NATIONAL BIORESOURCE DEVELOPMENT BOARD

Dept. of Biotechnology Government of India, New Delhi

For office use:	

MARINE BIORESOURCES

FORMS DATA ENTRY: Form- 1(general)

(Please answer only relevant fields; add additional fields if you require)

Fauna: √ Flora Microorganisms

General Category: Invertebrata (Zooplankton), Pelagic amphipoda

Scientific name & Authority: Streetsia porcella (Claus)

Common Name (if available):

Synonyms:Author(s)StatusStreetsia porcellaSenna1903, p. 10Oxycephalus procellusClaus1879 b, p. 48;

Streetsia intermedia Spandal, 1927, p. 188, figs. 20-21

Streetsia nyctiphanes, Fage, 1934, p.1631.

Classification:

Phylum: Arthropoda Sub- Phylum: mandibulata

Super class: Class: Crustacea Sub- Class: Malacostraca Super Order: Peracarida Order: Amphipoda Sub Order: Hyperiidea

Super Family: Platysceloidea Family: Oxycephalidae Sub-Family

Genus: Streetsia Species: porcella

Authority:(Claus)

Reference No.: Claus, C., 1897b. Die Gattungen und Arten der Platysceliden en Systematischen ubersicht. Arbeiten ausdem Zoologischen Institut der Universitat zu

Wien, 2: 147-198.

Geographical Location: *S. porcella* was found in the warm waters of the Atlantic and the Pacific from 37 degree N to 38 degree S. In the Indian Ocean it extends from 19 degree N to 39 degree S. It was also recorded from the Mediterranean waters, the sea of Japan and the New Zealand waters.

Latitude: 40°W to 115°E
Longitude: 20°N to 40 °S

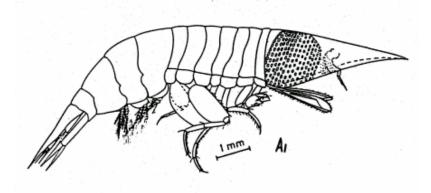
Place:
State:

Environment

Freshwater: Yes/No Habitat: Marine Salinity:33-35%
Brackish: Yes/No Migrations: Temperature:20-28°C

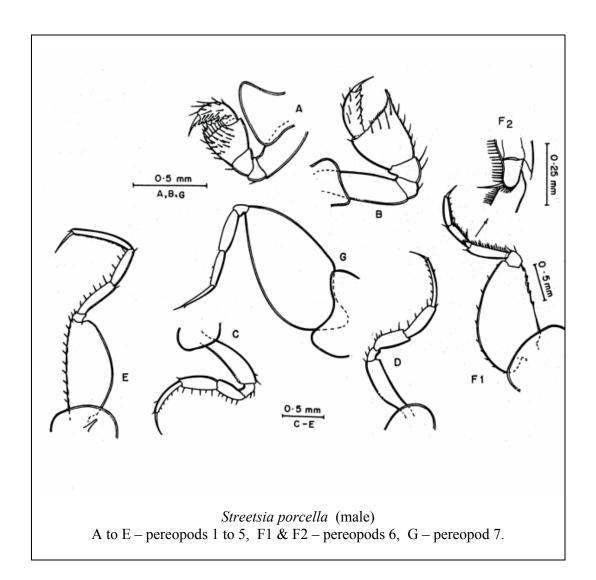
Salt Water: Yes√No Depth range:0-200m

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





Streetsia porcella
A1 – male, A2 – cephalon male.



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

pactivity: locally known/ reported/ not known Details:

Period of availability: Throughout the year – yes/ no If no, months:

SALIENT FEATURES:

Morphological:

