

## A New Palearctic *Amblypsilopus* Species (Insecta, Diptera, Dolichopodidae) from Turkey

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### ABSTRACT

A new species of *Amblypsilopus* is described from Turkey: *A. turcicus* sp. nov.. It is closely related to *A. janatus* (Negrobov, 1984) from Japan.

*Key words:* New species, *Amblypsilopus*, Dolichopodidae, Turkey

### INTRODUCTION

During the last decade various authors contributed to a better knowledge of the Dolichopodidae of Turkey and raised the number of species to 155 (Grichanov *et al.*, 2007, Grichanov and Tonguç, 2010; 2010a; Naglis, 2009; 2010; 2011; 2012; Popescu-Mirceni and Pârvu, 2009; Tonguç *et al.*, 2009; 2010, Tonguç and Barlas, 2011). Despite these recent efforts we suspect that at least twice as much species occur in this huge country with its great variety of habitats.

In the present paper we describe a new species of *Amblypsilopus* Bigot, 1888 a genus that belongs to the subfamily Sciapodinae. In western Europe the Sciapodinae is normally only represented by the genus *Sciapus* Zeller, 1842 that is quite rich in species. However, a single species *Amblypsilopus exul* (Parent, 1932) was described from greenhouses in France and the Netherlands. It is supposed to be introduced from the Oriental or Australasian region (Bickel, 1994). *Amblypsilopus* is mainly tropical in distribution and radiated much in the Oriental (71), Australasian (111), Afrotropical (47) and Neotropical (43) regions (Yang *et al.*, 2006). Only three species are known in the Palearctic region: *A. ancistroides* Yang, 1995 from China, *A. exul* from France and The Netherlands and *A. janatus* (Negrobov, 1984) from Japan. *Amblypsilopus ancistroides*, *A. janatus* and the species described here are all quite closely related in having a triangular epandrium with long cerci. The cerci bear a pair of strong setae at the apical third and some stronger setae, sometimes even spine-like at the tip. The dorsal surstylus is hook-shaped. The genitalia of *A. exul* are a little different.

## Taxonomic account

### Key to European Sciapodinae.

Dolichopodids usually having a forked vein M.  $M_2$  almost reaching wing margin.  
 - Mid and/or hind femur with distinct anterior preapical seta. Mesonotum generally grey dusted. .... *Sciapus* Zeller, 1842

- Femora without strong preapical seta. Mesonotum shining metallic green. Vertical bristle in male not differentiated from the bundle of seta on side of frons; female with a distinct vertical bristle lacking the bundle of setae ..... *Amblypsilopus* Bigot, 1889

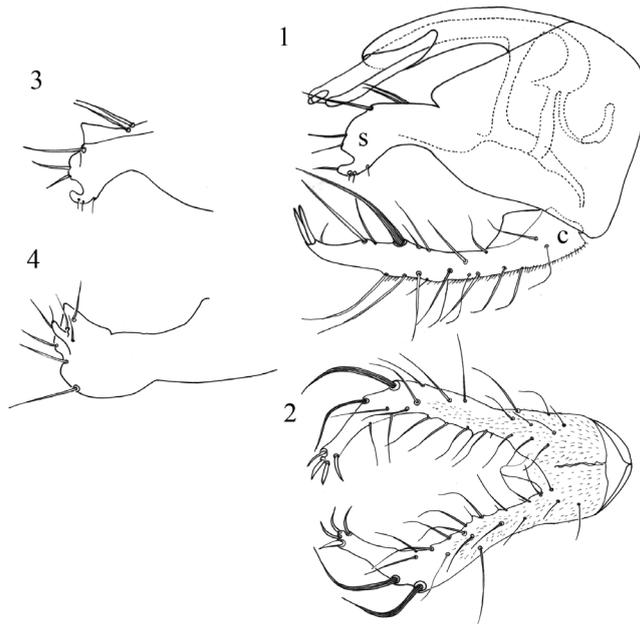
A key to species of *Sciapus* can be found in Grichanov, 2007.

### *Amblypsilopus turcicus* sp. nov. (Figs. 1-4)

Type material. Holotype: ♂, Turkey: Rize province, Centrum, Güneysu, 40° 59' N / 40° 34' E, 20.07.2009; Royal Belgian Institute of Natural Sciences.

Paratypes: 2 ♂♂, 1 ♀, Rize, Centrum, Güneysu, 40° 59' N / 40° 34' E, 20.07.2009; Muğla Sıtkı Koçman University, Science Faculty, Biology Department, Zoology Laboratory.

Diagnosis. Species with black antennae, postpedicel a little longer as wide, with an apical arista. Cercus with a pair of strong latero-ventral setae in apical third.



