

A NEW SPECIES OF
BAETODES FROM ARIZONA
(EPHEMEROPTERA: BAETIDAE)

The first record of *Baetodes* in North America, north of Mexico, was reported by Edmunds (Ent. News, 61:203-205, 1950) from nymphs collected by J. G. Needham in the Rio Frio, Garner State Park, Uvalde Co., Texas. An assemblage of mayfly nymphs from Arizona were found to belong to an undescribed species of *Baetodes*, representing the second record of the genus for North America, north of Mexico. The holotype is deposited in the California Academy of Sciences. We thank Jerry Battagliotti for preparing the included figures. The research upon which this report is based was supported by the National Science Foundation.

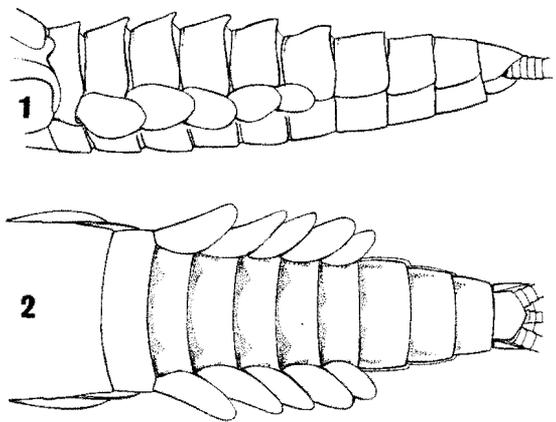
Baetodes sigillatus, new species
Figures 1 and 2

Description: Nymph.—Length: body 5.0–6.0 mm; caudal filaments 4.0–5.0 mm. General color light brown with reddish-brown markings. Head light brown with brown and reddish-brown markings; occiput brown, frons and genae reddish-brown; head without setae. Thoracic nota light brown with brown and reddish-brown markings; pronotum light brown with intricate brown and reddish-brown markings; mesonotum light brown with reddish-brown anterior transverse band, and with submedian longitudinal brown streaks; pronotum with a dorsal, median, posterior elevation; mesonotum without a dorsal elevation; thoracic nota without setae; thoracic sterna pale; legs light brown to brown with reddish-brown markings; femora light brown often margined with

reddish-brown; tibiae brown; tarsi brown to dark brown; coxae without gills; tarsal claws with 6–7 denticles. Abdominal terga light brown with reddish-brown markings; abdominal terga 1–9 with a reddish-brown transverse band; abdominal terga 6–10 with a median pale stripe, and often with submedian pale spots; abdominal tergum 10 light brown; abdominal terga 1–6 with small median tubercles, tubercle on tergum 6 barely discernable (Fig. 1); abdominal terga without setae; abdominal gills pale; abdominal sterna light brown with reddish brown markings; abdominal sterna 1–7 with an anterior transverse reddish brown band (band often disjunct on terga 5–8); abdominal sternum 9 pale (Fig. 2). Caudal filaments light brown.

Holotype: mature male nymph, Tonto Creek at Kohl's Ranch, Gila County, Arizona, 19 July 1970, R. K. Allen. *Paratopotypes:* 1 male and 1 female nymph, same data as holotype, in collection of California State College, Los Angeles.

Remarks: The only described species in the genus are known from South America. *Baetodes serratus* Needham and Murphy and *B. itatayanus* Demoulin were described from Brazil, and *B. spiniferum* Traver is known only from Venezuela. *Baetodes sigillatus* would seem to be distinguished from the other described species by distribution alone as there are no records of North American species of mayflies occurring in South America. The nymphs of this species are further distinguished by possessing small dorsal median tubercles on abdominal segments 1–6 (Fig. 1), and by the presence of transverse reddish-brown bands on abdominal sterna 1–7 (Fig. 2).



Figures 1–2. The nymph of *Baetodes sigillatus*, new species: Fig. 1, abdominal terga, lateral view; Fig. 2, abdominal sterna, ventral view.

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