

NOTES

ON THE OCCURRENCE OF WHITE MOUTH CREVALLE, *URASPIS HELVOLA* (FORSTER) IN THE BAY OF BENGAL

DURING the study of the carangids off the coasts of Andhra and Orissa in 1964-'65, the author was able to collect a large number of specimens of *Uraspis helvola* (Forster) varying from 92 mm. to 220 mm. in standard length from the trawl catches in the depth range 20-50 metres. The genus *Uraspis* Bleeker is unique among carangidae in having edentulous tongue, palate and vomer, a thick white membrane on the tongue, roof and floor of the mouth (the rest dark) and the scutes along the straight part of the lateral line with the spinose projections sometimes directed forwards. This is the first record of the genus *Uraspis* Blkr. from seas around India. The previous records have been from Western Indian Ocean, Red Sea, Persian Gulf, Western Pacific, Eastern Pacific, Australia and the Atlantic Ocean showing a wide distribution (Williams, 1961; Smith, 1962). The species of the genus *Uraspis* are rare and the descriptions have been restricted mostly to single specimens. A brief description of the species based on 36 specimens ranging from 150 mm. to 220 mm. in standard length is given below. Three of the specimens have been deposited in the Reference Collection Museum of Central Marine Fisheries Research Institute (Reg. No. CMFRI-F82/547).

Uraspis helvola (Forster)—Fig. 1

According to Williams (1961) the white mouth crevalle was first described by Forster in 1775 as *Scomber helvolus*. This was in manuscript form. Forster's descriptions of animals were edited in 1844 by Lichtenstein (*Descriptiones Animalium*). But even before this Schneider in his edition of Bloch's Fishes introduced some of the materials of Forster's manuscripts including that on *Scomber helvolus*.

Scomber helvolus Forster 1775, *Descriptiones Animalium* . . . , J. R. Forster, Ed. Lichtenstein 1844, pp. 414-415; Forster in Bloch and Schneider 1801, *Systema ichthyologiae*, I: 38.

Caranx helvolus Cuvier and Valenciennes 1833, *Histoire naturelle des poissons*, 9: 104; Gunther 1860, *Catalogue of the acanthopterygian fishes in the collection of the British Museum*, 2: 443.

Caranx (U) helvolus Hardenberg 1936, *Treubia*, 15: 374.

Uraspis helvola Williams 1961, *Ann. Mag. nat. Hist.*, (13), 4: 82; Smith 1962, *Ichthyol. Bull.*, 26: 506.

D. I (p) VIII+I 25-29; A. II+I 19-21; P. I-II 20-23; scutes 33-40; Vertebrae (including urostyle) 10+14.

Body oblong, compressed, dorsal profile strongly convex from snout to caudal peduncle; caudal peduncle slender, base wider than high. Ventral profile slightly

convex to isthmus, then almost straight to origin of anal fin and thence ascending in convex line to caudal peduncle. Depth 2.12 to 2.38, head 2.91 to 3.19 in standard length. Head obtusely convex, nearly as high as long; eye 2.92 to 3.79, snout 3.17 to 3.83, interorbital 3.05 to 4.07, sub-orbital 7.57 to 10.4, post-orbital 2.35 to 2.67 and upper jaw 2.22 to 2.60 in head; eye 0.84 to 1.1 in snout and 1.13 to 1.57 in post-orbital. Eye with feebly developed adipose lids, snout rather blunt, nostrils typically ovoid, closely adjacent before eye. Cleft of mouth oblique, opposite lower margin of eye; lower jaw slightly longer; upper jaw moderately protrusible and maxilla with a large posterior expansion, reaches a position varying between anterior edge of eye and centre of pupil.

