

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 : √	Flora	Microorganisms
General Category : Invertebrata (Zooplankton), Pelagic amphipoda		
Scientific name & Authority: <i>Metalycaea globosa</i> Stephensen , 1925		
Common Name (if available) :		
Synonyms:	Author(s)	Status
<i>Metalycaea globosa</i>	Stephensen	1925,p.183,fig.71
<i>Metalycaea globosa</i>	Fage	1960,p.6
<i>Metalycaea globosa</i>	Nair	1993 ,p.1171
<i>Lycaea serrata</i>	Bowman & Gruner	1973 ,p.8
<i>Lycaea serrata</i>	Vinogradov et al	1982 ,p.385 ,fig.208
Classification:		
Phylum: Arthropoda	Sub- Phylum: Mandibulata	
Super class:	Class: Crustacea	Sub- Class: Malacostraca
Super Order: Peracarida	Order: Amphipoda	Sub Order: Hyperiidea
Super Family: Platysceloidea	Family: Oxycephalidae	Sub-Family
Genus: <i>Metalycaea</i>	Species: <i>globosa</i>	
Authority: Stephensen		
Reference No.: Stephensen, K., 1925. Hyperiidea- Amphipoda (part 3: Lycaeopsidae, Pronoidae, Lycaeidae, Brachyscelidae, Oxycephalidae, Parascelidae, Platyscelidae). <i>Report on the Danish Oceanographical Expedition 1908-1910, to the Mediterranean and Adjacent Seas</i> , 2 , (D-5): 151- 252.		
Geographical Location: Recorded from the Mediterranean waters , Arabian Sea, south West and south East Indian Ocean .		
Latitude: 60°W to 115°E	Place: Indian Ocean	
Longitude: 30°N to 25 ° S	State:	

Environment

Fresh water : Yes/ No

Brackish : Yes/ No

Salt water : Yes✓/No

Habitat : Marine

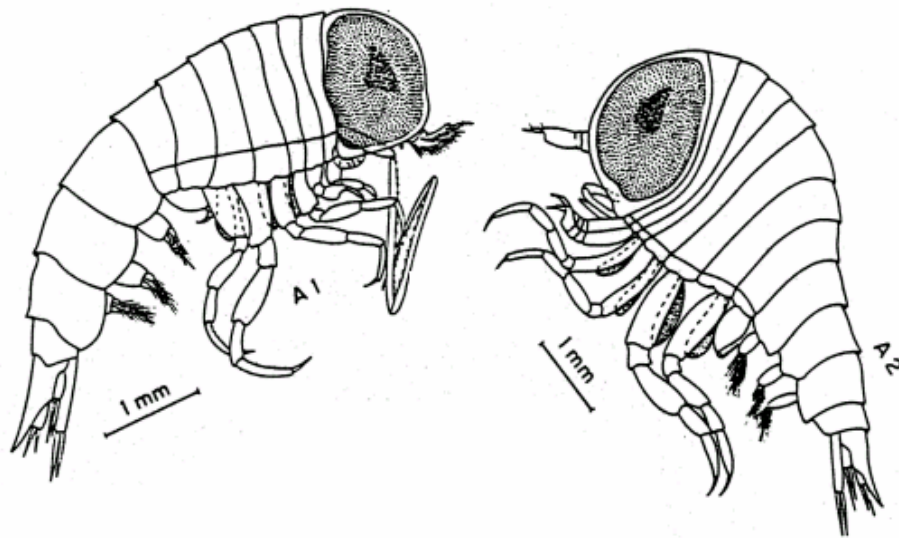
Migrations :

