

## A NEW SPECIES OF CHOROTERPES FROM MEXICO (Ephemeroptera: Leptophlebiidae)<sup>1</sup>

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### ABSTRACT

Description and figures are presented for *Choroterpes oaxacaensis* Brusca & Allen, n. sp., from southern Mexico.

A recent study of mayfly nymphs of the family Leptophlebiidae collected in Mexico by the junior author has revealed an undescribed species of the genus *Choroterpes* Eaton, 1881.

*Choroterpes oaxacaensis* Brusca and Allen, n. sp.

**NYMPH.** Length: body 5.0-6.0 mm; caudal filaments 5.0-6.0 mm. General color pale to tan with dark brown markings. Head pale with two large brown maculae on vertex and transverse brown bands between compound eyes (Fig. 3); maxillary palpi 3-segmented. Thoracic nota tan with diffuse brown markings; legs pale with brown markings; femora with a large median and a small subapical brown macula (Fig. 1a-b); femora with long spines and scattered setae on dorsal margin, and a median band of spines on anterior surface (Fig. 1a-b); tibiae with diffuse brown shading; tarsi pale; tarsal claws with 13-14 denticles (Fig. 1c). Abdominal terga with a complex color pattern as in figure 2; abdominal segments with postero-lateral projections, projection longest on segment 9, absent on 10; abdominal gills opaque with lateral trachea and diffuse black lamellar pigmentation (Fig. 4); abdominal sterna pale medially and suffused with brown, and dark brown laterally. Caudal filaments pale.

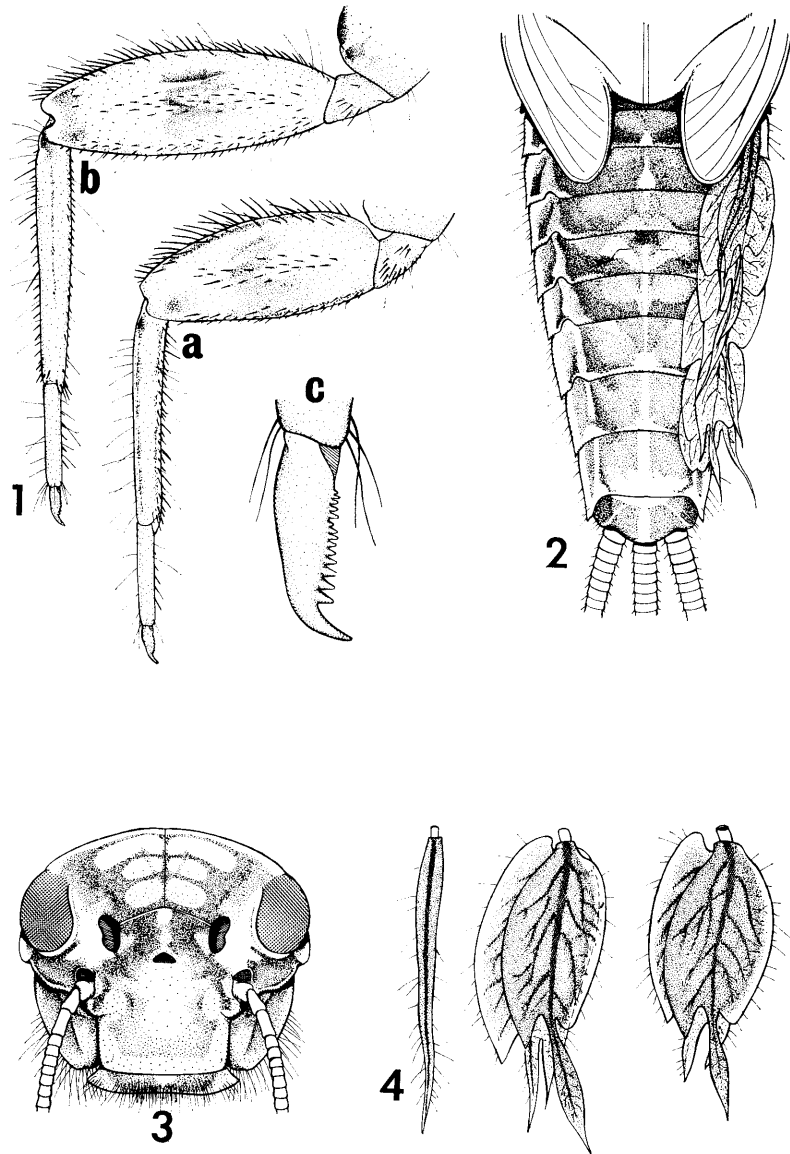
**TYPE.** Holotype: Mature male nymph, stream 15 miles north Ayoquezco, Oaxaca, Mexico, 20-X-68, R. K. Allen, in collection, California Academy of Sciences, San Francisco.

**REMARKS.** The holotype was collected in a small stream with a rocky bottom and moderate stream flow, at an elevation of 6,700 feet, and with a temperature of 54° F. *Choroterpes oaxacaensis* is

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FIGS. 1-4. *Choroterpes oaxacaensis* n. sp., nymphal structures: fig. 1a. right fore leg; fig. 1b. right hind leg; 1c. tarsal claw; fig. 2. abdomen, dorsal view; fig. 3. head, front view; fig. 4. first, third and fifth gills.

the third species of the genus described from Mexico and Central America. *Choroterpes inornata* Eaton, 1892, was described from northern Sonora and reported from Arizona, and *C. nervosa* Eaton, 1892, was described from Zapote, Guatemala. Descriptions of the nymphal stages of these species have not been published. It is unlikely that *C. oaxacaensis* is the nymph of *C. inornata* as mayflies known to occur in northern Sonora and Arizona have not been reported from tropical Mexico. *Choroterpes oaxacaensis* may be found eventually, however, to be the nymphal stage of *C. nervosa* as many Central American species reach their most northern limits in southern Mexico.