

FIVE NEW CHIRONOMIDAE (DIPTERA) FROM FLORIDA ¹

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The following five new species of Chironomidae have been discovered in the course of routine examinations of material from mosquito light traps operated by the Florida State Board of Health, Bureau of Entomology.

Disposition of types is indicated in parenthesis after data: United States National Museum (USNM), University of Florida Collections (UF), Dr. James E. Sublette (JES). All other types are in the collection of the Florida State Board of Health, Bureau of Entomology.

The following abbreviations (following Dendy and Sublette, 1959²), are used: LR, leg ratio; AR, antennal ratio; DM, dorso-median; DL, dorso-lateral; PA, prealar.

Chironomus (Dicrotendipes) lobus, new species

MALE HOLOTYPE: Ozello, Fla., June 16, 1961 (USNM).

Wing length 2.0 mm; AR 2.0; LR, 1.5. Frontal tubercles minute. Pronotum narrow, slightly projecting medially.

Head and thorax yellow-brown; antennal flagellum and pedicel dark brown; palpi light brown; thoracic vittae, pleural markings, sternum, and postnotum blackish-brown. PA bristles 4; DL bristles approximately 10, in single row.

Abdomen dark brown. Wings light brown, the veins brown. Legs light brown, the fore tibia and all tarsi darker.

Genitalia: (Fig. 1). Dark brown, the tip of ninth tergite and the anal point blackish. Similar to *Chironomus modestus* Say, but setae on inferior appendage not in two rows. Dististyle about 4.5 times long as wide; superior appendage large, heavily coated with microtrichia.

FEMALE: Unknown.

Paratypes: 3 males, Allenhurst, Fla., Jan. 13, 1961; 2 males, Siesta Key, Fla., Oct. 4, 1960; 2 males, Punta Rassa, Fla., Apr. 15, 1958; 1 male, Everglades City, Fla., Nov. 1, 1957, 3 males, Nov. 1, 1960 (one UF, one JES); 1 male, Port Richey, Fla., Mar. 22, 1955, 1 male, Nov. 11, 1955, 2 males, Apr. 22, 1958; 1 male, Ozello, Fla., Sept. 15, 1960, 1 male, Jan. 13, 1961; 1 male, Santa Rosa, Fla., Aug. 4, 1961.

Abdomen varied from olive-brown to dark brown. Wing length, range, 1.45-2.3; mean 1.8 (13); leg ratio, range, 1.2-1.6; mean 1.4 (3); antennal ratio, range 2.0-2.2; mean 2.0 (11). The dististyle typically is obliquely truncate at apex, making the style appear shorter and broader than shown in Figure 1. The species apparently occurs throughout the year.

Diagnosis: The broad, heavily setose superior appendage is distinctive.

¹ This investigation was supported in part by U. S. Public Health Service Grant E-4098, from the Institute of Allergy and Infectious Diseases.

² Dendy, J. S., and J. E. Sublette, 1959. The Chironomidae (=Tendipedidae: Diptera) of Alabama with descriptions of six new species. Ann. Ent. Soc. Amer. 52(5): 506-519.