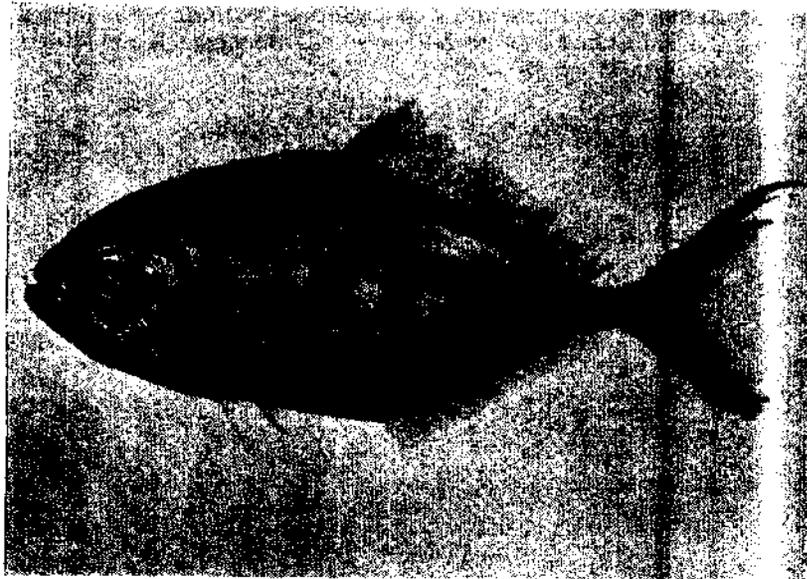


FIG. 1. *Uraspis helvola* (Forster), 220 mm. Standard length.

Teeth in jaws many, conspicuous, acute and curved in single series, none on vomer, palatines and tongue. Tongue, floor of the mouth and most of palate covered by a thick white membrane, rest of mouth dark. Gill rakers on first gill arch (left) 4-6+1+13-15. First 2 to 3 gill rakers of upper limb usually club-like, others of normal shape and increasing in size towards angle of arch; single raker at angle; the inner edges of rakers of lower and upper limbs with minute bony setae; largest gill raker (lower limb) 1.94 to 2.5 and largest gill filament 1.48 to 1.91 in eye.

Scales small. Cheeks and part of operculum scaled, rest of head naked. Breast naked ventrally and laterally for a short distance towards pectoral base. Lateral line, anteriorly with a low regular arch, becoming straight below about middle of second dorsal fin. Curved lateral line 0.79 to 1.0 in straight part of lateral line. Retrose scutes present along whole of straight lateral line which extends slightly beyond base of the central caudal rays.

Procumbent dorsal spine completely covered. First dorsal fin low, spines basally strong and their tips produced into very small filaments; fourth dorsal spine largest, 4.33 to 8.11 in head, eighth spine smallest; first pre-dorsal distance 2.46 to 2.76 in standard length. Second dorsal fin high, first 2 to 3 rays, highest, 1.63

to 2.09 in head ; anterior rays may be slightly falcate, following rays gradually decreasing in size posteriorly ; fin rays produced into very small fine filaments, the edge of fin nearly straight. Spine of second dorsal higher than fourth spine of first dorsal ; second predorsal distance 1.92 to 2.08 and length of second dorsal base 2.07 to 2.36 in standard length. Detached anal spines almost embedded. Anal slightly lower than second dorsal fin and in other respects the same as second dorsal. Spine of the second anal fin nearly one-third of first anal ray. First 2 to 3 anal rays highest 1.63 to 2.23 in head ; second pre-anal distance 1.56 to 1.68 and length of second anal base 2.68 to 3.04 in standard length. Pectoral fin long, falcate, reaching up to and beyond the beginning of straight part of lateral line ; length of pectoral 1.0 to 0.87 in head ; pre-pectoral distance 2.91 to 3.21 in standard length. Pelvic fin nearly falcate reaching up to about anus ; length of pelvic fin 2.0 to 2.74 in head ; pre-pelvic distance 2.66 to 2.91 in standard length. Caudal forked, lobes acute with 22 to 24 rays.

Head brownish, cheeks little darker, eye dark, two very faint brown bands on head, one on nape and the other on post-orbital. Body brownish with seven dark brown cross bands which are wider than the interspaces, in bigger specimens the cross bands are very faint.

A critical examination of all the specimens collected showed that the important morphometric and meristic characters (nature of teeth, scutes, pelvic and pectoral fins) and colour etc. undergo marked changes during growth and that fish below 150 mm. in standard length should be identified with caution. Such changes are evident only when a good series of specimens is examined. The details of these observations will be published later.

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