# LAMBRACHAEUS RAMIFER ALCOCK, A RARE SPIDER CRAB FROM THE EAST COAST OF SOUTHERN AFRICA (DECAPODA, BRACHYURA, MAJIDAE)

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## ABSTRACT

Lambrachaeus ramifer Alcock, previously known only from a single record from the Andaman Islands, is recorded from a shallow reef off Zululand. The specimen, an ovigerous female, is described and figured.

#### INTRODUCTION

From a collection of decapods from Sodwana Bay, Zululand, a remarkable spider crab drew the author's attention. On investigation, it was found to be *Lambrachaeus ramifer*, recorded from the Andaman Islands. It was felt that a redescription of such a rare species would be of interest.

# SYSTEMATIC DISCUSSION

Family Majidae Subfamily Inachinae Lambrachaeus ramifer Alcock Figures 1 - 2

Lambrachaeus ramifer Alcock, 1895: 168, pl. 3 (fig. 1). Alcock & Anderson, 1897: pl. 18 (fig. 3). Balss, 1957: 1621.

# **Description**

Ovigerous female: carapace posteriorly rectangular, anteriorly triangular; rostrum slender, elongate, with several lateral spines and single strong ventral spine; distal half of rostrum missing; an elongate 'neck' present between eyes and rest of carapace; orbits poorly defined, with three small dorsal spines, one posterior and one ventral spine; antero-lateral corner of

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buccal frame with single strong, curved, dorsally visible spine; cardiac region of carapace with single blunt median and two smaller lateral spines; hepatic region with few blunt spines; several small marginal spines in branchial region. Abdomen seven-segmented, stretched out to accommodate underlying egg-mass, with longitudinal raised and rounded median area; first segment narrowly rectangular; second segment slightly wider, with lateral tubercle; segments three to five similar to second segment but becoming progressively longer; sixth segment equal in length to fourth and fifth segments together, with distolateral and median tubercle; seventh segment triangular, with median pair of short spines.

Eyes not retractile, with small dorsal spine.

Antennule with basal segment inflated and bearing two spines, median margin flattened and flanged; second and third peduncle segments elongate, slender, flagellae short.

Basal antennal segment less than half width of basal antennular segment, held firmly by posterior orbital margin; third peduncle segment bearing six toothed spines; flagellum of eight articles, each bearing toothed spines.

Third maxilliped: exopod with small medio-distal spine; endopod with three spines on outer face, median margin serrate; third segment with single small spine on outer face and two strong spines at inner and one at outer distal angle; fourth segment with two spines on outer margin; fifth segment with single distal spine; sixth segment short, unarmed.

Chelipeds elongate-slender, but more robust than ambulatory pereiopods; right cheliped similar to, but slightly more robust than, left; fingers of chelae less than half length of palm of propodus; dactylar and propodal finger meeting only at tips; dactylus cutting edge armed with five or six rounded tubercles, fixed finger armed with five or six larger tubercles; propodus armed with several small scattered spines, and larger spine at base of dactylus, and elongate spine in proximal half; carpus one quarter length of propodus, with single spine; merus elongate, longer than palm of propodus, with several short and long spines; ischium very short, armed with single spine.

Ambulatory perciopods very slender, only slightly shorter than chelipeds, unarmed except for a few setae on dactyli.

