

A NEW SPECIES OF *POLYCENTROPUS*
(TRICHOPTERA: POLYCENTROPODIDAE) FROM CUBA¹

STEVEN W. HAMILTON

Department of Entomology, Clemson University, Clemson, South Carolina
29634-0365.

Abstract.—*Polycentropus mathisi*, new species, is described and illustrated. It is distinct from the other nine species of the *nigriceps* species-group in the form of the preanal, intermediate, and inferior appendages and in details of the phallus.

This is the third species of the *Polycentropus nigriceps* species-group described from Cuba in this decade, bringing to four the number of species from this large island. The widely distributed *P. nigriceps* Banks, 1938, is known from mountainous areas of Pinar del Rio, Las Villas, and Oriente Provinces, while *P. criollo* Botosaneanu, 1980, is known only from the holotype collected from Pinares de Mayari, northern Oriente Province, and *P. turquino* Botosaneanu, 1980, is known from two males and a female taken from "Pico Cuba, Massif Turquino, Sierra Maestra," southern Oriente Province. The fourth species, described here, is known from one male and three females collected in Sorroa, Pinar del Rio Province. In addition to the four Cuban species, four species are known from Hispaniola, one from Jamaica, and one from Puerto Rico. The systematics and biogeography of this distinct, monophyletic group of Greater Antillean caddisflies has been reviewed by Flint (1976) and Hamilton (in press).

