

# AMERICAN MUSEUM NOVITATES

Published by  
Number 1138 THE AMERICAN MUSEUM OF NATURAL HISTORY August 11, 1941  
New York City

## POLYCHAETOUS ANNELIDS FROM THE NEW ENGLAND REGION, PORTO RICO AND BRAZIL

By AARON L. TREADWELL

### Hesionidae

#### ANCISTROSYLLIS McINTOSH

##### *Ancistrosyllis tentaculata*, new species

Figures 1 to 3

Two specimens collected at Crab Meadow State Park, Long Island, N. Y. One is entire, the other lacks the posterior end. The former is too badly distorted to allow of accurate measurements but is about 5 mm. long and has a maximum width of 1 mm.

The prostomium (Fig. 1) is broadest on the anterior margin which is straight. The lateral margins are faintly curved and bend toward the median body line. Posteriorly there is a deep indentation dividing the prostomium into two bluntly rounded conical lobes whose apices are directed posteriorly. Rather more than one-third of the prostomium overlaps the peristomium. Because of poor preservation the structures at the front of the prostomium are badly defined but apparently they are the palps, the very small lobe on the anterior margin being the terminal joint present in other species of this genus. There are three tentacles, the median attached in the mid-dorsal line at the end of the indentation. The lateral tentacles are at the same level as the median but situated at the prostomial margin. The median tentacle is about one and a half times as long as the prostomium and is drawn as bent back upon itself, the position it occupies in both of the specimens. The lateral tentacles are slightly smaller than the median, their anterior ends reaching beyond the palpal margins. In one specimen, but not visible in the other, pigment spots lie on the prostomial margin just lateral to the point of insertion of the tentacles. These possibly represent eyes.

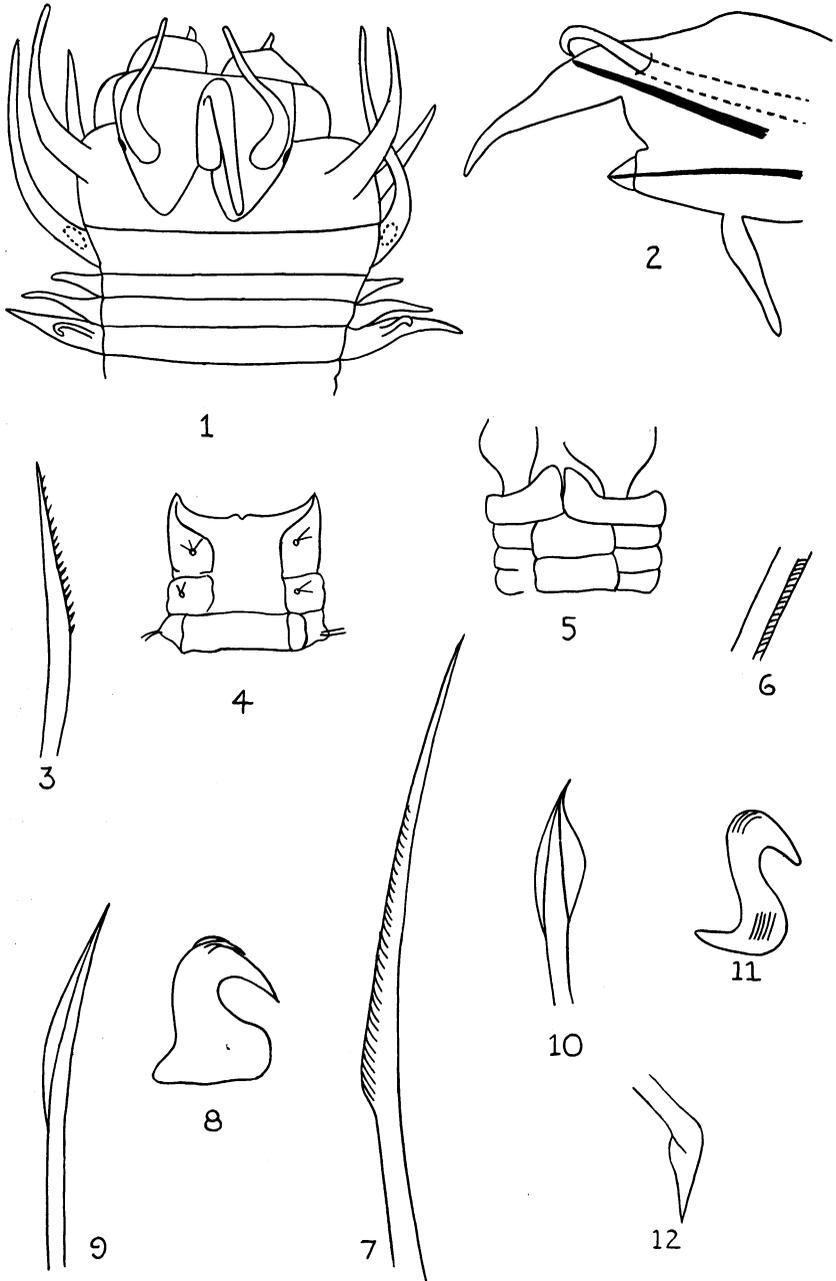
The first somite is about as long as the prostomium and wider than following somites. On either side it carries a pair of tentacular cirri of which the dorsal in each pair is slightly the larger and whose apices extend beyond the palpal margins. The second somite is about one-third as long as the first, its posterior margin narrower than the anterior. Its parapodium has a setal lobe with setae, a long slender dorsal cirrus whose apex reaches beyond the palp and a well-developed ventral cirrus. In both specimens there is as shown in the figure, near

