

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>Orthoconchoecia atlantica</i> (Lubbock), 1856 Common Name (if available):		
Synonyms	Author(s)	Status
<i>Halocypris atlantica</i>	Lubbock	1856
<i>Conchoecia atlantica</i>	Muller	1906
<i>Orthoconchoecia bispinosa</i>	Granata and Caporiacco	1949
<i>Conchoecia atlantica</i>	Deevey	1968
<i>Orthoconchoecia atlantica</i>	Poulsen	1973
Classification:		
Phylum: Arthropoda	Sub- Phylum	
Super class	Class: Crustacea	Sub- Class: Ostracoda
Order: Myodocopa	Sub Order: Halocypridina	
Super Family:	Family: Halocyprididae	Sub-Family: Conchoecinae
Genus: <i>Orthoconchoecia</i>	Species: <i>atlantica</i>	
Authority: Lubbock		
Reference No. Lubbock, J., 1856. On some Entomostraca collected by Dr. Sutherland, in the Atlantic Ocean. <i>Trans. Ent. Soc. London</i> , 4 : 8-37.		
Geographical Location: Reported as widely distributed in Atlantic, Pacific and Indian Oceans. These were very abundant in the whole of the Arabian Sea and Bay of Bengal.		
Latitude:	Place:	
Longitude:	State:	

Environment

Fresh water: Yes/ No

Habitat : Marine Salinity : 31.1-36.7 ‰

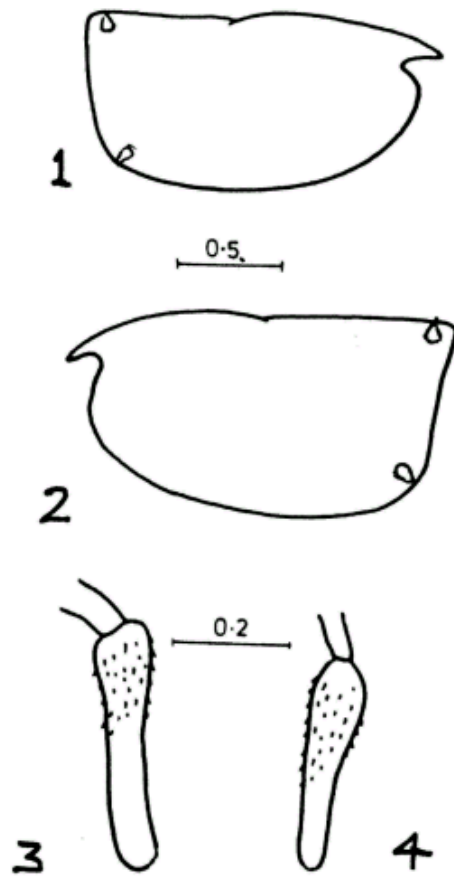
Brackish : Yes/ No

Migrations : Temperature : 12.1-30.4 °C

Salt water : Yes ✓ / No

Depth range :

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



Orthoconchoecia atlantica (Figs. 1-4)

Fig. 1. Male – carapace, lateral view

Fig. 2. Female – carapace, lateral view

Fig. 3. Male – frontal organ

Fig. 4. Female – frontal organ

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:

Carapace:- Length 3.2 to 4.5 mm. Females are larger in size than male. Height of carapace about half of its length. A large species, distinguished by the size and characteristic shape of carapace. Antero-ventral and postero-ventral corners rounded. Postero-dorsal corners distinct. Height of carapace increase posteriorly. Asymmetric glands in the usual place.

First antenna:- Male: The 'e' bristle longer than the carapace, provided with about 65-75 pairs of more or less uniform proximally pointing spines and just distal to it, 4 distally pointing slender spines and more distally 1 or 2 spines present. The 'd' bristle provided with 14-16 spines increasing in length distalwards, level with the distal half of the armature of 'e' bristle. At the same level 'b' bristle has 4-5 closely placed spines and more proximally 4-5 irregularly placed spines. The 'c' bristle is slender and half as long as 'b' bristle. The 'd' bristle is slightly longer than 'b' bristle and half as long as 'e' bristle.

Female: The 'e' bristle with 12-15 spines posteriorly and very few anteriorly.

The surface of the stem in both male and female covered with minute spines and the distal end with longer spines.

Second antenna:- Male: Both 'a' and 'b' bristles provided with hairs. In some 'c' and 'd' bristles or one of them is long. The 'h', 'i' and 'j' bristles with shafts. Shaft of the 'h' bristle bulbous. Right clasping organ with 2 small processes on its inner side

and with about 10 furrows and a bent papilla. Left clasping organ has no furrows but papilla present.

Female: The 'h' bristle not bulbous. One or two bristles present at the 'c' - 'd' bristles position.

Mandible:- Toothed edge of coxale with 9 teeth. Tooth lists with a lesser number of teeth than other species of the genus. Distal list with about 12 and proximal list with about 15 teeth. Masticatory pad with 3-4 narrow round flaps. Epipodial bristle is long and spine-like. The bristles of the ventral margin of first endopodite segment are also comparatively longer.

Maxilla:- Of the 6 anterior bristles, 2 are extremely long.

Copulatory limb:- More or less straight organ with round end and triangular appendage.

Furca:- Unpaired bristle present behind the furcal claws.

Frontal organ:- Proximal part broader and covered with spines and distal end is rounded in both male and female.

Sex attributes:

Descriptive characters:

Meristic characteristics:

Feeding habit:

Main food :

Feeding type :

Additional remarks:

The species of the genus are supposed to be characterised by long 'c' bristle and short 'd' bristle of second antenna. In females only one long bristle is present and the assumption is that it is 'c' bristle. A variation of this rule is observed in females of *O. atlantica*. In some female specimens both 'c' and 'd' bristles are long, of which 'd' bristle is longer. So it is quite probable that when one long bristle alone is present it may be 'd' bristle.

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.Characteristics: Abundance:	
Biochemical aspects: Proximate analysis: moisture/ fat/ protein/ carbohydrate/ash	Ref. No.
Electrophoresis:	Ref. No.
SPAWNING INFORMATION:	
Locality:	Main Ref:
Season:	
Fecundity:	
Comment:	
<p>MAJOR PUBLICATIONS (INDIAN): (include review articles, monographs, books etc.) George Jacob, 1977. Studies on planktonic ostracods of the Northern Indian Ocean. <i>Ph.D Thesis, University of Cochin</i>, 184pp. 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 - 316999 Fax: 0484 - 324972 e – mail: vijayalakshmi40@hotmail.com 3. Dr. Rosamma Stephen Scientist, National Institute of Oceanography Regional Centre, Kochi – 682 014 Phone: 390814, Res – 203087 Email rosa@niokochi.org <p>ACKNOWLEDGEMENT: (List of persons who contributed , modified or checked information)</p>	