

A NEW SPECIES OF *PSEUDONOMONEURA* BEQUAERT
(DIPTERA: MYDIDAE) FROM MEXICO

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Abstract.—A new mydid fly, *Pseudonomoneura calderwoodi*, n. sp., is described and illustrated from 18 specimens collected in Baja California, Mexico. This species is most similar to *Pseudonomoneura nelsoni* Fitzgerald and Kondratieff, and the characters for their separation are summarized. The existing taxonomic key to species of *Pseudonomoneura* is modified to accommodate the new species.

Key Words: Mydidae, *Pseudonomoneura*, Mexico

Fitzgerald and Kondratieff (1995) provided a recent review of the mydid fly genus *Pseudonomoneura* Bequaert in which six species are recognized. Through the kindness of J. A. Calderwood, Santa Barbara Museum of Natural History, 18 males of *Pseudonomoneura* which represented a new species were made available to us for description.

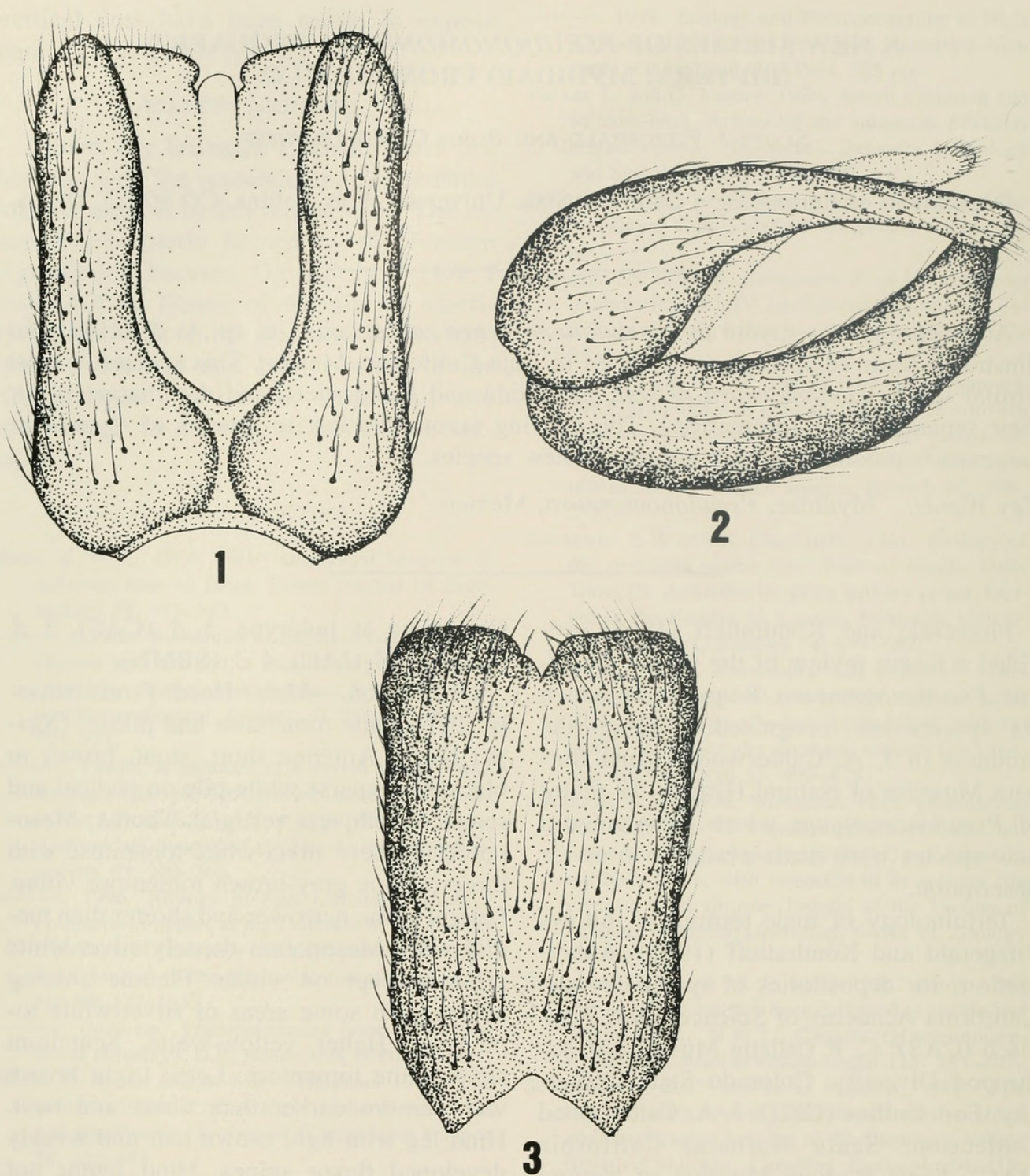
Terminology of male terminalia follows Fitzgerald and Kondratieff (1995). Abbreviations for depositories of specimens are: California Academy of Sciences, San Francisco (CAS); C. P. Gillette Museum of Arthropod Diversity, Colorado State University, Fort Collins (CSU); J. A. Calderwood Collection, Santa Barbara, California (JAC); Santa Barbara Museum of Natural History, Santa Barbara, California (SBMN).

