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Hybotidae (Diptera) from Turkey, with descriptions of seven new species

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Abstract

The family Hybotidae is systematically studied from Turkey for the first time. Altogether 51 species are reported from Turkey, of which 36 species are first recorded from this country and seven species are described as new for science: *Platypalpus academicus* **sp. nov.**, *P. anomalus* **sp. nov.**, *P. bohousi* **sp. nov.**, *P. diminuticornis* **sp. nov.**, *P. dursuni* **sp. nov.**, *P. moceki* **sp. nov.**, and *P. seticauda* **sp. nov.** Seven additional probably undescribed species remain unnamed due to insufficient material. *Tachypeza subnubila* Raffone, 2002 is proposed as new subjective junior synonym of *Tachypeza nubila* (Meigen, 1804).

Key words: Diptera, Hybotidae, taxonomy, new species, new synonymy, faunistics, Turkey, Palaearctic

Introduction

With over 11,400 described species, the superfamily Empidoidea represents one of the largest extant lineages of flies (Pape *et al*. 2009). Beside several still unplaced genera, this superfamily comprises five families: the Atelestidae, Brachystomatidae, Dolichopodidae *sensu lato*, Empididae and Hybotidae. The family Hybotidae comprises ca. 2000 described species worldwide (Yang *et al*. 2007) in almost 70 genera, out of them, the genus *Platypalpus* Macquart is a megadiverse genus with more than 600 described species worldwide (Barták & Kubík 2016). Hybotid flies are stout flies, yellow to black, small (mostly 1–7 mm), and are distributed worldwide. Growing evidence accumulates that Hybotidae is monophyletic (Chvála 1983; Collins & Wiegmann 2002; Sinclair & Cumming 2006; Moulton & Wiegmann 2007). The monophyly of the family is chiefly based on: palpifer and fore tibial gland present, laterotergite bare and R_{4+5} unbranched. The vast majority of known hybotid species are predators and are usually found on vegetation, logs, stones and other surfaces.

Our current understanding of the phylogenetics, taxonomy and natural history of the Hybotidae is limited (Collins & Wiegmann 2002; Moulton & Wiegmann 2007), with several groups being little known (Sinclair & Cumming 2006). In addition, large parts of the distributional range of this family have been poorly explored (e.g. Central Africa, the Oriental Region and Neotropics). In some of these regions the diversity of hybotid flies has probably been greatly under-estimated (Nagy *et al*. 2013). Our present paper aims to add some knowledge concerning another poorly studied area, Turkey.

Information concerning turkish hybotids is scattered among several papers dealing with chance findings (Raffone 2007: *Platypalpus verralli* (Collin, 1926), Pârvu & Popescu-Mirceni 2006: *Platypalpus collini* (Chvála, 1966a), *P. longiseta* (Zetterstedt, 1842), *Crossopalpus aeneus* (Walker, 1871), *C. nigritellus* (Zetterstedt, 1842), *C. setiger* (Loew, 1859)) or more comprehensive studies by Grootaert (2008): *Platypalpus ionicus* Grootaert, 2008, *P. anatolicus* Grootaert, 2008, *P. olivetorum* Grotaert, 2008, *P. kirtlingensis* Grootaert, 1986, *P. pallidiventris* (Meigen, 1822), *P. stigma* (Collin, 1926), *P. longiseta* (Zetterstedt, 1842), and 2 unnamed species; and Shamshev *et al*. 2015: *Hybos culiciformis* (Fabricius, 1775), *H. vagans* Loew, 1874. Altogether only 15 species are currently known from Turkey. We add an additional 43 species including seven described as new to science. All subordinate subfamilies and tribes of Hybotidae are treated herewith except the tribe Drapetini which will be treated in a follow-up paper.

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Material and methods

The material used in this study originates partly from the collections of both authors (under permission of staff of Muğla Sıtkı Koçman University) during the years 2011–2016 and partly from collections of Bohuslav Mocek (Hradec Králové, Czech Republic) in 1996 by means of sweeping vegetation. The specimens collected by authors of this study were sampled using Malaise traps (MT) and yellow pan traps (PT), or were swept from the vegetation (SW) and voucher specimens were dried from alcohol. All specimens were identified by the senior author. Voucher specimens are deposited in the collection of the Czech University of Life Sciences, Prague, Czech Republic (CULSP) and partly in the collection of East Bohemian Museum, Hradec Králové (MHK).

Genitalia preparations: genitalia together with 2–3 pregenital segments were removed and macerated in potassium hydroxide solution (approx. 10%) in small vials submerged in hot water for 1–2 hours. After neutralizing with 8% acetic acid, the genitalia were dissected in glycerine (except *P. diminuticornis*) and their parts photographed by means of an Olympus E-41 digital camera mounted on an Olympus BX51 compound microscope. Images were edited with the computer software Quick Foto micro 2.3 provided with Deep focus 3.1. Each image resulted usually from combining 7–15 layers. Images were improved by means of Adobe Photoshop and they served as models for outline of hand drawn illustrations; details were added by direct observation of the genitalia. We drew all structures from standardized platform view (i.e., as they imaged the greatest surface area).

The morphological terms used here follow Merz & Haenni (2000), Sinclair (2000) and Sinclair & Cumming (2006). All body measurements (including body and setae length) were taken from dry specimens (therefore the actual length may differ) by means of an ocular micrometer with a Nikon SMZ 1500 binocular microscope. Body length was measured from antennal base to the tip of the genitalia in males and to the tip of the cerci in females. General distribution of species were taken mostly from Wyatt (2014) and Shamshev (2016), supplemented with previously unpublished data from CULSP collection.

Descriptions of new species

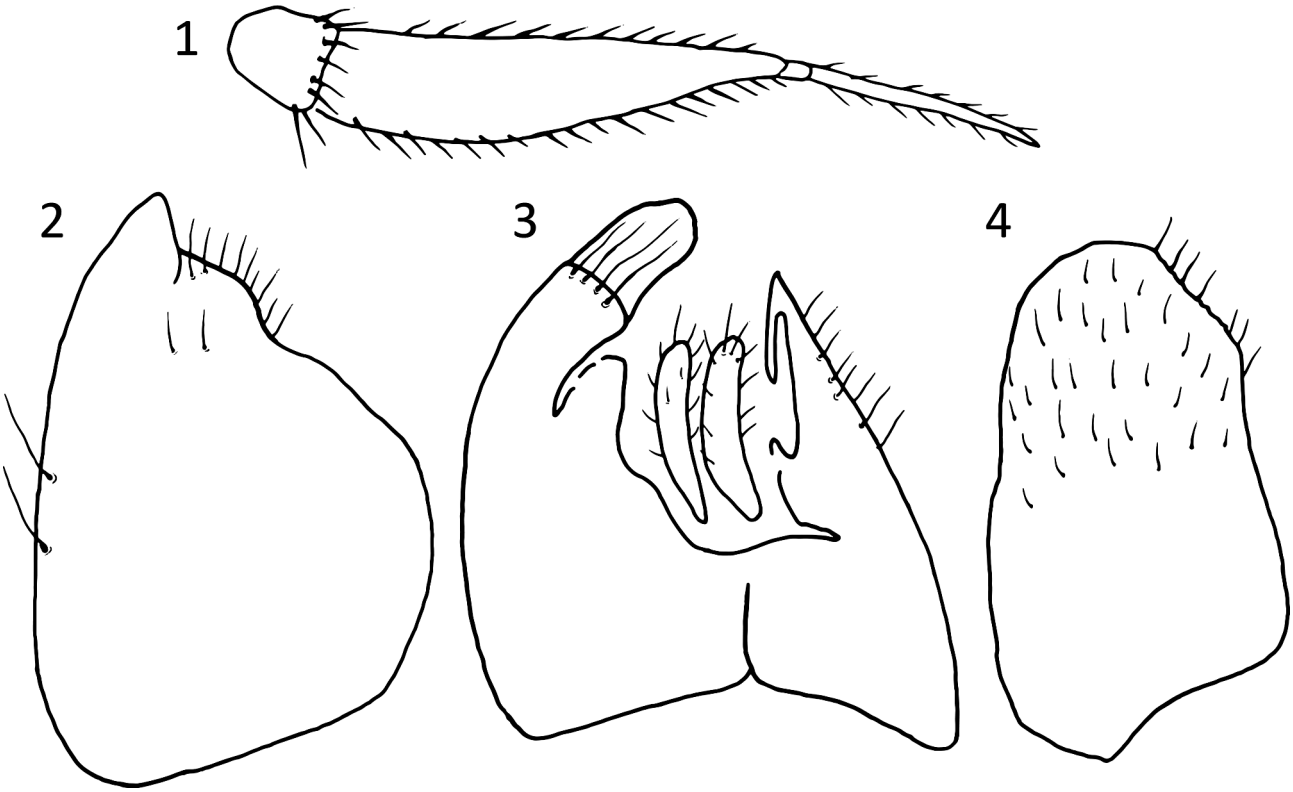
***Platypalpus academicus* sp. nov.**
(Figs 1–4, 27)

Type material. HOLOTYPE ♂, labelled: "Muğla 700 m 2013, University campus SW + PT, 37°09′42″N, 28°22′21″E, Barták, Kubík 29.iv.-10.v." (CULSP). **PARATYPES**: 1♀, same data as holotype; 4♂, 4♀, same locality, Malaise trap, 720 m, 37°09′42″N, 28°22′13″E, 26.v.–26.vi.2015, H. Kavak; 3♀, same locality, v.2015, H. Kavak; 1♀, 15 km SW of Muğla, damp valley nr. brook, 620 m, 37°06′31″N, 28°15′31″E, Barták, Kubík, 23.v.2011—all CULSP.

Diagnosis. Black species of the *P. longimanus* complex with two pairs of vertical setae; mesoscutum lustrous and evenly and densely setose without differentiated rows of setae; antennae with long postpedicel and shorter stylus; poorly differentiated posteroventral setae on mid femur; mid tibial spur almost absent; anepisternum microtrichose except ventroposterior corner and left epandrial lamella ovate apically.

Description. Male. Head brownish black, lustrous including frons, clypeus, ocellar triangle, narrow stripe behind eyes and behind ocellar triangle, only occiput finely microtrichose. Frons about 0.04 mm broad above antennae, widening dorsally and about 0.10 mm broad at level of anterior ocellus. Face 0.03 mm broad at middle and only slightly widening below. Gena very narrow and lustrous. Antenna (Fig. 1) brownish black; postpedicel 3.6–4.4X longer than wide, postpedicel 1.5–2X longer than stylus. Clypeus lustrous. Palpus whitish yellow, broadly ovate, nearly as long as labrum, with several whitish yellow setae. Ocellar setae brown, about 0.15 mm long, second pair short. Two pairs of vertical setae, inner pair about 0.10 mm long, strongly inclinate and widely separated (0.20 mm apart), outer pair slightly inclinate and somewhat shorter. Occiput short and densely brown setose dorsally and slightly longer and less densely setose ventrally. Proboscis yellow to brownish yellow, one-third as long as head height. **Thorax** brownish black, mesoscutum entirely lustrous including antepronotum, dorsal part of postronotum and postalar calli, only scutellum and sides of postalar calli microtrichose; lustrous parts of pleura: ventroposterior corner of anepisternum, whole of katepisternum, anepimeron and central part of meron, microtrichose parts: propleuron including ventral part of postpronotum, most of anepisternum, margins of meron

and metanotum. Mesoscutum densely and evenly covered with setae, without differentiated rows, median setae distinctly inclinate including setae along margins of prescutellar depression. All thoracic setae pale, brownish yellow to yellow. Chaetotaxy: postpronotal seta short, scarcely differentiated from setulae; acrostichals and dorsocentrals not differentiated (one longer pair of setae inserted on usual place of prescutellar dorsocentrals), all setae covering mesoscutum short (0.05 mm); notopleuron with 1–2 setae on posterior part; 1 short postalar and two pairs of scutellar setae (outer pair shorter). **Wing** clear or indistinctly darkened, with brown veins, veins R_{4+5} and M_{1+2} in apical third almost parallel. Crossveins almost contiguous (both basal cells almost equally long, first basal cell narrower than second basal cell), CuA_2 slightly recurrent and slightly C-shaped, anal vein distinct throughout its length. Costal seta yellow, moderately long. Squama white with yellow fringes. Halter whitish. **Legs** yellow, paler on coxae and bases of all femora, tips of tibiae and at least hind femur more or less darkened (variable), tarsi brown. Setae yellow on coxae and bases of femora, brown more distally. Fore femur moderately narrow, ventral setae about half as long as femur depth. Fore tibia slightly dilated, short setose, with two long subbasal ventral setae and conspicuous ovate tibial gland. Mid femur equally narrow as fore femur, most specimens with 3–5 short pale and scarcely differentiated posteroventral setae on distal third, not much longer than anteroventral row of spines. Mid tibia almost without apical spur, with row of black spines ventrally. Hind legs thin, without conspicuous setae. Fore tarsus with modified (very short) segments 2–4 and extremely long segment 5 (about 0.55 mm long and slightly longer than four preceding segments together), tarsus of mid leg modified (last segment almost as long as three preceding segments together). **Abdomen** brown, entirely lustrous. Abdominal setae yellow to yellowish brown. Genitalia (Figs 2–4) moderately long, left epandrial lamella (Fig. 4) oblong-ovate; cerci (Fig. 3) very short and simply digitiform; right epandrial lamella (Fig. 2) broad. **Female.** Similar to male, except as follows: postpedicel 1.4–1.7X longer than stylus; fore and mid tarsi not modified, even if much longer than corresponding tibiae; palpus brown; abdomen with segment 7 microtrichose to sublustrous, segment 8 microtrichose, conical, sternite with lustrous stripe on sides, cercus extremely short. **Length:** body 2.3–3.0 mm, wing 2.1–2.3 mm.



FIGURES 1–4. *Platypalpus academicus* **sp. nov. 1.** antenna. **2.** right epandrial lamella, lateral view. **3.** genitalia, dorsal view. **4.** left epandrial lamella, lateral view.

Etymology. The species is named to honour the Muğla Sitki Koçman University (Turkey), because most type specimens were captured on its beautiful campus.

Distribution. Turkey, Muğla province.

Remarks. The species described above is closely allied to *P. longimanus* (Corti, 1907) and *P. negrobovi* Grootaert, Kustov & Shamshev, 2012. With microtrichose anepimeron and short stylus, the newly described species is more similar to *P. longimanus* but with long apical segment of mid tarsus it reminds us of *P. negrobovi*. However, it differs from both by differently shaped left epandrial lamella (not excised apically) and much narrower (and not strikingly sexually dimorphic as in *P. longimanus*) stylus in male (female of *P. negrobovi* is unknown).

***Platypalpus anomalus* sp. nov.**
(Figs 5–7, 28)

Type material. HOLOTYPE ♂, labelled: "Turkey: 8 km S of Çine, river bank, 68 m, 37°32′34″N, 28°03′46″E, 29.iv.–1.v.2016, Barták, Kubík" (CULSP). **PARATYPES**: 3♂, same data as holotype (CULSP).

Diagnosis. Small black species of the *P. pallidiventris* - *cursitans* group with a single pair of inclinate vertical setae; antenna with basal segments reddish yellow and the rest black, stylus greatly thickened; mesoscutum rather sparsely microtrichose; mid tibial spur short, short pale posteroventral setae on mid femur.

