

**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>Vibilia longicarpus</i> Behning, 1913 Common Name (if available):		
Synonyms:	Author(s)	Status
<i>Vibilia longicarpus</i>	Behning	1913: 530
<i>Vibilia longicarpus</i>	Semenova	1973: 174
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: Vibiliodea	Family: Vibiliidae	
Genus: <i>Vibilia</i>	Species: <i>longicarpus</i>	
Authority: Behning, 1913 Reference No.: Behning, A.L. 1913. Die Vibiliiden (Amphipoda Hyperidea) der Deutschen Siidpolar-, Schwedischen Siidpolar-, "Albatross"- und "Michael Sars" – Expeditionen. <i>Zool. Anz.</i> , vol.41, No. 12, pp. 529-534.		
Geographical Location: This is a rare species, found only in the tropical part of the eastern pacific and in the northwestern part of the Indian Ocean.		
Latitude:	Place:	
Longitude:	State:	

Environment

Freshwater: Yes/ No

Habitat: Marine

Salinity:

Brackish: Yes/No

Migrations:

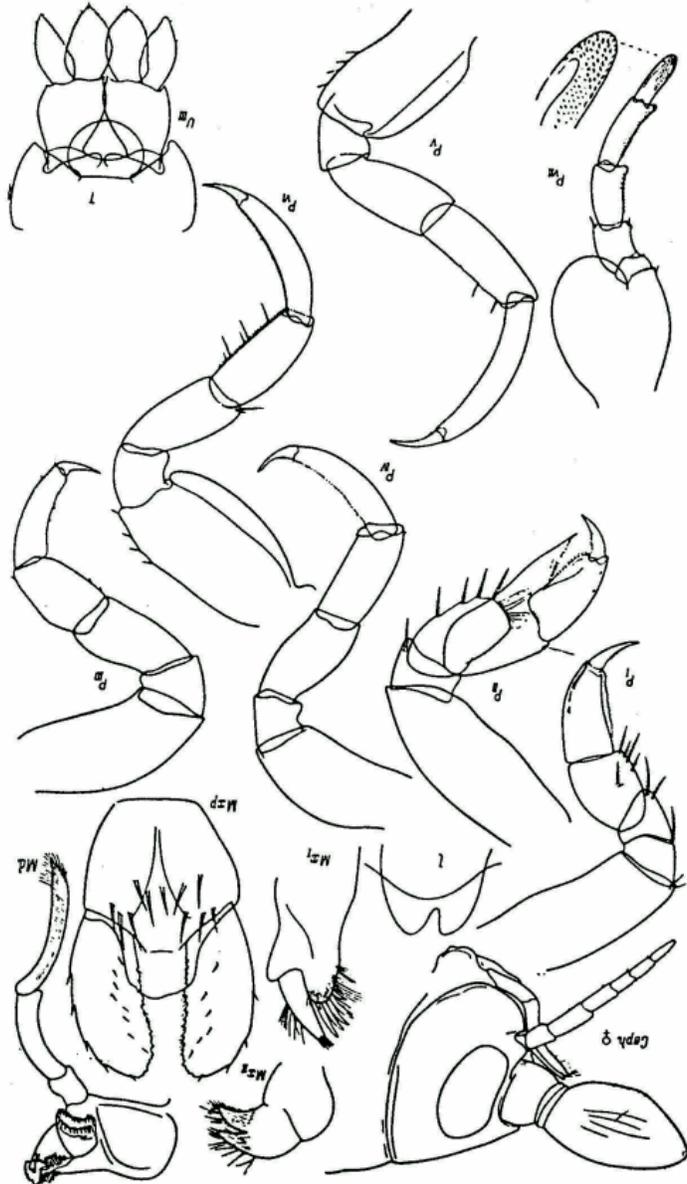
Temperature:

Salt Water: Yes/No

Depth range :

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

*Vibilia longicarpus* Behning



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:

This is a large species of *Vibilia*, close to *V.cultripes*. The body is cylindrical, thickset, and has a smooth thick integument. In females the length of the head is slightly less than its height, in males these are equal. The eyes are large, oval, intensely pigmented, and occupy about 1/3 the lateral surface of the head. Antennae I are about the same length as the head and somite I of the pereon; the flagellum is not longer than the head, elongated-oval, more convex from below; the reduced 2<sup>nd</sup> segment is almost not noticeable. Antennae II of the female are seven-segmented and equal to antennae I in length; the 3<sup>rd</sup> segment is the largest. Antennae II in the male are eight-segmented, longer than antennae I, at least in the length of the two distal segments. The maxillipeds have an almost round medial lobe that extends to the middle of the outer lobes; each outer lobe has a row of six-eight spinules on the surface and four five minute spinules along the outer margin.