Pseudonomoneura calderwoodi
Fitzgerald and Kondratieff,
New Species
(Figs. 1–3)

Types.—*Holotype*: ♂ (CAS), Mexico: Baja California [Baja California Norte], 13 km North of Guerrero Negro, dunes, 13 April 1995, J. A. Calderwood. *Paratypes*:

same data as holotype, 5 ♂ (CAS), 5 ♂ (CSU), 3 ♂ (JAC), 4 ♂ (SBMN).

Description.—*Male*: Head: Frons densely silver-white tomentose and pilose. Occiput black. Antenna short, stout, brown to black with sparse white pile on pedicel and scape. Mouthparts vestigial. Thorax: Mesonotum densely silver-white tomentose with three opaque gray-brown tomentose vittae. Lateral vittae narrower and shorter than medial vitta. Mesonotum densely silver-white pilose except on vittae. Pleurae shining brown with some areas of silver-white tomentum. Halter yellow-white. Scutellum silver-white tomentose. Legs: Light brown with femora darker than tibiae and tarsi. Hind leg with light brown hair and weakly developed flexor spines. Hind femur not swollen. Wing: Hyaline, 5–6.5 mm, venation as in other *Pseudonomoneura*. Abdomen: Tergites brown in ground color with yellow-white posterior margins. All tergites with thin silver-white tomentum and decumbent pile except on a middorsal longitudinal brown vitta which runs length of abdomen. Sternites brown with sparse decumbent pile. Bullae small, dark brown. Genitalia: In dorsal view, upper forceps of epandrium slender, apically rounded (Fig.



Figs. 1-3. *Pseudonomoneura calderwoodi*, male terminalia. 1, Dorsal view. 2, Lateral view. 3, Ventral view.

1), in lateral view, apically truncate, simple (Fig. 2). Gonocoxites slightly cleft with ventral processes absent (Fig. 3).

Female: Unknown.

Etymology.—The patronym honors Mr. J. A. Calderwood (SBMN), who collected and made available specimens for description.

Diagnosis.—The vestigial mouthparts

and the simple form of the upper forceps of the epandrium (i.e. lacking the digitate structure of *P. californica* (Hardy), the bifurcate structure of *P. bajaensis* Fitzgerald and Kondratieff, or the upper and lower flanges of *P. hirta* (Coquillett), *P. mitcheneri* (James) and *P. tinkhami* (Hardy)) will easily separate males of *P. calderwoodi* from all other *Pseudonomoneura*, with the

exception of *P. nelsoni* Fitzgerald and Kondratieff. Males of *P. calderwoodi* can be distinguished from the similar *P. nelsoni*, by the genitalia in dorsal view which have the upper forceps of the epandrium apically rounded (Fig. 1), rather than apically acute and bent outward (see Fitzgerald and Kondratieff 1995: 32, Fig. 21). In lateral view, the upper forceps of the epandrium are more apically truncate (Fig. 2) than in *P. nelsoni* (see Fitzgerald and Kondratieff 1995: 32, Fig. 20).

Males of *P. calderwoodi* can be identified using the key of Fitzgerald and Kondratieff (1995) with the following modification of couplets 1 and 2 (figure numbers are those in Fitzgerald and Kondratieff 1995):

- 1. Mouthparts vestigial 2
- Mouthparts well-developed 3

- 2. Male terminalia with upper forceps of epandrium simple (Figs. 20, 21) 2a
- Male terminalia with upper forceps of epandrium bifurcate (Figs. 17, 18) *bajaensis*
- 2a. Upper forceps of epandrium apically acute and bent outward in dorsal view (Fig. 21) *nelsoni*
- Upper forceps of epandrium apically rounded and not bent outward in dorsal view *calderwoodi*, n. sp.

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LITERATURE CITED

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Fitzgerald, Scott. J. and Kondratieff, Boris C. 1997. "A new species of *Pseudonomoneura* Bequaert (Diptera: Mydidae) from Mexico." *Proceedings of the Entomological Society of Washington* 99, 171–173.

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