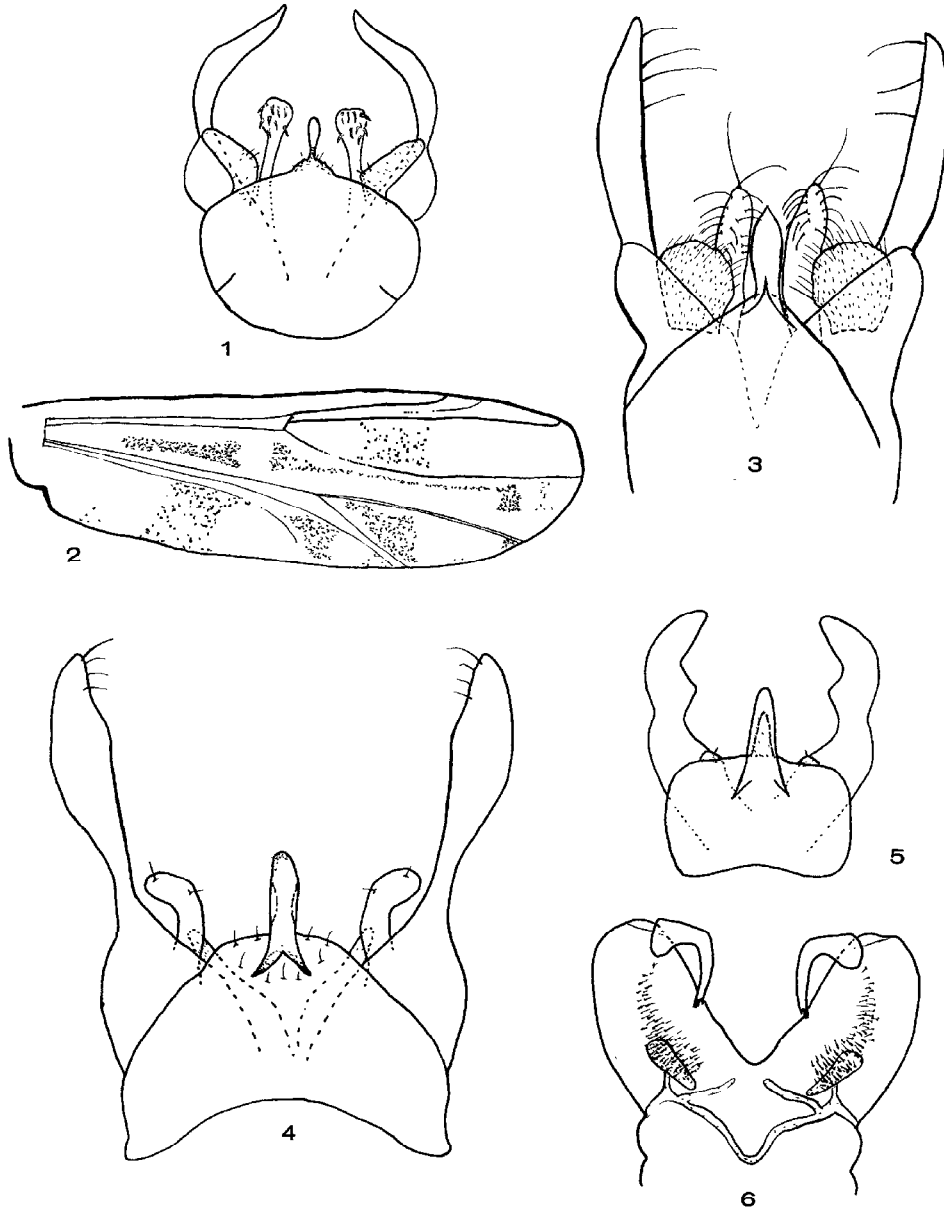


Figure 1. Male genitalia, *Chironomus lobus*, n. sp.
 Figure 2. Wing, *Polypedilum parascalaenum*, n. sp.
 Figure 3. Male genitalia, *Polypedilum parascalaenum*, n. sp.
 Figure 4. Male genitalia, *Chironomus alatus*, n. sp.
 Figure 5. Male genitalia, *Chironomus boydi*, n. sp.
 Figure 6. Male genitalia, *Tanypus clavatus*, n. sp.

Polypedilum (Polypedilum) parascalaenum, new species

MALE HOLOTYPE: Jackson Co., Fla., Woodruff Dam light trap #2, July 21, 1961. (USNM). Wing length 1.3 mm., LR ? (fore tarsi missing), AR 1.1.

Head, thorax, scutellum yellow-brown; abdomen brown; pedicel of antennae, thoracic vittae, sternum, pleural markings and postnotum blackish-brown. DL bristles in single row of 9-12 bristles. PA bristles 4. Mesonotum with pale pruinescence posteriorly. Halteres light brown.

Legs dark brown, the femora with pale subapical ring, the tibiae with a pale basal ring.

Wings with R_1 and R_{2+3} distinctly separated at apex; conspicuously marked with gray. (Fig. 2).

Genitalia: (Fig. 3). Anal point without teeth on base, superior appendage large, rounded, with dense microtrichia.

FEMALES: Similar to male, except more distinctly marked.

Paratypes: 2 females, Blountstown, Fla., Nov. 4, 1961; 2 females, Woodruff Dam light trap #6, May 15, 1956; 2 females, Chattahoochee, Fla., May 19, 1961.

Diagnosis: The wing markings on this species are distinctive.

Chironomus (Cryptochironomus) alatus, new species

MALE HOLOTYPE: Lake Worth, Fla., Sept. 3, 1957. (USNM).

Wing length, 1 mm.; LR 2; AR 1.5 (paratype).

Head, palpi, thorax, halter, yellowish-brown; pedicel of antennae, antennal flagellum, mesonotal vittae, postnotum dark brown; DL bristles in single row of 7 or 8, widely spaced; PA bristles 5.

Abdomen and legs pale brown, the forelegs and apical tarsal segments darker; mid and hind tibiae with two spines, the inner spine on mid tibia curved and distinctly shorter.

