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Review Article

Fresh/River Water Zooplankton in Bangladesh: A Critical Review

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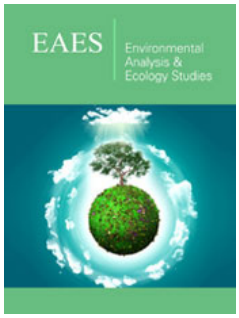

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Abstract

This study was conducted in 2020 to find out the total identified fresh/river water zooplankton in Bangladesh. This review was carried out based on the secondary data. Data were collected from different published journals and websites. Images of every species were collected from different websites since their image cannot be download from PDF and some of the publications only stated name. In the present study, a total of 260 zooplankton species were recorded in fresh/river water. Few species were identified in the larvae and egg stage. Zooplankton is an important part of the aquatic ecosystem that formulate the food chain and food web. There is very limited research on freshwater zooplankton in Bangladesh. Most of the study identified up to the Order level and unpublished. The findings of the present study suggested that it is very necessary to identify the freshwater zooplankton in species-level with a very clear image. This will be a great resource for the conservation of the river or freshwater ecosystem.

Keywords: Freshwater; Zooplankton; Identification; Ecosystem; Bangladesh

Introduction

Zooplankton is microscopic organisms that drift in water due to the wave action of water. Zooplankton is mainly visible in the pelagic zone of ponds, lakes, rivers, and oceans where light enters. They have no strong swimming organ-like fin in fish [1]. That's why they are unable to swim freely like fish and they have relied on the wave or current to swim [2]. Zooplankton act as a base of food chains and food webs in freshwater ecosystems since they are solely liable for all secondary production [1]. Moreover, some of them are known as indicators of ecological variations [3]. Zooplankton is now subjected to the effect of the global climate change phenomenon and its long-term and wide profound effect [4].

Directly or indirectly omnivorous and carnivorous fishes rely on zooplankton for their food [5]. Zooplankton excretes organic matters and provides large quantities of protein in water. These nutrients are required for the development of different organs of fish that promote rapid growth [6]. Zooplankton regarded as the ideal food source for brood fishes. Carps fish larvae and white fish (Mullet) larvae mostly feed on zooplankton [7]. Zooplankton is the main food item of *Xenentodon cancila* and while *Cirrhina reba's* feed mainly constitutes of zooplankton [8]. About 82% of the food item of *Anabas testudineus* [9], 32% of *Notoptrus notoptrus* [10], 23% of *Macrobrachium rosenbergii*, 47% of *Catla catla* [11], 6.37% of *Labeo rohita* [11],

24.19% of *Oreochromis nilotica* [12], 38.5% of the *Rohtee cotio* [13] and 30% of *Mystus vittatus* [14].

Identification of zooplankton is crucial since it is very difficult to forecast the effect of environmental changes if taxonomic information is unknown [15-18]. The taxonomic along with diversity status information will help scientific programmers' to design a new program [19-20]. Furthermore, zooplankton plays a significant role to develop the fisheries sector and increase the production level by determining the water quality and natural productivity. The seasonal variation of zooplankton composition is also a strong tool in this regard.

The effect of physico-chemical parameters of water in the species composition, abundance, and diversity of zooplankton determine the fish distribution [21]. Unfortunately, limited information is available on the seasonal variation of zooplankton and their relationship with the physico-chemical factors of water. Therefore, the zooplankton study is essential to know the dynamic of the fishery. Consequently, the present review study was conducted to know the total freshwater zooplankton species identified in Bangladesh so far.

Materials and Methods

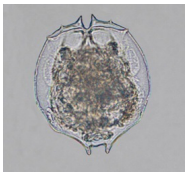
Authors collected data from different databases or google search, using the keywords "Zooplankton in Bangladesh" or "Zooplankton in freshwater of Bangladesh" or "Zooplankton in river of Bangladesh" or "Taxonomic study of zooplankton in Bangladesh" or "Taxonomic checklist of zooplankton in Bangladesh" or "Distribution of zooplankton in river of Bangladesh" or "Zooplankton diversity in river in Bangladesh" or "Heavy metals in edible seaweed" or "Trace metals in seaweed" or "Distribution of zooplankton in freshwater of Bangladesh" or "Zooplankton diversity in freshwater in Bangladesh", "Zooplankton in pond water of Bangladesh" or "Zooplankton in beel of Bangladesh" etc. Few images were not found for some species. 259-260 no. species images were taken from the authors another publication that's why there are no references in image link sources.

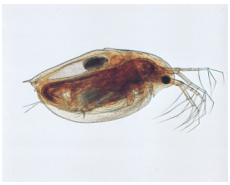
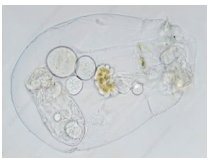
Fresh/river water zooplankton status in Bangladesh

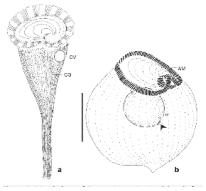
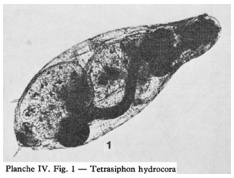
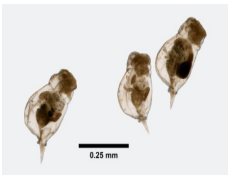
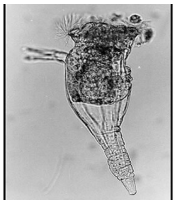
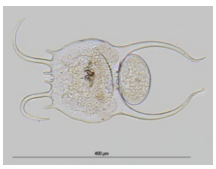
Zooplankton plays a significant role in aquatic ecosystems [22] by regulating the nutrient cycle and transportation of nutrients in lakes, rivers, estuary, and seas [23-26]. Physico-chemical factors and nutrient status of water control zooplankton biomass. Substantial research carried out in temperate and polar waters [27]. George [28], Krishnamurthy & Visvesvara [29], Sreenivasan [30] and Michael [31] conducted research on the ecology and zooplankton of India. Very few works done in Bangladesh by Das & Bhuiyan [32], Islam & Mendes [33], Khan et al. [34], Ali et al. [35], Zafar [36], Patra & Azadi [37], Bhuiyan et al. [38], Bhuiyan & Nessa [8,39-42]. In the present study, a total of 260 zooplankton species were recorded from freshwater or river water of Bangladesh. These species listed in Table 1 along with the image.

