NATIONAL BIORESOURCE DEVELOPMENT BOARD
Dept. of Biotechnology
Government of India, New Delhi

For office use:

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 : Vertebrata (Zooplankton) Fish larvae

Scientific name &Authority : *Auxis thazard* (Lacepede) 1802 - Adult
Common Name (if available): Short corseletted frigate mackerel Language: English

Synonyms	Author(s)	Status
Scomber thazard	Lacepede	1802
Scomber bisus	Rafinesque	1810
Auxis taso	Cuvier	1831
Auxis thazard	Jordan and Evermann	1896

Classification:
Phylum: Vertebrata Sub-Phylum:
Super class: Pisces Class: Osteichthyes Sub- Class: Actinopterygii
Super order: Teleostei Order: Perciformes Sub Order: Scombroidei
Super Family: Family: Scombridae Sub-Family: Thunninae
Genus: *Auxis* Species: *thazard*
Authority:
Auxis thazard (Lacepede) 1802
Reference No.:
Lacepede, B.G.E. De Lav. 1800-03 *Historie Naturelle de poissons* Vols. **1-5**.

Matsumoto, W.M.1959. Description of *Euthynnus* and *Auxis* from the Pacific and Atlantic Oceans and adjacent seas. *Dana Report*, **50:** 1-34

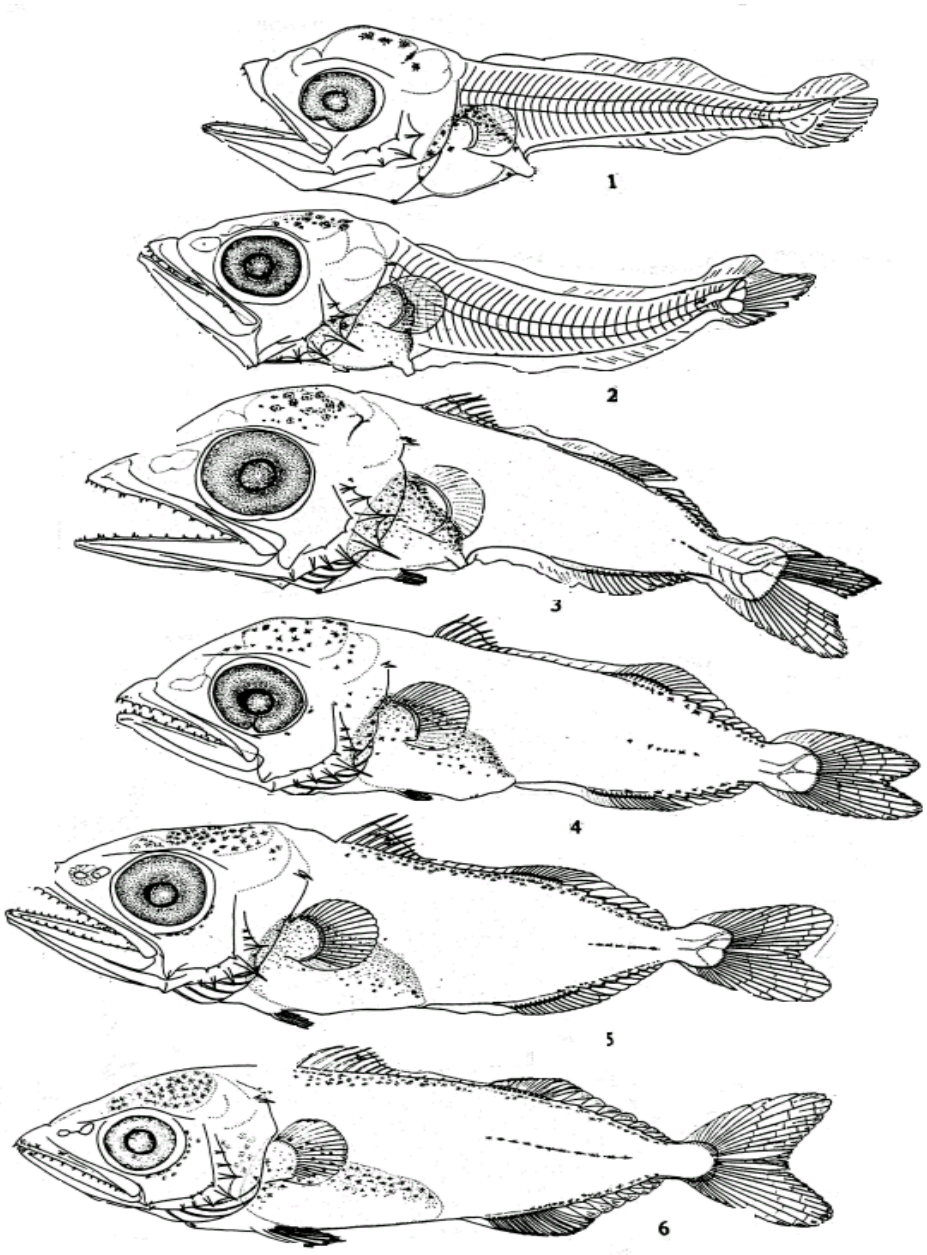
Geographical Location:
Indian, Atlantic, Mediterranean and Pacific Oceans. In the Indian Ocean it is known from the east coast of South Africa, Gulf of Aden, west and east coast of India, Laccadive, Sri Lanka and west coast of Australia.
Latitude: Place:

