

**AN INTERESTING POST-LARVAL BOTHID FISH FROM  
PORTO NOVO, SOUTH INDIA**

Two interesting post-larval stages of flat fishes were obtained on 23-1-1969 at Porto Novo from the fish catches with a seine net operated at a depth of 15 to 20 fathoms from a non-mechanised craft. The specimens measured 63 mm. and 60 mm. respectively in total length. The smaller specimen was deeply cut and damaged behind the operculum. In both specimens the right eye had moved upwards but not migrated. It is rather rare to find a flat fish larva of this length without the migration of the eye. Ochiai and Amaoka (1963) have recorded from Japanese waters a just metamorphosed post-larva of *Arnoglossus japonicus* Hubbs, measuring 56 mm. Smith (1967) has reported a similar larval bothid fish, *Parabothus thackerayi* Smith, measuring 51 mm. in total length collected from a rock pool near Durban, South Africa.

*Description of the larvae :* The two post-larval specimens now described have a prominent lower jaw and free preopercular margin. They appear to be late symmetrical larvae and are sinistral. The right eye has moved upwards and lies close to the dorsal fin (fig. 1).

*Colour :* The specimens are creamy white (in formalin) with two distinct rows of black pigments found dorsally and ventrally along the bases of the interneural and interhaemal spines as two uniform black lines and fading out near the caudal peduncle. Indistinct round blotches at a few places on the dorsal surface of the body were noticed in fresh condition.

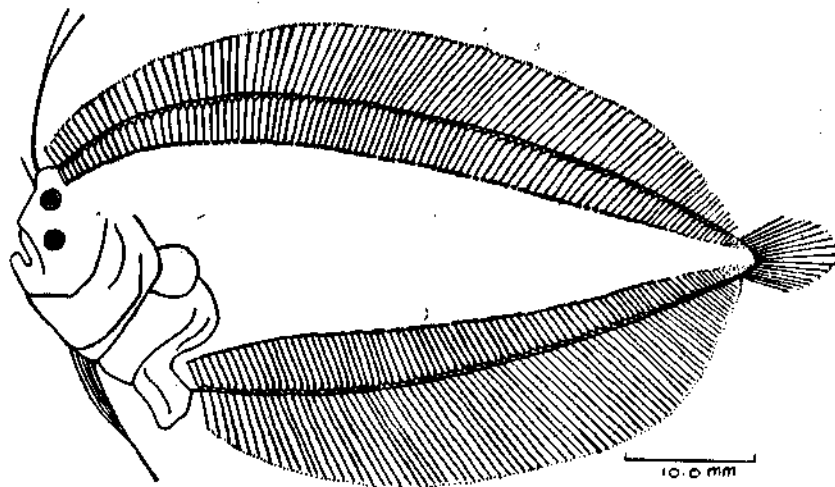


FIG. 1. 63 mm. Post-larval bothid fish (elongated fin rays broken).

The dorsal fin commences at the level of the left eye. The first dorsal ray is small, and the second one is elongated and filament-like. The elongated second dorsal ray, apparently broken in the 63 mm. specimen, is 1.4 times the head length, while in the second specimen it is 3.4 times. The undamaged (63 mm.) specimen has D. 98; A. 82; depth 2.6; and head 4.9 in standard length. The eye is darkly pigmented and 7 in head. A small pectoral fin is present on either side. The last pelvic ray, which is much elongated, is broken in the 63 mm. specimen, while it is 2.2 times the head in the other. The caudal has 17 rays and is free from dorsal and anal fins. Preopercular margin is free and no spines are present on the margins. The lower jaw is prominent. Teeth are not clearly visible on the jaws. Gill rakers are not discernible. The lateral line is not visible.

*Remarks :* It is well known that in some of the Bothid fishes the metamorphosis is considerably delayed. This larva differs from that of *Arnoglossus* sp. in the absence of spines or serrations on the cartilaginous plate, cleithra and pubic bar (Balakrishnan 1963). None of the species of *Bothus* occurring in the Indian waters has the dorsal and anal fin counts that correspond with those in these larvae, (D. 98. A. 82). The specimens are however referable to the genus *Laeops* Gunther. In two species, *Laeops nigriscens* Lloyd and *Laeops guentheri* Alcock, the fin ray counts correspond to those in the present specimens (Table I). Information about the larvae of *Laeops* is lacking and it is difficult to relate these two specimens now described to any of the *Laeops* species occurring in Indian waters.