

**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																							
Scientific name & Authority: <i>Phronima curvipes</i> Vosseler, 1901 Common Name (if available): <table border="0"> <tr> <td>Synonyms:</td> <td>Author(s)</td> <td>Status</td> </tr> <tr> <td><i>Phronima curvipes</i></td> <td>Vosseler</td> <td>1901: 27</td> </tr> <tr> <td><i>Phronima curvipes</i></td> <td>Pirlot</td> <td>1929: 114</td> </tr> <tr> <td><i>Phronima curvipes</i></td> <td>Shih &amp; Dunbar</td> <td>1963: 2</td> </tr> <tr> <td><i>Phronima curvipes</i></td> <td>Shih</td> <td>1969: 26</td> </tr> <tr> <td><i>Phronima curvipes</i></td> <td>Laval</td> <td>1970: 51</td> </tr> <tr> <td><i>-colletti</i></td> <td>Stephensen</td> <td>1924: 126</td> </tr> </table>			Synonyms:	Author(s)	Status	<i>Phronima curvipes</i>	Vosseler	1901: 27	<i>Phronima curvipes</i>	Pirlot	1929: 114	<i>Phronima curvipes</i>	Shih & Dunbar	1963: 2	<i>Phronima curvipes</i>	Shih	1969: 26	<i>Phronima curvipes</i>	Laval	1970: 51	<i>-colletti</i>	Stephensen	1924: 126
Synonyms:	Author(s)	Status																					
<i>Phronima curvipes</i>	Vosseler	1901: 27																					
<i>Phronima curvipes</i>	Pirlot	1929: 114																					
<i>Phronima curvipes</i>	Shih & Dunbar	1963: 2																					
<i>Phronima curvipes</i>	Shih	1969: 26																					
<i>Phronima curvipes</i>	Laval	1970: 51																					
<i>-colletti</i>	Stephensen	1924: 126																					
Classification: <table border="0"> <tr> <td>Phylum: Arthropoda</td> <td>Sub Phylum: Mandibulata</td> <td>Sub Class: Malacostraca</td> </tr> <tr> <td>Super class</td> <td>Class: Crustacea</td> <td>Sub Order: Hyperidea</td> </tr> <tr> <td>Super Order: Peracarida</td> <td>Order: Amphipoda</td> <td>Sub-Family</td> </tr> <tr> <td>Super Family: Phronimoidea</td> <td>Family: Phronimidae</td> <td></td> </tr> <tr> <td>Genus: <i>Phronima</i></td> <td>Species: <i>curvipes</i></td> <td></td> </tr> </table> <p>Authority: Vosseler, 1901                  Reference No.: Vosseler, I. 1901. Die Amphipoden der Plankton-Expedition. 1. Hyperidea, <i>Erg. Plankton-Exped. Humboldt-Stiftung</i>, vol. 2, G. e.1, 129 pp.</p>			Phylum: Arthropoda	Sub Phylum: Mandibulata	Sub Class: Malacostraca	Super class	Class: Crustacea	Sub Order: Hyperidea	Super Order: Peracarida	Order: Amphipoda	Sub-Family	Super Family: Phronimoidea	Family: Phronimidae		Genus: <i>Phronima</i>	Species: <i>curvipes</i>							
Phylum: Arthropoda	Sub Phylum: Mandibulata	Sub Class: Malacostraca																					
Super class	Class: Crustacea	Sub Order: Hyperidea																					
Super Order: Peracarida	Order: Amphipoda	Sub-Family																					
Super Family: Phronimoidea	Family: Phronimidae																						
Genus: <i>Phronima</i>	Species: <i>curvipes</i>																						
Geographical Location: Distributed in the tropics and subtropics of the World Ocean and in the Mediterranean Sea, reports are lacking from the central part of the Pacific Ocean although the species is common in the Indo-West Pacific region. Latitude: _____ Place: _____ Longitude: _____ State: _____																							

Environment

Freshwater: Yes/ No

Habitat: Marine

Salinity:

