

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																																																								
<p>Scientific name & Authority: <i>Scina crassicornis</i> (Fabricius, 1775) Common Name (if available):</p> <table border="0"> <thead> <tr> <th>Synonyms:</th> <th>Author(s)</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td><i>Scina crassicornis</i> (<i>Astacus</i>)</td> <td>Fabricius</td> <td>1775: 481</td> </tr> <tr> <td> (<i>Cancer</i>)</td> <td>Herbst*</td> <td>1793: 134</td> </tr> <tr> <td><i>Scina crassicornis</i></td> <td>Stebbing</td> <td>1904: 24</td> </tr> <tr> <td><i>Scina crassicornis</i></td> <td>Tattersall</td> <td>1906: 7</td> </tr> <tr> <td><i>Scina crassicornis</i></td> <td>Stephensen</td> <td>1918: 19, 1923: 9</td> </tr> <tr> <td><i>Scina crassicornis</i></td> <td>Chevreur</td> <td>1919: 10</td> </tr> <tr> <td><i>Scina crassicornis</i></td> <td>Wagler</td> <td>1926: 325, 1927: 90</td> </tr> <tr> <td><i>Scina crassicornis</i></td> <td>Shoemaker</td> <td>1945a: 228</td> </tr> <tr> <td><i>Scina crassicornis</i></td> <td>Vinogradov</td> <td>1960a: 221</td> </tr> <tr> <td> (<i>bermudensis</i> var.)</td> <td>Shoemaker</td> <td>1945a: 228</td> </tr> <tr> <td> -<i>cornigera</i></td> <td>Milne-edwards</td> <td>1830: 387</td> </tr> <tr> <td> (<i>Hyperia</i>) (<i>Tyro</i>)</td> <td>Milne-edwards</td> <td>1840: 80</td> </tr> <tr> <td><i>Scina crassicornis</i></td> <td>Stebbing</td> <td>1888: 1273, 1895: 351</td> </tr> <tr> <td><i>Scina crassicornis</i></td> <td>Chevreur</td> <td>1900: 121</td> </tr> <tr> <td> -<i>gracilis</i></td> <td>Dana</td> <td>1853: 834</td> </tr> <tr> <td>(<i>Clydonia</i>)-<i>atlantica</i> (<i>Tyro</i>)</td> <td>Bovallius</td> <td>1885b: 14</td> </tr> <tr> <td>-<i>sarsi</i>, <i>atlantica</i>, <i>longipes</i></td> <td>Bovallius</td> <td>1887b: 9, 13, 15 (<i>Tyro</i>)</td> </tr> </tbody> </table>			Synonyms:	Author(s)	Status	<i>Scina crassicornis</i> (<i>Astacus</i>)	Fabricius	1775: 481	(<i>Cancer</i>)	Herbst*	1793: 134	<i>Scina crassicornis</i>	Stebbing	1904: 24	<i>Scina crassicornis</i>	Tattersall	1906: 7	<i>Scina crassicornis</i>	Stephensen	1918: 19, 1923: 9	<i>Scina crassicornis</i>	Chevreur	1919: 10	<i>Scina crassicornis</i>	Wagler	1926: 325, 1927: 90	<i>Scina crassicornis</i>	Shoemaker	1945a: 228	<i>Scina crassicornis</i>	Vinogradov	1960a: 221	(<i>bermudensis</i> var.)	Shoemaker	1945a: 228	- <i>cornigera</i>	Milne-edwards	1830: 387	(<i>Hyperia</i>) (<i>Tyro</i>)	Milne-edwards	1840: 80	<i>Scina crassicornis</i>	Stebbing	1888: 1273, 1895: 351	<i>Scina crassicornis</i>	Chevreur	1900: 121	- <i>gracilis</i>	Dana	1853: 834	(<i>Clydonia</i>)- <i>atlantica</i> (<i>Tyro</i>)	Bovallius	1885b: 14	- <i>sarsi</i> , <i>atlantica</i> , <i>longipes</i>	Bovallius	1887b: 9, 13, 15 (<i>Tyro</i>)
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<p>Geographical Location: A circumoceanic warm-water a species that enter, however, the cold-water regions of the Atlantic Ocean (up to 64° N) and Antarctica (66°S). In</p>																																																								

the Pacific Ocean it is not found north of 44° N. It is absent in the northeastern part of the Arabian Sea where there is a distinct subsurface layer deficient in oxygen. It inhabits mostly the upper 500 m but is also known from catches of 1,400-2,7600 m. Repeatedly found in surface waters. According to the data of Thurston (1976b) its diurnal migrations are of large amplitude. It can produce phosphorescence in the form of running violet flashes moving from the proximal to the distal end of the pereopods.