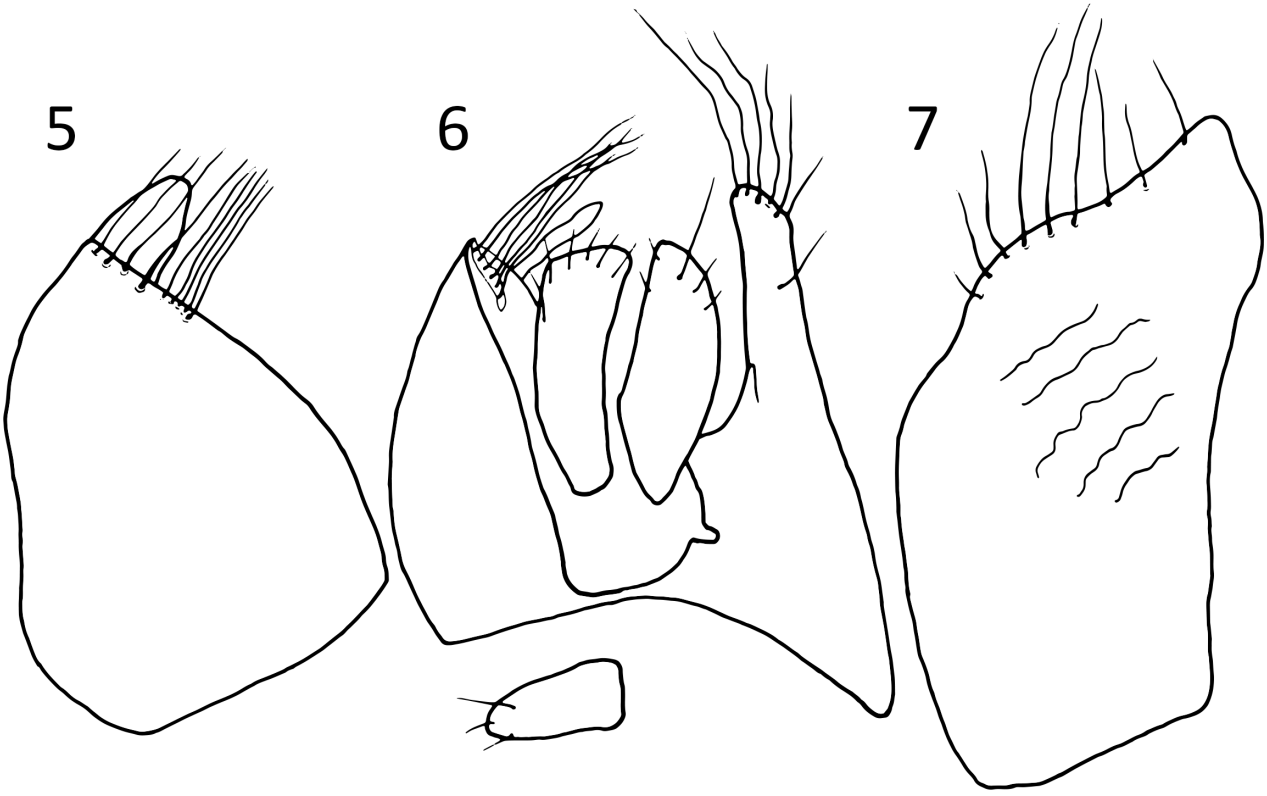
Description. Male. Head black, grey microtrichose. Frons about 0.05 mm broad and almost parallel-sided, widening slightly dorsally and 0.06 mm broad at level of anterior ocellus. Face 0.03 mm broad at middle. Gena very narrow and lustrous. Antenna with both basal segments reddish yellow, postpedicel and stylus black, postpedicel only slightly broader than basal part of stylus, 2.6–2.7X longer than wide, stylus greatly thickened (as in *P. farabiensis*—see Shamshev 1998, fig. 7) and 1.4–1.5X longer than postpedicel. Clypeus microtrichose on anterior (dorsal) half and lustrous below (posteriorly). Palpus brown, ovate, half as long as labrum, with 2 long subterminal brownish yellow setae. Ocellar setae pale, about 0.09 mm long, second pair very short. Single pair of inclinate short vertical setae as long as ocellar, inserted wide apart (0.17 mm). Occiput short and sparsely brownish yellow setose dorsally and short paler setose ventrally. Proboscis black, half as long as head height. **Thorax** black, grey microtrichose, katepisternum narrowly lustrous, leaving microtrichose stripes both anteriorly and posteriorly. Mesoscutum sparsely covered with relatively long and adpressed microtrichia causing somewhat subshiny appearance, pleura more densely microtrichose. All thoracic setae pale, brownish yellow to yellow. Chaetotaxy: postpronotal seta long, additional setae very short; acrostichals narrowly biserial and diverging, short (0.06 mm), only about 5–6 setae in one row; dorsocentrals uniserial, evenly short and sparse anteriorly, posteriorly 1–2 longer pairs; notopleuron with 1–2 setae on posterior part, otherwise with only a few short setulae; 1 postalar and 1 pair of scutellar setae (with additional pair of small setulae laterally). **Wing** clear with yellowish veins, R_{4+5} and M_{1+2} in apical third almost parallel. Crossveins very broadly separated (on distance about 3–4X longer than length of r-m crossvein (rather narrow second basal cell much longer than first basal cell), vein CuA_1 vanishing before wing margin. CuA_2 slightly recurrent and slightly C-shaped, anal vein indistinct in basal part. Costal seta brownish yellow, short. Squama whitish with yellow fringes. Halter whitish. **Legs** yellow including tarsi. Coxae yellow with yellow setae. Fore femur distinctly thickened in basal third, ventral setae short. Fore tibia slightly spindle-shaped dilated, with brownish setulae dorsally and anteriorly. Mid femur distinctly narrower than fore femur, with 6–8 short pale posteroventral setae, anteroventrally with several pale setae somewhat longer than those forming two rows of dark ventral spines. Mid tibia with short blunt-tipped apical spur and usual row of black spines ventrally. Hind legs thin, without conspicuous setae. **Abdomen** brown, lustrous except finely microtrichose sides of tergites 1–3. All abdominal setae pale (brown on genital lamellae) and short (except long marginal setae on last sternite). Genitalia (Figs 5–7): left epandrial lamella (Fig. 7) with long setae in dorsoapical part; cerci (Fig. 6) short and rather broad; right epandrial lamella (Fig. 5) with short surstylus. **Female.** Unknown. **Length:** body 2.0–2.3 mm, wing 1.7–2.0 mm.

Etymology. The species name is derived from "anomalus" (= *anomalos*, Greek adjective meaning anomalous, irregular) referring to several anomalous features of this species (shortened vein CuA_1, greatly thickened stylus).

Distribution. Turkey, Aydın province.

Remarks. The species described above is closely allied to the Central Asian species, *P. farabiensis* Shamshev, 1998, and *P. tumidiarista* Barták & Shamshev, 2015. With darkened palpi, shape of left epandrial lamella, and narrower mid femur it is closer to the latter. From both species it differs in the structure of male genitalia (left epandrial lamella bears very long, dark posteriorly oriented setae in dorsal excision, broad apical projection, and

much longer setae ventrally). Moreover, the lustrous spot on the katepisternum is broader than in both species with which it is compared (broader than posterior microtrichose stripe), vein CuA_1, ending far before the wing margin (distance longer than lower crossvein), and clypeus is lustrous on ventral half. *Platypalpus anomalus* sp. nov. leads to couplet 158 in the key by Grootaert & Chvála (1992), but differs from any other species of this section by its thickened stylus.



FIGURES 5–7. *Platypalpus anomalus* **sp. nov. 5.** right epandrial lamella, lateral view. **6.** genitalia, dorsal view (right surstylus below). **7.** left epandrial lamella, lateral view.

***Platypalpus bohousi* sp. nov.**
(Figs 8–11, 29)

Type material. HOLOTYPE ♂, labelled: "TURCIA MER., 10 km E Mut, Bogcagiz 800 m, pine f. [= forest] + pasture, B. Mocek 1.v.1996" (CULSP). **PARATYPES**: 1♂, 1♀, same data as holotype; 1♀, Turcia mer., 10 km N Silifke Yenibahce 600 m, mixed forest, B. Mocek 1.v.1996—CULSP and MHK.

Diagnosis. Very small black species of the *P. hackmani* group with 2 pairs of vertical setae (inner inclinate, outer lateroclinate); antenna with basal two segments yellow, postpedicel black and broadly ovate; thorax entirely microtrichose including katepisternum, large setae dark; legs yellow with only last segment of all tarsi contrastingly black in male (less so in female), mid femur with distinct ventral spines, midtibial spur absent, lacking posteroventral setae on mid femur; abdomen microtrichose; left epandrial lamella shallowly excised.

Description. Male. Head black, grey microtrichose. Frons about 0.07 mm broad ventrally (wider than pedicel) and widening dorsally (about 0.12 mm broad on upper part at level of anterior ocellus). Face about 0.05 mm broad at middle (slightly shrunken in all specimens). Gena broad and microtrichose. Antenna (Fig. 8) with basal segments yellow to dirty yellow, postpedicel and stylus black; postpedicel broadly ovate, about 2.5–2.9X longer than broad, stylus slightly shorter than postpedicel. Clypeus microtrichose. Palpus brownish yellow, narrowly ovate, half as long as labrum, with 1 long dorsal and another shorter subterminal brownish yellow setae. Ocellar setae dark brown, about 0.12 mm long, otherwise ocellar tubercule with only two pairs of minute setulae. Two pairs of black, long vertical setae (outer lateroclinate as long as ocellars, inner inclinate even longer), inner verticals inserted wide apart (0.23 mm). Occiput sparsely setose, dorsal setae brown, ventral white and comparatively short. Proboscis

black, slightly less than half as long as head height. **Thorax** black, entirely grey microtrichose including katepisternum. Large setae black to brown, small setae brown, proepisternal seta pale. Chaetotaxy: postpronotal seta very long and inserted posteriorly, two additional rather strong setae on anterior part of postpronotum; acrostichals biserial (about 8 setae in a row), 0.06 mm long; dorsocentrals irregularly uniserial, last 3–4 pairs long (anterior one situated in about middle of mesoscutum); posthumeral seta present and long, notopleuron with two long setae and 2–4 additional smaller setae; 1 short supra-alar; 1 postalar and 1 pair of long scutellar setae (with additional pair of small hairs laterally). **Wing** clear with yellow veins, R_{4+5} and M_{1+2} evenly slightly diverging basally and almost parallel apically. Crossveins very narrowly separated. CuA_2 slightly recurrent and slightly bowed, anal vein depigmented and indistinct in basal portion. Costal seta brown and very long including additional smaller setae. Squama pale yellow with pale fringes. Halter whitish yellow. **Legs** yellow, last segment of all tarsi contrastingly black except basal third to fourth. Coxae with yellow setae, those on fore coxa very long and strong. Fore femur thickened, covered with short brown setae, preapicals slightly longer, anteroventrals short and pale, brown posteroventrals up to half as long as femur depth. Fore tibia slightly thickened, short and mostly pale setose. Mid femur much narrower than fore femur, with 2–3 brown anterior setae on apical part, preapical one long and strong, no posteroventral setae, ventrally with only posterior row of brown spine-like setae in basal third up to 0.05 mm long, shorter and paler apically. Mid tibia narrower than fore tibia, with single submedian anterodorsal black seta, ventrally with short black spine-like setae more distinct in apical half, no apical spur. Hind femur short setose ventrally. Hind tibia with two rather long and black anterodorsal setae, in submedian and preapical positions. **Abdomen** brown, rather sparsely grey microtrichose, tergites in some lights subshiny, genital lamellae partly lustrous. Abdominal setae mostly brown to brownish yellow and short. Genitalia (Figs 9–11) small, left epandrial lamella (Fig. 11) elongate and distinctly excised apically; cerci (Fig. 10) simple and digitiform; right epandrial lamella (Fig. 9) elongate-ovate and internally short setulose. **Female.** Similar to male except darker legs: fore and mid femora brownish yellow and hind femur almost brown, darkening of last tarsal segments not so strongly contrasting as in male. Two rows of ventral spines on mid femur more distinct, black even in anterior row. **Length:** body 1.9–2.1 mm, wing 1.9–2.0 mm.

Etymology. The species epithet, *bohousi*, is a Latin genitive patronym to honor our friend and collector of type series, Bohuslav (familiar form = Bohouš) Mocek.

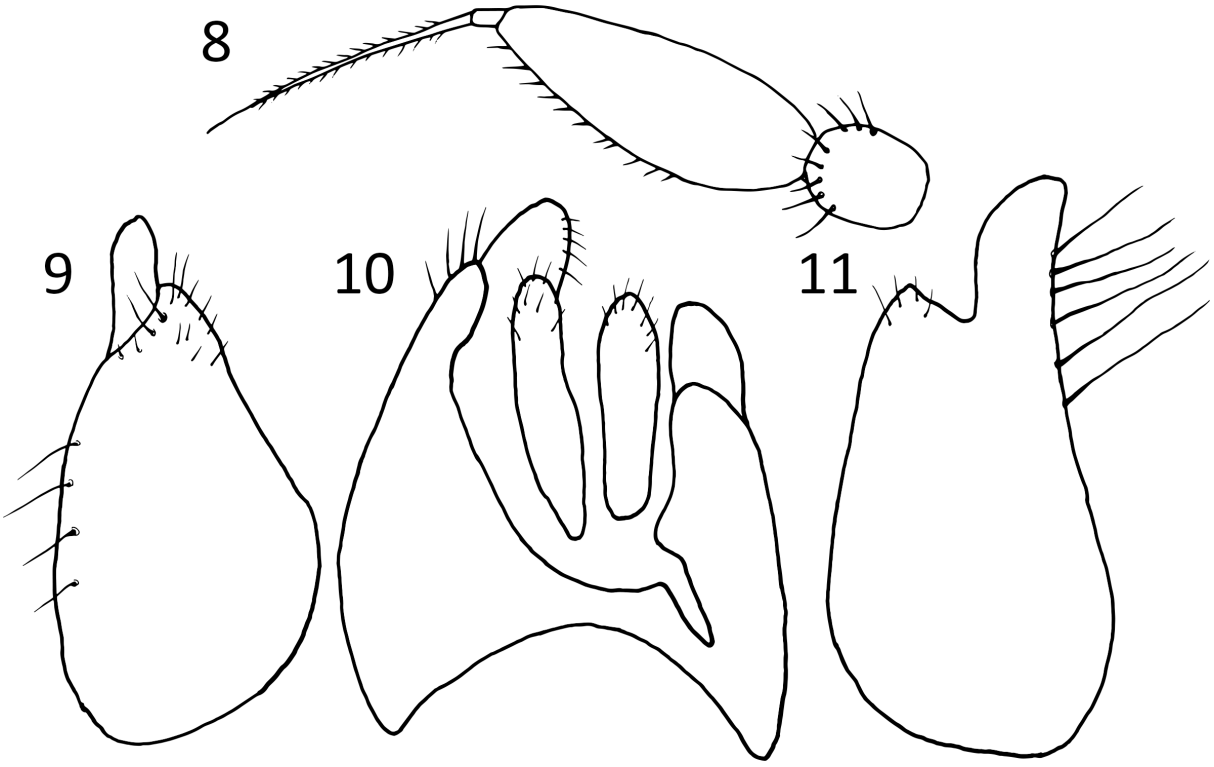
Distribution. Turkey, Mersin province.

