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: *Bothus myriaster* (Temminck and Schlegel) 1846 -Adult
Common Name (if available) :

Synonyms:	Author(s)	Status
Rhombus myriaster	Temminck and Schlegel	1846
Platophrys myriaster	Jordan and Evermann	1902
	Jordan and Starks	1906
	Snyder	1912
	Jordan, Tanaka and Snyder	1913
	Hubbs	1915
	Izuka and Matsuura	1920
	Kamohara	1931, 38
Platophrys ovalis	Regan	1908
Platophrys circularis	Regan	1908
Bothus ovalis	Norman	1927, 34
	Okada and Matsubara	1938
	Kuronuma	1948
	Kamohara	1950
	Kuroda	1951, 62
	Matsubara	1955
Bothus myriaster	Chabanaud	1929, 32, 95
	Wu	1932
	Norman	1934
	Okada and Matsubara	1938
	Smith	1949
	Kamohara	1950, 58, 64
	Mori	1952, 56
	Matsubara	1955
	Amoaka	1964, 68
	Nielsen	1984

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 : *Bothus*	Species : *myriaster*	

Authority: Jordan and Starks

Reference No.

Temminck and Schlegel,1846, Pisces. SIEBOLD's Fauna Japonica, 323 pp., 143 pls., supl. Pl. A. Leiden.

Geographical Location:

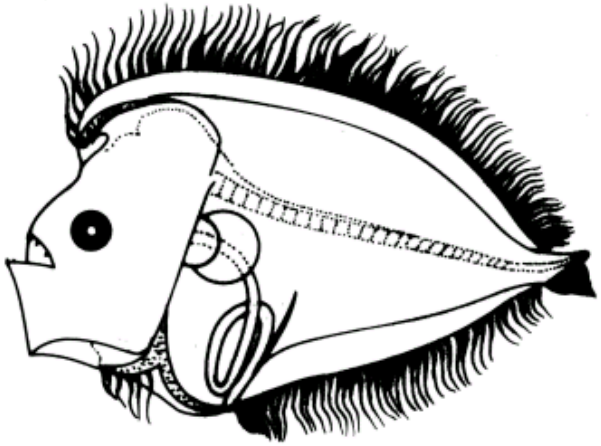
Coast waters of Madagascar, Somali coast and Arabia. Off the coast of Somalia, India, Burma and Sumatra (Indonesia).

Latitude:	Place:
Longitude:	State:

Environment

Fresh water : Yes/ No	Habitat :	Salinity :32.25-36.23 PSU
Brackish : Yes/ No	Migrations :	Temperature : 11-30°C
Salt water : Yes/ No	Depth range :196-4738 m	

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



Larva of *Bothus myriaster* – 33.5 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 86-92, Anal fin rays 62-70, Vertebrae 10+26-29

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:

The larval body is deeply ovate, diaphanous and symmetrical. The anterior elongated dorsal ray is not prominent and does not persist in the postflexion stages. Spines are totally absent on the cleithra, urohyal and posterior basipterygial processes. Jaws carry small teeth, alimentary canal runs parallel to the notochord for a short distance, then runs obliquely downwards, makes an elliptical coil at the posterior end of the abdominal cavity in 4.1 mm NL larva, anus opening at the level of ninth vertebral segment. In later stages, ventral portion of intestinal loop pushed obliquely forwards and the anus comes to lie at the level of sixth vertebral segment in 33.5 mm SL larva. A pair of caecal outgrowths appear at the anterior end of the intestine and another pair a little below, directed into the space between the loops. The intestinal coil is not compact. The interspace between the ascending and descending loops are filled with glandular material. The posterior basipterygial processes extend beyond the level of the descending loop of the alimentary canal. Swim bladder small, placed between seventh and ninth vertebral segments but in advanced stages it gets reduced. The first tiny dorsal ray is differentiated in flexion stages but full complement of median fin rays are seen only in postflexion stages. The elongated anterior dorsal ray shrivels up in the early postflexion stages. This species appears to have protracted larval life because the eye migration has not yet started in 33.5 mm SL larva eventhough flexion to postflexion stage has attained when the larvae were 5.2 mm SL. An elongated and asymmetrical left pelvic fin radial, with elongated rays, the anterior three of which are placed in advance of the right fin. The dorsal and anal fin rays ranges from 86-92 and 62-70 respectively. There are 10+26-29 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.

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