



Environment

Fresh water: Yes/ No

Habitat :

Salinity :

Brackish : Yes/ No

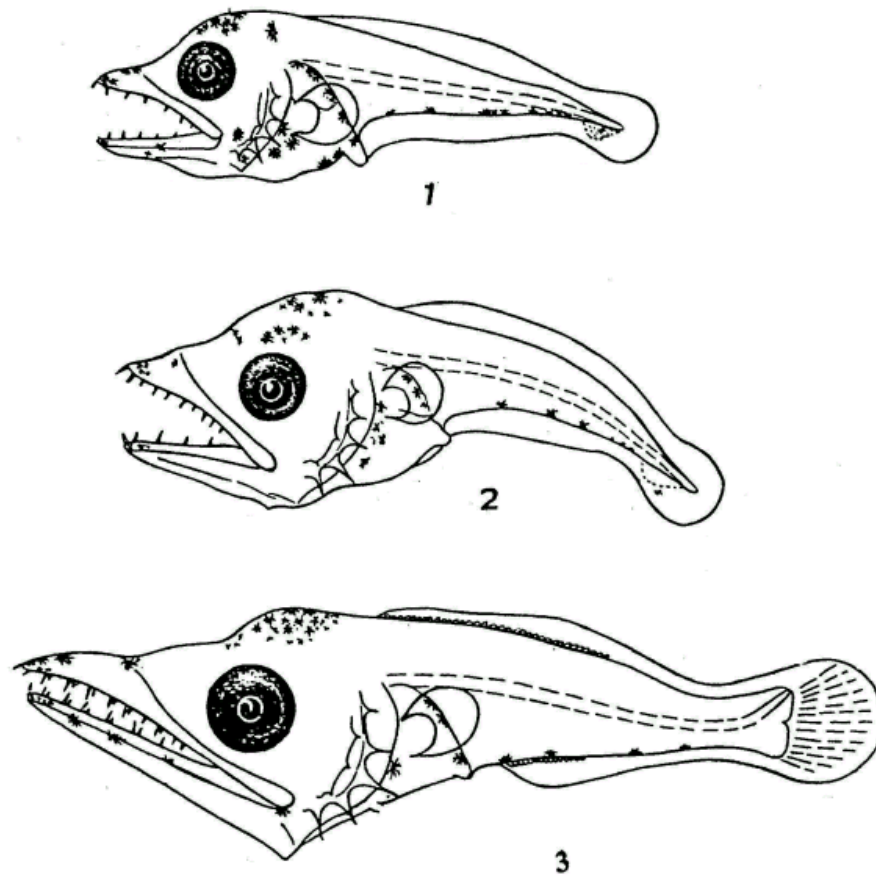
Migrations :

Temperature :

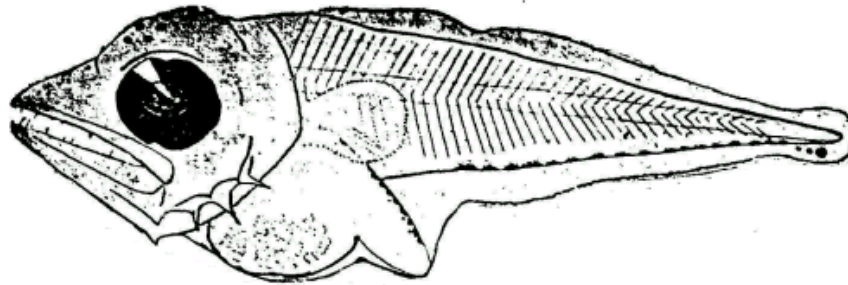
Salt water : Yes/ No

Depth range :

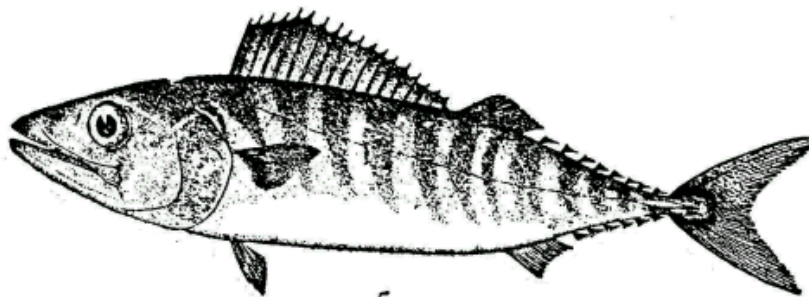
Picture (scanned images or photographs of adult / larval stages)



Figs. 1–3 Larvae of *Sarda orientalis*  
Fig. 1. – 4.2 mm. Fig. 2. – 4.9 mm. Fig. 3 – 6.1 mm.  
(Reproduced from Gorbunova, 1974).



4



5

Fig. 4. - *Sarda* sp. 3.5 mm larva (Reproduced from Klawe, 1961).  
Fig. 5. - *Sarda orientalis* 80 mm juvenile (Reproduced from Jones, 1960).

<p>DATA ENTRY FORM: Form- 2(Fish / shellfish / others ) Ref.No.:</p> <p>(please answer only relevant fields ; add additional fields if you require)</p> <p>Form -1 Ref.No.:</p>			
<p>IMPORTANCE</p>			
Landing statistics (t/y) :	from	to	Place :
Main source of landing:	Yes/ No		Coast: east/ west
Importance to fisheries:			Ref . No.:
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:
<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.:
<p>Eggs: Ripe ovum is large, spherical, transparent with oil globule and an average diameter of 1.3 mm when fresh and 1.04 mm on preservation.</p> <p>Larvae: No information is available on early larvae. Three larvae measuring 4.2 mm, 4.9 mm and 6.1 mm described by Gorbunova, 1974 (Figs. 1-3 ) are reproduced here to facilitate identification. These larvae are less pigmented with chromatophores on the forebrain, tip of snout, stomach and along the midventral line up to urostyle. In the first two staged fins are represented by only finfolds. Opercular spines are present, the fourth one being the longest. In the 6.1 mm stage larva the head is more elongated with pointed snout and prominent opercular spines. The jaws are with teeth. There are large pigments noticed on the lower jaw. Rudiments of dorsal and anal are already indicated.</p> <p>In 3.5 mm larva described by Klawe, 1961 (Fig.4) only 3 opercular spines are seen. Area of forebrain is pigmented. Posterior to the vent chromatophores are present along the midventral line up to the urostyle. In juveniles of about 80 mm length (Fig. 5) twelve tranverse bands which are incomplete ventrally are present over the body gradually change into characteristic wavy lines of the adult.</p>	
Characteristics:	
Abundance:	
Biochemical aspects:	
Proximate analysis: moisture/ fat/ protein/ carbohydrate/ash	Ref. No.
Electrophoresis:	Ref. No.
<b>SPAWNING INFORMATION:</b>	
Locality:	Main Ref:
<p><i>S. orientalis</i> is the only species of the genus found in the Indian ocean. Spawning period seems to be from April to September with peak in July – August. Juveniles are reported to occur along the Kerala Coast.</p>	
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. The genus *Auxis* Cuvier, VII. *Sarda orientalis* (Temminck and Schlegel), *Indian. J. Fish.*,7 (2) : 337-47.

Jones, S. and M.Kumaran, 1964. Eggs, larvae and juveniles of Indian Scombroid fishes. *Pro. Symp. Scombr. Fishes* Mandapam Camp, (Mar. Biol. ASS.India), 1962 **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*, 349 pp.

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