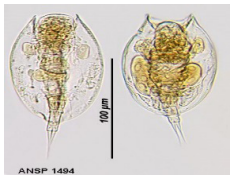
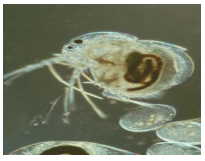
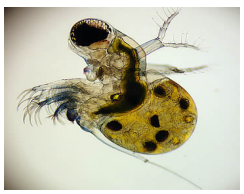
Limitation

Some studies were found that worked up to a group or order level. The authors worked on the species level zooplankton species [43-48]. Most of the articles did not add images of the identified species and some added but could not be used either for copyright or for the quality of the image. Rather, authors used google search images from different websites citing the image link. Some species spelling was not found in google search; the author corrected the spelling [49-56]. There are some work may be done by different University students and Professors, but the authors used only published articles. Finally, this review study did not get any funding to conduct this research [57-61].

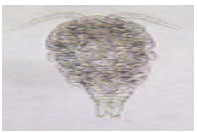
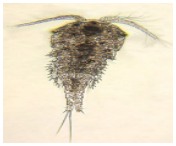
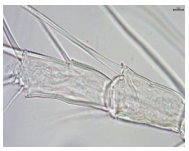
Sl. No.	Scientific Name	Taxonomic tree	Image	References
01.	*Brachionus angularis*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Brachionus Species: *Brachionus angularis*		[21,40-42]
02.	*Filinia* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Testudinellidae Genus: Filinia Species: *Filinia* sp.		[40,42-47]
03.	*Lepadella cristata*	Phylum: Rotifera Class: Eurotatoria Order: Ploima Family: Lepadellidae Genus: Lepadella Species: *Lepadella cristata*		[40]

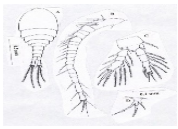
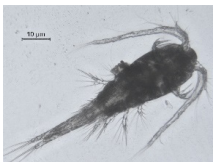
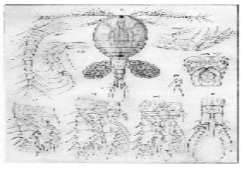
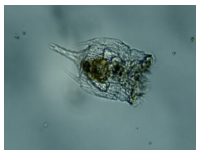
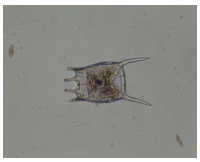
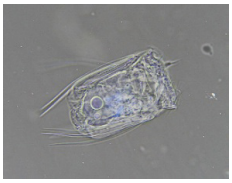
04.	*Testudinella* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Testudinellidae Genus: Testudinella Species: *Testudinella* sp.		[40,48]
05.	*Bosmina* sp.	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Bosminidae Genus: Bosmina Species: *Bosmina* sp.		[1,21,40, 41,43,45, 49-51]
06.	*Daphnia pulex*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Daphniidae Genus: Daphnia Species: *Daphnia pulex*		[40]
07.	*Diaphanosoma* sp.	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Sididae Genus: Diaphanosoma Species: *Diaphanosoma* sp.		[40,42,44-50]
08.	*Asplanchna* sp.	Phylum: Rotifera Class: Eurotatoria Order: Ploima Family: Asplanchnidae Genus: Asplanchna Species: *Asplanch*na sp.		[40,42,44, 45,47,52-53]
09.	*Astramoeba radiosa*	Phylum: Protozoa Super class: Lobosa Class: Amoebaea Family: Thecamoebidae Genus: Astramoeba Species: *Astramoeba radiosa*		[54]
10.	*Paramecium trichium*	Phylum: Ciliophora Class: Oligohymenophorea Order: Peniculida Family: Paramecidae Genus: Paramecium Species: *Paramecium trichium*		[54]
11.	*Branchioecetes* sp.	Phylum: Ciliophora Class: Litostomatea Order: Haptorida Family: Tracheliidae Genus: Branchioecetes Species: *Branchioecetes* sp.		[54]
12.	*Epistylis plicatilis*	Phylum: Ciliophora Class: Suctoria Order: Chonotrichida Family: Epistylidae Genus: Epistylis Species: *Epistylis plicatilis*		[54]

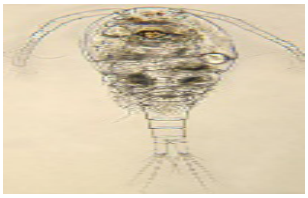
13.	*Intranstylum invaginatum*	Phylum: Ciliophora Class: Oligohymenophorea Order: Sessilida Family: Vorticellidae Genus: Intranstylum Species: *Intranstylum invaginatum*		[54]
14.	*Trichocerca longiseta*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Trichocercidae Genus: Trichocerca Species: *Trichocerca longiseta*		[42,54]
15.	*Tetrasiphon hydrocora*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Tetrasiphonidae Genus: Tetrasiphon Species: *Tetrasiphon hydrocora*		[54]
16.	*Enteroplea lacustris*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Notommatidae Genus: Enteroplea Species: *Enteroplea lacustris*		[54]
17.	*Conochiloides dossuarius*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Notommatidae Genus: Enteroplea Species: *Conochiloides dossuarius*		[54]
18.	*Rotaria neptunia*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Philodinidae Genus: Rotaria Species: *Rotaria neptunia*		[21,42,50, 54]
19.	*Brachionus plicatilis*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Brachionus Species: *Brachionus plicatilis*		[48,54]
20.	*Brachionus rubens*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Brachionus Species: *Brachionus rubens*		[41,54-55]
21.	*Brachionus falcatus*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Brachionus Species: *Brachionus falcatus*		[21,41-42, 48,50,55]

