

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 : Invertebrate (zooplankton) Ostracoda		
Scientific name & Authority : <i>Archiconchoecia striata</i> Muller, 1894		
Common Name (if available) :		
Synonyms:	Author(s)	Status
Classification:		
Phylum: Arthropoda	Sub- Phylum	
Super Class :	Class : Crustacea	Sub- Class: Ostracoda
Super Order:	Order: Myodocopida	Sub Order : Myodocopina
Super Family:	Family : Cypridinidae	Sub-Family: Cypridininae
Genus : <i>Archiconchoecia</i>	Species : <i>striata</i>	
Authority: Muller		
Reference No.		
Muller, G. W., 1894. Die ostracoden des Golfes von Neapel und der Angrenzenden Meerec – abschnitte. <i>Fauna Flora Golf. Neapel</i> , 21 : 1-404.		
Geographical Location:		
Muller (1906) recorded <i>A. striata</i> from the central Indian Ocean. Leveau (1969) reported the species from the north and northwest Arabian Sea. IIOE data show that the species is distributed in Bay of Bengal also. Their salinity tolerance is evidenced by the fact that they are equally abundant in the high salinity waters of Arabian Sea and the low salinity waters of the Bay of Bengal. Their peak abundance was noted in the Bay of Bengal, 14°07'N and 97°05'E where 1600 individuals were collected in a single haul from 200 m to surface. The Indian Ocean standard net with its 0.33 mm mesh size is too coarse to retain this species efficiently, hence large catches of these animals may be more a result of net clogging rather than their being uncommon or even absent from other areas.		
Latitude:	Place:	
Longitude:	State:	

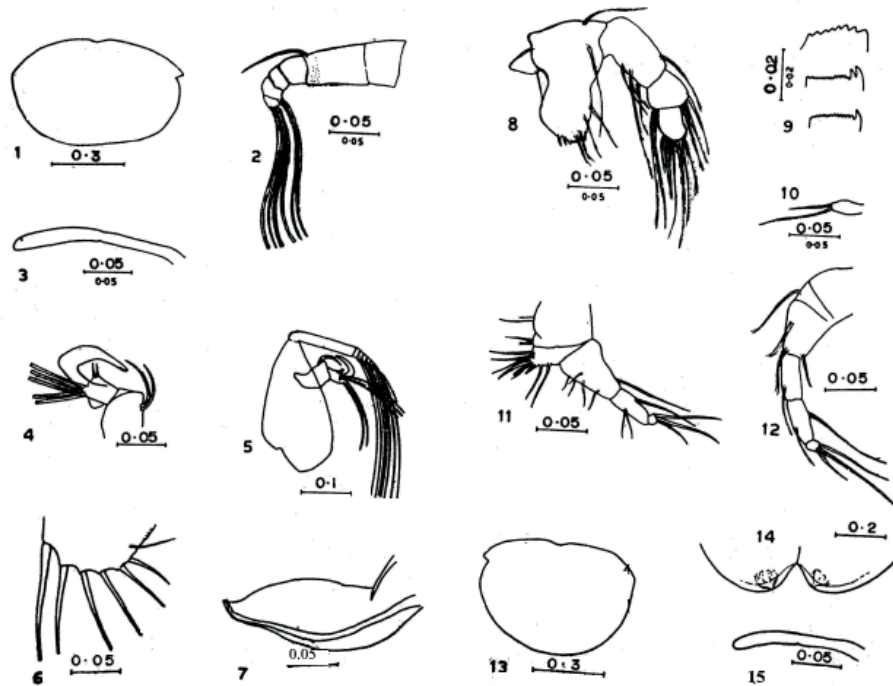
Environment

Fresh water: Yes/ No Habitat : Marine Salinity : 31.59‰ - 36.86‰

Brackish : Yes/ No Migrations : Temperature : 13.16°C - 30.36°C

Salt water : Yes✓/ No Depth range :

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



Archiconchoecia striata (After George, 1977)

Male: 1 – Carapace, lateral view; 2 – First antenna; 3 – Frontal organ; 4 – Right second antenna, endopodite; 5 – Left second antenna; 6 – Furca; 7 – Copulatory organ; 8 – Mandible, endopodite; 9 – Mandible, tooth lists; 10 – Seventh limb; 11 – Fifth limb; 12 – Sixth limb.

Female: 13 – Carapace, lateral view; 14 – Carapace, posterior margin showing opening of asymmetric glands; 15 – Frontal organ.

