

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 bucephala</i> Giles, 1887 Common Name (if available):		
Synonyms:	Author(s)	Status
<i>Phronima bucephala</i>	Giles	1887: 215
<i>Phronima bucephala</i>	Laval	1970: 47
<i>-colletti</i>	Shih	1969: 21
Classification:		
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>bucephala</i>	
Authority: Giles, 1887		
Reference No: Giles G.M. 1887. Natural history notes from H.M. Indian Marine Survey Steamer "Investigator" on six new amphipods from the Bay of Bengal. <i>J. Asiatic Soc Bengal</i> , Vol. 56, (pt. 2), No. 2, pp. 212-229.		
Geographical Location: Northern and western parts of the India Ocean and also Indo-West Pacific and east part of the Pacific (Nasca ridge).		
Latitude:	Place:	
Longitude:	State:	

Environment

Freshwater: Yes/ No

Habitat: Marine

Salinity:

Brackish: Yes/No

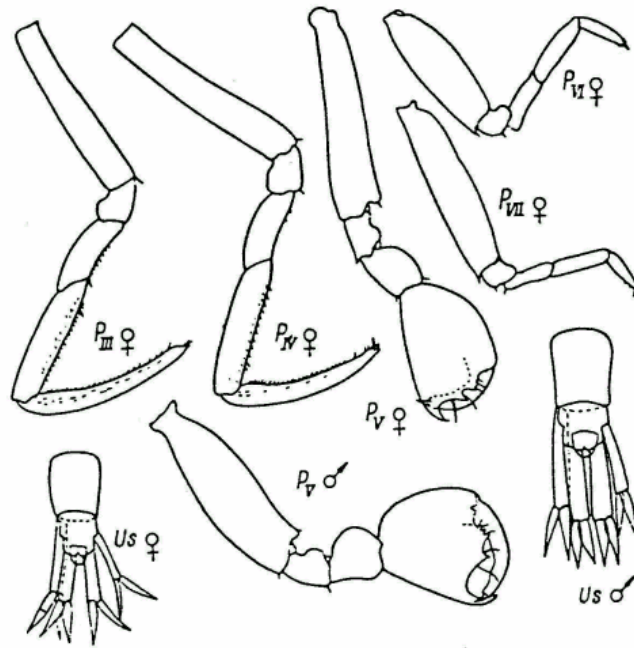
Migrations:

Temperature:

Salt Water: Yes/No

Depth range :

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



Phronima bucephala Giles (after Laval, 1970)

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 body is thin, especially in females, with a delicate integument. The head is weakly bulged and dorsally almost inconspicuous. Both pairs of antennae are well developed in males.

The 2^{ns} segment of pereopods V is longer than the analogous segment of pereopods III; the length of the 4th segment in females is more than its width, while in males in length and breadth are approximately equal, the maximal width in the middle of the segment; the 5th segment of pereopods V in females is almost triangular and the posterior proximal angle does not project; in males this segment is almost rectangular or slightly trapezoid, with a rounded posterior proximal angle which, however, does not project proximally along the margin of the 4th segment; the length of the segment along the anterior margin (including the anterior distal tooth) is more than the maximum width of the segment; the medial structures of the distal margin of the 5th segment are close to those in *P.colletti* and are identical in both sexes; the medial protuberance is not high and has close-set denticles on its posterior margin; the medial denticle is also developed.

The first pair of gills are less reduced than in *P.colletti* although they are slightly smaller in size than the second pair, being nearly $\frac{3}{4}$ its length and $\frac{4}{5}$ its width.

The basipodite of the uropods have parallel sides. The rami of uropods II are approximately equal in length.

Sex attributes:

Dimorphic

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

Descriptive characters:

Meristic characteristics:

Feeding habit:

Main food:

Feeding type:

Additional remarks This species is very close to *P.colletti* and for a long time was considered a geographic variety of the latter, however, Laval (1970) convincingly proved the independent status of the species *P.bucephala*.

Size and age:

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

Ref. No.:

Length of females up to 9 mm, of males 6-7 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.
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> <p>ACKNOWLEDGMENT: (List of persons who contributed, modified or checked information)</p>	