

TWO NEW RECORDS OF STOMATOPODS WITH  
DESCRIPTION OF A FEMALE OF *HARPIOSQUILLA*  
*INDICA* MANNING, 1969 [STOMATOPODA SQUILLIDAE]

By

H. C. GHOSH

*Zoological Survey of India, Calcutta*

(With 1 text-figure)

INTRODUCTION

Manning (1969) described *Harpiosquilla indica* based on a single male from Mandapam Camp, S. India. Since then no further record of this species is available. The author, while working on two collections of Stomatopods from the Andaman Islands and the east coast of India, came across a female of *H. indica* from the Andaman Islands, and a male of *H. indica* and a female of *H. melanoura* from the Andhra Coast. This extends the known distribution of these species. Further, the female of *H. indica* is being described for the first time.

I am grateful to the Director, Zoological Survey of India for his permission to work on the stomatopod collections of the Department and to Dr. K. K. Tiwari, Sri G. Ramakrishna and Dr. V. K. Premkumar for their assistance and encouragement in the preparation of this note.

Registration numbers refer to Zoological Survey of India Collections and all measurements are given in millimeters.

SYSTEMATIC ACCOUNT

Order STOMATOPODA

Family SQUILLIDAE

1. *Harpiosquilla indica* Manning

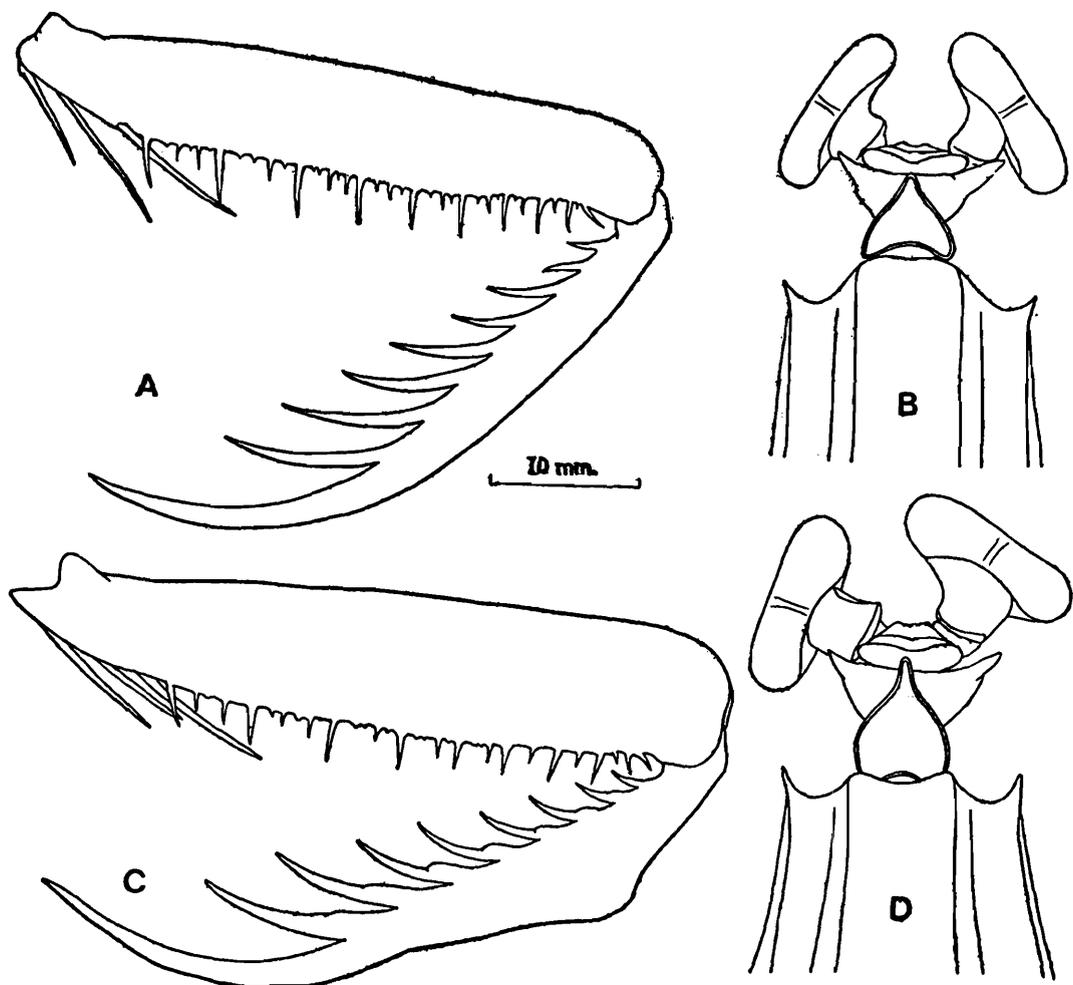
(Text-fig. 1 A—D)

1969. *Harpiosquilla indica* Manning, *Smithsonian Contributions to Zoology*, No. 36 : 33.

*Material*.—1♀; 131.0; Aerial Bay, Diglipur, N. Andaman;

April 23, 1971 ; B. K. Tikader ; Reg. No. C 1032/2.—1 ♂ ; 130.0 ; Waltair, Andhra Coast ; July 18, 1963 ; A. Daniel ; Reg. No. C 1165/2.

