

*NANO GALATHEA RAYMONDI*, A NEW GENUS AND SPECIES OF  
GALATHEIDAE (DECAPODA, ANOMURA) FROM THE BAY OF BENGAL

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A fairly large collection of Galatheidae, obtained by the International Indian Ocean Expedition (IIOE) 1963-1964 and deposited in the Smithsonian Institution, has very kindly been made available for study. The collection reveals several new species and two new genera: *Coralliogalatea* was established earlier (Baba & Javed, 1974) for inclusion of specimens from Madagascar; in the present paper a new genus and species is described for two females from the Bay of Bengal.

**Nanogalatea** new genus

Diagnosis. — Size small. Rostrum broadly triangular, concave dorsally, carinated on ventral side, lateral margins finely serrated, notched near apex, and without any teeth. Dorsal surface of carapace coarse, unarmed, with weak striations; branchial region with marginal spines, outer orbital angle armed. Abdomen unarmed. Ocular peduncle short and dilated, cornea cap-like. Basal antennular segment globular, short and stout with at least four distinct terminal spines. Second segment of antennal peduncle with outer and inner marginal spines. Ischium of third maxilliped triangular in cross section, distinctly longer than merus. Third thoracic sternite not as wide as anterior margin of fourth.

Type-species. — *Nanogalatea raymondi* new species.

Remarks. — *Nanogalatea* resembles both *Liogalatea* Baba, 1969, and *Phylladiorhynchus* Baba, 1969. Basically the genera of the Galatheidae, especially of the subdivisions of the formerly recognized *Galatea* s.l. are characterized by the shape of the rostrum. Apart from the complete absence of the rostral teeth from this new genus, there is no distinct character to separate it from the closest relative, *Phylladiorhynchus*: the basal segment of the antennule and the third maxilliped are common and characteristic to both. However, the occurrence of two specimens suggests that the character of the absence of rostral teeth might be constant. The new genus agrees with *Liogalatea* in lacking rostral teeth but it differs clearly in having (1) the outer orbital angle armed and distinctly produced, (2) the

third thoracic sternum narrower than the anterior margin of the fourth, (3) the basal antennular segment with at least four spines terminally, and (4) the merus of the third maxilliped very much shorter than the ischium. At present *Nanogalathea* includes only the type species.

### ***Nanogalathea raymondi* new species**

**Material.** — International Indian Ocean Expedition, Cruise 1, Sta. 18 A, 03°34'N 98°00'E, depth 77 m, 21 March 1963, 2 ♀♀.

The larger, ovigerous, female is selected as the holotype; the smaller, non-ovigerous, female is the paratype. The holotype will be deposited in the National Museum of Natural History, Smithsonian Institution, Washington D.C. The paratype will be retained in the Invertebrate Reference Museum, University of Karachi, Karachi.

**Description of the holotype.** — The rostrum is broadly triangular, it is carinated ventrally, the lateral margins are finely serrated posterior to the sharp tip. The dorsal surface is concave and with plumose setae, some of which are arranged in a distinct row along the lateral margin. The outer orbital angle is armed with a stout pyramidal spine. The antero-lateral spine is small followed by seven lateral spines of which the one on the hepatic region, is minute and is rather dorsal in position (fig. 1).

The pterygostomial flap is narrow posteriorly and acutely pointed anteriorly; striae are few and with very fine setae (fig. 2).

The third thoracic sternite is slightly depressed, rather broad and with sinuous margins (fig. 3).

The eyes are quite characteristic, having a short broad ocular peduncle and with a tuft of plumose setae on the margin, anteriorly. The cornea is light brown in colour.

The basal segment of the antennule is armed with five spines on the outer margin, the third being the largest, the proximal two are quite small. The disto-median angle is produced into a well defined spine, with serrated margins (fig. 4). A pronounced tuft of hairs is present on the distal segment of the antennular peduncle. The disto-median angle of the basal segment of the antenna is produced into a large and pointed spine, slightly overreaching the second segment. The second segment is longer than the others, its distal angles are produced into spines (fig. 5). The third segment bears a small spine on the disto-median angle on the left side only.