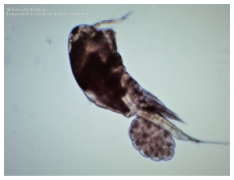
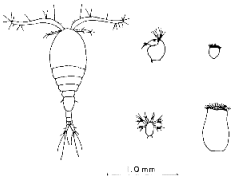
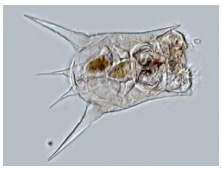
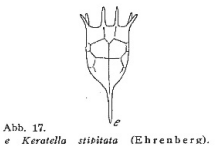
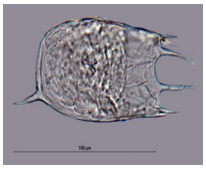
22.	*Lepadella imbricata*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Lepadellidae Genus: Lepadella Species: *Lepadella imbricata*		[54]
23.	*Daphnia parvula*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Daphniidae Genus: Daphnia Species: *Daphnia parvula*		[54]
24.	*Daphnia longispina*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Daphniidae Genus: Daphnia Species: *Daphnia longispina*		[54]
25.	*Moina irrasa*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Moinidae Genus: Moina Species: *Moina irrasa*		[54]
26.	*Moina brachiata*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Moinidae Genus: Moina Species: *Moina brachiata*		[54-55]
27.	*Ceriodaphnia reticulata*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Daphniidae Genus: Ceriodaphnia Species: *Ceriodaphnia Reticulate*		[54]
28.	*Diaphanosoma leuchtenbergianum*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Sididae Genus: Diaphanosoma Species: *Diaphanosoma leuchtenbergianum*		[54-55]
29.	*Drepanothrix dentata*	Phylum: Arthropoda Class: Branchiopoda Order: Diplostraca Family: Macrothricidae Genus: Drepanothrix Species: *Drepanothrix dentata*		[54]
30.	*Polyphemus pediculus*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Polyphemidae Genus: Polyphemus Species: *Polyphemus pediculus*		[54]

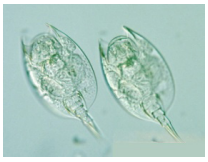
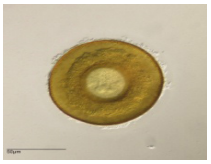
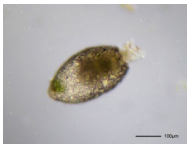
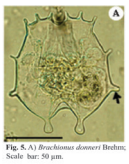
31.	*Cyprois occidentalis*	Phylum: Arthropoda Class: Crustacea Order: Podocopida Family: Cyprididae Genus: Cyprois Species: *Cyprois occidentalis*		[54]
32.	*Cypridopsis rhomboidea*	Phylum: Arthropoda Class: Crustacea Order: Podocopida Family: Cyprididae Genus: Cypridopsis Species: *Cypridopsis rhomboidea*		[54]
33.	*Cypridopsis yucatanensis*	Phylum: Arthropoda Class: Crustacea Order: Podocopida Family: Cyprididae Genus: Cypridopsis Species: *Cypridopsis yucatanensis*		[54]
34.	*Limnocythere santi*	Phylum: Arthropoda Class: Crustacea Order: Podocopida Family: Cyprididae Genus: Limnocythere Species: *Limnocythere santi*		[54]
35.	*Cypricercus obliquus*	Phylum: Arthropoda Class: Crustacea Order: Podocopida Family: Cyprididae Genus: Cypricercus Species: *Cypricercus obliquus*		[54]
36.	*Cypricercus horridus*	Phylum: Arthropoda Class: Crustacea Order: Podocopida Family: Cyprididae Genus: Cypricercus Species: *Cypricercus horridus*		[54]
37.	*Neodiaptomus strigilipes*	Phylum: Arthropoda Class: Copepoda Order: Calanoida Family: Diaptomidae Genus: Neodiaptomus Species: *Neodiaptomus strigilipes*		[54]
38.	*Heliodiaptomus contortus*	Phylum: Arthropoda Class: Copepoda Order: Calanoida Family: Diaptomidae Genus: Heliodiaptomus Species: *Heliodiaptomus contortus*		[54]
39.	*Diaptomus pygmaeus*	Phylum: Arthropoda Class: Copepoda Order: Calanoida Family: Diaptomidae Genus: Diaptomus Species: *Diaptomus pygmaeus*		[54]

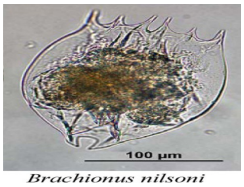
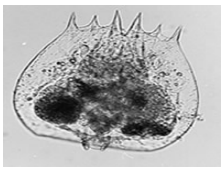
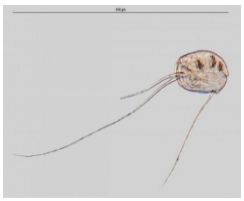
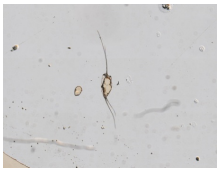
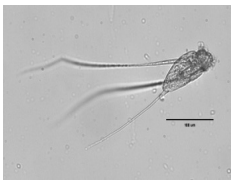
40.	*Eucyclops agilis*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Diaptomus Species: *Diaptomus pygmaeus*		[54]
41.	*Cyclops nanus*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Cyclops Species: *Cyclops nanus*		[50,54-55]
42.	*Cyclops bicolor*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Cyclops Species: *Cyclops bicolor*		[54]
43.	*Cyclops vernalis*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Cyclops Species: *Cyclops vernalis*		[54]
44.	*Cyclops vericans rubellus*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Cyclops Species: *Cyclops vericans rubellus*		[54]
45.	*Macrocyclops distinctus*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Macrocyclops Species: *Macrocyclops Distinctus*		[54]
46.	*Microcyclops* sp.	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Microcyclops Species: *Microcyclops* sp.		[54]
47.	*Paracyclops fimbriatus poppei*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Paracyclops Species: *Paracyclops fimbriatus poppei*		[54]
48.	*Mesocyclops leuckarti*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Mesocyclops Species: *Mesocyclops leuckart*		[41,54-55]

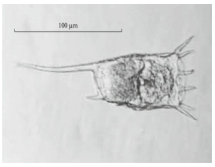
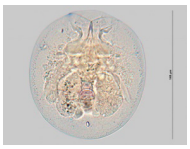
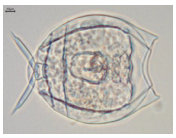
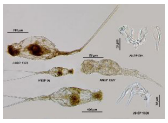
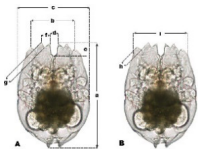
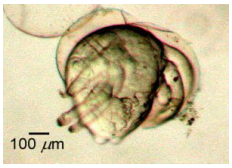
49.	*Mesocyclops hyalinus*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Mesocyclops Species: *Mesocyclops hyalinus*		[41,54]
50.	*Mesocyclops inversus*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Mesocyclops Species: *Mesocyclops inversus*		[54]
51.	*Mesocyclops dybowskii*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Mesocyclops Species:*Mesocyclops dybowskii*		[41,54]
52.	*Brachionus caudatus*	Phylum: Rotifera Class:Monogononta Order: Ploima Family: Brachionidae Genus: Brachionus Species: *Brachionus caudatus*		[40-41,50,55]
53.	*Brachionus forficula*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Brachionus Species: *Brachionus forficula*		[40-42,50,55]
54.	*Hexarthra* sp.	Phylum: Rotifera Class: Monogononta Order: Flosculariaceae Family: Hexarthridae Genus: Hexarthra Species: *Hexarthra* sp.		[21,40]
55.	*Keratella* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Keratella Species: *Keratella* sp.		[40,43,44-45,47,49, 51,53,56,57]
56.	*Monostyla* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Lecanidae Genus: Monostyla Species: *Monostyla* sp.		[40,50]
57.	*Polyarthra* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Synchaetidae Genus: Polyarthra Species: *Polyarthra* sp.		[40-42,47,49,51]

