

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>Istiophorus gladius</i> (Broussonnet) 1786-Adult Common Name (if available) : Sail fish Language: English		
Synonyms:	Author(s)	Status
<i>Scomber gladius</i>	Broussonnet	1786
<i>Istiophorus gladius</i>	Mc Cullock	1921
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>Istiophorus</i>	Species: <i>gladius</i>	
Authority:		
<i>Istiophorus gladius</i> (Broussonnet) 1786		
Reference No.		
Broussonnet, P.M.A. 1786. Memoire sur lavoilier (<i>Histiophorus velifer</i>). <i>Mem. Acad. Sci. Paris</i> , 450-455.		
Deraniyagala, P.E.P.1949. Some Vertebrate animals of Ceylon. Vol . 1, Colombo.		
Jones,S. 1959. Notes on eggs, larvae and juveniles of fishes from Indian Waters. II. <i>Istiophorus gladius</i> (Broussonnet) <i>Indian J. Fish.</i> ,6 : (1) 204-210		
Geographical Location: Indo-Pacific		
Latitude:	Place:	
Longitude:	State:	

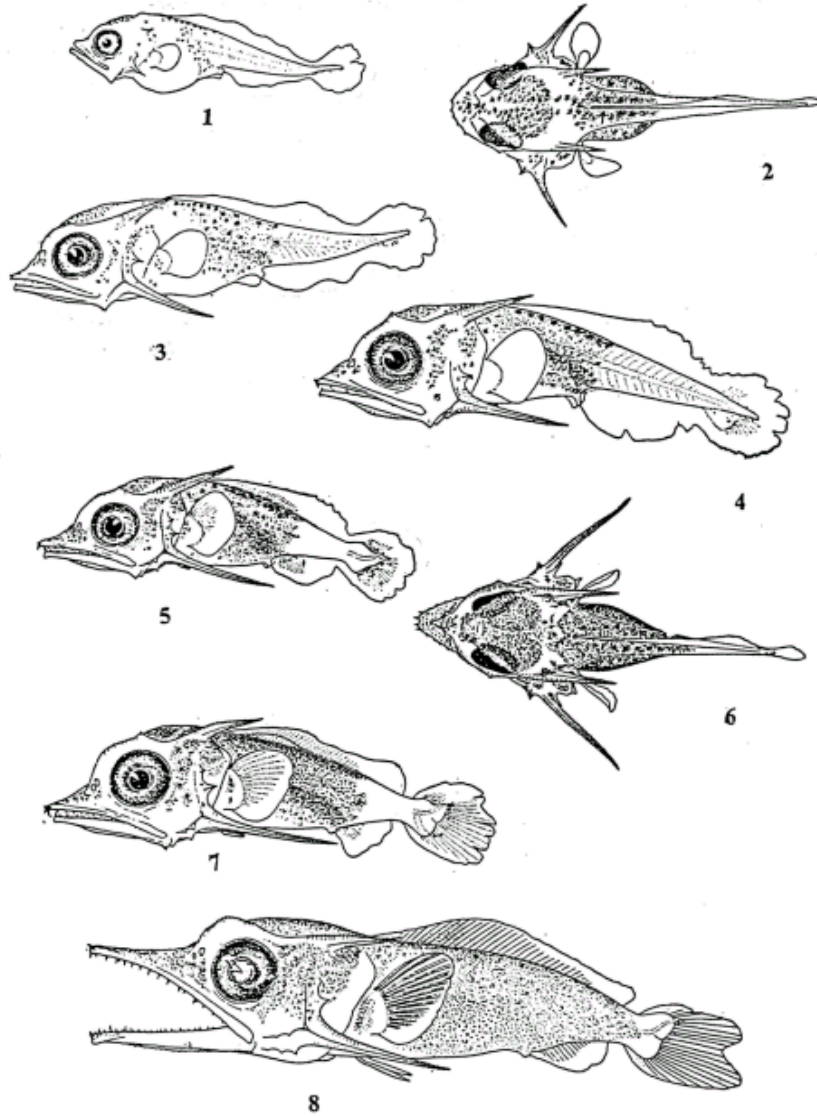
Environment

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. 1-8. *Istiophorus gladius*

Fig. 1. 3.4 mm. Fig. 2. Dorsal view of 4.17 mm stage. Fig. 3. 4.74 mm.

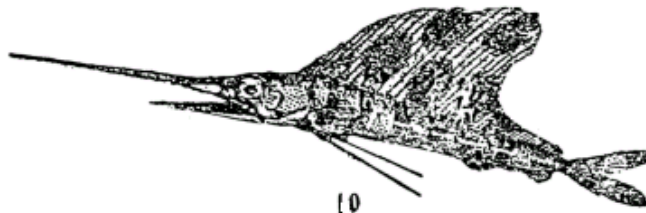
Fig. 4. 5.42 mm. Fig. 5. 6.51 mm. Fig. 6. Dorsal view 6.51 mm stage.

Fig. 7. 7.8 mm. Fig. 8. 11.75 mm.

(Reproduced from Jones, 1959a)



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Figs. 9-10. *Istiophorus gladius*

Fig. 9. 23.5 mm. (Reproduced from Yabe, 1953a)

Fig. 10. 127 mm. (Reproduced from Deraniyagala, 1949)

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 relationships:

Eggs and larvae:

Ref. No.:

Published information on eggs is not available.

Deep bodied zoea type larva like that of marlins and sailfishes. Characterised by the elongated snout, small eyes and relatively small head depth. Anterior edge of orbit is not angular. Pigments spots appear on the posterior peripheral area of the gular membrane. Larva of 3.4 mm stage was reported to be present with yolk. Diameter of eye is about 8 in total length. Vent is posterior to the mid point of total length. The pterotic and preopercular spines are short in early stages. The orbital crest, pterotic and preopercular spines are serrated. In specimens of 6-8 mm stages the preopercular spines reach upto the vent. In larger specimens preopercular spines are comparatively short. Position of eye is somewhat high i.e. tip of snout is almost in line the centre of eye. In a specimen measuring 11.75 mm the snout has elongated, the dorsal fin increased in length, the caudal fin forked and pelvic fin increased in length. The dorsal fin of juveniles measuring more than 20 mm is almost semicircular in outline and its anterior rays are short (Figs. 1-10).

No. Characteristics:

Abundance:

Biochemical aspects:

Proximate analysis: moisture/ fat/ protein/ carbohydrate/ash

Ref. No.

Electrophoresis:

Ref. No.

SPAWNING INFORMATION:

Locality:

Main Ref:

Tropical seas of the Indo-Pacific, but very limited in temperate region.

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. *Proc. 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.

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