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AN ADDITIONAL NEW BRAZILIAN SPECIES OF *MESSIASIA* (DIPTERA, MYDIDAE)

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ABSTRACT

Messiasia wilcoxi, sp. n. (Brazil, Espírito Santo, Conceição da Barra) is described. It belongs to a group of species inhabiting sandy areas, previously known only from the coasts of Peru and Ecuador, and the Sonoran region of Mexico and the southwestern United States.

After the publication of the revision of the genus *Messiasia* (Wilcox & Papavero, 1975), an additional new species was received. It belongs to the *lunei-pertenuis* species-group, characterized by the orange-red abdomen (tergites and sternites). This group was only known from the arid coasts of Peru and Ecuador, and from the Sonoran Desert of Mexico and southwestern United States. The occurrence of this new species in Conceição da Barra, in the coast of the State of Espírito Santo, Brazil, seems to confirm the idea that this group of species is associated to sandy areas.

M. wilcoxi, however, differs from the other two species in the golden-yellow hairs of the head. So, in the key to species in the revision cited above, a modification must be introduced in the second part of couplet 12:

"Abdominal tergites orange with or without dark spots, or entirely black, in which case the lateral margins of the mesonotum are orange; hairs of the head black or golden yellow".

Then, this new species will run to couplet 17, which can be thus modified for its reception:

- "17a. Hairs of the head golden-yellow; thorax and legs dull black; tergite 1 and base of 2 dull black; 2-7 orange-red, with lateral and posterior margins black; antennae 1-3 black, club dark red, segments 0.40-0.14-1.70-1.54 (0.40) mm in length (width); hind femora 5.44 (0.88) in length (width); wings very light yellow, veins blackish; length, 17 mm (Brazil: Espírito Santo) *wilcoxi*, sp. n.
Hairs of the head entirely black 17b

- 17b. Tergite 1 dull black, with narrow posterior margin brown, 2-7 yellowish-red with narrow sides brown to black; antennae 1-3 black to dark red, club largely red, segments 0.39-0.13-2.11-1.82 (0.50) (σ); hind femora dark red, 4.9 times as long as wide, σ 6.47 (1.31), ♀ 6.05 (1.21) mm; wings brown, submarginal cell 2 petiolate; bullae black, red internally, σ 0.71 (0.13), ♀ 0.39 (0.13) mm; length, 18-23 mm (USA: Arizona; Mexico: Sonora) *pertenuis* (Johnson)

Tergite 1 shining black with narrow posterior margin yellow to brown, 2-7 yellowish-red with narrow sides brown, sides of sternites 5-7 extending inward and touching posteriorly on 6-7 brown; antennae black, club in part red, segments σ 0.29-0.16-1.13-1.45 (0.34), ♀ 0.32-0.16-1.37-1.50 (0.42) mm; hind femora black, 6.6 to 6.8 times as long as wide, 4.89 (0.74) (σ), 5.37 (0.79) (♀); wings brown, submarginal cell 2 closed to petiolate; bullae, σ yellow, 0.34 (0.11), ♀ reddish, 0.32 (0.08) mm; length, 14-16 mm (Peru, Ecuador) *lanei* d'Andretta".

Messiasia wilcoxi, sp. n.

Male: Length, 17 mm. Head dull black, sides of face extending across below antennae, sides of frons sparsely, and occiput (especially centrally), cinereous pollinose. Hairs golden-yellow, subequal in length to antennae 1; decumbent, dense and long on gibbosity; semierect and mixed with a few black hairs besides and above antennae; erect on frons; slightly longer above and below on occiput, where they are paler; superior orbital margins of occiput with a few, thicker, black hairs. Proboscis black, labella subequal to length of oral cavity, 1.10 mm long. Face at lower eye margin 1.00, at antennae 1.28, vertex 1.00, one eye 0.90 mm, in width. Antennae black, apical (dilated) part of club dark red; hairs black, a few golden hairs below on segment 1; antennal segments 0.40, 0.14, 1.70, 1.54 (0.40) mm in length (width).

Thorax entirely dull black; hairs short, sparse, black; a few, pale yellow, longish hairs, on pronotum and pteropleura.

Legs entirely black, vestiture black. Hind femora 5.44 (0.88) mm in length (width), some 19-20 dark red tuberculate spines on venter; apical spur on hind tibiae 0.20 in length; tarsal segments 1.00 (0.24), 0.48, 0.32, 0.32, 0.50 mm in length (width). Claws reddish, tip black; pulvilli yellowish.

Halteres and alula black, the alula with a broad margin and the very short fringe translucent yellow. Wings very light yellow, veins blackish.

Tergite 1 and anterior margin of 2 dull black; hairs on 1 longish, sparse, semierect, yellowish; tergites 2-7 orange-red, with narrow posterior margins and a little wider lateral margin black; 6-7 with broader blackish areas, both laterally and posteriorly; 2-3 posteriorly, beyond black rim, with cream-colored hind margin. Sternites light orange, posterior margins creamy; sternite 5, latero-posteriorly, and 6 over entire surface, diffuse black. Hairs short, sparse, decumbent, black, becoming longer on apical segments.

Genitalia reddish on hypandrial surface, black on remainder, with stiff, black bristles apically.

Holotype ♂, BRAZIL, *Espírito Santo*, Conceição da Barra, 12.iii.1968 (C. T. & C. Elias col.), in the Museu de Zoologia da Universidade de São Paulo.

The specific name is a homage to Dr. J. Wilcox, in his 40th year of publications on Diptera.

REFERENCE

- WILCOX, J. & N. PAPAVERO
1975. Studies of Mydidae (Diptera) systematics and evolution. III. The genus *Messiasia* d'Andretta in the Americas (Mydidae). *Arq. Zool.*, S. Paulo, 26 (1): 1-48, 35 figs.

