

A New Species of Polychaetous Annelid (Family Capitellidae) from Southern California¹

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DURING THE COURSE of studying the quantitative distribution of polychaetous annelids in Newport Bay, California, a new species belonging to the capitellid genus *Scyphoproctus* Gravier 1904 was encountered. This is the first report of the genus in the eastern Pacific Ocean.

Only two species of this genus have been reported previously. *Scyphoproctus djiboutiensis* was described from the Red Sea by Gravier (1904, 1906), and subsequently was reported from India by Fauvel (1930, 1953). Okuda (1940) described *S. gravieri* from Okinawa.

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Scyphoproctus oculatus n. sp.

A total of 28 specimens was collected from the bottom of Newport Bay, California, with a size one Hayward orange-peel bucket. These stations were all located near the Pacific Coast Highway (Alternate 101) Bridge which passes over Newport Bay.

The holotype measures 20 mm. in length and 1.0 mm. in width. Other complete specimens ranged from 8 to 20 mm. in length. The prostomium (Fig. 1) is broadly rounded in front and bears one pair of elliptical-shaped eyes on either side. The peristomium lacks setae. The following 12 segments are setigerous with only simple capillary setae (Fig. 2)

in both the notopodium and neuropodium.

The abdominal region of the holotype consists of 85 setigerous segments. Hooded hooks (Fig. 3) are present in both the notopodium and the neuropodium of each segment, except at the posterior end (see below). The hooks bear one large tooth, three smaller teeth, and are covered in part by a hood (Fig. 3). Just anterior to the anal funnel (Fig. 4) at the posterior end of the animal, the hooded hooks in the notopodium are replaced by simple acicular spines (Fig. 5). The first appearance of these spines ranges from the sixth to the second segment from the anal funnel. The acicular spines of the two notopodia of a segment shift towards the median line with each succeeding segment so that the spines of either side at the segment just anterior to the anal funnel nearly touch one another. This approaches the condition of a single dorsal line of acicular spines at this segment in *S. djiboutiensis* (Gravier, 1904, 1906).