Brackish: Yes/No

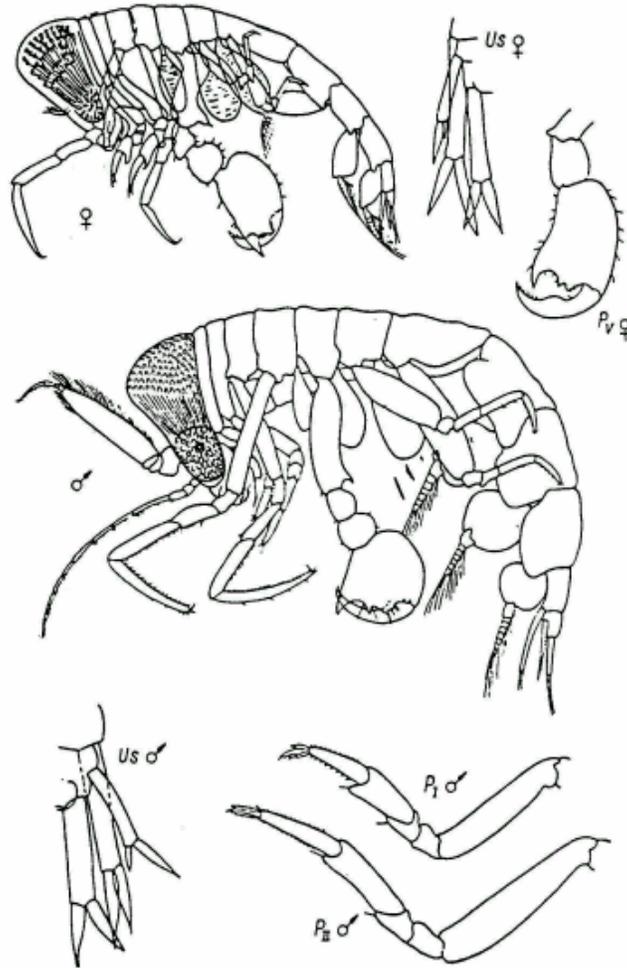
Migrations:

Temperature:

Salt Water: Yes/No

Depth range :

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



*Phronima curvipes* Vosseler ( female, PV of female, Us- after Vosseler, 1901; rest – after Laval, 1968b).

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 antennae are well developed in males. The flagellum of antennae I is five to seven segmented, in antennae II seven-to nine-segmented and equal to antennae I in length.

Pereopods V have an S-shaped 2<sup>nd</sup> segment, which is particularly noticeable in females the posterior distal angle of this segment extends behind and is acute; the 4<sup>th</sup> segment in females is almost spherical, in males the width of the segment is more than its length; the 5<sup>th</sup> segment is trapezoid, in females its length is more than its width, in males the relation is reversed; the maximum width along the distal margin is more than the length; the maximum width along the distal margin is more than the length the posterior proximal angle of the 5<sup>th</sup> segment projects roundly, particularly in males in which the length of the posterior margin is more than twice the length of the anterior margin; the anterior distal tooth is strong, slightly curved and exceeds the height of the medial protuberance of the distal margin, the medial protuberances is triangular in females, more or less roundish in males, and uniformly denticulate posteriorly; the medial denticle is developed only in males. The 6<sup>th</sup> segment of pereopods V in females passes slightly beyond the anterior margin of the 5<sup>th</sup> segment in males is almost the same length as the distal margin of the 5<sup>th</sup> segment a low protuberance is noticeable in the distal part of the 6<sup>th</sup> segment.

Uropods II are appreciably narrower and shorter than the rest, with a very short endopodite, which in males is at least half the length of the exopodite.

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: The males of *P. curvipes* are quite similar to the males of *P. colletti* and *P. pacifica* (for the family *Phronimidae* greater similarity between males than between females of various species is generally characteristic and at times has led to erroneous identifications). The distinguishing features of males of *P. curvipes* are the structural details of the subchela and uropods II.

Size and age:

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

Ref. No.:

Length of adult females 8.5-17 mm, of males 6.0-9.2 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 relation ships:

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