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A New Species of *Megaselia* from Arizona
(Diptera, Phoridae)

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Among some phorid flies received from Chicago Natural History Museum for determination was an interesting new species of *Megaselia*, which is described below. My thanks are due to Dr. Rupert Wenzel for the privilege of studying these Phoridae and for assistance in the publication of this paper.

***Megaselia (Aphiochaeta) ventralis*, new species. Figure 24.**

Female (in alcohol).—Total length 1.8–2.2 mm.; head width (large specimen) 0.50 mm. Frons yellow, pubescent, median furrow distinct; frontal width 0.28 mm., median length 0.36 mm., lateral length 0.30 mm. Four supra-antennals of equal length, the upper pair nearly two-fifths of frontal width apart (0.12 mm.). Antials a little higher than upper supra-antennals and midway between these and antero-laterals, which are higher than the antials. Second row straight, pre-cellars more approximate than upper supra-antennals. Upper post-oculars differentiated, the lower long. Eyes large, ocular cilia distinct. One malar bristle, followed by a series of seven weak genal bristles. Third antennal joint clear yellow, small, rounded; arista 0.46 mm. long, practically bare. Palpi clear yellow, hairy below, with five long marginal bristles. Epistoma a little protracted. Labrum pear-shaped, chitinized.

Thorax reddish-yellow, with two dorso-central bristles. Mesopleura above with fine hairs and behind with 1–3 bristles of moderate length. Scutellum with two bristles and two hairs.

Abdomen (fig. 24, A, B) yellow. First tergite short, partly covered in front by a membranous seam of whitish color. Second tergite incomplete, not reaching sides, narrowed behind, lateral margins convex and with 2–3 delicate bristles, hind margin with some short hairs. Segments 3–4 elongated, membranous, without chitinous tergites, pubescent including venter. Segments 5–6 short. Fifth tergite dark brown, partly withdrawn, convex behind and with a series of fine bristles on hind margin. Sixth segment membranous in the middle, at each side with a rounded chitinous lobe (fig. 24, B, *l*) which is dark brown and hairy. Seventh segment with a short dark chitinous plate dorsally. Cerci small.

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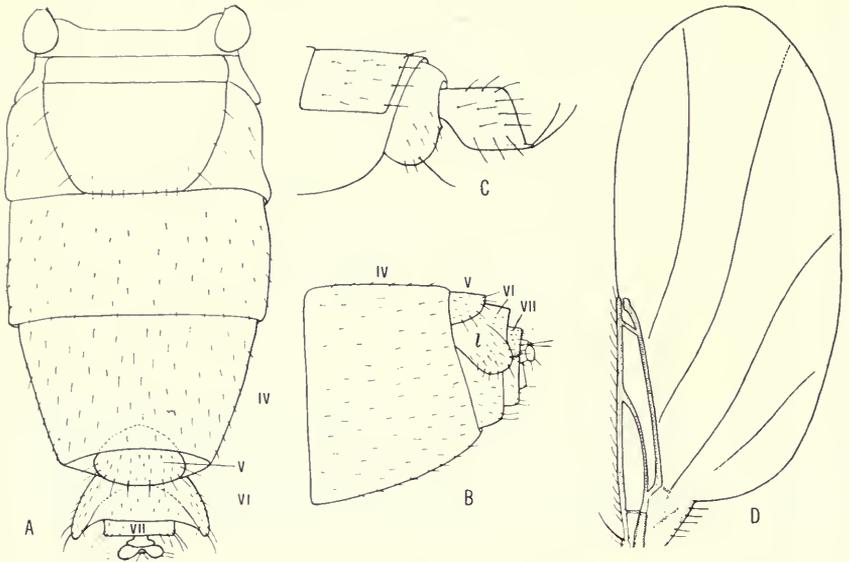


FIG. 24. *Megaselia (Aphiochaeta) ventralis*, new sp. A, Abdomen of female. B, Terminal segments of female abdomen, lateral view. C, Hypopygium of male, from left. D, Wing of female. (Borgmeier del.)

Legs yellow, hind femur not darkened at tip. Front tibia 0.40 mm. long (in a large specimen), with a dorsal row of short cilia and a very short terminal ventral spur. Front tarsus 0.56 mm., front metatarsus one-half of tibia. Mid-tibia with an incomplete dorsal hair-seam and two series of cilia on basal two-thirds. Hind femur two-fifths as broad as long, ventro-basal hairs not prolonged. Hind tibia with a complete dorsal seam and about eleven postero-dorsal cilia, the basal four inconspicuous, the others distinct.

Wing (fig. 24, D) grayish-yellow, veins yellow. Length 1.46–1.80 mm. Costa 0.45 of wing-length, ratio of segments 14:10:4. Costal cilia short, about 19 in each row. Mediastinal vein lacking. Veins 4–7 apically evanescent; the fourth slightly concave, the fifth and sixth slightly sinuous. Anal margin with five hairs. Halteres whitish yellow.

Male.—Total length 1.6 mm. Frons dark brown, chaetotaxy as in female. Third antennal joint yellowish-brown; arista short (0.36 mm.), almost bare. Palpi normal.

Thorax reddish-yellow, darker than in female. Mesopleura with a small black spot above, with hairs and one strong bristle of moderate length. Venter yellow.

Abdominal tergites dark brown, but yellow on basal half of second, posterior half of fifth and a median streak on third and fourth. All tergites with a fine yellow seam on hind margins. Hypopygium (fig. 24, C) dark brown, very short, partly withdrawn, not prolonged behind, each side below with a single bristle of moderate length. Anal segment 0.18 mm. long, 0.10 mm. high, whitish-

yellow, hairy, end-hairs prolonged, bristle-like, legs yellow. Hind femur ventrally with about seven long semi-decumbent hairs on basal half. Front tibia 0.34 mm.

Wing: costa shorter than in female, index 0.41, ratio of segments 13:9:3.

Holotype.—A female, Wickenburg, Maricopa County, Arizona, collected "at light," August, 1950, by Howard K. Gloyd. In the collection of Chicago Natural History Museum.

Paratypes.—Two females and a male, same data as the type, one of the female paratypes in the collection of T. Borgmeier.

Discussion.—This species differs from all other North American species of the subgenus *Aphiochaeta* by the peculiar structure of the female abdomen and by the large anal protuberance of the male.



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