

XII. — ON THREE REMARKABLE ANNELIDA POLYCHAETA.  
BY Dr. R. HORST. — (WITH 2 TEXTFIGURES).

*Paralacydonia weberi* n. sp.

Among some *Glyceridae*, dredged by the Siboga-expedition at Stat. 52, south off Flores at a depth of 959 M., I met with five specimens of a Polychaet, which must be ranged among the genus *Paralacydonia*. This rare genus was based by Fauvel in 1913<sup>1)</sup> on three specimens of a worm (*Paralacydonia paradoxa*), that holds an intermediary place between the *Phyllodocidae* and *Nephtyidae* and was found in the Mediterranean sea, south of Monaco, at a depth of about 50 M. The prostomium is conical and provided at its distal end with four bi-annular antennae; the buccal segment is without appendages. The first setigerous segment bears uniramous parapodia, whereas the following parapodia are biramous; the two lobes are separated from each other by a large distance and are provided with long cilia along their internal border. The dorsal lobe is provided with two low lips, between which a fascicle of simple bristles arises and bears a small dorsal cirrus and distally a papillous appendage. The ventral lobe also has two low lips with a fascicle of compound, heterogomph bristles and is provided distally with a large triangular appendage, whereas at its inferior side there occurs a digitiform ventral cirrus. The Siboga-specimens much resemble *Paralacydonia paradoxa*; however in some regards they show small discrepancies from the last named species, that's why I think they must be considered to belong to an other species, named in honour of the leader of the expedition. *Paralac. weberi* is much larger, one specimen measuring about 40 mm., whereas the mediterranean worm has a length of 20 mm.; the number of segments of *Paralac. weberi* amounts to about 100. The buccal segment and the first two setigerous ones bear upon their dorsal side a transversal, ridge-shaped enlargement, constituting together behind the head a kind of shield, that is rounded rectangular, and provided with two shallow grooves. In *Paralac. paradoxa* however only the first two segments participate in the formation of this shield and a single groove only is visible therein. At the ventral side the mouth is limited behind by a tongue-shaped appendage of the third setigerous segment; posteriorly in the succeeding

1) Bull. Inst. Océanogr. Monaco, n<sup>o</sup>. 269, 1913, p. 54, fig. 10. A detailed description, illustrated by several figures, afterwards was published by him in: Annél. polychètes non pélag. de l'Hirondelle et Princ.-Alice, 1914, p. 138, pl. VII, figs. 1—9.

segments it passes into a narrow median ventral area, limited by a groove on each side; this area also occurs in *Paralac. paradoxa* (Pl. VII, fig. 2), but is not mentioned by Fauvel.

The parapodium much resembles that of *Nephtys*. Its notopodium is provided with a low, rounded anterior lip, which shows an incision in the middle, there where the apex of the acicula lies; a short dorsal cirrus, only a little higher than the lip, occurs at its internal border. The posterior lip is straight, without lobes. Between both lips there arises a fascicle of simple, faintly bent bristles. The neuropodium like as the notopodium has its border by an incision separated in two lobes; the superior lobe is triangular, with its end pointed upward, the inferior one is oval. At its inferior margin a digitiform ventral cirrus arises, nearly as long as the neuropodium. The posterior lip is rounded; between both lips a fascicle of compound bristles arises. These bristles are heterogomph and bear a spine upon the longest limb of the articulation, as

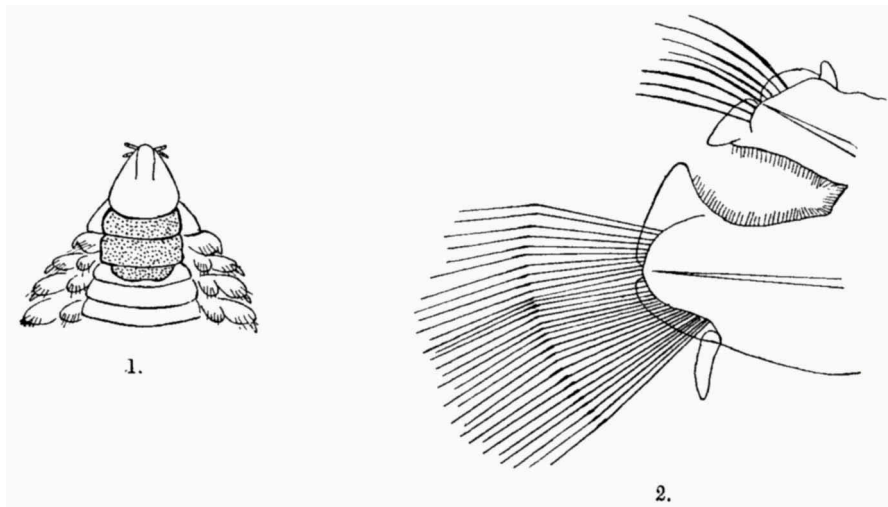


Fig. 1. Dorsal view of the anterior segments of *Paralacydonia weberi*.  
 „ 2. A parapodium from the median body-region of the same.

figured by Fauvel (Pl. VII, fig. 9); they are provided with a slender, finely denticulated, terminal piece. In the interval between both footlobes the border is densely beset with long cilia.

