

The Female of *Setodes guttatus* with Distribution Notes (Trichoptera: Leptoceridae)¹

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ABSTRACT: The female of *Setodes guttatus* (Banks) is described, illustrated and compared with *S. oligius* (Ross), its nearest relative. *Setodes guttatus* and *S. stehri* (Ross) are reported from southern Alabama.

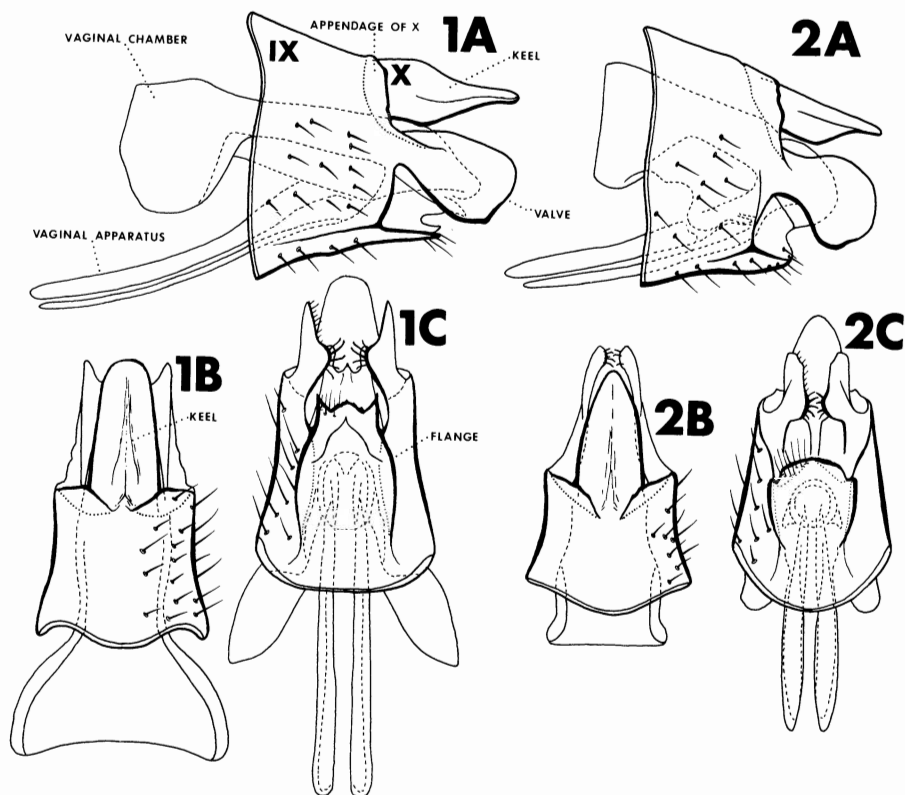
Recently, Holzenthal (1982) reviewed the leptocerid caddisfly genus *Setodes* in North America. In that paper diagnoses, illustrations, and a key were provided for both sexes of the eight Nearctic species except the female of *S. guttatus* (Banks). Due to the collecting efforts of the junior author, a population of *S. guttatus* was discovered in the Red Hills region of southern Alabama. The species was previously thought to be restricted to the Northeast with records from Connecticut, District of Columbia, Maine, Maryland, New Jersey, Pennsylvania, and Quebec. In addition, *S. stehri* (Ross), thought to be endemic to the Southern Appalachians, was taken at the same Alabama locality. Immatures of both species were subsequently collected and will be described in a future paper. We are taking this opportunity to describe and illustrate the female of *S. guttatus* and to present new distributional data for it and *S. stehri*.

Setodes guttatus (Banks) (Fig. 1A-C)

Female genitalia similar to those of *S. oligius* (Fig. 2A-C), its closest relative. Entire genitalic apparatus heavily sclerotized. Abdominal segment IX short, higher than wide and similar in dimension to VIII. Tergum X acuminate in lateral view and bearing a prominent dorsal keel. Appendages of X (=apico-lateral projections of tergum IX of Holzenthal, 1982) short, broad, and thin. Valves large and spoon-shaped. Sternite IX with postero-lateral acute projections and with prominent lateral flanges. Vaginal chamber very large and apparently acting as a receptacle for the spherical egg mass. Antero-ventral sclerotized projections of vaginal apparatus very long, extending anteriorly to segment VI.

Setodes guttatus will key to *S. oligius* in Holzenthal (1982). The two species can be separated with the following modification of that key:

14. Antero-ventral sclerotized projections of vaginal apparatus absent (Holzenthal, 1982, Fig. 10, p. 260) *S. epicampes* Edwards
- Vaginal apparatus with a pair of heavily sclerotized projections extending anteriorly beyond segment VIII (Figs. 1A, 2A) 15
15. Sternite IX with acute postero-lateral projections and prominent lateral flanges; sclerotized projections of vaginal apparatus long, extending anteriorly to segment VI (Fig. 1A-C) ..
..... *S. guttatus* (Banks)
- Sternite IX simple, lateral flanges not as prominent; sclerotized projections of vaginal apparatus shorter, extending anteriorly to segment VII (Fig. 2A-C) *S. oligius* (Ross)



Figs. 1, 2. 1. *Setodes guttatus* (Banks), female genitalia. A. Lateral. B. Dorsal. C. Ventral. 2. *Setodes oligius* (Ross), female genitalia. A. Lateral. B. Dorsal. C. Ventral.

MATERIAL EXAMINED: ALABAMA: Conecuh Co., Sepulga River at U.S. Hwy. 31, SW of McKenzie, 4 September 1982, S. C. Harris, 2 males, 4 females.

Setodes stehri (Ross)

MATERIAL EXAMINED: Same as above, 3 males, 11 females.

HABITAT AND BIOLOGY: The Sepulga River at Hwy. 31 is approximately 50 m wide and 1–2 m deep. Substrate consists of large slabs of fossiliferous limestone bedrock as well as smaller cobble, sand, and gravel. Current is moderate. Larvae of both species were collected in sandy deposits on the leeward sides of rocks as described by Merrill and Wiggins (1971) for the collection of *S. incertus*. Adults were collected at UV light.

Holzenthal, R. W. 1982. The caddisfly genus *Setodes* in North America (Trichoptera: Leptoceridae). J. Kans. Entomol. Soc. 55:253–271.

Merrill, D., and G. B. Wiggins. 1971. The larva and pupa of the caddisfly genus *Setodes* in North America (Trichoptera: Leptoceridae). Life Sci. Occ. Papers, Royal Ontario Mus. 19:1–12.

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