

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 : Invertebrata (Zooplankton),Pelagic amphipod		
Scientific name & Authority : <i>Cystisoma fabricii</i> Stebbing , 1888 Common Name (if available) :		
Synonyms:	Author(s)	Status
<i>Cystisoma fabricii</i>	Stebbing	1888: 1333
<i>Cystisoma fabricii</i> (<i>Thaumatops</i>)	Woltereck	1903: 457
<i>Cystisoma fabricii</i> (<i>Thaumatops</i>)	Stephensen	1918: 63
<i>Cystisoma fabricii</i>	Barnard	1932: 272
- <i>loveni</i> (<i>Thaumatops</i>)	Bovallius	1889: 52
- <i>coalita</i> (<i>Thaumatops</i>)	Woltereck	1903: 457
Classification:		
Phylum: Arthropoda	Sub Phylum: Mandibulata	Sub Class: Malacostraca
Super class	Class: Crustacea	Sub Order: Hyperiidea
Super Order: Peracarida	Order: Amphipoda	Sub-Family
Super Family: Vibiliioidea	Family: Cystisomatidae	
Genus: <i>Cystisoma</i>	Species: <i>fabricii</i>	
Authority: Stebbing, T.R 1888. Reference No.. Report on the Amphipoda collected by H.M.S. "Challenger" during the years 1873-76. Rept. Sci. Res. "Challenger", Zool., vol. 29 (pt. 1-3), 1737 pp.		
Geographical Location: Found in the Atlantic Ocean between 50 ° S and 50 ° N, the tropical part of the Indian Ocean, and southwestern part (north of the Subtropical Convergence) and eastern equatorial part of the Pacific Ocean.		
Latitude:	Place:	
Longitude:	State:	

Environment

Fresh water: Yes/ No

Habitat : Marine

Salinity :

Brackish : Yes/ No

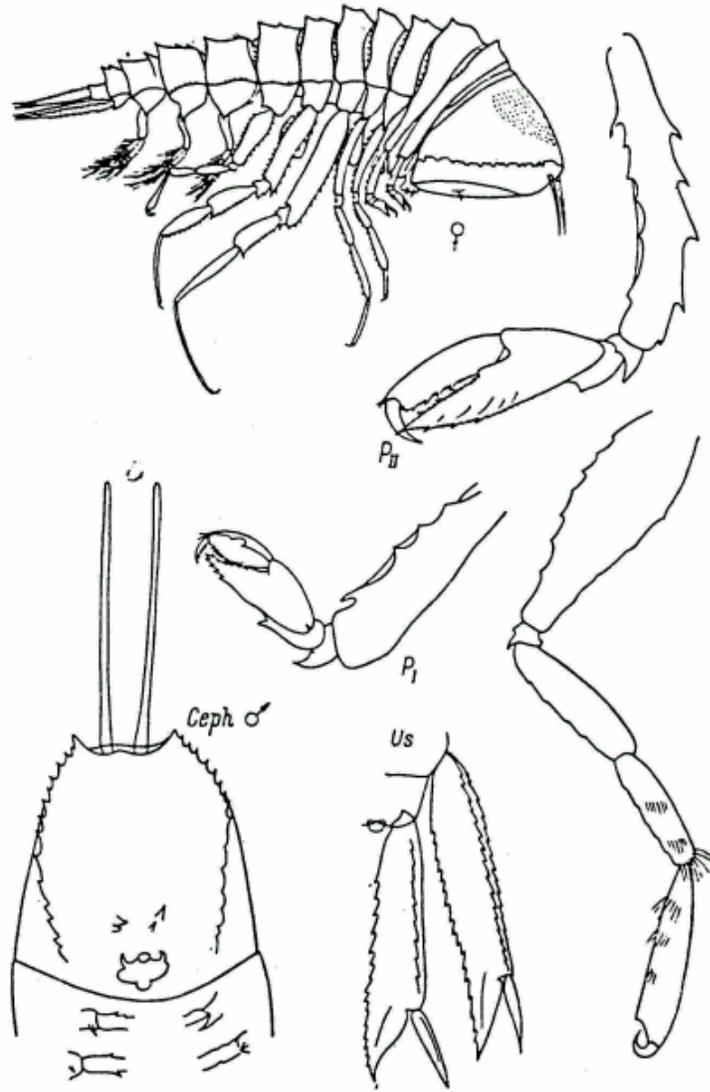
Migrations :

Temperature :

Salt water : Yes/No

Depth range :

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



Cystisoma fabricii Stebbing. (female- after Bovallius, 1889; P₁, P₂- after Stebbing, 1888; Ceph male, Us – after Stephensen, 1918).