Remarks. The species described above is allied to other species of the *P. hackmani* group with microtrichose abdomen and yellow basal antennal segments: comprising *P. dursuni* **sp. nov.**, *P. nanus* (Oldenberg, 1924) and *P. hallensis* Grootaert & Stark, 1997. These four species differ in shape of the postpedicel which is narrow and 3X as long as wide in *P. hallensis*, and broader in the remaining species: 1.5X as long as wide in *P. nanus* and 2.3–2.9X as long as wide in both *P. dursuni* and *P. bohousi*; further differences concern colouration of the male fore tarsus, which is completely yellow in *P. nanus*, yellow with dark last segment in *P. hallensis* and *P. bohousi* and yellow with segments 2–4 black on apical ¾ in *P. dursuni*; and they also differ in the shape of left epandrial lamella which is deeply excised in *P. nanus* (see Chvála 1989, fig. 71.), shallowly excised in *P. bohousi* **sp. nov.** (Fig. 11), triangular in *P. dursuni* **sp. nov.** (Fig. 18), and elongate with apical finger like and long setose process in *P. hallensis* (see Grootaert & Stark 1997, fig. 7.). Moreover, *P. hallensis* has a long proboscis (nearly as long as head height) and both *P. hallensis* and *P. nanus* have paler (yellow) large thoracic setae than both *P. dursuni* and *P. bohousi*. Also females may be distinguished according to the same characters (except genitalia). Compare also remarks under *Platypalpus* sp. nr. *hallensis*.

Both *Platypalpus dursuni* and *P. bohousi* may be distinguished in the key by Grootaert & Chvála (1992) modified as follows:

196 (195b)	Postpedicel at least 4X longer than broad. Katepisternum with a lustrous patch in middle. . . . . .canariensis Grootaert & Chvála, 1992
-	Postpedicel at most 3X longer than broad. Katepisternum entirely microtrichose. 196a
196a (196)	Legs dark brown. Antenna black. Mid femur without black spines ventrally (male unknown). . . . . minutissimus (Strobl, 1899)
-	Legs mostly yellow, only femora sometimes darkned. Basal antennal segments yellow to reddish yellow. Mid femur with distinct black spines ventrally 196b
196b (196a)	Male with left epandrial lamella without cleft. Segments 2–4 of fore tarsus with basal fourth whitish and apical part contrastingly black, segment 5 dirty yellow (Fig. 31). Female with all tarsal joints except basitarsi darkened, last two segments almost entirely darkened. . . . . dursuni **sp. nov.**

- Male with left epandrial lamella with shallow cleft. Segments 2–4 of fore tarsus yellow, segment 5 with apical part contrastingly black (Fig. 29). Female with only last segment of tarsi brown. . . . . .bohousi **sp. nov.**



FIGURES 8–11. *Platypalpus bohousi* **sp. nov. 8.** antenna. **9.** right epandrial lamella, lateral view. **10.** genitalia, dorsal view. **11.** left epandrial lamella, lateral view.

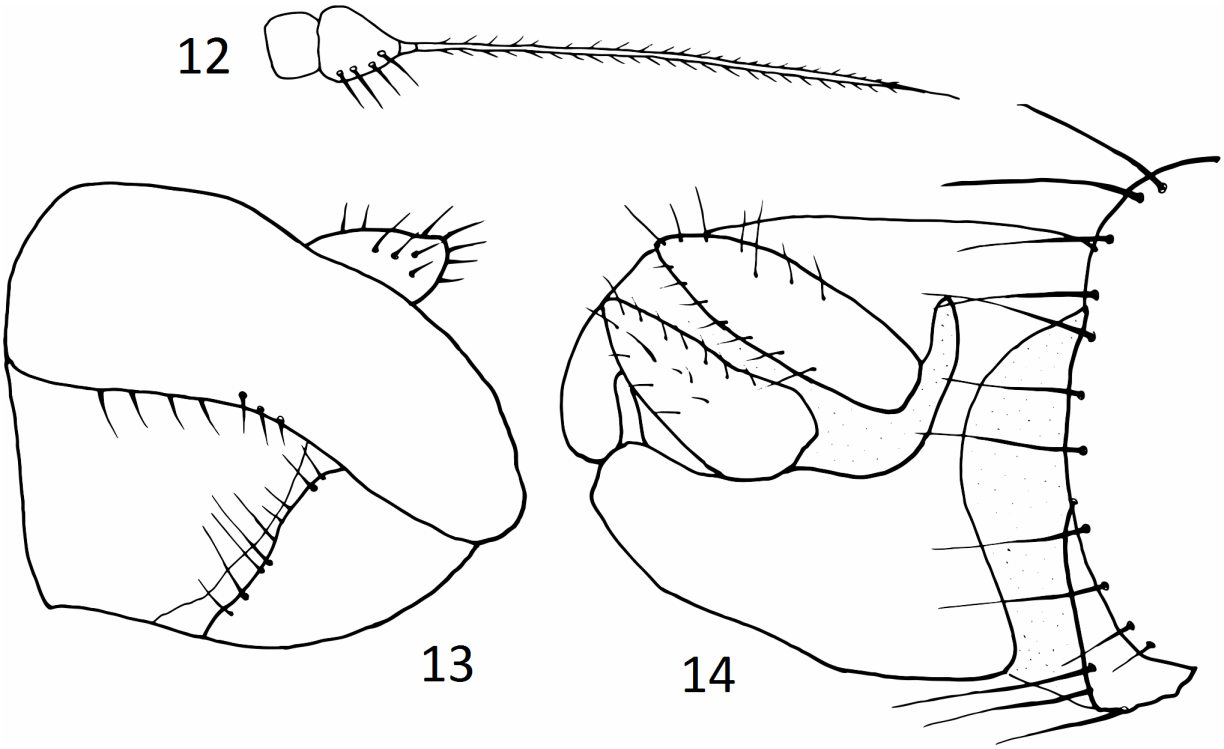
***Platypalpus diminuticornis* sp. nov.**
(Figs 12–14, 30)

Type material. HOLOTYPE ♂, labelled: "**TURKEY**, Muğla University campus, Malaise trap, 730 m, 37°09′38″N, 28°22′11″E, xi.2015–iv.2016, Barták, Kubík" (CULSP). **PARATYPES:** 1♀, same locality, Malaise trap, 710 m, 37°09′39″N, 28°22′20″E, Barták, Kubík, xi.2012–iii.2013; 4♀, same locality, 720 m, 37°09′42″N, 28°22′13″E, H. Kavak, i.2015—all CULSP.

Diagnosis. Black species of the *P. longicornis* group with 2 pairs of vertical setae (inner inclinate, outer lateroclinate); antenna black, postpedicel subequally long as broad, stylus 10X longer than postpedicel; thorax microtrichose except lustrous spot on katepisternum; mid tibial spur very short, lacking posteroventral setae on mid femur; abdomen microtrichose.

Description. Male. Head black, grey microtrichose. Frons about 0.07 mm broad and almost parallel-sided on lower part (about as broad as pedicel), widening dorsally and about 0.12 mm broad on upper part at level of anterior ocellus. Face about 0.04 mm broad at middle. Gena very narrow and lustrous. Antenna (Fig. 12) black; postpedicel subequally long as broad, stylus about 10X longer than postpedicel. Clypeus microtrichose. Palpus brown, broadly ovate, half as long as labrum, with 1 long and 2 shorter subterminal yellowish brown setae. Ocellar setae black, about 0.22 mm long, second pair unusually long (2/3 length of first pair). Two pairs of long black vertical setae (outer lateroclinate pair as long as ocellars, inner inclinate pair even longer), inner pair inserted wide apart (0.22 mm). Occiput short black setose dorsally and longer whitish setose ventrally. Proboscis black, slightly more than half as long as head height. Compound eye distinctly kidney-shaped incised posteriorly. **Thorax** black, entirely grey microtrichose, katepisternum broadly lustrous, leaving narrow microtrichose stripe on posterior part and in posterodosal corner. All setae black to brown, only several very small setulae on notopleuron pale. Chaetotaxy: postpronotal seta long accompanied with two rather long setae and several very short hairs; acrostichals irregularly 6-serial on broad median stripe, short (about 0.06 mm), more than 15 setae in one row;

dorsocentrals evenly short, irregularly arranged, nearly uniserial, but with several setae scattered laterad, last two pairs strong and long; notopleuron with 2 long setae on posterior part, otherwise only sparsely setulose; 1 postalar and 1 pair of long scutellar setae (with additional pair of small hairs laterally). **Wing** clear with brown veins, R_{4+5} and M_{1+2} in apical third almost parallel. Crossveins very narrowly separated. CuA_2 recurrent and slightly S-shaped, anal vein depigmented but distinct along entire length. Costal seta brown, costal swelling near tip of R_1 dark. Squama pale yellow with darker margin and long white fringes. Halter whitish yellow. **Legs** brown, distal parts of fore and mid femora brownish yellow, fore and mid tibiae and all basitarsi brownish yellow. Distal parts of tarsi darkened but not distinctly annulated. Coxae brown. Legs with most setae and setulae pale but also with irregularly arranged dark setae. Fore femur not much thickened, ventral setae slightly shorter than femur depth. Fore tibia narrow, short setose. Mid femur slightly swollen (only slightly deeper than fore femur), without posteroventral setae but spine-like setae in ventral rows rather long. Mid tibia with very short blunt-tipped apical spur. Hind legs thin, femur short setose ventrally. **Abdomen** black, entirely rather light grey microtrichose except lustrous genital lamellae. All abdominal setae pale and short except longer marginal setae on last three segments. Genitalia small (not dissected in only male (holotype)) with left epandrial lamella (Fig. 13) simple narrowly oblong, with rounded tip and row of several short setae ventrally, cerci simple and digitiform (Fig. 14), short, left one narrower and longer than right one. **Female.** Similar to male except darker legs: parts brown in male are nearly black and parts brownish yellow in male rather yellowish brown. **Length:** body 3.3 mm (male holotype), female up to 4 mm (due to exposed abdomen), wing 3.6–4.0 mm.



FIGURES 12–14. *Platypalpus diminuticornis* **sp. nov. 12.** antenna. **13.** genitalia, from left side. **14.** genitalia, dorsal view.

Etymology. The species name is derived from very short postpedicel (diminutus, Latin, meaning reduced).

Distribution. Turkey, Muğla province.

Remarks. The species described above can be easily recognized according to the very short postpedicel and entirely microtrichose abdomen in both sexes. It somewhat resembles *P. agnitus* Collin, 1960, described and up to now known only from Israel, but this species has biserial acrostichals, much shorter stylus (about twice as long as postpedicel) and 4–5 notopleurals.

Platypalpus diminuticornis **sp. nov.** may be arranged in the key by Grootaert & Chvála (1992) as follows:

207 (206)	Postpedicel at most 2.7X as long as deep 208a
-	Postpedicel at least 3X as long as deep. 209
208a (207)	Postpedicel subequally long as deep, stylus 10X longer. Abdomen entirely microtrichose in both sexes except lustrous

	male genitalia (Fig. 30)	*diminuticornis* **sp. nov.**
-	Postpedicel longer than deep, stylus at most twice as long as postpedicel. Abdomen lustrous	208b
208b (208a)	Palpus and fore coxa yellow; acr 3–4 serial; smaller species (1.9–2.1 mm)	*maltensis* Grootaert & Chvála, 1992
-	Palpus blackish brown; fore coxa black; acr 6-serial; larger species (body 2.4–3.3 mm)	*nigricoxa* (Mik, 1884)

***Platypalpus dursuni* sp. nov.**
(Figs 15–18, 31)

Type material. HOLOTYPE ♂, labelled: "Turkey, 13 km NE of Mugla, pine wood + pasture, 37°15′N, 28°30′E, 1100–1300 m, Barták, Kubík, 2.-3.v.2016" (CULSP). **PARATYPES:** 1♂, 2♀, same data as holotype (CULSP).

Diagnosis. Very small black species of the *P. hackmani* group with 2 pairs of vertical setae (inner inclinate, outer lateroclinate); antenna with basal two segments yellow, postpedicel black; thorax entirely microtrichose including katepisternum, large setae dark; legs yellow with segments 2–4 of fore tarsi contrastingly black in male, mid femur with distinct ventral spines, midtibial spur absent, lacking posteroventral setae on mid femur; abdomen microtrichose; left epandrial lamella triangular.

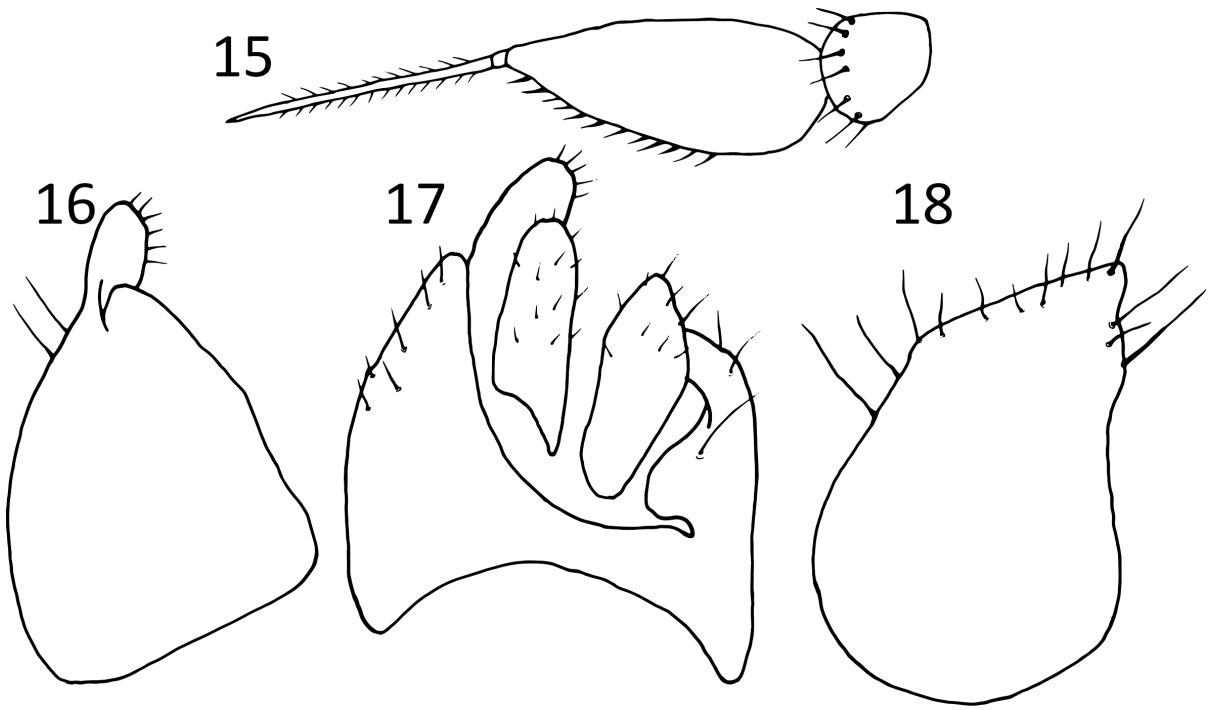
Description. Male. Head black, face and genae yellow, grey microtrichose. Frons about 0.07 mm broad ventrally (wider than pedicel) and widening dorsally (about 0.12 mm broad on upper part at level of anterior ocellus). Face about 0.06 mm broad at middle, almost parallel-sided. Gena broad and microtrichose. Antenna (Fig. 15) with basal segments yellow, postpedicel and stylus black; postpedicel broadly ovate, 2.3X longer than broad, stylus subequally long. Clypeus microtrichose. Palpus yellow, narrowly ovate, less than half as long as labrum, with 1 yellow dorsal seta and several very small additional setae. Ocellar setae dark brown, about 0.15 mm long, ocellar tubercule with two pairs of minute additional setulae. Two pairs of long black vertical setae (outer lateroclinate pair as long as ocellars, inner pair even longer), inner pair inserted wide apart (0.19 mm). Occiput sparsely and rather long setose, dorsal setae brownish yellow, ventral setae white and comparatively short. Proboscis black, half as long as head height. **Thorax** black, entirely grey microtrichose including katepisternum. Large setae black to brown and strikingly long, small setae brownish yellow, proepisternal seta yellow. Chaetotaxy: postpronotal seta very long and inserted posteriorly, two additional setae shorter and other short pale setae inserted on anterior part of postpronotum; acrostichals biserial (about 7 setae in a row), 0.07 mm long; dorsocentrals irregularly uniserial, first 2–3 pairs short, last 3–4 pairs long (anterior one situated anterior to middle of mesoscutum); posthumeral seta present and long, notopleuron with two long setae and 2–4 additional smaller setae; 1 short supraalar; 1 postalar and 1 pair of long scutellar setae (with additional pair of smaller setae laterally). **Wing** clear with yellow veins, R_{4+5} and M_{1+2} evenly slightly diverging, vein R_{4+5} slightly bowed towards C apically. Crossveins narrowly separated. CuA_2 nearly perpendicular and slightly bowed, anal vein depigmented and indistinct in basal portion. Costal seta brown and very long, also second costal seta strong in male paratype. Squama pale yellow with pale fringes. Halter whitish yellow. **Legs** clear yellow, segments 2–4 of fore tarsus contrastingly black (except basalmost parts), mid and hind tarsi yellow with slightly darkened tips of last 3–4 segments (not contrastingly and no annulations). Coxae with yellow setae, those on fore coxa very long and strong. Fore femur thickened (1.4X broader than mid femur - measured at broadest points), covered with short pale setae except somewhat longer preapicals, anteroventrals short, posteroventrals about one-third as long as femur depth. Fore tibia slightly thickened, short and mostly pale setose, with 1–2 rather long dark anterodorsals. Mid femur much narrower than fore femur, with two long brown anterior setae on apical part, no posteroventral setae, ventrally with two rows of dark spine-like setae, those in posterior row up to 0.05 mm long on basal third becoming shorter and paler apically. Mid tibia narrower than fore tibia, with 1–2 black anterodorsal setae, ventrally with short black spine-like setae less distinct in proximal half, no apical spur. Hind femur relatively strong, short setose ventrally, with longer dark preapicals. Hind tibia with two rather long and black anterodorsal setae (submedian and preapical). **Abdomen** brown, rather sparsely grey microtrichose, tergites in some lights subshiny, genital lamellae lustrous. Abdominal setae mostly brownish yellow to brown and short. Genitalia (Figs 16–18) small, left epandrial lamella (Fig. 18) triangular-shaped apically, cerci (Fig. 17) short and simply digitiform, left cercus slightly broader than right one, right epandrial lamella (Fig. 16) oval, surstylus with distinct small setae. **Female.** Similar to male, except as follows: face darker, yellowish parts confined to middle of gena; fore femur with yellowish brown ring occupying middle half of femur, mid and hind femora only slightly shadowed middorsally; tarsal joints (except basitarsi) of all legs darkened apically, least two segments almost entirely brownish yellow to yellowish brown.

