

A NEW GENUS OF STOMATOPOD CRUSTACEAN FROM  
THE INDO-WEST PACIFIC REGION

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*Abstract.*—*Mesacturoides*, new genus, is recognized for *Gonodactylus crinitus* Manning, 1962, and three related species. The type-species, *M. crinitus*, previously known only from the Seychelles Islands, is common in shallow water habitats at Tulear, Madagascar, as well as at Mauritius and Reunion Islands in the western Indian Ocean.

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*Gonodactylus crinitus* Manning, 1962 was based on four females of a small stomatopod collected in the Seychelles Islands. The species apparently has not been reported since its original description. In 1969 I transferred *G. crinitus* to the genus *Mesacturus* Miers, 1880, along with five other Indo-West Pacific species then assigned to *Gonodactylus*.

Recently, samples of stomatopods collected during field studies in Madagascar, Mauritius, and Reunion Island in the western Indian Ocean by Mireille Peyrot-Clausade, Station Marine d'Endoume, Marseille, France, were forwarded to me for identification. Her collections included 40 samples of *Mesacturus crinitus* from reef habitats in all three localities, indicating that the species was relatively abundant there.

This rich material prompted a reevaluation of the status of the species assigned to *Mesacturus*, which, as I noted (1969:151) includes two groups of species with very different telson types. One group, including the type-species, *Gonodactylus furcicaudatus* Miers, 1880, and *G. kempi* Odhner, 1923, is characterized by having a bizarre telson with a narrow basal part and a slender, bifurcate median projection extending posteriorly (Manning, 1969: Fig. 2). The second group of species, characterized by having a *Gonodactylus*-like telson with longitudinal bosses dorsally and distinct submedian and intermediate marginal teeth, includes *G. brevisquamatus* Paulson, 1875 (Red Sea), *G. fimbriatus* Lenz, 1905 (Zanzibar, Seychelles Islands), *G. spinosocarinatus* Fukuda, 1910 (Pacific Ocean, from Japan to Indonesia), and *G. crinitus* (western Indian Ocean). These latter four species are assigned to a new genus, characterized below.

*Mesacturoides*, new genus

*Definition.*—Rostral plate (Fig. 1a) sharply trispinous. Cornea (Fig. 1a) subglobular. Anterior margins of lateral plates of carapace convex, extending anteriorly beyond base of rostral plate (Fig. 1a). Propodus of claw lacking proximal movable spine (Fig. 1d). Mandibular palp present, 3-

