

ON THE OCCURRENCE OF THE DEESEA SNAKE FISH,
ACANTHOCEPOLA LIMBATA (CUVIER) (PISCES: CEPOLIDAE)
IN KARWAR WATERS

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Deep sea snake fishes are common in the coastal waters of the eastern Atlantic, and widespread but rare in the central Indo-Pacific (Smith, 1949). Few of these have been recorded from Indian waters (Day, 1889). Mukkaram collected a specimen of *Cepola abbreviata* Cuvier [= *Acanthocepola abbreviata* (Cuvier)] measuring 95 mm total length (Regional centre of C.M.F.R. Institute, Mandapam Camp Reference collection No. 171/471) from the landings along the Orissa coast. Balakrishnan collected a specimen of *A. limbata* (Cuvier) (*Cepola indica* Day) measuring 116 mm total length and weighing 3 g (C.M.F.R. Substation, Karwar Reference collection No. 87/1) at Karwar on 19th November 1960. But there is no record of these specimens in extant literature.

A male deep sea snake fish, *Acanthocepola limbata* (Cuvier) (fig 1.) measuring 556 mm total length and weighting 140 gm was collected from 'Chittubale' (boat-seine) landings at Karwar on 11th September 1975. It is thought worthwhile to give a description of the specimen (C.M.F.R. Sub-station, Karwar Reference collection NO. 87/2) as also morphometric measurements of the present and previous specimens (Table 1).

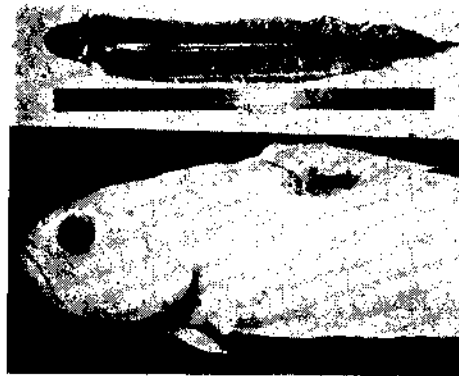


FIG. 1. *Acanthocepola limbata* (Cuvier). Above: the entire specimen; below: showing the blotch on the dorsal fin.

TABLE 1. *Morphometric measurements of two specimens of Acanthocephala limbata (Cuvier) collected at Karwar. (Specimen of 11-9-1975 collected by the present authors and that of 19-11-1960 collected by Dr. V. Balakrishnan).*

Character	Date of collection	
	11-9-1975 fresh	19-11-1960 preserved
	Measurements (mm)	
Total length	556	116
Standard length	512	109
Head length	45	16
Snout	11	3
Eye diameter (same along both axes)	12	6
Eye (middle dark portion)	6.5	3
Maxillary length	23	8
Mandibular length	18	5
Snout to insertion dorsal	39	16
Length of dorsal	508	97
Snout to insertion pectoral	46	17
Length of pectoral	31	11
Snout to insertion pelvic	38	15
Length of pelvic	32	10
Snout to insertion anal	75	20
Length of anal	472	92
Length of caudal	44	7
Snout to vent	67	16
Snout to origin of lateral line	45	13
Gape	28	7
Depth of body in line with eye	40	11
Depth of body at dorsal insertion	47	15
Depth of body at pectoral insertion	45	14
Depth of body at pelvic insertion	47	15
Depth of body at anal insertion	44	14
Depth of body at mid-length	29	11
Depth of body at caudal insertion	44	—
Inter-orbital distance	11	4
Distance between eyes	20	7
Breadth of body at dorsal insertion	24	8
Breadth of body at mid-length	11	3.5
Width of gill opening	56	13

TABLE 1. (Continued)

Character	Date of collection	
	11-9-1975 fresh	19-11-1960 preserved
	Measurements (mm)	
Dorsal to pectoral	34	11
Dorsal to posterior margin of orbit	20	7
Snout to nostril	9	3.5
Distance between nostrils	11	4
Nostril to anterior margin of orbit	3	1
Length-range of:		
dorsal rays	10 37	7 13
anal rays	6 32	8 10
gill filament	18	4
gill raker	11	1.5

Description

D. 83; A.93; P.19; V. 6; C. 10; GR. 17+34; GF. 100.

Body elongate, laterally compressed, gradually tapering to caudal. Scales cycloid, minute, present on head and opercle. When fresh, body covered with a slimy substance. Eyes red, large and lateral in anterior half of head. Middle slimy substance. Eyes red, large and lateral in anterior half of head. Middle part of eye bright dark. Mouth strongly oblique, large and slightly protractile. Median palatine teeth. Tongue triangular. Preopercle bluntly serrated. Gill openings wide and semi circular. Lateral line ascending from the upper corner of the gill opening to dorsal and running very close to its base up to caudal end. A single long dorsal originates on head. Dorsal and anal continuous with the caudal. Anal also long, commences opposite 8th dorsal ray. First dorsal and anal rays short. Pectorals short, round, branched and originate beneath 4th or 5th dorsal ray. When fresh, colour of entire body fine red (hibiscus) with golden yellow bands on sides. First 15 bands prominent and the last 4-5 bands faded. Body colour and bands faded gradually on preservation. Membranous portion of dorsal and anal pinkish red. Dark red oblong blotch on the dorsal between 9th and 14th rays, covering little above half the length of rays (fig. 1). Black patches present on sides of mouth under premaxillary and maxillary processes. A white band, 3 mm wide, runs at a distance of 18 mm from the bases of 7th to 16th anal rays.

It is of interest to note that but for variations in numbers of dorsal, anal and caudal fin rays, there is similarity in the meristic counts in Karwar specimens. The present specimen has a short head and lean body as compared to the earlier one.

General distribution: India, Japan, Formosa, Philippines, Indo-Australian Archipelago, Australia.

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