

NATIONAL BIORESOURCE DEVELOPMENT BOARD

Dept. of Biotechnology
Government of India, New Delhi

For office use:

MARINE BIORESOURCES

FORMS DATA ENTRY: Form- 1(general)

Fauna: <input checked="" type="checkbox"/>	Flora	Microorganisms																								
General Category: Invertebrata (Zooplankton), Pelagic amphipod																										
<p>Scientific name & Authority: <i>Phronimopsis spinifera</i> Claus, 1879 Common Name (if available):</p> <table border="0"> <thead> <tr> <th>Synonyms:</th> <th>Author(s)</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td><i>Phronimopsis spinifera</i></td> <td>Claus</td> <td>1879 a: 64</td> </tr> <tr> <td><i>Phronimopsis spinifera</i></td> <td>Bovallius</td> <td>1889:326</td> </tr> <tr> <td><i>Phronimopsis spinifera</i></td> <td>Chevreur & Fage</td> <td>1925:408</td> </tr> <tr> <td><i>Phronimopsis spinifera</i></td> <td>Shoemaker</td> <td>1945a:242</td> </tr> <tr> <td>- <i>sarsi</i></td> <td>Bovallius</td> <td>1887a: 23; 1889:320</td> </tr> <tr> <td>- <i>tenella</i></td> <td>Stebbing</td> <td>1888:1347</td> </tr> <tr> <td>- <i>tumida</i></td> <td>Vosseler</td> <td>1900:9</td> </tr> </tbody> </table>			Synonyms:	Author(s)	Status	<i>Phronimopsis spinifera</i>	Claus	1879 a: 64	<i>Phronimopsis spinifera</i>	Bovallius	1889:326	<i>Phronimopsis spinifera</i>	Chevreur & Fage	1925:408	<i>Phronimopsis spinifera</i>	Shoemaker	1945a:242	- <i>sarsi</i>	Bovallius	1887a: 23; 1889:320	- <i>tenella</i>	Stebbing	1888:1347	- <i>tumida</i>	Vosseler	1900:9
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<p>Geographical Location: A circumtropical species known from the tropical regions of the Atlantic, Indian, and Pacific oceans, the Mediterranean and Red seas. It is found in surface layers up to a depth of 300-500 m.</p> <table border="0"> <tr> <td>Latitude:</td> <td>Place:</td> </tr> <tr> <td>Longitude:</td> <td>State:</td> </tr> </table>			Latitude:	Place:	Longitude:	State:																				
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Environment

Freshwater: Yes/ No

Habitat: Marine

Salinity:

Brackish: Yes/No

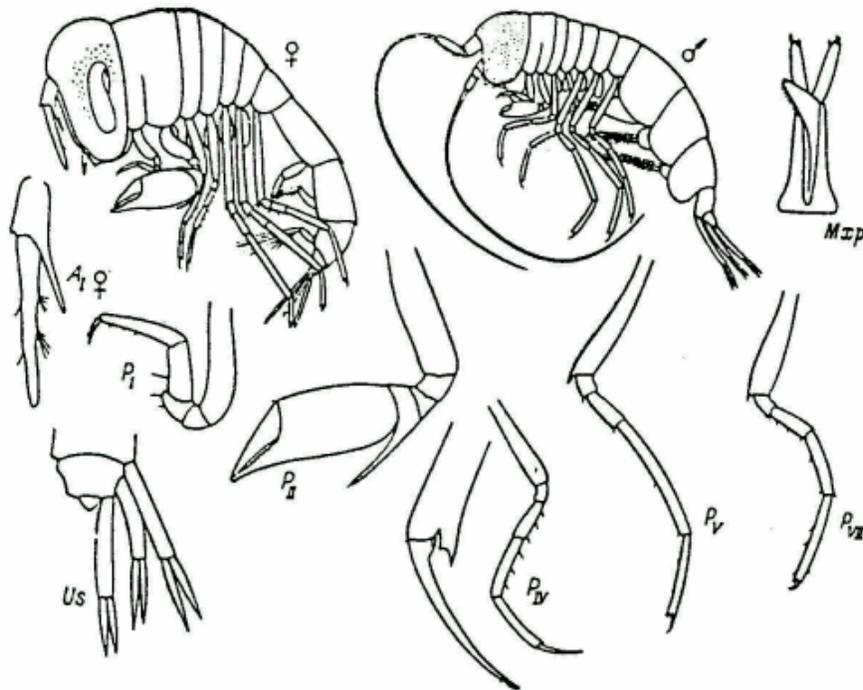
Migrations:

