

DESCRIPTIONS OF TWO NEW ISOPODS, AN APSEUDES
AND A MUNNOPSIS, BOTH FROM THE GALAPAGOS
ISLANDS.

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In 1888, during the cruise of the U. S. Bureau of Fisheries steamer *Albatross* around South America, two specimens, representing two new species of isopods belonging to different genera, were collected off Chatham Island, Galapagos Islands, at the same station and in a great depth, 812 fathoms. These species are described below. From the same locality and depth a specimen of *Arcturus* was obtained, which has been referred to *A. abyssicola* Beddard.

APSEUDES GALAPAGENSIS, new species.

Body narrow, elongate. Color white.

Head narrower anteriorly than posteriorly, with the front produced in the middle in a long slender acute rostrum, which has at the base on either side a rounded bulblike expansion; the rostrum extends forward to the middle of the basal article of the first antennæ. The shape of the rostrum is similar to that in *Apseudes spinosus* (M. Sars). On either side of the rostrum, the ocular process is produced in a long, acute spine, equal in length to the rostral spine. There are no eyes. The basal article of the first antennæ is long and narrow and extends forward; it is unarmed; the second and third articles are short and subequal and together are about half as long as the basal article; the flagellum is composed of 14 articles, the secondary filament of 6 articles. The second antennæ are slender and frail; the first article is short, about as broad as long; the second, fourth and fifth articles are subequal and each is about three times as long as the first article; the third is minute; the flagellum is composed of 7 articles. A scale is articulated to the second article. (See fig. 1.)

The first segment of the thorax is united with the head to form a carapace, as is usual in this genus. The second segment (first free segment) is produced on either side of the epimeron in a small spine, the post-lateral angle being rounded. The epimeron is produced in

a long, acute process, extending forward on either side of the head. The third segment (second free segment) has three small spines on the lateral margin anterior to the epimeron, which is small, and one spine posterior to the epimeron. The fourth segment (third free segment) has three spines on the lateral margin anterior to the epimeron, the first being small, the two following ones long and acute, and two small spines posterior to the epimeron. The fifth segment (fourth free segment) as well as the sixth segment (fifth free segment) have each three spines on the lateral margin on either side anterior to the epimeron, the first one being small and the two following ones long and acute. The seventh or last thoracic segment (sixth free segment) has two long, acute spines anterior to the epimeron. The fifth and sixth segments (fourth and fifth free segments) are the longest and are subequal.

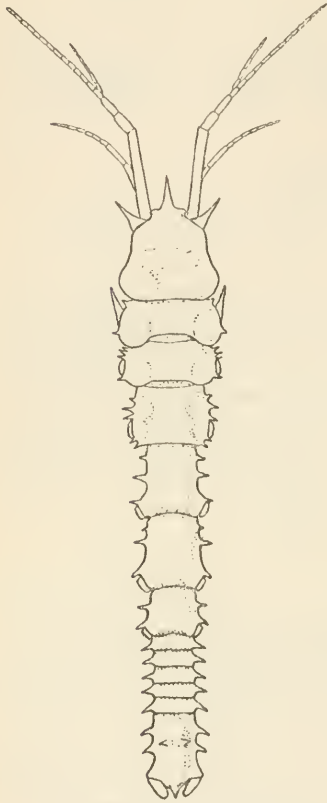


FIG. 1.—APSEUDES GALAPAGENSIS.

The first five segments of the abdomen are short and subequal and each has the lateral margin produced on either side in a long, acute process. The sixth or terminal segment is about as long as the four preceding segments taken together; it terminates in an acute point which is upturned. About the middle of the dorsal surface are two spines, one on either side of the median line. The lateral margin is produced on either side in two long, acute processes, one a little below the middle of the segment and the other a little above. The peduncle of the uropods is elongate; both branches are missing. On the ventral side of the body is a long, median spine on each of the thoracic and the first five abdominal segments.

The first pair of legs are chelate; they are large and strong and have the propodus furnished with a triangular process or tooth a short distance from the articulation of the dactylus with the propodus. The carpus also has a small triangular process near the proximal end. (See fig. 2.) The second pair of legs are fossorial and are a little longer and stouter than any of the following, which are similar in structure



FIG. 2.—APSEUDES GALAPAGENSIS. FIRST LEG.

and size. The propodus of the fossorial legs is furnished with four spines on the inner margin.

