

COENAGRION INTERRUPTUM, NEW SPECIES, FROM THE
MARQUESAS, AND NYMPH OF HEMICORDULIA
ASSIMILIS HAGEN *

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The following descriptions are based on material in the collection of the Pacific Entomological Survey which was sent me for determination.

Coenagrion interruptum, new species (fig. 33, *a, b*).

Length, 32 mm.; abdomen, 29 mm.; hind wing, 18 mm.

This is a slender blackish damselfly prettily marked with blue, green, and yellow. The top of the head in the mature male is black with roundish bright blue post-ocular spots. The face is dull yellowish around the mouth and greenish at the sides up to above the level of the antennae along the eye margin, and black on frons and clypeus, with the green almost meeting and almost dividing the black along the fronto-clypeal suture. Front side of basal antennal segments yellow.

Prothorax black above, yellowish beneath, with a blue cross-band in front on dorsum and a broad blue stripe on each side. Synthorax black in front with a broadly interrupted antehumeral stripe that forms an inverted exclamation mark, the outer edging of which is light blue, on each side. Sides green, with only a hair line of black on the third lateral suture, dilated into a spot near its upper end; a similar spot at the top of the middle suture is confluent with the black line on the subalar crest. There are also hair lines on the sutures about the leg bases. Venter yellowish. Wings hyaline with tawny stigma; 11 to 12 post-nodals in the fore wing, 10 in the hind. Vein *M*₂ arises near the sixth antenodal in the fore wing, the fifth in the hind wing. Legs yellowish becoming greenish with age, femora and tibiae heavily capped with black externally toward the knees. Spines of the external row of hind tibiae very variable in number, usually 6, but varying from 5 to 8, the last 2 close together. Hind tarsi very much shorter than the others.

Abdomen very slender on the elongated middle segments. Segments 1 and 2 blue above, each with a quadrangular basal black spot covering three-fourths of the dorsum and with a narrow apical black ring; side greenish; segments 3 to 7 black above, yellowish at the sides, the black widens apically, and at the base is invaded by the yellow; 8 and 9 wholly blue, becoming violet. The intersegmental membrane at the apex of segments 7, 8, and 9 forms a narrow pale blue transverse crescent; 10 above and superior appendages black; sides of 10 and of inferior appendages yellowish. The second joint of the penis ends in two pairs of subequal clawlike hooks, one above the other, and the membranous third joint is deeply bifid at the tip.

The female differs in having the pale color more extensive, especially on the face, and in having the bluish green of the sides of the thorax and of the basal abdominal segments replaced by yellowish brown or tan. The large postocular pale areas are (in this one mature specimen) overlaid next the eye by a postocular spot of blue like that of the male. The dorsal stripes of the synthorax are wide and continuous from collar to crest; almost as wide as the mid-dorsal black stripe. The stigma is tawny, as in the young male.

* Pacific Entomological Survey Publication I, article 10.

The superior appendages of the male are about as long as the tenth segment. Viewed from above they are a pair of stout semicircularly incurved and acutely pointed hooks. The basal third is thick, hairy, and elevated and terminates in a transverse ridge whose superior margin bears internally a small rounded lobe and externally two teeth. Beyond this thickened basal portion the hooks are flattened and declined and bare. The inferior appendages are slightly shorter, strongly declined, and with a rounded tubercle in the middle of the superior margin and on the upturned tooth at the tip.

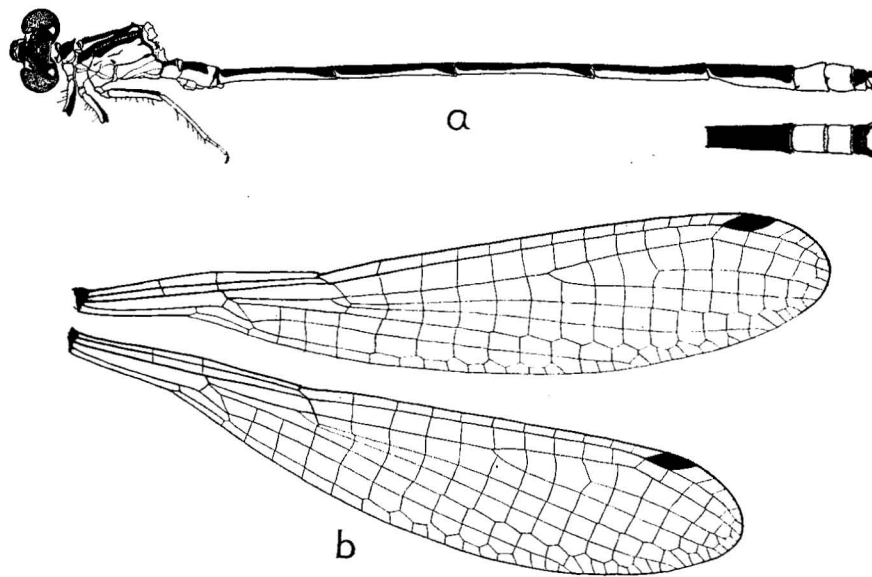


FIGURE 33. a, *Coenagrion interruptum*, new species; b, wings of *Coenagrion interruptum*.