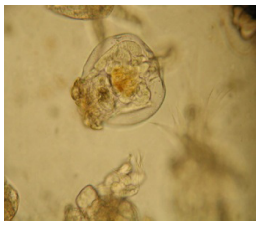
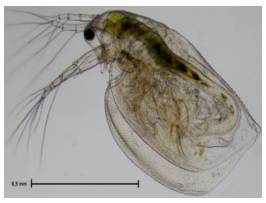
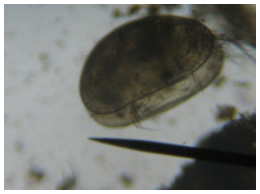
58.	*Daphnia lumholtzii*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Daphniidae Genus: Daphnia Species: *Daphnia lumholtizi*		[40,42,50,55]
59.	*Daphnia magna*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Daphniidae Genus: Daphnia Species: *Daphnia magna*		[40]
60.	*Macrothrix rosea*	Phylum: Arthropoda Class: Branchiopoda Order: Anomopoda Family: Macrothricidae Genus: Macrothrix Species: *Macrothrix rosea*	 	[40]
61.	*Moina* sp.	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Moinidae Genus: Moina Species: *Moina* sp.		[21,40,42-45,47-49,51-53]
62.	*Cyclops leukartii*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Cyclops Species: *Cyclops leukartii*		[40]
63.	*Diaptomus* sp.	Phylum: Arthropoda Class: Copepoda Order: Calanoida Family: Diaptomidae Genus: Diaptomus Species: *Diaptomus* sp.		[1,21,40,42-53,56,58]
64.	*Eudiaptomus* sp.	Phylum: Arthropoda Class: Copepoda Order: Calanoida Family: Diaptomidae Genus: Eudiaptomus Species: *Eudiaptomus* sp.		[40]
65.	*Heliodiaptomus latift*	Phylum: Arthropoda Class: Copepoda Order: Calanoida Family: Diaptomidae Genus: Heliodiaptomus Species: *Heliodiaptomus latift*		[40]

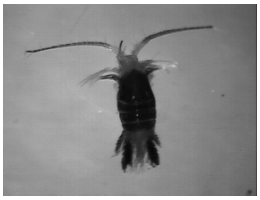
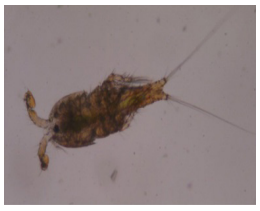
66.	*Macrocyclops* sp.	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Macrocyclops Species: *Macrocyclops* sp.		[40]
67.	*Mesocyclops* sp.	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Mesocyclops Species: *Mesocyclops* sp.		[1,40,43,46, 48,50,53,58]
68.	*Streptocephalus* sp.	Phylum: Arthropoda Class: Branchiopoda Order: □Anostraca Family: □Streptocephalidae Genus: Streptocephalus Species: *Streptocephalus* sp.		[48]
69.	*Brachionus diversicornis*	Phylum: Rotifera Class:Monogononta Order: Ploima Family: Brachionidae Genus: Brachionus Species: *Brachionus diversicornis*		[42,48,50,55]
70.	*Brachionus calyciflorus*	Phylum: Rotifera Class:Monogononta Order: Ploima Family: Brachionidae Genus: Brachionus Species: *Brachionus calyciflorus*		[41-42,48, 50,55]
71.	*Brachionus quadridentatus*	Phylum: Rotifera Class:Monogononta Order: Ploima Family: Brachionidae Genus: Brachionus Species: *Brachionus quadridentatus*		[41,48,50]
72.	*Keratella stipitata*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Keratella Species: *Keratella stipitata*		[48]
73.	*Keratella Valga*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Keratella Species: *Keratella Valga*		[21,48,55]
74.	*Cyclops* sp.	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Cyclops Species: *Cyclops* sp.		[1,21,42-53,56]

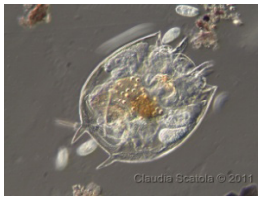
75.	*Alona* sp.	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Chydoridae Genus: Alona Species: *Alona* sp.		[48]
76.	*Trichocerca* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Trichocercidae Genus: Trichocerca Species: *Trichocerca* sp.		[21,47-48,50,56]
77.	*Lepadella* sp.	Phylum: Rotifera Class: Eurotatoria Order: Ploima Family: Lepadellidae Genus: Lepadella Species: *Lepadella* sp.		[42,48,50]
78.	*Arcella* sp.	Phylum: Amoebozoa Class: Tubulinea Order: Arcellinida Family: Arcellidae Genus: Arcella Species: *Arcella* sp.		[21,50]
79.	*Difflugia* sp.	Phylum: Amoebozoa Class: Tubulinea Order: Arcellinida Family: Difflugiidae Genus: Difflugia Species: *Difflugia* sp.		[21,41-42,49-50]
80.	*Centropyxis* sp.	Phylum: Amoebozoa Class: Tubulinea Order: Arcellinida Family: Centropyxidae Genus: Centropyxis Species: *Centropyxis* sp.		[50]
81.	*Phacus* sp.	Phylum: Euglenozoa Class: Euglenoidea Order: Euglenida Family: Euglenidae Genus: Phacus Species: *Phacus* sp.		[21,49-50]
82.	*Pareuglypha* sp.	Phylum: Cercozoa Class: Imbricatea Order: Euglyphida Family: Euglyphidae Genus: Pareuglypha Species: *Pareuglypha* sp.		[50]
83.	*Asplanchna priodonta*	Phylum: Rotifera Class: Eurotatoria Order: Ploima Family: Asplanchnidae Genus: Asplanchna Species: *Asplanchna priodonta*		[21,50]
84.	*Brachionus donneri*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Brachionus Species: *Brachionus donneri*		[42,50]

