

TWO NEW GENERA OF HYDROMETRIDAE FROM THE MARQUESAS ISLANDS (HEMIPTERA)^{1 2}

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In 1934 Mr. E. P. Van Duzee [B. P. Bishop Mus., Bull. 114(26) : 326], described a curious new hydrometrid from the Marquesas Islands which he named *Hydrometra pacifica*. He kindly sent me for study the male paratype of this species and another strange Marquesan species which came to the attention of Mr. Robert L. Usinger. These two specimens are most unusual and cannot be assigned to any previously described genera. Mr. Van Duzee was not certain that the two specimens of *H. pacifica* were mature, but the male paratype which I have seen is fully developed.

The general facies of Mr. Usinger's specimen reminded me of *Limnobates paradoxus* Hussey [Brooklyn Ent. Soc., Bull. 20(3) : 115-118, pl. 4, 1925], so I re-examined the type of this species. *L. paradoxus* is only about as long as the head and thorax of the hairy Marquesan species and its thorax is no broader than the front of the head of the new species. It is not as hairy as the insular species, although it has some hairs that are fairly long and unlike the spinules, and has conspicuous small black spinules on the head and pronotum which are entirely lacking in the new species. The tarsus of *L. paradoxus* has the terminal segment a little longer and decidedly thicker than the preceding and very inconspicuous claws. On the head of Hussey's type I find the four long hairs arising from pale spots and can find no indication of the usual anterior pair common to other hydrometrids. The drawing given by Dr. Hussey shows the spinules as light instead of black.

Genus TRICHOMETRA, new genus

Hairy, stout-bodied hydrometrids; head stout, longer than thorax but shorter than abdomen, three pairs of head setae located as in *Hydrometra*, both dorsal and ventral interocular grooves absent, eyes of moderate size but about half the diameter of that of head, antennae probably 4-segmented, first segment shortest and stouter than those following, third longest; rostrum elongate, tip may attain anterior margin of prothorax. Thorax short, width across meta-acetabula about three-fourths the median length, the middle coxae

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² Contribution from the Department of Entomology, University of Kansas, Lawrence, Kansas.

almost equidistant between anterior and posterior coxae, scutellum minute, sternum neither sulcate nor longitudinally sutured; omphalium absent. Abdominal segments broader than long. Legs stout, hairy, first tarsal segment half as long as second which equals third in length; tarsal claws apical, stout.

Genotype, *Trichometra robusta* Hungerford.

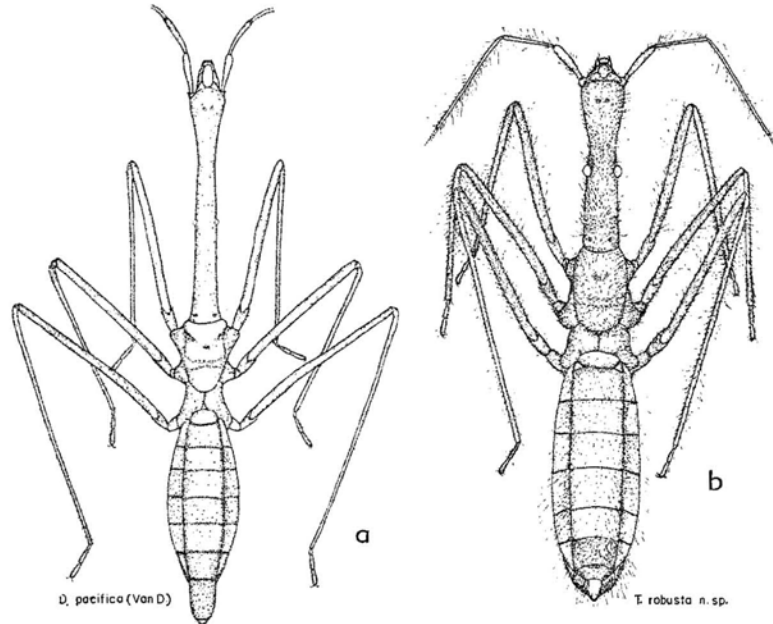


FIGURE 1.—a, *Dolichocephalometa pacifica*; b, *Trichometra robusta*.

***Trichometra robusta*, new species (fig. 1, b).**

Size and color: length 6 mm.; greatest width of abdomen 1.11 mm. General color dark brown; median longitudinal stripe on pronotum, caudal half silvery; silvery spots on anterior half of second, third, fourth and fifth connexival sections and faint spots on sixth. Venter lightly frosted.