Figs. 1-4. *Amblypsilopus turcicus* sp. nov. 1. Epandrium lateral view; 2. Cerci dorsal view; 3. Tip of dorsal surstylus; 4. Inner view of tip of dorsal surstylus. S: surstylus, C: cercus.

## Description

Head: Frons and clypeus shining, metallic blue-green, without dusting; almost smooth; with 5-7 black lateral hairs, vertical bristle not prominent. Face with light pruinosity. One pair of long, black anterior ocellars directed backward and 1 pair of thin and shorter posterior ocellars. Postocular bristles black above, dense and white below. Palps brown, with 2 black bristles. Proboscis brownish, with pale hairs. Antenna black; pedicel with 1 long dorsal bristle, twice as long as pedicel is wide, ventral bristles short; postpedicel short, subtriangular in lateral view, a little longer than wide; arista apical, black, about as long as head is wide.

Thorax: Mesonotum metallic blue-green; 4 irregularly set pairs of acr, anterior pair short, posterior 3 pairs very long; 6 dc, anterior 4 very short, 2 long strong prescutellars; 1 pair of long scutellars; 1 short humeral, 1 presutural, 1 sutural, 1 postsutural, 2 notopleurals, 1 supra-alar. Sides of thorax shining metallic green.

Legs: All coxae and femora dark, fore and mid tibiae yellowish brown, hind tibia darkened, tarsi brownish. Fore femur with double ventral row of long white hairs on basal third about as long as femur is wide and short row of short black posterior preapicals. Mid femur with double ventral row of white hairs on basal 2/3 as long as femur is wide and row of posterior black preapicals on apical fourth. Hind femur with double row of white hairs on basal 2/3. No distinct bristles on tibiae. Fore tarsus with tarsomeres 1 and 2 with very dense white ciliation over entire ventral side, except for basal fifth of first tarsomere. Apical two tarsomeres of hind tarsus both as long as wide and somewhat flattened.

Wing: hyaline, cross-vein m-cu straight,  $M_2$  present, but weak. Halter brownish. Squama dark with long black setae.

Abdomen: Shining metallic reddish green. All hairs and bristles on dorsum black; hairs on venter white. Hypopygium brown (Figs. 1-4). Cercus with a pair of strong black latero-ventral setae in apical third and a pair of fine but long dorsal setae (Figs. 1, 2); only dorsal surface of cercus bearing microtrichia, otherwise cercus bare; apex of cercus with 4 short spine-like setae (Fig. 2).

Female: Similar to male but with 1 distinct black vertical bristle on lateral slope of frons, nearly as long as ocellars, further without hairs on slope of frons. Fore coxa with 2 strong white anterior bristles near tip. First and second tarsomeres of fore leg without ventral cilia. Apical tarsomeres of hind tarsus slender. Mid tibia with 1 strong anterior bristle on basal fifth. Five dc becoming longer posteriorly, anterior dc much stronger than in male. Halter white, base of stem brown.

Distribution: Turkey (Rize province)

Etymology: The species is named after the country where it was found.

## DISCUSSION

*Amblypsilopus exul* was up to now the only European, but invasive, *Amblypsilopus* species. It has yellow antenna while *A. turcicus* sp. nov. has black antenna. For further

differences and a figure of the male genitalia of *A. exul* we refer to Bickel (1994: Fig. 100g). The male of *A. turcicus* can be recognized from *A. ancistroides* in having a pair of strong latero-ventral setae on cerci that are not present in the latter. These setae should not be confused with a pair of long fine dorsal setae that are present in both species as well as in *A. janatus*. *Amblypsilopus ancistroides* bears about four long setae on the apex of the cercus while these four setae are short and rather spine-like in *A. turcicus*.

In fact *A. turcicus* sp. nov. is most similar to *A. janatus*. The latter has however five strong dc while in *A. turcicus* sp. nov. there are only two strong dc (prescutellars). The tip of the dorsal surstylus in *A. janatus* is wider, a pair of basal epandrial setae is longer and the most apical epandrial seta is at the same level of the pair of basal epandrial setae. The tip of the surstylus bears a row of at least five equally long setae. In *A. turcicus* sp. nov. the tip of the surstylus is more slender, the pair of basal epandrial setae is shorter and the apical epandrial seta is more distant from the basal pair of basal epandrial setae. The tip of the surstylus does not bear a row of setae. There are further a number of colour differences that could be due to different interpretation.

### Bionomics

In contrast to *A. exul*, the new species was not found in a greenhouse, but in the open air near green bean, tomatoes and savoy cabbage fields.

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