Length: body 1.9 mm (male), 2.0–2.1 mm (female), wing 1.8–2.0 mm.

Etymology. The species epithet, *dursuni*, is a Latin genitive patronym to honor Oktay Dursun for his help during our expeditions.

Distribution. Turkey, Muğla province.

Remarks. The species described above is very closely allied to *P. bohousi* **sp. nov.** For differential diagnosis see remarks under the latter species.



FIGURES 15–18. *Platypalpus dursuni* **sp. nov. 15.** antenna. **16.** right epandrial lamella, lateral view. **17.** genitalia, dorsal view. **18.** left epandrial lamella, lateral view.

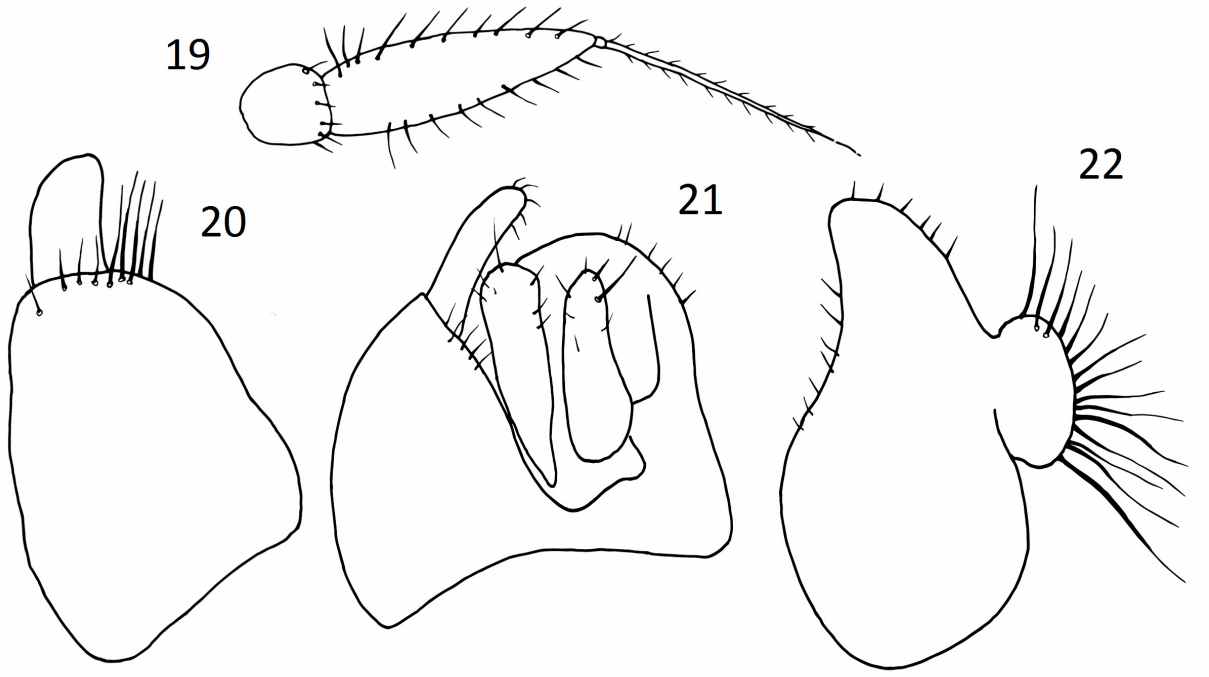
***Platypalpus moceki* sp. nov.**
(Figs 19–22, 32)

Type material. HOLOTYPE ♂, labelled: "TURCIA MER., 10 km E Mut, Bogcagiz 800 m, pine f. [= forest] + pasture, B. Mocek 1.5.1996" (CULSP). **PARATYPES:** 6♂, 7♀, same data as holotype (CULSP and MHK); 1♀, Turcia mer, 10 km N Silifke, Yenibahce 600 m, mixed forest B. Mocek, 1.v.1996 (CULSP).

Diagnosis. Yellow species of the *P. pallidiventris—cursitans* group with 2 pairs of vertical setae; thorax microtrichose except lustrous spot on katepisternum in male, central part of mesoscutum lustrous in female; mid tibial spur blunt in both sexes (in male with saddle-like apex armed with spine-like seta); long sparse pale posteroventral setae on mid femur.

Description. Male. Head black with lower part of frons, face, gena and clypeus more or less (variable) yellowish to yellow, very light (almost silvery) grey microtrichose, all setae whitish yellow. Frons about 0.07 mm broad on lower part (about as broad as pedicel but slightly collapsed in all specimens), slightly widening dorsally. Face broader than frons (about 0.10 mm broad at middle), distinctly keel-like protruding. Gena broad, microtrichose. Antenna (Fig. 19) with both basal segments yellow, postpedicel yellow basally and darkened in apical half to fifth (variable), stylus brown; postpedicel 2.8–3.3X longer than broad, stylus about as long as postpedicel. Clypeus microtrichose. Palpus broadly ovate and distinctly tipped, pale yellow, about 3/4 as long as proboscis, with 1–2 subterminal white seta(e). Ocellar setae whitish yellow and long (about 0.18 mm), posterior pair half as long. Two pairs of pale vertical setae, outer pair lateroclinate and about as long as ocellars, inner pair inclinate and slightly longer, inserted 0.15 mm apart. Occiput whitish yellow setose, setae shorter on dorsal half and longer on ventral part. Proboscis blackish brown, half as long as head height or slightly less. **Thorax** entirely

yellow, microtrichose (only narrow stripe below acrostichals devoid of microtrichia), katepisternum narrowly lustrous, leaving microtrichose stripes on both anterior and posterior parts. All setae whitish yellow. Chaetotaxy: postpronotal seta long and strong accompanied with several short setulae; acrostichals nearly regularly narrowly biserial and slightly diverging, about 0.07 mm long, about 10 setae in one row; dorsocentrals equally long and irregularly 2–3 serial, last pair long, prescutellar depression with setae; notopleuron usually with two setae on posterior part (lower one sometimes reduced) and several additional short setae; 1 long postalar and 1 pair of long scutellar setae (mostly with additional pair of small hairs laterally). **Wing** clear with pale veins. R_{4+5} and M_{1+2} slightly converging apically. Crossveins broadly separated. CuA_2 slightly recurrent to almost perpendicular, almost straight and shortened. Costal seta moderately long, yellow. Squama pale yellow with yellow fringes. Halter pale yellow. **Legs** entirely yellow including coxae and last tarsomeres (only with small dark dots on trochanters and apically darkened midtibial spur). Most setae whitish yellow except ventral spines on mid femur and tibia, some larger setae darkened. Fore femur thickened; rows of antero- and posteroventral setae slightly shorter than half of femur depth. Fore tibia slightly spindle-like dilated, short setose, setae mixed yellow and brown. Mid femur about as deep as fore femur (but longer), with several long, pale posteroventral setae. Mid tibia with apical spur as long as tibia depth, rather saddle-like excavated apically, ending with spine-like seta. Hind legs thin, femur short setose ventrally. **Abdomen** yellow including genitalia (with exception of brown hypandrium). Tergite 2 nearly completely microtrichose on lateral parts, tergite 3 with basal half microtrichose laterally and tergite 4 with basal third microtrichose, remaining parts including venter and epandrial lamellae lustrous. All abdominal setae pale and moderately long. Genitalia (Figs 20–22): left epandial lamella (Fig. 22) elongate, short setose dorsally and apically,



FIGURES 19–22. *Platypalpus moceki* **sp. nov. 19.** antenna. **20.** right epandrial lamella, lateral view. **21.** genitalia, dorsal view. **22.** left epandrial lamella, lateral view.

with very long ventral outgrowth only narrowly connected with lamella bearing more than 30 long setae (about 0.20 mm long but appearing shorter on figure illustrated from standardized plane); cerci digitiform and short (Fig. 21), right epandrial lamella (Fig. 20) broadly ovate, with ovate surstylus bearing small setae ventrally. **Female.** Similar to male except as follows: central disc of mesoscutum lustrous leaving postpronotum, narrow stripe along postpronotum, notopleuron, scutellum and narrow stripe on lateral parts microtrichose; midtibial spur of different shape: rounded, in lateral view with flat ventral part and more convex dorsal side (without sadle-like excavation); abdominal tergites more lustrous (only tergites 1–2 and last three tergites and last sternite microtrichose and darkened); postpedicel in most specimens darker, yellow only on basal part. **Length:** body 2.4–3.0 mm, wing 2.4–3.4 mm.

Etymology. The species epithet, *moceki*, is a Latin genitive patronym to honor Dr. Bohuslav Mocek (Hradec Králové), the collector of type series.

Distribution. Turkey, Mersin province.

Remarks. The species described above is most allied to the recently described species, *P. amankutanensis* Barták & Shamshev, 2015. The latter species has a sharp midtibial spur in both sexes and quite different male genitalia (lateral lamella without setose outgrowth). Moreover, sexual dimorphism in microtrichosity of mesoscutum is rare feature in the genus *Platypalpus*.

The species described above may be only with difficulties arranged into the key by Grootaert & Chvála (1992) due to controversies in couplet 18 (the species does not run to couplet 19 nor to 21). Deeper changes are necessary to re-arrange species under couplet 18.

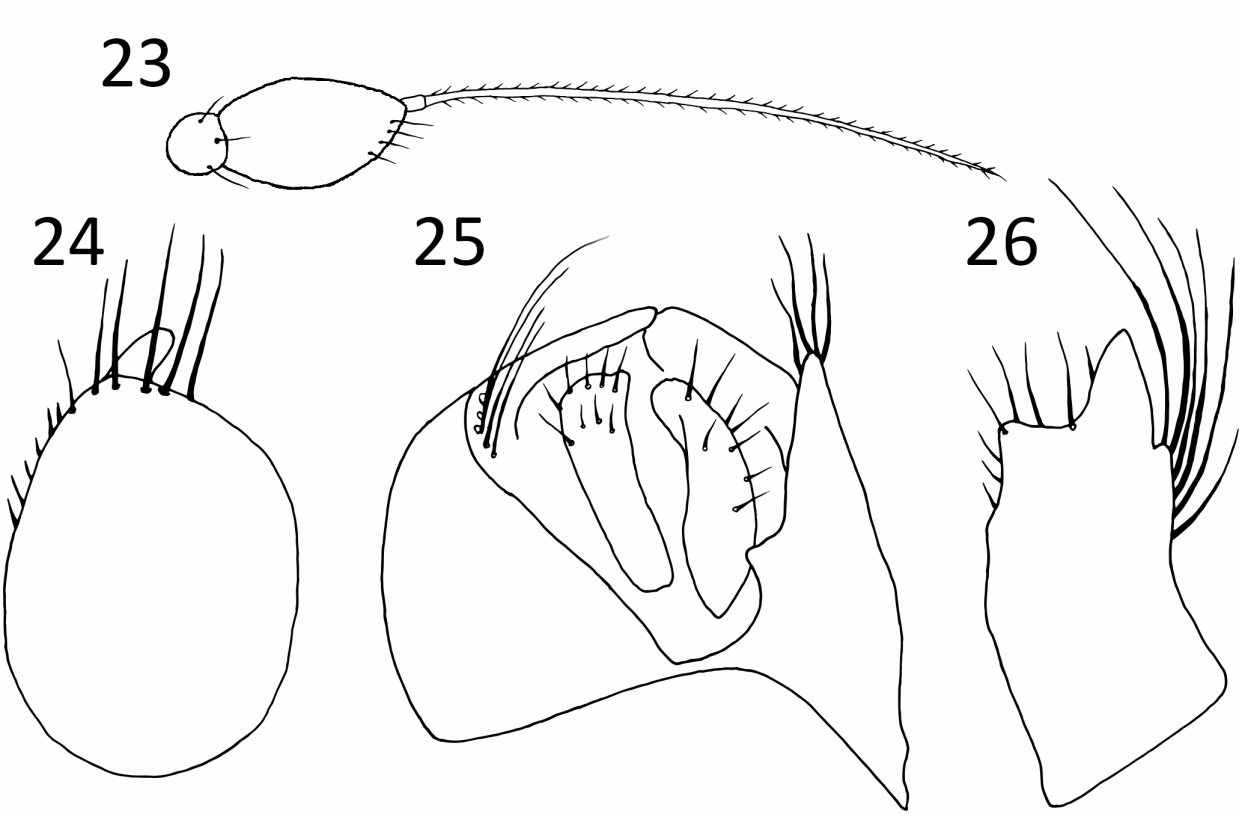
***Platypalpus seticauda* sp. nov.**
(Figs 23–26, 33)

Type material. HOLOTYPE ♂, labelled: "Turkey: 8 km S of Çine, river bank, 68 m, sw [= sweeping vegetation], 37°32′34″N, 28°03′46″E, Barták, Kubík, 29.iv.–1.v.2016" (CULSP). **PARATYPES:** 1♂, 2♀, same data as holotype (CULSP).

