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A NEW SPECIES OF THE GENUS *OTITES* (DIPTERA, ULIDIIDAE) FROM CRETE (GREECE)

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A New Species of the Genus *Otites* (Diptera, Ulidiidae) from Crete (Greece). Kameneva E. P. — *Otites cretana* Kameneva sp. n. from Crete (Psiloritis Ridge) is described. It superficially resembles *Otites nebulosa* (Latreille, 1812) and *Dorycera persica* Hennig, 1939 in the combination of very high gena and short antenna, but differs from all known Otitini by the thickened costal vein (in male), undulate vein R_{2+3}, lacking ocellar setae and having 3 pairs of short scutellar setae. Status and generic limits of *Otites* and *Dorycera* are preliminary discussed.

Key words: Diptera, Ulidiidae, Otitini, Crete, Greece, Europe, new species.

Новый вид рода *Otites* (Diptera, Ulidiidae) с о. Крит (Греция). Каменева Е. П. — Описан *Otites cretana* Kameneva, sp. n. с Крита (хребет Псилоритис). Новый вид внешне напоминает *Otites nebulosa* (Latreille, 1812) и *Dorycera persica* Hennig, 1939 сочетанием очень высоких щёк и короткой антенны, отличаясь от всех известных Otitini утолщенной костальной жилкой (у самца), извилистой жилкой R_{2+3}, утратой глазковых щетинок и наличием 3 пар коротких щитковых щетинок. Предварительно обсуждаются статус и границы родов *Otites* и *Dorycera*.

Ключевые слова: Diptera, Ulidiidae, Otitini, Крит, Греция, Европа, новый вид.

Introduction

The picture-winged flies (Ulidiidae) are rather small family of some 700 species, distributed predominantly in the New World and to the lesser degree, in the Palaearctic Region, with few species widespread other zoogeographical regions. Based upon available collection material, approximately 90 species of 19 genera of the family Ulidiidae are recognized in Europe, of which at least 5 species are undescribed (Soós, 1984; Kameneva, unpublished data).

While treating material of collection of the Zoologisches Staatsammlung München (Germany), an odd specimen, which clearly belongs to the tribe Otitini of the subfamily Otitinae, and has an "intermediate" condition of generic characters. As it has structure of the male genitalia as in the type species of the genus *Otites*, I place the new species in that genus.

Morphological terminology follows J. F. McAlpine (1981).

Otites Latreille, 1804

Type species: *Musca porcus* Latreille, 1804.

Diagnosis. Eye oval to round. Gena moderately to very high. Flagellomere 1 and pedicel short. Gena 1/3 times as high as to slightly higher than eye. Thorax robust, mesonotal scutum only slightly longer than wide. Dorsocentral, acrostichal and intraalar setae present. Cell bcu closed with sinuate vein forming short posteroapical lobe. Vein A_1 + CuA_1 reaching posterior margin of wing. Anal lobe wider than cell bcu. Abdomen wide, shining to entirely microtrichose. Surstylus with numerous prensisetae (2–7 in Nearctic species; 10–35 in Palaearctic species), gonites moderately developed;

phallus moderately wide, spinulose, rarely almost bare, without glans-like structure at apex. Aculeus narrow, with blunt apex. Three sausage-like wrinkled spermathecae.

Discussion. The genus *Otites* Latreille is widespread in the Holarctics, being most abundant and diverse in the Mediterranean region, from Iberian through Apennine and Balkan Peninsulae to Asia Minor and Near East. It includes c. 22–24 described species in Europe and western part of Asia, 2 in eastern part of the Palaearctic Region (Soós, 1984; Kameneva, 1996, 1997) and 7 in the Nearctic Region (Steyskal, 1966).

The genus *Dorycera* Meigen, 1830 is probably a monophyletic lineage (most species with very wide parafacial and high gena; almost all with long antennae) within the clade that includes also most *Otites* species (Kameneva, unpublished data). All known species of *Dorycera* and at least the so-called *formosa* group of species of *Otites* (Kameneva, 1996) share very dense brush of 15–35 prensisetae on surstylus, which is believed to be their synapomorphy; some species groups in *Otites* might have 2–7 prensisetae (possible plesiomorphy) and are possibly basal groups in this genus.