Longitude: State:

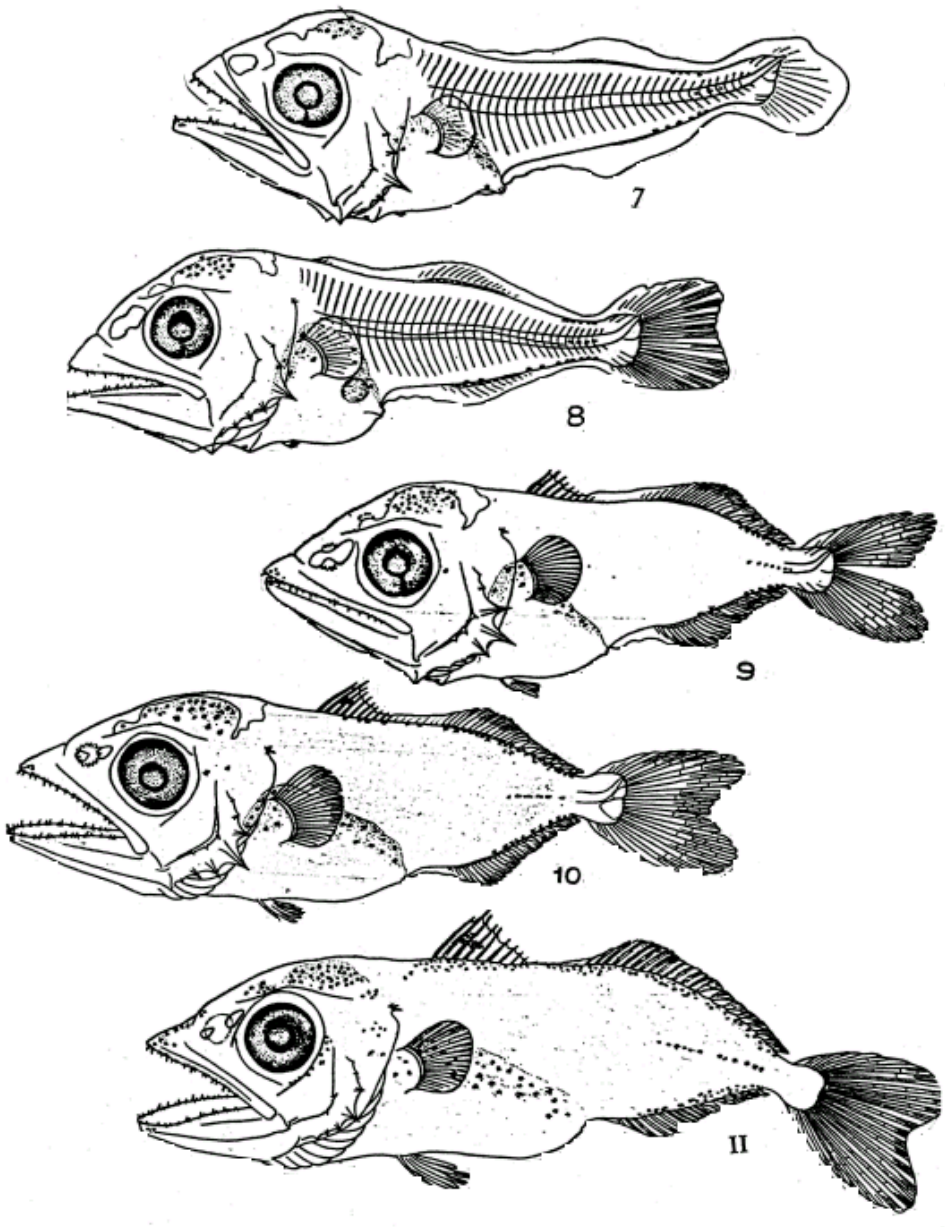
Environment

Fresh water: Yes/ No	Habitat :	Salinity :
Brackish : Yes/ No	Migrations :	Temperature :
Salt water : Yes √	Depth range :	

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



Figs. 1-6. Larval stages of *Auxis* (type I, reproduced from Matsumoto, 1959)
Fig. 1. 4.5 mm, Fig. 2. 5.5 mm, Fig. 3. 7.05 mm,
Fig. 4. 9.7 mm, Fig. 5. 11.2 mm, Fig. 6. 13.2 mm.



Figs. 7-11. Larval stages of *Auxis thazard* (reproduced from Jones, 1961)
Fig. 7. 4.99 mm, Fig. 8. 6.58 mm, Fig. 9. 8.78 mm,
Fig. 10. 10.25 mm, Fig. 11. 14.42 mm.

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:

Diagnostic characteristics:

Sex attributes:

Descriptive characters:

Meristic characteristics:

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.:

Information on eggs is not available. Ripe ovum is reported to be of having a diameter of 0.97mm. with single oil globule of 0.22mm size.

Larvae are characterised by conspicuous chromatophores along the middorsal and midventral lines. In older specimens chromatophores are found along the mid lateral line also of the caudal peduncle. They have deep head with tapering body having 39 myomeres. In postlarval stages, snout is short and pointed, and its length is less than the diameter of eye. Mouth is oblique. Head is not as large as in other larval tunas. Teeth are present on both jaws. In 