

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>Scomberomorus commerson</i> (Lacepede) 1800-Adult Common Name (if available) : Barred Spanish mackerel		
Synonyms:	Author(s)	Status
<i>Scomber commerson</i>	Lacepede	1800
<i>Scomber commersonii</i>	Shaw	1803
<i>Cybium commersonii</i>	Ruppell	1828
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:Scomberomorinae
Genus : <i>Scomberomorus</i>	Species : <i>commerson</i>	
Authority: <i>Scomberomorus commerson</i> (Lacepede) 1800		
Reference No.		
Lacepede,B.G.E.V, 1800-1802. Historic naturelle des Poissons 1 to 5 .		
Gorbunova, N.N. 1974. A review of scombroid fishes (Scombridae, Pisces). <i>Trudy.Inst. Okeanol.</i> 96 , 23-76 – (In Russian).		
Munro, I.S.R, 1942. Eggs and early larvae of the Australian Barred Spanish Mackerel, <i>Scomberomorus commersoni</i> (Lacepede) with preliminary notes on the spawning of that species. <i>Proc. Roy. Soc. Queensland</i> , 54 (4) : 33-48.		
Geographical Location:		
Indo – Pacific waters.		
Latitude:	Place:	
Longitude:	State:	

Environment

Fresh water: Yes/ No

Habitat :

Salinity :

Brackish : Yes/ No

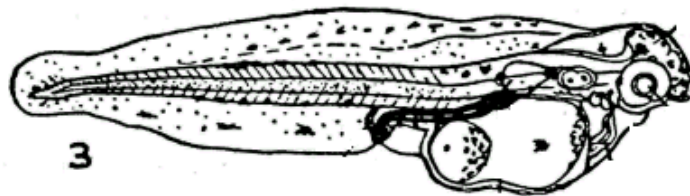
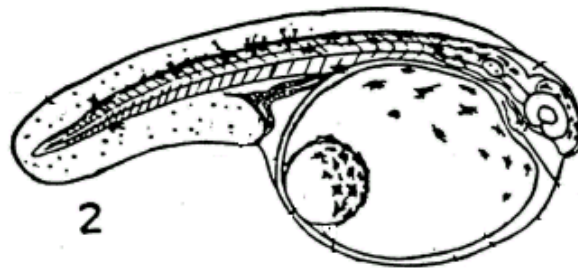
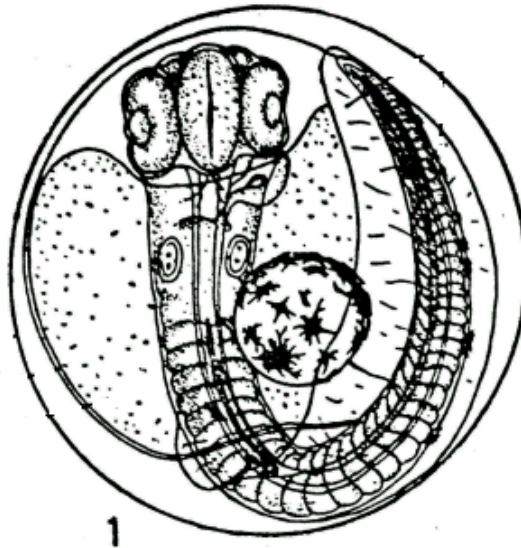
Migrations :

Temperature :

Salt water : Yes✓/ No

Depth range :

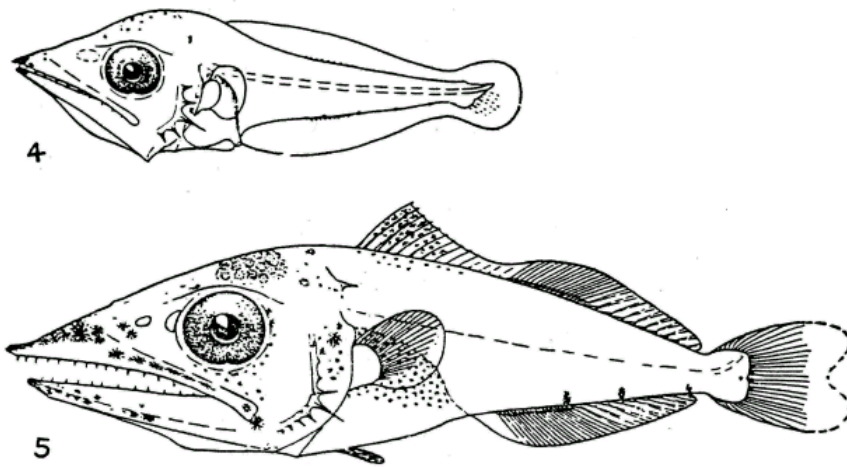
Picture (scanned images or photographs of adult / larval stages)