Furthermore, in some cases identification of generic position of species is dubious: both *Otites nebulosa* (Laterille, 1812) and *Dorycera persica* Hennig, 1939 have short antennae, very wide gena and parafacial, and similar shape of male genitalia, but are assigned to different genera.

Thus, *Otites* (in the sense of Hennig, 1939) can be a paraphyletic formation, but we consider it and *Dorycera* separate genera until revisions are completed (Kameneva, in prep.; Ackerman, Freidberg, in prep.).

The species is assigned here to the genus *Otites* as it has male genitalia very similar to that in the type species of the genus in combination with short antenna.

Otites cretana Kameneva, **sp. n.**

Material. Holotype ♂: Greece: Crete: "Nidha, Psiloritisgeb., N Irakliou 1400 m, KRETA/GRAECIA, (St. TF/SL-BL)", 23.02.1997 (W. Ruckdeschel) (ZSSM).

Diagnosis. The new species (fig. 1, *1*) superficially resembles *Otites nebulosa* (Latreille, 1812) and *Dorycera persica* Hennig, 1939 in the combination of very high gena and short antenna, but differs from all known Otitini by the thickened costal vein (in male), undulate vein R_{2+3}, lacking ocellar setae and having 3 pairs of short scutellar setae.

Description. Male. Head (fig. 1, *2–3*) higher and wider than long, length : height : width ratio = 1 : 1.38 : 1.45; yellow, ocellar triangle black, frons with reddish and brown patches. Frons widened anteriorly, 0.72 times as wide as long in posterior part and as wide as long at the level of anterior margin of eye, matt tawny to orange with pair of diffuse elongate brown patches anterior of vertical plates, diffuse reddish-brown (blackish above lunule) patch anterior of ocellar triangle, black setulose; lateral margins narrow silver-white microtrichose. Ocellar triangle almost as long as wide. Vertical plates poorly expressed. Lunule inconspicuous, hidden underneath anterior margin of frons. Parafacial wide, 1.6 times as wide as length of flagellomere 1, tawny, with brown spot at eye anterior margin, shining in dorsal portion, otherwise subshining, with dense shagreened or cellular sculpture (also on gena), and with narrow silver microtrichose orbit. Gena very high, clearly separated from slightly bulged postgena by vertical furrows or folds. Eye round, 1.1 times as high as long and 0.9 times as high as gena. Face entirely yellow, matt, slightly receding, twice as high as wide in the middle; antennal grooves deep and narrow, open ventrally, almost as long as face at middle, separated by wide rounded facial carina. Clypeus low, hidden in oral cavity. Occiput slightly convex, swollen in lower half, yellow, with brownish medial sclerite and W-shaped whitish microtrichose area; vertex blunt carinate. Antenna reddish yellow, scape with 4–5 setulae; pedicel densely black setulose, as long as wide; flagellomere 1 short