7.94 mm larva, pigmentation on the head and abdomen are present. Intestine is short and triangular in shape. Fins possess spines and rays characteristic of adult. Position of vent is near the middle of body. Eyes are big. Head, pectorals and dorsals are pigmented. Opercular spines are prominent (Figs. 1-11).

Characteristics:
Abundance:

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

SPAWNING INFORMATION:

Locality: Auxis larvae are collected from Laccadive Sea and Indo-Pacific waters closer to land masses.
Main Ref:
Season:
Fecundity:
Comment:

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

Jones, S. 1960. Notes on eggs, larvae and juveniles of fishes from Indian waters VI. Genus *Auxis* Cuvier. VII. *Sarda orientalis* (Temminck and Schlegel). *Indian J. Fish.*, **7** (2): 337-347.

Jones, S. 1961. Notes on eggs, larvae and juveniles of fishes from Indian waters IX. Further observations on the genus *Auxis* Cuvier. *Indian J. Fish.*, **8** (2): 413-421.

Jones, S. and M. Kumaran, 1964. Eggs, larvae and juveniles of Indian Scombroid fishes. *Proc. Sym. Scombr. Fishes,* Mandapam Camp,(*Mar. Biol. Ass. India*) 1962, **1**: 343-378.

Peter, K.J. 1977. Distribution of tuna larvae in the Arabian Sea. *Proc. Symp. Warm Water Zoopl. Spl. Publ. UNESCO/NIO*: 36-40.

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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