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Mittheilungen aus der Zoologischen Station zu Neapel.

Leipzig: Wilhelm Engelmann,-1921. http://www.biodiversitylibrary.org/bibliography/8813

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Family Bodotriidae.

Cyclaspis longicaudata G. O. Sars.

C. longicaudata, G. O. Sars, Crust. Norway Vol. 3 1899 p. 16, pls. 7 and 8.

No specimens from station 8 were in the collection sent to me. Dr. Lo Bianco however records young specimens from this station, the depth of which, 120 metres, is considerably less than any hitherto recorded for the species. The specimens of both sexes are all immature.

Occurrence. — Stations [8] 17, 18, 23, 26, 39, 44. Depth 120—1100 metres.

Family Vauntompsoniidae.

Bathycuma brevirostris (Norman).

Leucon brevirostris, Norman, Ann. Mag. N. H. (5) Vol. 3 1879 p. 71.

Vaunthompsonia caeca, Bonnier, Ann. Univ. Lyon Tome 26 1896, p. 536, pl. 28 fig. 3.

Bathycuma brevirostris, Calman, Fisheries Ireland Sc. Invest. 1904 N: 1 (1905) p. 18.

All the specimens are immature. The largest, a female, measures a little over 8 mm. in length.

Occurrence. — Stations 17, 18, 26, 39, 44. Depth 950—1100 metres.

Family Leuconidae.

Leucon pallidus G. O. Sars.

L. pallidus, G. O. Sars, Crust. Norway Vol. 3 1900 p. 33 pl. 25; Calman, Fisheries Ireland Sc. Invest. 1904 N: 1 (1905) p. 19.

Four immature specimens agreeing with those from the West of Ireland which I have referred to this species.

Occurrence. - Station 29. Depth 100 metres.

Leucon longirostris G. O. Sars (Pl. 27, figs. 1-8).

L. longirostris, G. O. Sars, Svenska Vet. Akad. Handl. 9. Bd. 1871
No. 13 p. 42 fig. 75. Norman, Ann. Mag. N. H. (5) Vol. 3
1879 p. 69.

Description of sub-adult female (fig. 1). Total length 5,7 mm.

Carapace (including pseudo-rostrum) about 31/2 times in total length, the dorsal crest horizontal posteriorly, strongly curved downwards in front and armed in its anterior two-thirds with about seven stout curved teeth, well separated and diminishing in size posteriorly. Pseudorostrum (fig. 2) more than 1/3 of total length of carapace, straight, tapering to an acute point and directed slightly upwards. The lower margin bears two or three more or less distinct teeth near the base. Antero-lateral margin nearly straight with a narrow but deep antennal notch above which bears three or four stout teeth. Antero-lateral angle not produced but bearing a strong tooth, followed by a series of successively diminishing teeth on the lower margin. The pleural plate of the penultimate thoracic somite is produced into a sharp curved tooth posteriorly, and there is a pair of curved teeth on the sternal surface of the last thoracic somite (not one as stated by Norman) a little in front of the insertion of the last pair of legs (fig. 3). The abdomen is about equal in length to the cephalothoracic region.

The antennules (fig. 4) have the outer flagellum composed of three segments, the first equal in length to the last segment of the peduncle and the terminal one very small. The inner flagellum is unsegmented and is equal in length to the first segment of the outer. It bears several long and rather stout setæ at the tip.

There is a row of strong teeth on the lower surface of the basis of the first legs. Uropods (fig. 5) a little shorter than the last two somites together, the peduncle longer by one quarter than the last somite, carrying about five spines on its inner edge. Endopod one-third longer than the peduncle, the proximal segment more than three times as long as the distal. Fifteen spines on inner edge of proximal and five on distal segment besides the stout terminal spine. One long and several short setæ on outer margin. Exopod a little longer than first segment of endopod, bearing setæ on both margins and a group on the apex.

Adult male (fig. 6). Total length 6,0 mm. Carapace $^{1}/_{4}$ of total length, the dorsal crest unarmed. Pseudorostrum (fig. 7) $^{1}/_{5}$ of total length of carapace, horizontal and obliquely truncate. The lower angle bears one or two teeth. Antero-lateral margin straight and vertical, without antennal notch, with two teeth above near base of pseudorostrum. Tooth on antero-lateral angle followed by a series of serrations on anterior part of lower margin.

