

OCCURRENCE OF *JOHNIUS HOLO-*  
*LEPIDOTUS* (LACÈPÈDE) IN INDIAN  
WATERS\*

WHILE slight changes have been introduced in the nomenclature of Indian Sciænid<sup>s</sup> by Fowler<sup>1,2</sup> and Weber and Beaufort,<sup>3</sup> no species essentially different or additional to those described by Day<sup>4,5</sup> have so far been recorded from Indian waters. It was interesting to find therefore some specimens of *Ghols* among the catches of the Government of India trawlers in February 1955, which were distinct from all the species described by Day<sup>4,5</sup> for Indian waters as well as by Weber and Beaufort<sup>3</sup> for the Indo-Australian archipelago. They were also different from other *Ghols* usually occurring in Bombay markets and in the trawler

---

\* Published with the permission of the Chief Research Officer, Central Marine Fisheries Research Station, Mandapam.

catches by their more elongate form, smaller eyes, truncate to double-emarginate caudal fin, a dark axillary blotch and, in fresh specimens, a row of shining spots along the lateral line on either side of the body. Detailed examination has brought the above *Ghols* into the species described as *Johnius hololepidotus* (Lacépède) by Fowler<sup>2</sup> and Smith.<sup>6</sup> The following are the diagnostic characters of the Indian examples based mainly on a single specimen which is at the Central Marine Fisheries Research Station. A photograph of the specimen is given in Fig. 1.

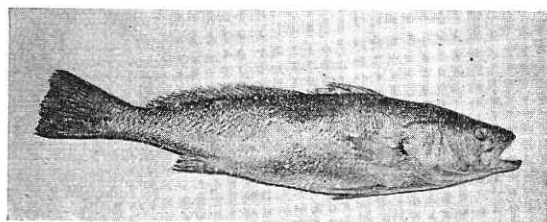


FIG. 1. Photograph of Indian specimen of *Johnius hololepidotus* Lacépède—right view.

**Description.**—B. VII; D.X., 1, 27; A.II, 7; P.18; V.I, 5; C.18. Head about 4 in standard length; depth  $4\frac{1}{4}$ ; snout a little over 3 in head; eye 7 or even a little more in head; 2 in snout and a little over 2 in interorbital distance; interorbital convex. Lower jaw slightly longer than upper; six pores below mandibular symphysis. No mandibular barbel. Posterior end of maxilla reaches to below hind edge of eye. Snout has no lateral lobes. No palatine teeth. In lower jaw, teeth in two series, outer villiform and inner enlarged and conical. In upper jaw three front teeth on each side large and widely separated. Operculum with two blunt, spine-like processes; pre-opercle entire.

**Fins.**—5th dorsal spine the longest, about 3 in head, 4th and 3rd next in order; 2nd anal spine 5 in head and about  $\frac{1}{3}$  shorter than the 1st ray. Anal commences opposite about 12th dorsal ray; base 5 in soft dorsal.

**Scales.**—On body feebly ctenoid, continued on the caudal fin but not on the soft dorsal and ventral. Tubular scales 56 upto base of caudal fin and some more (not easily countable) on caudal fin. Immediately above lateral line there are about 25 special scales interspersed with others and appear in fresh specimens as a row of silvery spots along the sides of the body. These scales are slightly larger than the others and stand out prominently in the wet specimens on account of their silvery sheen. Nine scales between lateral line and

spinous dorsal; 17 between lateral line and base of ventral; 21 between lateral line and ventral middle line.

**Caudal** may be described as truncate to double-emarginate, the truncate nature being interrupted by a slight projection of the middle portion of the fin. Least depth of caudal peduncle about  $3\frac{1}{2}$  in head.

**Colour.**—Grey superiorly; whitish grey below. A large dark axillary blotch, i.e., the fleshy process at the base of pectoral fin large and dark.

The total length of the preserved specimen is 104 cm., the caudal being 10.5 cm. Ten individuals were dissected and examined for gonad condition and it was found that some of the females were in stage IV of maturity.

Fowler<sup>2</sup> gives the geographical distribution of *Johnius hololepidotus* (Lacépède) as follows: Eastern Tropical Atlantic, Mediterranean, Red Sea, Madagascar, Natal, South Africa, Western Australia, South Australia, Victoria, Tasmania, New South Wales and Queensland.

In the above instance of the occurrence of the species in the Saurashtra waters of India as many as 57 specimens (all full grown adults) were reported to have been caught in a single haul during bull-trawling near Porbunder, at a depth of 22-26 fathoms. The specimens were considered as 'unusual' and 'new' by some of the fishermen and fish merchants in Bombay. The author did not notice the species in the earlier and subsequent catches of the trawlers (during the years 1953, 1954 and 1955) but Shri K. H. Mohamed (personal communication) has noticed specimens somewhat similar on some previous occasions. It is clear, however, that the species must be rather rare in Indian waters, if it is not a migrant from the Red Sea or the African Coast where it is said to form a good fishery.

My thanks are due to Shri K. H. Mohamed for help in taking the detailed measurements.

Offshore Fisheries

G. SESHAPPA.

Res. Unit of C.M.F.R.S.,  
Sassoon Dock, Bombay-5,  
January 14, 1956.

1. Fowler, H. W., *J. Bombay Nat. Hist. Soc.*, 1926-1929, 31, 32 and 33.
2. —, *Bull. U.S. Nat. Mus.*, 1933, 12.
3. Weber, M. and De Beaufort, L. F., *The Fishes of the Indo-Australian Archipelago*, 1936, 7.
4. Day, F., *Fishes of India*, 1877-88.
5. —, *Fishes of British India*, 1889, 2.
6. Smith, J. L. B., *The Sea Fishes of Southern Africa*, 1949.