

FOUR NEW DOLICHOPODIDAE FROM THE
EASTERN UNITED STATES
(DIPTERA)

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A review of the known Dolichopodidae of the Eastern United States has revealed the following apparently undescribed species.

***Telmaturgus brevicornis* n. sp.**

Male.—Length, 2 mm; wing, 2 mm by 0.6 mm. Face very narrow below, becoming wider above, silvery white; front broad, slightly widened above, shining metallic violet; palpi and proboscis yellowish; antennae brownish-black; first segment short, only slightly wider apically, bare above; second segment short with a ring of fine setulae; third segment about as long as wide, bluntly pointed, with a dorsal arista; lower orbital cilia pale.

Mesonotum dark metallic bronze color with a median bluish streak and with black spots above the bases of the wings; pleurae a little darker with slight whitish pollen; acrostichal bristles very small, biseriate; dorsocentrals large, with four pairs; scutellum with two widely separated bristles and a few fine setulae; propleurae bare in the middle.

Coxae and the hind margin of the pleurae yellow; fore coxae with light brown bristles apically; middle and hind coxae with a black external bristle; middle coxae with black hairs on the anterior surface; fore and middle femora and tibiae yellow, hind femora yellow on the basal half; hind femora toward the apex, hind tibiae and tarsi, fore and middle tarsi toward the tips brownish; middle and hind femora with preapical bristles; middle tibiae with anterodorsal bristles near the basal fourth and distal third, a posterodorsal near the middle, and three apical bristles; hind tibiae with about six small bristles dorsally, approximately paired near the basal, middle and distal fourths, the middle pair longest; length of the fore tarsi as 12-6-4-3-3, middle tarsi as 17-9-6-5-4, hind tarsi as 11-14- with distal three joints broken off.

Wings narrowly oval, hyaline; with the third vein slightly bent backwards; fourth vein essentially straight beyond the crossvein; crossvein perpendicular to the last part of the fourth vein, one third as long as the last of the fifth vein. Calypters and halteres pale yellow; cilia of the former not observed.

Abdomen cylindrical, mostly dark bronze-colored with violet tinges; second and third segments yellowish, especially on the sides; hairs and bristles black; hypopygium small, imbedded in the tip, brownish-black; outer genital lamellae small, oval, brownish-black, with fine rather pale hairs.

Holotype male from herbaceous vegetation on stream bank, Duke Gardens, Durham, North Carolina, May 7, 1959, collected by Hazim Daoud. Type in the author's collection.

The genus *Telmaturgus* has been considered until now as monotypic and as being restricted to the palearctic region. However, in addition to the present species, *T. satrapa* (*Diaphorus satrapa* Wheeler) and a yet undescribed species from eastern Tennessee belong to this genus.

***Peloropeodes frater* n. sp.**

Male.—Length, 2 mm; wing, 2 mm by 1 mm. Face narrow, wider above, with transverse ridge near the mouth; front broad, narrowing below; face and front with yellowish-gray pollen nearly obscuring the dark ground color; palpi dark with coarse whitish pollen; proboscis dark brown; antennae dark brown, covered with fine pale hairs; first segment about as long as wide, bare above; second segment slightly shorter and wider, with a ring of setulae which are longest dorsally; third segment still wider at the base, a little longer than wide, lower margin slightly convex, upper margin nearly straight beyond the arista, rather pointed at the tip; arista dorsal near the basal third, about twice as long as the antennae, jointed at its basal third; lower orbital cilia except lowermost pair, with pale tips.

Mesonotum metallic dark green, dulled with yellow pollen, pollen whitish on the sides; acrostichals rather short, uniseriate, ending before the rather flattened area on the posterior slope; dorsocentrals larger, with six pairs; two large scutellar bristles with a pair of smaller hair-like bristles toward the outer side; a fine rather pale bristle above the fore coxae.

