

LX.—*A new Amphipod Species*, *Tryphosites alleni*. By E. W. SEXTON, Marine Biological Laboratory, Plymouth.

[Plate XIV.]

TWO specimens of the species described below were taken by Dr. Allen during the cruise of the 'Huxley' in the north of the Bay of Biscay, August 1906, trawled in 246 fathoms, 48° 7' N., 8° 13' W.

Fam. *Lysianassidæ*.

Genus *TRYPHOSITES*, G. O. Sars.

Tryphosites alleni, sp. n. (Pl. XIV.)

Two specimens, ovigerous females, measuring 10 mm. from the tip of the rostrum to the tip of the telson.

Besides these two specimens I have been able, through Mr. Tattersall's kindness, to examine some fourteen others, taken, together with the type species, *T. longipes*, by the 'Helga' on the west of Ireland, in 200 fathoms. They were of all sizes, measuring from 2.5 mm. to 10 mm. in length; the four largest were males.

With regard to the distribution of the two species, Mr. Tattersall has informed me that "*T. longipes* is alone found in shallow water. The other form is alone found in very deep water, and the two forms together in intermediate depths."

Description.

In general aspect much resembling the type species, *T. longipes**, the principal distinguishing characters being found in the hand of gnathopod 2, the shape of side-plate 4, the epimera of pleon-segment 3, and the telson.

Head longer than the first peræon-segment, but not equal to the first two in length; lateral corners much produced and acute.

Eyes large, a long oval, pigment faded.

Side-plates as in the type species with the exception of side-plate 4; in this (fig. 1) the projecting portion of the lower hind margin is rounded, in *longipes* it is truncate and angular.

* A full description and figures will be found in Prof. Sars's 'Crustacea of Norway,' vol. i. p. 81, pl. xxviii. fig. 3, and pl. xxix. fig. 1.

Pleon-segments 1 and 2, hind margins straight, postero-lateral angles obtuse. Pleon-segment 3 is the most easily observed distinguishing character of the species; in *longipes* the posterior lobe is acutely upturned, rounding gradually below into the inferior margin, while in *alleni*, in all stages of growth, the lobe is acutely produced below as well as above, the margin between the points being deeply concave (fig. 2).

Antennæ.—Superior antenna: peduncle as in *longipes*; flagella longer in proportion; *primary flagellum* in the large female considerably more than twice the length of the peduncle, 18-jointed; *accessory flagellum* nearly one-third the length of the primary, 6-jointed. The largest male in Mr. Tattersall's collection had 22 joints in the primary, 6 in the accessory.

Inferior antenna shorter than the superior in the female; flagellum 15-jointed. In the male the flagellum is filiform, 62 joints in the largest specimen, 46 in the smallest.

Oral parts.—*Lower lip* much as figured by Sars for *longipes*, densely covered with fine hairs, as is also the upper lip.

Mandibles (figs. 3 and 4) much as in the type species, but distinguished from it by the different proportions of the joints of the palp. *Cutting-plates* large, rounded, with a small recurved tooth above. The left mandible (fig. 3) has a very small *accessory plate*, the margin of which is divided into three rounded teeth. *Spine-row* with three spines. *Molar* large, prominent; crown reniform in shape, transversely ridged. The *palp* is very long and slender, the second joint longer in proportion than in *longipes*, twice the length of the third, with a row of graduated setiform spines crossing its distal end diagonally; third joint narrow, tapering to the tip, with a row of serrate spines on the inner margin, and an apical cluster of four longer ones setting out at a different angle.

Maxilla 1 (fig. 5).—*Inner plate* tipped with 2 plumose setæ; *outer plate* large, apex obliquely truncate, with 11 strong, flat, dentate spines, 10 of which are arranged close together in two rows, the remaining one being inset lower down on the inner margin. *Palp* large and broad; apical margin rounded and beset with 7 small stout teeth and 1 short spine.

Maxilla 2 as in *longipes*.

Maxillipeds (fig. 6).—*Inner plate*: apex truncate, with 3 short stout teeth; a row of plumose setæ starting from the outer angle runs halfway down the inner margin. *Outer plate* very large, furnished with 2 stout teeth apically and a

row of 13 minute ones along the inner margin; 6 small spines are inset submarginally on the outer surface. *Palp* short, hardly longer than the outer plate; terminal joint with a distinct nail and 3 setules subapically; the second and third joints setose on the inner margins.

