

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>Microphasmoides vitjazi</i> Vinogradov, 1960 Common Name (if available): Synonyms: Author(s) Status <i>Microphasmoides vitjazi</i> Vinogradov 1960a: 214		
Classification: Phylum: Arthropoda Sub- Phylum: Mandibulata Sub- Class: Malacostraca Super class: Class: Crustacea Sub Order: Hyperiidea Super Order: Peracarida Order: Amphipoda Sub-Family SuperFamily Lanceoloidea Family: Microphasmidae Genus: <i>Microphasmoides</i> Species: <i>vitjazi</i> Authority: Vinogradov Reference No.: Vinogradov, M. E. 1960a. Hyperiidea Physosomata tropicheskikh raionov Tikhogo okeana [Hyperiidea Physosomata of the tropical regions of the Pacific Ocean]. <i>Tr. In-ta Okeanol. ANSSR</i> , vol. 41 , pp. 198-247.		
Geographical Location: Tropical regions of the Pacific and Indian oceans in the region of the Philippines, New Hebrides, and Japanese deepwater trenches. It is found in catches from depths of 500-2,000 m and in through catches from depths of 1,700 m and more to the surface. Latitude : Place : Longitude : State :		

Environment

Freshwater: Yes/No

Habitat: Marine

Salinity:

Brackish: Yes/No

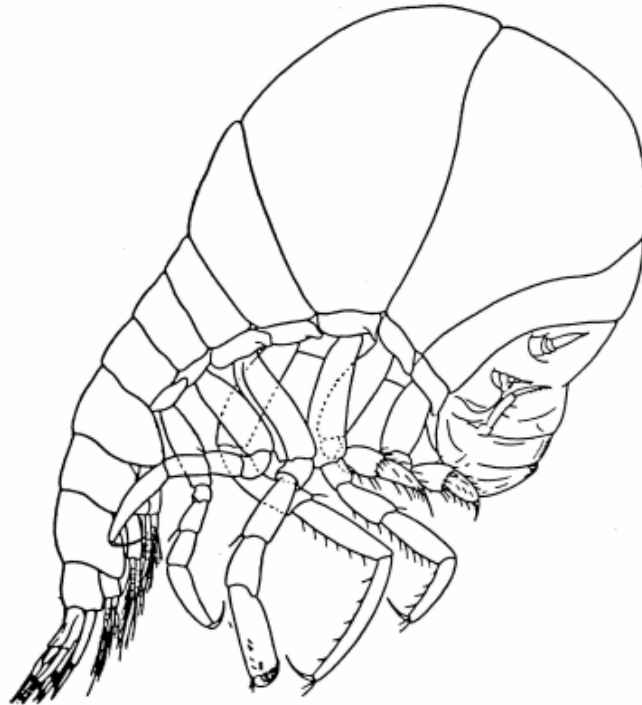
Migrations:

Temperature:

Salt Water: Yes/No

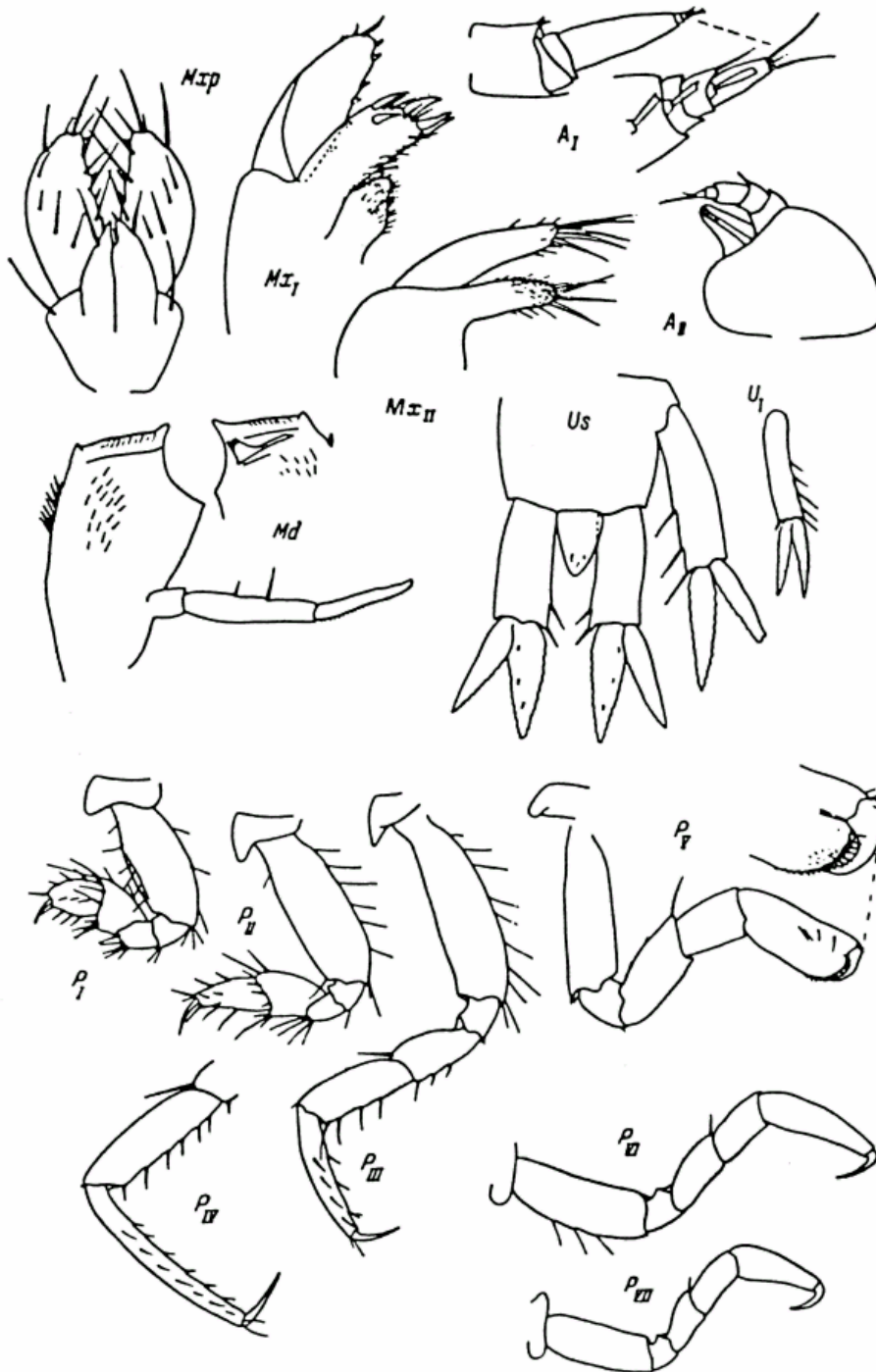
Depth range :

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



Microphasmoides vitjazi Vinogradov, sexually immature specimen
(after Vinogradov, 1960 a).

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



Microphasmoides vitjazi Vinogradov, sexually immature specimen
(after Vinogradov, 1960 a).

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 color of unfixed crustaceans is cherry-red.

The flagellum of antennae I is less than 1.5 times longer than the peduncle, its proximal segment five times longer than the three distal segments together. Antennae II are slightly shorter than antennae I, seven-segmented, the vesicularly bulging 2nd segment slightly longer than the remaining part of the antenna.

The mandibles have a weak, thin palp that is nearly equal in length to the mandibular body. The outer lobe of maxillae I has a straight truncated edge armed with seven spines for the distal margin; the inner lobe is small, oval; the palp slightly narrows distally. The maxillipeds have a fairly large inner lobe, almost reaching half the length of the outer lobe.

Coxal plates I-V have a slightly stretched, roundish lower anterior angle; coxal plates VI-VII are oval.

In pereopods I the 5th segment is equal to the 6th. Pereopods II are identical in structure but slightly longer; the 5th and 6th segments are equal; the claw is long and strong. Pereopods III are more than 1.5 times longer than pereopods II, their 2nd segment is almost equal to the 4th and 5th segments together; the narrower 6th segment is almost twice longer than the 4th; the claw is long, strong, and slightly curved. Pereopods IV are longer than pereopods III because of the greater length of the distal segments. Pereopods V are shorter than IV but the distal segments (particularly the 6th) are markedly massive; the 2nd segment is equal to the 4th and 5th together and slightly longer than the 6th; the 6th segment is very broad, almost linear and forms with the claw a well-developed subchela; its palmate margin is shorter and steeper than in the *Microphasma* and armed with a row of strong, short setae, increasing in size in the distal part of the row; the length of the strong curved claw is less than the width of the 6th segment. Pereopods VI are slightly shorter than pereopods V and much weaker; their 2nd segment is equal to the 4th and 5th together and slightly longer than the markedly distally narrowing 6th segments; the claw

is long, strong , and curved. Pereopods VII are the same in structure and length ratios of segments as pereopods VI but only $\frac{2}{3}$ their length.

The uropods have lanceolate, acute, and denticulate rami. The telson is triangular with an obtuse tip; it reaches half the length of the basipodite of uropods III.

Sex attributes:

Dimorphic

Male: 1st antenna well developed , female: 1st 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 sexually immature specimens 5 to 6mm.

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.:
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.) Dr.K.K.C.Nair Scientist-In-Charge R.C. of NIO, Post Box-1616 Kochi – 682 014 Dr. N. Krishna pillai “Radhika” 65- Champaka Nagar Bakery Junction Trivandrum-695 001 ACKNOWLEDGMENT: (List of persons who contributed, modified or checked information)	