Fore coxae mostly brown, middle and hind coxae yellow with the outer surface brownish; fore and middle coxae with pale hairs anteriorly grading into dark bristles distally; middle and hind coxae with a black bristle on the outer surface; legs yellow with slight brownish color on the middle of the fore and upper edge of the hind femora, toward the tips of the fore and middle tarsi and broadly on the tips of the joints of the hind tarsi; middle and hind femora with distinct preapical bristles, hind femora with numerous long setulae near the preapical bristle; middle tibiae with two long anterodorsal bristles and two shorter posterodorsals paired near the basal fourth and middle, four apical bristles; hind tibiae with bristles short, two paired near the basal fourth, an anterodorsal just before the middle, a posterodorsal near the third fifth, three apicals; length of the fore tarsi as 17-7-5-4-5, middle tarsi as 24-15-11-7-6, hind tarsi as 13-19-14-9-7.

Wings oval, hyaline, with black veins; third and fourth veins parallel beyond the posterior crossvein, bent slightly backwards; crossvein perpendicular to the basal part of the fourth vein, about half as long as the last of the fifth vein; sixth vein represented by a slight fold. Calypters and halteres yellow with tips of the former and their cilia black.

Abdomen about as long as the thorax, metallic green dulled with yellow pollen on the first segment dorsally; hairs and marginal bristles black; hind margin of the fourth segment ventrally projecting with a slender rearward projection from the middle; hypopygium black; appendages yellow; outer appendages with a sharp bend followed by a slightly broadened portion appearing to have a hole in it, the tip with a very slender point; inner appendages and what appears to be the ventral sheath exerted as far as the outer appendages.

Holotype male on moist rock by stream, Duke Gardens, Durham, North Carolina, May 30, 1959. Type in the author's collection.

The new species superficially resembles *P. brevis* (Van Duzee) very closely, but in having the inner hypopygial appendages as long as the outer it approaches *P. bicolor* (Van Duzee). The short but ventrally convex third segment of the antennae is distinctive, and I have not seen a ventral marginal projection on an abdominal segment in any other *Peloropecodes*.

***Condylostylus viridivittatus* n. sp.**

Male.—Length, 3 mm; wing, 3 mm by 1.2 mm. Face rather wide, metallic green, nearly obscured by white pollen on the lower two-thirds; front broad, shining metallic green, very slightly pollinose; occiput strongly concave on each side of the ocelli; palpi and proboscis translucent yellow, palpi with two black bristles and numerous shorter pale hairs; antennae yellow; first two segments nearly the same width, each a little shorter than wide, first bare above, second with a ring of setulae longer above and below; third segment very short and conical, covered with short white pubescence; arista dorsal and basal; eyes with very short pubescence in the lower part and along the hind margin; lower orbital cilia very fine and pale.

Mesonotum yellow with a longitudinal, median, metallic green stripe; disk of the scutellum metallic green with margins yellow; whitish pollen evident on the pleurae; three pairs of large acrostichal bristles; six pairs of dorsocentrals, anterior pair very small; scutellum with two strong bristles and two hairlike bristles; a slender pale bristle and a few pale hairs above the base of each fore coxa.

Coxae yellow; fore coxae with a crest of stout pale bristles on the outer edge near the base followed by numerous pale hairs, with a row of black hairs on the inner edge grading into a crest of black bristles at the tip; middle coxae with black hairs and distally black bristles; hind coxae with a few pale setulae and a strong black bristle on the outer surface; legs yellow with hairs and bristles black, denser toward the tips of the tarsi and almost obscuring the ground color; femora without true preapical bristles; fore tibiae with only a very short bristle dorsally near the basal fifth; middle tibiae with an anterodorsal bristle near the basal fourth, the two posterodorsals and a ventral bristle very short, three or four apical bristles; hind tibiae with a dorsal bristle near the basal fourth and with two apical bristles; hind basitarsi with two or three bristle-like hairs at the base ventrally which superficially appear to be apical bristles of the tibiae; distal joints of the tarsi flattened and slightly widened; length of the fore tarsi as 65-19-15-10-5, middle tarsi as 65-25-15-8-5, hind tarsi as 50-25-14-9-5.

