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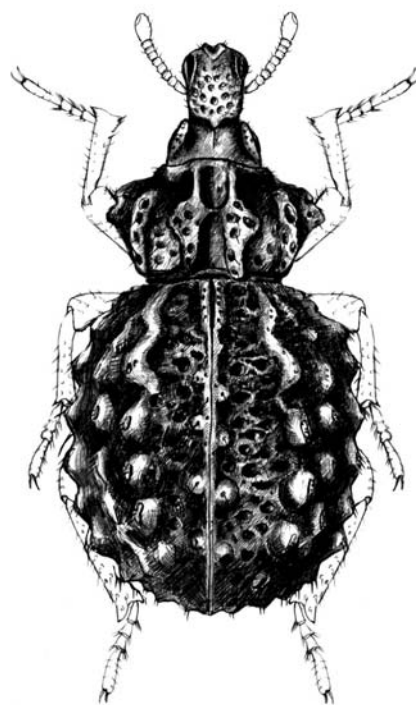


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***Platypalpus negrobovi* a new species of the family Hybotidae  
(Diptera: Empidoidea) from the North-West Caucasus**

***Platypalpus negrobovi* – новый вид семейства Hybotidae  
(Diptera: Empidoidea) с Северо-Западного Кавказа**

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**Key words:** Diptera, Hybotidae, *Platypalpus*, new species, Caucasus, Russia.

**Ключевые слова:** Diptera, Hybotidae, *Platypalpus*, новый вид, Кавказ, Россия.

**Abstract.** *Platypalpus negrobovi* sp. n. is described from the North-West Caucasus (Russia, Krasnodar Prov.). The new species belongs to the *P. pallipes* group and is closely related to *P. longimanus* (Corti, 1907) in having modified tarsomeres of male fore and mid legs.

**Резюме.** *Platypalpus negrobovi* sp. n. описывается с Северо-Западного Кавказа (Россия, Краснодарский край). Новый вид относится к группе видов *P. pallipes* и наиболее близок к *P. longimanus* (Corti, 1907) наличием модифицированных члеников лапок средних и задних ног самца.

## Introduction

The present new species is very closely related to *Platypalpus longimanus* (Corti, 1907) by having a very long apical tarsomere on the fore leg and the mid leg that are unique features among representatives of the genus *Platypalpus* Macquart, 1827. Smith [1969] gave a re-description of *P. longimanus* and illustrated the fore and mid legs of male as well as genitalia.

In fact the nomenclature of *P. longimanus* is quite confusing since both Corti [1907] and Strobl [1910] described the same species with the same name. Chvála [1989] describes this history in detail and concludes that Corti [1907] should be the author of *P. longimanus*. Corti described the species as *Tachydromia* (*Cleptodromia*) *longimana* and one could wonder if the name «*longimana*» should be retained instead of «*longimanus*». If the name is used as a noun in single as well in plural it should be «*longimanus*».

The species we recently found in the Caucasus corresponds more or less to the description given by Chvála [1989] for *P. longimanus*. Also the genitalia look quite similar to the drawings given by Chvála (l. c.), but there remain several differences that we point out in the discussion below. Unfortunately the holotype of *P. longimanus* (Corti) is lost, leaving us in doubt what the real *P. longimanus* is.

## *Platypalpus negrobovi* sp. n.

(Fig. 1–6)

**Type material.** Holotype – ♂, Russia, Krasnodar Province, Apsheronsk District, Biological station «Kamyshanova Polyana», 1240 m, Malaise trap, 18.05–13.06.2010, S.Yu. Kustov (mounted on pin, in Royal Belgian Institute of Natural Sciences (Brussels)).

The following description was made when the holotype was conserved in alcohol. After description the specimen was decolouring fast and therefore it was mounted after drying in ethylacetate. During the drying process it even decoloured more and the original colours are those shown on the photos and given in the description. During the mounting process an antenna was lost and wings were wrinkled.

**Description.** Male. Head black; frons, vertex, occiput and clypeus shining; face finely grey dusted. Vertex and occiput with numerous pale thin setae. Frons triangular, above antennae somewhat narrower than postpedicel, evenly widened toward ocellar tubercle, near anterior ocellus 2 times as broad as above antennae. Ocellar tubercle with 2 pairs of very short bristles. Occiput covered with numerous hair-like setae on upper part; vertical bristles not prominent. Antenna brownish yellow; postpedicel elongate conical, 3.5 times as long as wide; stylus a little thickened, almost as long as postpedicel (fig. 1). Proboscis brownish. Palpus brownish yellow, broad, with several dark subapical setae.

Thorax black with yellowish hairs and bristles. Mesonotum and pleura shining, only scutellum thinly grey dusted. Postpronotal lobe with 1 weak bristle. Scutum evenly covered with short hair-like setae of subequal length, except for 1 pair of short prescutellar dorsocentrals; 2 subequal notopleurals, 1 postalar, 4 scutellars (lateral pair thinner).

