

NATIONAL BIORESOURCE DEVELOPMENT BOARD

Dept. of Biotechnology
Government of India, New Delhi

For office use only

MARINE BIORESOURCES

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

Fauna : <input checked="" type="checkbox"/>	Flora	Microorganisms
General Category : Vertebrate (Zooplankton) Fish larvae		
Scientific name & Authority : <i>Laeops macrophthalmus</i> (Alcock) 1889 - Adult Common Name (if available) :		
Synonyms:	Author(s)	Status
<i>Scianectes macrophthalmus</i>	Alcock	1889, 90, 98
<i>Scianectes lophoptera</i>	Alcock	1889
<i>Laeops macrophthalmus</i>	Alcock	1889
	Regan	1905
	Norman	1927, 34
<i>Laeops lophotera</i>	Norman	1927
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>Laeops</i>	Species : <i>macrophthalmus</i>	
Authority: Alcock		
Reference No.		
Alcock, 1889. List of Pleuronectidae from the Bay of Bengal. <i>Jour. Asiat. Soc. Bengal</i> , 58 (2), pp.279-295, pls. 16-18.		
Geographical Location:		
Larvae of this species were recorded in Cochin, outer shelf of Cape Comorin and at latitude 06°34'00" and longitude 51°00'00"		
Latitude:		Place:
Longitude:		State:

Environment

Fresh water : Yes/ No

Habitat :

Salinity : 34 –35PSU

Brackish : Yes/ No

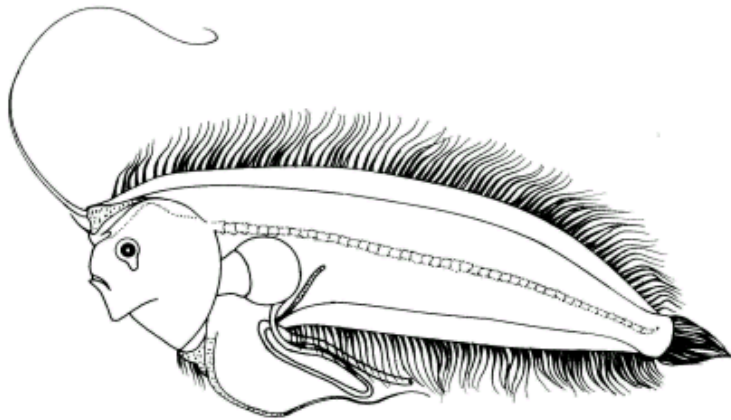
Migrations :

Temperature : 16-29°C

Salt water : Yes/ No

Depth range : 30 m

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



Laeops macrophthalmus : 19.0 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 86-93, Anal fin rays 67-70, Vertebrae 11+30-35

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:

The larval body is thin, flat, symmetrical and translucent. Ventral profile of the abdomen remains straight and parallel to the dorsal body wall, caudal portion tapers in preflexion stage but in postflexion stage tapers gradually giving the characteristic shape. Eyes black and symmetrical, in postflexion stage they have a conical muscular outer ring. Mouth terminal and small being less than the diameter of the eye in early stage, jaws are almost equal, teeth absent in preflexion stage, but 11 pairs in the upper and 6 pairs in lower appear in postflexion stage. Alimentary canal runs almost parallel to the notochord up to seventh myotome where it forms an elliptical coil which is directed backwards and

occupies the posterior end of the abdominal cavity, rectal portion is distinctly marked, directed backwards and anus opens at the level of the 11th myotome. In postflexion stage, the intestinal coil gets considerably elongated and pushes the abdomen, which hangs down as a trailing appendage. The trailing abdomen equals the length between first and seventh caudal vertebral segments and the rectal portion extends further down. If the trailing abdomen is superimposed on the body, the intestinal loop reaches the level of seventh caudal vertebra and the anus opens at the level of the tenth. An oval swim bladder is placed at the space between fourth and sixth myotomes, which presses the alimentary canal down in preflexion stage. Liver is not massive as in other bothids. Spines are not seen anywhere on the body particularly on the urohyal, cleithra and posterior basipterygial processes.

The medium fin folds are continuous and confluent in the preflexion stage. The anterior end of the dorsal fin fold extends over the skull but has not reached the snout with a well differentiated, elongated dorsal ray supported by the first dorsal pterygiophore arising from the level of the base of the occipital. Median rays are comparatively long and most of the rays have a length equal to the depth of the body without pterygiophores. Small brownish pigment patches are seen distributed along the dorsal and ventral body wall at the bases of the dorsal and anal fin rays and also at the posterior dorsal corner of the abdominal cavity beneath the vertebral column. There are 86-93 dorsal and 67-70 anal fin rays and 11+30-35 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., 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.

Dileep, M.P., 1989. Studies on the larvae of a few demersal fishes of the south west coast of India. Ph.D. Thesis, University of Cochin, Kerala, India, 271 pp.

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(List of persons who contributed, modified or checked information)

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