

REFERENCES

- PANIKKAR, N. K. 1938. 'Recent researches on *Trochus*.' *Curr. Sci.*, **11**: 552-553.
- PRASHAD, B. AND RAO, H. S. 1934. 'Notes on the bionomics of *Trochus niloticus* Lin.—II On two new limpet-like gastropods from the Andaman waters.' *Rec. Ind. Mus.*, **36**: 1-4.

**RECORD OF MALE *PARAPENAEOPSIS ACCLIVIROSTRIS*
ALCOCK**

WHILE revising the prawns of the *Penaeus* group Alcock (1905) created the species *acclivirostris* of genus *Parapenaeopsis*. The material he studied comprised 34 prawns, all females, obtained from Madras, Ganjam, Vizagapatam, the Palk Strait and the Persian Gulf. The male of this species has not been described so far.

A few small prawns, resembling young *Metapenaeus affinis* in general form and colour, were taken in the month of March 1960 from the 'dol' (fixed bag net) catches made off Sassoon Docks in Bombay at a depth of 6 to 7 fathoms. They measured 26 to 46 mm. from tip of rostrum to end of telson. Later in the same month, from an otter trawl catch from deeper waters of 15 to 20 fathoms off the same locality a large individual measuring 58 mm. was obtained. On close examination these prawns proved to be *Parapenaeopsis acclivirostris* Alcock. Out of the 19 individuals collected 9 are males.

Alcock's (1906) description and figures of the female tally with the present material in almost all details. The rostrum has 7 to 8 teeth and in the female it does not pass beyond the tip of the second segment of the antennular peduncle. The antennular flagella are subequal and 7/10 of the length of their peduncle in the female. The fifth pair of legs reaches almost to the tip of antennal scale.

The males are far smaller than the females. The 9 males examined are within a length range of 26 to 31 mm. and all of them appear to be adult as could be seen from the full development of their petasma. Three mature females with ripening ovaries measure from 44 to 58 mm. in length. The rostrum in the male just surpasses the eye and falls short of the tip of the basal segment of the antennular peduncle. The petasma reaches the basis of the third pereopod. The distolateral projections of the lateral lobes are reflected posterolaterally making an angle of 60° with the longitudinal axis of the petasma. The distance between the tips of the projections is a little less than half the total length of the petasma. The width across the lateral lobes at their widest region is about a third of the petasmas length (Fig. 1 a and b). The distal piece of the appendix masculina is horse-hoof shaped, minutely setose and about half the length of the basal piece. On its posterodistal aspect are found one large and one or two smaller tongue like processes (Fig. 1 c).

Parapenaeopsis acclivirostris very closely resembles *P. tenellus* (Bate), and Alcock himself was doubtful of the validity of the new species he created. With the discovery of the male, its specific identity can now be established.

The main differences in the external sexual characters of the males of the two species are given below.

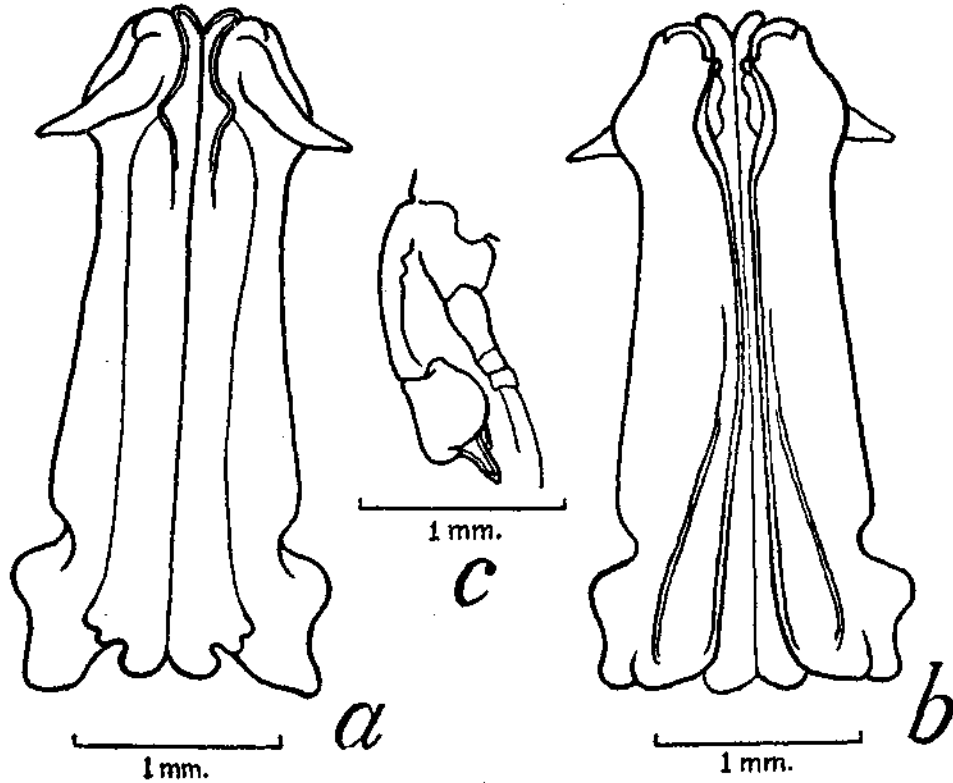


Figure 1. *Parapeneopsis acclivirostris*: Male, 30 mm. a. Dorsal surface of petasma; b. Ventral surface of petasma; c. Appendix masculina

Character	<i>P. acclivirostris</i>	<i>P. tenellus</i> (Kubo, 1949; Dall, 1957)
Petasma:	Disotolateral projections of the lateral lobes are not long and slender. Distance between tips of projections is a little less than half the petasmas length. Lateral lobes not expanded laterally; distance across their most lateral extremities is about a third of the petasmas length.	Distolateral projections of the lateral lobes are long and slender. Distance between tips of projections is four-fifths of petasmas length. Lateral lobes are expanded laterally; distance across their most lateral extremities is half the length of the petasma.
Appendix masculina:	Distal piece half the length of basal piece with two or three posterodistal tongue-like processes.	Distal piece a third as long as the basal piece with one posterodistal tongue-like process.

P. acclivirostris is one of the four species of *Parapeneopsis* devoid of mastigobranchiae on the first and second pair of pereiopods. The other three are *P. hungerfordi* Alcock, *P. venusta* de Man, and *P. tenellus* (Bate). *P. acclivirostris* and *P.*

tenellus are remarkable species among Penaeinae in that they lack the isolated epigastric tooth.

I am thankful to Shri M. Krishna Menon, Research Officer (Prawns), Central Marine Fisheries Research Substation, Ernakulam for helpful criticism.

*Central Marine Fisheries Research Substation,
Bombay-1.*

M. M. KUNJU

REFERENCES

- ALCOCK, A. 1905. *Ann. Mag. Nat. Hist.*, (7) 16 : 508-32.
- . 1906. *Catalogue of the Indian Decapod Crustacea. Part III. Macrura. Fasciculus 1. The prawns of the Penaeus Group.* (Indian Museum : Calcutta).
- DALL, W. 1957. *Austr. J. Mar. Freshw. Res.*, 8 : 136-230.
- KUBO, I. 1949. *J. Tokyo Coll. Fish.*, 36 : 1-467.