A NEW PROTOJANIRA FROM NATAL

A New Protojanira from Natal (Isopoda, Asellota).

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With 1 Text-figure.

IN October, 1953, Mr. W. D. Oliff sent me four specimens of a tiny Isopod which he had collected while carrying out a survey of Natal rivers for the Council for Scientific and Industrial Research. These specimens were in poor condition, and description was delayed pending the discovery of further material. In July, 1954, Mr. Oliff sent two more specimens. In the meantime Dr. Lawrence, of the Natal Museum, had sent a specimen which he had found amongst some Chilopoda collected by the Lund University Expedition under Dr. Per Brinck.

All these specimens seem to have been collected together with other animals from which they were not at the time differentiated; they only came to light later when the material was sorted. Thus they were not specially preserved. This explains the poor condition of the specimens. Nevertheless it has been possible to observe all the characters necessary for a specific description, with one rather important omission : the 1st perceoped of the female. Only two females were present, and both had lost the 1st pair of perceopeds; also neither apparently was mature because no trace of oostegites was found.

Genus Protojanira Brnrd.

Protojanira Barnard, 1927, Trans. Roy. Soc. S. Afr., xiv. p. 163. Genotype : P. prenticei Brnrd., 1927.

The new species conforms with the essential characters of this genus except as regards the specialization of the 1st perceoped. The remarkable character of the 1st pleoped of the male is repeated in the new species; in fact there is no specific difference.

Peræopods 2-7 are tri-unguiculate (as in *Janira*). A curious feature is the presence of two small processes on the inner (*i.e.* posterior or dorsal) surface of the operculiform 1st pleopod of the female. These were observed in both female specimens, but this feature requires checking on better preserved material.

Protojanira perbrincki n. sp. Text-figure a-k.

Body narrow elongate. Head longer than broad, margins entire. Eyes completely absent. Peræon segments 1-3 about as broad as long, segment 4 shorter, segments 5-7 increasing in length, postero-lateral corners bluntly

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produced, margins entire, with a few setæ. Side-plates indistinguishable. Pleon longer than broad, oval, margins sparsely setose.

Antenna 1 with fairly stout basal joint, followed by two shorter peduncular joints, and about 12 graduated flagellar joints, most of which are broader than long, with sensory filaments in the male. Antenna 2 about half length of body, 3rd joint with movable linear scale, tipped with 2–4 setæ, 5th and 6th joints subequal, flagellum subequal to peduncle, with about 18–24 joints, some of the proximal ones tending to be much shorter than broad.



TEXT-FIG.

Protojanira perbrincki n. sp. a, Whole animal; b, mandible; c, maxilla 1; d, maxilla 2; e, maxilliped; f, peræopod 1, 4th-7th joints, with palmar spine further enlarged; g, peræopod 2, 4th-7th joints; h, operculum (pleopod 1), \mathcal{G} ; i, pleopod 1, \mathcal{J} ; j, pleopod 2, \mathcal{J} ; k, margin of pleon, with uropod.

Mandible with strong tridentate cutting-edge, but rather weak molar. Maxilla 2 with outer and middle plates tipped with simple setæ. Maxilliped with inner plate squarely truncate at apex, with 2–3 setules, 3–4 coupling hooks, 2nd joint of palp the largest, but not lobately expanded on inner margin, epipod narrow ovate. Peræopod 1 of the male stronger than the following peræopods, subchelate, 4th joint broader than long, outer apex with a rather strong spine, 5th joint with 2 spines and some setæ on inner apex, 6th oval, palm long and oblique, with a comb-like series of small spines and defined proximally by a large spine, which appears to be movably articulated, finger finely serrate along greater part of inner margin, but leaving the distal quarter bare. In the female, unknown.

Peræopods 2-7, 4th joint with conspicuous spine on outer apex, 7th joint with 2 strong claws and between them an almost equally strong curved spine.

Pleopod 1 of the male, two oblong lobes, apically subtruncate, and basally united. Cf. fig. 9a of P. prenticei.

Operculum in the female subcircular or broadly oval, distal margin undulate; on inner surface two small oval lobes.

Pleopod 2 of the male normal, see fig. 9c of P. prenticei.

Pleopods 3 and 4 biramous, outer ramus 1-jointed, inner ramus narrow, apically blunt. Pleopod 5 uniramous, oval.

Uropods about two-thirds length of pleon, inner ramus longer than peduncle, outer ramus shorter than inner, both with simple setæ, one apical one on each ramus longer than the others.

Length 4mm., breadth 0.5 mm. Colour whitish.

Localities.—Above the National Park Hostel, Tugela River system, altitude 6,000 ft. Six specimens, including both sexes. W. D. Oliff coll., Natal Provincial River Research.

Hluhluwe Game Reserve, Zululand. One male specimen. Dr. Per Brinck coll., Lund University Expedition.

Habitat.—According to the data supplied the animals were found in two quite different habitats. Mr. Oliff found his specimens in a "clear swift-running river with stony bed . . . the animals were netted with others washed off the stones in the river bed". Dr. Lawrence says that Dr. Brinck's specimen was taken "under a stone in a fairly wet ravine."

All the specimens are undoubtedly conspecific. The Hluhluwe specimen is a male with 1st perceoped agreeing exactly with those of the specimens from the other locality.