

**A NOTE ON AN ABNORMAL *LEONNATES JOUSSEAUMEI* GRAVIER  
(FAMILY NEREIDAE—POLYCHAETA)**

The power of regeneration of lost or damaged parts in polychaetes is very well known. In most of the Nereidiform polychaetes new segments replace the lost segments and they can be generally recognised by being smaller than the rest at first. Moreover, not only can new segments arise at the hind end, but a new head can be formed at the anterior end. These regenerated heads are smaller at first than the rest of the body, but soon grow to a normal size. This extensive power of regeneration generally remains latent till injury provides the stimulus and is of extreme value to the polychaetes.

On 14-10-1961, a worm measuring 75 mm. (97 setigers) was collected by breaking open a dead coral stone taken from Palk Bay near Mandapam at a depth of 1 metre and was identified as *Leonnates jousseaumei* Gravier. Plate I shows the anterior end of the animal which exhibited an interesting type of abnormality. A dorso-lateral split has occurred at the anterior end affecting the first three setigers only, as a result of which it is divided into two unequal members. The smaller member on the right side carries four tentacular cirri and a single poorly developed palp. The

ventral portion is chitinized and all the mouth parts, except the soft paragnaths in the form of soft conical papillae, are missing. The larger member on the left side is more or less normal, slightly shifted towards the left from the median axis of the worm and carries a prostomium with four eyes, a single poorly developed palp, and a tentacular cirrus. The remaining three tentacular cirri are missing and their positions are indicated by three short cirrophores. The tentacles are also missing from the prostomium. The small horny paragnaths on the maxillary and the



soft conical papillae on the oral rings of the proboscis, which carries a pair of curved horny jaws, are normal. The ventral side of the proboscis is not chitinized. The parapodia on either side of the affected segments are normal. From the 4th setiger onwards the animal is normal with a parapodia carrying a dorsal bundle of homogomph spinigerous setae and a ventral bundle of falcate homogomphs with the terminal pieces hooked at the apex and serrate on the convex border. The colour of the animal is dark brown with a brownish horizontal red line on each segment on the dorsal side. There is a dark spot also at the base of the dorsal rami in each segment.

We have not come across such a type of abnormality in Nereids so far and it is quite clear that an injury has occurred to the worm at the dorso-lateral angle

affecting the first three anterior segments above the base of the parapodia and the healing has not united the damaged parts.

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*Central Marine Fisheries Research Institute,  
Mandapam Camp.*

K. RANGARAJAN  
C. SANKARANKUTTY

## REFERENCE

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