Polycentropus mathisi Hamilton, NEW SPECIES

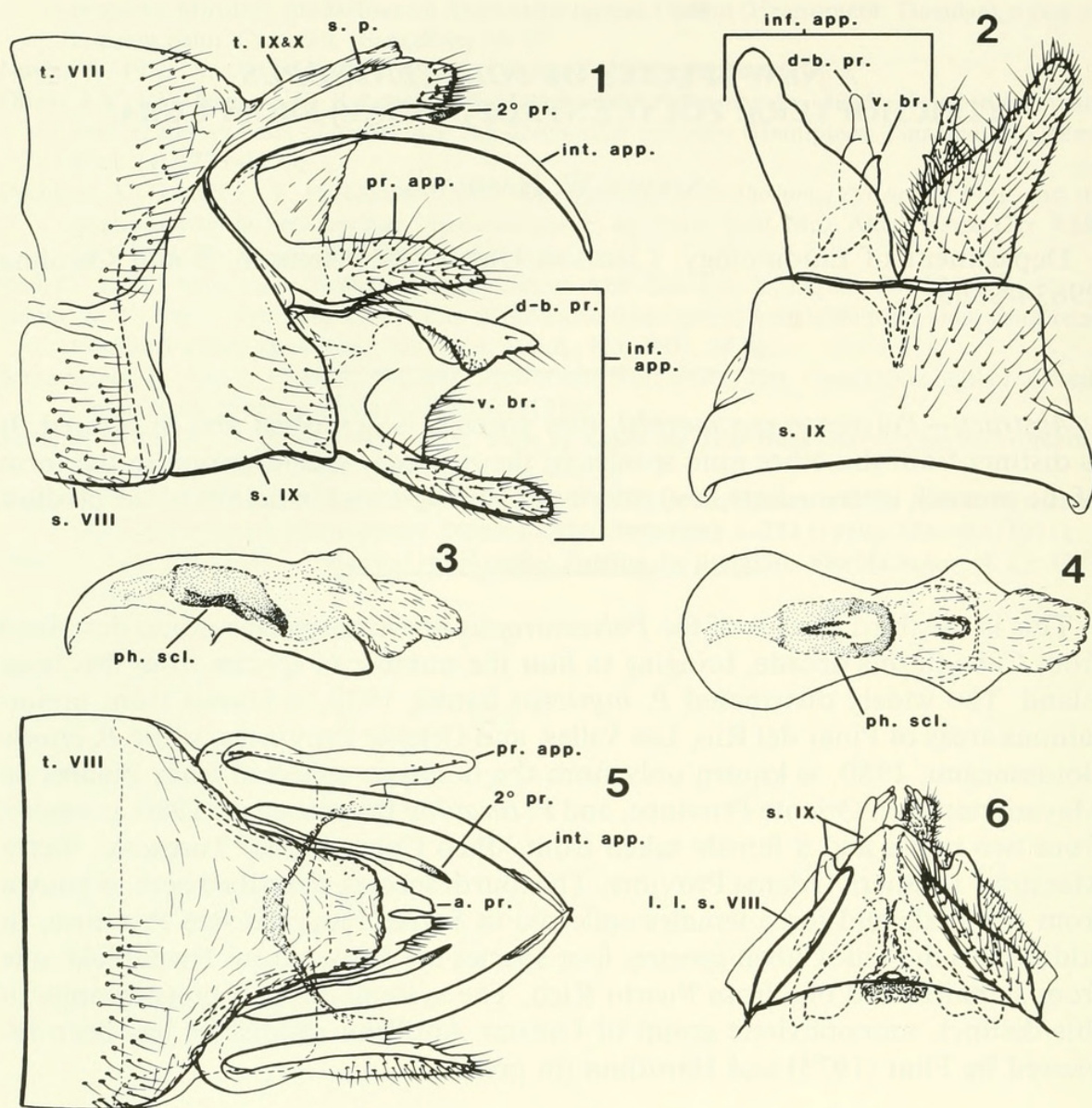
Figs. 1-6

Several characters of the male genital segments render this species distinct from all other species of the *nigriceps* group. The dorsobasal process of the inferior appendage is broadened and blade-like apically, the preanal appendage is acute and lanceolate, and the intermediate appendage bears a long, thin, weakly sclerotized secondary process which originates mesobasally. Also, the vertical brace of the inferior appendage bears a large, acute, posterior prominence.

Description.—Length of forewing: Male, 6.3 mm; female, 7.6-8.4 mm. Legs and thorax pale yellow, abdomen pale brown, dorsum of head and thorax brown; forewings dark brown, with numerous, scattered, small spots of yellow hairs; hindwing with scattered, brown setae.

Male genitalia.—Sternite IX (s. IX) angulate, anterior margin straight for most of its length, anterodorsal corner rounded, posterodorsal surface sloping from

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Figs. 1-6. *Polycentropus mathisi*. Male terminalia, 1-5: 1, left lateral; 2, ventral; 3, phallus, left lateral; 4, phallus, dorsal; 5, dorsal. 6, Female terminalia, ventral. a. pr. = apical process, d-b. pr. = dorso basal process, inf. app. = inferior appendage, int. app. = intermediate appendage, l. l. s. VIII = lateral lobe of sternite VIII, ph. scl. = phallotremal sclerite, pr. app. = preanal appendage, 2° pr. = secondary process, s. p. = setose patch, s. VIII = sternite VIII, s. IX = sternite IX, t. VIII = tergite IX, t. IX & X = tergites IX and X, v. br. = vertical brace.

acute dorsal point to truncate posteroventral corner. Tergum IX and X (t. IX & X) lightly sclerotized ventrally with pair of broad, short, setate, apical processes (a. pr.); dorsal surface membranous with pair of slightly raised setose patches (s. p.), one on either side. Preanal appendage (pr. app.) in lateral aspect simple, narrow, acute posterad, with vestiture of fine, elongate setae; ventromesal surfaces of preanal appendages connected by narrow, sclerotized, subphallic band. Intermediate appendage (int. app.) long, narrow, evenly curved in lateral aspect, with mesal secondary process (2° pr.) originating mesally at base; secondary process thin, $\frac{2}{3}$ length of intermediate appendage, lightly sclerotized except at apex. Inferior appendage (inf. app.) with dorsobasal process (d-b. pr.) straight, apical

portion with ventral rounded point, acute apex; ventral portion of each inferior appendage linear, narrow in lateral aspect, ventral portions divergent when viewed from below, each narrowed apically; vertical brace (v. br.) of inferior appendage with prominent, acute, posterior point. Phallus with lightly sclerotized phallobase bearing dorsomesal bump, pair of apicolateral flanges, and apical pair of ventrolateral flanges; phallotremal sclerite (ph. scl.), in lateral aspect, with darkly sclerotized, beak-like distal area and dark ventral band, in dorsal aspect with distomesal opening and paired dark mesal bands before opening.

Female genitalia.—Lateral lobes of sternite VIII (l. l. s. VIII) narrow, blade-like, tapering apically. Sternite IX (s. IX) trilobate posteriorly, central lobe broad with small mesal notch; each lateral lobes somewhat truncate, narrower than central lobe. Vaginal sclerites indistinct, membranous, posteriorly, with round, mesal sclerite bearing rimmed central opening.

Type material.—*Holotype*: ♂, CUBA, Pinar del Rio Province, Soroa, 27–28.iv.1983, W. N. Mathis. *Paratypes*: 3 ♀, same data as holotype. All specimens are in the U.S. National Museum of Natural History, Washington, D.C.

Etymology.—This species is named for its collector, Wayne N. Mathis of the U.S. National Museum of Natural History.

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