

A NEW SPECIES OF DRAGONFLY AND OTHER NOTES FROM
THE MARQUESAS ISLANDS*

By

JAMES G. NEEDHAM

DEPARTMENT OF ENTOMOLOGY, CORNELL UNIVERSITY

In my first report on the collections of the Pacific Entomological Survey from the Marquesas Islands I described *Coenagrion interruptum* new species, and the hitherto little-known nymph of *Hemicordulia assimilis* Hagen¹. Later I described from subsequent collections from the same source a new species of *Pseudagrion*². Since that time I have received additional material including adult males of a new species of *Hemicordulia*, and a most interesting coenagrionine nymph. These are described below. As all of the Marquesan collections are not yet at hand it seems unwise to publish a list of records of other species at this time.

Hemicordulia mumfordi, new species (fig. 1, *b*).



FIGURE 1. *Hemicordulia*, male appendages: *a*, *H. oceanica*; *b*, *H. mumfordi*. Drawn by G. T. Lew.

Length 51 mm., abdomen 36 mm., hind wing 35 mm.

A beautiful metallic green, occiput brown, fringed with stiff black hairs. Vertex metallic green, same color covering most of the frons above and down the front to a limiting line of bright yellow. Clypeus olivaceous and mouth blackish.

Thorax wholly green in front and on the sides, lacking entirely the stripes of yellow that characterize the other species of the genus. Black on the collar and densely clothed with tawny hair above it. About the wing roots above and leg bases beneath, dull brown, legs black, front femora brown beneath, wings hyaline with brown stigma and with a golden tint overspreading the base of the anal triangle. Membranule and dilated base of costa greenish brown. Antenodal and postnodal cross-veins 7:8 and 6:9 in fore and hind wing respectively.

Abdomen metallic greenish black, becoming darker toward the end and with a shining brown ring on the apical margin of the second segment. Caudal appendages of the male black, as long as segments 9 and 10 together (fig. 1, *b*).

¹ Needham, J. G., *Coenagrion interruptum*, new species, from the Marquesas, and nymph of *Hemicordulia assimilis* Hagen: B. P. Bishop Mus., Bull. 98, pp. 111-114, 1932.

² Needham, J. G., *Pseudagrion demorsum*, new species, from the Marquesas: B. P. Bishop Mus., Bull. 114, pp. 71-72, 1933.

* Pacific Entomological Survey Publication 7, article 12. Issued October 18, 1933.

Hivaoa: Mount Temetiu, from the slope north of the summit, altitude 3800 feet, December 27, 1930, 1 male, H. Tauraa; altitude 3860 feet, December 30, 1930, 1 male, H. Tauraa.

The second male has the inferior appendage a little shorter but appears to be otherwise identical.

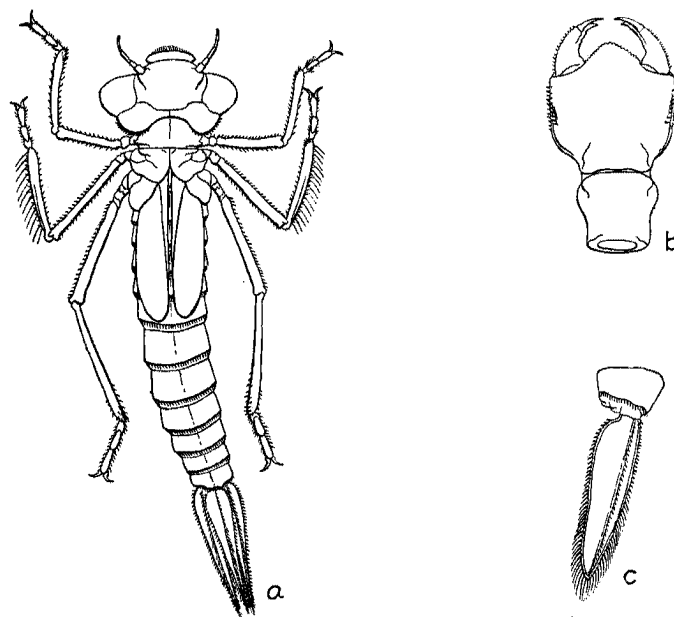


FIGURE 2. Unknown coenagrionine nymph from Hivaoa: *a*, whole figure; *b*, labium; *c*, a single gill. Drawn by W. D. Sargent.

Coenagrionine, genus unknown.

Length 15 mm., tails 4 mm. additional; width of head 4 mm.

Nymph

Color nearly uniform pale brown (in these alcoholic specimens), probably greenish in life. Without pattern save for pale, longitudinal dashes in the intersegmental membranes of the abdomen. Head much wider than thorax and a little wider than long, smooth above, with broadly rounded, densely spinulose hind angles and with a wide straight-bottomed notch between these. Labium short and wide, its hinge reaching backward only between the front coxae; entirely destitute of raptorial setae; lateral lobes edged on their inner margins with minute, obscure crenulations. Middle lobe entire, obtusely triangular, regularly denticulate.

Prothorax flattened above with a prominent rounded shelflike lobe at each side toward the rear that is set off by a notch from the nearly straight hind margin. Legs short, stout, carinate, and minutely spinulose-serrate along the carinae. There is a suggestion of a subapical ring of darker color on each femur.

Abdominal segments about equal in length, or the tenth very slightly shorter. No lateral carinae. Gills half as long as the abdomen, tapering from near the base to their

blunt tips, strongly compressed, carinate, and minutely serrulate along the carinae. The hairs that arise singly between the denticulations increase in length from short spines at the base to long, soft pile at the tip.

Uapou: Paaumea Valley, Vaikokoo, altitude 2200 feet, under stones in stream bed, December, 1931, 2 nymphs, one of them grown. LeBronnec and H. Tauraa.

Nukuhiva: Muake, altitude 2500 feet, under stone in stream, August 3, 1931, 1 nymph, LeBronnec and H. Tauraa.

This is a rather stout damselfly nymph with a wide head and short, sharply triquetral gills. It is peculiar among known coenagrionines in its entire lack of raptorial setae on the labium. If it should prove to be the nymph of my *Coenagrion interruptum*, which I very much doubt, then there would seem to be good reason for erecting another genus to contain it. The solution of the matter awaits further collecting.