NATIONAL BIORESOURCE DEVELOPMENT BOARD

Dept. of Biotechnology
Government of India, New Delhi

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MARINE BIORESOURCES

FORMS DATA ENTRY**:** Form- 1(general) Ref. No.:
(please answer only relevant fields; add additional fields if you require)

Fauna : √ Flora Microorganisms

General Category : Vertebrate (Zooplankton) Fish larvae

Scientific name &Authority: *Cynoglossus cynoglossus* Hamilton Buchanan, 1882 - Adult
Common Name (if available) :

Synonyms:	Author(s)	Status
Achirus cynoglossus	Hamilton (Buchanan)	1822
Plagusia bengalensis	Bleeker	1853
Cynoglosuss bengalensis	Gunther	1862
Cynoglossus buchanani	Day	1869
Cynoglossus bengalensis	Day	1877
	Johnstone	1904

Classification:

Phylum: Vertebrata	Sub- Phylum	
Super Class : Pisces	Class : Osteichthyes	Sub- Class:
Super Order: Teleostei	Order:	Sub Order :
Super Family:	Pleuronectiformes	Sub-Family:Cynoglossinae
Genus : *Cynoglossus*	Family : Cynoglossidae	
	Species : *cynoglossus*	

Authority:Hamilton Buchanan
Reference No.
Hamilton Buchanan, 1822. *Fish. Ganges*, pp. 132, 373

Geographical Location:

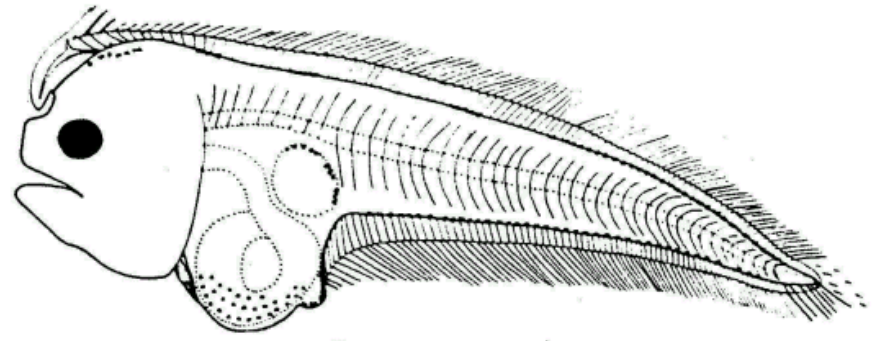
Cochin backwaters, Fairway Buoy, Barmouth, Aroor, Kulaseksharam, Pallipuram, Thanneermukkam and Aryad.

Latitude: Place:
Longitude: State:

Environment

Fresh water : Yes/ No	Habitat :	Salinity : 25.2-34.4PSU
Brackish : Yes/ No	Migrations :	Temperature : 25.7-34.1°C
Salt water : Yes/ No	Depth range :	

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



Cynoglossus cynoglossus, 4.1 mm (from Balakrishnan and Lalithambika Devi, 1974)

DATA ENTRY FORM: Form- 2 (Fish / shellfish / others)
(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/ west
Importance to fisheries :
Main catching method :
Used for aquaculture :yes/ never/ rarely
Used as bait: yes/no/ occasionally
Aquarium fish :yes/ no/ rarely
Game fish : yes/ no
Dangerous fish :poisonous/ harmful/ harmless
Bioactivity : locally known/ reported/ not known Details:
Period of availability: Throughout the year – yes/ no If no, months:

SALIENT FEATURES :

Morphological: See first column of last page

Diagnostic characteristics: - “ “

Sex attributes:

Descriptive characters: “ “

Meristic characteristics : Dorsal fin rays 98-106, Anal fin rays 76-83, Vertebrae 46-47

Feeding habit:
Main food :
Feeding type :

Additional remarks :

Size and age :

Maximum length (cm) (male / female/ unsexed) Ref. No.:
Average length (cm) (male / female / unsexed) Ref . No.:
Maximum weight : (g) (male / female / unsexed) Ref. No.:
Average weight :(g) (male / female / unsexed) Ref No.:
Longevity (y) (wild) : (captivity) Ref . No.:
Length / weight relationalships:

Eggs and larvae: Ref . No.:
Characteristics:

Intestine runs almost parallel to the body wall and makes a circular coil. Abdomen does not project beyond the ventral body wall. The median fin folds are well preserved unlike in other larvae and the distortion of the body is comparatively less. Swim bladder occupies the space between 5th and 10th vertebrae. In the dorsal fin fold 3 elongated rays are present at the anterior end which are well separated from each other, while the remaining rays are crowded together.

The rostral hook remains separate from the ethmoidal region of the cranium indicating advancement in development. Rostral hook reaches the tip of the premaxilla and is closely applied to the ethmoidal region of the cranium. Ventral fin has 4 rays which extends backward to meet the forwarded extension of the anal fin. Irregular dark brown pigment patches and spots are distributed as shown in the figure.

The larvae of *C. cynoglossus* appear to have a robust body. Their fin folds retain good shape and their bodies undergo very little distortion. Metamorphosis started around 4.6 mm and 4.7mm larvae was metamorphosed stage. There are 98-106 dorsal rays, 76-83 anal rays and 46-47 vertebrae including urostyle.

Abundance:
Biochemical aspects:
Proximate analysis: moisture/ fat/ protein/ carbohydrate/ash Ref. No.
Electrophoresis: Ref. No.

SPAWNING INFORMATION:
Locality: Main Ref:
Season:
Fecundity:
Comment:

MAJOR PUBLICATIONS (INDIAN):
(include review articles, monographs, books etc.)

Balakrishnan, K.P. and C.B. Lalithambika Devi, 1974. Larvae of some flat fishes from a tropical estuary. In: *The Early Life History of Fish*. Ed. J.H.S. Blaxter, Springer-Verlag, Berlin, 677-684.

Lalithambika Devi,C.B. 1993. Seasonal fluctuation in the distribution of Eggs and larvae of flat fishes (Pleuronectiformes - Pisces) in the Cochin backwater. Journal of the Indian Fisheries Association 23, 21-34.

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