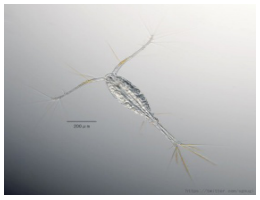
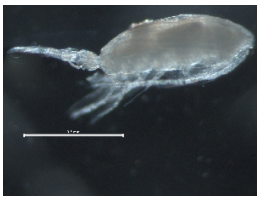
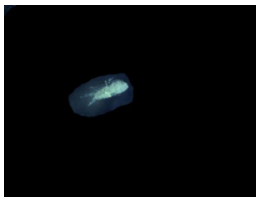
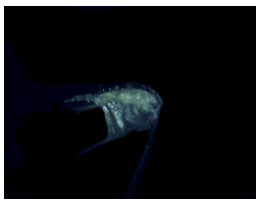
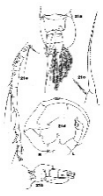
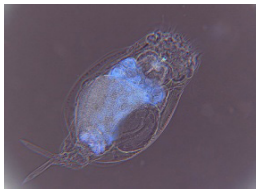
85.	*Brachionus nilsoni*	Phylum: Rotifera Class:Monogononta Order: Ploima Family: Brachionidae Genus: Brachionus Species: *Brachionus nilsoni*	 *Brachionus nilsoni*	[50]
86.	*Brachionus urceolaris*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Brachionus Species: *Brachionus urceolaris*		[50]
87.	*Colurella* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Colurella Species: *Colurella* sp.		[50]
88.	*Filinia longiseta*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Testudinellidae Genus: Filinia Species: *Filinia longiseta*		[21,50]
89.	*Filinia opoliensis*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Testudinellidae Genus: Filinia Species: *Filinia opoliensis*		[50,55]
90.	*Filinia terminalis*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Testudinellidae Genus: Filinia Species: *Filinia terminalis*		[50]
91.	*Harrirgia* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Testudinellidae Genus: Harrirgia Species: *Harrirgia* sp.		[50]
92.	*Pompholyx sulcata*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Testudinellidae Genus: Pompholyx Species: *Pompholyx sulcata*		[50]
93.	*Horaella* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Testudinellidae Genus: Horaella Species: *Horaella* sp.		[50]

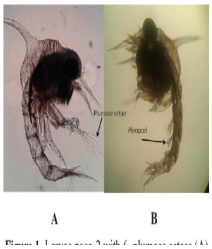
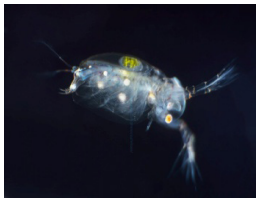
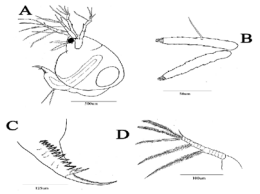
94.	*Keratella cochlearis*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Testudinellidae Genus: Keratella Species: *Keratella cochlearis*		[21,50,55]
95.	*Keratella tropica*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Testudinellidae Genus: Keratella Species: *Keratella tropica*		[41,50,55]
96.	*Testudinella patina*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Testudinellidae Genus: Testudinella Species: *Testudinella patina*		[50,55]
97.	*Lecane luna*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Lecanidae Genus: Lecane Species: *Lecane luna*		[50]
98.	*Manfredium* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Lecanidae Genus: Manfredium Species: *Manfredium* sp.		[50]
99.	*Monogononta* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Lecanidae Genus: Monogononta Species: *Monogononta* sp.		[50]
100.	*Polyarthra vulgaris*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Synchaetidae Genus: Polyarthra Species: *Polyarthra vulgaris*		[21,50]
101.	*Nauplius*			[21,42,46-52, 55,56]
102.	*Metanauplius*			[42,48,50]
103.	*Cyclops varicans*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Cyclops Species: *Cyclops varicans*		[50]

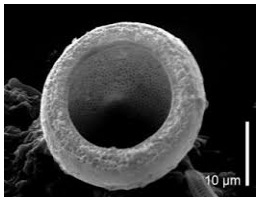
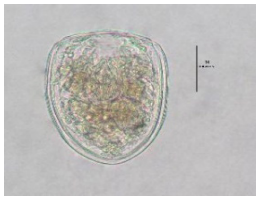
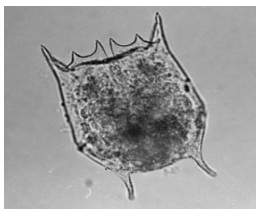
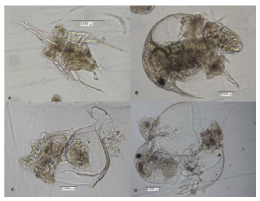
104.	*Diaptomus glacialis*	Phylum: Arthropoda Class: Copepoda Order: Calanoida Family: Diaptomidae Genus: Diaptomus Species: *Diaptomus glacialis*		[50]
105.	*Heterocypris* sp.	Phylum: Arthropoda Class: Ostracoda Order: Podocopida Family: Cyprididae Genus: Heterocypris Species: *Heterocypris* sp.		[41-42,49,50]
106.	*Brachionus diversicornis*	Phylum: Rotifera Class:Monogononta Order: Ploima Family: Brachionidae Genus: Brachionus Species: *Brachionus diversicornis*		[42-47,49,51-53,56-57]
107.	*Daphnia* sp.	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Daphniidae Genus: Daphnia Species: *Daphnia* sp.		[42-47,51,53]
108.	*Helidiaptomus* sp.	Phylum: Arthropoda Class: Copepoda Order: Calanoida Family: Diaptomidae Genus: Helidiaptomus Species: *Helidiaptomus* sp.		[46]
109.	*Cyclocypris* sp.	Phylum: Arthropoda Class: Ostracoda Order: Podocopida Family: Cyclocyprididae Genus: Cyclocypris Species: *Cyclocypris* sp.		[46]
110.	*Cyclocypris* sp.	Phylum: Arthropoda Class: Ostracoda Order: Podocopida Family: Cyprididae Genus: Cyclocypris Species: *Cyclocypris* sp.		[21,46]
111.	*Calanus helgolandicus*	Phylum: Arthropoda Class: Maxillopoda Order: Calanoida Family: Calanidae Genus: Calanus Species: *Calanus helgolandicus*		[56]

