A second species of the genus *Huckettomyia* PONT & SHINONAGA (Diptera: Muscidae)

[Eine zweite Art der Gattung *Huckettomyia* PONT & SHINONAGA (Diptera: Muscidae)]

by
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Abstract A new species of the genus *Huckettomyia* PONT & SHINONAGA, ***H. secunda* spec. nov.**, is described from the Sochi region of south-west Russia.

Key words Muscidae, *Huckettomyia*, Palaearctic, Russia, new species

Zusammenfassung Eine neue Art der Gattung *Huckettomyia* PONT & SHINONAGA, ***H. secunda* spec. nov.**, wird aus dem südwestlichen Russland beschrieben.

Stichwörter Muscidae, *Huckettomyia*, Paläarktis, Russland, neue Art

Introduction

The genus *Huckettomyia* PONT & SHINONAGA was described from a single species from the northern islands of Japan and eastern Siberia (PONT & SHINONAGA 1970). It has subsequently been found in the Altai Mountains of western Siberia (V. S. SOROKINA, pers. comm.) and also in north Sweden (PONT 2005). Recent collecting in the Krasnodar area of south-western Russia (Sochi region on the eastern side of the Black Sea and mountainous area of Adygeya), has led to the discovery of a very striking second species of the genus (Fig.1) which we are describing here.

Huckettomyia is the only genus of the muscid tribe Azeliini to have a setulose prosternum, and both its validity and its phylogenetic position near the base of the tribe have been established by SAVAGE & WHEELER (2004). The new species agrees very well with the generic descriptions given by PONT & SHINONAGA (1970: 193–194) and by SAVAGE & WHEELER (2004: 281–282), except that the prosternum is setulose on its margins along its whole length, the setulae being very conspicuous, and the hind tibia lacks an anterodorsal apical seta. The male can be recognised immediately by the stout, blunt, posteroventral spur at the tip of the hind tibia (Fig. 1). This spur appears to be a single structure, whereas the apical hind tibial spur found in other Azeliini (many species of *Thricops* RONDANI) consists of a few adpressed or even partly coalescing setae.

Material and methods

The material discussed here is located in the Zoological Museum of Moscow University, Russia (ZMUM), and the Natural History Museum, London, UK (BMNH). Morphological terminology follows MCALPINE (1981), except that we follow STUCKENBERG (1999) and use "postpedicel" for antennal flagellomere 1 (3rd antennal segment).

Huckettomyia secunda spec. nov.

(Figs 1–6)