Depth range :0-200m

Salinity :33-35%

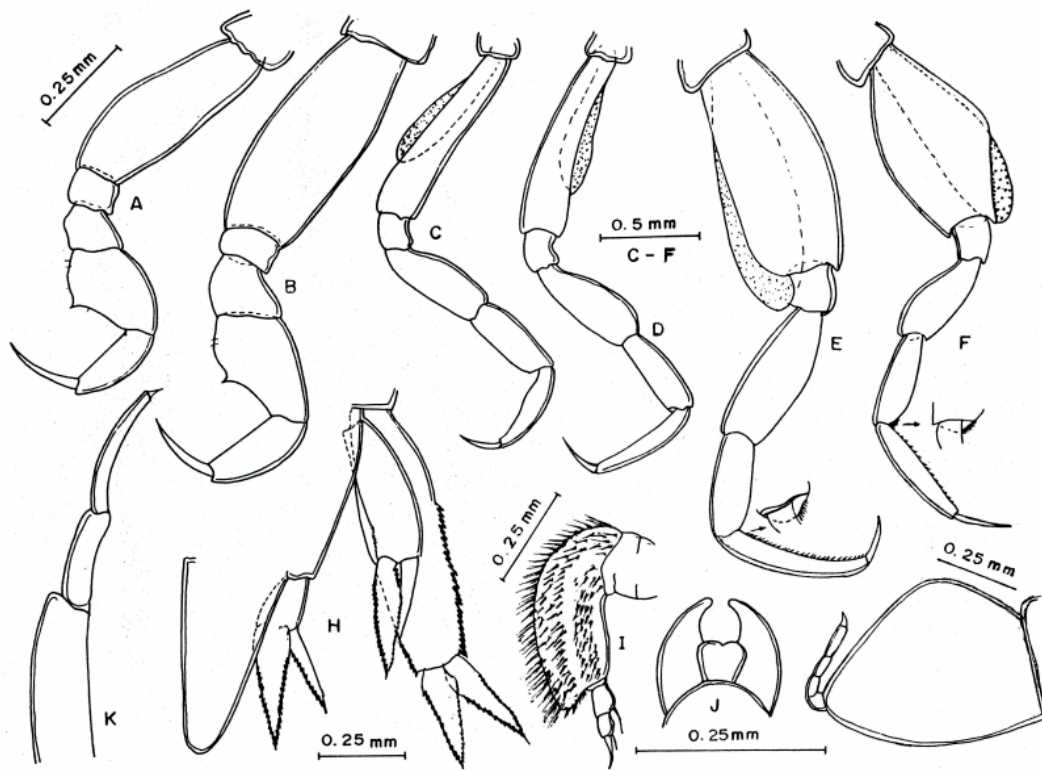
Temperature:20-28°C

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



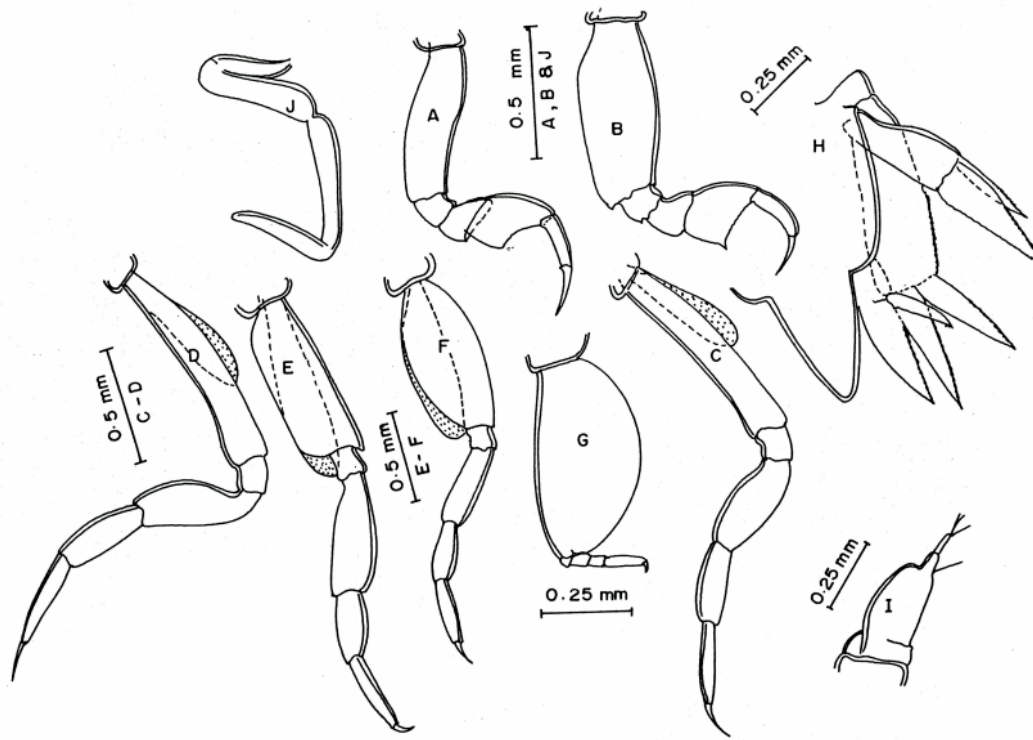
Metalycaea globosa

A1 – adult male, A2 – juvenile male.



Metalycaea globosa (adult male)

A to G – pereopods 1 to 7, H – Uropods and telson, I – antenna 1, J – antenna 2.



Metalycaea globosa (juvenile male)
 A to G – pereopods 1 to 7, H – Uropods and telson,
 I – antenna 1, J – maxilliped, K – mandible.

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: First antenna in male apparently with a short, indistinctly 3 segmented peduncle ; flagellum 4 segmented. Second antenna well developed and 5 segmented. Outer margin of all the segments spinulose. Mandible moderately developed, palp 3 segmented. Maxillae 1&2 presumably absent. Maxillepede with 2 lateral lobes narrowing distalwards and a median low distally bilobed lamina. Carpus of pereopods 1&2 enlarged and produced into a low triangular projection or process making the limb neither simple nor subchelate (weakly sub chelate)

In female, first antenna simple 4-5 segmented. Second antenna absent. Cephalon showing a distinct oral projection. Mandible simple, cutting edge rudimentary, palp absent. Marginal serrations on uropods extremely weak in juvenile females but clear in males. Telson reaching the middle of the endopod of the first uropod , over reaching in the male .

Sex attributes: Dimorphic

Male: The 1st segment of the flagellum of antenna 1 in males has a characteristic projection in the distal part of the anterior margin.

Female: First antenna reduced, second absent.

Descriptive characters:

Meristic characteristics :

Feeding habit: Feeds on micro zooplankton.

Main food :

Feeding type :

