

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 : <input checked="" type="checkbox"/> | Flora | Microorganisms |
| General Category : Vertebrata (Zooplankton) Fish larvae | | |
| Scientific name & Authority: <i>Makaira mazara</i> (Jordan & Snyder) 1901-Adult Common Name (if available) : Blue marlin Language: English | | |
| Synonyms: | Author(s) | Status |
| <i>Tetrapturus mazara</i> | Jordan&Snyder | |
| <i>Eumakaira nigra</i> | Hiraska and Nakamura | |
| <i>Istiompax howardi</i> | Whitley | |
| Classification: | | |
| Phylum: Vertebrata | Sub-Phylum: | |
| Super class: Pisces | Class: Osteichthyes | Sub- Class: Actinopterygii |
| Super order: Teleostei | Order: Perciformes | Sub-Order: Scombroidei |
| Super Family: | Family: Istiophoridae | Sub-Family: |
| Genus: <i>Makaira</i> | Species: <i>mazara</i> | |
| Authority: <i>Makaira mazara</i> (Jordan & Snyder) 1901 | | |
| Reference No. | | |
| Jordan, D.S and J.O.Snyder, 1901. <i>A preliminary checklist of fishes of Japan</i> , 3 : 159pp. | | |
| Ueyanagi,S. 1964. Description and distribution of larvae of five istiophorid species in the Indo-Pacific. <i>Proc.Symp.Scombr.fishes</i> , Mandapam Camp,(<i>Mar.Biol. Ass. India</i>) 1962, 1 : 499-528. | | |
| Ueyanagi,S.and H.Yabe, 1959. Larvae of the Black marlin(<i>Eumakaira nigra</i> Nakamura) <i>Rpt.Nanki.Reg.Fish.Res.Lab.</i> , 10 : 151-169. | | |
| Geographical Location: Indo-Pacific | | |
| Latitude: | Place: | |
| Longitude: | State: | |

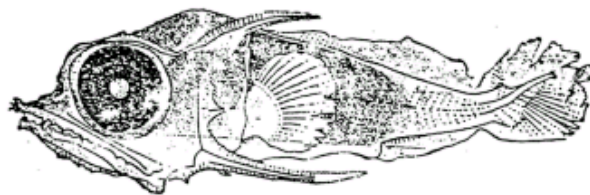
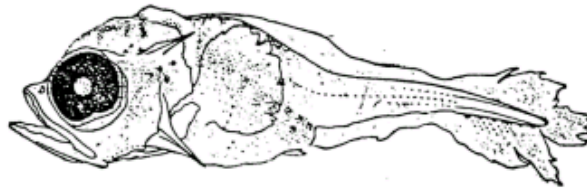
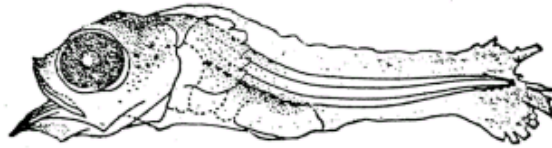
Environment

Fresh water : Yes/ No
Brackish : Yes/ No
Salt water : Yes

Habitat :
Migrations :
Depth range :

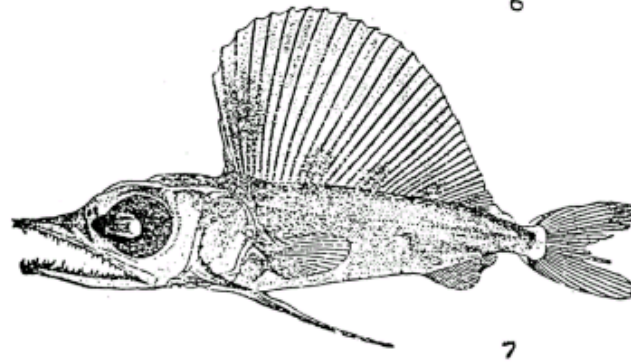
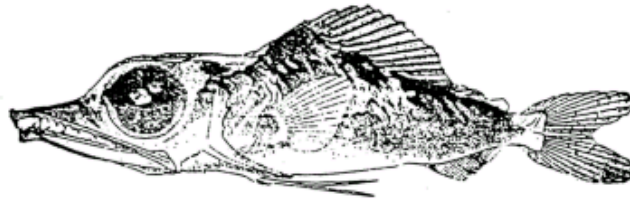
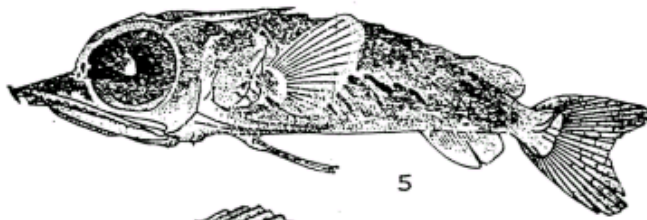
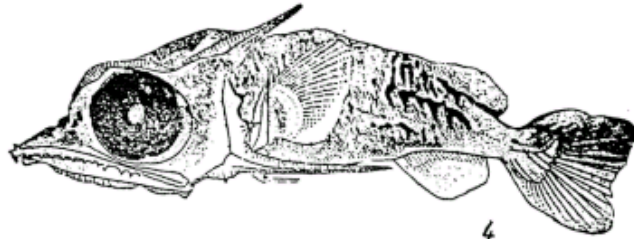
Salinity :
Temperature :

