

**NATIONAL BIORESOURCE DEVELOPMENT BOARD**

Dept. of Biotechnology  
Government of India, New Delhi

For office use:

**MARINE BIORESOURCES**

FORMS DATA ENTRY: Form- 1(general)

Ref. No.: (please answer only relevant fields; add additional fields if you require)

Fauna : <input checked="" type="checkbox"/>	Flora	Microorganisms
General Category : Invertebrata (Zooplankton),Pelagic amphipod		
Scientific name & Authority : <i>Vibilia caeca</i> Bulycheva, 1955 Common Name ( if available) :		
Synonyms:	Author(s)	Status
<i>Vibilia caeca</i>	Bulycheva	1955: 1050
<i>Vibilia caeca</i>	Vinogradov	1956: 208
Classification:		
Phylum: Arthropoda	Sub- Phylum: Mandibulata	Sub- Class:
Super class	Class: Crustacea	Malacostraca
Super Order: Peracarida	Order: Amphipoda	Sub Order: Hyperiiidea
Super Family: Vibilioidea	Family: Vibiliidae	Sub-Family
Genus: <i>Vibilia</i>	Species: <i>caeca</i>	
Authority: Bulycheva, 1955 Reference No.: Bulycheva, A.I. 1955, Giperiidy (Amphipods-Hyperiiidea) severozapadnoi chastic Tikhogo okeana [Hyperiiids (Amphipoda, Hyperiiidea) of the northwestern part of the Pacific Ocean]. DAN SSSR, vol. 102, No. 5, pp. 1047-1050.		
Geographical Location: Northwestern part of the Pacific Ocean, southwestern part of the Bering Sea, and Bussol Strait. In habits the Indian Ocean (10° N 85° E) and near Australia (Vinogradov,1990, Zeidler 1992).		
Latitude:	Place:	
Longitude:	State:	

Environment

Fresh water: Yes/ No

Habitat : Marine

Salinity :

Brackish : Yes/ No

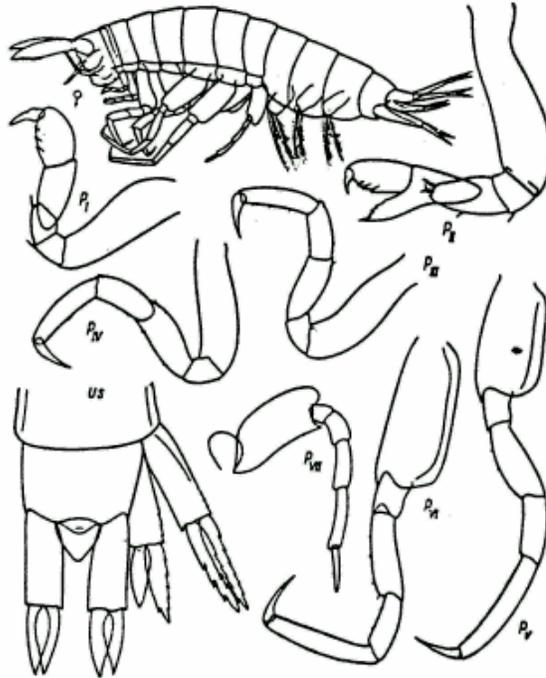
Migrations :

Temperature :

Salt water : Yes/ No

Depth range :

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



*Vibilia caeca* Bulycheva

DATA ENTRY FORM: Form- 2(Fish / shellfish / 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 head is short, with a small rounded rostrum bent downward. Eyes are absent. Antennae I are longer than the head and first three somites of the pereon. The base is deeply thrust into the cephalic capsule and is cylindrical; the length of the 1<sup>st</sup> segment is more than its height; the flagellum is longer than the head and the first two somites of the pereon, its height does not exceed the base, and it is proximally cylindrical but distally flat and obliquely truncate; each of the two apically situated rudimentary segments bears a few setae. Antennae II are short, extend to the middle of antennae I. and four segmented; the distal segment is the longest and bears minute setae on the surface. The maxillipeds have broad outer lobes which are rounded at the ends and have a band of 14-20 spinules running parallel to the inner margin; the medial lobe is small, with a roundly elevated or truncate apex.