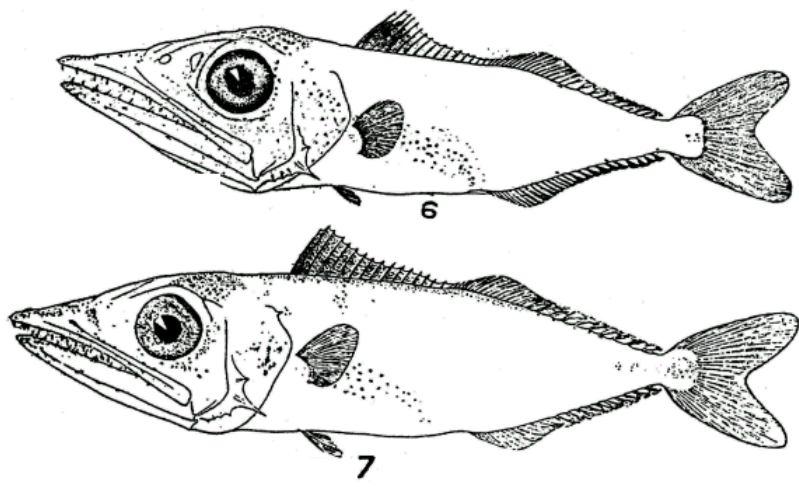
Figs. 1 to 3. *Scomberomorus commerson*

Fig. 1. Egg with embryo just before hatching, Fig. 2 - 2.5 mm larva,

Fig. 3 - 3.2 mm larva (Reproduced from Munro, 1942)



Figs. 4 to 5. *Scomberomorus commerson* larvae
Fig. 4 - 4.8 mm larva, Fig. 5 - 13.3 mm juvenile
(Reproduced from Gorbnnova, 1965).



Figs. 6 to 7. *Scomberomorus commerson* juveniles
Fig. 6 – 14.4 mm, Fig. 7 – 24 mm (Reproduced from Jones, 1961).

<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> <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.:
<p>Eggs: Spherical pelagic egg of diameter 1.25 mm, with single oil globule of 0.31 mm. Pigmentation is present in definite pattern. (Fig. 1).</p> <p>Larvae: Newly hatched larvae is 2.5 mm in length with yolk sac and oil globule. 5.6 mm larva has a medium depth of body, but tapering posteriorly. Body with about 45 myomeres. Pre anal part is approximately 30-40% of the body. Snout is beak like, mouth wide with minute teeth. Opercular spines are conspicuous. Pigmentation is prominent on head and ventral part of the body. Eyes are big. Intestine is coiled. The head of juvenile measuring 14.4 mm, is only about 2.3 and height 4.2 in standard length. The second preopercular spine, which is the largest, projects beyond the operculum. As the fish grows the depth of body gradually increases and head length becomes comparatively less in relation to standard length. Chromatophores are much fewer.</p> <p>In a 24 mm specimen the head is 2.6 and height 4.2 in standard length. A very narrow band of chromatophores is present close to the base of spinous and soft dorsals. There is another small cluster at the base of caudal fin extending to the caudal peduncle. (Figures 2-7).</p>	
Characteristics:	
Abundance:	
Biochemical aspects:	
Proximate analysis: moisture/ fat/ protein/ carbohydrate/ash	Ref. No.
Electrophoresis:	Ref. No.
SPAWNING INFORMATION:	
Locality:	Main Ref:
<p>Most widely distributed in the Indo – Pacific waters. Caught all along the Indian Coasts, Andamans and Laccadives.</p>	
Season:	
Fecundity:	
Comment:	

MAJOR PUBLICATIONS (INDIAN):

(include review articles, monographs, books etc.)

Basheeruddin, S and K.N. Nayar, 1962. Apreliminary study of the juvenile fishes of the coastal waters off Madras city. *Indian J. Fish.*, 1961, **8** (1): 169-188.

Jones, S. 1962. Notes on eggs, larvae and juveniles of fishes from Indian waters VIII. *Scomberomorus commerson* (Lacepede) and X *Scomberomorus lineolatus* (Cuvier). *Indian J. fish.*, 1961, **8** (1) : 107-120.

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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