

Key for Microzooplankton Species found in Sundaparandian

Pattinam and Manamelkudi, Tamil Nadu, India (9-10° N, Arabian Sea).

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The present note consists of a single key for microzooplankton identification. Their classification is presented below following Edmondson classification (1959), Davis (1955) and Omeri and Ikeda (1984). Key to the copepod given here are modified from Kasturirangan (1963) and Newell and Newell (1973). Taxonomic Account of Microzooplankton occurring in S.P. Pattinam and Manamelkudi During July 2005 to June 2006.

Key to the major groups of planktonic animals

1. -One celled or many celled, all cells are more or less alike Phylum: Protozoa (2)
 Many celled with different kinds of cells (5)
2. Cells possessing flagella or pseudopodia; Cells possessing cilia Class: Infusoria (3)
3. Cells possessing flagella Class: Mastigophora
 Cells possessing pseudopodia Class: Sarcodina
4. Cells with a central capsule or shell or lattice work composed of spicules.... order: Radiolaria
 Without a central capsule but with a shell or test.... order: Foraminifera
 Without shell or testor capsule.... order:Amoebaea
5. Without organ systems (6)
 With organ systems, some at least developed (7)
6. Cells forming a ball with flagellated cells at one pole and non-flagellated flat cells at the other pole Phylum:Porifera
 An external layer of ciliated cells covering large endodermal cells Phylum:Coelenterata (Planula)
7. Radially or biradially symmetrical forms (8)

- Bilaterally symmetrical forms or asymmetrical (9)
8. Radially or biradially symmetrical forms Phylum:Coelenterata
Biradially symmetrical forms with eight rows of ciliary combs arranged
the length of the body Phylum: Ctenophora
9. With a vertebral column or a notochord or both Phylum: Chordata (10)
With neither a vertebral column nor a notochord(12)
10. With a vertebral column sub Phylum: Vertebrata
With a notochord only (11)
11. Notochord confined to the tail region sub Phylum: Urochordata
Notochord extends the length of body sub Phylum: Cephalochordata
12. Body segmented with exoskeleton with paired appendages or setae (13)
Body not segmented wormlike with paired lateral fins Phylum: Chaetognatha
Body not segmented with exoskeleton or lorica and setae are not paired but later
Phylum: Rotifera
Body not segmented with thick cuticle and setae Phylum : Nematoda
13. Body wormlike with paired lateral setae (14)
Body segmented with paired appendages Phylum:Arthropoda
14. Carapace forming a bivalved shell covering the entire body and having head ... (15)
Carapace forming a bivalved shell covering the entire body and no head ... Class: Bivalvia
Carapace circular and coiled carapace not thus Class:Gastropoda (16)
15. With a well-developed cement gland Sub class:Cirripedia
Without a well-developed cement gland Sub class:Ostracoda
16. Three pairs of segmented appendages Class:Crustacea
With more than three pair of appendages.... (17)
17. Carapace forming a bivalved shell which does not cover the head...Class: Crustacea; Order:
Cladocera
Carapace not thus (18)
18. Carapace small not covering the last five thoracic segments Order: Cumacea
without carapace.... (19)
19. Most of the thoracic appendages are uniramous and leg like (20)
Most of the thoracic appendages are biramous and swimmeret like sub class: Copepoda
20. Body usually flattened dorsoventrally; thoracic legs of one kind Order: Isopoda
Body flattened laterally; thoracic legs more than one kind Order: Amphipoda

Key to microzooplankton

Class: Rhizopoda

Order: Foraminifera

Test is spiny consisting of 5.6 chambers per whorl. The final chamber often forms a flap like extension..... *Globigerina quinqueloba*.

The test is small and highly lobate. It is spired with 3.5 to 4 chambers in the last whorl. The wall is finely perforated. There are 12 chambers which are spherical and arranged in 2 ½ whorls. The sutures are distinct and depressed *Globigerina parva*.

The test is free and composed of rapidly enlarging chambers arranged trochospirally. The chambers are subglobular and arranged in two whorls: the last whorl comprises 3 chambers. The wall is calcareous and coarsely perforated. The sutures are distinct and depressed..... *Globigerinatriloculinoides*.

Test consisting of a number of small chambers, all chambers visible and test coarsely perforated *Globigerina rubescens* .

Order: Acantharia

The length of the spicules is 400-600 and approximately 3 thick projecting from a protoplasm of 160-250 diameter *Acanthochiasma fusiforme*.

Spicules are present. It looks like a spider web.... *Acanthometron Species*.

Class: Ciliata

Order: Tintinnida

Lorica consisting of a bowl with or without an aboral horn: oral region with or without a flare: wall composed of a fine primary structure and agglomerated material ... *Tintinnopsis*

Lorica is more cylindrical, elongated without bowl ending in an aboral horn.... *T. cylindrical*.

Irregularly shaped posterior margin Agglomeration is moderate.... *T. nordquisti*

Lorica with two regions bowl and a column without oral flare.

Bowl and column uniformly agglomerated *T. tubulosa*.

Lorica without aboral horn

Lorica with small oral flare and oral rim irregular.... *Tintinnopsis directa*.

Lorica is shorter and has a short and rather broad pedicel aborally *T. strigose*.

- Lorica is small and closed at its aboral end and has few particles attached to it ... *T. acuminata*.
- Lorica with one main region
- Lorica bullet shaped *T. beroidea*
- Lorica is widely open trumpet-shaped oral end.
- The aboral end is closed..... *T.campanula*.
- Lorica is of variable form with the bluntly pointed aboral end..... *T. lobancoi*.
- Lorica with aboral horn, column and spherical bowl, bowl between a long column and horn *T. tocantinensis*.
- Lorica tubular or sack shaped, aboral and closed or open, wall soft, very minute foreign particles on lorica *Tintinnidium*
- Lorica soft with sparse agglomeration and open aboral end *T.primitivum*
- Lorica soft with sparse agglomeration and closed aboral end *T.incertum*
- Lorica more or less cylindrical, open at both ends coarsely agglomerated *Leprotintinnis*
- Lorica with an opening on both ends, slight constriction near the aboral end.
- The walls of lorica are soft *L.pellucidus*)
- Lorica with openings on both ends Lorica with large aboral flare *L. nordquisti*
- Lorica with bowl and windows.... *Dictyocysta*
- Lorica is penetrated by three whorls of fenestrae *D.elegans*
- Lorica without spine *D.seshaiyai*
- Lorica with agglomerated bowl and hyaline collar.... *Codonellopsis*
- Collor has spiral markings, shorter than the main bowl of the lorica..... *C. pusilla*
- Collor is longer than the bowl..... *C.ecaudata*
- Long collar with avoid fenestrate bowl without pedicel.... *C.ostenfeldi*
- Lorica without agglomerated particles *Favella*
- Lorica is composed of primary and secondary reticular elements.
- Lorica with aboral horn and without spiral turns *Favella philippinensis*
- Lorica with less than four spiral turns, horn with wings ... *F. ehrenbergii*
- Lorica is small and clean with aboral end.
- Lorica with 8 spirals turns *Helicostomella longa*

Lorica is clean and slender. Lorica has a slight flare and it is provided with straight striations*Rhabdonella* sp. (Fig: 30)

Lorica is short with aboral end.

Collor is also short with 2 annuli..... *Metacylis jorgensenii*

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