Diagnosis. Small black species of the *P. minutus* group with 1 pair of vertical setae; mesoscutum lustrous except narrow lateral margins, pleura microtrichose except largely lustrous katepisternum, anepisternum with small lustrous spot and meron subshiny; mid tibial spur short and blunt in both sexes; long sparse pale posteroventral setae on mid femur.

Description. Male. Head black, rather light grey microtrichose, all setae yellow. Frons about 0.06 mm broad on lower part (slightly wider than pedicel) slightly widening dorsally (0.08 mm broad at level of front ocellus). Face narrower than frons (about 0.04 mm broad at middle but distinctly widening ventrally. Gena medium wide, lustrous. Antenna (Fig. 23) black including stylus; postpedicel small and rather broad basally, 1.5–1.8X longer than broad, stylus 2.6–2.7X longer than postpedicel. Clypeus lustrous. Palpus yellow, broadly ovate, half as long as proboscis, with 3–4 white setae. Ocellar setae yellow and short (about 0.08 mm), posterior setulae very short. Single inclinate pair of pale vertical setae equally small as ocellars and inserted conspicuously wide apart (0.18 mm). Occiput short yellow setose dorsally and somewhat longer setose ventrally. Proboscis blackish brown, slightly less than half as long as head height. **Thorax** black, mesoscutum lustrous (from antepronotum to margin of scutellum), microtrichose parts: postpronotum, notopleuron, postalar calli and scutellum; pleura microtrichose except following parts: katepisternum broadly lustrous (almost up to hind margin), anepisternum with small lustrous spot in middle and meron broadly sublustrous (similarly as in *P. albifacies* (Collin, 1926)). All setae yellow. Chaetotaxy: postpronotal seta long and strong, accompanied with several short setulae; acrostichals biserial and short (0.04 mm) and few in numbers (4–5 pairs); dorsocentrals only slightly longer, uniserial, 5–6 in a row ending in single long seta; notopleuron with single long seta inserted in microtrichose part and several additional small setae; 1 postalar and 1 pair of scutellar setae (with additional pair of small setulae laterally). **Wing** clear with yellow to slightly brownish yellow veins. R_{4+5} and M_{1+2} parallel in apical half. Crossveins narrowly separated. CuA_2 almost perpendicular, almost straight, basal part of anal vein indistinct. Costal seta moderately long, yellow. Squama yellow with yellow fringes. Halter whitish yellow. **Legs** entirely yellow including all coxae (except small dark dots on trochanters), last tarsal joints slightly darkened. Nearly all setae on femora and tibiae yellow (except ventral spines on mid femur and tibia). Fore femur thickened, sparse rows of antero- and posteroventral setae about half of femur depth, several strong but short preapicals. Fore tibia spindle-like dilated, short setose, with several short and fine dark setae dorsally. Mid femur approximately equally deep as fore femur, with several long pale posteroventral setae, anterior of two ventral rows of spines consists of very short setae, nearly as short as their warts. Mid tibia with apical spur shorter than tibia depth, yellow and flattened, appearing sharp in lateral view but broadly rounded in ventral view. Basal part of hind femur curved (bowed dorsolaterally), short setose. Hind tibia thin and short setose. **Abdomen** brownish black, lustrous, with only sides of first two tergites microtrichose. All abdominal setae pale (except brown large setae on right epandrial lamella) and short (except several longer setae laterally on last abdominal segments). Genitalia (Figs 24–26) very distinctive: left epandrial lamella (Fig. 26) shallowly excised apically, bearing very long setae on small tubercule, setae arched, but if stretched, would be up to

0.30 mm long; cerci (Fig. 25) short and digitiform, right cercus apically broad with short, inner apical lobe and left cercus slightly arched medially; right epandrial lamella (Fig. 24) broadly ovate, with short simple surstylus. **Female.** Very similar to male, basal abdominal tergites more lustrous (with only slight indication of microtrichosity) and last two segments microtrichose. **Length:** body 1.9–2.0 mm (female up to 2.3 mm due to somewhat stretched abdomen), wing 2.0–2.3 mm.



FIGURES 23–26. *Platypalpus seticauda* **sp. nov. 23.** antenna, **24.** right epandrial lamella, lateral view. **25.** genitalia, dorsal view. **26.** left epandrial lamella, lateral view.

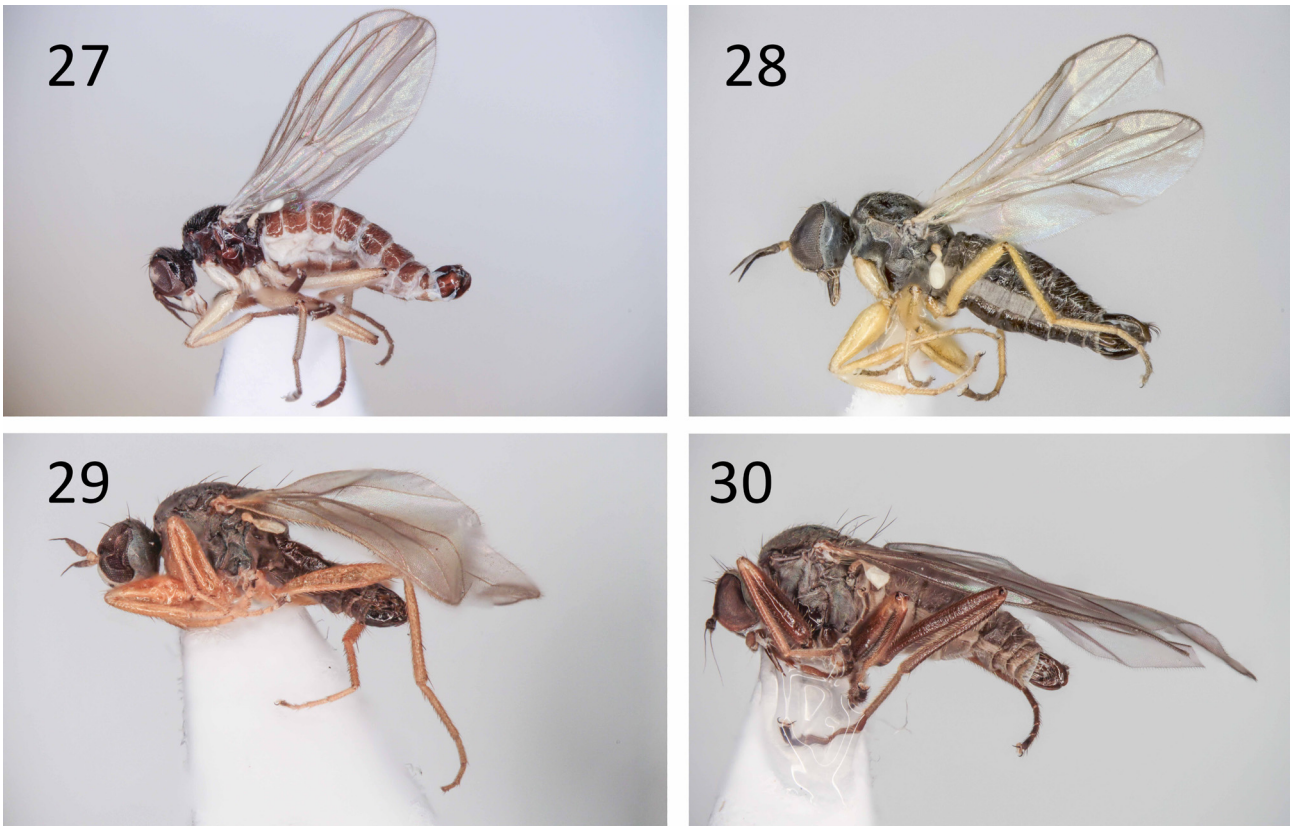
Etymology. The species name reflects extremely long setae on left epandrial lamella.

Distribution. Turkey, Aydın province.

Remarks. The species described above may be easily recognized by the extremely long ventral setae on the left epandrial lamella. It is similar to *P. zernyi* Chvála, 1975, described from South Spain. Besides many small differences in colour of tarsi (*P. zernyi* has annulated tarsi with last two segments entirely dark), length of vertical setae (long in *P. zernyi*), number of notopleural setae (two in *P. zernyi*), length of stylus (2.3X longer than postpedicel in *P. zernyi*), the most obvious differences are in microtrichosity pattern on pleura (lustrous in *P. zernyi*) and ventral setosity of left epandrial lamella (with much shorter setae in *P. zernyi*). The above described species should be also compared with *P. javieri* Grootaert, 1995, however, this species has, beside other differences, pointed midtibial spur.

Platypalpus seticauda **sp. nov.** may be arranged in the key by Grootaert & Chvála (1992) as follows:

61 (60)	Pleura densely grey microtrichose, except for polished katepisternum; large thoracic bristles black (Canary Islands) . . . . . *argenteomicans* (Becker, 1908)
-	Anepisternum and/or meron polished at least in central part; large thoracic setae yellow to yellowish bown 61b
61b (61)	Meron dusted; midtibial spur pointed, black . . . . . *javieri* Grootaert, 1995
-	Meron lustrous to sublustrous; midtibial spur blunt, yellow 61c
61c (61b)	Tarsi black annulated; anepisternum broadly lustrous; left epandrial lamella ventrally with setae about 0.15 mm long . . . . . *zernyi* Chvála, 1975
-	Tarsi yellow with only last segment darkened, no anulations (Fig. 33); anepisternum with small lustrous spot in middle; left epandrial lamella ventrally with setae up to 0.30 mm long . . . . . *seticauda* **sp. nov.**



FIGURES 27–30. Holotypes. **27.** *Platypalpus academicus* **sp. nov. 28.** *Platypalpus anomalus* **sp. nov. 29.** *Platypalpus bohousi* **sp. nov. 30.** *Platypalpus diminuticornis* **sp. nov.**

Faunistic records

Arrangement of taxa follows Sinclair & Cumming (2006).

Subfamily Trichininae

Trichina elongata Haliday, 1833

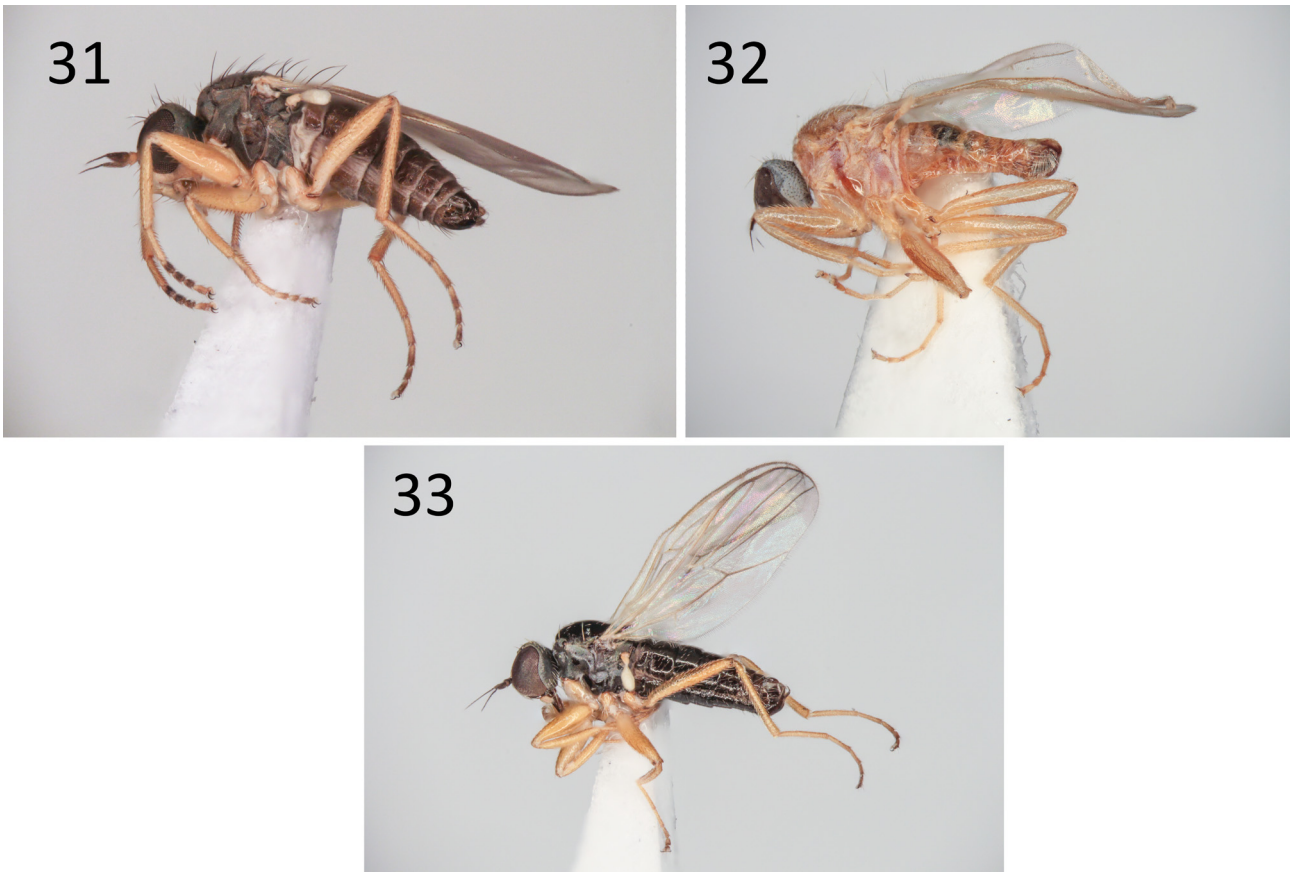
Material examined. Muğla prov.: 2♂, 2♀, Muğla University campus, 710 m, 37°09′39″N, 28°22′20″E, MT, edge of pine wood + Quercus shrubs, xi.2012-iii.2013; 1♀, same locality, 730 m, xi.2015–iv.2016, MT, 37°09′38″N, 28°22′11″E, Barták, Kubík—all CULSP.

Remarks. Known from most European countries including Russia but interestingly, until now not known from the southern states. This is the first record for Turkey and, simultaneously, southernmost record of this species.

Trichina unilobata Chvála, 1981

Material examined. Isparta prov.: 1♂, Kasnak Mesesi NP, 1050 m, 5.iii.2007 (CULSP).

Remarks. Species known up to present only from the type locality in Spain. In CULSP collections there are also specimens from France. This is the first record for Turkey.



FIGURES 31–33. Holotypes. **31.** *Platypalpus dursuni* **sp. nov. 32.** *Platypalpus moceki* **sp. nov. 33.** *Platypalpus seticauda* **sp. nov.**

Subfamily Ocydrominae

***Leptopeza flavipes* (Meigen, 1820)**

Material examined. Samsun prov.: 1♀, Samsun University campus, 41°22′N, 36°11′E, Barták, Kubík, 22.vi.–4.vii.2014 (CULSP).

Remarks. Holarctic species, in Europe distributed nearly everywhere, in Asia up to Far East. This is the first record for Turkey.

***Oropezella sphenoptera* (Loew, 1873)**

Material examined. Muğla prov.: 1♂, Toparlar, lowland forest, SW, 36°58′39″N, 28°39′30″E, Barták, Kubík, 5–7.v.2013 (CULSP).

Remarks. Species distributed in Europe except northern parts. In CULSP collections there are specimens also from Israel. This is the first record for Turkey.