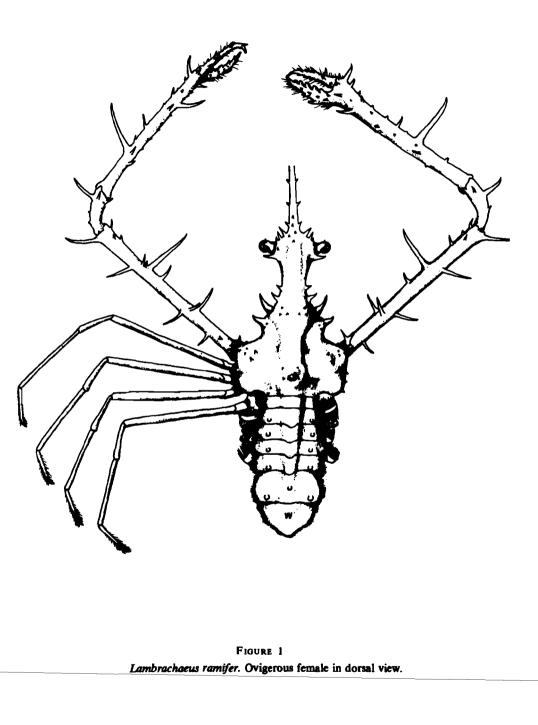
## Material

One ovigerous female, South African Museum catalogue number SAM-A15613, (27° 31' S/32° 41' E). Carapace length (from orbit to posterior margin) 7,5 mm. Greatest carapace width 6,5 mm. Chelipeds: dactylus plus propodus 11,6 mm, carpus 3,2 mm, merus 10,0 mm. The specimen was caught in about 16 metres on an offshore reef in Sodwana Bay, after a section of the reef was poisoned with Rotenone.

## Remarks

Lambrachaeus ramifer belongs to the subfamily Inachinae, with its incompletely developed orbits, slender basal antennal segment, sub-triangular carapace, single elongate rostrum and extremely elongate and slender ambulatory perciopods (Griffin 1966).

Alcock (1895) created this genus and species for a male specimen from the Andaman Islands, and described it as closely allied to Leptopodia (now Stenorhynchus) and



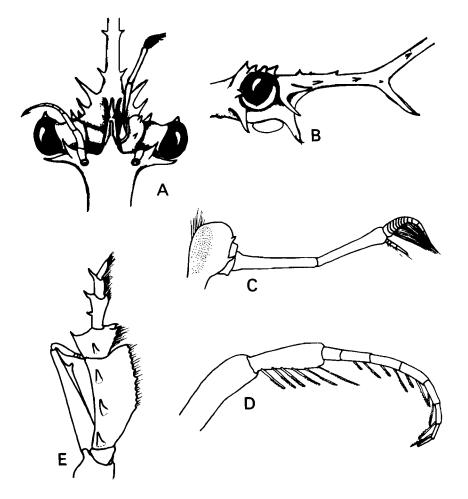


FIGURE 2 Lambrachaeus ramifer. A, ventral view of eyes, antennules, and antennae; B, lateral view of eye and rostral base; C, antennule; D, antenna (basal segment not shown); E, third maxilliped

Metoporaphis, these being the only other two genera of the Inachinae with a very elongate slender single rostrum and elongate perciopods.

The present specimen agrees almost exactly with Alcock's figure (1895) of the holotype male in dorsal view. The segmentation and shape of the abdomen is neither figured nor mentioned in the description, and as the type is not available, this feature, in which male and female majids often differ, must be left without comment.

Stenorhynchus Lamarck (Rathbun 1925), represented by a single species on the Atlantic and Pacific coasts of America, lacks a distinct 'neck', has an almost unarmed carapace and an almost unformed orbit. The genus is probably not very closely allied to *Lambrachaeus* as the abdomen is five-segmented in the female, six-segmented in the male.

*Metoporaphis* Stimpson, represented by a single species on the east coast of America, has a more defined 'neck', but the chelipeds are shorter than the ambulatory pereiopods, while the last three segments of the abdomen in the female are coalesced. The resemblance of this genus to *Lambrachaeus* is probably superficial rather than an indication of close affinity.

### ACKNOWLEDGEMENTS

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### REFERENCES

- ALCOCK, A 1895. Materials for a carcinological fauna of India. No. 1. The Brachyura Oxyrhyncha. J. Asiat. Soc. Beng. 64: 157 297.
- ALCOCK, A & ANDERSON, A R S 1897. Crustacea Part IV. Illustrations of the Zoology of the Investigator, Plates 16 - 27. Culcutta: Superintendent of Government Printing.
- BALSS, H 1957. Decapoda. Bronn's Kl. Ordn. Tierreichs 1, Abt. 1, Buch 7, Lief. 12: 1505-1672.
- GRIFFIN, D J G 1966. A review of the Australian majid spider crabs (Crustacea, Brachyura). Aust. Zool. 13: 259 - 298.
- RATHBUN, M J 1925. The spider crabs of America. Bull. U.S. natn. Mus. 129: 1 613.