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**A NEW SPECIES OF *MEDETERA* FISCHER VON WALDHEIM, 1819
(DIPTERA: DOLICHOPODIDAE) FROM IRAN**

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Summary. *Medetera anjudanica* sp. n. from Iran is described and illustrated. The new species is close to *M. glaucelloides* Naglis, 2013 described from Turkey, differing mainly in morphology of male genitalia.

Key words: Diptera, Dolichopodidae, *Medetera*, taxonomy, new species, Iran, Markazi.

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Резюме. Из иранского остана Меркази описан *Medetera anjudanica* sp. n. Новый вид близок к *M. glaucelloides* Naglis, 2013, описанному из Турции, отличаясь, главным образом, морфологией гениталий самца.

INTRODUCTION

The genus *Medetera* Fischer von Waldheim, 1819 is known by about 350 species described from all zoogeographical Regions, but with rich diversity in the Palaearctic. It is a stem genus of the tribe Medeterini and the subfamily Medeterinae (Grichanov, 2017). It was reviewed by Negrobov & Stackelberg (1972) for the Palaearctic Region. Negrobov & Naglis (2016) provided recently a revised key to *Medetera* species of the Region.

The holotype and paratype of the new species collected during a recent expedition to Central Iran are housed at the Zoological Institute of the Russian Academy of Sciences, St Petersburg (ZIN). Specimens have been studied and photographed with a ZEISS Discovery V-12 stereo microscope and an AxioCam MRc5 camera. Morphological terminology and abbreviations follow Cumming & Wood (2009). Body length is measured from the base of the antenna to the tip of genital capsule. Wing length is measured from the base to the wing apex. Male genitalia were macerated in 10% KOH. The figure showing the hypopygium in lateral view (Fig. 4) is oriented as it appears on the intact specimen, with the morphologically ventral surface of the genitalia facing up, dorsal surface down, anterior end facing right and posterior end facing left.

DESCRIPTION OF A NEW SPECIES

Medetera anjudanica Grichanov et Ahmadi, sp. n.

Figs 1–6

TYPE MATERIAL. Holotype – ♂, **Iran**: Markazi Province, Arak env., 35 km ESE, Anjudan village, [33°59'03" N, 50°02'01" E, 2036 m a.s.l., on house wall], 22.V 2017, leg. Grichanov [ZIN]. Paratype: 1 male, same label.

DESCRIPTION. Male. *Head* (Fig. 2): frons bluish black, with grey pruinosity; face bluish black, with grey pruinosity above clypeus, narrowest distance between eyes as long as distance between ocellar setae; clypeus shining blue; palpus orange, with white hairs; proboscis brown; antenna (Fig. 3) mainly black, with arista-like stylus white, blackish at base; first flagellomere rounded, about as long as high; arista subapical, bare; length (mm) of scape to pedicel to postpedicel to stylus (1st and 2nd segments), 0.04/0.04/0.07/0.02/0.56; ocellar, vertical and postvertical bristles white; postocular setae white.

Thorax: greenish blue-black, with dense grey pruinosity, with white bristles and setae; 6 pairs of rather short dorsocentral setae, with only posterior pair long and strong; acrostichal setae distinct, consisting of 5–6 pairs; proepisternum with 2 setae of unequal length on its lower portion; scutellum with 2 pairs of strong setae.

Legs: mainly yellow; coxae orange yellow, blackish at extreme base; tarsi black from tip of segment 3; hairs and setae white; fore coxa with few apical setae; mid coxa with strong anterolateral seta; hind coxa with strong lateral seta; femora with short hairs; tibia and tarsomeres devoid of strong bristles; hind tibia with short dorsal seta at 4/5 which slightly longer than remaining short setae; tarsomeres with simple setulae; fore podomere length (from femur to tarsomere 5, mm): 0.61/0.58/0.31/0.14/0.11/0.09/0.09, mid leg: 0.74/0.69/0.44/0.21/0.14/0.09/0.08, hind leg: 0.73/0.86/0.25/0.36/0.17/0.10/0.12.

Wing: hyaline, veins brown; basal section of M distinctly shorter than distal section (0.69/0.93); ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_{1+2} , 0.3/0.08; ratio of cross-vein *dm-cu* to distal part of CuA_1 to maximal distance between R_{4+5} and M_{1+2} , 0.16/0.27/0.2; lower calypter yellow, with white setae; halter yellow.