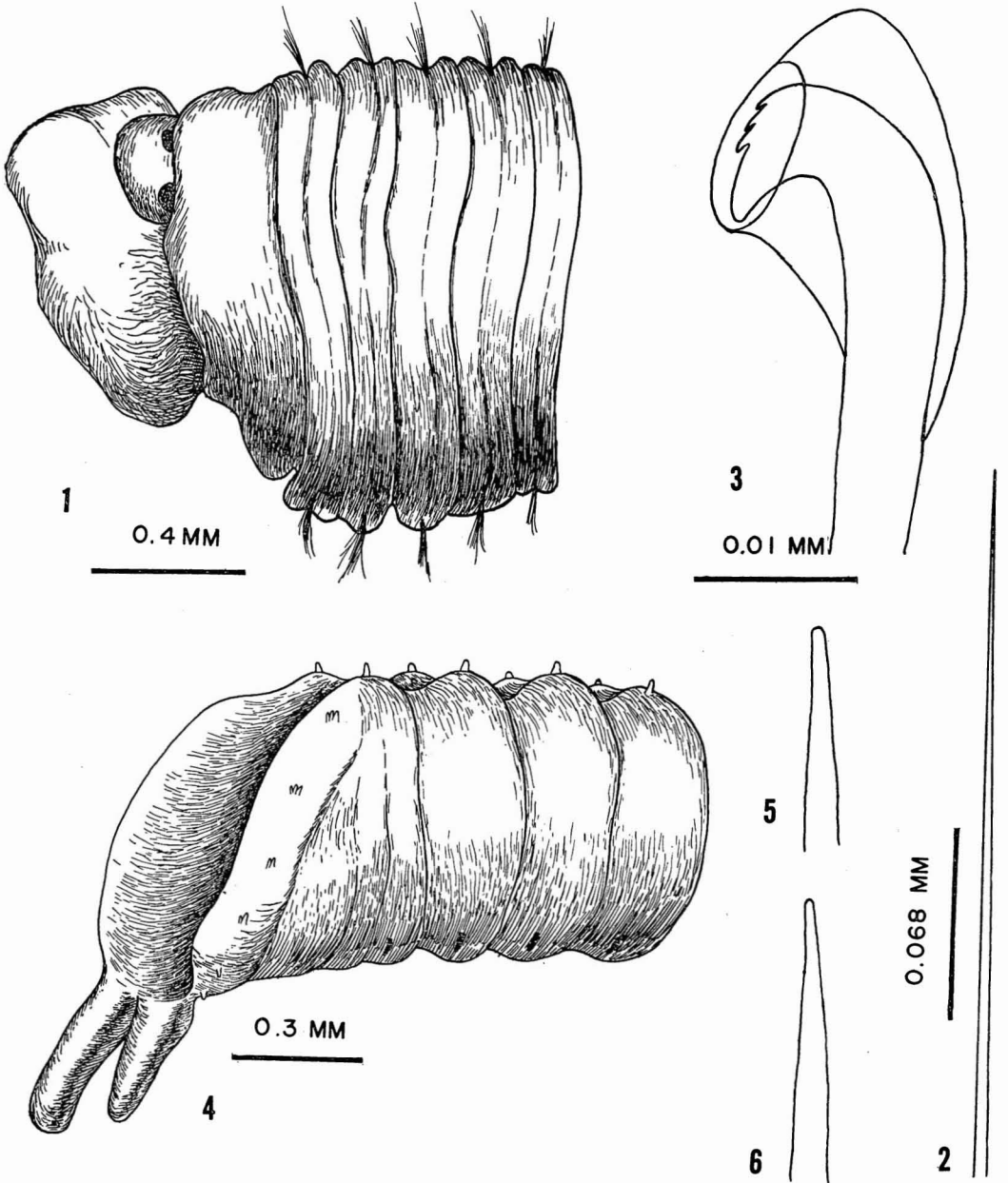
The anal funnel (Fig. 4) is composed of six groups of acicular spines (Fig. 6) on each side. The number of spines varies dorsoventrally, right and left, and from specimen to specimen. Typically there are 3, 3, 2, 2, 1, 1 (dorsal to ventral) acicular spines on each side. However, the following variations were observed: for the left side 4, 4, 4, 2, 2, 2, and 4, 3, 2, 2, 1, 1; for the right side 4, 4, 2, 2, 2, 2, and 4, 4, 2, 2, 1, 1.

DISCUSSION

Scyphoproctus oculatus differs from the other two species in the genus by the possession of a pair of eyes on the prostomium and by only six groups of acicular spines on each side of the anal funnel. The prostomium of *S. djibou-*

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FIGS. 1-6. *Scyphoproctus oculatus* n. sp. 1, Anterior end in lateral view; left to right, everted proboscis, prostomium with both eyes shown, peristomium, setigerous segments 1 to 5 bearing capillary setae. 2, Capillary seta from segment 7. 3, Hooded hook from segment 15. 4, Posterior end in lateral view; left to right, anal funnel bearing two anal cirri and six groups of acicular spines and the posterior setigerous segments with acicular spines in the notopodium and hooded hooks in the neuropodium. 5, Acicular spine from a posterior notopodium; magnification as 2. 6, Acicular spine from anal funnel; magnification as 2.

tiensis lacks eyes, and the anterior end is unknown in *S. gravieri*. Both *S. djiboutiensis* and *S. gravieri* are characterized by having 11 groups of acicular spines on either side of the anal funnel. The number of spines is 4, 4, 3, 3, 3, 2, 2, 2, 1, 1, 1 in the former, and 13 (or 12), 7, 5, 5 (or 4), 4, 3, 2 (or 3), 2, 2, 2, 1 in the latter species.

Type Material

The holotype, seven paratypes, and additional specimens have been deposited in the polychaete collections of the Allan Hancock Foundation, University of Southern California.

Type Locality

Bottom of Newport Bay near the Pacific Coast Highway (Alternate 101) Bridge. The substrate consisted of sand and shell fragments at these stations.

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