**NATIONAL BIORESOURCE DEVELOPMENT BOARD**
Dept. of Biotechnology
Government of India, New Delhi

For office use:

**MARINE BIORESOURCES**
FORMS DATA ENTRY**:** Form- 1(general**)**

Fauna: √ Flora Microorganisms

General Category: Invertebrata (Zooplankton) Pelagic amphipod

Scientific name &Authority: *Vibilia cultripes* Vosseler, 1901
Common Name (if available):

| Synonyms: | Author(s ) | Status |
|---|---|---|
| *Vibilia cultripes* | Vosseler | 1901: 121 |
| *Vibilia cultripes* | Behning | 1912: 213, 1913: 533 |
| *Vibilia cultripes* | Stephensen | 1918: 53 |
| *Vibilia cultripes* | Chevreux & Fage | 1925: 388 |
| *Vibilia cultripes* | Shoemaker | 1945a: 234 |

Classification:

| | | |
|---|---|---|
| Phylum: Arthropoda | Sub- Phylum: Mandibulata | Sub- Class: Malacostraca |
| Super class | Class: Crustacea | Sub Order: Hyperiidea |
| Super Order: Peracarida | Order: Amphipoda | Sub-Family |
| Super Family: Vibiliodea | Family: Vibiliidae | |
| Genus: *Vibilia* | Species : *cultripes* | |

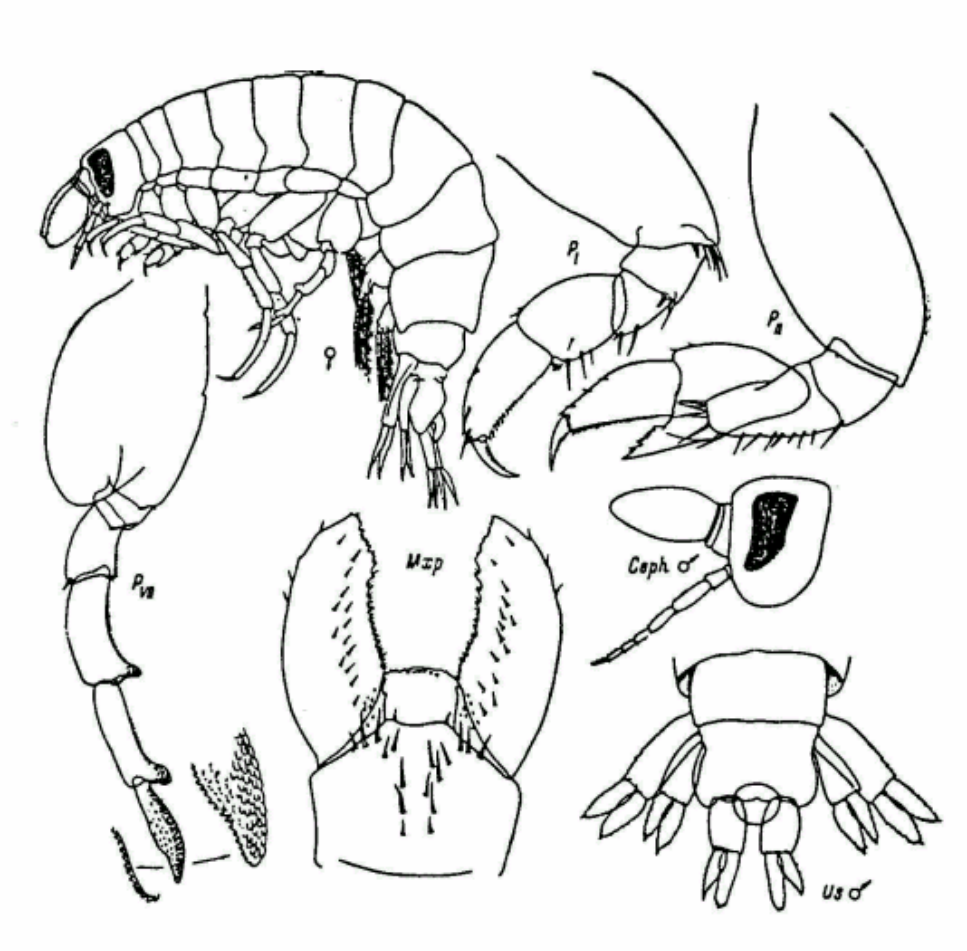
Authority: Vosseler, 1901
Reference No.: Vosseler, I. 1901. Die Amphipoden der Plankton-Expedition. 1. Hyperiidea, *Erg. Plankton-Exped. Humboldt-Stiftung*, vol. 2, G. e.l, 129 pp.

