

REFERENCES

- BANSE, K. 1959. *J. Mar. biol. Ass. India.*, 1: 33.
 BOOLOOTIAN, R. A., GIESE, A. C., FARMANFARMAIAN AND TUCKER, J. 1959. *Physiol. Zoo.*, 32: 213.
 GEORGE, P. C. AND NAYAK, K. R. 1961. *Indian J. Fish.*, 8: 44.
 MENON, M. K. 1952. *J. zool. Soc. India.*, 4: 177.
 PANIKKAR, N. K. AND JAYARAMAN, R. 1966. *Proc. Indian Acad. Sci.*, B. 64: 231.
 PRASAD, R. R. AND TAMPI, P. R. S. 1953. *Bombay nat. Hist. Soc.*, 51: 674.

A CASE OF ABNORMAL PETASMA IN THE PENAEID PRAWN,
METAPENAEUS AFFINIS (H. MILNE-EDWARDS)

INSTANCES of anomalies in the structure of the external genital organs of crustaceans are on record. Recently, George (1963) and Susseelan (1968) have described partly developed petasma in the female specimen of *Metapenaeus monoceros* (Fabricius) and *M. affinis* (H. Milne-Edwards) respectively. While examining a boat seine

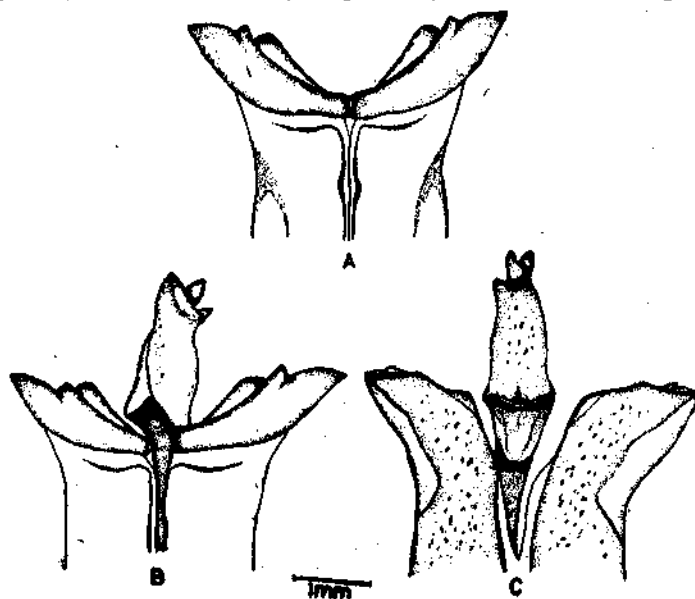


FIG. A. Normal petasma.
 FIG. B. Abnormal petasma (dorsal view).
 FIG. C. Abnormal petasma (ventral view).

catches made on 27-1-1967 from 11 metres depth off Calicut, a male specimen of *M. affinis* (141 mm. in total length and 34 mm. in carapace length) with abnormally developed petasma was observed. The anomaly was in the distal end, where a conspicuous additional lobe was noticed (Fig. B). This lobe was medially placed and originated from the distolateral portion of the left half of the petasma.

A closer examination of the comparative size and structure revealed that it was a fully developed andricum. The usual distal lobes are normally developed as described by Alcock (1906) and George and Rao (1968). The structure and size of the additional lobe were found to be similar to the normal distal lobes of the petasma on either side. From its position, it would appear that the tip of the left endopodite, at the time of differentiation of the distal lobes (42 mm. size, George and Rao, *op. cit.*) got bifurcated into 2, each one undergoing the normal development. As the endopodite gradually attained the adult petasmal characters, the outer lobe occupied the usual transverse position and the inner one developed straight giving a trilobed appearance at the tip. The abnormality being confined to the petasma, its teratological nature is of interest in view of the importance given to the characters of external genitalia in taxonomic studies in prawns.

Central Marine Fisheries, Research Institute
Mandapam Camp, South India.

D. SIVALINGAM
P. VEDAVYASA RAO

REFERENCES

- ALCOCK, A. 1906. *Catalogue of the Indian Decapod Crustacea in the collection of the Indian Museum. Part III. Macrura. Fasciculus I. The prawns of the Peneus group.* 55.
- GEORGE, M. J. 1963. *J. Mar. biol. Ass. India*, 5 (1) : 145.
- & VEDAVYASA RAO, P. 1968. *Ibid.* 10 (1) : 62-70.
- SUSEELAN, C. 1968. *Adv. Abstr. Contr. Fish. Aquat. Sci. India.*, 2 (4) : 11.