Additional remarks : Since its creation, *Metalycaea globosa* Stephensen (1925) has never been recorded by any other worker and hence its validity was considered to be doubtful .The present record of this species from the Indian Ocean shows that it is a valid species . The presence of males, females and juveniles in the IIOE collections helped to make this assertion.

Size and age :

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

Ref. No.:

Male 8.0, Female nil, Juvenile 6.10 to 6.8

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 relational ships:

Eggs and larvae: Ref. No.:
Eggs are stored in the brood pouch and fully developed juveniles hatch out from the brood pouch.
Characteristics:
Abundance:
Biochemical aspects:
Proximate analysis: moisture/ fat/ protein/ carbohydrate/ash Ref. No.
Electrophoresis: Ref. No.

SPAWNING INFORMATION:

Locality: Main Ref:
Season:
Fecundity:
Comment:

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

Pillai, N.K., 1966a. Pelagic Amphipoda in the collections of the Central Marine Fisheries Research Institute, India, Part 1, Oxycephalidae. In *Proceedings of the Symposium on Crustacea, I. Marine. Biological. Association of India*: 169-204.

Nair, K.K.C. and K.V. Jayalakshmy, 1992. Distribution of oxycephalidae (Hyperidea – Amphipoda) in the Indian Ocean – A Statistical Study. *Oceanography of the Indian Ocean*, Oxford and IBH Publications, 201-210. Ed. By B.N. Desai.

Nair, K.K.C., 1993. *Metalycaea globosa* Stephensen, a valid species of oxycephalidae (Amphipoda, Hyperidea). *Journal of Plankton Research*, **15**: 1171-1176.

Nair, K.K.C (1995) Taxonomic Features And Identification Of Oxycephalidae, *Mahasagar*, Vol.28. No 1&2.

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

Dr.K.K.C.Nair
Scientist-In-Charge
R.C. of NIO,
Post Box-1616
Kochi – 682 014

Dr. N. Krishna pillai
“Radhika”
65- Champaka Nagar
Bakery Junction
Trivandrum-695 001

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