The 2<sup>nd</sup> segment of pereopods I is 2/5 the length of the entire leg, its anterior margin proximally convex the posterior margin straight, and the posterior distal angles of both the 2<sup>nd</sup> and 3<sup>rd</sup> segments bears spines; the 6<sup>th</sup> segment is 1.5 times longer than wide, its anterior margin uniformly convex, and the posterior margin with complex denticulation (groups of minute denticles are divided by deeper incisions); the claw is thick, almost straight, and somewhat longer than half the 6<sup>th</sup> segment. The 2<sup>nd</sup> segment of pereopods II is slightly longer than the rest of the leg, its anterior margin convex, and the posterior margin slightly S-shaped; the 3<sup>rd</sup>-4<sup>th</sup> segments bear spines along the anterior margin; the 5<sup>th</sup> segment is the same length along its anterior margin as the 6<sup>th</sup> segment, its process extends to the base of the claw, and its inner margin as well as the anterior margin of the 6<sup>th</sup> segment with complex denticulation (as in pair I); the claw is short, equal to half the length of the 6<sup>th</sup> segment. The 2<sup>nd</sup> segment of pereopods III has an S-shaped anterior margin while its posterior margin is convex; all the segments are smooth and their length ratio 3:1: 2: 1.5:2.3:1. Pereopods IV are slightly longer and thinner and the length ration of the segments 3.5:1:2:1:5:2:4:1.3; the distal part of the posterior margin of the 5<sup>th</sup> segment bears one

very small seta while that of the 6<sup>th</sup> segment has an indistinct denticulate broader with individual setae. Pereopods V-VI are similar; the claw is 2/5 the length of the 6<sup>th</sup> segment; the 4<sup>th</sup> segment has solitary; the claw is 2/5 the length of the 6<sup>th</sup> segment; the 4<sup>th</sup> segment has solitary setae along its anterior margin; the 5<sup>th</sup>-6<sup>th</sup> segments are finely denticulate along the anterior margin. The 2<sup>nd</sup> segment of pereopods VII is less than 1/3 the length of the entire leg, its width is less than its length; its margins are parallel, the posterior lobe stretched downward to the end of the 3<sup>rd</sup> segment, the anterior margin slightly concave, and the distal angle stretched (as in V. Stebbing); in the length ration of the 4<sup>th</sup>-7<sup>th</sup> segments is 9:13:17:10; each successive segment is narrower than the preceding one; the 7<sup>th</sup> segment is finger-shaped and has a characteristic squamose pattern on its surface.

The urosome is somewhat longer than somite III of the pleon but the posterior lateral angles are not prominent. The basipodites of the uropods are longer than the rami and their inner distal angles acutely stretched; the basipodites of uropods I-II extend to the middle of the basipodite of uropods III and bear strong denticles on the outer margin. The rami of uropods I are equal in length; the exopodite has coarsely denticulate outer margin while the proximal 2/3 of the inner margin smooth. The exopodite of uropods II has a coarsely denticulate outer margin while the proximal 3/4 of the inner margin is finely denticulate, with a large denticle distally; the endopodite is shorter than the exopodite, with a finely denticulate outer margin and an uneven inner margin without distinct denticles. The basipodite of uropods III is distally armed with very minute denticles; the rami in both sexes are equal in length similar in shape, and finely denticulate along the sides facing each other; the exopodite has a smooth outer margin; the inner margin of the endopodite is uneven. The telson is elongated-triangular, apically rounded, and extends to the middle 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.:

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 relational 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="margin-left: 40px;"> <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>ACKNOWLEDGEMENT:</b> (List of persons who contributed, modified or checked information)	