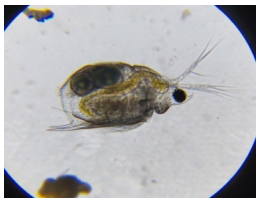
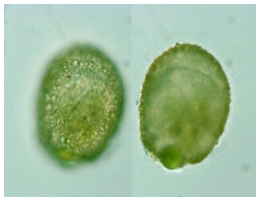
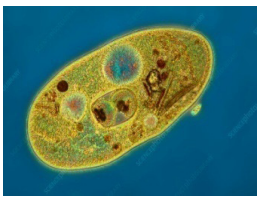
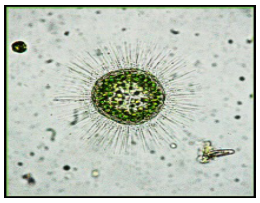
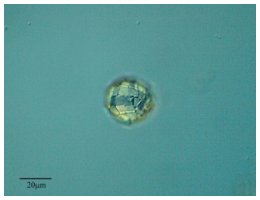
112.	*Microcalanus pusillus*	Phylum: Arthropoda Class: Maxillopoda Order: Calanoida Family: Calanidae Genus: Microcalanus Species: *Microcalanus pusillus*		[56]
113.	*Paracalanus parvus*	Phylum: Arthropoda Class: Maxillopoda Order: Calanoida Family: Calanidae Genus: Paracalanus Species: *Paracalanus parvus*		[56]
114.	*Temora longicornis*	Phylum: Arthropoda Class: Hexanauplia Order: Calanoida Family: Temoridae Genus: Temora Species: *Temora longicornis*		[56]
115.	*Acartia clausi*	Phylum: Arthropoda Class: Maxillopoda Order: Calanoida Family: Acartiidae Genus: Acartia Species: *Acartia clausi*		[56]
116.	*Centropages typicus*	Phylum: Arthropoda Class: Maxillopoda Order: Calanoida Family: Centropagidae Genus: Centropages Species: *Centropages typicus*		[56]
117.	*Candacia armata*	Phylum: Arthropoda Class: Maxillopoda Order: Calanoida Family: Candaciidae Genus: Candacia Species: *Candacia armata*		[56]
118.	*Oithona helgolandica*	Phylum: Arthropoda Class: Hexanauplia Order: Cyclopoida Family: Oithonidae Genus: Oithona Species: *Oithona helgolandica*		[56]
119.	*Tigriopus* sp.	Phylum: Arthropoda Class: Hexanauplia Order: Harpacticoida Family: Harpacticidae Genus: Tigriopus Species: *Tigriopus* sp.		[56]

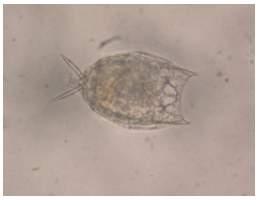
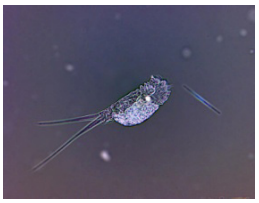
120.	*Processa* sp.	Phylum: Arthropoda Class: Malacostraca Order: Decapoda Family: Processidae Genus: Processa Species: *Processa* sp.		[56]
121.	*Lecane* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Lecanidae Genus: Lecane Species: *Lecane* sp.		[21,43,49,51]
122.	*Platyias* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Platyias Species: *Platyias* sp.		[42-43]
123.	*Ceriodaphnia* sp.	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Daphniidae Genus: Ceriodaphnia Species: *Ceriodaphnia* sp.		[43]
124.	Shrimp larvae			[43,46,59]
125.	*Notholca* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Notholca Species: *Notholca* sp.		[42,53]
126.	*Pseudocalanus* sp.	Phylum: Arthropoda Class: Maxillopoda Order: Calanoida Family: Clausocalanidae Genus: Pseudocalanus Species: *Pseudocalanus* sp.		[57]

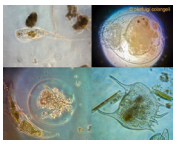
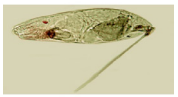
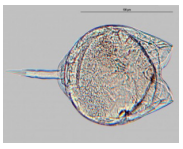
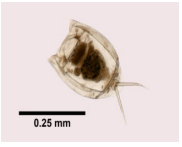
127.	*Calanus* sp.	Phylum: Arthropoda Class: Maxillopoda Order: Calanoida Family: Calanidae Genus: Calanus Species: *Calanus* sp.		[49,57]
128.	*Oithona* sp.	Phylum: Arthropoda Class: Hexanauplia Order: Cyclopoida Family: Oithonidae Genus: Oithona Species: *Oithona* sp.		[57]
129.	*Acartia* sp.	Phylum: Arthropoda Class: Maxillopoda Order: Calanoida Family: Acartiidae Genus: Acartia Species: *Acartia* sp.		[57]
130.	*Paracalanus* sp.	Phylum: Arthropoda Class: Maxillopoda Order: Calanoida Family: Calanidae Genus: Paracalanus Species: *Paracalanus* sp.		[57]
131.	*Centropages* sp.	Phylum: Arthropoda Class: Maxillopoda Order: Calanoida Family: Centropagidae Genus: Centropages Species: *Centropages* sp.		[57]
132.	*Paracartia* sp.	Phylum: Arthropoda Class: Maxillopoda Order: Calanoida Family: Acartiidae Genus: Paracartia Species: *Paracartia* sp.		[57]
133.	*Euchlanis* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Euchlanidae Genus: Euchlanis Species: *Euchlanis* sp.		[57]
134.	*Synchaeta* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Synchaetidae Genus: Synchaeta Species: *Synchaeta* sp.		[57]