the base of the dorsal cirrus, a rounded translucent area the meaning of which I am unable to guess. The second parapodium is small; it has a dorsal but no ventral cirrus and a setal lobe with setae. The third parapodium is about twice as large as this but its parts have about the same proportionate size while the fourth is considerably larger than the third, its dorsal cirrus being especially noticeable. A prominent feature of this dorsal cirrus is a large colorless spine whose base is imbedded deeply in the parapodium, its slightly bent shaft coming to the surface on the dorsal surface of the dorsal cirrus at its base. Beyond this it extends over the cirrus, its apex bent into a strong hook (Fig. 2). This type of parapodium with spine is found in all subsequent somites except for a very few at the posterior end, which are rudimentary. One anal cirrus remains in the entire specimen but its apex is missing. Apparently it was about as large as the dorsal cirri but less tapering in outline. The ventral cirri are all rather prominent and reach to the ends of the setal lobes. The parapodia are prominent in all cases and in median and later somites are longer than the body width.

The parapodia are rather thick (Fig. 2), the dorsal cirri large. Ventral to the large hooked spine mentioned above is the acicula. The setal lobe has two lips, one pointed and one rounded, the acicula extending into the pointed lip. In the entire specimen seen from the ventral surface the pointed lip is ventral to the rounded one though in the specimen from which the figure was drawn one appears to be anterior to the other. These parapodia are very delicate and it is difficult to avoid distortion in mounting for study. The spine should be understood as coming to the surface nearer the dorsal surface than would be inferred from the figure.

All setae are simple and I could find only two types. The first are slender, acicular and of varying lengths, the others are shorter and thicker and have a row of prominent spines along one margin (Fig. 3). I was unable to find any acicular setae with marginal serrations as described by Southern (1921, Pl. xix, fig. 1g), nor the bifurcate ones figured by Langerhans (1881, Pl. iv, fig. 16b).

The type is Cat. No. 2893, in The American Museum of Natural History.



Figs. 1 to 3. *Ancistrosyllis tentaculata*: 1, head  $\times 45$ ; 2, posterior parapodium  $\times 66$ ; 3, seta  $\times 250$ .

Figs. 4 to 8. *Laonome sanjuanensis*: 4, dorsal view of anterior somites  $\times 7.5$ ; 5, ventral view of anterior somites  $\times 7.5$ ; 6, detail of collar seta  $\times 250$ ; 7, second type of collar seta  $\times 250$ ; 8, uncinus  $\times 250$ .

Figs. 9 to 12. *Parasabella minuta*: 9, seta from dorsal end of seta tuft  $\times 250$ ; 10, spatulate seta  $\times 250$ ; 11, uncinus  $\times 250$ ; 12, pennoned seta  $\times 250$ .