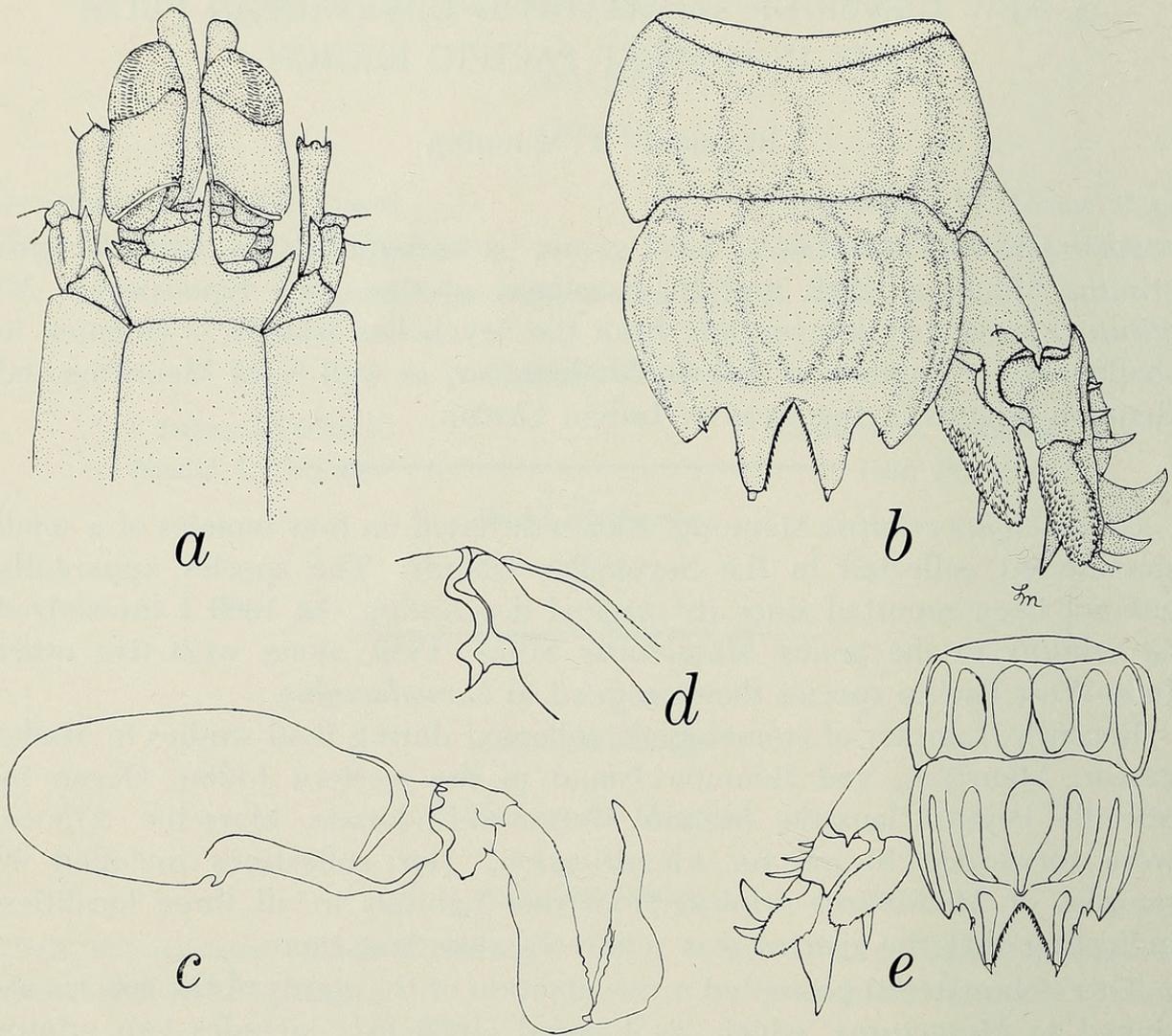


Fig. 1. *Mesacturoides crinitus* (Manning, 1962). Male, TL 27 mm, Tulear: *a*, Anterior part of body; *b*, Sixth abdominal somite, telson, and uropod; *c*, Raptorial claw; *d*, Proximal part of propodus of claw, inner face. Juvenile, TL 8 mm, Tulear: *e*, Sixth abdominal somite, telson, and uropod [Setae omitted in all figures].

segmented. Articulated anterolateral plates of abdomen present. Posterior margin of sixth abdominal somite almost straight (Figs. 1*b*, *e*). Telson a flattened plate, with median and other longitudinal prominences; posterior margin produced into 2 pairs of teeth, submedians with movable apices. Distalmost spines on outer margin of proximal segment of uropodal exopod enlarged, strongly recurved (Figs. 1*b*, *e*). Uropodal endopod abnormal in shape and setation, curved laterally, lacking dorsal spines (Figs. 1*b*, *e*). Uropodal exopod and endopod lacking fixed spines on inner margin (Figs. 1*b*, *e*).

*Type-species*.—*Gonodactylus crinitus* Manning, 1962.

*Etymology*.—The generic name is derived from the Greek, *-oides*, like, and the generic name *Mesacturus*. The gender is masculine.

*Remarks*.—*Mesacturoides*, as the name implies, shows clear affinities with

*Mesacturus*, the only other genus in the family in which the spines of the uropodal exopod are greatly enlarged and recurved. It differs from *Mesacturus* in basic telson ornamentation, having a typical *Gonodactylus*-like telson rather than the unusual telson with a long, median posterior projection found in both species of *Mesacturus*. The four species of *Mesacturoides*, *M. brevisquamatus*, *M. crinitus*, *M. fimbriatus*, and *M. spinosocarinatus*, can be distinguished by using the key to *Mesacturus* given by me in 1969 (p. 151); the first couplet in that key also can be used to separate *Mesacturus* and *Mesacturoides*.

*Mesacturus* and *Mesacturoides* occupy an isolated position in the family Gonodactylidae. The highly modified uropods probably are a specialization for living in burrows on reefs, but neither their function nor the behavior of these animals has been studied.

In order to facilitate recognition of members of *Mesacturoides*, additional illustrations of *M. crinitus* are presented here (Fig. 1). The telson and uropods of one of the smallest juveniles examined, a postlarva, TL 8 mm, also are illustrated here; the main generic characters, including the enlarged and recurved spines on the uropodal exopod, already are developed at this size.

At Tulear, Madagascar, *M. crinitus* was collected at 14 stations on the outer reef flat; 44 specimens, total lengths 8–30 mm, were taken there. The species also was represented at nine stations in the boulder tract, where 24 specimens, 8–25 mm long, were collected. The species may be rarer at Mauritius, where a single female, 19 mm long, was taken on the reef flat, Trou au Biches. On Reunion Island, the species occurred in seven samples (18 specimens, 9–23 mm long) on the reef flat at St. Pierre; five samples (12 specimens, 11–19 mm long) on the reef flat at St. Gilles; and in four samples (11 specimens, 10–16 mm long) at a depth of 4 m on the outer reef slope at St. Gilles. In all, 110 specimens of a species thought to be rare were collected during these surveys at 40 different stations. It seems obvious that careful sampling of microhabitats at selected localities across the Indo-West Pacific region will be required before we can begin to get a clear picture of distribution patterns of the shallow water stomatopods of that region.

#### Acknowledgments

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