<p>DATA ENTRY FORM: Form- 2(Fish / shellfish / others) Ref.No.:(please answer only relevant fields ; add additional fields if you require) 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>Carapace: Length 0.6 – 0.7 mm. Height 60% of length in male and 70% in female. Rostrum short; postero-dorsal, posatero-ventral and antero-ventral corners of carapace rounded, and with a distinct notch middorsally, concentric striations, more conspicuous at the margin. ‘Asymmetric glands’ of both right and left valves open posterodorsally at about two third of the shell.</p>			
<p>First antenna: Relative length of 6 segmented stem 20%. Second segment with minute hairs distally and a disto-dorsal bristle extending beyond the end of the limb. Fifth segment with 2 sensory filaments and 6th segment with 4 sensory filaments. Sensory filaments equal, with a relative length of 29%.</p>			
<p>Second antenna: Protopodite longer in male than in female. Relative length 39% in male against 33% in female. Eight segmented exopodite similar in both sexes. First segment bare and 2nd and 8th segments with long natatory bristles. End segment with one additional shorter bristle.</p>			
<p>Endopodite bigger in male. First endopodite segment with curved ‘a’ bristle and ‘b’ bristles. Second segment with short ‘c’ and ‘d’ bristles, ‘e’ bristle absent, and distally with ‘f’ and ‘g’ bristles. Third segment with ‘h’, ‘i’ and ‘j’ bristles. ‘c’, ‘d’ and ‘e’ bristles absent in female endopodite.</p>			
<p>Right clasping organ well developed, middle portion being broader and distal portion tapering. Five or six folds present at the distal end. Distal 2/3 part of the clasping organ bent at an acute angle with the proximal part. Left clasping organ less developed and smoothly curved. Proximal two third part uniformly thick and narrowing distally.</p>			
<p>Mandible: Toothed edge of coxale with 8 triangular teeth. Distal tooth list with two large spiny teeth and 15 small teeth. Proximal toothe list with one large spiny tooth and 13 small blunt teeth of uniform size and arrangement. Masticatory pad with minute spines or hairs. Basal endite with 6 triangular teeth and two short tube bristles.</p>			

An additional large triangular teeth present laterally of the two distal teeth. Two bristles on anterior margin of basale endite placed separately. Exopodial bristle present but epipodial bristle absent. Endopodite segments shaped like that of *A. ventricosa* (Poulsen, 1969) with same number and type of bristles.

Maxilla: Plumose bristle of basale not as stout as that of *A. cucullata* or *A. ventricosa*. First segment with six long bristles on anterior margin and 4 bristles on posterior margin. End segment short with 2 stout and 3 slender bristles. Endites of precoxale and coxale as in other species of the genus and with the same number of bristles as in *A. ventricosa*.

Furca: Six pairs of claws gradually decreasing in length, last pair of claws having half the length of the first. Unpaired bristles present behind the claws.

Copulatory organ: Flattened and large, about one third of carapace length. Broader at middle and ends in a pointed tip. Vas deferens open almost at the distal end of the organ provided with a transversely placed spine.

Frontal organ: Weakly divided into two parts, but with uniform thickness. Distal end rounded. Male frontal organ, slightly over reaching stem of first antenna, female frontal organ shorter, with a relative length 19% against 23% in male.

Sex attributes:

Descriptive characters:

Meristic characteristics:

Feeding habit:

Main food :

Feeding type :

Additional remarks:

A. striata differ from other species of the genus in the smaller size, less developed rostrum, lesser number of bristles on appendages and presence of six pairs of claws on furca. Also frontal organ in *A. striata* is short and with rounded end where as in other species of the genus it is long and slender.

Size and age:

Maximum length (cm) (male / female/ unsexed)

Ref. No.:

Length: 0.6-0.7 mm

Height: 60% of length in male and 70% in female

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: Characteristics: Abundance:	Ref. No.:
Biochemical aspects: Proximate analysis: moisture/ fat/ protein/ carbohydrate/ash Electrophoresis:	Ref. No. Ref. No.
SPAWNING INFORMATION:	
Locality: Season: Fecundity: Comment:	Main Ref:
<p>MAJOR PUBLICATIONS (INDIAN): (include review articles, monographs, books etc.)</p> <p>George Jacob, 1977. Studies on planktonic ostracods of the Northern Indian Ocean. <i>Ph.D Thesis, University of Cochin</i>, 184pp.</p> <p>George, J and Vijayalakshmi Nair, R., 1980. Planktonic ostracods of the northern Indian Ocean. <i>Mahasagar-Bull. Natn. Inst. Oceanogr.</i>, 13(1): 29-44.</p> <p>LIST OF INDIAN EXPERTS(Name, address, phone, fax, e-mail etc.)</p> <ol style="list-style-type: none"> 1. Dr. Jacob George Pulickal Soonoro Church Road Elamkulam Kochi – 682 020 2. Dr. Vijayalakshmi R. Nair HB/50, “Vijaya” South Bridge Avenue, Panampilly Nagar, Kochi - 682036 Tel: 0484 - 2316999 Fax: 0484 - 2324972 e – mail: vijayalakshmi40@hotmail.com 3. Dr. Rosamma Stephen Scientist, National Institute of Oceanography Regional Centre, Kochi – 682 014 Phone: 2390814, Res – 2203087 Email rosa@niokochi.org <p>ACKNOWLEDGEMENT: (List of persons who contributed , modified or checked information)</p>	