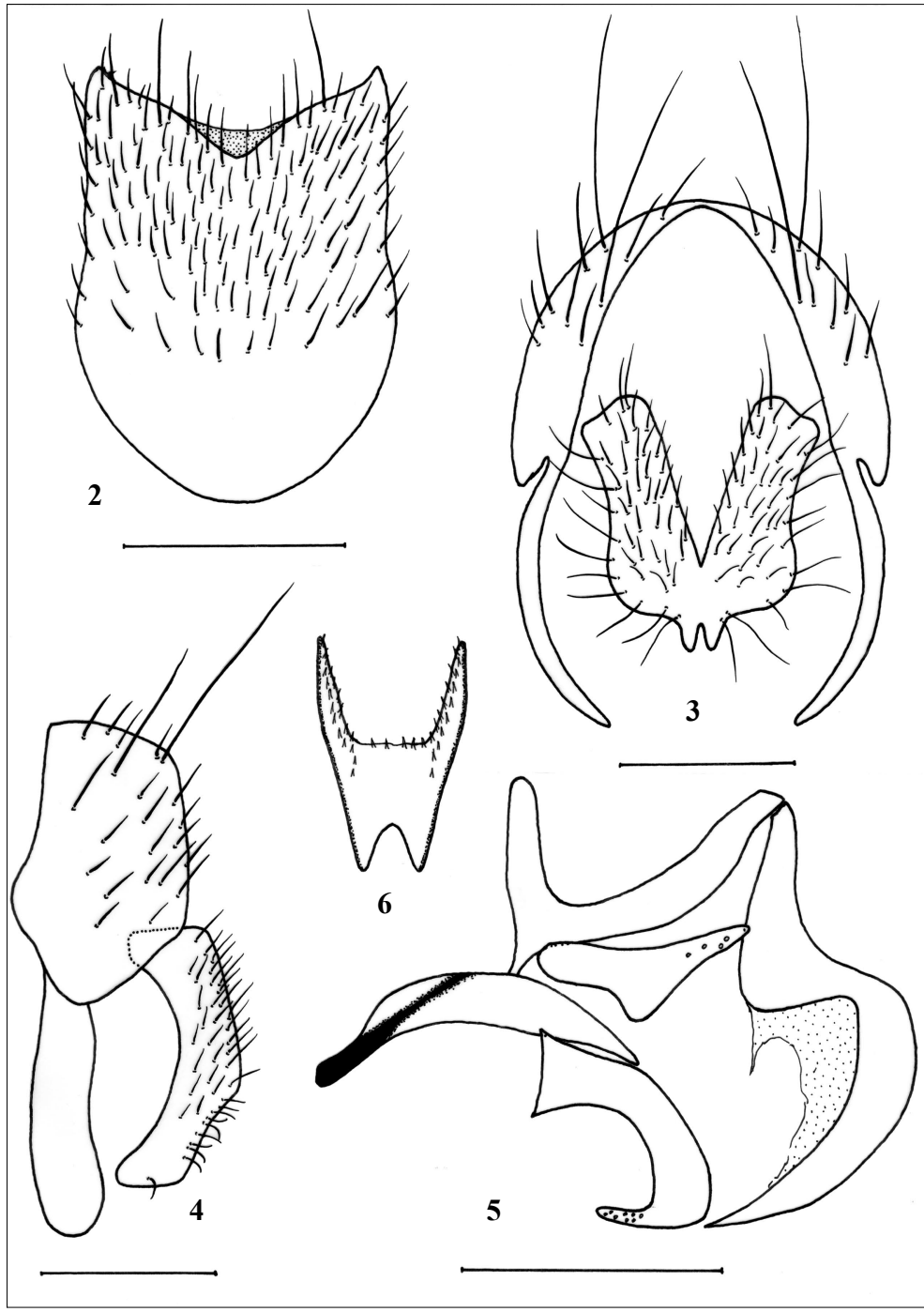
Types. Holotype: ♂, RUSSIA: Sochi region, m. Akhun (43,548°N 39,815°E), 27.x.2007, N. Vikhrev (ZMUM). **Paratypes**: 3 ♂♂ 1 ♀, RUSSIA: 1 ♂, same locality as holotype, 25.iv.2008, N. Vikhrev (BMNH); 2 ♂♂, Sochi region, Monastir (43,583°N 40,001°E), 4.x.2008, N. Vikhrev (ZMUM and BMNH); 1 ♀, Adygeya, N. Lagonaki mountain (44,103°N 40,020°E), ca 1450 m, pine forest, 15–17.vi.2009, K. Tomkovich (ZMUM).

Etymology: The species name is the Latin word "secundus", meaning "second".

Description. Male. General appearance as in Fig. 1. Ground-colour black, with light grey dusting. **Head**: Holoptic. Eye with short scattered hairs. Fronto-orbital plate, parafacial, face and gena silvery-white pruinose, upper part of fronto-orbital plate dull; occiput grey. Frons at narrowest point hardly wider than diameter of anterior ocellus. Fronto-orbital plates touching in upper half of frons. 15–16 pairs of frontal setae extending from lunule almost to level of anterior ocellus, the 3rd pair the strongest, the setae thereafter decreasing in length and strength above; orbital setae absent. Lunule with a silvery spot above antennal insertion. Antenna black, postpedicel about 2.5 times as long as broad. Arista black, short pubescent, the individual hairs half as long as basal width of arista. In lateral view, mouthedge well behind level of profrons. Gena narrow, about half width of postpedicel; with a strong upcurved seta just in front of post-occipital dilation. Palpus black. Mentum of proboscis dusted.

Thorax: Viewed from behind, scutum light grey dusted, with a pair of narrow presutural undusted vittae between acrostichal setulae and dorsocentral row that coalesce after suture to form a broad central patch running from suture to level of 2nd postsutural dorsocentral; with a pair of broad presutural patches between intraalar and supraalar, and a pair of broader postsutural vittae between dorsocentrals and intraalars. Acrostichals 0+1, dorsocentrals 2+4, intraalars 1+2, supraalars 1+1; prealar over half as long as 2nd notopleural, or absent (one paratype). Spiracles brown. Prosternum setulose along margins, notopleuron with setulae around both setae, proepimeron with long and dense hairs. Proepisternal depression, anepimeron, meron and katepimeron bare. Katepisternal setae 1+2, the lower seta weaker and placed almost below upper posterior one. Scutellum grey dusted, with 1 strong preapical, 1 strong lateral, also 3–4 irregular pairs of less strong setae; sides of scutellum with numerous setulae below the level of the strong setae, but ventral surface bare. **Legs**: Long and thin, black, but all knees narrowly yellow. Fore femur with rows of posteroventral and posterodorsal setae. Fore tibia with the posteroventral setulae long and erect, among them with 2–3 fine setae. Mid femur without anteroventral setae, with short posteroventrals in basal half that are not as long as femoral depth; about 7 anterior setae in basal third; 1 anterodorsal and 2 posterodorsal preapical setae. Mid