Legs largely pale yellow including all coxae (fig. 2). Apical third of hind femora and fore and mid tarsi brown. Fore femur slightly thickened, nearly 1.5 times as wide as fore tibia, covered with short setae. Fore tibia somewhat spindle-shaped, covered with short setae. Fore tarsomere 1 long and nearly half as long as fore tibia (fig. 3); tarsomeres 2–4 short, becoming nearly 1.3 times shorter from 2<sup>nd</sup> to 4<sup>th</sup>, tarsomere 4 with short ventral projection; tarsomere 5 slightly thickened, very long, nearly as long as preceded tarsomeres combined. Mid femur thickened, nearly 1.5 times as wide as fore femur; with double row of black ventral spinules, lacking posteroventral bristles. Mid tibia with row of

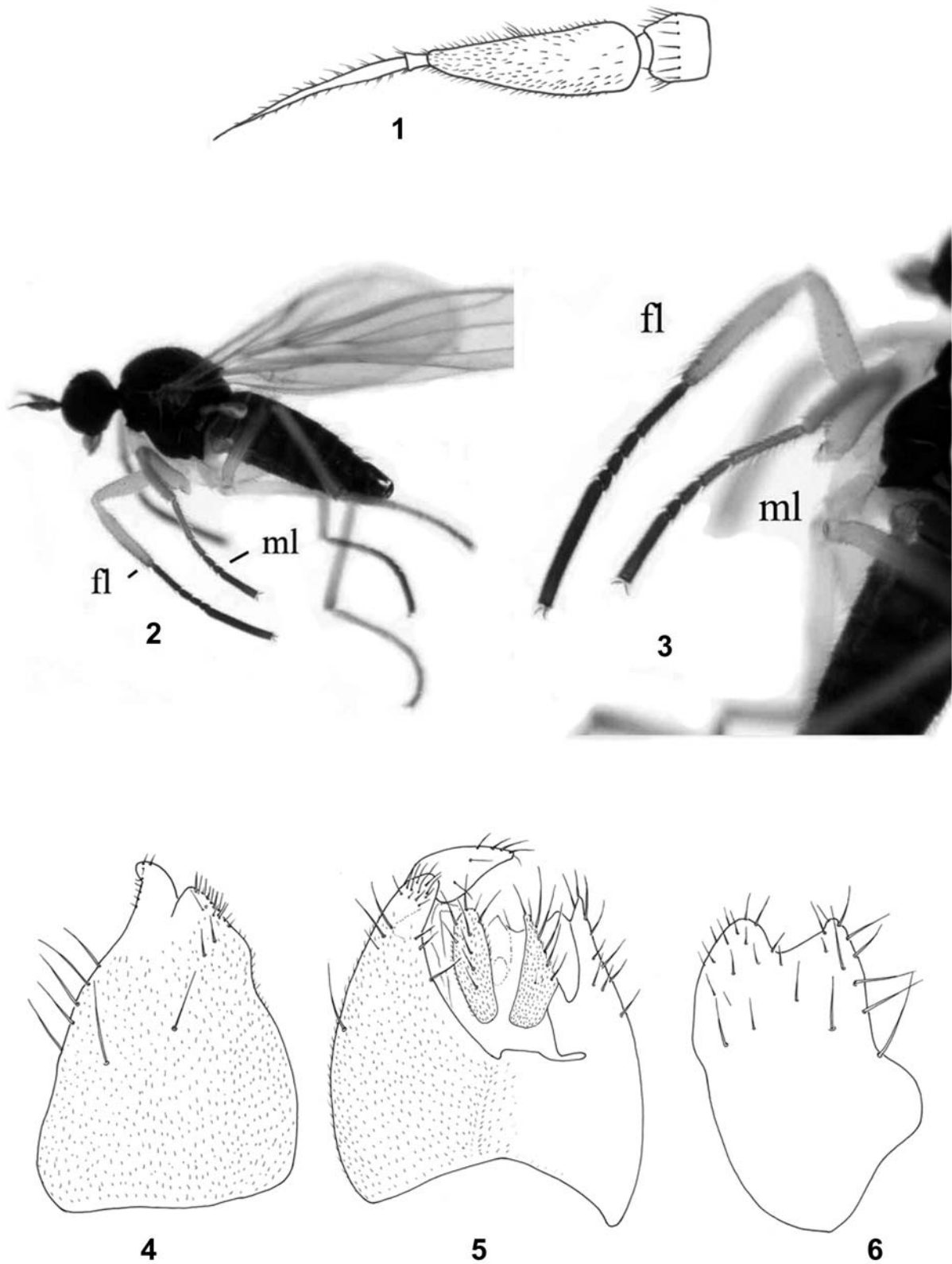


Fig. 1–6. *Platypalpus negrobovi* sp. n., holotype, male.

1 – antenna, lateral view; 2 – habitus, lateral view; 3 – fore and mid legs, dorsal view (fl – fore leg, ml – mid leg); 4 – right epandrial lamella, lateral view; 5 – epandrium, dorsal view; 6 – left epandrial lamella, lateral view.