The pleural plate of the penultimate thoracic somite is not

produced posteriorly, but the sternal surface of the last somite bears two curved teeth as in the female. The outer flagellum of the antennules is composed of four segments. As in the female the inner flagellum is equal in length to the first segment of the outer.

Uropods (fig. 8) considerably longer than the last two somites together, peduncle about one-third longer than the last somite with about nine long spines and setæ on its inner edge. Endopod nearly one-half longer than peduncle, the proximal segment four times as long as the distal. There are very numerous spines of varying length on the inner edge and a few on the outer edge. Exopod not quite as long as the first segment of endopod.

Remarks. — This species was described by Sars from a fragmentary and immature male specimen. Norman added some details from a female specimen, probably also immature. The females and young in the present collection resemble closely Sars' very characteristic figure and some of the specimens sent to me bore labels in Prof. Sars' handwriting. There can, therefore, be no question as to the identification, although Sars' description of the inner ramus of the antennule as "rudimentar og knudeformig" is at variance with the characters of the specimens examined by me.

Occurrence. — Stations 17, 18, 26, 30, 39, 44, 57. Depth 950—1200 metres.

Distribution. — Off coast of Portugal, 550 fathoms (SARS); at entrance of Davis Straits, 1750 fathoms (NORMAN).

Leucon siphonatus Calman (Pl. 27 fig. 9).

L. siphonatus, Calman, Fisheries Ireland Sc. Invest. 1904 N: 1 (1905) p. 19, pl. 1 figg. 2—4.

This species, which was described from a single immature female obtained off the West of Ireland, is represented by a number of specimens including adults of both sexes in the present collection. Unfortunately nearly all the specimens are in poor condition and I am therefore unable to add much of importance to the description already given. The Mediterranean specimens are much smaller than that from Ireland. A female with brood-pouch well developed measures only 2.7 mm., while the type-specimen, though immature, is 3.85 mm. in length. The structural differences however are so slight that there can hardly be any hesitation in referring them to the same species. The Naples specimens have generally two teeth in place of one on the dorsal edge of the carapace close to the base

of the pseudorostrum, the teeth on the anterior margin, above the antennal notch, are longer than in the type-specimen, and those on the lower edge of the pseudorostrum are apparently not always present. The most important difference, however, is in the proportions of the antennule. In the younger specimens this appendage agrees fairly well with the figure and description already given. In those approaching maturity, however, and in the adult female (fig. 9) it is much more slender, with the last segment of the peduncle longer by about 1/3 than the preceding and a little longer than the external flagellum. The branchial siphon is in some cases protruded to a greater length than in the type-specimen, sometimes to considerably more than the length of the carapace. At the tip of the endopod of the uropods what was described as a "long slender spine" is in reality a stout, plumose seta and, in addition to the spine at the base of this seta, the distal segment of the endopod has three spines on its inner edge.

The adult male specimens are unfortunately fragmentary. No teeth appear on the dorsal edge of the carapace nor on the lower edge of the pseudorostrum. Save for the absence of the antennal notch, the armature of the antero-lateral margin of the carapace seems not to differ greatly from that of the female.

In referring to *L. tenuirostris*, Sars, as the only species agreeing with the present one in having a large inner ramus on the antennule, I overlooked Zimmer's *L. septemdentatus* (Hamburger Magalhaensische Sammelreise, Cumacea 1902 p. 3) which however is distinguished by the widely open antennal notch and other characters. As has been shown above *L. longirostris* Sars must now be added to the same group of species.

Occurrence. — Stations 8, 17, 18, 26, 29, 44. Depth 100—1100 metres.

Family Nannastacidae.

Cumella sp.

Two female specimens which, though nearly or fully adult measure only about 1,75 mm. in total length, occurred at Station 29. They appear to differ in certain characters from all the described species of the genus, but as neither of them is in a very good state of preservation I have not thought it advisable to attempt to diagnose the species.