Fig. 1: *Huckettomyia secunda* spec. nov., male; habitus in lateral view (holotype).



Figs 2–6: *Huckettomyia secunda* spec. nov., male terminalia (paratype from 25.iv.2008). – **2**: 5th sternite; – **3**: Hypopygium, dorsal view; – **4**: Hypopygium, lateral view; – **5**: Aedeagus, lateral view; – **6**: Tip of aedeagus, ventral view. Scale bars = 0.25 mm.

tibia with 3 posterior setae. Hind coxa without setulae on posterodorsal surface. Hind femur with complete rows of anteroventral and anterodorsal setae, and with long, dense, fine setae in basal half of posterior surface. Hind tibia with 3–4 long posterodorsal setae, a row of short setae along anterodorsal surface, 5–7 short anteroventrals in apical 2/3, and 3 very fine posteroventral hairs at middle; with 1 dorsal but 0 anterodorsal apical seta, and a strong blunt apical spur on posteroventral surface (Fig. 1). **Wing**: Hyaline, slightly brownish infuscated, yellow towards base. Veins brown, bare except costa. Vein M straight. Calypters yellowish, lower one of the *Phaonia* type. Haltere yellow.

Abdomen: Densely yellowish-grey dusted with a conspicuous black median vitta on tergites 1+2 to 5. Lateral marginal setae present on tergites 1+2 to 5, and a few lateral discals on tergites 4 and 5. Sternites black, densely dusted; sternite 1 bare; sternite 5 as in Fig. 2. **Terminalia**: Figs 3–6. Surstylus elongate, flattened, curved in posterior view. Cercal plate produced into two small "teats" at apex. Epiphallus half as long as phallapodeme. Pregonite and postgonite each with a few sensilla at tip. Distiphallus large, and open ventrally (Fig. 6).

Measurements: Length of body, 7.5–8.0 mm. Length of wing, 6.5–7.0 mm.

Female. Differs from the male as follows: **Head**: Dichoptic, frons about 0.38 of head width. Frontal vitta with a pair of crossed setae. Fronto-orbital plate with 8 inclinate frontal setae, 2 proclinate and 2 reclinate orbital setae. Postpedicel only 2 times as long as wide.

Thorax: Scutum with prealar seta about as long as posterior notopleural. Prosternum with setulae shorter than in male and developed only on posterior part, so very careful examination is required to see them. **Legs**: Black, but with an obscure reddish tint. Fore tibia without elongate setulae or fine setae on posteroventral surface. Hind femur with only 3 anteroventral setae at apex and without long setae on posterior surface. Hind tibia with only 1 strong anterodorsal seta, without fine hairs and apical spur on posteroventral surface.

Abdomen: Shorter and wider, more pointed at apex, the dusting less dense and median vitta less conspicuous.

Measurements: Length of body, 7.0 mm. Length of wing, 6.5 mm.

Ecology. Two males (October 2007 and April 2008) were collected near human excrement, in deciduous forest at 50 m above sea level. 2 males (4 October 2008) were collected on leaves of bushes at 1–2 m above ground, in deciduous forest 250 m above sea level.

Diagnosis. The two known species of *Huckettomyia* can be separated by the following key:

– Male: hind tibia with a conspicuous apical posteroventral spur (Fig. 1). Female: abdomen evenly grey dusted with a narrow undusted median vitta, and the dusting on tergite 5 not contrasting with that on the basal tergites. ..... ***secunda* spec. nov.**

– Male: hind tibia without an apical spur. Female: abdomen subshining on dorsal surface, without a distinct median vitta, and tergite 5 more densely dusted than basal tergites. ... . ***watanabei* Pont & Shinonaga, 1970**

Acknowledgement

We thank Dr Vera S. Sorokina (Novosibirsk, Russia) for information on the occurrence of *Huckettomyia* in Western Siberia.

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The paper was accepted on 5 October 2010.
Editum: 29 December 2010.