There is a single female with half of the abdomen missing. There are seven males among which are two whole specimens. The others lack more or less of the abdomen.

Uapou: Hakahetau Valley, elevation 900 feet, December 14, 1929, elevation 1,500 feet, December 26, 1929, elevation 800 feet, January 25, 1930, R. R. Whitten.

Tahuata: Tehue Valley, elevation 650 feet, May 27, 1930, elevation 1,000 to 2,000 feet, January 29, 1930; Amatea, elevation 2,500 feet, July 11, 1930, LeBronnec and H. Tauraa.

This species does not quite fit *Coenagrion*, and another new genus might with abundant precedents be erected for it, were it not that there are already too many undefinable genera in this part of the series. Stigmas are alike in fore and hind wing, and there is no elevation and scarcely an emargination of the tip end of the abdomen in the male.

Hemicordulia assimilis Hagen (fig. 34, *a*, *b*).

Nymph

Total length, 25 mm.; abdomen, 15 mm.; width of head, 7.5 mm.; width of abdomen, 8 mm. This is a stocky smooth-bodied nymph with blunt, short-spined abdomen. Head rather large with small laterally prominent eyes. Labium short, its hinge only reaching the middle legs, with 8 lateral and 8 or 9 mental setae, the 5 outer ones larger. End hook rather slender. Legs faintly banded with lighter and darker areas. The pair of ventral tubercles before the middle coxae, beside the hinge of the labium, is clad with tufted bristles.

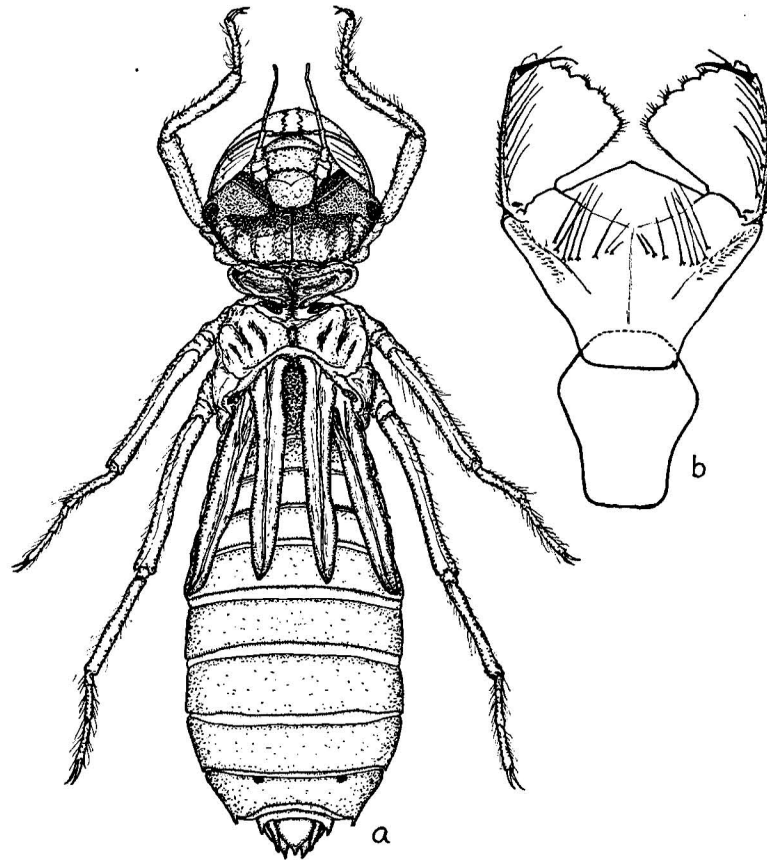


FIGURE 34. *Hemicordulia assimilis* Hagen: *a*, nymph; *b*, labium of nymph, from within.

Abdomen with no dorsal hooks and with very short lateral spines on segments 8 and 9, those of 8 almost vestigial. Segment 10 annular, included in the apex of 9, which is a little prolonged and hair-fringed beneath. Appendages very short, the superior, viewed from above, almost an equilateral triangle; laterals almost as long; inferiors a little longer.

Two adult males of this fine metallic species were collected on Tahuata, Vaitupaahi, elevation 1,750 feet, July 9, 1930, and elevation 1,800 feet, LeBronnec and H. Tauraa, and two in addition on the slope north of the summit of Mount Temetiu, Hivaoa, elevation 3,680 feet, March 27, 1930, Mumford and Adamson. Five nymphs that I refer by supposition to the same species were collected on Mount Temetiu, Hivaoa, elevation 3,000 feet, December 29, 1930, H. Tauraa. The species has been reported from the Celebes, New Guinea, and Alu and Rubiana of the Solomon Islands.