

Tattersall. 1906

Report on the Leptocephala, Siphonophora and
Stomatopoda collected by Prof. Herdman at Ceylon in 190.

Rep. Ceylon Pearl Oyster Fish. V. II. 1906.
Pl. 1-3.

Sivella paulsoni Kossmann. Pl. I. figs 3 to 7.

S. jaltensis Paulson (1875), no Gennadius. Sinellidae paulsoni. Gennadius (1881)

Locality: - Pearl Banks, Cheval Saar, March 1902, 8 fathoms, one female, 12 mm.

The general form of the body is robust and rather stoutly built.

The carapace is shorter than the pectoral and of equal breadth throughout. It is produced in front into a short acutely pointed rostrum.

The pectoral has the first segment slightly longer than the next four which are subequal in length. The 6th segment is about one and a half times as long as the 5th.

p. 164 The eyes are large and globose, not quite reaching the distal end of the basal joint of the antennular peduncle. The pigment is black.

The antennular peduncle (fig. 4) is rather long and stoutly built. The basal joint is longer than the remaining two combined. The second joint is quite short and has its outer edge armed with short plumose setae. The 3^d joint is longer than the 2^d. All three joints have a plumose seta on their inner distal corners.

The antennal peduncle is rather long and slender, with the penultimate joint about 3 times as long as the terminal one.

The antennal scale (fig. 4) extends almost to the distal end of the antennular peduncle and is about 3 times as long as broad. Its outer margin is entire and terminates in a strong spine, beyond which the evenly rounded apex of the scale projects for a little distance.

The mouth parts in so far as they could be studied in the single available specimen, agreed well with Kossmann's figures.

The first thoracic limbs (maxillipeds) (fig. 5) are rather short when compared with the same appendage in S. thompsoni. The merus is longer than the carpus, the propodus is small and the nail distinct and longer than the fingers. The whole limb is moderately well armed on its inner edge with short plumose setae.

The 2^d thoracic limbs are missing in the specimen.

The remaining thoracic limbs (fig. 6) are somewhat slender and elongate. The tarsus is about as long as the merus and distinctly two-jointed, the first joint shorter than the 2^d one. The nail is distinct and long, and the whole limb well armed with simple setae, with a bunch of plumose setae at the basal part of the nail.

The exopods of all the thoracic limbs are well developed, and have the outer distal corner of the expanded basal joint slightly acuminate. The flagelliform part is composed of ten joints.

The fleopods are of the usual type found in the ♀ of this genus.

The tetron (fig. 7) is about one and a half times as long as the last

segment of the floor. It is narrowly liguliform and tapering in shape with a prominent constriction at about one third of its length from the base. The apex is armed with a pair of long spines between which are a pair of medium setae and 3 small equal-sized spines. The sides below the constriction are armed with about 28 spines arranged in series of five distally, and 3 and 4 proximally. The proximal spine of each series is the shortest, the succeeding spines gradually increasing in length. Above the constriction the lateral margins are armed with 3 stout spines, larger than the spines armoring the distal part of the margins.

The inner uropod is about one and a sixth times as long as the telson, narrow and having about 45 spines on its inner margin, the spines commencing at the inner posterior corner of the strobyle and extending to the tip. The spines are arranged in series of sometimes two and sometimes 3, the most posterior spine nearly as long as the terminal spines of the telson. The strobyle is well developed.

f. 165. - The outer uropod is a little longer than the inner and much broader, the terminal joint being about one quarter of the length of the proximal one, the latter armed on the distal two thirds of its outer margin with 15 strong spines increasing in length posteriorly.

Length of an ovigerous female 12 millims.

The above description is based on the single Ceylon specimen in this collection which I refer to this species. The ♂ is as yet unknown. Professor Paulson (1875) first describes this species, though he refers his specimens at the time to S. jaltensis Germarinsky.

Kossmann (1880), who had a much larger specimen of what he believed to be Paulson's species at his disposal, recognises that it differs rather markedly from S. jaltensis, and, therefore, re-describes it, with figures under the name of S. paulsoni. Germarinsky (1880) likewise came to the conclusion that S. jaltensis, Paulson was not the same as his species, and, apparently unacquainted with Kossmann's earlier paper, fortunately also re-named it S. paulsoni. He has, however no specimens, and drew up his diagnosis entirely from Paulson's work.

Though both Germarinsky's and Kossmann's descriptions are imperfect in many points, they only differ in one important detail from the Ceylon example, namely, in the number of spines on the outer margin of the 1st joint of the outer uropod. Germarinsky gives the number as 7, Kossmann figures 8, while the Ceylon example has fifteen. This great difference may, I think, be explained by the difference of size of the individuals from which the various descriptions were drawn up. Germarinsky's description was based on Paulson's specimens, 4 mm in length; Kossmann's example was 8.5 mm, while the Ceylon one is 12 mm.

the spinulation of the telson and uropods is known in other species of the group to vary with the size of specimens. In all other respects the present example agrees in the main with Kossmann's figures.

S. paulsoni approaches nearest to S. denticulata G. M. Thompson, among all the species of Sinella which have been described but differs from the latter (1) in the length and proportion of the joints of the antennular peduncle; (2) in the deviating form of the antennal scale; (3) in the presence of spines on the lateral margins of the telson above the constriction; (4) in the much larger number of spines on the inner uropod. From the three Pacific species of the genus - S. gracilis, S. thompsoni and S. insica - S. paulsoni may be at once distinguished by having the outer uropod longer than the inner and in having many more spines on the outer edge of the former.

Prior to Professor Hersman's capture of this species in Ceylon it was only known from the Red Sea. Its geographical distribution has thus been considerably extended. As far as I am aware, it is the 1st Myct ever recorded from Ceylon.

Haplostytes erythraeus, Kossmann (?)

Locality : - South end of Red Sea, myct a tow-net, one of 5 myt. In consequence of its small size and damaged condition, the absolute identity of // this specimen is a matter of some doubt. A description of the specimen is therefore given.

The carapace has the rostral projection short and bluntly rounded. It is without any trace of dorsal lobes on its hinder margin, which is slightly emarginate.

The fleon has the sixth segment about one and half times as long as the preceding one, which shows no trace of a median posterior dorsal spine.

The antennular peduncle, which is only slightly longer than that of the antenna, has ~~two~~ 2 small spines on the outer margin of the 2d. joint.

The antennal scale is very short scarcely reaching beyond the distal end of the basal joint of the antennular peduncle. Its outer margin is entire and terminates in a very strong spine. The apex of the scale does not project beyond the top of the spine.

The telson is as long as the last segment of the fleon and cleft at its apex, the cleft, as usual in this sub-family, being penated. The lateral margins bear 6 long and stout spines.

The uropods are both slightly longer than the telson, the inner a very little longer than the outer. The outer uropod has 11 strong spines on the outer margin, while the

inner bears five spines on its internal margin.

Length, 5 mm.

It is probable that the above specimen belongs to H. erythraeus. As just described, it differs from H. normani in the antennal scale, which has a stronger terminal spine and the apex not produced beyond the spine, and also in having a much blunter & rostral projection. The males further differ from those of H. normani in having in inner branch of the third pterygost in the ♂ quite absent.

H. erythraeus is only known from the Red Sea, where both Kossmann's type and the above specimen were obtained.
