

A NEW SPECIES OF *PETERSULA* FROM SOUTHERN INDIA (EPHEMEROPTERA: LEPTOPHLEBIIDAE)

K. G. Sivaramakrishnan and Michael D. Hubbard¹

Abstract. A new species of the mayfly genus *Petersula*, *P. nathani*, is described from southern India.

A series of mayflies from southern India collected for the Bernice P. Bishop Museum by P.S. Nathan contained 1 specimen of a new species of *Petersula* Sivaramakrishnan. *P. nathani*, n. sp., is the 2nd known species of *Petersula*; both species are from southern India. The new species is illustrated as *Petersula* sp. in Sivaramakrishnan (1984).

Terminology and procedures used in the description follow those of Sivaramakrishnan (1984). The holotype specimen was dried in an envelope and later placed into alcohol.

***Petersula nathani* Sivaramakrishnan & Hubbard, new species**

Fig. 1-3

Petersula sp. Sivaramakrishnan, 1984: fig. 8, 9, 11, 13.

♂ imago. Length: body, 12.7 mm; fore wings, 13.0 mm. (Head distorted.) Thorax: dark brown; pronotum brown, lateral and posterior margins of mesonotum uniformly washed with blackish brown. Prothoracic legs brown, except prothoracic femora heavily and irregularly marked with black (other legs broken off and missing). Wings (Fig. 1-3): longitudinal and crossveins of fore and hind wings brown; membrane of fore and hind wings hyaline, except cells C and Sc of fore wings translucent brown; costal margin of hind wings convex. Abdomen: terga of segments 1-7 translucent yellowish brown washed with brown, terga 8-10 opaque brown; a dark, narrow, transverse band on posterior margin of all terga; paired longitudinal, submedian lines on terga 3-5; sternum 1 brownish black, sterna 2-7 translucent yellowish brown, sterna 8-9 opaque brown; a black, narrow, transverse band on sterna 2-9. Genitalia: brown; length of spinelike projection arising from near apex of each penis lobe nearly 1/3 length of penes. (Caudal filaments broken off and missing.)

♂ subimago. Unknown.

♀ imago and subimago. Unknown.

Nymph. Unknown.

Holotype ♂ imago, INDIA: Madras [Tamil Nadu] State, Anamalai Hills, Kadamparai, 3500' [1070 m], V.1963 (P.S. Nathan) (BPBM 13,079). The holotype is deposited in the collections of the B.P. Bishop Museum.

Remarks. *Petersula nathani* can be distinguished from the only other species in the genus, *P. courtallensis* Sivaramakrishnan, by the following characters in the male imago: (1) terga 1-7 are translucent yellowish brown and washed with brown (Si-

1. Department of Entomology, Florida A&M University, Tallahassee, Florida 32307, USA.

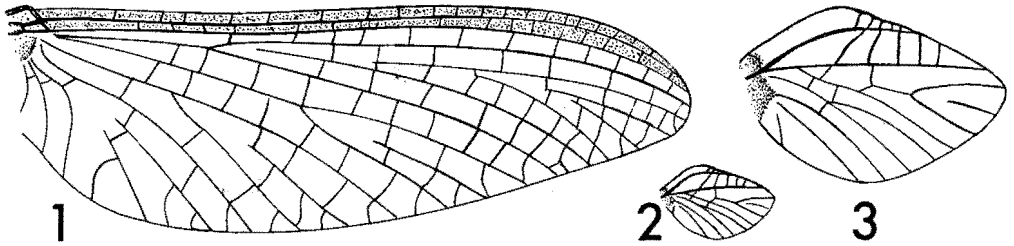


FIG. 1-3. *Petersula nathani*, ♂: 1, fore wing; 2, hind wing; 3, hind wing enlarged.

varamakrishnan 1984: fig. 11, 13); terga 8-10 are opaque brown; (2) paired longitudinal, submedian lines are present on terga 3-5; (3) vein MP_2 of fore wings is attached at base only to vein MP_1 with a crossvein (Fig. 1); and (4) length of spinelike projection arising from near apex of each penis lobe is nearly $1/3$ length of penes.

Acknowledgments. The research reported here was supported by a research program (FLAX 79009) of CSRS, USDA, at Florida A&M University. We thank Janice G. Peters, who prepared the illustrations and contributed much to the finished manuscript. W.L. Peters and H.M. Savage provided many useful comments in preparation of this paper.

LITERATURE CITED

Sivaramakrishnan, K.G. 1984. A new genus and species of Leptophlebiidae: Atalophlebiinae from southern India (Ephemeroptera). *Int. J. Entomol.* 26(3): 194-203.