## AMERICAN MUSEUM NOVITATES

PUBLISHED BY THE AMERICAN MUSEUM OF NATURAL HISTORY CITY OF NEW YORK JULY 30, 1952 NUMBER 1579

## THE AMERICAN SPECIES OF CYLINDROSTETHUS MAYR (HEMIPTERA, GERRIDAE)

By CARL J. DRAKE1

The genus *Cylindrostethus* Mayr is represented in the Western Hemisphere by seven species, including a new form from Peru described below. The members of this singular genus are the longest and largest of the American water-striders. Their bodies are extremely elongate, moderately stout, and almost cylindrical in form. The middle and hind legs are extremely long, with the tips of the femora reaching to or beyond the apex of the abdomen. Macropterous forms of the American species are extremely rare, as the winged form of only one species, *C. palmaris* Drake and Harris, is known.

The American species of *Cylindrostethus* can be readily separated into two distinct groups as follows:

Group 1: Mesonotum unicolorous, longitudinally impressed on sides. Sixth ventral segment in male doubly emarginate on hind margin (deeply notched at middle); first genital segment above broad, not narrowed posteriorly, truncate behind; upper lobe of second segment at base beneath with a pair of long, divergent, prong-like processes pointed anterolaterally and downward. This group comprises *C. linearis* (Erichson), *C. erythropus* (Herrich-Schaeffer), *C. bilobatus* Kuitert, and *C. bassleri*, new species.

GROUP 2: Mesonotum with a conspicuous dark stripe on each side. Sixth ventral segment in male with only a broadly rounded emargination on posterior margin; first genital above tapering slowly, then before the apex abruptly narrowed and terminating in a sharp point; upper lobe of second segment beneath at base

<sup>&</sup>lt;sup>1</sup> Iowa State College, Ames, Iowa.

expanded laterally on each side into a small, plate-like structure. This group includes *C. regulus* (B. White), *C. hungerfordi* Drake and Harris, and *C. palmaris* Drake and Harris. It should be noted that the hardened structures on the basal part of the hind lobe of the second genital segment of the male present characters of specific value for the separation of species in both groups.

## Cylindrostethus bassleri, new species

APTEROUS FORM: Large, very elongate, dark ferruginous brown; mesonotum unicolorous, without dorsal or lateral stripes on mesonotum; pronotum with a median longitudinal brown stripe. Head with basal part brownish, very dark or brownish black in front, beneath pale brown. Anterior coxae, trochanters, and femora largely testaceous, femora beneath darker. Acetabular plates in front testaceous. Middle and hind legs brownish. Antennae blackish fuscous. Pubescence short, dense, grayish. Abdomen beneath clothed with short hairs.

Size: Length, 16.00-17.00 mm.; width, 2.0-2.40 mm.

HEAD: Width across eyes, 1.75 mm. Narrowest part of interocular space scarcely more than half as wide as the width of an eye. Eyes large, converging anteriorly, blackish. Antennae moderately long, clothed with short pubescence, without stiff long hairs; formula: I, 82; II, 30; III, 20; IV, 46. Rostrum short, fuscous black, the last segment black and shining.

THORAX: Pronotum short, less than twice as wide as long. Mesonotum very long, parallel-sided, longitudinally impressed on each side, roundly produced behind. Middle and hind legs very long, very slender, the tips of hind femora extending considerably beyond apex of genital segments.

Male: Abdomen parallel-sided; connexiva straight, rather narrow, margined with brown, strongly produced posteriorly so as to form on apical end of each a large sharp spine, which extends almost to posterior margin of first genital segment. Last segment of venter doubly emarginate behind, the median notch broad, deep, U-shaped, and without a tooth at middle. First genital segment above large, broad, not narrowed posteriorly, wide and truncate behind, almost quadrate in outline, with outer margins of dorsal surface brownish; beneath rounded, plump, darkened apically, the posterior margin broadly, roundly emarginate. Second genital segment above narrow, almost cylindrical at base, thence tapering posteriorly and terminating in a sharp spine;

upper lobe on each at base beneath with a large, somewhat flattened, sharp, prong-like projection which points anterolaterally and somewhat downward.

Female: Abdomen slowly narrowed posteriorly; connexiva slightly wider than in male, broadly margined with brown, slightly narrower posteriorly, reflexed apically with apices touching, each terminating behind in a short, sharp spine, the spines also touching within; abdomen above with a small patch of hairs at base; last segment of venter feebly roundly produced at the middle of hind margin; genital segments narrowed posteriorly, terminating in a sharp spine. Posterior part of mesonotum without median, raised, posteriorly directed lobes.

Type Material: Holotype, male, and allotype, female, Santiago River, Peru, November 4, 1924, collected by H. Bassler, in the collection of the American Museum of Natural History. Paratypes, four specimens, taken with type, in collection of the author and American Museum.

This species is most closely allied to *C. linearis* and *C. erythropus*, from which it can be separated by its larger size, longer first and last antennal segments; the males do not have a spine at the middle of the U-shaped notch on the last venter, and the prominent prongs on the terminal lobe of second genital segment are also differently shaped.

## LIST OF AMERICAN SPECIES

Genus Cylindrostethus Mayr, 1865 Cylindrostethus Fieber, 1861 (invalid) Hydrobates Erichson, 1848 (preoccupied; not Boie) Janias Distant, 1910 (synonym) Type, C. fieberi Mayr (= Gerris productus Spinola)

- 1. bassleri Drake, 1952, Peru
- 2. bilobatus Kuitert, 1942, Bolivia, Brazil
- 3. erythropus (Herrich-Schaeffer), 1850, Brazil
- 4. hungerfordi Drake and Harris, 1934, British Guiana
- 5. linearis (Erichson), 1848, Brazil, Bolivia
- 6. palmaris Drake and Harris, 1930, Brazil, Venezuela, Colombia, British West Indies (Trinidad)
- 7. regulus (B. White), 1879, Brazil