

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>Katsuwonus pelamis</i> (Linnaeus) 1758 - Adult		
Common Name (if available): Oceanic Skipjack		Language: English
Synonyms	Author(s)	Status
<i>Scomber pelanis</i>	Linnaeus	1758
<i>Thunnus pelanis</i>	Cuvier	1831
<i>Katsuwonus pelanis</i>	Kishinouye	1915
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: <i>Katsuwonus</i>	Species: <i>pelamis</i>	
Authority: <i>Katsuwonus pelamis</i> (Linnaeus) 1758		
Reference No.:		
Linnaeus, C. 1758. Sive regna tria systematics proposita per classes, ordines, genera, et species cum charactaibus differentiis, synonymus locis etc. <i>Systema Naturaei</i> 1: 297 pp.		
Matsumoto, W.M.1958. Description and distribution of larvae of four species of tuna in the Central Pacific waters. <i>U.S. Dept.int.Fish and Wildl. Serv. Fish. Bull</i> 58 (128) : 29-72.		
Geographical Location:		
Tropical and sub tropical waters of Indo-Pacific and Atlantic Oceans.In the Indian Ocean this species has been recorded from off south and east coasts of Africa, Gulf of Aden, Laccadive Sea, Maldives, Gulf of Mannar and western Australia.		
Latitude:	Place:	
Longitude:	State:	

Environment

Fresh water: Yes/ No

Habitat :

Salinity :

Brackish : Yes/ No

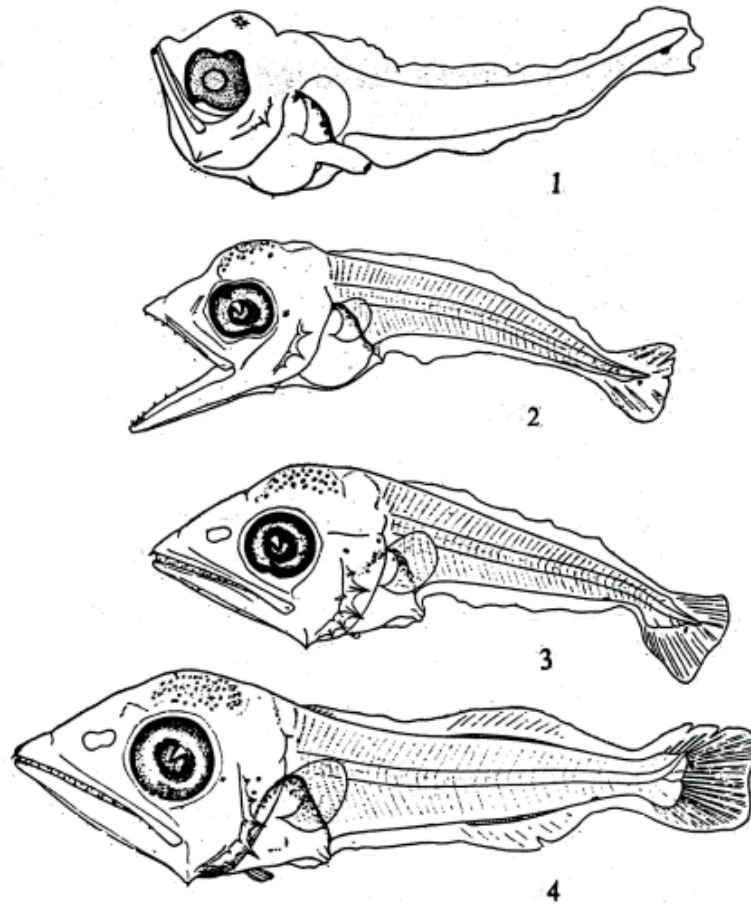
Migrations :

Temperature :

