

**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: <i>Arnoglossus tapeinosoma</i> (Bleeker) 1866 - Adult Common Name ( if available ) :		
Synonyms:	Author( s)	Status
<i>Platophyrs (Arnoglossus) tapeinosoma</i>	Bleeker	1866, 1866-72
<i>Arnoglossus macrolophus</i>	Alcocok	1889, 90, 96, 98
	Johnstone	1904
	Weber	1913
	Norman	1927
	Fowler	1928
<i>Bothus (Arnoglossus) tapeinosoma</i>	Weber and Beaufort	1929
<i>Arnoglossus tapeinosoma</i>	Norman	1934
	Nielsen	1984
<i>Arnoglossus tapeinosomus</i>	Arai and Amaoka	1966
Classification:		
Phylum: Vertebrata	Sub- Phylum	
Super Class : Pisces	Class : Osteichthyes	Sub- Class:
Super Order: Teleostei	Order: Pleuronectiformes	
	Sub Order : Pleuronectoidei	
Super Family:	Family : Bothidae	Sub-Family:Bothinae
Genus : <i>Arnoglossus</i>	Species : <i>tapeinosoma</i>	
Authority: Bleeker		
Reference No.		
Bleeker, 1866. Atlas ichthyologique des Indes Orientales Neerlandaises, public sour les aus-de L'Inde Archipelagique. <i>Ned. Tijd. Dierk.</i> , <b>3</b> , pp. 43-50.		
Geographical Location:		
The larvae of <i>A. tapeinosoma</i> have a wider distribution. They were found both in the coastal and offshore waters as well as in the southern and northern latitudes occurring in stations located south east off South Africa, east of Somali coast, Persian Gulf, Arabian coast, south of peninsular India, along the east coast of India, off the coast of Burma, Thailand, in the Malacca Strait and along the west coast of Australia		
Latitude:		Place:
Longitude:		State:

Environment

Fresh water : Yes/ No

Habitat :

Salinity : 29.50-36.01 PSU

Brackish : Yes/ No

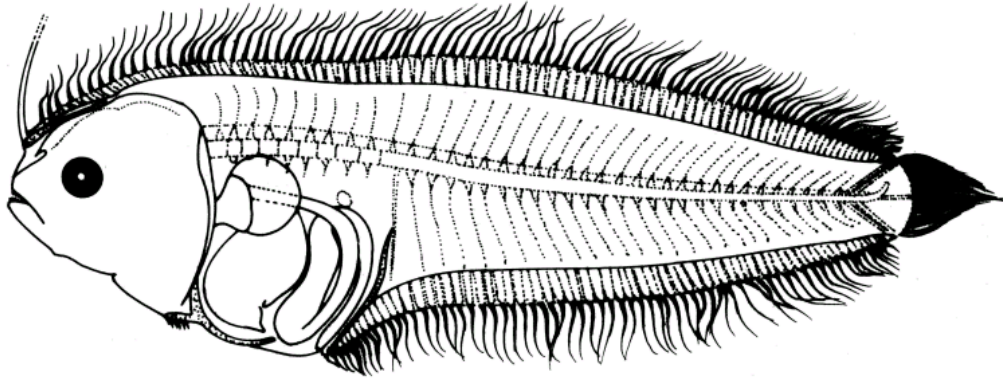
Migrations :

Temperature : 16-27°C

Salt water : Yes/ No

Depth range : 50-5000 m

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



Larva *Arnoglossus tapeinosoma* 16.5 mm SL, from Lalithambika Devi, 1999.

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 93-97, Anal fin rays 66-74, Vertebrae 10+31.

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 relationships:

Eggs and larvae: Ref. No.:  
Characteristics:

Larval body is thin, flat, transparent, long and symmetrical in early stages, Eyes are symmetrical and prominent, Anterior portion of alimentary canal runs almost parallel to the notochord and bends down at the posterior end of abdominal cavity where it describes a single, circular coil in early stages. Anus opens on right side of the 10<sup>th</sup> myotome in early larval stages. The circular nature of the alimentary canal gets gradually changed into an elliptical coil, in advanced forms intestinal coil becomes compact and anus gets pushed forwards to the level of the eighth vertebral segment. Liver occupies the space between cleithra and intestinal loop, its antero-posterior axis is more than that of the dorso-ventral axis, but in advanced stages, the dorso ventral gains over antero-posterior axis. Swim bladder is seen above intestinal loop occupying the space between eighth and ninth vertebral segments, pushing the intestinal loop ventralwards. Spines are not found anywhere on the body. There are 93-97 dorsal and 66-74 anal fin rays and 10+31 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.)

Lalithambika Devi, C.B., 1986. Studies on the flat fish (Heterosomata) larvae of the Indian Ocean. Ph.D. Thesis, University of Kerala, India, 480 pp.

Lalithambika Devi, C.B. 1991. First records and a comparative study of larvae of *Arnoglossus tapeinosoma* (Bleeker) and *Arnoglossus aspilos* (Bleeker) (Bothidae-Pisces) from the Indian Ocean and adjacent waters. Proceedings of the Kerala Science Congress, 158-160.

Lalithambika Devi, C.B., 1999. Bothid larvae (Pleuronectiformes-Pisces) of the Indian Ocean. *Indian J. Mar. Sci.*, **28** : 198-210.

Lalithambika Devi, C.B., 1999. Larvae of Bothidae (Pleuronectiformes-Pisces), Illustrated Key. Published by National Institute of Oceanography, Goa, pp. 35.

LIST OF INDIAN EXPERTS (Name, address, phone, fax, e-mail etc.)

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