The genus *Paralacydonia* is closely allied to the small *Lacydonia miranda* <sup>1)</sup> found by Marion and Bobretsky in the Gulf of Marseille and

1) Ann. Sc. nat. (Sér. VI), Vol. 2, 1875, p. 57, pls. 7 and 8).

afterwards met with by St. Joseph on the coast of Dinard and in the vicinity of St. Raphael; this worm is ranged by Gravier in the sub-family of the *Lopadorhynchidae* <sup>1)</sup> and Fauvel suggests that it only should be the juvenile stade of *Paralacyd. paradoxa*.

On the synonymy of *Nereis caenocirrus* Chamb. and  
*Nereis onychophora* mihi.

In the 4<sup>th</sup> part of vol. IV of the „Zoolog. mededeelingen”, 28 Dec. 1918, I described a male *Heteronereis*, captured by the Siboga-expedition at Stat. 172, off Gisser, that is characterised by having in the anterior, agamous body-region, the notopodial fascicle represented by a single, stout, yellow bristle, with a dark brown, hook-shaped apex. The epitocous change of the parapodia commences with the 16<sup>th</sup> segment. Chamberlin seems to have overlooked this paper, for in his „Annelida polychaeta of the Pacific” (p. 209; pl. 33 a. 35) <sup>2)</sup> he describes and figures *Nereis caenocirrus* from the Marshall islands, which in so many characters agrees with *Ner. onychophora*, that I presume both species to be identical. There are some little discrepancies, f. i. the longest tentacular cirrus reaches to the 7<sup>th</sup> somite, whereas in the Siboga-specimen it extends only to the 3<sup>rd</sup> segment; however taking into account, that in other *Nereis*-species the length of the tentacular cirri is very variable, the difference is of no great morphological value. Unfortunately in the Pacific-specimens the proboscis was not protruded and therefore it remains undecided, whether the armature of both species agrees with each other.

On *Platynereis polyscalma* Chamb.

As *Platynereis polyscalma* Chamberlin <sup>3)</sup> has described and figured the *Heteronereis*-stade of a worm, collected in the neighborhood of Ellice- and Gilbert-islands, that is characterised by an elongated prostomium, the preocular division of which is a translucent area, rounded anteriorly, flattened dorso-ventrally and bearing on its ventral side the tentacles. In the male this preocular lobe is greatly longer, with the tentacles very much shorter and the palpi conspicuously modified. Of the four eyes the anterior pair are greatly larger than the posterior, nearly wholly ventral in position with the lenses directed ectoventrad; the posterior eyes are dorsal

1) Nouv. Arch. Muséum d'Hist. nat. (Sér. IV), Vol. II, 1900, p. 191.

2) Memoirs Museum of Compar. Zoology, Harvard College, Vol. 48, 1919.

3) loc. cit. p. 219, Pls. 30, 31 and 32.

in position, broadly elliptic in outline. The number of somites in the anterior or nereid division of the body is apparently always fifteen. The blades of the most dorsal notopodial natatory setae are strongly transversely ridged. Unfortunately Chamberlin does not mention, that Gravier already in 1901 <sup>1)</sup> (from the Gulf of California) and I myself in 1910 <sup>2)</sup> (from the coast of Java) have described a similar *Heteronereis*-form, which no doubt is nearly allied to, perhaps even identical with his *Platynereis*-species. Because the proboscis was not protruded and we only had a small material at our disposal we could not state to which sub-genus of *Nereis* those *Heteronereis*-specimens did belong; Chamberlin however observed at the dissected proboscis the paragnathes to be very small and closely arranged in lines in areas III and IV and therefore ranges the Pacific specimens in the sub-genus *Platynereis*.

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1) Bulletin Muséum d'Hist. natur. Vol. VII, 1901, p. 177, figs. 1—11.

2) Notes Leyden Museum, Vol. XXXIII, 1911, p. 113, figs. 1—5.

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