The specimens were in a collection of polychaetes made by the New York State Conservation Commission and sent to me for identification by Dr. H. K. Townes. Other polychaetes from this collection are listed in Biological Survey of the Salt Waters of Long Island, pt. 1, pp. 171-172, 1938, Suppl. to 25th Report of New York State Conservation Commission. The publication of the description here is by permission of the Commission.

The genus *Ancistrostylis* was first defined by McIntosh (1877, pp. 502, 503; Pl. LXV, fig. 3) from a specimen collected in Davis Strait to which he gave the species name *groenlandica* and he assigned the genus to the family Syllidae. A noticeable feature of this genus is the large dorsal spine found in most parapodia. Langerhans (1881, pp. 107, 108, Pl. iv, fig. 16) gave the name *A. albinii* to a specimen found in the Canary Islands which he also listed as a syllid but noted it as very aberrant. Korschelt (1894, pp. 279-285, Pl. XIII, figs. 16 to 29) described a series of pelagic annelid larvae from Trieste characterized in the later stages by the large dorsal spines. This he thought closely related to *Ancistrostylis* but differing from it enough to be assigned to a distinct genus for which he proposed the name *Harpochaeta* with the species *cingulata*. He also thought these were syllids. Ehlers (1908, pp. 59-61, Pl. VI, figs. 4 to 7) gave a more detailed diagnosis of *Ancistrostylis* than that by McIntosh and he recognized that the genus belongs in the Hesionidae. Ehlers thought that *Harpochaeta* is synonymous with *Ancistrostylis* and described the species *robusta*, from the Atlantic coast of Africa. Southern (1921, p. 573, Pl. XIX, fig. 1) recorded *A. constricta* from Chilka Lake, India. Fauvel (1923, pp. 250-251, Fig. 94f-k) considers *Harpochaeta* as synonymous with *Ancistrostylis* and uses *cingulata* as a characteristic species, though this is known only from larval stages. I am unable to follow Fauvel in listing *Ancistrostylis* as synonymous with Webster's *Cabira* (1879, p. 67, Pl. XI, figs. 155-157). Webster describes and figures a stout spine which he locates in the ventral cirrus but in no other feature

can I find the slightest resemblance to any figures or descriptions of species of this genus or to my own specimens. *A. tentaculata* agrees more closely with *A. constricta* than with any other species thus far described, especially in the form of the tentacles, tentacular cirri and the first four parapodia. The two species differ in the form of the head region, and in setae as mentioned above. In *tentaculata* the hooked spines first appear on the fourth setigerous somite while in *constricta* their first appearance is between the thirtieth and fortieth parapodia. *Tentaculata* also shows no signs of surface tubercles seen in the other species.

## Nereidae

### *Nereis (Neanthes) varia* Treadwell

*Nereis (Neanthes) paucidentata* TREADWELL (name preoccupied), 1939, American Museum Novitates, No. 1023, p. 6, Fig. 25.

Type is Cat. No. 2564, in The American Museum of Natural History.

Collected at Charlestown, Mass., and Groton, Conn.

## Sabellidae

### LAONOME MALMGREN

#### *Laonome sanjuanensis*, new species

Figures 4 to 8

The body-length to base of gills is 33 mm. and its width at the anterior end of the thorax is 3 mm. On either side are twenty gill-filaments of varying lengths, none over 12 mm. long, all unusually slender and united only at their bases. The barbules are all very delicate and short. There are no dorsal appendages and no eyes. The tentacles are broad at their bases and about 1.75 mm. long. In no part of the body is there any especial pigmentation, the general body-color being light brown, the tentacles slightly paler than the body. The thorax is composed of six somites, the remainder of the body of between eighty and ninety. The collar is two-lobed and inconspicuous. The halves are widely separated dorsally (Fig. 4); ventrally (Fig. 5) each lobe widens into a triangular flap whose apex extends anteriorly between the bases of the gills. These flaps are in contact but do not noticeably overlap. In the preserved material the first three somites are slightly narrower than the fourth, while somites behind this narrow gradually toward the posterior end of the body.

