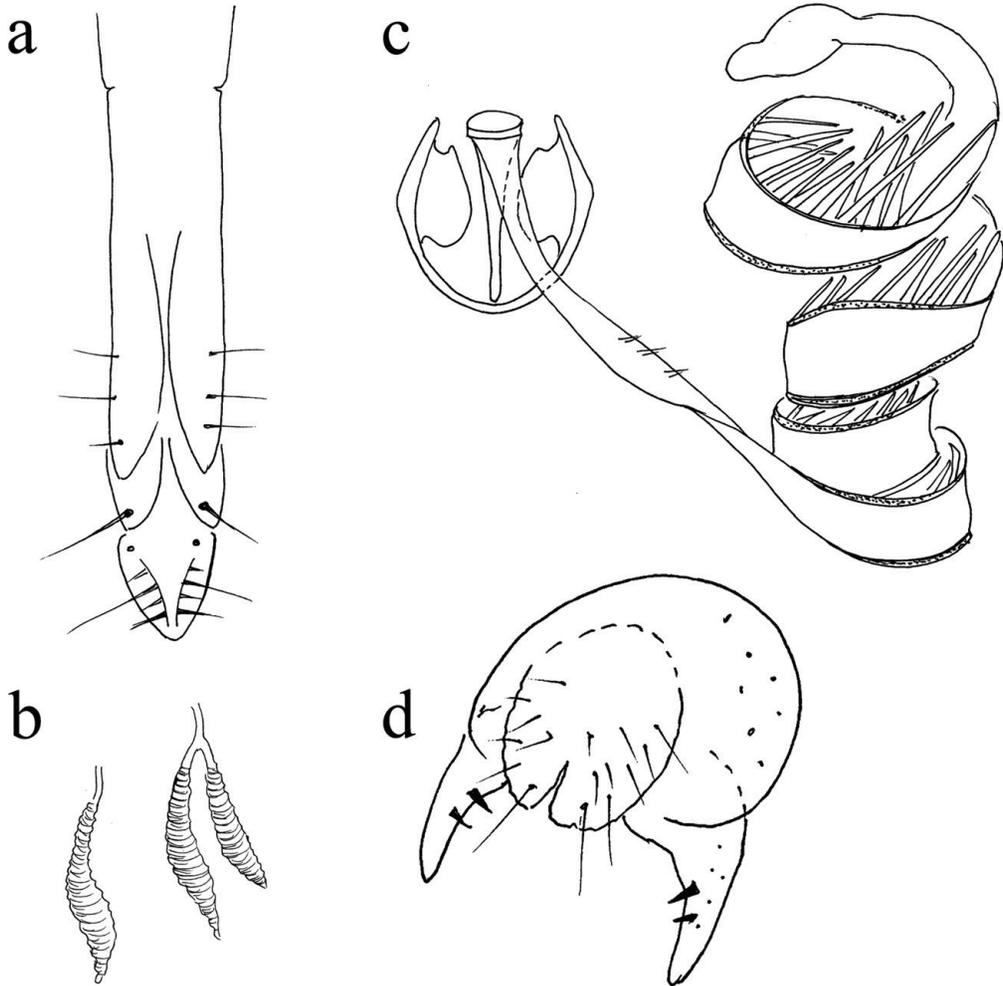


Fig. 2. *Melieria daghestanica* sp. nov., genitalia of female (paratype) (a, b) and of male (paratype) (c, d): a, aculeus; b, spermathecae; c, hypandrium with phallus; d, epandrium.

3.0 times as long as postsutural seta-like dc and 3.5–4.0 times as long as presutural seta; ac setae arranged in 2–4 more or less distinct rows (two rows posteriorly and four rows anteriorly). Only one (postsutural) pair of supraalar setae present. All setae black.

Wing hyaline, 0.35 times as wide as long, with brown crossbands. Dorsal surface of costal vein distal to R_1 apex with eight thin setulae being neither thickened nor distinguished from those on R_1 and anterior margin of C . Distance between crossveins $R-M$ and $dM-Cu$ less than $dM-Cu$ length. Cells

bc and c both dark yellow, cell sc brown in apical half. Brown subbasal crossband extending from vein R_1 to vein Cu_1 . Discal crossband extending from stigma through crossveins $R-M$ and $dM-Cu$ to posterior wing margin. One short subapical spot extending from apical third of R_1 to middle of cell r_{4+5} . Apical crossband very broad, partly joining to subapical spot. Calypters light yellow. Halter yellow.

Legs with black setae. Fore and hind femur dark yellow to brown, greyish tomentose. Mid femur brown to black, greyish

tomentose. Fore tibia dark yellow to brown, with one long spur ventrally before apex. Mid and hind tibia yellow. Mid tibia ventroapically with one long and 8–10 shorter spurs. Tarsi yellow. Claws black.

Abdomen brown to black, densely grey tomentose, with setae black. Posterior margins of tergites 3 and 4 brown. Epandrium as in Fig. 2d. Surstylus with two prenisetae at middle of its length.

Wing length 2.9–3.2 mm (in holotype, 3.0 mm). Body length 2.7–3.2 mm (in holotype, 2.8 mm).

Female (Fig. 2a–b). Similar to male, except genital structures. First flagellomere rounded at apex. Tergite 5 1.5–2.0 times as long as tergite 6. Tergosternite 7 grey tomentose, 3 times as long as tergite 6. Spermathecae elongate, wrinkled and papillose, conspicuously widened subapically.

Wing length 3.0–3.2 mm. Body length 3.0–3.3 mm.

Etymology. The new species is named after its type locality.

Distribution. The Republic of Daghestan (Russia).

ACKNOWLEDGEMENTS

I am deeply indebted to A.I. Shatalkin (Zoological Museum of Lomonosov State University, Moscow, Russia), O.G. Ovchinnikova (Zoological Institute, St Petersburg) and J. Ziegler (Museum für Naturkunde, Leibniz-Institut für Evolutions- und Biodiversitätsforschung, Berlin, Germany) for the assistance and advice. I am grateful to Dr. Bernhard Schurian (same

institute) for his assistance with photomicroscope. The study was partially supported by the Russian Foundation for Basic Research, grants nno.13-04-01638a and 14-04-31932mol-a.

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Received November 14, 2013 / Accepted May 9, 2014