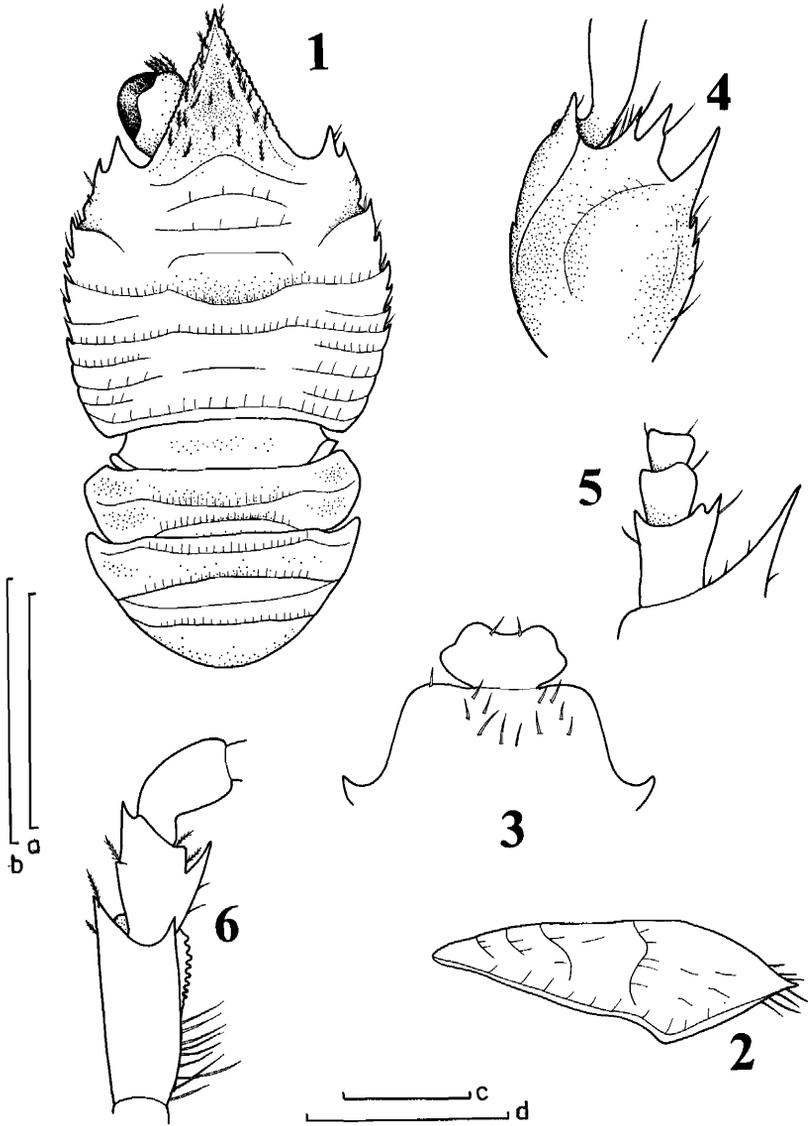
The merus of the third maxilliped is shorter than the ischium, armed with a strong inner marginal spine and a small outer distal marginal spine. Both distal angles of the ischium are produced into well developed spines (fig. 6).

The chelipeds and all the walking legs are missing from the holotype as well as the paratype. Epipods are absent from all the pereopods.

**Size.** — Carapace length including rostrum 2.0 mm and 1.5 mm; carapace breadth 1.5 mm and 1.0 mm.

**Etymology.** — The name of the genus is derived from the Latin word nanus,

a dwarf, in combination with the generic name *Galathea*, with which genus the present is closely related. The species is named for Dr. Raymond B. Manning of the Smithsonian Institution for making the specimens available for study.



Figs. 1-6. *Nanogalathea raymondi* new genus, new species, holotype, female. 1, specimen in dorsal view; 2, right pterygostomial flap; 3, anterior part of sternal segments; 4, basal segment of right antennule, in dorsal view; 5, right antennal peduncle, in ventral view; 6, part of endopod of right third maxilliped, in ventral view. Fig. 1, at scale d; 2 at scale c; 3-5 at scale b; 6 at scale a. All scales = 1 mm.

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## SUMMARY

*Nanogalathea raymondi* new genus and species is described for two females from the Bay of Bengal collected during the IIOE Expedition. The genus is quickly diagnosed by the absence of the rostral teeth; pyramidal spine on the outer orbital angle, shape and armature of the basal antennular segment and the shape of the third thoracic sternites. Relationship of the genus with closely allied genera is **discussed**.

## REFERENCES

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