

**ON AN ANOMALY IN THE CHELIPED OF THE PORTUNID CRAB,  
*PORTUNUS PELAGICUS* (LINNAEUS)**

*Portunus pelagicus* is the dominant species and contributes substantially to the crab fishery along the Palk Bay and Gulf of Mannar coasts in the vicinity of Mandapam. On 23rd February 1966, a male specimen of this species with the carapace measuring 59 mm. in length and 132 mm. in breadth which had two additional dactyli on the left cheliped (Fig. 1) was collected from the gill net (*Nandu valai*) catches from Gulf of Mannar landed near the jetty of the Central Marine Fisheries Research Institute. Such an anomalous condition of the cheliped which appears to be rare has not been reported hitherto in this species and therefore a brief description is given below. The right cheliped of the specimen was unfortunately broken before collection.

The cheliped measures 156 mm. and the propodite (up to tip of thumb) 85 mm. in length. About midway along the inner margin of the original dactylus an additional branch takes its origin which in turn gives rise at its base, on the outer margin to another branch (Fig. 2). Both the additional dactyli are immovable but possess well developed teeth along their inner margins like the thumb and original dactylus. While the first branch lies parallel and in apposition to the distal part of the original dactylus, the second one has a transverse course, lying external to the thumb. Although the second dactylus appears to form a 'miniature claw' with the distal part of the original dactylus, it is not functional as the former is immovable by

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\* Personal communication from Shri K. Virabhadra Rao.

itself. The only functional part of the claw is constituted by the basal half of original dactylus with the basal half of the thumb. The third dactylus appears to



FIG. 1. Dorsal view of *Portunus pelagicus* (Linnaeus) showing anomaly of left cheliped (right cheliped broken). FIG. 2. Enlarged view of the distal portion of left cheliped of the same (outer side).

provide additional grip in conjunction with the functional part of the claw. On the whole, the presence of the two additional dactyli appears to be a disadvantage rather than an advantage to the crab.

The specimen has been deposited in the Reference Collection Museum of the Central Marine Fisheries Research Institute (Reg. No. CMFRI-018/191).

A somewhat similar abnormality has been recently described by Noble (1964) in the case of *Neptunus (Neptunus) sanguinolentus* (= *Portunus sanguinolentus*) where two additional thumbs have been noticed on the left cheliped.

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*Central Marine Fisheries Research Institute,  
Mandapam Camp.*

P. S. B. R. JAMES

#### REFERENCE

- NOBLE, A. 1964. *J. Mar. biol. Ass. India*, 6 : 312-313.