Temperature:

Salt Water: Yes/ No

Depth range :

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



Phronimopsis spinifera Claus (after Bovallius, 1889)

DATA ENTRY FORM: Form –2 (Fish/ Shell fish/ 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:

Diagnostic characteristics: The integument is thin and transparent. The body of males is well proportioned; in females the pereon is thickset but the pleon is very narrow. The first two somites of the pereon are fused in the dorsal part and higher than the next two somites, which in turn are higher than the posterior three somites. The head in females is longer than two, in males longer than three somites of the pereon. The antennal socket is well developed and hence the anterior side of the head is flat while the lower side is round. The interantennal lobe is absent.

Antennae I and II in males are approximately equal in length, flagella-form, and only slightly shorter than the body. In antennae I the 1st segment of the peduncle is thick and cylindrical while the next two segments are very short; the 1st segment of the flagellum is conical; the 2nd segment is strong with a spoon-shaped process in the lower part of the distal margin; the flagellum has 17 segments. The flagellum of antennae 11 likewise has 17 segments. Antennae 1 in females are barely longer than the head; the lower distal angle of the only segment of the peduncle is stretched into a long wedge-shaped process that is longer than the segment; the flagellum is elongated-conical and much longer than the peduncle. Antennae 11 are slightly longer than the peduncle of antennae 1 and flagellum one-segmented, conical, and approximately the same length as the peduncle.

The epistome is conical and distinctly larger than in other genera of the family. The mandibles have a narrow body, sharply denticulate cutting edge, an accessory plate (left mandible), a broad dentate process similar to that in representatives of the genus *Parathemisto*, and (in males) a fairly strong three-segmented palp. In maxillae I the palp broadens distally and has a round apex; the outer lobe is conical, armed with strong spines, and its surface covered with thin short setae. The basal segment of the maxillipeds is narrow and long, longer than the narrowly lanceolate

outer lobes, and the fused inner lobes more than half the length of the outer lobes.

The 6th segment of pereopods I is narrowly conical and 1.5 times longer than the 5th; the claw is strong, slightly curved, and bears numerous thin setae on the surface; the 5th and 6th segments together are longer than the 2nd segment. Pereopods II are longer and stronger than pereopods I and devoid of any ornamentation; the 5th segment is cupulate and its round upper lobe and acute lower lobe cover the proximal part of the broad and strong 6th segment; the 4th and 7th segments form a well-developed strong chela. Pereopods III and IV are similar in structure and notably longer than pereopods II; the linear 2nd segment is somewhat shorter than the 5th and 6th segments together; the 4th and 5th segments are armed with strong setae on the posterior margin; the 6th segment is slightly curved, thin, and the posterior distal angle stretched into an acute denticle which together with the long thin claw forms a poorly developed chela. Pereopods III-IV, and devoid of any ornamentation; the 6th segment is somewhat broadened in the distal part. Its posterior distal angle stretched into a denticle, which together with the highly curved claw forms a small chela.

The peduncle of the uropods is thin and long; the rami are narrow, lanceolate, and approximately equal in length. The telson is small, its apex round, the margins concave in the distal part.

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 sexually mature species 3-6mm.

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 relation ships:

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="text-align: center;"> <p>Dr. K.K.C. Nair Scientist-In-Charge R.C. of NIO, Post Box-1616 Kochi – 682 014</p> <p>Dr. N. Krishna pillai “Radhika” 65- Champaka Nagar Bakery Junction Trivandrum-695 001 Email kkcnair@niokochi.org</p> </div> ACKNOWLEDGMENT: (List of persons who contributed, modified or checked information)	