Wings light brown; the fork of Cu beyond the r-m crossvein; hairs on anterior wing veins very dark; squama without fringe.

Genitalia: (Fig. 4). Very similar to *carinatus* (Townes), differing in that the apex of the superior appendage is much broader and turns outward, and the ninth tergite lacks a median setiferous ridge.

FEMALE: Unknown.

Paratypes: 2 males, Lake Worth, Fla., Aug. 2, 1957; 2 males, Goose Prairie, Fla., Aug. 2, 1957, 3 males, Sept. 13, 1960. (one UF, one JES).

Wing length, range 1.0-1.1; mean 1.06 (5); AR 1.5 (1).

Diagnosis: This species is very similar to *carinatus*, but is smaller, has a shorter spine on the middle tibia (*carinatus* has a shorter spine on the hind tibiae), and has a broader, bent apex to the superior appendage of the male genitalia.

Chironomus (Cryptochironomus) boydi, new species

MALE HOLOTYPE: Palm Beach Co., Fla., Pump Station S-5A, Conservation area #1, Sept. 9, 1960. (USNM).

Wing 1.5 mm.; LR 1.8 (paratype); AR 2.0.

Head, thorax, abdomen pale greenish stramineous; pedicel ochraceous; antennal flagellum brown; mesonotal vittae, sternum, and postnotum

orange; halteres green; PA bristles 4-6; DM bristles in staggered double row; DL bristles in a single row.

Legs pale greenish, fore legs and apical tarsi on all legs medium brown; two spines on each hind tibia, apparently only 1 spine on mid tibiae.

Wings light brown; veins only slightly darkened; fork of Cu beyond r-m crossvein; M ending at wing apex; squama with only 4-5 hairs.

Genitalia: (Fig. 5). Style with a very distinct inner lobe; anal point broad, with a separate dorsal point bearing many microtrichia; superior appendage very inconspicuous, a broad lobe bearing one seta.

FEMALE: Unknown.

Paratypes: 2 males, same data as holotype (one UF); 4 males, Grant, Fla., Jan. 13, 1961 (one JES); 1 male, Belle Glade, Fla., July 17, 1956.

Wing length, range, 1.5-1.6; mean 1.55 (4); LR 1.9 (1); AR, range 1.8-2.2; mean 2.0 (4).

Diagnosis: This species can be readily separated from all other known species of this genus by the very distinctive shape of the style.

I take pleasure in naming this species in honor of Dr. Mark F. Boyd.

Tanypus clavatus, new species

MALE HOLOTYPE: Santa Rosa, Fla., Apr. 15, 1961 (USNM).

Wing length 2.1 mm., LR 0.73. Pronotum slightly produced at apex.

Head and mouthparts light brown, pedicel fuscous. Mesonotum buff with blackish-brown vittae, pleural markings, sternum, and posnotum. Mesonotal tubercle very distinct, lighter than vittae. DL in single row to just anterior to scutellum, where they form a clump of 5-6. Scutellum dark medially, pale laterally.

Abdomen dark brown, blackish at incisures. Legs dark brown. Wings pale brown, r-m crossvein dark, anterior veins brown, posterior veins paler; indistinct brown spots: three in cell R_5 , two in M, one in Cu, and four or five in anal cell. Halter stem yellow, the knob brown.

Genitalia: (Fig. 6). Dististyle curved, tapering to sharp-pointed apex with blunt, dark spine; large dense patch of setae along inner ventral surface of basistyle; the chitinized supports in base of basistyle black and club-shaped.

FEMALE: Similar to male except for usual sexual differences.

Paratypes: 1 male, Port Richey, Fla., Mar. 7, 1961 (UF); 2 males, Santa Rosa, Fla., Dec. 13, 1955, 1 male, Mar. 2, 1956, 1 male Apr. 25, 1961, 1 male, Mar. 28, 1961; 1 male, Ozello, Fla., Feb. 24, 1961; 3 males, Apalachicola, Fla., Feb. 24, 1961; 1 male, Everglades City, Fla., Dec. 6, 1955 (JES), 1 male, Jan. 20, 1961, 1 male, Feb. 5, 1961, 1 male, Feb. 25, 1961.

Wing length, range, 2.1-2.3; mean, 2.2 (5); LR, range, 0.67-0.73; mean, 0.70 (6). In most specimens the mesonotal vittae and postnotum are black. PA bristles range from 4-7.

Diagnosis: The black mesonotal vittae, indistinct wing spots, and male genitalia serve to distinguish this species from all other known *Tanypus*.