The collar setae are of two kinds. The first are long and slender and faintly limbate, the

marginal wing striated (detail, Fig. 6). The second are shorter than the first and protrude to a shorter distance from the body surface than do they. They are faintly geniculate, widen just distal to the bend and then narrow to a sharp point. The convex margin is noticeably striated but not at all denticulate (Fig. 7). In the other thoracic somites essentially the same forms of setae occur. In the abdomen are both long and short setae, as in the thorax, but there is a much greater degree of similarity between the two. Uncinigerous tori begin on somite 2, each carrying a single row of uncini. The latter are alike in thorax and abdomen, each (Fig. 8) with one prominent tooth and a few others on the crest, the precise outlines of the latter being difficult to determine. There is no basal prolongation.

The type is Cat. No. 2892, in The American Museum of Natural History.

Collected in a tidal pool, north side of Island, East San Juan, Porto Rico, by S. Mattlupse.

#### PARASABELLA BUSH

##### *Parasabella minuta*, new species

Figures 9 to 12

The characters of the collar and setae place these specimens in *Sabella* as defined by Fauvel (1927, p. 296) or *Parasabella* Bush (1904, pp. 199-200). They live in thin-walled tubes which have a light outer coating of sand grains. In the type the length of body to the base of the gills is 13 mm., the gills being 3 mm. long. The greatest width, near the anterior end, is about

0.75 mm. On either side are seven gill-filaments, the radioles being rather heavy, the barbules in length about four times the radiole diameter. The apex of the radiole is naked. In the middle region of each radiole are a few dark eye-spots, the number varying in different radioles. The collar is very low and two-lobed, the ends widely separated dorsally but overlapping ventrally. In the collar fascicle the setae are geniculate with a striated wing on the convex margin (Fig. 9), the dorsalmost ones longer and more slender than the ventral. There are five somites in the thorax, the four following the one above described having dorsal setae and ventral uncini. The setae show gradations from those like the collar setae in the dorsal part of the tuft to a spatulate type at the ventral end. These (Fig. 10) are short and have acute apices and wings on both sides of the stalk. So far as I could determine all abdominal setae are of the long slender type. In the thoracic tori are uncini in a row of five to eight and ventral to these an equal number of pennoned setae. The uncini (Fig. 11) have a single large tooth and their apices are striated rather than toothed. The pennoned setae (Fig. 12) are smaller than the uncini. Only uncini are present in abdominal tori, these being similar in form to those of the thorax.

There is reason to believe that immature sabellids have fewer somites than do the adults, and since five is an unusually small number of thoracic somites it seems probable that these are immature.

The type is Cat. No. 2894, in The American Museum of Natural History.

Collected at Island of São Sabastio, Brazil.

#### LITERATURE

- BUSH, K. J.  
1904. Tubicolous annelids of the tribes Sabellidae and Serpulidae from the Pacific Ocean. Harriman Alaska Expedition, pp. 169-355, Pls. XXI-XLIII.
- EHLERS, ERNST  
1908. Die bodensässigen Anneliden aus den Sammlungen der deutschen Tiefsee Exp. "Valdivia," 1898-1899, pp. 1-167, Pls. I to XXIII. Jena.
- FAUVEL, PIERRE  
1923. Faune de France, V, Polychètes errantes, pp. 1-488, Figs. 1 to 181.
- KORSCHIEDT, E.  
1894. Ueber Ophyotrochia puerilis Clap-Metsch. und die polytrochen Larven eines anderen Anneliden (*Harpochaeta cingulata*, nov. gen., nov. sp.), Zeit f. Wiss. Zool., LXXV, pp. 224-285, Pls. XII-XV, 6 text figs.
- LANGERHANS, P.  
1881. Ueber einige Canarische Anneliden. Nova Acta d. Leop. Carol. Acad., XLII, No. 3, pp. 93-124, Pls. iv, v. Halle.
- MCINTOSH, WILLIAM C.  
1877. Annelids obtained during the cruise of H.M.S. "Valorous" to Davis Strait. Trans. Linn. Soc. London, (2) I.
- SOUTHERN, R.  
1921. Polychaeta of the Chilka Lake. Memoirs of the Indian Museum, V, pp. 553-659, Pls. xix-xxxI.
- WEBSTER, H. E.  
1879. Annelida polychaeta of the Virginian Coast. Trans. Albany Institute, IX, pp. 1-72, 11 Pls.