Subfamily Tachydromiinae

***Platypalpus albiseta* (Panzer, 1806)**

Material examined. Aydın prov.: 3♂, 8 km S of Çine, river bank, 68 m, SW, 37°32′34″N, 28°03′46″E, Barták,

Kubík, 29.iv.–1.v.2016; **Muğla** prov.: 4♂, Akyaka, river bank + salty meadow, 37°03′16″N, 28°19′57″E, Barták, Kubík, 16–27.v.2011; 3♂, Akyaka, pasture, 4 m, 37°03′09″N, 28°20′17″E, Barták, Kubík, 16–27.ix.2012; 1♂, same locality, 37°03′19″N, 28°20′07″E, 28.iv.–8.v.2013, 6 m; 1♂, Akyaka, 40 m, forest, SW, 37°03′19″N, 28°19′36″E, Barták, Kubík, 26.iv.2016; 2♂, Toparlar, lowland forest, 36°58′39″N, 28°39′30″E, SW, Barták, Kubík, 5–7.v.2013; **Samsun** prov.: 2♂, Samsun University campus, 41°22′N, 36°11′E, Barták, Kubík, 22.vi.–4.vii.2014—all CULSP.

Remarks. Broadly distributed species in temperate and North Erurope (interestingly, until now unknown from southern states), eastwards to Georgia and Armenia. There are an additional 11♀ in CULSP collection from the same localities as mentioned above but they cannot be identified with certainty, so the records are omitted here. These are the first records for Turkey.

Platypalpus anatolicus Grootaert, 2008

Material examined. Muğla prov.: 1♂, Mugla University campus, MT, 720 m, 37°09′42″N, 28°22′13″E, H. Kavak, 26.v.–26.vi.2015 (CULSP).

Remarks. The species was described from Turkey. The postpedicel in our specimen is 2.5–2.6X longer than wide which corresponds to the measurement taken from the figure in Grootaert (2008, fig. 1); however, according to the original description the postpedicel is apparently "3X longer" longer than wide.

Platypalpus annulatus (Fallén, 1815)

Material examined. Aydın prov.: 6♂, 3♀, 8 km S of Çine, river bank, 68 m, PT, 37°32′34″N, 28°03′46″E, Barták, Kubík, 29.iv.–1.v.2016; **Gaziantep** prov.: 1♂, 3♀, Birecik E from Gaziantep, pastures SE from town, 37.00N, 38.00E env. [= environment], V. Vrabec 24–25.iv.1997; **Hatay** prov.: 1♂, Turkey, Ceulik nr. Samandag, meadow nr. Titus Tünneli env., 36.07°N, 35.52E env., V. Vrabec 2–23.iv.1997; **Muğla** prov.: 2♂, 1♀, same data, 21.ix.2012; 1♂, Akyaka, salty meadow, SW + PT, 37°02′53″N, 28°19′39″E, Barták, Kubík, 28.iv.-9.v.2013; 1♂, Akyaka, pasture, 37°03′19″N, 28°20′07″E, Barták, Kubík, 28.iv.-8.v.2013; 1♂, Merkez co. Yenice, 8.x.2006—all CULSP.

Remarks. Broadly distributed species in Western Palaearctic, from North Africa to Scandinavia (but rare in the North), eastwards to Turkmenistan, and also the Nearctic Region. Specimens from Turkey have entirely yellow legs similar to many other specimens from Mediterranean countries in CULSP collections. These are the first records for Turkey.

Platypalpus annulitarsis Kovalev, 1978

Material examined. Czech Republic: Podyjí NP, Široké pole, meadow + river corridor 270 m, 48°51′30″N, 15°51′01″E, MT, Barták, Kubík, 2.vii.–9.viii.2003 (CULSP, previously published by Barták *et al*. 2005); **France:** 2♂, Luz-Saint-Sauveur, pasture nr. brook 630 m, 42°53′47″N, 0°01′42″W, 12–13.vii.2009, SW (CULSP); **Turkey: Hatay** prov.: 3♂, 6♀, 20 km W Antakya, Çevlik, undecidouous [= evergreen] forest, B. Mocek, 3.v.1996 (CULSP, MHK).

Remarks. The Turkish specimens of *P. annulitarsis* have a yellow postpedicel and abdomen and is identified in the key by Grootaert & Chvála (1992) as *P. villeneuvi* (Becker, 1910). The latter species was redescribed by Grootaert & Chvála (1992) on the basis of a female holotype from Corsica. Males remain unknown and therefore it is impossible to formally synonymize both species unless additional material from the type locality, including males are collected. Turkish specimens agree in all details with the original description of *P. anulitarsis* (Kovalev 1978) (including details of the male genitalia, midtibial spur, etc.) except size, colour of abdomen and shape and colour of antenna. These are the first records for Turkey.

For clarity, all differences between specimens from France and Turkey, redescription of *P. villeneuvi* by Grootaert & Chvála (1992) and the original description (Kovalev 1978) of *P. anulitarsis* are summarized in Table 1.

TABLE 1. Differences between *P. villeneuvi* (only female known) and *P. annulitarsis* from various locations.

	P. villeneuvi (♀) (after Grootaert & Chvála 1992)	***P. annulitarsis*** (♂) (after Kovalev 1978)	***P. annulitarsis*** France (♂)	***P. annulitarsis*** Turkey (♂)
Postpedicel colour	Pale yellow with black extreme tip	Orange-yellow in basal half and darkened apically	Yellow in basal third, darkened (yellowish brown) apically	Orange-yellow
Postpedicel length: width	More than 2X (2.26 measured from picture)	2.2–2.45	2.4–2.6	1.7–1.8
Colour of abdomen	Yellowish, sides of tergites 3 to 5 darkened	Brownish yellow to brownish black with yellowish segments 1 and 2	Yellow	Yellow
Length of stylus: length of postpedicel	1.47 (measured from illustration)	Almost 2X	1.4–1.7	2.5–2.9
Length of midtibial spur	Only slightly longer than tibia depth	Longer than tibia depth	1.5X longer than tibia depth	1.5X longer than tibia depth
Wing length (mm)	2.4	2.5–2.7	2.9–3.0	2.9–3.0
Wing	Clear with light brownish veins	With yellowish tinge and yellow veins slightly darkened apically	With yellowish tinge and yellow veins	With yellowish tinge and yellow veins

Platypalpus australominutus Grootaert, 1989

Material examined. Samsun prov.: 1♂, Samsun University campus, 41°22′N, 36°11′E, Barták, Kubík, 22.vi.–4.vii.2014 (CULSP).

Remarks. The species is known from Western Europe, ranging from Spain to Norway. This is the first record for Turkey.

Platypalpus bartaki Chvála, 1989

Material examined. Muğla prov.: 1♂, 2♀, Muğla University campus, MT, 720 m, 37°09′42″N, 28°22′13″E, H. Kavak, i.2015; 1♀, same locality, MT, 700 m, 37°09′42″N, 28°22′2″E, O. Dursun, xii.2013–ii.2014—all CULSP.

Remarks. This species was previously known only from Austria and Czech and Slovak Republics. Specimens from Turkey (T) differ slightly from central European mountain populations (CE) in having legs entirely dark yellow (with brownish to brownish black markings of various extent on femora in CE). Additionally, the shape of the cerci slightly differs, the T specimen has no interapical tooth on both cerci and the female abdomen is almost entirely microtrichose (with broad lustrous median triangles on tergites 2–6 in CE). Other characters including all details of genitalia are identical (including basal sclerotization of left epandrial lamella and asymmetrical tergite 8). Setae around left epandrial lamella are longer than depicted by Chvála (1989, fig. 42, in both T and CE). These are the first records for Turkey.

Platypalpus brachystylus (Bezzi, 1892)

Material examined. Muğla prov.: 5♂, 2♀, Muğla University campus, MT, 720 m, 37°09′42″N, 28°22′13″E, H.Kavak, iv.2015; 1♂, 11 km E of Muğla, pine wood + meadow, 1310 m, 37°12′45″N, 28°27′42″E, Barták, Kubík, 1.v.2013; 1♂, Akyaka, pasture, 6 m, 37°03′19″N, 28°20′07″E, Barták, Kubík, 28.iv.–8.v.2013—all CULSP.

Remarks. Distributed in Europe from Pyrenees (Andorra—unpublished) to Kaspian Sea and from Italy to Scandinavia. These are the first records for Turkey.

***Platypalpus calceatus* (Meigen, 1822)**

Material examined. Muğla prov.: 2♂, Toparlar, lowland forest, SW + PT, 8 m, 36°59′27″N, 28°38′50″E, Barták, Kubík, 28–30.iv.2016; **Samsun** prov.: 2♂, Samsun, University campus, 41°22′N, 36°11′E, Barták, Kubík, 22.vi.–4.vii.2014—all CULSP.

Remarks. This species is known from most European countries including Russia. These are the first records for Turkey.

***Platypalpus cryptospina* (Frey, 1909)**
= *Tachydromia tantula* Collin, 1926.

Material examined. Muğla prov.: 2♂, Akyaka pasture, 8 m, 37°03′11″N, 28°20′33″E, Barták, Kubík, 27.iv.2016; 1♂, Muğla, University campus SW + PT, 700 m, 37°09′42″N, 28°22′21″E, Barták, Kubík, 29.iv.–10.v.2013; 1♂, Toparlar, 60 m, lowland wood, SW, 36°58′39″N, 28°39′30″E, Barták, Kubík, 5–7.v.2013—all CULSP.

Remarks. This species is known from several European countries (Austria, Belgium, Czech Republic, Estonia, Finland, France, Germany, Great Britain, Slovakia, Slovenia, Sweden, Switzerland, Leningradskaja obl.) and West Siberia. Specimens from Turkey have entirely yellow or slightly annulated tarsi similarly as *P. aliterolamellatus* Kovalev, 1971; however, other characters are closer to *P. cryptospina*: large katepisternal spot, mesoscutum without yellowish tinge, mid and hind coxae darkened (one specimen even with brownish tip of hind femur), long setae on ventral side of left epandrial lamella, lustrous abdominal tergites 3 to 5, and closer-set crossveins. These are the first records for Turkey.

***Platypalpus cursitans* (Fabricius, 1775)**

Material examined. Kırklareli prov.: 1♀, Üksüp Kızılcıkteppe, 41°43.359′N, 27°22.710′E, 274 m, 15.v.2007 (CULSP).

Remarks. Broadly distributed species throughout West parts of Palaearctis, eastwards to Orenburg province (Russia) and Almaty region (Kazakhstan—unpublished). First record for Turkey.

***Platypalpus hemispinosus* Grootaert, 1995**

Material examined. Nevşehir prov.: 1♂, 10 km E Nevşehir, Ortahisar env. garden, steppe, B. Mocek, 11.v.1996 (CULSP).

Remarks. This species is known only from the type locality in Spain. The specimen from Turkey slightly differs from the original description; specifically the legs are almost entirely black except light brownish red apical parts of fore and mid femora, fore and mid tibiae and bases of basitarsi. However, all other characters including peculiar bristling of the midlegs and genitalia are identical. This is the first record for Turkey.

***Platypalpus excavatus* Yang & Yao *in* Yang *et al*., 2007**
= *Tachydromia excisa* Becker, 1907 (preocc., nec Loew, 1864) [= *Platypalpus*].

Material examined. Muğla prov.: 5♂, 1♀, Muğla University campus, 710 m, MT, edge of pine wood + Quercus shrubs, 37°09′39″N, 28°22′20″E, xi.2012–iii.2013; 2♂, 5♀, same locality, MT, 720 m, 37°09′42″N, 28°22′13″E, H.Kavak, iv.2015; 2♂, same locality, 26.v.–26.vi.2015; 1♂, same locality, PT, 645 m, 37°09′42″N, 28°22′21″E, O. Dursun, 8.vi.2012; 2♂, 1♀, 11 km E of Muğla, pine wood + meadow, 1310 m, 37°12′45″N, 28°27′42″E, Barták, Kubík, 1.v.2013; 1♂, 5km S of Muğla, edge of pine wood, on flowers, 670 m, 37°08′27″N, 28°22′05″E, Barták, Kubík, 6.v.2013; 1♂, Gökçeova Gölü, lake shore, 1750 m, 37°03′42.52″N, 28°48′28.42″E, Barták, Kubík, 20.ix.2012—all CULSP.

Remarks. This species is broadly distributed in West Palaearctic including the Mediterranean (Cyprus). These are the first records for Turkey.

Platypalpus flaviseta Chvála, 1973

Material examined. Muğla prov.: 1♂, 13 km NE of Muğla, pasture/pine wood, 1200 m, 37°14′50″N, 28°30′E, Barták, Kubík, 23–27.vi.2015 (CULSP).

Remarks. The species has been known from temperate and southern parts of Western Europe. Our specimen has distinctly lighter legs than all specimens we have seen (anterior fore coxae and bases of all femora yellow, the remaining leg segments rather light yellowish brown); however, the specimen is immature. The male genitalia and other characters exactly agree with Western European populations. This is the first record for Turkey.

Platypalpus granadensis Chvála, 1972

Material examined. Muğla prov.: 2♂, 6♀, Muğla University campus, MT, 720 m, 37°09′42″N, 28°22′13″E, H. Kavak, iv.2015 (CULSP).

Remarks. This species was previously known from the female holotype from Spain (Chvála 1981). Our female specimens agree exactly with the original description except the mid femur bears anterior (or slightly anterodorsal) setae, of which at least 1–2 but usually 3–4 are dark at least on apical half of the femur and also strong and dark anteroventral setae are on the apical half of the femur. In original description and illustration (Chvála 1981: 147, fig. a) these setae are not mentioned; however, B. Sinclair (Ottawa) kindly examined the female holotype and found anteroventral setae to be present, but not as strong as in our specimen (he compared the holotype with photo of our specimen). Also the anterior setae are present, but they "appear to be slender and long, not readily distinguished from finer setae" (B. Sinclair pers. comm. 2017). The postpedicel in our specimens is 1.95X longer than the stylus (mean, standard deviation = 0.22) exactly the same value as obtained by measuring Chvála′s fig. b. However, direct measuring of holotype showed this ratio to be 1.66 (B. Sinclair, pers. comm. 2017). Genitalia are very similar to those of *P. longicornis* (compare Chvála 1975, figs 329–331), only left epandrial lamella is slightly concave ventrally and both cerci are more rounded apically). *Platypalpus granadensis* is undoubtedly closely related to *P. longicornis*, as already stated by Chvála (1981). Besides differences given in this paper, the mid tibial spur is distinct, rather long and flat in *P. granadensis* (also apparent from Chvála 1981, fig. a) which disagrees with the statement: "No apical spur on mid tibia" in original description; however, it is almost absent in *P. longicornis*. These are the first records for Turkey.

Platypalpus incertoides Grootaert & Chvála, 1992

Material examined. Muğla prov.: 1♀, 15 km SW of Muğla, damp valley nr.brook, 630 m, 37°06′31″N, 28°15′31″E, Barták, Kubík, 23.v.2011; 2♀, 5 km S of Muğla, edge of pine wood, 670 m, on flowers, 37°08′27″N, 28°22′05″E, Barták, Kubík, 6.v.2013—all CULSP.

Remarks. The species has been hitherto known only from Spain. We suspect that it may be only a dark form of *P. stackelbergi* Kovalev, 1971. These are the first records for Turkey.

Platypalpus ionicus Grootaert, 2008

Material examined. Adıyaman prov.: 2♀, Nemrut Daglari Mts., 30 km NE Kahta, Karadut 1800 m, B. Mocek, 9.v.1996; 1♀, Buruncayir steppe, B. Mocek, 10.v.1996; **Mersin** prov.: 1♀, 10 km E Mut, Bogcagiz 800 m, pine f. + pasture, B. Mocek, 1.v.1996; **Muğla** prov.: 4♂, Akyaka, pasture, 6 m, 37°03′19″N, 28°20′07″E, Barták, Kubík, 28.iv.–8.v.2013; 2♀, Muğla University campus, 700 m, SW + PT, 37°09′42″N, 28°22′21″E, Barták, Kubík, 29.iv.–10.v.2013; 2♂, 1♀, same locality, YPWT, 700 m, 37°09′42″N, 28°22′22″E, O.Dursun, iv.–v.2014; 1♂, 13 km NE of Muğla, pasture/pine wood, 1200 m, 37°14′50″N, 28°30′E, Barták, Kubík, 23–27.vi.2015—CULSP and MHK.

