

**NATIONAL BIORESOURCE DEVELOPMENT BOARD**

Dept. of Biotechnology  
Government of India, New Delhi

For office use:
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**MARINE BIORESOURCES**

**FORMS DATA ENTRY: Form- 1(general)**

Fauna: <input checked="" type="checkbox"/>	Flora	Microorganisms
General Category: Invertebrata (Zooplankton), Pelagic amphipod		
Scientific name & Authority: <i>Themistella fusca</i> (Dana, 1852)		
Common Name (if available):		
Synonyms:	Author(s)	Status
<i>Themistella fusca (Lestrigonus)</i>	Dana	1852: 983
<i>Themistella fusca</i>	Bate	1862: 291
<i>Themistella fusca (Hyperielli)</i>	Bovallius	1887a; 20
<i>Themistella fusca</i>	Bowman	1973: 67
<i>-steeenstrupi</i>	Bovallius	1887a: 23; 1889: 313
<i>-thoracica(Hyperia)</i>	Vosseler	1901:73
Classification:		
Phylum: Arthropoda	Sub Phylum:	Sub Class: Malacostraca
Super class	Mandibulata	Sub Order: Hyperiidea
Super Order: Peracarida	Class: Crustacea	Sub-Family
Super Family:	Order: Amphipoda	
Phronimoidea	Family: Hyperiidae	
Genus: <i>Phronima</i>	Species: <i>solitaria</i>	
Authority: (Dana, 1852)		
Reference No.: Dana, J.D. 1852. On the classification of the Crustacea Choristopoda or Tetradeapoda. <i>Amer. J. Sci. Arts</i> , ser. 2, vol. 14, pp. 297-316.		
Geographical Location: Tropical (Canary Islands) and equatorial (Barbados Island, Bay of Guinea) regions of the Atlantic Ocean, the Arabian Sea, and tropical part of the Pacific Ocean (central regions of the Gulf of California, coastal regions of Nicaragua and Guatemala). It is a surface species.		
Latitude:	Place:	
Longitude:	State:	

Environment

Freshwater: Yes/ No

Habitat: Marine

Salinity:

Brackish: Yes/No

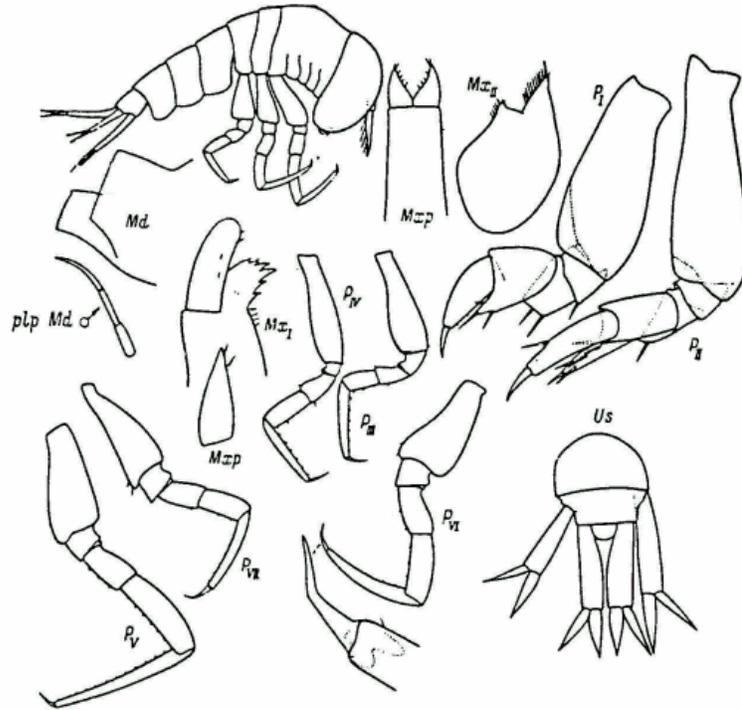
Migrations:

Temperature:

Salt Water: Yes/No

Depth range :

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



*Themistella fusca* (Dana), female (after Bowman, 1973)

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:		
<p>The anterior part of the body is very short; the head and the pereon together are shorter than the pleon. The somites of the pleon are very large. The integument is thin and transparent. The anterior part of the head is flat and the lower part rounded.</p> <p>Antennae I in males exceed the length of the head, pereon, and pleon together; the 1<sup>st</sup> segment of the peduncle is thick and longer than the next two segments together; the conical 1<sup>st</sup> segment of the flagellum is the same length as the entire peduncle; the number of segments in the flagellum exceeds 20. Antennae II are somewhat longer than the entire body of the crustacean; the number of segments in the flagellum reaches 21. Antennae I in females are equal to the head in length.</p> <p>The process of the 5<sup>th</sup> segment of pereopods I is very slightly shorter than half the length of the 6<sup>th</sup> segment; the 6<sup>th</sup> segment is longer than the body of the 5<sup>th</sup> segment, its anterior margin convex and smooth, the posterior margin straight and finely denticulate. Pereopods II are somewhat longer than pereopods I; the distal process of the 5<sup>th</sup> segment is 3/4 the length of the posterior margin of the 6<sup>th</sup> segment; the narrowly conical 6<sup>th</sup> segment is somewhat longer than the 5<sup>th</sup> segment; the claw is almost straight and twice shorter than the 6<sup>th</sup> segment. Pereopods IV are somewhat longer than pereopods III; the 2<sup>nd</sup> segment broadens distally; the 5<sup>th</sup> segment of pair III is shorter than in pair IV; the 6<sup>th</sup> segment is narrow, linear, and has short setae along the posterior margin; the claw is slightly curved and 1/3 the length of the 6<sup>th</sup> segment. Pereopods V are longer than the other pairs; the 5<sup>th</sup> segment is longer than the 3<sup>rd</sup> and 4<sup>th</sup> together, the narrow 6<sup>th</sup> segment is equal to the 4<sup>th</sup> and 5<sup>th</sup> together; the 4<sup>th</sup>-6<sup>th</sup> segments bear short equidistant setae along the anterior margin; the claw is approximately 1/6 the length of the 6<sup>th</sup> segment, pereopods VI and VII are similar in structure; in contrast to pair V the 6<sup>th</sup> segment is shorter than the 4<sup>th</sup> and 5<sup>th</sup> together; the claw is 1/4 the 6<sup>th</sup> segment in length and appears as if broken in the distal part.</p>		

The lower posterior angle is broadly rounded in epimerons I and II, in epimeron III stretched and rounded at the apex. The basipodites of the uropods are twice longer than the rami.; the rami are narrowly lanceolate and have an acute apex. The roundish- triangular telson is equal in length and width, its length 1/5 that of the basipodite of uropods III.

Sex attributes:

Dimorphic

Male: 1<sup>st</sup> antenna well developed, female: 1<sup>st</sup> 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 males 4 mm.

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: Biochemical aspects: Proximate analysis: moisture/ fat/ protein/ carbohydrate/ash Electrophoresis:	Ref. No.    Ref. No. Ref. No.
<b>SPAWNING INFORMATION:</b> Locality: Season: Fecundity: Comment:	Main Ref:
<b>MAJOR PUBLICATIONS (INDIAN):</b> (Include review articles, monographs, books etc.) <b>LIST OF INDIAN EXPERTS (Name, address, phone, fax, e-mail etc.)</b>  <div style="margin-left: 40px;"> <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 <a href="mailto:kkcnair@niokochi.org">kkcnair@niokochi.org</a></p> </div> <b>ACKNOWLEDGMENT:</b> (List of persons who contributed, modified or checked information)	