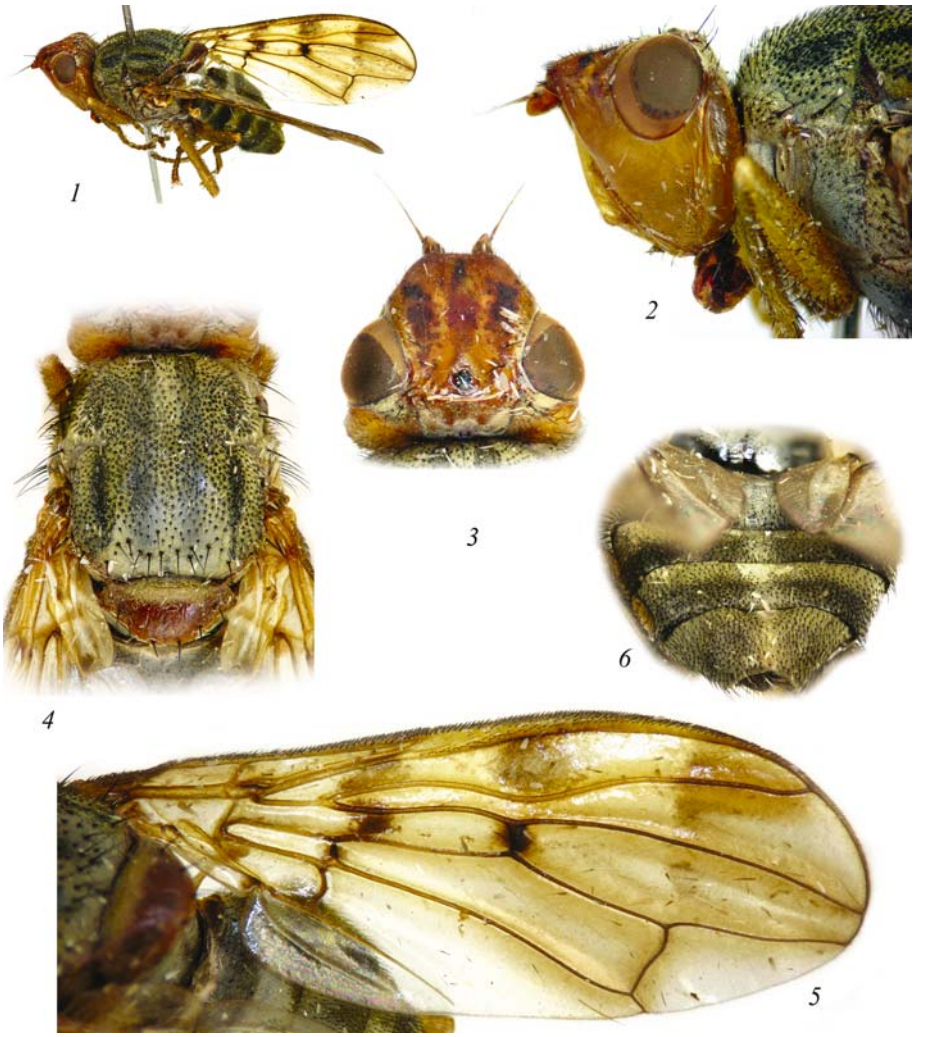

Fig. 1. *Otites cretana* sp. n., holotype ♂: *1* — habitus, left dorsal; *2* — head left; *3* — same, dorsal; *4* — mesonotum, dorsal; *5* — wing; *6* — abdomen, dorsal.

Рис. 1. *Otites cretana* sp. n., голотип ♂: *1* — общий вид, слева и сверху; *2* — голова слева; *3* — то же, сверху; *4* — среднеспинка, сверху; *5* — крыло; *6* — брюшко, сверху.

oval, 1.2 times as long as wide and c. as long as pedicel. Arista brownish yellow, trisegmented, 3 times as long as flagellomere 1. Ocellar seta absent. Two pairs of subequal orbital setae. Postocellar setae parallel; vertical setae moderately short; lateral vertical seta 1.5 times as long as postocellar and as long as orbital setae; medial vertical seta 1.5 times as long as lateral seta. Postvertical and postocular setulae less than half as long as lateral verical seta. Peristomal setulae in ventral one fourth of gena, proclinate, short as long as postocular seta. Genal seta indistinguishable from peristomal setulae. Postgenal setae twice as long as postocular and peristomal setulae. Palp parallel-sided, moderately narrow, yellow; ventrally with numerous black setulae along ventral margin as long or slightly longer than palp width. Proboscis capitate, reddish-yellow with brown and black setulae; prementum moderately small, hidden in oral cavity; labella fleshy, broad.

Thorax (fig. 1, *4*) black, densely yellowish-grey microtrichose, four inconspicuous vittae with slightly sparser microtrichia not entirely covering underlying cuticle; bases of setae and setulae with small black dots. Prosternum almost regular pentagonal, short setulose in dorsal half. Scutum 1.3 times as long as wide. Scutellum reddish yellow,

conspicuously convex, golden microtrichose in latero-basal half. Postscutellum black, densely grey microtrichose. Mediotergite black, densely grey microtrichose in dorsal half, shining in ventral half. Anepisternal suture distinctive in dorsal half. Metasternal postcoxal bridge absent. One postpronotal, 1 proepimeral, 3 notopleural setae (anterior seta double on both sides in holotype). Two supra-alar, 1 intra-alar, 1 post-alar, 1 dorsocentral seta aligned with intra-alar setae; prescutellar acrostichal setae present; 2 groups of setae between dorsocentral and acrostichal seta; 3 pairs of subequal, moderately short scutellars. Postsutural area of anepisternum with 7–8 subequal setae. 1 short katepisternal seta poorly distinguishable from setulae. Anepimeron with 1–2 setulae.