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



Figs. 1-3. *Makaira mazara*

Fig. 1. 2.9 mm. Fig. 2 . 3.3 mm. (Reproduced from Ueyanagi and Yabe,1959)



Figs. 4-7 *Makaira mazara*
Fig. 4. 8.6 mm. Fig. 5. 11.6 mm. Fig. 6. 16.3 mm.
Fig. 7. 23.2 mm. (Reproduced from Ueyanagi and Yabe, 1959).

| | | | |
|--|--|--|--|
| <p>DATA ENTRY FORM: Form- 2(Fish / shellfish / others) (please answer only relevant fields ; add additional fields if you require) Form –1 Ref.No.:</p> | | | |
| <p>IMPORTANCE</p> <p>Landing statistics (t/y) : from to Place : Ref . No.:</p> <p>Main source of landing : Yes/ No Coast: east/ west</p> <p>Importance to fisheries :</p> <p>Main catching method :</p> <p>Used for aquaculture :yes/ never/ rarely</p> <p>Used as bait: yes/no/ occasionally</p> <p>Aquarium fish :yes/ no/ rarely</p> <p>Game fish : yes/ no</p> <p>Dangerous fish :poisonous/ harmful/ harmless</p> <p>Bioactivity : locally known/ reported/ not known Details:</p> <p>Period of availability: Throughout the year – yes/ no If no, months:</p> | | | |
| <p>SALIENT FEATURES :</p> <p>Morphological:</p> <p>Diagnostic characteristics: -</p> | | | |
| <p>Sex attributes:</p> <p>Descriptive characters:</p> | | | |

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 relationships:

| | |
|--|-----------|
| Eggs and larvae: | Ref. No.: |
| Published information on eggs is not available. | |
| Deep bodied zoea type larva like that of sailfish which has close similarities in many respects. Characterised by the relatively short blunt snout, large eyes, and forward placement of anterior edge of orbit. Pterotic spines rise obliquely from its base and preopercular spines run nearly parallel to the ventral profile of body. No pigmentation on the lower part of head. The snout is blunt. Eyes are slightly larger and position of centre of eye is at a higher level from the horizontal line from snout. The ventral fin in later stages are longer than those of sail fish of comparable size. Body is pigmented. (Figs.1-7) | |
| Characteristics: | |
| Abundance: | |
| Biochemical aspects: | |
| Proximate analysis: moisture/ fat/ protein/ carbohydrate/ash | Ref. No. |
| Electrophoresis: | Ref. No. |
| SPAWNING INFORMATION: | |
| Locality: | Main Ref: |
| Tropical eastern Indian Ocean west of Sumatra and western Pacific. | |
| Season: | |
| Fecundity: | |
| Comment: | |

MAJOR PUBLICATIONS (INDIAN):

(Include review articles, monographs, books etc.)

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

Peter, K.J.1982.studies on some fish larvae of the Arabian Sea and Bay Of Bengal .
Ph.D Thesis, Univ. of Cochin, 349pp.

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

1. M.Kumaran
Scientist, CMFRI. (Rtd)
Malaparambil Housing Colony
Calicut – 673 009

2. Dr. K.J.Peter
Scientist, NIO. (Rtd)
Koithara
54/2950, Kadavanthara South
Kochi-682020
Ph. (0484) 318036
e-mail: peterann@md4.vsnl.net.in

ACKNOWLEDGEMENT:

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