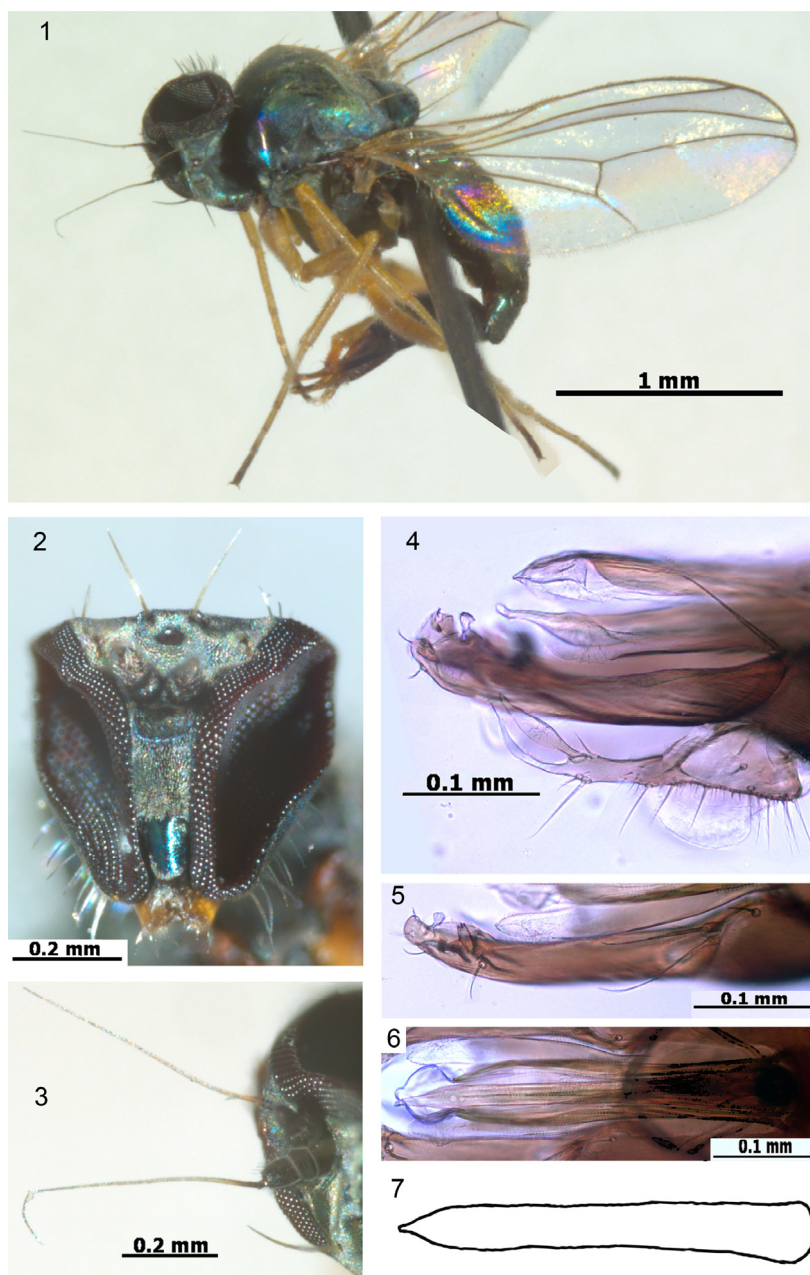
Abdomen: greenish blue-black, with grey pollinosity, with short white setae; 7th tergum well developed; hypopygium black, narrow, elongate-triangular, with yellow-brown appendages (Fig. 4); hypandrium (ventral view) relatively narrow and mostly parallel sided, with strong subapical constriction, forming apical round head with minute projection at apex (Fig. 6); phallus simple, pointed at apex; epandrial lobes rather short, distinctly separated, each bearing equally long and simple setae (Fig. 5); short epandrial seta present between epandrial lobes and base of hypandrium; surstylus long and narrow (Fig. 5); dorsal and ventral arms of surstylus fused almost to apex; dorsal surstylar arm slender, with two dorsal setae; ventral surstylar arm with 2 simple apical setae, 1 leaflike subapical seta, 1 thick dentate seta at junction with dorsal surstylar arm; cercus (Fig. 4) with subtriangular base, narrow distally, ending with long slender pointed process, bearing flattened subapical ventral seta, equal in length to apical process; other cercal setae simple.

MEASUREMENTS. Body length without antennae 2.3 mm, antenna length 0.7 mm, wing length 2.1 mm, wing width 0.7 mm.

FEMALE: unknown.

DISTRIBUTION. Iran (Markazi).

ETYMOLOGY. The species is named after the historical Iranian village, Anjudan (or Anjedan), where the type series was collected.



Figs. 1–7. *Medetera* spp. 1–6 – *M. anjudanica* sp. n.: 1 – habitus, lateral view; 2 – head, anterior view; 3 – antennae, dorsolateral view; 4 – distal appendages of hypopygium, lateral view; 5 – epandrial lobes and sursylus, ventral view; 6 – hypandrium and phallus, ventral view; 7 – *M. glaucelloides* Naglis, 2013, hypandrium, ventral view (after Naglis, 2013: Fig. 1b).

DIAGNOSIS. According to S. Naglis (2013), the new species belongs to the *Medetera muralis* species group differing from other groups in the absence of dorsal setae on mid tibia. The absence of strong setae on all legs is characteristic of the closest genus *Cyrturella* Collin, 1952, but the latter is remarkable in having subequal in length segments 1 and 2 of hind tarsus in both sexes (Grichanov, 2016). Following the key to Palaearctic species (Negrobov & Naglis, 2016), the new species is close to *M. glaucelloides* Naglis, 2013 described from Turkey, which has many colour differences from the new species in addition to morphological differences. It is worth noting that all specimens from Turkey collected in 1985 by Wolfgang Schacht (Zoologische Staatssammlung München) and studied by Stefan Naglis were originally stored in 70% alcohol, but dried and mounted on pin for the examination and for further conservation (Naglis, 2010). The single *M. glaucelloides* type was most probably discolored, having generally much lighter body, antennae, wing veins and legs, than those in *M. anjudanica*. Nevertheless, *M. glaucelloides* was described with antenna and thoracic setae brown, the narrowest distance between eyes 1.5 times the distance between ocellar setae (Naglis, 2013), whereas *M. anjudanica* has black antenna with mostly white antennal stylus and white thoracic setae, the narrowest distance between eyes as long as the distance between ocellar setae. The two species differ well by male genitalia structures. *M. glaucelloides* has hypandrium (ventral view) parallel sided to apex, with acute apex; epandrial lobes reduced to two setae of unequal length; ventral surstylar arm bearing a thin feathered apical seta; cercus having a strong apical spine (Naglis, 2013: Fig. 1b); whereas *M. anjudanica* has hypandrium (ventral view) mostly parallel sided, with strong subapical constriction, forming apical round head with minute projection at apex; epandrial lobes short, but distinct, each bearing equally long setae; ventral surstylar arm bearing a leaflike subapical seta; cercus ending with a long slender pointed process and bearing a flattened subapical ventral seta, equal in length to apical process.

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