

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 amphipoda		
Scientific name & Authority: <i>Lanceola loveni</i> Bovallius, 1885 Common Name (if available):		
Synonyms:	Author(s)	Status
<i>Lanceola loveni</i>	Bovallius	1885b:6,1887b:36
<i>Lanceola loveni</i>	Shoemaker	1945a:206
<i>Lanceola loveni</i>	Vinogradov	1957:190, 1960a :205
- <i>aestiva</i>	Stebbing	1888: 1309
(part.)	Stephensen	1918:15
(part.)	Hurley	1956 :4
Classification:		
Phylum: Arthropoda	Sub- Phylum: Mandibulata	
Super class:	Class: Crustacea	Sub- Class: Malacostraca
Super Order: Peracarida	Order: Amphipoda	Sub Order: Hyperidea
Super Family: Lanceoloidea	Family: Lanceolidae	Sub-Family
Genus: <i>Lanceola</i>	Species: <i>loveni</i>	
Authority: Bovallius		
Reference No.: Bovallius, C. 1885b. On some forgotten genera among the amphipods <i>Crustacea. Kgl. Svenska Vat.-Akad. Handal.</i> , Vol. 10, No. 14, 17 pp.		
Geographical Location: Northern, tropical, and Southern regions of and Atlantic Oceans and tropical regions of the Indian Ocean (including the Arabian Sea and Bay of Bengal). Northernmost occurrence has been reported from Davis Strait and the Being Sea. A deepwater species, known from 500-700 to 3,000-4,000m but the maximum records relate to 1,002-2,000m depths.		
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)



Lanceola loveni Bovallius, male. A, gnathopod 1; B, gnathopod2; C, peraeopod 2; D, peraeopod 3; E, peraeopod 4; F, peraeopod

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 integument is thin. The body has a low dorsal keel forming small denticles on somites III-VII of the pereon, somites of the pleon, and somite I of the urosoma. The small high head has a small rostrum. The eyes are small, without crystalline prisms.

Antennae I are much shorter than the first two somites of the pereon; the proximal segment of the flagellum is relatively narrow with an extended posterior and bulging (particularly in the distal part) anterior margins; the 1st and 2nd distal segments are small with almost parallel margins; their length is more than their width; the elongated 3rd segment has a stout apical seta, almost equal in length to the three distal segments together. Antennae II are much (more than twice) longer than antennae I.

The mandibles have a relatively narrow slanted cutting edge, a triangular accessory plate and a very long palp, more than twice longer than the mandibular body. Maxillae I have broad inner lobes. Maxillae II have narrow lobes that are equal in width.

Pereopods I are stout, with a slightly broadened 2nd segment; the 5th segment is highly broadened distally, its length just slightly more than its width; the 6th segment is oval, with bulging anterior and posterior margins, sometimes almost hemispherical, with maximum width at its base or in the proximal third; the length and width proportions are variable and decrease as the animal ages; the claw is straight. The 5th segment of pereopods II is weakly broadened distally, usually equal to the 6th but may be somewhat shorter or longer; these segments together are roughly equal to the 2nd in length. Pereopods III and IV are nearly equal in length and similar in structure; their 2nd segment has parallel margins or slightly broadens distally; the 4th segment is somewhat longer than the 5th, which in turn is shorter than or equal to the thin 6th segment; the claws are long, almost straight. Pereopods V are longer than IV; their 2nd segment is longer than the 4th, which in turn is longer than the 5th and the latter longer than the 6th segment. Pereopods VI are longer than V; their 4th segment

is slightly shorter than the 2nd, but appreciably (nearly 1.3 times) longer than the 5th segment; the 6th segment is also longer than the 5th but shorter than the 4th. Pereopods V and VI; are longer than the pereon. Pereopods VII are appreciably shorter than VI; their 4th segment is equal to the 6th, longer than the 5th but shorter than the 2nd segment. The claws on pereopods V-VII are thin, curved, and retractile.

The uropods have narrowly lanceolate rami. The telson is triangular (sometimes helmet-shaped), usually(but not always) with an acute tip; its length is $\frac{1}{2}$, rarely $\frac{1}{3}$, 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: It was earlier suggested (Vinogradov, 1957, 1963) that *L. loveni* Bovallius and *L. aestiva* Stebbing are identical and attention was drawn to the similarity of descriptions (save for the structure of the eyes) and illustrations of *L. aestiva* given by Stebbing (1888) and of the *Scypholanceola vanhoeffeni* prepared by Woltereck (1905). The eyes of *L. aestiva* have not been very precisely described by Stebbing and it is their exceptional structure which served as the basis for Woltereck's establishment of the genus *Scypholanceola*. A later review of the type specimen of *L. aestiva* preserved in the British Museum showed that the holotype (larger specimen) should actually be considered *Scypholanceola*, and that the paratype (smaller specimen) is identical to *Lanceola loveni* (see Thurston, 1973). Thus *L. aestiva* Stebbing should be considered the older synonym of *S. vanhoeffeni* and *L. aestiva* in works by later authors should be considered a synonym of *L. loveni* Bovallius.

Size and age:

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

Ref. No.:

Sexually mature individuals varies from 15 to 29 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: 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</p> <p>Dr. N. Krishna pillai “Radhika” 65- Champaka Nagar Bakery Junction Trivandrum-695 001</p> </div>	
ACKNOWLEDGMENT: (List of persons who contributed, modified or checked information)	