Remarks. This species is only known from Turkey. The species is very similar to *P. dalmatinus* (Strobl, 1902) and in the original description there is the following differential diagnosis: "The acr are 4-seriate in *P. dalmatinus* and the third antennal segment is 4–5 times as long as wide and has the arista as long as third segment. The arista is much shorter than the third antennal segment in *P.ionicus*". However, this diagnosis is confusing because Grootaert (2008) stated: "antenna .... 4–5 times as long as wide" which covers the variation found in *P. dalmatinus*; moreover, acrostichals, stated as "triseriate in frons but otherwise biseriate" are in our specimens mostly 3–5 seriate in front part and 2–4 seriate in hind part, however, two of our specimens have almost biseriate acrostichals throughout. Stylus in specimens of *P. dalmatinus* from CULSP collections is 0.8–1.2X longer than postpedicel and in *P. ionicus* it is slightly sexually dimorphic: in males 0.6–1.0X (mean = 0.8) and in females 0.9–1.4X (mean = 1.1) longer than postpedicel. Postpedicel in *P. ionicus* is 4.5–5.9X longer than broad in males (mean = 5.0) and 3.1–4.3X longer than broad in females (mean = 3.8). Because of these findings, and considering variations of characters, we propose the following differential diagnosis and arrangement of both species in the key by Grootaert & Chvála (1992):

97a (97) Stigma-like swelling at tip of R_1 blackish brown; katepisternal lustrous patch smaller, leaving broad hind margin of katepisternum microtrichose; ♂ right cercus broadened at about middle and narrowed apically, left epandrial lamella more square-shaped at apex (Grootaert 2008, figs 7, 8) . . . . . *ionicus* Grootaert, 2008

\- Stigma-like swelling at tip of R_1 yellow; katepisternal lustrous patch larger, reaching nearly hind margin of katepisternum; ♂ right cercus broadened towards tip, left epandrial lamella ovate apically (Grootaert & Chvála 1992, figs 119, 120) . . . . . *dalmatinus* (Strobl, 1902)

Platypalpus kirtlingensis Grootaert, 1986

Material examined. Aydın prov.: 11♂, 8 km S of Çine, river bank, 68 m, PT, 37°32′34″N, 28°03′46″E, Barták, Kubík, 29.iv.–1.v.2016; **Burdur** prov.: 1♂, Yassigüme village, 37°36.51′N, 30°7.80 E, 950–1000 m, 11.vi.2008; **Muğla** prov.: 1♂, Fethiye co., Kayaköy 36°34.772′N, 29°04.986′E, 140 m, 8.iv.2007; 1♂, Akyaka, pasture, 6 m, 37°03′19″N, 28°20′07″E, Barták, Kubík, 28.iv.–8.v.2013; 2♂, Akyaka, river bank + salty meadow, 37°03′16″N, 28°19′57″E, Barták, Kubík, 16–27.v.2011; 1♂, Toparlar, lowland forest, SW + PT, 8 m, 36°59′27″N, 28°38′50″E, Barták, Kubík, 28–30.iv.2016; 1♂, 13km NE of Muğla, pine wood + pasture, 37°15′N, 28°30′E, 1100–1300 m, Barták, Kubík, 2–3.v.2016; 1♂, Akyaka, pasture, 37°03′19″N, 28°20′07″E, 28.iv.–8.v.2013; 1♂, Akyaka, pasture, 8 m, 27.iv.2016, 37°03′11″N, 28°20′33″E, Barták, Kubík; Akyaka, 40 m, forest, SW, 37°03′19″N, 28°19′36″E, Barták, Kubík, 26.iv.2016; **Samsun** prov.: 1♂, Samsun University campus, 41°22′N, 36°11′E, Barták, Kubík, 22.vi.–4.vii.2014—all CULSP.

Remarks. This species is widely distributed in temperate Europe, southwards to the Mediterranean (including Egypt—unpublished; from Turkey reported by Grootaert (2008)), eastwards to Uzbekistan. Only male records are reported here due to difficulties in identifying females.

Platypalpus longiseta (Zetterstedt, 1842)

Material examined. Muğla prov.: 1♂, Akyaka, pasture, 4 m, 37°03′09″N, 28°20′17″E, Barták, Kubík, 23–27.ix.2012; 9♂, Akyaka, river bank + salty meadow, 37°03′16″N, 28°19′57″E, Barták, Kubík, 16–27.v.2011; 1♂, Merkez Co. Yenice, 37°6.978′N, 28°19.102′E, 670 m, 8.x.2006; 1♂, Muğla University campus, SW + PT, 700 m, 37°09′42″N, 28°22′21″E, Barták, Kubík, 17–22.v.2011; **Samsun** prov.: 1♂, Samsun University campus, 41°22′N, 36°11′E, Barták, Kubík, 22.vi.–4.vii.2014—all CULSP.

Remarks. This species is distributed in Europe including the Mediterranean, eastwards to Uzbekistan, also Israel and Turkey. The above mentioned records are based on males only because of difficulties in identifying females. All specimens were dissected and, all except two (last two males in the list above) belong to form with "pallidiventris" genitalia (i.e., with short tooth on apex of left cercus and strongly ventrally bowed subepandrial sclerite) and simultaneously "longiseta" fore tarsi (i.e., ultimate tarsal segment black annulated but penultimate one yellow). This result should be expected because *P. longiseta* is a very common species and we selected from our large samples preferably specimens with short tooth on apex of left cercus. Several specimens have bifurcated tooth on left cercus (with smaller tooth laterally near base of longer apical tooth, best visible in dorsolateral view).

Interestingly, we found no males with typical “pallidiventris” forelegs (i.e., with subequally coloured ultimate and penultimate joints of fore tarsus) in Turkey (although Grootaert (2008) reports this species from Turkey). However, recently we found several such males from Israel including intermediate forms in leg colouration. So, both species may represent only different forms of a single species.

Platypalpus luteicornis (Meigen, 1838)

Material examined. Muğla prov.: 7♂, Muğla University campus, edge of pine wood + Quercus shrubs, 710 m, MT, 37°09′39″N, 28°22′20″E, xi.2012–iii.2013; 5♂, 2♀, Gökçeova Gölü, lake shore, 1750 m, 37°03′42.52″N, 28°48′28.42″E, Barták, Kubík, 20.ix.2012; 1♂, 11 km E of Muğla, pine wood + meadow, 1310 m, 37°12′45″N, 28°27′42″E, Barták, Kubík, 1.v.2013; 5♂, 2♀, Muğla University campus, 730 m, MT, xi.2015–iv.2016, 37°09′38″N, 28°22′11″E, Barták, Kubík—all CULSP.

Remarks. Broadly distributed in Europe including European Russia. This species is rather variable in many characters including arrangement of acrostichal setae (in some specimens almost triserial), colour of basal antennal segments (ranging from black to yellow), and mid femur (swollen or rather narrow). These are the first records for Turkey.

Platypalpus nigricoxa (Mik, 1884)

Material examined. Muğla prov.: 15♂, 14♀, Muğla University campus, MT, 720 m, 37°09′42″N, 28°22′13″E, H. Kavak, iv.2015; 5♂, 3♀, same locality, PT, 645 m, 37°09′42″N, 28°22′21″E, O. Dursun, 8.vi.2012; 3♂, 1♀, same locality, edge of pine wood, 700 m, MT, 37°09′42″N, 28°22′21″E, O. Dursun, v.2013; 1♂, same locality, edge of pine wood, MT, 700 m, 37°09′41″N, 28°22′21″E, Barták, Kubík, xi.2012–iii.2013—all CULSP.

Remarks. The species is known from several European countries ranging from Italy to North Scandinavia, including northern European part of Russia. Turkish specimens (T) have antennae different than European (E): stylus is 1.1–1.5X longer than postpedicel (E) but 2.5–2.7X in (T), and postpedicel is 1.9–2.8X longer than wide (E), and 1.9–2.1X in (T). Also legs are paler in T specimens, without dark ventral stripe on femora. However, male genitalia are identical in all details including triangular structures on inner part of cerci, swollen right epandrial lamella, dorsally incised left epandrial lamella, etc. These are the first records for Turkey.

Platypalpus niveisetoides Chvála, 1973

Material examined. Muğla prov.: 1♂, Muğla University campus, 700 m, SW + PT, 37°09′42″N, 28°22′21″E, Barták, Kubík, 29.iv.–10.v.2013; 1♂, same locality, MT, 720 m, 37°09′42″N, 28°22′13″E, H. Kavak, 26.v.–26.vi.2015; 1♂, 1♀, 13 km NE of Muğla, pasture/pine wood, 1200 m, 37°14′50″N, 28°30′E, Barták, Kubík, 23–27.vi.2015—all CULSP.

Remarks. Known from only several European countries ranging from Italy to Germany, and in CULSP collections there are also specimens from Greece and Bulgaria. These are the first records for Turkey.

Platypalpus niger (Meigen, 1804)

Material examined. Aydın prov.: 1♂, 8 km S of Çine, river bank, 68 m, PT, 37°32′34″N, 28°03′46″E, Barták, Kubík, 29.iv.–1.v.2016; 7♂, 3♀, same data, PT; **Muğla** prov.: 4♂, Toparlar, lowland forest, 36°58′39″N, 28°39′30″E, SW, Barták, Kubík, 7.v.2013; 12♂, 2♀, same locality, SW + PT, 8 m, 36°59′27″N, 28°38′50″E, Barták, Kubík, 28–30.iv.2016; **Samsun** prov.: 8♂, Samsun University campus, 41°22′N, 36°11′E, Barták, Kubík, 22.vi.–4.vii.2014—all CULSP.

Remarks. Broadly distributed in temperate and South Europe. This species are very similar to *P. nigricolor*, differing chiefly in prothorax partly lustrous and male left epandrial lamella without ventral indentation. These are the first records for Turkey.

Platypalpus nigricolor Merz & Chvála, 1998

Material examined. Samsun prov.: 5♂, 1♀, Samsun, University campus, 41°22′N, 36°11′E, Barták, Kubík, 22.vi.–4.vii.2014 (CULSP).

Remarks. This species was up to now reported only from the Czech Republic and Switzerland; however, in CULSP collections there are specimens from Bulgaria. This is the first record for Turkey.

Platypalpus norvegicus Grootaert & Jonassen, 1991

Material examined. Muğla prov.: 4♂, Akyaka, forest, 30 m, 37°03′16″N, 28°19′35″E, Barták, Kubík, 30.iv.–9.v.2013 (CULSP).

Remarks. This species has been known up to present only from Norway. Our specimens agree with the original description in all details, except the male abdominal pattern could not be compared because it was not described: our specimens have a lustrous abdomen with all tergites broadly microtrichose on sides (more broadly than in *P. pulicarius* (Meigen, 1830)) and also sternites 6 to 7 microtrichose (sternite 8 lustrous to sublustrous—the same as in *P. pulicarius*). The male genitalia are almost identical with the original description, only the right cercus is slightly more broadened apically (about as depicted in *P. pulicarius* by Chvála 1975, fig. 360) and right surstylus is long and narrow, straight, with small broadening about its base. This is the first record for Turkey.

Platypalpus novakii (Strobl, 1893)

Material examined. Muğla prov.: 1♂, 2♀, 15 km SW of Muğla, damp valley nr.brook, 630 m, 37°06′31″N, 28°15′31″E, Barták, Kubík, 23.v.2011; 9♂, ♀, Muğla University campus, SW + PT, 700 m, 37°09′42″N, 28°22′21″E, Barták, Kubík, 17–22.v.2011—all CULSP.

Remarks. This species is broadly distributed throughout the Mediterranean, ranging from Spain to Greece, also Rhodos and Algeria. These are the first records for Turkey.

Platypalpus olivetorum Grootaert, 2008

Material examined. Muğla prov.: 1♂, Muğla University campus, PT, 645 m, 37°09′42″N, 28°22′21″E, O. Dursun, 8.vi.2012 (CULSP).

Remarks. This species is described and known only from Turkey. In CULSP collections there are also specimens from Israel.

Platypalpus pallidicornis (Collin, 1926)

Material examined. Burdur prov.: 1♂, 2♀, Yassigüme village, 37°36.51′N, 30°7.80′E, 950–1000 m, 11.vi.2008 (CULSP).

Remarks. This species is broadly distributed almost throughout Europe, from Scandinavia to Spain and from Great Britain to European Russia. This is the first record for Turkey.

***Platypalpus pictitarsis* (Becker, 1902)**

Material examined. Aydın prov.: 4♂, 8 km S of Çine, river bank, 68 m, SW, 37°32′34″N, 28°03′46″E, Barták, Kubík, 29.iv.–1.v.2016; **Burdur** prov.: 1♂, Yassigüme village, 37°36.51′N, 30°7.80′E, 950–1000 m, 11.vi.2008; **Muğla** prov.: 2♂, Kayaköy 36°34.772′N, 29°04.986′E, 140 m, 8.iv.2007; 2♂, Akyaka, pasture, 5 m, 37°03′19″N, 28°20′07″E, 28.iv.–8.v.2013; 4♂, same locality, 8 m, 37°03′11″N, 28°20′33″E, Barták, Kubík, 27.iv.2016; 6♂, Akyaka, river bank + salty meadow, 37°03′16″N, 28°19′57″E, Barták, Kubík, 16–27.v.2011; **Samsun** prov.: 9♂, Samsun, University campus, 41°22′N, 36°11′E, Barták, Kubík, 22.vi.–4.vii.2014—all CULSP.

Remarks. This species is distributed broadly in Europe except north countries, and also from Ukraine, Egypt, Tunisia, Israel, and Cyprus. Due to difficulties in distinguishing females from *P. kirtlingensis*, we present here only male records. These are the first records for Turkey.

***Platypalpus riojaensis* Chvála, 1981**

Material examined. Muğla prov.: 2♂, 2♀, 13 km NE of Muğla, pine wood + pasture, 37°15′N, 28°30′E, 1100–1300 m, Barták, Kubík, 2–3.v.2016 (CULSP).

Remarks. Specimens from Turkey slightly differ from the original description of *P. riojaensis* in smaller size (wing length 2.2 mm), left epandrial lamella without dorsal outgrowth and right surstylus broadly ovate. However, in CULSP collection there are other specimens of probably the same species (from Cyprus) also without dorsal outgrowth on left epandrial lamella but slightly larger (wing length 2.5 mm) and with elongate right surstylus, one of them with all femora brownish yellow. Spine-like ventral setae on hind femora (mentioned in original description of *P. riojaensis*) are present in some specimens, but absent in other ones (without correlations with characters of genitalia). Therefore, we consider all specimens conspecific and characters are variable. This is the first record for Turkey.

***Platypalpus sinevi* Kustov, Shamshev & Grootaert, 2015**

Material examined. Muğla prov.: 17♂, 3♀, Muğla University campus, MT, 720 m, 37°09′42″N, 28°22′13″E, H. Kavak, i.2015; 3♀, same data except iv.2015; 1♂, same locality, MT, 730 m, 37°09′38″N, 28°22′11″E, Barták, Kubík, xi.2015–iv.2016; 2♀, same locality, MT, 700 m, 37°09′42″N, 28°22′2″E, O. Dursun, xii.2013–ii.2014—all CULSP.