Wings elongate oval, hyaline; second and third veins curved gradually backwards to near their tips which are widely separated; last section of the fourth vein about half as long as the basal part, slightly sinuous, ending before the margin; a fork from near the tip of the fourth

vein directed forward and slightly basally, with a rather sharp bend near the middle and straight and directed longitudinally in the last half, ending just before the apex of the wing near the tip of the third vein; posterior crossvein oblique with the anterior end more distal, half again as long as the last part of the fifth vein; sixth vein represented by a slight fold. Calypters and halteres yellow; cilia of the former black.

Abdomen mostly yellow; hairs and marginal bristles black; hind margin of the third segment and all of the fourth to the sixth segment with greenish and coppery tinges; hypopygium very small, dark; outer genital lamellae black, rather crescent-shaped, somewhat pointed apically, with a few black hairs.

Holotype male on foliage by shaded stream, Rock Creek Park near Silver Spring, Washington D. C., June 25, 1959. Type in the author's collection.

Of the characters used to distinguish *Condylostylus* from *Sciapus* I have found the color of the cilia of the calypters to be the most dependable. For this reason the present species has been considered to be a *Condylostylus* in spite of having only two strong scutellar bristles and a primarily yellow body color by which it resembles three neotropical species of *Sciapus*. The crest of pale bristles on the fore coxae appears to be a distinctive feature.

***Hercostomus brunneifacies* n. sp.**

Male.—Length, 2.5 mm; wing 2.5 mm by 1.1 mm. Face broad, slightly narrower below, with numerous short black bristles on the lower third, covered with brown pollen; front broad, dark metallic green with slight gray pollen: palpi and proboscis black; antennae black; first segment widened distally from a narrow base, with a few short hairs above; second segment about as long as the first but wider, longer on the sides, with a ring of setulae which are longer above and below; third segment about as wide as long, rather blunt, covered with short white pubescence, with a dorsal arista near the base; orbital cilia black.

Thorax dark metallic green with only slight yellowish pollen on the mesonotum, with thicker white pollen on the pleurae; fore part of the mesonotum with many hair-like bristles; acrostichals biseriata, about a third as long as the dorsocentrals; six pairs of long dorsocentrals, the fifth pair more approximated; scutellum with two strong marginal bristles and with numerous fine setulae on the disk and margin; a black bristle above each fore coxa; very fine pale setulae before the posterior spiracle.

Coxae black, fore and middle coxae with black hairs and distally with bristles, middle and hind coxae with a strong black external bristle; femora, tips of fore tarsi, middle tarsi from the tip of the first joint, hind legs from the tips of the tibiae black; fore, middle and basal two thirds of hind tibiae yellow; middle and hind femora with a preapical oristle, middle femora also with a preapical-like bristle on the inner side; fore tibiae with only short hairlike bristles, only two of the anterodorsal row nearly as long as the width of the tibiae, these nearly paired with two short posterodorsals; middle tibiae with anterodorsal and posterodorsal bristles paired near the basal sixth and with a pair and a ventral bristle just beyond the middle, a third anterodorsal near the basal fourth, with five apical bristles; hind tibiae with anterodorsal and posterodorsal bristles nearly paired at the basal sixth and third, an anterodorsal near the distal third, a posterodorsal near the middle, with two small ventral bristles, two apicals and one subapical; length of the fore tarsi as 9-4-3-2-2, middle tarsi as 12-6-5-3-3, hind tarsi as 8-10-6-5-4-.

Wings oval, very slightly brownish tinged; third and fourth veins nearly straight and parallel beyond the posterior crossvein, fourth ending distinctly before the tip of the wing; crossvein perpendicular to the base of the fourth vein, about two thirds as long as the last part of the fifth vein; sixth vein represented by a slight fold. Calypters and halteres yellow; cilia of the former black.

Abdomen a little longer than the thorax, metallic dark green, with the hairs and the slightly longer marginal bristles black; hypopygium black; outer genital lamellae somewhat wider than long, rather truncate apically, brown with black cilia; inner appendages yellow.

Holotype male on foliage along a marshy stream, Bronx Park, Bronx, New York, June 26, 1959. Type in the author's collection.

Of the group of species with short bristles on the face of the male no other has the face covered with brown pollen. The only other species of the group having short and truncate hypopygial lamellae has the hind tibiae mostly black.