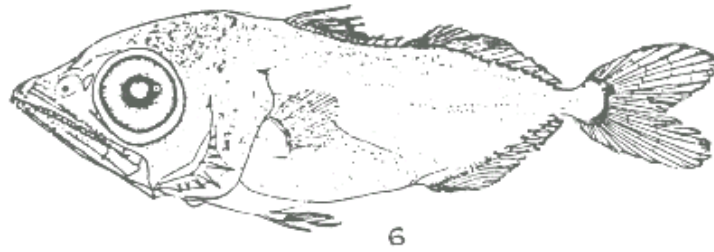
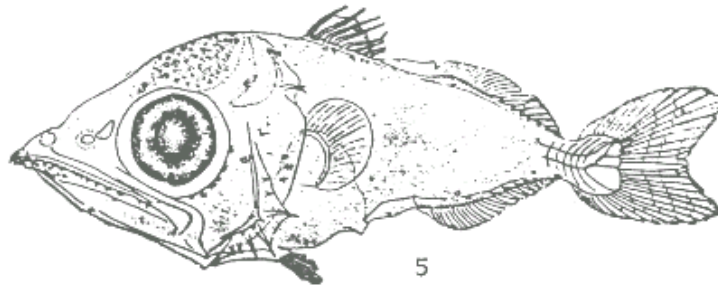
Salt water : Yes

Depth range :

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



Figs. 1 – 4. *Katsuwonus pelamis* (Reproduced from Jones,1959)
Fig.1. 2.9mm, Fig. 2. 3.6mm, Fig.3 5.8mm, Fig. 4 7.8mm



Figs. 5-6 *Katsuwonus pelamis* (Reproduced from Matsumoto, 1958)
Fig. 5. 8.7mm, Fig. 6. 14.25mm.

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:

<p>Eggs and larvae:</p> <p>Fully ripe ovum is spherical and transparent having a mean diameter of 0.9mm and with an oil globule of about 0.14mm size.</p> <p>Early larvae has a large head in comparison with the body, which is long and slender. Greatest depth is posterior to the eye. The abdominal sac is characteristically small and is situated anteriorly to the mid-point of total length. The mouth is large and the angle of jaws reaches to about a vertical below the posterior margin of the eye. The lower jaw is slightly included at the tip. Diameter of eye is less than the length of the snout which is long and pointed. A maximum of 8 spines are developed normally along the edge of the preoperculum, the one in the preopercular angle being the longest. Number of spines varies with the size of larvae, the maximum number being present at about 8mm stage. These spines gradually get atrophied in juvenile stages. Rudiment of dorsal fin begins to develop, when the larvae reach a length of about 6.7mm. In juveniles 20 precaudal and 21 caudal vertebrae could be counted.</p> <p>The presence of a single chromatophore, a little anterior to the caudal peduncle along the midventral line is very characteristic of this species, and this persists even at a very later stage. Chromatophores begin to develop on the opercle in the specimens of about 5mm and more. Early appearance of chromatophores over the forebrain in specimens of more than 7mm length, the presence of chromatophores on the middle of each mandible, and formation of few chromatophores along the anterior portion of the first dorsal fin are very characteristic. Dermal chromatophores are present at the tip of lower and upper jaws. (Figs.1-6)</p> <p>Characteristics:</p> <p>Abundance:</p> <p>Biochemical aspects:</p> <p>Proximate analysis: moisture/ fat/ protein/ carbohydrate/ash</p> <p>Electrophoresis:</p>	<p>Ref. No.:</p> <p>Ref. No.</p> <p>Ref. No.</p>
<p>SPAWNING INFORMATION:</p> <p>Locality: Main Ref:</p> <p>Larvae and juveniles were recorded during December – April months from the Minicoy area in the Indian Ocean.</p> <p>Season:</p> <p>Fecundity:</p> <p>Comment:</p>	

MAJOR PUBLICATIONS (INDIAN):

(Include review articles, monographs, books etc.)

Jones, S. 1960. Notes on eggs, larvae and juveniles of fishes from Indian waters III. *Katsuwonus pelamis* (Linnaeus) and IV *Neothunnus macropterus* (Temminck and Schlegel). *Indian J. Fish.*, 1959 **6** (2): 360-373.

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**: 483-498

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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