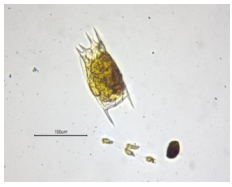
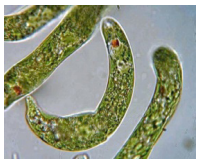
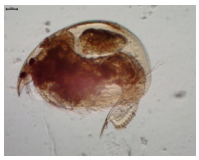
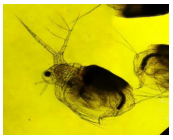
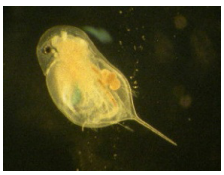
135.	Crab larvae (Scylla)			[57]
136.	*Pseudocandona* sp.	Phylum: Arthropoda Class: Ostracoda Order: Podocopida Family: Candonidae Genus: Pseudocandona Species: *Pseudocandona* sp.		[57]
137.	*Sida* sp.	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Sididae Genus: Sida Species: *Sida* sp.		[57]
138.	*Bosmina coregoni*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Bosminidae Genus: Bosmina Species: *Bosmina coregoni*		[42]
139.	*Bosmina longiros-tris*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Bosminidae Genus: Bosmina Species: *Bosmina longirostris*		[42,55]
140.	*Moinodaphnia* sp.	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Moinidae Genus: Moinodaphnia Species: *Moinodaphnia* sp.		[42]
141.	*Heliodiaptomus latifi*	Phylum: Arthropoda Class: Copepoda Order: Calanoida Family: Diaptomidae Genus: Heliodiaptomus Species: *Heliodiaptomus latifi*		[42]
142.	*Amphizonella* sp.			[42]

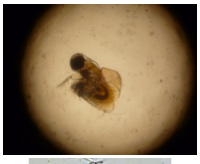
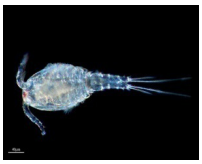
143.	*Pyxidicula* sp.	Phylum: Bacillariophyta Class: Bacillariophyceae Order: Rhopalodiales Family: Rhopalodiales Genus: Pyxidicula Species: *Pyxidicula* sp.		[42]
144.	*Ascomorpha* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Gastropodidae Genus: Ascomorpha Species: *Ascomorpha* sp.		[21,42]
145.	*Asplanchnopus* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Asplanchnidae Genus: Asplanchnopus Species: *Asplanchnopus* sp.		[42]
146.	*Brachionus bidentata*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Brachionus Species: *Brachionus bidentata*		[42]
147.	*Harringia* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Asplanchnidae Genus: Harringia Species: *Harringia* sp.		[42]
148.	*Hexarthra intermedia*	Phylum: Rotifera Class: Eurotatoria Order: Flosculariaceae Family: Hexarthridae Genus: Hexarthra Species: *Hexarthra intermedia*		[42]
149.	*Notommata* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Notommatidae Genus: Notommata Species: *Notommata* sp.		[42]
150.	*Platyias patulus*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Platyias Species: *Platyias patulus*		[21,42]

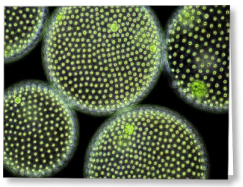
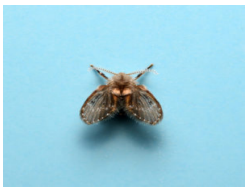
151.	*Alonella* sp.	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Chydoridae Genus: Alonella Species: *Alonella* sp.		[41-42]
152.	*Scapholeberis kingi*	Phylum: Arthropoda Class: Branchiopoda Order: Diplostraca Family: Daphniidae Genus: Scapholeberis Species: *Scapholeberis kingi*		[42]
153.	*Scapholeberis* sp.	Phylum: Arthropoda Class: Branchiopoda Order: Diplostraca Family: Daphniidae Genus: Scapholeberis Species: *Scapholeberis* sp.		[42]
154.	*Awerintzewia* sp.	Phylum: Amoebozoa Class: Tubulinea Order: Arcellinida Family: Heleoperidae Genus: Awerintzewia Species: *Awerintzewia* sp.		[42]
155.	*Frontonia* sp.	Phylum: Ciliophora Class: Oligohymenophorea Order: Peniculida Family: Frontoniidae Genus: Frontonia Species: *Frontonia* sp.		[42]
156.	*Acanthocystis* sp.	Phylum: Heliozoa Class: Centrohelea Order: Centrohelida Family: Acanthocystidae Genus: Acanthocystis Species: *Acanthocystis* sp.		[42]
157.	*Paraquadrula* sp.	Phylum: Amoebozoa Class: Tubulinea Order: Arcellinida Family: Paraquadrulidae Genus: Paraquadrula Species: *Paraquadrula* sp.	 	[42]
158.	*Vasicola ciliata*	Phylum: Ciliophora Class: Prostomatea Order: Prostomatida Family: Metacystidae Genus: Vasicola Species: *Vasicola ciliata*		[42]

159.	*Vasicola* sp.	Phylum: Ciliophora Class: Prostomatea Order: Prostomatida Family: Metacystidae Genus: Vasicola Species: *Vasicola* sp.		[42]
160.	*Cephalodella* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Notommatidae Genus: Cephalodella Species: *Cephalodella* sp.		[21,41-42,49]
161.	*Filinia camascela*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Testudinellidae Genus: Filinia Species: *Filinia camascela*		[42,55]
162.	*Lecane ohioensis*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Lecanidae Genus: Lecane Species: *Lecane ohioensis*		[42]
163.	*Monommata* sp.	Phylum: Rotifera Class: Monogononta Order: Ploimida Family: Notommatidae Genus: Monommata Species: *Monommata* sp.		[42]
164.	*Cyclops scutifer*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Cyclops Species: *Cyclops scutifer*		[58]
165.	*Cyclops strenuus*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Cyclops Species: *Cyclops strenuous*		[58]
166.	*Heliodiaptomus* sp.	Phylum: Arthropoda Class: Copepoda Order: Calanoida Family: Diaptomidae Genus: Heliodiaptomus Species: *Heliodiaptomus* sp.		[41,58]

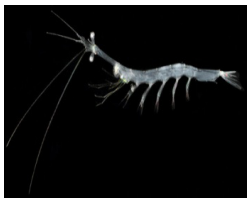
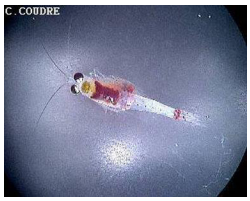
167.	*Mesocyclops* sp.	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Merocyclops Species: *Merocyclops* sp.		[1,58]
168.	*Brachionus patulus*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Brachionus Species: *Brachionus patulus*		[41]
169.	*Rotaria* sp	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Philodinidae Genus: Rotaria Species: *Rotaria* sp.		[41,49]
170.	*Trichocera ratus*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Trichocercidae Genus: Trichocerca Species: *Trichocera ratus*		[41]
171.	*Trichocera cylindrica*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Trichocercidae Genus: Trichocerca Species: *Trichocera cylindrica*		[41]
172.	*Trichocera similis*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Trichocercidae Genus: Trichocerca Species: *Trichocera similis*		[41]
173.	*Lecane bulla*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Lecanidae Genus: Lecane Species: *Lecane bulla*		[41]
174.	*Lecane ungulata*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Lecanidae Genus: Lecane Species: *Lecane ungulata*		[41,55]
175.	*Encentrum* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Dicranophoridae Genus: Encentrum Species: *Encentrum* sp.		[41]