The pereon is much longer than the pleon and urosoma together; somites III-VII are approximately equal in size, somites I-II shorter than they. The pereopods are strong. The 2<sup>nd</sup> segment of pereopods I is shorter than the remaining segments together; the 2<sup>nd</sup>-5<sup>th</sup> segments bear one-four setae in the posterior distal angle; the 6<sup>th</sup> segment is longer than the 5<sup>th</sup> and has a denticulate posterior margin; its anterior margin bears two short setae distally; the claw is half the length of the 6<sup>th</sup> segment and denticulate posteriorly. The 2<sup>nd</sup> segment of pereopods II is shorter than the rest of the leg, with a barely convex posterior margin; the process of the 5<sup>th</sup> segment extends to the base of the claw; the anterior distal angle of this segment is armed with a strong seta; the posterior margin of the 6<sup>th</sup> segment and the margin of the process facing it are denticulate. The 2<sup>nd</sup> segment of pereopods III-IV has a straight anterior and a convex posterior margin; the posterior distal angle of the 5<sup>th</sup> segment of pereopods IV and the posterior margin of the 6<sup>th</sup> segment of both III and IV are

finely denticulate; the claw is  $1/3$  the length of the 6<sup>th</sup> segment. Pereopods V-VI are almost equal in length; the 2<sup>nd</sup> segment is equal in length of the 3<sup>rd</sup> and 4<sup>th</sup> segments together, in pereopods V, 1.5 times, in pereopods VI, 2 times longer than wide, and anteriorly bears several spinules distally; the anterior and distal margins of the 5<sup>th</sup> and anterior margin of the 6<sup>th</sup> segment are finely denticulate and the 5<sup>th</sup> additionally bears several equidistant thin spines on the anterior side; the claw is  $2/7$  the length of the 6<sup>th</sup> segment. The 2<sup>nd</sup> segment in pereopods VII is highly broadened, its width almost equal to its length, and the rounded lobe of the posterior margin reaches  $1/3$  the 4<sup>th</sup> segment; the anterior side of the 2<sup>nd</sup>-3<sup>rd</sup> segments is distally ornamented with minute denticles; the 4<sup>th</sup> segment is almost square, finely denticulate distally and bears one seta in the anterior and posterior distal angles; the 5<sup>th</sup> segment is 1.5 times longer than the 4<sup>th</sup>, anteriorly and distally bears very small spinules, and slightly projects above the base of the 6<sup>th</sup> segment; the 6<sup>th</sup> segment is three times longer than wide and its anterior side covered with minute spinules; the anterior distal angle of the 6<sup>th</sup> segment also projects; the 7<sup>th</sup> segment is finger-shaped, shorter and slightly narrower than the 6<sup>th</sup> segment, and its surface anteriorly and distally covered with a squamose pattern that proximally modifies into very minute spinules.

The posterior lateral angles of the urosome project backward. The basipodite of uropods I is denticulate in the distal part of the outer margin and twice longer than wide; the rami are  $2/3$  the length of the basipodite and finely denticulate proximally, more coarsely distally. The basipodite of uropods II is 11.5 times longer than wide and the inner distal angle project; the rami are smooth proximally, unevenly denticulate distally, and equal to or barely shorter than the basipodite. The basipodite of uropods III is about equal in length and width; the rami in females are identical in length and equal to the basipodite; the endopodite is distinctly broader than the exopodite the latter is finely denticulate along the inner margin but without distinct denticles on the outer margin; the endopodite is uniformly denticulate along the outer margin and also in the distal half of the inner margin, and the apical seta lies in a shallow pit. In males the rami are more coarsely denticulate distally than proximally, the endopodite is broader and longer than the exopodite, and the apical seta of the endopodite situated in a deep notch between two denticles. The telson is transversely oval, sometimes round.

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.:

Body length up to 12 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> 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>  Dr. N. Krishna pillai “Radhika” 65- Champaka Nagar Bakery Junction Trivandrum-695 001  <b>ACKNOWLEDGMENT:</b> (List of persons who contributed, modified or checked information)	