A NEW SPECIES OF CLAVELLA (COPEPODA, LERNAEOPODIDAE) FROM THE SOUTH ATLANTIC

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In the course of a comparative study of the genus Clavella, the author had the opportunity to examine three specimens of Clavella from the fins of the nototheniid fish Notothenia rima Richardson, 1844-45, collected in the Straits of Magellan in 1889. These specimens formed a part of the copepod collection of the U. S. National Museum, Washington, D.C., and they were put at the author's disposal through the courtesy of Dr. T. E. Bowman. The noted copepodologist, C. B. Wilson, identified these specimens as belonging to the species C. insolita Wilson, 1915, and they were catalogued U.S. Nat. Mus. No. 53476.

Closer inspection soon revealed that, even though the original description of C. insolita was not sufficiently detailed, the specimens could not belong to that species. To make sure of his diagnosis, the present author compared them with the type specimens of C. insolita, also obtained through the good services of Dr. Bowman. The comparison confirmed the suspicion that the specimens were misidentified by Wilson and that they belong, in fact, to a species of Clavella as yet unknown.

Of the three specimens examined, two were dissected and studied, magnified up to × 1200, in phase-contrast illumination and under the interference microscope, for the finer details of the appendages. The third was drawn entire and returned to the Smithsonian Institution, where it will remain as the type specimen of the new species of Clavella. In acknowledgment of Dr. T. E. Bowman's unstinted help and courtesy in the course of several years, the author proposes to name this species Clavella bowmani.

This paper is devoted to the description of the new species.

Clavella bowmani sp. nov.

Type host: Notothenia rima Richardson, 1844-45; attached to the fins.
Type locality: Straits of Magellan.

FEMALE

Body. — Cephalothorax longer than the trunk, subcylindrical, slightly narrowing towards the apex. Trunk flattened dorso-ventrally, slightly longer than broad,
with sloping ‘shoulders’ and evenly rounded postero-lateral corners (fig. 1 A, 2 B). No trace of the genital process. In the mid-posterior line a shallow, short groove is present, the egg-strings being attached about half way between it and the postero-lateral corners of the trunk. Egg-sacs slightly longer than the trunk, cylindrical. The dimensions of the body of the holotype specimen are as follows: length of trunk 1.2 mm, width of trunk 1.08 mm, length of cephalothorax 1.8 mm, diameter of cephalothorax 0.29 mm.

The first antenna (fig. 1 B, C, D). — Segmentation indistinct. The basal part inflated and provided with a stout spine on the dorso-median aspect (fig. 1 B). The distal part slender and armed with a number of spines at the apex. In all, four (or five?) apical spines are present. Two spines, marked 4 and 5 in fig. 1 C, D, provide the main features of the apical armament. Spine 4 appears to be homologous in shape and position with similarly numbered spines in C. adunca (Strøm) and C. stellata (Kröyer) (cf. Kabata, 1960, 1962). It is situated near the centre of the apex and is stout, with a rounded tip. Spine 5 is longer than, and directly outside the base of spine 4. It has a sharp tip, usually slightly curving inwards. On one occasion the tip appeared to be prolonged into a filamentous whip, but this was not observed in other specimens. Just external to spine 5 is a shorter and more slender spine, marked X in fig. 1 C, D. The small size of the first antenna and the scarcity of specimens made it impossible to ascertain whether the spine X arises from the same base as spine 5. If spine 5 is identical with spines of the same number in other species of Clavella examined by the author, then it is probable that spines 5 and X of C. boueraayai, as in other species, arise from the same base. Numbered 1 and 3 in fig. 1 C, D are sharp-pointed, strong spines, spine 1 being the shortest of them all, while spine 3 is of about the same length as spine 4. Spines 1 and 3 are situated in the positions approximately the same as the similarly numbered structures in C. stellata and C. adunca (cf. Kabata, 1960, 1962), though in those species they are in the shape of spine-topped tubercles.

The second antenna (fig. 1 E). — With a swollen basal part, this appendage gradually tapers to relatively slender, uniramous apex. On its dorsal aspect, at about the middle of its length, is a small tubercular protuberance. The apices of the second antennae are armed with four projections, three short, blunt ones grouped at the very apex and one spine-like, longer and slightly curved, with a sharp tip, situated apart from the group and farther away from the apex.

The mandible (fig. 1 F). — This appendage is unlike that of any other species previously examined by the author. The distal, narrow quarter of the blade is equipped with four sharp, curving teeth, gradually diminishing in size from the outermost to the innermost member of the series. These four teeth are followed by a long and narrow, sharp tooth, beginning with which the mandible widens towards the cutting blade. Between that blade and the first tooth there are three more teeth, one small and sharp and two longer, also sharp and equal in size.

The maxilla (fig. 1 G). — The general structure of this appendage is similar to those of other species of Clavella. It consists of a stalk, surmounted by two