Wing (fig. 1, *5*) moderately wide, 2.8 times as long as wide. Costal vein with 3 poorly distinguishable breaks, thickened (possibly, only in males) from humeral break to middle of distance between apices of pterostigma and vein R_{2+3}; antero-dorsally and antero-ventrally with series of 2–3 rows of stiff short setulae along whole thickened portion; dorsally with tiny setulae along pterostigma. Vein Sc straight and meeting costa at acute angle, complete, but thinned between apex. Pterostigma extremely short, almost replaced by swollen veins C and R_1. Vein R_1 with 1–2 rows of setulae distal of Sc apex; apex of R_1 indistinguishable (at least in male): swollen vein C and R_1 widely confluent without clear border. Vein R_{2+3} undulate, almost parallel to R_{4+5} to level of vein r-m, then diverging. Vein R_{4+5} ending posterior of wing apex, approximated to vein M; cell r_{4+5} widened medially and narrowed apically, but open. Cell bcu closed with sinuate vein forming very short posteroapical lobe. Vein A_1 + CuA_1 reaching posterior margin of wing. Pterostigma brown, 5–7 times as long as wide. Wing with basicostal, costal and subcostal cells yellow; cell r_{2+3} yellow with 3 diffuse brownish spots: anterior of radial fork, at widest medial part and apex; cell br with brown spot posterior of radial fork; vein r-m with blackish brown spot. Other cells mostly yellow, darker at veins and lighter inside, except cell cua_1, anal cell and anal lobe hyaline. Anal lobe wider than cell bcu; vein A_2 present as fold. Alula wide. Calypters narrow; upper calypter slightly longer than lower one, white, with white fringe. Halter yellowish-white.

Legs entirely yellow, unmodified, except femora moderately swollen; moderately setulose (setae and setulae black). Forefemur with one row of posteroventral setae and uniformly setulose, midfemur with long posteroventral setulae; hindfemur without longer setae. Foretibia with longer semierect apicodorsal and 3–4 apical posteroventral spur-like setulae; midtibia with 6–7 apico-ventral spur-like setulae. Tarsi setulose, with thickened lateroventral setulae, especially on mid- and hindtarsus. Claws simple, microtrichose in basal half.

Abdomen (fig. 1, *6*) wide, black, densely grey microtrichose, including sternites and pleura; in posterior portion black setulose, with small black dots at bases of setulae; basomedial portions of tergite 1 and tergite 2 without setulae, uniformly microtrichose; tergites 3–5 with uniformly grey microtrichose medial triangle devoid of setulae, and lateral portions sparsely setulose in anterior halves and densely setulose in posterior halves. Abdominal tergites 3–5 subequal. Sternites 1–5 (fig. 2, *5*) trapezoid, conspicuously narrowed towards posterior margin, moderately setulose. Pregenital segments as in other species.

Male genitalia (fig. 2, *1–4*): epandrium round in posterior view (fig. 2, *1*), almost triangular in lateral view, with long, mesally curved outer (lateral) surstylus and brush of 20–25 dense prensisetae on basal plate of inner (medial) surstylus. Hypandrium (fig. 2, *2*) with moderately developed and somewhat unequal gonites, and pair of sensillar plates lateral of phallic base. Epiphallus (fig. 2, *2*: eph) bilobate. Ejaculator (fig. 2, *3*) small, with moderately short and narrow apodeme. Phallus without conspicuous glans, with short and rather sparse spines (fig. 2, *4*: sps) in medial portion.

Female unknown.

Fig. 2. *Otites cretana* sp. n., holotype ♂: *1* — epandrium, posterior; *2* — posterior portion of hypandrium, enlarged; 3 — ejaculator; *4* — phallus (basal portion cut out), *5* — abdominal sternites 2–8 (eph — epiphallus; sps — spines).

Рис. 2. *Otites cretana* sp. n., голотип ♂: *1* — эпандрий, сзади; *2* — задняя часть гипандрия, увеличено; 3 — эякулятор; *4* — фаллюс (базальная часть отрезана), *5* — 2–8-й стерниты брюшка (eph — эпифалл; sps — шипы).

Measurements. Male. Body and wing length 10.3 mm, wing width 3.7 mm; costal cell length 2.2 mm, thorax length 4.4 mm.

Etymology. Latin adjective meaning "Cretan", referring to its type locality.

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