

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>Mugil parsia</i> (Hamilton-Buchanan) 1822-Adult Common Name (if available) : Goldspot mullet		
Synonyms:	Author(s)	Status
<i>Mugil cantoris</i>	Bleeker	1852
<i>Liza parsia</i>	Hamilton-Buchanan	1822
Classification:		
Phylum: Vertebrata	Sub- Phylum	
Super Class : Pisces	Class : Osteichthyes	Sub- Class: Actinopterygii
Super Order: Teleostei	Order: Mugiliformes	Sub Order :
Super Family:	Family : Mugilidae	Sub-Family:
Genus : <i>Mugil</i>	Species : <i>parsia</i>	
Authority: <i>Mugil parsia</i> (Hamilton-Buchanan) 1822-Adult		
Reference No. Hamilton-Buchanan, 1822. <i>Fish. Ganges</i> p. 215.		
Sarojini, K.K., 1957. Biology and fisheries of the grey mullets of Bengal. <i>Ind. J. Fish.</i> , 4(2): 160-207.		
Geographical Location: Coastal and estuarine waters of the Indo – Pacific.		
Latitude:	Place:	
Longitude:	State:	

Environment

Fresh water: Yes/ No

Habitat :

Salinity :

Brackish : Yes✓/ No

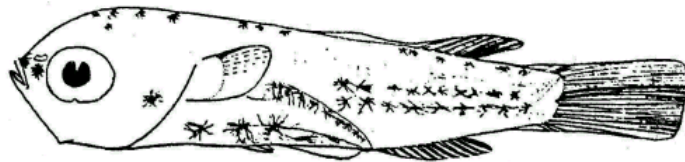
Migrations :

Temperature :

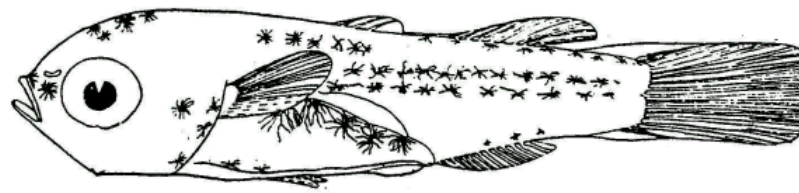
Salt water : Yes✓/ No

Depth range :

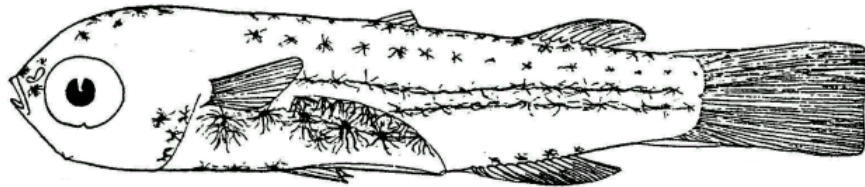
Picture (scanned images or photographs of adult / larval stages)



1



2



3

Figs. 1 – 3. *Mugil parsia*, larval stages
Fig. 1 – 6.1 mm; Fig. 2 – 7.05 mm; Fig. 3 – 7.75 mm
(Reproduced from Sarojini, 1957)

<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.:
Eggs are pelagic, spherical and pigmented with single oil globule.	
Larvae is moderately pigmented with 24 myomeres. In the 6.4 mm larva, the second dorsal, caudal and anal fins are already formed with fin rays. Position of the first dorsal fin is indicated by the dorsal embryonic finfold which is continuous with the second dorsal. Pelvic fins are rudimentary. Pectoral fins have faint indications of rays. The tip of notochord is sharply upturned. There is a row of chromatophores along the lateral line, which is prominent behind the level of origin of first dorsal. Mouth is terminal and alimentary canal extends to more than half of the body.	
The 7.05 mm and 7.75 mm larvae are more pigmented than the earlier stage. Three groups of chromatophores are present on the nape, another row on the mid-dorsal and mid-ventral aspects of the caudal peduncle. There are also very prominent and highly branched chromatophores, lining the body cavity, on opercle, symphysis of upper jaw and in front of the eye. Preanal finfold completely disappeared. The first dorsal has 4 spiny rays. Jaws are almost equal. Chromatophores on the lining of the body cavity appears very dense and highly branched forming a network. (Figs. 1-3).	
Characteristics:	
Abundance:	
Biochemical aspects:	
Proximate analysis: moisture/ fat/ protein/ carbohydrate/ash	Ref. No.
Electrophoresis:	Ref. No.

SPAWNING INFORMATION:	
Locality:	Main Ref:
Postlarvae and juveniles are recorded from the coastal and estuarine waters of Bengal, Visakapatanam, Tamilnadu, Kerala, Maharastra and atound Andaman islands from December to April.	
Season:	
Fecundity:	
Comment:	

MAJOR PUBLICATIONS (INDIAN):
(include review articles, monographs, books etc.)

Luther, G., 1967. The grey mullets. *Cent. Mar. fish. Res. Inst. 20th Anniv. Souv.* 70-74.

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.

Sarojini, K.K., 1957. Biology and fisheries of the grey mullets of Bengal. *Ind. J. Fish.*, 4(2): 160-207.

LIST OF INDIAN EXPERTS (Name, address, phone, fax, e-mail etc.)

1. Dr. K.J.Peter
Scientist, NIO. (Rtd)
Koithara
54/2950, Kadavanthara South
Kochi-682020
Ph. (0484) 318036
e-mail: peterann@md4.vsnl.net.in

2. Dr. M.D. Kuthalingam
C/o Tamil Nadu Veterinary & animal Science University
Tuticorn - 628 008

3. Dr. Luther
Scientist, CMFRI (Rtd.)
M I G – 1/30, Door no. 2-13- 41
Sector 6 A, M.V.P Colony
Vizakapatnam.

ACKNOWLEDGEMENT:

(List of persons who contributed, modified or checked information)