Geographical Location: Tropical waters of the Atlantic, Indian and Pacific oceans; common in the Mediterranean Sea. Catches are small in number in most of the areas.
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 cultripes* Vosseler (-after Behning, 1925)

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 thickset with a thick integument tuberculous laterally. The head lacks a rostrum, is almost rectangular, and its height slightly more than its length, which is equal to the first two somites of the pereon. The eyes are very large; in females they are elongated-reniform and occupy about 1/3 the lateral surface of the head; in males they are dorsally broadened, contiguous, and occupy more than half the lateral surface of the head. Antennae I are equal in length to the head and somite I of the pereon together and their base is short; the Ist segment of the flagellum is ovate (lateral view) and its apex round; the flagellum is equal to the head in length; the rudimentary 2$^{nd}$ segment is apically barely discernible. Antennae II in females are not longer than antennae I, are six-segmented, all the segments with convex margins, and each succeeding segment somewhat narrower than the preceding one; the margins of the 4$^{th}$-6$^{th}$ segments bear minute setae; antennae II in males are eight-segmented, longer than antennae I length by at least three distal segments of its, and the margins of the last four segments are armed with setae. In the maxillipeds the outer lobes have a slightly convex inner margin and bear spinules (more than 14) on the surface; the outer margin may bear four to nine spinules; the medial lobe does not extend to the middle of the outer lobes, and the distal margin is almost straight in females but with a central prominence in males.

The pereon is equal to the pleon and urosome together. Somite I is about half the length of somite II which in turn is ¾ of somite III; the subsequent segments are approximately equal in length. The 2$^{nd}$ segment of pereopods I has convex margins and its maximum width is 3/5 its length; the anterior margin of the 4$^{th}$ segment projects along the 5$^{th}$ segment up to its middle and is armed with two strong setae; the 5$^{th}$ segment bears three-four setae on the distally denticulate posterior margin and minute setae in the distal part of the convex anterior margin; the 6$^{th}$ segment is equal

to the 5th and tapers distally; the posterior margin is denticulate while the anterior margin bears short setae; the claw is strong, slightly curved, equal to half the length of the 6th segment , and slightly denticulate posteriorly Pereopods II are slightly longer than pereopods I; the 2nd segment is twice longer than wide, its margins convex, and the posterior distal angle bears one-two short setae; the 4th segment is posteriorly armed with setae which are modified to stiff spines on the distal lobe extending to the middle of the posterior margin of the 5th segment; the 5th and 6th segments are about equal in length, the anterior margins convex and distally with several thin spinules; the process of the 5th segment extends to the middle of the 6th segment and is anteriorly non uniformly denticulate the 6th segment is twice longer than wide and its posterior margin is denticulate; the claw is half the length of the 6th segment and slightly denticulate posteriorly . In pereopods III-IV the 2nd segment is twice longer than wide; the 4th and 6th segments are approximately equal in length and the 5th segment slightly shorter than they; the posterior margins of the 4th-5th segments bear some spinules while the 6th segment is denticulate the claw is about 1/5 the length of the 6th segment. Pereopods V-VI are identical, somewhat longer than pereopods III-IV, mainly because of the greater length of the distal segments; the 4th and 5th segments are equal in length, the 6th segment longer than they, with finely denticulate anterior margin; the 5th segment of pereopods VI is anteriorly armed with equidistant spiniform setae. The structure of pereopods VII is specific. They are approximately equal in length to pereopods IV; the 2nd segment is equal in length to the next three segments together, its width, ¾ its length , the distal lobe of the posterior margin round and extends slightly beyond the base of the 4th segment; the three distal segments are about equal in length; the anterior distal angle of the 5th-6th segment forms a short finger-shaped process with a squamose pattern on the surface that also covers the anterior and distal part of the 7th segment, modifying posteriorly into groups of very fine short setules; the 7th segment is broadened, flattened in the middle, and constricted toward the end, resembling a knife blade, whereby the name of the species-*cultripes* (knife-legged); the distal half of the posterior margin of the 7th segment is uniformly denticulate and the apices of the denticles upcurved.

The last of the epimeral plates has a slightly produced posterior margin. Urosomite I is almost half the length of the last somite of the pleon and 2/3 of the last (geminate) urosomite, in which the posterior lateral angles project markedly backward . The rami of uropods I-II are equal in length. The basipodite of uropods I is denticulate on the outer and distal margin; the margins of the exopodite are finely denticulate proximally and more coarsely distally; the outer margin of the endopodite is similarly armed but the inner margin is proximally smooth. Uropods II are shorter than uropods I; the basipodite is distally broadened, its length barely more than its width the sides of the rami facing each other are denticulate (more coarsely toward the ends) while the opposite sides denticulate only distally. The endopodite of uropods III is longer than the exopodite, especially in males; the length of the basipodite slightly exceeds its width. Ornamentation of the rami differs in the two sexes: in females the inner margin of the exopodite is coarsely, in males very finely denticulate the endopodite in males tapers toward to middle in the distal 1/3 has parallel margin, and apically bears a minute seta embedded in a deep notch between two broad denticles; in females the apical seta is barely discernible and situated in a shallow pit. In both sexes the outer margin of the exopodite is denticulate only distally and the inner margin of the endopodite is smooth. The telson is transversely oval, almost round, and extends to the middle 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.:
One of the largest species of *Vibilia*: adults reach up to 15 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: Ref. No.:
Characteristics:
Abundance:
Biochemical aspects:
Proximate analysis: moisture/ fat/ protein/ carbohydrate/ash Ref. No.:
Electrophoresis: Ref. No.:

SPAWNING INFORMATION:
Locality: Main Ref:
Season:
Fecundity:
Comment:

MAJOR PUBLICATIONS (INDIAN):
(Include review articles, monographs, books etc.)

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