*Description of an adult female.*—Antennular peduncle shorter than carapace ; corneal index 258 ; rostral plate longer than broad, lateral margins tapering to a slender median projection touching anteromedian margin of antennular somite ; carapace with median carina ; opposable margin of propodus of claw with smaller spines and denticles between large spines ; dactylus of claw with nine teeth, no marginal projection on outer margin ; fifth thoracic somite rounded laterally, posterior three thoracic somites lacking submedian carinae, sixth and seventh thoracic somites ending in acute spines posteriorly, intermediate carinae of thoracic somites unarmed ; ventral keel of eighth thoracic somite rounded ; first to fifth abdominal somites lacking submedian carinae, abdominal carinae spined as follows : submedian 6, intermediate 3-6, lateral 1-6, marginal



Text-fig. 1. *Harpiosquilla indica* Manning. A. Raptorial claw (female). B. Anterior portion of body (female). C. Raptorial claw (male). D. Anterior portion of body (male).

1.5 ; count of denticles on telson as follows : submedian 5, intermediate 8-10, lateral 1 ; marginal carina of telson less than twice as long as lateral carina ; post anal keel not extending half way between anus and posterior margin ; inner half of distal segment of uropodal exopod with dark pigment.

*Color in spirit.*—Antennal scale outlined with dark chromatophores ; rostral plate outlined with dark pigment ; meral depression of claw with proximal and distal dark spots ; a dark spot on each of the dorsal and ventral surfaces of propodus at distal end ; anteromedian margin of fifth thoracic somite lined with black ; posterior margins of fifth to eighth thoracic and first to sixth abdominal somites lined with dark pigment ; anterior edge of basal segment and proximal segment of uropodal exopod with diffuse dark spots ; inner half of distal segment of uropodal exopod black. Other observations on color pattern noted by Manning (1969) not noticeable.

*Measurements.*—Only female known, total length 131.0. Other measurements of the female and the male as follows :

	♀	♂
Antennular peduncle length	26.0	25.6
Carapace length	27.6	26.4
Cornea width	10.7	9.5
Rostral plate length	6.0	5.6
Rostral plate width	4.4	4.1
Raptorial propodus length	40.0	35.5
Fifth abdominal somite width	28.6	27.1
Telson length	23.6	23.0
Telson width	25.7	24.0
Corneal Index	258	278

*Sexual dimorphism.*—A careful study of the morphological features of the two sexes reveals the existence of sexual dimorphism. The main observable differences between the male and the female are : 1) The male has a prominent triangular outer projection on the dactylus of the claw which is absent in the female ; 2) basal portions of the teeth of the claw are swollen in the male, but not so in the female ; 3) the anterior projection of the rostral plate is more slender in the male and goes beyond the anteromedian margin of the antennular somite whereas in the female the rostrum is less slender

anteriorly and does not go beyond the anteromedian margin of the antennular somite; 4) the submedian carinae of the sixth abdominal somite and the median carina of the telson are more swollen in the male than in the female.

*Distribution.*—*H. indica* is so far known from its type locality only (Mandapam, South India). Its range is now extended further east to the Andhra Coast and Andaman Islands in the Bay of Bengal.

## 2. *Harpiosquilla melanoura* Manning

1968. *Harpiosquilla melanoura* Manning, *Proc. U. S. nat. Mus.*, 124 (3641): 18.

1969. *Harpiosquilla melanoura* Manning, *Smithsonian Contributions to Zoology*, No. 36: 21.

*Material.*—1 ♀; 132.0; Waltair, Andhra Coast; July 12, 1963; A. Daniel; Reg. No. C 1037/2.

*Remarks.*—This specimen agrees with Manning's (1968 and 1969) descriptions and figures except as follows: i) intermediate carinae of the abdominal somites 3-6 are spined; ii) telson is slightly broader than long but this character seems to be variable. Manning (1968) states, "telson noticeably longer than broad" and gave measurements of the Holotype (male) as telson length 24.5, and width 21.7. Manning (1969) gave measurements of a female which reads telson length 28.5 and width 27.6 which means the telson is not so noticeably longer than broad. In the present specimen the telson is slightly broader than long. This may be a case of sexual dimorphism but unless more specimens of both the sexes are examined no definite conclusion can be made.

*Measurements.*—1 ♀; total length 132.0; Antennular peduncle length 27.5; carapace length 27.0; cornea width 10.0; rostral plate length 5.0, width 4.5; raptorial propodus length 36.2; fifth abdominal somite width 29.5; telson length 24.1, width 25.2; corneal index 270.

*Distribution.*—*Harpiosquilla melanoura* originally described from Madagascar (Manning, 1968) has been subsequently recorded from the Indo-West Pacific region, at Rose Bay, Port Jackson, New South Wales, Australia (Stephenson and Mc Neill, 1955 as *Squilla raphidea*); Mergui Archipelago; and off Burma (Manning, 1969). This is the first record of this species from the coastal waters of the Indian mainland.

## SUMMARY

This paper deals with two additional records of stomatopods—*Harpiosquilla indica* and *H. melanoura*. An adult female of *H. indica* which has been recorded herein for the first time from the Andaman Islands has been described. *H. melanoura* is also recorded for the first time from the mainland coastal waters of India. Sexual dimorphism in *H. indica* and morphological differences between my specimen of *H. melanoura* with that of the published account of this species is also given.

## REFERENCES

- MANNING, R. B. 1968. Stomatopod Crustacea from Madagascar. *Proc. U. S. nat. Mus.*, Washington, **124**, (3641): 1-61.
- MANNING, R. B. 1969. A review of the genus *Harpiosquilla* (crustacea: stomatopoda) with descriptions of three new species. *Smithsonian Contributions to Zoology*, Washington, no. 36: 1-41.