Рис. 1–6. *Platypalpus negrobovi* sp. n., голотип, самец.

1 – антенна, вид сбоку; 2 – габитус, вид сбоку; 3 – передняя и задняя ноги, вид сверху (fl – передняя нога, ml – задняя нога); 4 – правая лопасть эпандрия, вид сбоку; 5 – эпандрий, вид сверху; 6 – левая лопасть эпандрия, вид сбоку.

black ventral spinules, lacking apical spur. Mid tarsomeres 1–4 unmodified; tarsomere 5 long, nearly as long as tarsomere 1 and as long as tarsomeres 2, 3 and 4 combined. Hind legs unmodified.

Wing hyaline; veins largely dirty yellow, paler basally; costal bristle dirty yellow. Veins  $R_{4+5}$  and  $M_{1+2}$  parallel near wing margin; cells br and bm contiguous. Squama pale, with concolorous setae. Halter pale.

Abdomen light brown, viewed dorsally slightly shining, lacking pollinosity, almost evenly covered with short brownish hair-like setae. Terminalia (fig. 4–6) moderately large, brownish, cerci somewhat darker. Right epandrial lamella (fig. 4) with only 5 bristles on its right margin. Cerci concealed in lamella (fig. 5). Left epandrial lamella (fig. 6) excavated apically and hence bifid, its left margin with a few stronger bristles.

Length: body 3.5 mm, wing 4 mm.

Female. Unknown.

**Diagnosis.** Head and thorax dark brown; vertical bristles not prominent; fore tarsomere 5 very long; mid femur lacking posteroventral bristles, mid tarsomere 5 very long, as long as tarsomeres 2, 3 and 4 combined.

**Distribution and habitat.** Russia, the Caucasus (Krasnodar Prov.). The new species was collected in a forest at an altitude of about 1200 m.

**Etymology.** The new species is dedicated to Prof. Dr. Oleg Negrobov to commemorate his 70<sup>th</sup> Birthday on 21<sup>st</sup> November 2011 [Shamshev, Grootaert, 2011].

## Discussion

*Platypalpus longimanus* and *P. negrobovi* **sp. n.** are considered to belong to the *P. pallipes*-group. This is a species-group with undifferentiated vertical bristles, vertex and upper part of occiput with numerous equally long hairs, mesonotum shining with evenly distributed hairs (i.e. no distinct acrostichals and dorsocentrals), no distinct postpronotal (= humeral) bristle, anal lobe of wing little developed, vein closing anal cell very recurrent, head rather round in lateral view, mid tibia without spur or a very small one and mid femur with posteroventral bristles.

However, *P. longimanus* has sometimes short but differentiated vertical bristles and Chvála [1989] even mentions «sometimes with an indication of two adressed pairs». This can lead to confusion. As to the presence of posteroventral bristles on mid femur, Chvála (l. c.) quotes that they are pale and rather short in *P. longimanus*. In *P. negrobovi* **sp. n.** there are no posteroventral bristles what again can lead to confusion in using the keys [Chvála, 1989; Grootaert, Chvála, 1992]. However we do not doubt that *P. longimanus* and *P. negrobovi* **sp. n.** belong to the *P. pallipes*-group.

*Platypalpus longimanus* is said to have thinly grey dusted pleuron except for katepisternum (= sternopleuron) and anepimeron (= pteropleuron) [Chvála, 1989], but in Grootaert and Chvála [1992] it is corrected that also the meron (hypopleuron) is shining. In *P. negrobovi* **sp. n.** pleura are entirely shiny. In male of *P. longimanus* stylus is at most half as long as postpedicel. In *P. negrobovi* **sp. n.** stylus is nearly as long as postpedicel comparable to

female of *P. longimanus*. The morphology of the genitalia is similar in *P. negrobovi* **sp. n.** to the figures of *P. longimanus* given by Chvála [1989: 258, fig. 5–7] though the differences could be due to different preparation and observation techniques. The apical tarsomere of mid leg is said to be as long as tarsomeres 3 and 4 combined in *P. longimanus* as is figured by Smith [1969]. In *P. negrobovi* **sp. n.** mid terminal tarsomere is much longer and as long as tarsomeres 2, 3 and 4 combined or nearly 2 times as long as tarsomeres 3 and 4 combined.

To key out *P. negrobovi* **sp. n.** from *P. longimanus* we propose following:

- Stylus in male nearly as long as postpedicel. Mid tarsus with apical tarsomere as long as tarsomeres 2, 3 and 4 combined. .... *P. negrobovi* **sp. n.**
- Stylus in male half as long as postpedicel. Mid tarsus with apical tarsomere as long as tarsomeres 3 and 4 together. .... *P. longimanus* (Corti, 1907)

*Platypalpus longimanus* is a very rare species with probably a broad distribution (United Kingdom, Belgium, Germany, Austria, Italy, Rumania and Ukraine). However there are doubts about conspecificity of all these records [Chvála, 1989; Grootaert, Chvála, 1992]. Several species might be involved.

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