NATIONAL BIORESOURCE DEVELOPMENT BOARD

Dept. of Biotechnology Government of India, New Delhi

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MARINE BIORESOURCES

FORMS DATA ENTRY: Form- 1(general)

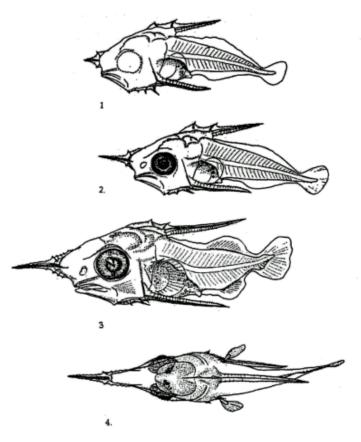
Fauna: √ Flora Microorganisms General Category: Vertebrata (Zooplankton) Fish larvae Scientific name & Authority: *Holocentrus* sp. Scopoli, 1777 - Adult Common Name (if available): Squirrel fish Language: English Synonyms: Author(s) Status Holocentrum Artedi Classification: Phylum: Vertebrata Sub-Phylum: Super class: Pisces Class: Osteichthyes Sub- Class: Actinopterygii Super order: Teleostei Order: Beryciformes Sub-Order: Super Family: Family:Holocentridae Sub-Family: Genus: Holocentrus Species: Authority: Holocentrus sp. Scopoli, 1777 ReferenceNo. Scopoli, 1777. Introd. Hist. Nat. p.449. Jones, S. and M. Kumaran, 1964. Notes on eggs, larvae and juveniles of fishes from the Indian waters. XII. Myripristis murdjan (Forskal) and Holocentrus sp. Indian J. Fish. 1962, **9**(1): 157-167 Geographical Location: Tropical waters of Indian, Atlantic and Pacific Oceans. Latitude: Place: Longitude: State:

Environment

Freshwater: Yes/No Habitat: Marine Salinity: Brackish: Yes/No Migrations: Temperature:

Salt Water: Yes/No: Yes Depth range: Epipelagic

Picture (scanned images or photographs of adult/ larval stages)



Figs. 1-4. Post larvae of *Holocentrus* sp. (Jones & Kumaran, 1964). Fig.1- 2.56 mm. Fig.2- 2.89 mm. Fig.3- 4.60 mm. Fig.4. Dorsal view of the above

DATA ENTRY FORM:	Form –2 (Fish/ Shell fish/ Ot	hers) Ref.		
No.:					
(Please answer only relevant fields; add additional fields if you require)					
Form- 1 Ref. No.:					
IMPORTANCE					
Landing statistics (t/y): from	to	Place:	Ref . No.:		
Main source of landing: Yes/ No		Coast: east/ w	rest		
Importance to fisheries:					
Main catching method:					
Used for aquaculture: yes/ never/ i	•				
Used as bait: yes/no/ occasionally					
Aquarium fish: yes/ no/ rarely					
Game fish: yes/ no					
Dangerous fish: poisonous/ harmf					
Bioactivity: locally known/ reported			Details:		
Period of availability: Throughou	t the year –	yes/ no	If no, months:		
SALIENT FEATURES:					
Morphological:					
Sex attributes:					
B : :: 1					
Descriptive characters:					

Meristic characteristics:		
Feeding habit:		
Main food:		
Feeding type:		
Additional remarks:		
Size and age:		
Maximum length (cm) (male/ fe	emale/ unsexed	Ref. No.:
4.5-	11mm	
Average length (cm) (male/fem	ale/unsexed)	Ref. No.:
Maximum weight: (g) (male/f	female/unsexed)	Ref. No.:
Average weight: (g) (male/fe	male/unsexed)	Ref. No
Longevity (y) (wild):	(captivity)	Ref. No
Length/ weight relation ships:		

Eggs and larvae:

Ref. No.

Eggs are pelagic.

Larva is highly pigmented. Head is characterised by the presence of 3 conspicuous spines, one from the tip of the snout directed forward and others from the lateral margins of operculum, one on either side directed backwards. Larva has the appearance of zoea. Eyes are big. Alimentary canal is thick and coiled.

The 2.89 mm stage larva is slender and tapering with a large head measuring 40.8% in standard length. There is a serrated spine at the end of the snout, the base of which is broad and is supported by strong spines on the sides. Mouth is slightly oblique. There is a serrated preopercular spine at the angle of each preopercle. Lower limb of the preopercle has three curved spines, the posterior one near the angle being the longest. Minute wart like thickenings is discernible over the snout, supraorbital and postorbital parts of head. Myotomes are distinct and 25 could be counted. Median finfold is continuous and narrow at the caudal region. Pectorals are devoid of fin rays. Caudal fin is protocercal. A row of chromatophores is present along the ventral midline of the caudal region. Dorsal part of the visceral sac is pigmented.

The 4.6 mm stage shows considerable advance in development over the preceding stage. Head length increased to 53.8% of standard length. Mouth is inferior. Eye is very prominent and its diameter is 12.6% in standard length. Traces of fin rays are discernible in the region of soft dorsal, anal and caudal. Pectoral is rounded and fin rays have formed.

In *Holocentrus* sp. Rostral spine appears as a single structure and is much longer than the diameter of the eye unlike *Myripristis murdjan*, where it appears paired, serrated and shorter than the diameter of the eye (Figs 1-4).

Characteristics:

Abundance:

Biochemical aspects:

Proximate analysis: moisture/ fat/ protein/ carbohydrate/ash

Ref.

No.

Electrophoresis:

Ref. No.

SPAWNING INFORMATION:

Locality:

Main Ref:

Larvae are collected from waters around tropical oceanic islands, off shore regions of Atlantic, Pacific and Indian Oceans including Arabian Sea and Bay of Bengal.

Season:

Fecundity:

Comment:

MAJOR PUBLICATIONS (INDIAN):

(Include review articles, monographs, books etc.)

Jones and M.Kumaran, 1964. Notes on eggs, larvae and juveniles of fishes from the Indian Waters. XII. Myripristis murdjan (Forskal) and Holocentrus sp. *Indian J. Fish.* 1962 **9** (1): 157-167

Peter, K.J.1982.studies on some fish larvae of the Arabian Sea and Bay Of Bengal . *Ph.D Thesis Univ. of Cochin*, 349pp

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