

NATIONAL BIORESOURCE DEVELOPMENT BOARD

Dept. of Biotechnology
Government of India, New Delhi

For office use:

MARINE BIORESOURCES

FORMS DATA ENTRY: Form- 1(general) Ref. No.:
(please answer only relevant fields;add additional fields if you require)

Fauna : <input checked="" type="checkbox"/>	Flora	Microorganisms
General Category : Invertebrata (Zooplankton), Copepoda		
Scientific name & Authority : <i>Drepanopsis frigidus</i> Wolfenden, 1911 Common Name (if available) :		
Synonyms:	Author(s)	Status
Classification:		
Phylum: Arthropoda	Sub- Phylum	
Super Class :	Class : Crustacea	Sub- Class: Copepoda (Milne-Edwards,1840)
Super Order: Gymnoplea	Order: Calanoida (Sars1903)	Sub Order :
Super Family:	Family : Pseudocalanidae	Sub-Family:
Genus : <i>Drepanopsis</i>	Species : <i>frigidus</i>	
Authority: Wolfenden Reference No.: Wolfenden, R. N., 1911. "Die Marinen Copepoden. II Die Pelagischen Copepoden der Westwind – Drift und der Sudlichen Eismeers " <i>Dutsche Sud – Polar Expedition</i> , Vol. XII , Pt. 4., Berlin.		
Geographical Location:		
Latitude: 25°N to 30°S	Place: Indian Ocean	
Longitude: 20°E to 120°E	State:	

Environment

Fresh water: Yes/ No

Habitat : Marine

Salinity : >35‰

Brackish : Yes/ No

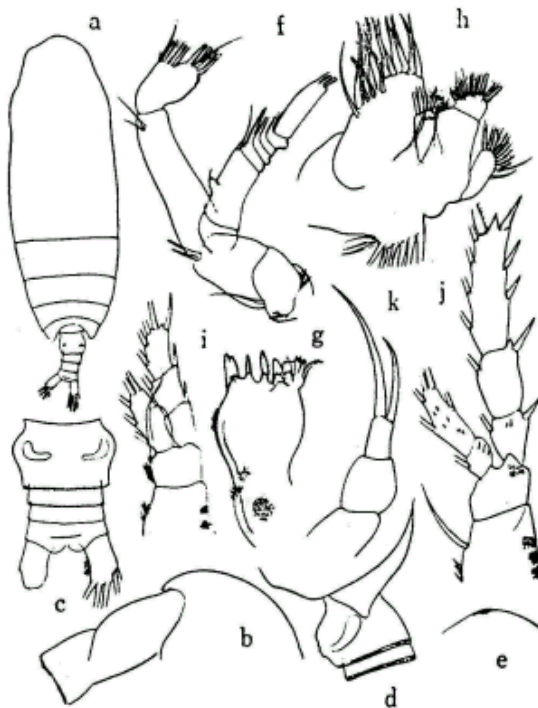
Migrations :

Temperature : <20°C

Salt water : Yes✓ / No

Depth range : Bathypelagic

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



Drepanopsis frigidus (After Tanaka, 1956)

Female: a – dorsal aspect; b – prosome, lateral aspect; c – abdomen, dorsal aspect;
d – last pedigerous segment and genital segment, lateral aspect;
e – rostrum, ventral aspect; f – 2nd antenna; g – mandible blade; h – 1st maxilla;
i – 1st leg; j – 2nd leg; k – 4th leg.
k – 4th leg.

DATA ENTRY FORM: Form- 2(Fish / shellfish / 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:	
<p>Female: The body oblong ovate in dorsal view. The prosome fused with the 1st pedigerous segment, the 4th pedigerous segment separates from the 5th; the lateral corners of the last pedigerous segment produced triangularly, but the apex is not so sharp as figured by Wolfenden. The rostrum is represented by two small points when viewed from the ventral.</p> <p>The urosome 4-segmented and is contained about 6-times in the length of the cephalothorax; the segment and the furca in the proportions 42: 8: 8: 13: 29=100. The genital segment 1,4 times as wide as long and produced considerably below; the first three segments are fringed with very minute teeth on the distal margin; the fircal rami 1,5 times as long as wide.</p> <p>The 1st antenna 24-jointed, reaches back to the end of the 3rd urosomal segments, and the joints are furnished with slender setae. The 2nd antenna has the exopodite about as longa sa the endopodite; the 2nd joint of the exopodite has two protruberances which carry each a short marginal seta. The mandible has a small endopodite; the biting part is furnished with groups of fine spinules. The 1st maxilla has the following spinulations: the outer lobe has 9 setae, the exopodite 11 setae, the endopodite 4, 4, 6 setae. The 2nd maxilla has a row of spinules on the 2nd and 3rd lobe; the setae arising from the endopodite are unmodifdied. The maxilliped as shown in the figure; the basal joints are furnished with rows of spinules on the anterior margin.</p> <p>The 1st leg has 3-jointed exopodite and 1-jointed endopodite; the 1st basal joint has two groups of spinules on the outer margin. The 2nd leg has 3-jointed exopodite and 2-jointed endopodite; the 1st and 2nd joints of the endopodite are furnished with spinules on the posterior surface; the terminal spine of the exopodite has 29 serrations. The 3rd and 4th leg have eacg 3-jointed exopodite and endopodite; the joints of the endopodite are furnished with groups of spinules on the posterior surface; the terminal spine of the exopodite has 28 and 43 serrations respectively. The 5th pair of legs 3-jointed; the distal joint ghas two spines; the inner one is about asa longasa the combined lengths of the htree joints taken together.</p>	
Sex attributes:	
Descriptive characters:	

Meristic characteristics:

Feeding habit:

Main food :

Feeding type :

Additional remarks:

The specimen agrees well with the description given by Wolfenden . Farran's specimen from the Antarctic has the total length 2,58-2.88 mm; Sewell's specimen from the Indian Seas measured 2.28 mm, and has a backwardly pointing median spine instead of bifid rostrum. Vervoort's specimen from the Antarctic measured 2,90 mm, and has a rostral median spine. The present specimen agrees well with those described except the stupid rostrum and longer urosome and 1st antenna.

Size and age:

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

Female: 2.88-2.95 mm.

Ref. No.:

Tanaka, 1956

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:	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.)	
Madhupratap, M. and P. Haridas, 1986. Epipelagic calanoid copepods of the Northern Indian Ocean. <i>OCEANOLOGICA ACTA</i> , 9 (2): 105-117.	
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