There are five pairs of double-branched pleopods, which are small and slender and rather difficult to see.

Only one specimen was collected by the U. S. Bureau of Fisheries steamer *Albatross* April 4, 1888, at station 2807, off Chatham Island, Galapagos Islands, at a depth of 812 fathoms in globigerina ooze, coral, and mud.

Type-specimen.—Cat. No. 43694, U.S.N.M.

MUNNOPSIS LONGIREMIS, new species.

Body oblong-ovate. Anterior division wider than posterior division.

Head wider than long, $3\frac{1}{2}$ mm. wide, $1\frac{1}{2}$ mm. long (including the rostrum). The front is produced between the basal articles of the antennæ, the anterior margin of the rostrum being straight. The first pair of antennæ have the basal article large and dilated; the second is small and short; the two following are subequal and both together about equal in length to the second; the flagellum is very long, extending to the posterior margin of the fourth thoracic segment. The second antennæ are broken at the end of the third article and the terminal parts lost. The eyes are absent. The mandibles have a 3-jointed palp, the middle article being about three times as long as either of the other two. (See fig. 3.)

The first segment of the thorax is shorter in the middle of the dorsal region than either of the two following, which are subequal. The first segment is 0.3 mm. long, the second and third each 0.5 mm. The fourth segment is short in the middle of the dorsal region (about 0.5 mm.), and is produced backward at the sides. The fifth segment is 0.5 mm. long in the middle of the dorsal region. The sixth and seventh segments are longer in the middle of the dorsal region than any of the preceding, the sixth being twice as long as the fifth (1 mm.) and the seventh a little longer than the sixth. The lateral parts of the last three segments are produced backward. All the segments are provided with epimera.

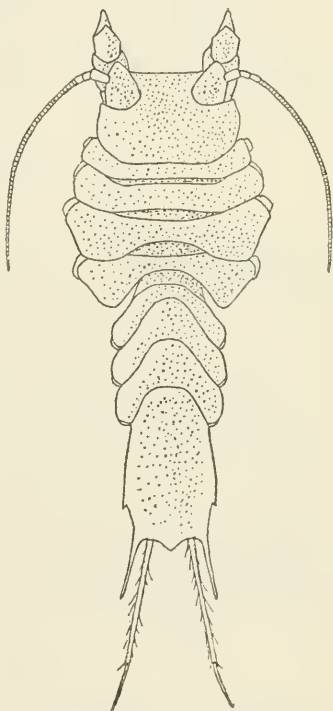


FIG. 3.—MUNNOPSIS LONGIREMIS.

The abdomen consists of a single large segment, which measures 4.5 mm. in length. At each post-lateral angle is a long spine, 1.5 mm. in length, produced straight backward and about two-thirds the length of the lateral margin is a small spine on either side. The posterior margin is produced in the middle in a small triangular process. The uropoda consist of a long peduncle, 3 mm. in length, or twice as long as the post-lateral spines, and a single branch which is 1.5 mm. in length.

All the legs are broken at the basis with the exception of one leg of the first pair, and this is the only one preserved (see fig. 4); it is prehensile, with 13 spines on the propodus and 5 on the merus; there is also one long spine on the carpus about the middle of the inner margin.

A single imperfect specimen, the body being in two parts, was found by the U. S. Bureau of Fisheries steamer *Albatross* at station 2807, off Chatham Island, Galapagos Islands, at a depth of 812 fathoms in globigerina ooze, coral, and mud.



FIG. 4.—MUNNOPSIS LONGIREMIS.
FIRST LEG. x 10½.

Type-specimen.—Cat. No. 43695, U.S.N.M.

This species is very close to *Munnopsis latifrons* Beddard from off Ino Sima Island, Japan. It differs, however, from that species as described and figured by Beddard in not having the posterior margin of the terminal segment of the body truncate, but produced in a small triangular process, in having the post-lateral spines of this segment much longer than in that species and in having a greater number of spines on the propodus of the first pair of legs. The spine on the carpus is also situated halfway between the posterior and the anterior end of the article, while in *M. latifrons* it is situated closer to the anterior end.

The specimens referred by me to *M. latifrons* in 1909 differ from that species in having the posterior margin of the abdomen produced in a triangular process between the post-lateral spines, which are more divergent than in Beddard's specimens. There are also two smaller spines on the lateral margin on either side not seen in Beddard's specimens. These specimens may have to be referred to a new species.

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