

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>Xiphias gladius</i> Linnaeus, 1758 - Adult		
Common Name (if available) : Sword fish		Language: English
Synonyms:	Author(s)	Status
<i>Xiphias platipterus</i>	Shaw and Nodder	1792
<i>Xiphias imperator</i>	Bloch and Schneider	1801
Classification:		
Phylum: Vertebrata	Sub-Phylum:	
Super class: Pisces	Class: Osteichthyes	Sub- Class: Actinopterygii
Super order: Teleostei	Order: Perciformes	Sub-Order: Scombroidei
Super Family:	Family: Xiphiidae	Sub-Family:
Genus: <i>Xiphias</i>	Species: <i>gladius</i>	
Authority: <i>Xiphias gladius</i> Linnaeus 1758		
Reference No. Linnaeus, C. 1758. Sive regna tria systematics proposita per classes, ordines, genera et species cum characteribus, differentiis, synonymus locis, etc. <i>Systema Natural</i> 1 (2) 824pp.		
Nakamura, H. <i>et al.</i> , 1951. Notes on the life history of sword fish <i>Xiphias gladius</i> Linnaeus. <i>Jap. J. Ichthyol.</i> , 1 (4): 264-271.		
Taning, A.V. 1955. On the breeding areas of the swordfish (<i>Xiphias</i>). <i>Deep. Sea. Research. Suppl.</i> Vol. 3 : 438-450.		
Yabe, H. <i>et al.</i> , 1959. Study on the life history of the swordfish, <i>Xiphias gladius</i> Linnaeus. <i>Rept. Nanki. Reg. Fish Res. Lab.</i> 10 : 107-150		
Geographical Location: Atlantic, Pacific and Indian Ocean.		
Latitude:	Place:	
Longitude:	State:	

Environment

Fresh water : Yes/ No

Habitat :

Salinity :

Brackish : Yes/ No

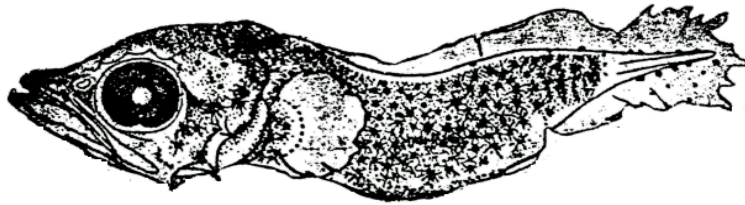
Migrations :

Temperature :

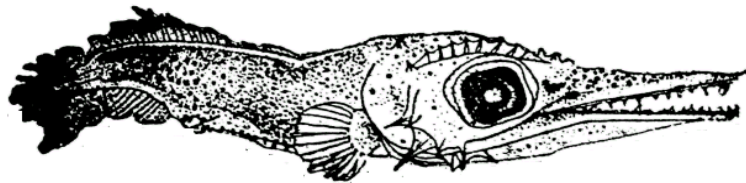
Salt water : Yes

Depth range :

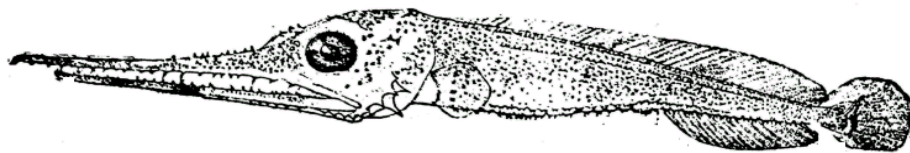
Picture (scanned images or photographs of adult / larval stages)



1



2



3

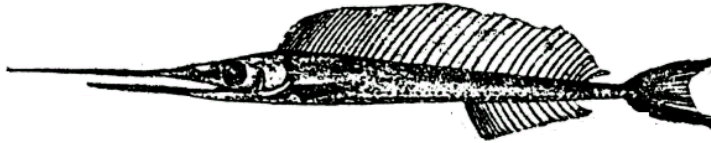
Figs. 1-3. *Xiphias gladius*

Fig. 1. 5.1 mm. Fig. 2 . 8.2 mm. (Reproduced from Yabe, *et al.*, 1959)

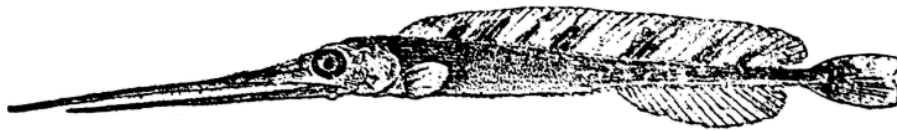
Fig. 3. 16.2 mm. (Reproduced from Jones, 1958)



4



5



6

Figs. 4-6 *Xiphias gladius*

Fig. 4. 46.3 mm. (Reproduced from Taning, 1955)

Fig. 5. 73 mm. (Reproduced from Yabe, *et al.*, 1959)

Fig. 6. 252 mm. (Reproduced from Nakamura, *et al.*, 1951)

<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 records on eggs are not available.	
<p>Smallest specimen described is of 5.1mm length. This has the snout already elongated with vent far posterior to the mid points of total length. This larvae can be easily identified by the nature of spination on the head and body and the long snout. In smaller specimens spination on the head consists of a supra orbital ridge, preopercular spines, cranial spines and temporal spine. Keeled spines on the body characteristic of later stages are absent in early stages. In specimens of about 15mm length, the spination consists of interrupted groups on the snout, a pre orbital ridge with 8 spines, 2 closely-set rows of short spines along the preopercle, a keeled ridge of spines below the angle of the jaw, 2 spines dorsal to the cranium, and 2 spines in the temporal region. Rows of spinous scales over the body are connected at their base. The body is more or less heavily pigmented with the ventral side lighter in colour.(Figs.1-6).</p>	
Characteristics:	
Abundance:	
Biochemical aspects:	
Proximate analysis: moisture/ fat/ protein/ carbohydrate/ash	Ref. No.
Electrophoresis:	Ref. No.
SPAWNING INFORMATION:	
Locality:	Main Ref:
Larvae have been collected from Laccadive Sea, Atlantic and Pacific Oceans.	
Season:	
Fecundity:	
Comment:	

MAJOR PUBLICATIONS (INDIAN):

(Include review articles, monographs, books etc.)

Jones,S. 1958. Notes on eggs, larvae and juveniles of fishes from Indian waters 1. *Xiphias gladius* Linnaeus. *Indian J. Fish.*, **5** (2): 357-361

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

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