Diagnostic characteristics: Body compactly built and stout, cephalon relatively short, produced into a short downwardly directed rostrum, which is half the length of the cephalon. Pleon segment 1-3 are rather deep with postero- lateral prolongations acute. Carpus of peropod 1 is produced into a more or less rounded lobe armed with about 10 unequal teeth, inner border finely serrate, inner surface of the segment carries large number of stiff spinnate setae. Carpus of the 2nd perepod, inner distal angle drawn out into a long spine, distal border is regularly serrate. Basis of perepod 5 with a straight upper border; basis of 6th perepod distal border serrated, the remaining segments armed with well-spaced spinules; basis of 7th pereopod ovate. Inner ramus of the third uropod much flattened. S. porcella (typical) Cephalon elongate triangular, pleon segment 1-3 very deep, deeper than the pereon plus the coxal plates, postero laterally angular, not produced. Carpus of pereopod 1 broader than long and widening distal wards, distal border transverse, inner distal part covered with stiff spines, borders not serrated, propodus very narrow (unlike in typical form). Carpus of 2nd pereopod much broader than long, inner distal part less densly spiney than in first leg, distal borders with about 6 spines successively increasing in length, inner distal spine very long, propodus slender and with sub parallel slides. Pereopods 3 and 4 not very slender. Basis of 5th pereopod enlarged, nearly twice as long as broad; basis of 6th longer than that of 5th, twice as long as broad; 7th pereopod relatively small *S. porcella* (variety).

Sex attributes: Dimorphic

Male: The 1st segment of the flagellum of antenna 1 in males has a characteristic projection in the distal part of the anterior margin.

Female: First antenna reduced, second absent.

Descriptive characters:

Meristic characteristics:

Feeding habit:

Main food:

Feeding type:

Additional remarks: *S. porcella* can be easily distinguished from its congers by the subchelate second pereopod (chelate in all the other species) the relatively short double pleon segment, the flattened rami of the second and third uropods, particularly the endopod of the third, and the size of the basis of the seventh pereopod in relation to the rest of the limb. In this species the basis of the seventh pereopod is shorter than the rest of the limb (equal in other species).

S. porcella shows a wide range of intra-specfic variation and this is perhaps the reason for the species having been described under several names. But Fage (1960) after studying his rich material concluded that S. intermedia Spandal (1927) and S. nyctiphanes Fage (1934), as synonymous with S. porcella. This species has been illustrated in detail by Stebbing (1888), Spandal (1927) and Pillai (1966a). These illustrations clearly apply to the IIOE material (Pl. 18a). The characters given for S. porcella (variety) are based on three males (Pl.18b0 collected from the south east Indian Ocean between Java and Australia along the 110 degree E meridian. These specimens differ from typical material mainly in the shape and armature of the carpus of the first and second perepods (Pl.18a, Figs A-B). The author was inclined to refer these to a new species but as the species is subject to considerable inter- specfic variation and the three specimens differ only in one character, he has described it in detail. In authors collection there are adult males showing the proximal constriction of the cephalon (Pl. 3, Fig.2) as illustrated by Stebbing. But males without this constriction are also very common (Pl. 3a, Fig. L1). The length of the cephalon in relation to total length in males is slightly more than one-third and in females clearly less than that. The pereon and pleon are sub equal in length.

Size and age:

Maximum length (cm) (male/ female/ unsexed) Ref. No.:

Male 7.04to 14.47, Female 8.00 to 15.56, Juvenile 2.56 to 6.78

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

Maximum weight: (g) (male/female/unsexed)

Average weight: (g) (male/female/unsexed)

Longevity (y) (wild): (captivity)

Ref. No.:

Ref. No.:

Length/ weight relation ships:

Eggs and larvae: Ref. No.

Eggs are stored in the brood pouch and fully developed juveniles hatch out from the brood pouch.

Characteristics:

Abundance:

Biochemical aspects:

Proximate analysis: moisture/ fat/ protein/ carbohydrate/ash Electrophoresis:

Ref. No. Ref. No.

SPAWNING INFORMATION:

Locality: Main Ref:

Season: Fecundity: Comment:

MAJOR PUBLICATIONS (INDIAN):

(Include review articles, monographs, books etc.)

Pillai, N.K., 1966a. Pelagic Amphipoda in the collections of the Central Marine Fisheries Research Institute, India, Part 1, Oxycephalidae. In *Proceedings of the Symposium on Crustacea, I. Marine. Biological. Association of India:* 169-204.

Nair, K.K.C. and K.V. Jayalakshmy, 1992. Distribution of oxycephalidae (Hyperiidea – Amphipoda) in the Indian Ocean – A Statistical Study. *Oceanography of the Indian Ocean*, Oxford and IBH Publications, 201-210. Ed. By B.N. Desai.

Nair, K.K.C (1995) Taxonomic Features And Identification Of Oxycephalidae, *Mahasagar*, Vol.28. No 1&2.

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