Structural characteristics: stout and hairy.

Head: length 73 units; breadth across antenniferous tubercles 18 units; across eyes 14 units; across postocular portion 11 units; ratio of anteocular to postocular portion of head is 39 to 28; the eye 6 units in diameter and about midway between antenniferous tubercle and anterior margin of prothorax; interocular grooves absent; clypeus longer than broad, somewhat inflated, setiferous, truncate apically; rostrum barely attaining front margin of prothorax; beginning with the basal segment the ratio of the lengths of the antennal segments is expressed by the formula: 15:22:49.7:x. (the antennae in type are broken.)

Thorax: prothorax short, compact, distance between first and second coxae is to that between the second and third as 18:20. Unpitted except for four pits on venter of prothoracic collar. Length of pronotum 30 units which is three-fourths length of thorax measured on median dorsal line; acetabula without pits; legs short, stout and hairy;

coxae and trochanters relatively longer than in species of *Hydrometra*; hind coxa and trochanter together one-fourth the length of hind femur. Leg measurements as follows: anterior femur 56 units, tibia 64 units, tarsus 15 units; posterior femur 85 units, tibia 110 units, tarsus 15 units. Anterior femur just attaining antenniferous tubercle; posterior femur surpassing apex of abdomen by 15 units.

Abdomen: length 90 units, greatest width 37 units. Tergites broader than long, less hairy than connexivum which is broadest in the middle, tapering to narrow ridge on both ends. First dorsal genital short, tapering and truncate at tip; second dorsal genital declivant, conate. Ventral abdominal segments more or less hairy; last one roundly produced apically.

Described from a single wingless female found on Hivaoa, Marquesas Islands, Temetiu Summit, alt. 4,160 ft., on ferns, Jan. 20, 1932, by LeBronnec. Holotype in Bishop Museum.

Genus DOLICHOCEPHALOMETRA, new genus

Body clothed with appressed pubescence. Head elongate, nearly as long as thorax and abdomen together, three pairs of head setae located as in *Hydrometra*, both dorsal and ventral interocular grooves absent, eyes reduced to about a dozen coarse facets and half or less than half the diameter of head, antennae probably 4-segmented, relatively stout, first segment slightly shorter than second, third segment longest. Rostrum extremely long, considerably surpassing anterior margin of prothorax. Thorax short, width across meta-acetabula a little more than three-fifths the median length; the middle coxae almost equidistant between anterior and posterior coxae, scutellum invisible, sternum neither sulcate nor longitudinally sutured, omphalium absent. Abdominal segments broader than long. Legs moderately stout and covered like the body with appressed pubescence, first tarsal segment less than half as long as second which is subequal in length to third, tarsal claws apical, moderate in size.

Genotype, *Dolichocephalometra pacifica* (Van Duzee). [*Hydrometra pacifica* Van Duzee, B. P. Bishop Mus., Bull. 114(26): 326, 1934.]

These two new genera have many characteristics in common. However, as shown in figure 1, the body vestiture and the proportional size of the head, eyes and rostrum are of generic value. Both genera belong to the Hydrometrinae and are distinguished from *Hydrometra* by the short thorax with the middle coxae about equidistant between the other two and by having the abdominal tergites at least as broad as long.

The genera of Hydrometridae may be separated as follows:

- A. Antennae 5-segmented, omphalium present, body more or less clothed with minute but stout black spinules and some erect pubescence.....
 **Limnobotodes** Hussey

- AA. Antennae 4-segmented, omphalium absent, body not clothed with minute but stout spinules.
- B. Sternum neither sulcate nor longitudinally sutured.
- C. Thorax compact, short, median coxae about equidistant between the other two, abdominal tergites at least as broad as long.
- D. Body clothed with hair, eyes of moderate size on a head of moderate length **Trichometra** Hungerford
- DD. Body clothed with appressed pubescence, eyes reduced on a head nearly as long as the body.....
..... **Dolichocephalometra** Hungerford
- CC. Thorax elongate, the median coxae nearer the anterior than the posterior coxae. Abdominal tergites longer than broad.....
..... **Hydrometra** Lamarck
- BB. Mesosternum sulcated along median longitudinal line, mesosternum with two distinct longitudinal sutures..... **Bacillometra** Esaki