Latitude:

Place:

Longitude:

State:

Environment

Freshwater: Yes/ No

Habitat: Marine

Salinity:

Brackish: Yes/No

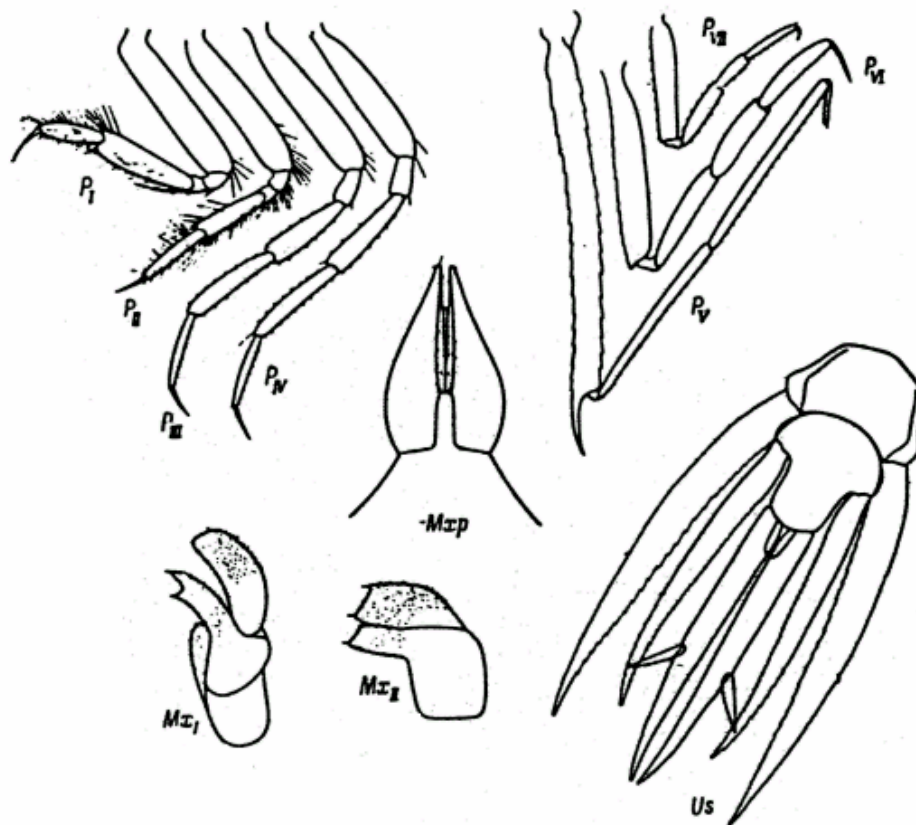
Migrations:

Temperature:

Salt Water: Yes/No

Depth range :

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



Scina crassicornis (Fabricius) (after Wagler, 1926).

(The author does not mention the sex of the illustrated specimen; this is true of several of his other illustrations).

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 pereon is broadly oval. The pleon and urosomite I have one low dorsal and two lateral keels.

The head has a highly protruding mouth cone. Antennae I surpass the pereon in length but are shorter than the pereon and pleon together.

Antennae II in males are long, the 3rd and 4th segments of the peduncle clavate, and the thin flagellum five segmented.

The outer lobes of the maxillipeds taper sharply in the distal part; the fused inner lobes are roughly half the length of the outer, their apex straightly truncated and bearing two setae.

The structure of the appendages, particularly the last three pairs of pereopods, is fairly constant. Pereopods III-IV are identical in length and structure; the 4th and 5th segments are equal in length; the 6th segment is slightly narrower and shorter; the claws are long and thin. The 2nd segment of pereopods V is slightly denticulate on the anterior⁵ and posterior margins; its anterior distal angle is produced into a smooth acute process, several times longer than the 3rd segment; the 4th segment is roughly the same length as the 5th or slightly shorter than it, and together they are longer than the 2nd segment; the 6th segment is weak and short, usually 1/4-1/3 the length of the 5th; the claws are short and curved. Pereopods VI are noticeably shorter but stronger than pereopods V; the 2nd segment is smooth along both the anterior and posterior margins; the 4th segment is longer than the 5th, which in turn is longer than the 6th or equal to it; the claw is long and slightly curved. Pereopods VII are weak, their 6th segment longer than the 5th; the claw is long and curved. Uropods I and II are uniformly finely denticulate on the posterior margin; the posterior margin of uropods III is smooth. The telson has parallel margins and is apically rounded.

Sex attributes:

Dimorphic

Male: 1st antenna well developed , female: 1st antenna reduced.

Descriptive characters:

Meristic characteristics:

Feeding habit:

Main food:

Feeding type:

Additional remarks: There are specimens in which the proportions of pereopods V-VII differ from the typical; the 4th segment of pereopods V is almost half the length of the 5th; the 6th segment of pereopods VI and VII is notably shorter than the 5th; the claws of pereopods VI and VII are shorter than in the typical form. Such differences from the typical specimens have been observed in the specimens from the tropical part of the Pacific Ocean and from the South and North Atlantic (Barnard, 1932; Shoemaker, 1945a; Vinogradov, 1960a) The presence of specimens exhibiting intermediate characteristics of these features does not permit us to share the opinion voiced by Shoemaker about the possibility of separating specimens that deviate maximally from the type specimen into a special subspecies.

In the structure of pereopods, length of antennae, and several other features, many species *S. curvidactyla* and *S. curilensis* and, to a lesser extent, *S. incerta* and *S. langhansi* come closer to *S. crassicornis*, and form a single group. Some genera features of the species of this group are also found in *S. borealis* and *S. vosseleri* but since several significant differences exist, they cannot be included in the *crassicornis* group.

Size and age:

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

Ref. No.:

Largest and one of the most abundant species of the genus *Scina*. The size of sexually mature specimens varies from 12 to 29 mm in females.

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.:
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="text-align: center;"> <p>Dr. K.K.C. Nair Scientist-In-Charge R.C. of NIO, Post Box-1616 Kochi – 682 014 Email kkcnair@niokochi.org</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)	