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.:	
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: The head in females is slightly longer than wide, the dorsal side convex, the ventral side flat, slightly convex only in the region of the ventral denticles. In males the head is short and high (in lateral view almost wedge-shaped), obliquely truncate on the frontoventral plane, and convex in the region of the ventral denticles. Antennae I in females are shorter than the head, in males much longer; the antennal bases are contiguous; the flagellum is triquetrous and has an acute apex. There are 12-16 marginal denticles while the ventral denticles only two pairs: the anterior denticles are highly developed and twice larger than the glandular; arcuate rows of denticles are absent. The mandibles have one central, very acute denticle, slightly curved medially. The height of the somites of the pereon is significantly less than that of the head in females, but similar in males. The coxal spines are smaller than in <i>C. pellucida</i> but nonetheless quite distinct. The 2 nd segment of pereopods I is equal in length to the rest of the leg; the process of the 5 th segment is large, denticulate, and extends almost to the base of the claw; the 6 th segment is 1.5-2 times longer than wide; the margins of both the 5 th and 6 th segments are carinate and denticulate; the claw is more than 1/3 the length of the 6 th segment. The 2 nd segment of pereopods II is slightly longer than the other segments together, narrow, with three-four denticles on the carinate posterior margin, a denticulate anterior lateral keel, and smooth anteromedial margin, (keels of pereopods I-II in <i>C. fabricii</i> more weakly developed than in <i>C. pellucida</i>); the length of the basal part of the 5 th segment is more than the maximum width but less than the length of the chelate process extending beyond the base of the claw; the 6 th segment is narrow, with convex anterior and straight denticulate posterior margin; it tapers slightly distally and is four times longer than wide; the anterior keels are denticulate, projecting with the denticles along the sides of the claw. The 2 nd -5 th segments of pereopods III-IV have a denticulate carinate posterior margin and a smooth anterior margin. The 2 nd segments of pereopods III is approximately equal to the length of the 3 rd -5 th segments together, shorter than in	

pereopods II, and slightly curved forward ; the 4th segment is shorter than the 5th ; with a weakly denticulate posterior keel; the surface of the 4th-6th segment bears transverse rows of resilient setae which are more highly developed in the distal part of the 5th segment; the claw is small and narrow. The proportions and ornamentation of pereopods IV are approximately the same but the leg itself is large , with the result that pereopods III hardly extend to the end of its 5th segment; the 6th segment in females is about equal to the 5th but in males considerably shorter. Pereopods V-VII have broadened proximal segments, especially in large individuals. Pereopods V constitute about $\frac{3}{4}$ the body length of the crustacean; the 2nd segment is approximately six times longer than wide, its anterior margin distally with a sharp lobe extending to the end of the 3rd segment; the 5th segment is longer than the 4th but slightly shorter than the 2nd, its anterior margin denticulate and tapering distally; the 6th segment is longer than the 5th, narrow, without ornamentation, and bent forward at the base. Pereopods VI extend to the end of the 5th segment of pereopods V. The 2nd segment of pereopods VII is broadened proximally, its length in males and large females not more than three times the maximum width, in females smaller than 70mm about four times the width; the margins are denticulate and proximally convex, and the width along the distal margin is half the maximum width; the 4th-6th segments are almost equal in size and the anterior margin weakly denticulate; in males the 6th segment is narrow, linear, and without projections and the claw small and barely curved; in females the 6th segment is distally broadened, somewhat bulged, and the distal part of the anterior margin terminates, in an acute denticle not reaching the level of articulation of the claw; the latter originates from the projection of the posterior distal part of the segment and hence the notch between the denticle and the base of the claw is anteriorly truncate; the claw is short, very deeply curved, with its apex toward the middle of the notch, and does not extend to the anterior denticle (in very large females the denticle may be less prominent and the projection rounded).

The urosome is short and somewhat longer than the last somite of the pleon. The urosomites are equal in length but the last one narrower. The uropods have broad basipodites, their length in females 2.5-3 times, in males 3-4 times the width. The endopodites are highly broadened proximally; the exopodites are equal in length but very narrow and triquetrous. The margins of the basipodites and rami are denticulate; the rami of uropods I are about 1/3, of uropods III half the length of the basipodite.

Sex attributes:

Dimorphic

Male: 1st antenna well developed, female: 1st antenna reduced.

Descriptive characters:

Meristic characteristics:

Feeding habit:

Main food :

Feeding type :

Additional remarks:

Size and age:

Maximum length (cm) (male / female/ unsexed) Ref. No.:

Length of females up to 80mm, of males rarely more than 50mm.

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: Ref. No.:

Eggs and larvae: Characteristics: Abundance: Biochemical aspects: Proximate analysis: moisture/ fat/ protein/ carbohydrate/ash Electrophoresis:	Ref. No.: Ref. No. Ref. No.
SPAWNING INFORMATION: Locality: Season: Fecundity: Comment:	Main Ref:
MAJOR PUBLICATIONS (INDIAN): (include review articles, monographs, books etc.) LIST OF INDIAN EXPERTS (Name, address, phone, fax, e-mail etc.) <div style="margin-left: 40px;"> <p>Dr. K.K.C. Nair Scientist-In-Charge R.C. of NIO, Post Box-1616 Kochi – 682 014 Email kkcnair@niokochi.org</p> <p>Dr. N. Krishna pillai “Radhika” 65- Champaka Nagar Bakery Junction Trivandrum-695 001</p> </div>	
ACKNOWLEDGEMENT: (List of persons who contributed, modified or checked information)	