Remarks. This species is known up to now only from the European part of Russia (Karachay-Cherkessia). Specimens from Turkey (T) slightly differ from the original description (C), but we consider them conspecific due to: (1) striking similarity of male genitalia, (2) most differences are only in colour characters (T specimens are distinctly darker), and (3) corrections of the original description in many respects by communication with S. Kustov (pers. comm. 2017). Characters not described or specified herewith: clypeus lustrous (both T and C); fore and mid femora with brown (T) or mixed pale and brown setae (C), fore femur with 2 strong anterior setae (both T and C); mid femur with anteroventral brown spine-like setae longer than those in anteroventral row (both T and C); legs dirty yellow (both T and C); abdomen brownish yellow to blackish brown (both T and C); female tergites entirely microtrichose (T) but more broadly lustrous (C); length of body up to 3.9 mm (T), wing from 3.5 mm (T); acrostichals in several specimens almost regularly biserial, with only 1–3 setae inserted on anterior part of mesoscutum outside rows (T). These are the first records for Turkey.

***Platypalpus stigma* (Collin, 1926)**

Material examined. Muğla prov.: 2♀, 13 km NE of Muğla, pine wood + pasture, 37°15′N, 28°30′E, 1100–1300 m, Barták, Kubík, 2–3.v.2016; 1♀, Ula co., Oyri, 37°3.987′N, 28°33.860′E, 185 m, 7.iv.2007—all CULSP.

Remarks. The species has been known from several countries of temperate and South Europe. The first Turkish reports were reported by Grootaert (2008).

***Platypalpus zeravshanensis* Barták & Shamshev, 2015**

Material examined. Aksaray prov.: 8♂, Tüz Golu lake, 60 km NW Askaray, steppe + bank of lake, B. Mocek, 13.v.1996 (CULSP and MHK); **Mersin** prov.: 2♂, 10 km E Mut, Bogcagiz, 800 m, pine f. [= forest] + pasture, B. Mocek, 1.v.1996 (MHK).

Remarks. Specimens from Turkey slightly differ from those from Uzbekistan: they are darker (both basal antennal segments reddish yellow to reddish brown, legs darkened to various extent—mostly both fore and mid femora brown to black in basal two-thirds, some specimens also with darkened base of hind femur), and more lustrous (fore coxa lustrous up to anterior row of setae, katepisternal spot reaching nearly hind margin of katepisternum). However, all other characters including male genitalia are identical (including details of hypandrium, shape of cerci, and shape of right surstylus). These are the first records for Turkey.

***Tachydromia arrogans* (Linné, 1761)**

Material examined. Aydın prov.: 5♂, 8 km S of Çine, river bank, 68 m, 37°32′34″N, 28°03′46″E, Barták, Kubík, 28–30.vi.2015; **Samsun** prov.: 4♂, Samsun, University campus 41°22′N, 36°11′E, Barták, Kubík, 22.vi.–4.vii.2014—all CULSP.

Remarks. Distributional range covers almost all Europe, also North Africa, Syria and West Asia (Azerbaidjan, West Caucasus (Russia) and Georgia). These are the first records for Turkey.

***Tachydromia carpathica* Chvála, 1966b**

Material examined. Samsun prov.: 3♂, Samsun University campus 41°22′N, 36°11′E, 22.vi.–4.vii.2014, Barták, Kubík (CULSP).

Remarks. Known previously from Austria, Italy, Slovakia, Slovenia, and Hungary. This is the first record for Turkey.

***Tachypeza nubila* (Meigen, 1804)**
= *Tachypeza subnubila* Raffone, 2002: 40 **syn. nov**.

Material examined. Muğla prov.: 5♂, 1♀, Muğla University campus,730 m, MT, 37°09′38″N, 28°22′11″E, Barták, Kubík, xi.2015–iv.2016 (CULSP).

Remarks. This species is distributed throughout Europe, eastwards to East Siberia (Krasnoyarskiy terr.). This is the first record for Turkey.

Tachypeza subnubila was described from a single male deposited in State Forestry (Laboratory Bosco della Fontana - Mantova). In this collection there is one well preserved specimen (only antennae missing except left pedicel, left hind tibia missing and most large setae broken), labelled: "Italy—Parma—Riserva Naturale Gueadine Pradaccio, 18/VII—7/VIII/2001 legit Lab. Bosco Fontana, Malaisetrap sentiero State Forestry Corps—NRBF coll., Tachypeza subnubila n. sp. det. Raffone G. 2001, Holotypus ♂". Genitalia are separately stored in a plastic microvial. Originally it was preserved in alcohol but we dried and mounted it on a card. It represents a specimen of *Tachypeza nubila*. It agrees with this species in all details including genitalia. Genitalia are without cerci but detailed shape of all remaining structures agrees with *T. nubila* (including subepandrial sclerite, long setae on dorsal side of left epandrial lamella omitted in Raffone (2002, fig. 4)). Therefore we consider *Tachypeza subnubila* a junior subjective synonym of *T. nubila.*

Subfamily Hybotinae

***Bicellaria ingrata* Collin, 1960**

Material examined. Muğla prov.: 40♂, 18♀, Muğla University campus, edge of pine wood + Quercus shrubs, 710 m, MT, 37°09′39″N, 28°22′20″E, Barták, Kubík, xi.2012–iii.2013; 2♂, 1♀, same locality, 730 m, MT, 37°09′38″N, 28°22′11″E, Barták, Kubík, xi.2015–iv.2016; 3♀, same locality, MT, 720 m, 37°09′42″N, 28°22′13″E, H. Kavak, i.2015; 1♀, same locality, PT, 645 m, 37°09′42″N, 28°22′21″E, O. Dursun, 8.vi.2012—all CULSP.

Remarks. The species has been known up to now only from Israel and Lebanon. Very few specimens were found with four setae on the palpus, which may cause difficulties using the key by Barták *et al*. (2013). These are the first records for Turkey.

***Bicellaria simplicipes* (Zetterstedt, 1842)**

Material examined. Muğla prov.: 8♂, 6♀, Toparlar, lowland forest, SW, 36°58′39″N, 28°39′30″E, Barták, Kubík, 5–7.v.2013; 2♂, same locality, SW + PT, 8 m, 36°59′27″N, 28°38′50″E, Barták, Kubík, 28–30.iv.2016; 1♂, Akyaka, pasture, 8 m, 37°03′11″N, 28°20′33″E, Barták, Kubík, 27.iv.2016—all CULSP.

Remarks. Broadly distributed in Europe, eastwards to West Siberia. These are the first records for Turkey.

***Bicellaria spuria* (Fallén, 1816)**

Material examined. Muğla prov.: 1♀, 13 km NE of Muğla, pasture/pine wood, 1200 m, 37°14′50″N, 28°30′E, Barták, Kubík, 23–27.vi.2015; 2♂, 1♀, same locality, pine wood + pasture, 37°15′N, 28°30′E, 1100–1300 m, Barták, Kubík, 2–3.v.2016; **Samsun** prov.: 1♂, 1♀, Samsun, University campus, 41°22′N, 36°11′E, Barták, Kubík, 22.vi.–4.vii.2014—all CULSP.

Remarks. West Palaearctic species (possibly complex of several siblings), with doubtful records from the Nearctic and Oriental regions. These are the first records for Turkey.

***Hybos culiciformis* (Fabricius, 1775)**

Material examined. Muğla prov.: 18♂, 6♀, Muğla University campus, 730 m, MT, 37°09′38″N, 28°22′11″E, Barták, Kubík, xi.2015–iv.2016; 1♂, same locality, 710 m, edge of pine wood + Quercus shrubs, MT, 37°09′39″N, 28°22′20″E, xi.2012–iii.2013, Barták, Kubík—all CULSP.

Remarks. The species is distributed throughout Europe and the Mediterranean (including North Africa, Turkey, and Lebanon), and in CULSP collections there are specimens from Israel. See also remarks under *Hybos* sp. nr. *culiciformis*.

***Hybos vagans* Loew, 1874**

Material examined. Samsun prov.: 1♀, Samsun University campus, 41°22′N, 36°11′E, Barták, Kubík, 22.vi.–4.vii.2014 (CULSP).

Remarks. This species is rather restricted is distribution, ranging from North-East Turkey (Duzce prov.) to North Iran (Gorgan). This species was first reported from Turkey by Shamshev *et al*. (2015) and this represents the only second record for Turkey.

Unnamed species
(listed alphabetically)

***Hybos* sp. nr. *culiciformis* (Fabricius)**

Material examined. Aydın prov.: 1♂, 8 km S of Çine, river bank, 68 m, SW, 37°32′34″N, 28°03′46″E, Barták, Kubík, 29.iv.–1.v.2016; **Muğla** prov.: 4♂, Akyaka, forest, 30 m, 37°03′16″N, 28°19′35″E, Barták, Kubík, 30.iv.–9.v.2013; 1♂, 2♀, same locality, 40 m, SW, 37°03′19″N, 28°19′36″E, Barták, Kubík, 26.iv.2016; 1♂, Akyaka, pasture, 8 m, 37°03′11″N, 28°20′33″E, Barták, Kubík, 27.iv.2016; 7♂, 1♀, 11 km E of Muğla, pine wood + meadow, 1310 m, 37°12′45″N, 28°27′42″E, Barták, Kubík, 1.v.2013; 2♀, Muğla University campus, edge of pine wood + Quercus shrubs, MT, 710 m, 37°09′39″N, 28°22′20″E, Barták, Kubík, xi.2012-iii.2013; 1♂, 5 km S of Muğla, edge of pine wood, on flowers, 37°08′27″N, 28°22′05″E, 670 m, Barták, Kubík, 6.v.2013; 1♂, 2♀, 13 km NE of Muğla, pasture/pine wood, 1200 m, 37°14′50″N, 28°30′E, Barták, Kubík, 23–27.vi.2015; 1♂, 1♀, same locality, 37°15′N, 28°30′E, 1100–1300 m, Barták, Kubík, 2–3.v.2016; 4♂, 3♀, Gökçeova Gölü, lake shore, 1750 m, 37°03′42.52″N, 28°48′28.42″E, Barták, Kubík, 20.ix.2012—all CULSP.

Remarks. Specimens are very similar to *H. culiciformis*; however, they have larger postpedicel, dark scutellars, shorter ventral preapical seta on mid tibia and larger microtrichose areas of the abdomen. The most important difference is in male genitalia: hypandrium extends posteriorly in a cone-shaped projection. We hesitate to describe this species herewith as new because Shamshev *et al*. (2015) reported great variations in male genitalia and other characters in *H. culicifomis*. However, we have seen no intermediate specimens and in CULSP collections are also specimens from Greece and Croatia. Additional studies are necessary to solve if both "forms" represent different species.

***Platypalpus* sp. nr. *articulatus* Macquart**

Material examined. Osmanyie prov.: 4♂, 1♀, Nur Daglari Mts., 20 km N Antakya, Akbez, 500 m, B. Mocek, 5.v.1996 (CULSP).

Remarks. Similar to *P. articulatus* Macquart, 1827 (palpus and mid and hind coxae dark), with identical genitalia. However, fore tarsi with all segments annulated (as in *P. articulatoides* (Frey, 1918)) and female abdomen lustrous (as in *P. maculimanus* (Zetterstedt, 1842)).

***Platypalpus* sp. nr. *cothurnatus* Macquart**

Material examined. Muğla prov.: 1♀, Akyaka, pasture, 8 m, 37°03′11″N, 28°20′33″E, Barták, Kubík, 27.iv.2016; 1♀, Muğla University campus, SW + PT, 700 m, 37°09′42″N, 28°22′21″E, Barták, Kubík, 17–22.v.2011—all CULSP.

Remarks. This species is similar to *P. cothurnatus* Macquart, 1827; however, the palpus is slightly larger, mesoscutum narrowly lustrous just behind antepronotum, and abdominal segment 7 mostly lustrous. Without associated males the identification or description as new species is impossible.

***Platypalpus* sp. nr. *dessarti* Grootaert**

Material examined. Aydın prov.: 1♀, 8 km S of Çine, river bank, 68 m, SW, 37°32′34″N, 28°03′46″E, Barták, Kubík, 29.iv.–1.v.2016 (CULSP).

Remarks. This species is similar to *P. dessarti* Grootaert, 1983; however, the clypeus is lustrous, crossveins close together, vein M more gently bowed being nearly straight in apical third and vein CuA_2 recurrent. Without associated males the identification is impossible.

Platypalpus sp. nr. *hallensis* Grootaert & Stark

Material examined. Osmanyie prov.: 1♀, Turkey mer., Nur Daglari Mts., 30 km E Osmanyie, Hasanbeyli, 1200 m, B. Mocek, 5.v.1996 (CULSP).

Remarks. Species of the "*P. hackmanni*" group similar to *P. hallensis*; however, katepisternum with small lustrous spot and antenna black. Contrary to both species of this group described here as new, it has no ventral spines on the mid femur and yellow large thoracic setae. The specimen is in very poor condition.

Platypalpus sp. nr. *malagonensis* Grootaert & Chvála

Material examined. Hatay prov.: 1♀: Harbiye nr. Hatay, river valley, V. Vrabec, 21.iv.1997 (CULSP).

Remarks. Similar to *P. malagonensis* Grootaert & Chvála, 1992, in basic characters (two pairs of verticals, microtrichose mesoscutum, long midtibial spur, biserial acrostichals, yellow thoracic setae, postpedicel 2.5X longer than broad, stylus 1.6X longer than postpedicel). However, the palpus is pale yellow, katepisternal spot very narrow and abdomen microtrichose including venter, except triangular-shaped dorsal spots on tergites 2–5.

Tachydromia sp. nr. *alatauensis* Shamshev & Chvála

Material examined. Adıyaman prov.: 1♂: Nemrut Daglari Mts., 30 km NE Kahta, Karadut, 1800 m, B. Mocek, 9.v.1996 (CULSP).

Remarks. Similar to *T. alatauensis* Shamshev & Chvála, 2001, in having dark halter, very shallow and almost indistinct excavation on mid femur, and lustrous occiput; however, basal antennal segments are red (distinctly paler than postpedicel), palpus brownish black, basal third of fore and mid femora yellow, and fore and mid tarsus with segments 1–3 distinctly paler than remaining two. Male genitalia are identical with *T. alatauensis*. There are further two species of *Tachydromia* with dark halter: *T. halterata* (Collin, 1926) (with deep excesion on mid femur) and *T. israeliensis* Shamshev & Grootaert, 2009 (with microtrichose occiput and different genitalia). We cannot describe this male specimen as a new species because of its poor condition (large setae missing, right stylus probably broken and left postpedicel missing).

Discussion

Based mostly on large recent collections of the authors, the first thorough study of the family Hybotidae (except the tribe Drapetini) from Turkey is presented. Altogether 51 species are reported, of which 36 species are first recorded from this country and seven species are described as new for science. An additional seven species remain unnamed, mostly because of unsatisfactory material at hand. Considering previously published records (Raffone 2007; Pârvu & Popescu-Mirceni 2006; Grootaert 2008; Shamshev *et al*. 2015), 57 species of Hybotidae are currently known from Turkey which is undoubtedly only a small part of its true species composition.

Turkish populations of several species differ slightly from Central and/or West European populations of the same species. Sometimes the differences are such that we hesitate to describe them as distinct species. Mostly, differences concern only colour characters (*P. hemispinosus*) or shape of postpedicel (*P. annulitarsis*), but sometimes gather also colour of antenna. Most notably, this concerns *P. nigricoxa*, *P. sinevi*, *P. zeravshanensis*, and *P. annulatus*. The most stable character seems to be male genitalia (in spite variability reported in this respect by Shamshev & Grootaert (2002), Shamshev *et al*. (2015), and Barták & Kubík (2016)). Interestingly, Caucasian populations of some species also differ from their Central/West European conspecifics (Shamshev pers. comm. 2017). If it is a manifestation of recent speciation process or clinal variability may be revealed by further research.

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