

## COLLECTING WATER MITES IN CUBA.

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In the spring of 1924 the author spent a week in Cuba; one of the purposes of the visit was to secure if possible collections of water mites. All of the time was spent in Havana, with some short trips into the surrounding country. A few attempts to find likely collecting grounds in the suburbs of Havana proved fruitless, ignorance of the geography, the languages and the customs proving insurmountable difficulties in the short time available. Then a visit was made to the University of Havana and here the author found a most courteous welcome and very generous help. Dr. Carlos de la Torre, professor of Zoology, very kindly offered his assistance; as a result, it was possible to visit several places in the vicinity of the city, and a small amount of material was finally secured.

The time of year, early April, was not favorable for collecting, as this is the end of the dry season. Moreover, the mosquito campaign of the last years has resulted in the draining of many small ponds and pools where the water mites might be looked for. Several sloughs were visited which yielded nothing. But two places were found which gave them in some abundance. One of these places was a small artificial lake supporting much plant life in Floral Park, Marianao, about eight miles west of Havana; the other was the weedy border of the Almendares River, at Vento, some ten miles southeast of Havana, near the city reservoir. Only a short time for collecting was possible, but both places proved to be rich collecting ground.

With the Birge collecting net, over sixty individuals were secured in the two places. The material was preserved and has since been carefully studied. It is believed that this is the first published account of the hydracarina of Cuba. Any material even though meager, contributes to the comparison of the fauna of Cuba and the southern states.

## DESCRIPTION OF THE SPECIES.

Six genera and as many species were found represented in the material so secured, three of which are new. A list of the species follows, with a brief description of the new species. A more detailed account of the latter, with figures, will appear in a later publication.

*Limnesia histrionica* (Herm.) was found both in Floral Park and at Vento. Seventeen individuals, males, females and nymphs, were secured. One of the females was very young but had eggs. This species is a very large one and cosmopolitan.

*Neumania tenuipalpis* Mar. was found, one female, at Vento. This species appears to be fairly common in the United States.

*Diplodontus americanus* Mar. comprised the majority of individuals in the entire collection, forty-eight individuals being secured at Vento, both adults and nymphs. It is a common and very abundant species in the States.

*Arrhenurus habanicus*, nov. spec., was represented by two individuals only, both females. The body is oval, measuring 0.8 mm., and has a large enclosed dorsal area. The palpi are unusual, the second joint bearing a tuft of long curved blade-like bristles.

*Piona marianaensis* nov. spec., was represented by two males found in Floral Park. The ventral plates cover a large part of the surface, the last two epimera being very narrow. The genital area abuts closely upon the epimera and bears a few faintly outlined acetabula near the posterior border. The fourth leg is not highly developed. The palpi are stout, with a large hair papilla on the fourth segment.

*Xystonotus torrei* nov. spec., was found in Floral Park to the number of fourteen individuals, ten of which were males. The author takes pleasure in dedicating this new and very interesting species to Dr. Torre. The body of the new mite is circular in outline and deep blue in color, measuring 0.6 mm. in the male and 0.75 mm. in the female. The enclosed dorsal area is large and circular; in the male it is extended posteriorly in to a short truncated peg which projects slightly beyond the body edge. The epimera are united, the posterior borders of

the last pair partly fused with the body covering. The genital areas of each side, oval in the male, circular in the female, bear three acetabula on each plate. Palpi and capitulum are very small. The fourth leg in the male is conspicuously modified, the fifth segment being large and curved, while the fourth is very short and bears a tuft of hairs.