

ON AN ADVANCED POSTLARVA OF *PRIACANTHUS HAMRUR* (FORSK.)
(PISCES: PRIACANTHIDAE) FROM THE KRISHNA ESTUARY

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ABSTRACT

The postlarval of *Priacanthus* have hitherto not been described from Indian waters. An advanced postlarva of the same measuring 14 mm in total length was collected from Krishna estuary in June, 1979. The morphometric data and the diagnostic features relating to the specimen are given.

Key words : Krishna estuary, morphometry, *Priacanthus*, postlarvae.

Priacanthids, commonly called big-eyes, are demersal fishes usually caught from relatively deep waters in the trawl nets from Indian coasts. Four species of the genus *Priacanthus*, Cuv. & Val., namely, *Priacanthus hamrur* (Forsk.), *P. holocentrum* (Bleeker), *P. cruentatus* (Lacepede) and *P. boops* (Schneider) have been recorded from Indian waters. A number of attempts have been made to study the fish eggs and larvae from different regions in India. Such works have been carried out from the coasts of Waltair (Raju, 1967), Madras (John, 1951; Nair, 1952; Vijayaraghavan, 1957), Porto Novo (Venkataramanujam, 1975; Venkataramanujam and Ramamurthy, 1977) Gulf of Mannar and Palk Bay (Bapat, 1955); Trivandrum (Gopinath, 1946), Bombay waters (Bal and Pradhan, 1951) and south-west coast of India (George, 1979). In all the above mentioned works priacanthid larval forms were not reported and this would be the first record of this larval form from the Indian waters.

The occurrence, size-range and feeding habits of juveniles of *P. hamrur* were studied from the Madras coast by Bashceruddin and Nayar (1962). Yamada and Ikemoto (1979) described the larval and juvenile stages of *P. macracanthus* from the East China Sea. In the present work an advanced postlarva was collected from Krishna estuary (15°54'N, 80°63'E) and based on adult characters it is identified as *P. hamrur*. Since this is reported first time from Indian waters, a detailed description is given.

Fin formula: D. X+14; A. III+14; P. 18; V. I+5.

The postlarva has the same fin counts as that of the adult. Body strongly compressed, oblong, covered with small spiny structures identical with scales. Mouth large, vertical with minute teeth on jaws. The lower jaw prominent and longer than the upper. Pre-orbital space serrated on its dorsal and anterior regions. Pre-opercle strongly serrated. In the anterior one third of its length there are three conspicuous spines of which the middle one is stout, serrated on both sides, nearly equal to the eye diameter and reaching the origin of ventral fins. On either side of this spine there are two relatively short, smooth spines. At the posterior end of the preopercle another set of three smooth spines is present, of which the middle one is long and

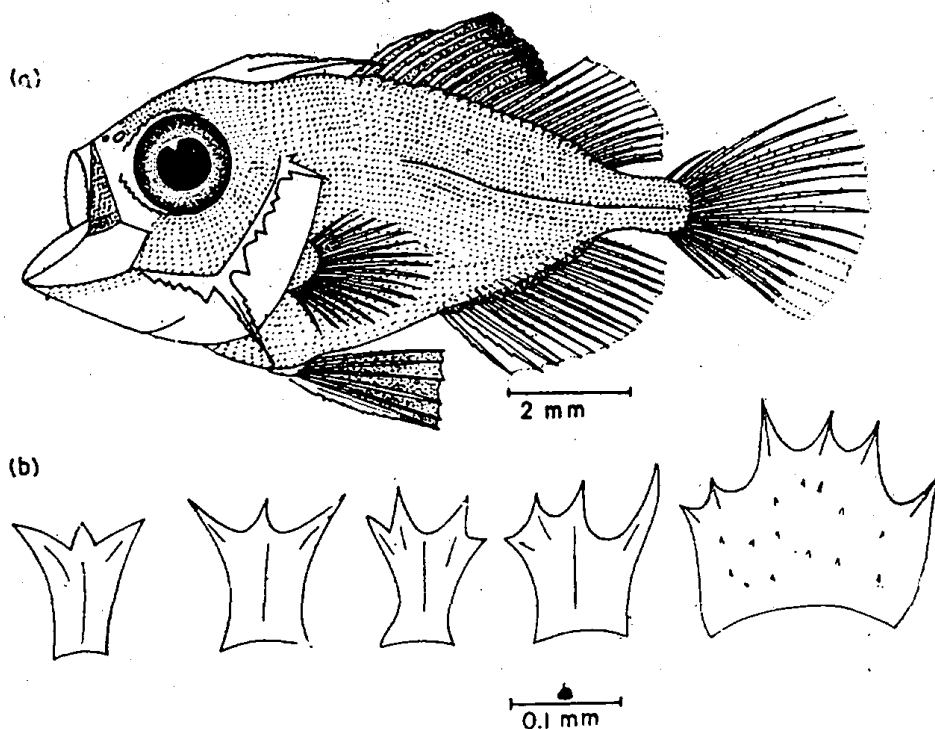


Fig 1. (a) Advanced postlarva of *Priacanthus hamrur*, 14.0 mm total length.
(b) Spiny structures (future scales).

reaches the opercular margin. Head 2.6 in total length. Eye 2.6, snout 4.1 in head length. A strong occipital spine with serrations on the dorsal side is present which extends up to the base of the second dorsal spine.

The first four spines of the dorsal fin strongly serrated on their anterior margins. Margin of the pectoral fin fan-shaped; the longest ray reaching the origin of the anal fin. Ventral fin reaching the anal; its spine is strongly serrated on the outer margin. Origin of the anal fin, below seventh dorsal spine; anterior two spines of the anal stout and serrated anteriorly, the third spine longer and weaker than the rest. Caudal fin slightly rounded. The basal halves of rays in the dorsal, anal, ventral and caudal fins spinulose.

The spiny structures (scales) are distributed all over the body from snout to the tail. Based on the number of denticulations, the scales could be grouped into 3 categories: those with three, four and six denticulations. The scales with three denticulations are mainly distributed on the head region. Majority of the scales on the trunk region have four denticulations; scales at the base of the anal fin appear to be better developed and are larger in size, with six denticulations (Fig. 1-b).

The colour of the preserved specimen is brownish. The ventral fin and the inter-spinous membrane of the dorsal fin bear brown pigment spots; the outer margin of the latter has a deeper tinge due to the dense pigment spots.

The occurrence of this larval form is interesting since it was encountered only once on 2nd June, 1979. I believe that this stray occurrence is due to the strong current

during May 1979 when a major cyclone struck this region bringing in some of the oceanic forms. This view is further substantiated by the simultaneous occurrence of some offshore larval forms like *Myctophum* sp., *Auxis* sp. and *Neothunnus* sp.

The present specimen has the same fin counts of *P. hamrur* and most of the adult meristic characters are formed. Still it is termed as 'Postlarva', as it exhibits a few larval characters, namely, the stoat, serrated occipital and opercular spine, and the spiny structures on the body which are future ctenoid scales. All these characters disappear as the larva metamorphoses (Yamada and Ikemoto, 1979). Hence the present specimen is described as an advanced postlarva of *P. hamrur*.

ACKNOWLEDGEMENTS

The author is highly grateful to Prof. Y. Radhakrishna for his valuable guidance and help. Thanks are due to Prof. S. Dutt, Andhra University, for helpful comments and suggestions. Thanks are also due to the CSIR, New Delhi, for financial assistance and authorities of Nagarjuna University for the facilities provided.

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