Gnathopod 1 much as in *longipes*; second joint slightly longer in proportion; sixth joint, palm oblique, with two sensory spines at the angle; palmar margin convex and serrulate; finger a little longer than the palm, furnished with a decurrent tooth near the apex, 3 setules inset in the notch and 1 behind it.

Gnathopod 2 (figs. 7 and 8) much more slender than in *longipes*. The second joint is longer in proportion. The sixth joint differs from that of the type species. In *longipes* it is described by Sars as being a little shorter than the fifth, oblong-oval, with the "superior edge straight, inferior one bulging out at the middle"; the distal end is truncate, the finger being inset in the middle of the margin; the palm straight, rounding into the hind margin. In *alleni* the sixth joint is considerably shorter than the fifth; it is long and narrow, inferior margin straight, not bulging, front margin straight, curving a little distally to the insertion of the finger. The palm is convex and produced at the palmar angle; the finger smaller than in *longipes*, of the same construction, but with the base more swollen; tip curved, acute, with a decurrent tooth and a cluster of stiff bristles subapically. The bristles on the outer side of the hand are more striking than in *longipes*; the bases are more swollen, being twice the width of the shafts, and the apical flagella are much longer and thinner (see fig. 8).

Peræopods much as in *longipes*; first and second alike, slender, densely setose on the hind margins of the fourth, fifth, and sixth joints; finger long, nearly three-quarters the length of the sixth joint. The hinder peræopods rapidly increase in length; basal joints closely set with small spines anteriorly, posterior margin serrated; the other joints very slender, spinose, fingers equalling those of the anterior peræopods in length, but only half their width.

Pleopods.—Rami long, with about 17 joints in the inner, and 19 in the outer ramus; 5 cleft spines; coupling spines small, the lower one with 3 recurved teeth, the upper and smaller one with 4.

Uropods more slender and more spinose than in the type species. *Uropod 1*: peduncle very long and slender, with a row of 20 short spines on the outer curve, 8 longer ones on the inner side; rami only two-thirds as long as the peduncle,

subequal to each other in length, very slender, with short spines on the outer curve and longer ones on the inner.

Uropod 2 (fig. 9): peduncle much shorter and nearly twice as stout as that of uropod 1; rami subequal to it in length; the inner ramus, of the form characteristic of the genus, is much longer and narrower than in *longipes*; it is actually of the same length as the outer ramus, but appears shorter through being inset at a different level. *Uropod 3* (fig. 10): peduncle broad, shorter than the rami; inner ramus slightly the shorter, margin serrated, furnished with sensory spines and 1 plumose seta proximally; outer ramus 2-jointed, outer margin with spines, inner margin serrate, with 3 long plumose setæ; a setule in each apex.

Telson (fig. 11).—The sixth pleon-segment is produced in an acute process on either side of the telson; in *longipes* these processes are shorter and rounded.

It tapers distally; cleft to nearly three-quarters the length; apices serrate on the inner side, each with 1 strong spine inset; a pair of mobile ciliated hairs on either side of the cleft. There were 6 spines on one side in the largest female examined, 4 on the other (probably two have been broken off), but the number is less in the smaller specimens.

EXPLANATION OF PLATE XIV.

- Fig.* 1. Side-plate 4, $\times 17$.
Fig. 2. Epimeron of the third pleon-segment, $\times 17$.
Fig. 3. Left mandible, $\times 58$.
Fig. 4. Right mandible, $\times 58$.
Fig. 5. Maxilla 1, $\times 58$.
Fig. 6. Maxillipeds, $\times 58$.
Fig. 7. Gnathopod 2, $\times 42$.
Fig. 8. Finger and one of the spines, gnathopod 2, $\times 265$.
Fig. 9. Uropod 2, $\times 42$.
Fig. 10. Uropod 3, $\times 42$.
Fig. 11. Telson, $\times 42$.

LXI.—*New Mammals from Tropical South America.*

By OLDFIELD THOMAS.

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Phodotes tumidirostris continentis, subsp. n.

♂. 77; ♀. 50, 78, 124.

Quite like the type form, as described by Miller* from the Island of Curaçao, but markedly larger.

* P. Biol. Soc. Wash. xiii. p. 160 (1900).

