

SHORT COMMUNICATIONS

**ON THE ASSOCIATION OF A PORCELLANID CRAB *POLYONYX* SP. WITH
THE TUBE-DWELLING POLYCHAETE *LOIMIA* MEDUSA (SAVIGNY) IN
THE LAKSHADWEEP WATERS, INDIA.**

Occurrence of a porcellanid crab, *Polyonyx* sp. (Fig. 1) in association with the tube-dwelling polychaete worm, *Loimia medusa* (Savigny) [Terebellidae] (Fig. 2) was observed at Kavaratti, Lakshadweep during March, 1984. Of the six terebellid tube of *L. medusa* examined, only two were found to be associated with the crab, *Polyonyx* sp. The tube

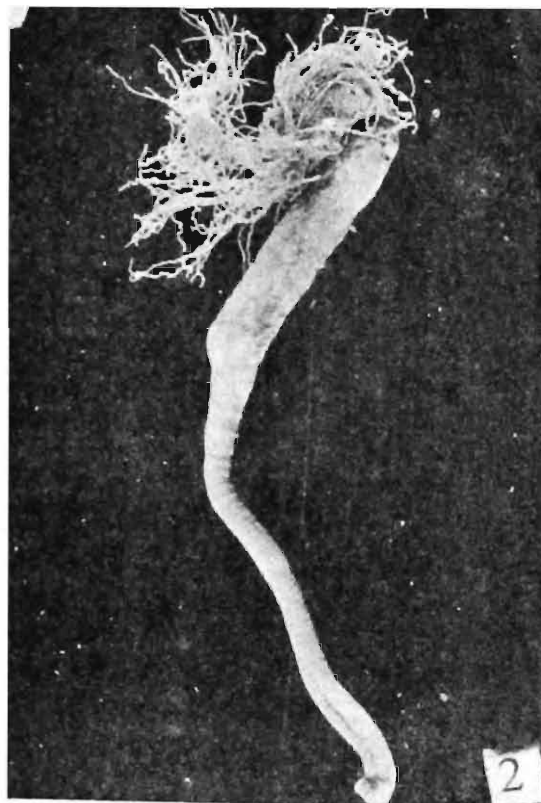
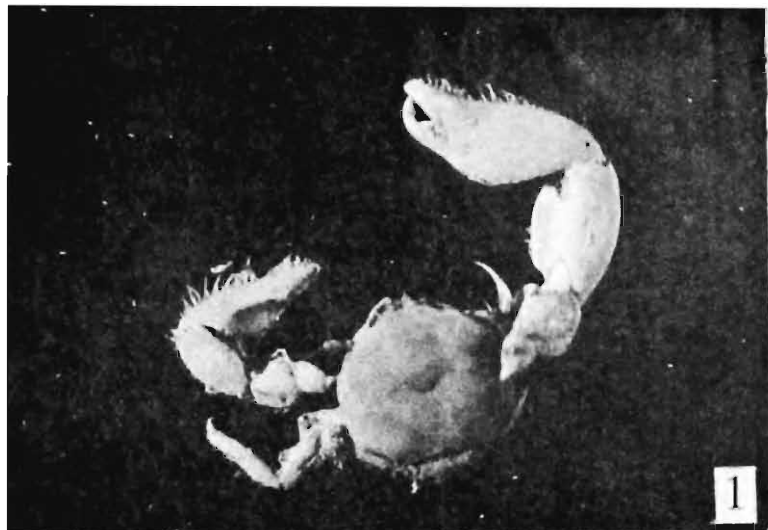


Fig. 1 The commensal porcellanid Crab *Polyonyx* sp.

Fig. 2 The polychaete worm *Loimia medusa* Savigny

measured 35 cm in length and 1 cm in diameter and was located in the intertidal zone of reef area protruding above the ground. The crab occupied the tentacular tuft of the polychaete and had retracted inside passively with the retreat of the polychaete as many times it was disturbed.

Members of the genus *Loimia* are known to build tubes away from rocks. Generally, the tubes are soft which appear untidy and fragile and usually composed of sand, mud, fragments of shells or sponge spicules. But the tubes observed at Lakshadweep were of hard calcareous type and composed of fragments of coral stones and sands. MacGinitie and MacGinitie (1968) stated that none of the polychaetes that live in hard tubes of calcium carbonate harbour commensals. Interestingly, the present situation is an exception to MacGinitie and MacGinitie's observations.

The association of *Polyonyx* with other animals is well documented in the literature. It was briefly reviewed by Sankolli and Shenoy (1965) while reporting on the occurrence of the polychaete worm *L. medusa* in association with a *Polyonyx* sp. in Bombay waters. However, the association of the porcellanid crab, *Polyonyx* sp. with the polychaete *L. medusa* is the first report of its kind from Lakshadweep and the second report from Indian waters.

It appears that the polychaete *Loimia medusa* builds its tube with the material whatever available in the immediately surrounding environment and the crab, *Polyonyx* sp. has the tendency to live in association with other animals.

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