A NEW POLYCHAETOUS ANNELID OF THE GENUS PHYLLODOCE FROM THE WEST COAST OF COSTA RICA

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In August, 1927, a small collection of invertebrates from the Gulf of Nicoya was sent to the United States National Museum by Professor Manuel Valerio of the Lyceum of Costa Rica, for identification. Included in this material was a polychaetous annelid, here described, which appears to be new to science.

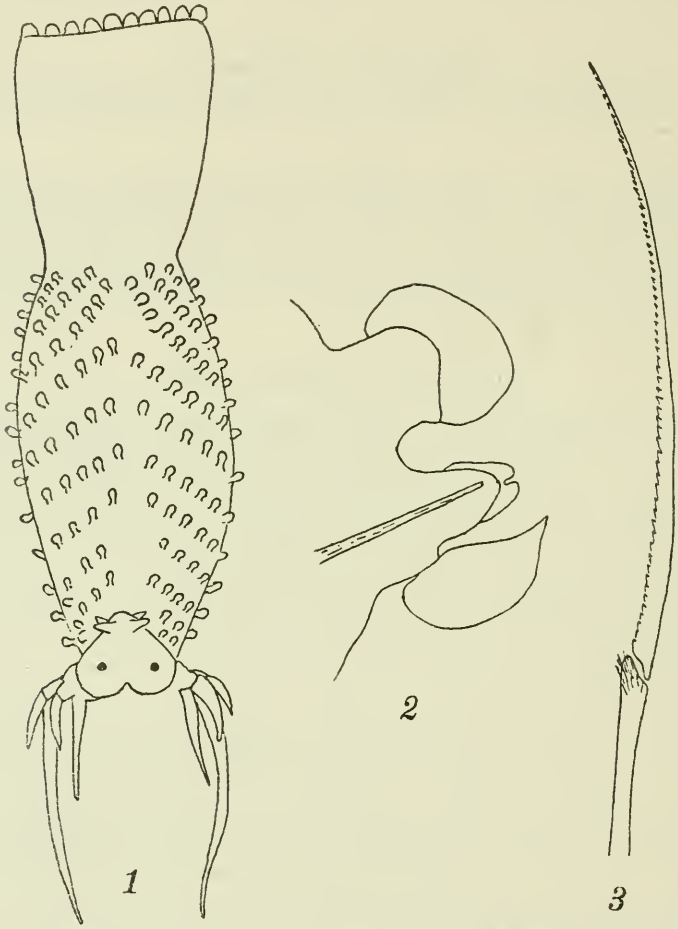
PHYLLODOCE NICOYENSIS, new species

Of the three specimens in the collection, only one is not badly coiled. This is 90 mm. long, about 0.5 mm. wide at the prostomium, and 1.5 mm. wide in the region of the fifteenth somite. So far as can be determined in their coiled condition the others are approximately the same length. None is entire posteriorly, but all show a gradual tapering in width behind the fifteenth somite. In preserved material the body color is an iridescent purple, the parapodia, prostomium, peristomium, and tentacular cirri light brown.

The anterior margin of the prostomium (fig. 1) is only very slightly rounded and from the bases of the tentacles each lateral margin slopes latero-posteriorly at an angle of about 45° as far as the level of the eyes. Here it bends forming the rounded latero-posterior prostomial angle. The posterior prostomial margin has the usual median incision, in which is a very small and inconspicuous papilla. The eyes are small and black, situated at about one quarter of the length of the prostomium from its posterior border. The tentacles are short and stout, about as long as the distance between those of opposite sides. The first tentacular cirrus and the ventral one on somite 2 are about equal in size and extend as far posteriorly as somite 5. The dorsal one on somite 2 extends to somite 8 and the one on somite 3 to somite 12.

In two of the three individuals the proboscis is protruded. The proximal portion of the proboscis, extending rather more than one-

half its length, is much thinner walled and of greater diameter than the distal, though it is possible that this may be in part due to the preserving fluids. Rounded brown colored papillae (fig. 1) are distributed over the surface of this proximal portion. Dorsally, some eight rows of these papillae start at equal intervals on either side of the mid line, each row running in a postero-lateral direction



FIGS. 1-3.—PHYLLODOCE NICOYENSIS, NEW SPECIES; 1, PROSTOMIUM AND PROBOSCIS × 7.5; 2, PARAPODIUM × 22.5; 3, SETA × 250

around the proboscis. The anterior ones of these rows are the longest and meet from opposite sides on the mid-ventral lines. The more posterior ones being shorter, end at the posterior margin of the proboscis. Other short rows start from the circumference of the end of the proximal region, those of opposite sides meeting in the mid-ventral line. At the anterior end of this mid-ventral line is a clear space, containing a few scattered papillae. The distal portion

of the proboscis is broadest at the apex, and has on either side three not very prominent longitudinal ridges. Its terminal margin carries 18 lobes.

The parapodia (fig. 2) are similar in form throughout the body, differing only in that the most anterior ones are very small. The setal lobe has the usual arrangement of a bifid presetal and a rounded postsetal lip, the latter the shorter. The dorsal cirrophore has nearly twice the vertical diameter of the setal lobe and is two-thirds as long as it is. The cirrus is small and inconspicuous. The ventral cirrophore is a rounded elevation at the base of the setal lobe. The ventral cirrus is broadly rounded on its ventral margin and distally bends upward and outward to meet the dorsal at an acute angle. The dorsal margin is in general horizontal, but is more or less wavy in contour. The apex of the ventral cirrus extends a little beyond that of the setal lobe, and it is shorter than the dorsal cirrus. The setae differ from one another only in size, the swollen apex of the shaft carrying numerous spines (fig. 3). The distal portion is long, slender, and slightly bent, and has numerous denticulations along the concave surface. The holotype (Cat. No. 19244 U.S.N.M.) was taken in the Gulf of Nicoya, Costa Rica.

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