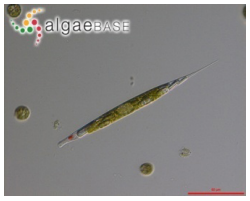
176.	*Keratella quadrata*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Keratella Species: *Keratella quadrata*		[41]
177.	*Euglena gracilis*	Phylum: Euglenophycota Class: Euglenophyceae Order: Euglenales Family: Euglenaceae Genus: Euglena Species: *Euglena gracilis*		[41]
178.	*Paramecium* sp.	Phylum: Protozoa Class: Ciliates Order: Hymenostomatida Family: Parameciidae Genus: Paramecium Species: *Paramecium* sp.		[41]
179.	*Euglena* sp.	Phylum: Euglenophycota Class: Euglenophyceae Order: Euglenales Family: Euglenaceae Genus: Euglena Species: *Euglena* sp.		[41,49]
180.	*Alona rectangula*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Chydoridae Genus: Alona Species: *Alona rectangula*		[41]
181.	*Alona quadrangularis*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Chydoridae Genus: Alona Species: *Alona quadrangularis*		[41]
182.	*Daphnia similis*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Daphniidae Genus: Daphnia Species: *Daphnia similis*		[41]
183.	*Daphnia micrura*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Daphniidae Genus: Daphnia Species: *Daphnia micrura*		[41]
184.	*Daphnia carinata*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Daphniidae Genus: Daphnia Species: *Daphnia carinata*		[41]

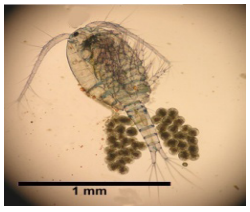
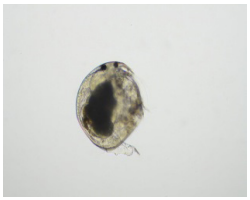
185.	*Moina micrura*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Moinidae Genus: Moina Species: *Moina micrura*		[41,55]
186.	*Polyphemus* sp.	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Polyphemidae Genus: Polyphemus Species: *Polyphemus* sp.	 	[41]
187.	*Microcyclops varicans*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Microcyclops Species: *Microcyclops varicans*		[41,55]
188.	*Paracyclops fimbriatus*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Paracyclops Species: *Paracyclops fimbriatus*		[41]
189.	*Bryocvamptus* sp.			[21,49]
190.	*Microsetella* sp.	Phylum: Arthropoda Class: Hexanauplia Order: Harpacticoida Family: Ectinosomatidae Genus: Microsetella Species: *Microsetella* sp.		[49]
191.	*Macrothrix* sp.	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Macrothricidae Genus: Macrothrix Species: *Macrothrix* sp.	 	[21,49]
192.	*Sagitta* sp.	Phylum: Chaetognatha Class: Sagittoidea Order: Aphragmophora Family: Sagittidae Genus: Sagitta Species: *Sagitta* sp.		[4,49,60]

193.	*Kelicotia* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Kelicotia Species: *Kelicotia* sp.		[21,49]
194.	*Volvox* sp.	Phylum: Chlorophyta Class: Monogononta Order: Chlorophyceae Family: Volvocaceae Genus: Volvox Species: *Volvox* sp.		[21,49]
195.	*Colpoda* sp.	Phylum: Ciliophora Class: Colpodea Order: Colpodida Family: Colpodidae Genus: Colpoda Species: *Colpoda* sp.		[21,49]
196.	*Euglypha* sp.	Phylum: Cercozoa Class: Imbricatea Order: Euglyphida Family: Euglyphidae Genus: Euglypha Species: *Euglypha* sp.		[21,49]
197.	*Acetes* sp.	Phylum: Cercozoa Class: Malacostraca Order: Decapoda Family: Sergestidae Genus: Acetes Species: *Acetes* sp.		[4,59,60]
198.	Adult drone fly	Phylum: Arthropoda Class: Insecta Order: Diptera		[60]
199.	Adult sewage fly	Phylum: Arthropoda Class: Insecta Order: Diptera		[60]
200.	Amphipoda	Phylum: Arthropoda Class: Malacostraca Order: Amphipoda		[4,59-60]
201.	Archaeogastrop-oda	Phylum: Mollusca Class: Gastropoda Order: Archaeogastropoda		[60]

202.	Bivalvia	Phylum: Mollusca Class: Bivalvia		[4,60]
203.	Caridean shrimp	Phylum: Arthropoda Class: Malacostraca Order: Decapoda		[4,60]
204.	Coleoptera	Phylum: Arthropoda Class: Insecta Order: Coleoptera		[60]
205.	Crab Larvae			[60]
206.	Doliolida	Phylum: Chordata Class: Thaliacea Order: Doliolida		[60]
207.	Ephemeroptera	Phylum: Arthropoda Class: Insecta Order: Ephemeroptera		[60]
208.	Fish juvenile			[60]
209.	Hemiptera	Phylum: Arthropoda Class: Insecta Order: Hemiptera		[60]
210.	Hydromedusa			[4,60]
211.	Isopoda	Phylum: Arthropoda Class: Malacostraca Order: Isopoda		[4,59,60]

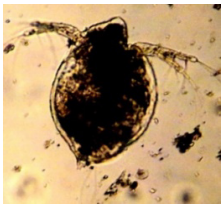
212.	*Lucifer* sp.	Phylum: Arthropoda Class: Malacostraca Order: Decapoda Family: Luciferidae Genus: Lucifer Species: *Lucifer* sp		[4,59,60]
213.	Megalopa Larvae			[4,60]
214.	Mesogastropoda	Phylum: Mollusca Class: Gastropoda Order: Mesogastropoda		[60]
215.	Mysidacea	Phylum: Arthropoda Class: Malacostraca Order: Mysidace		[60]
216.	*Mysis* sp.	Phylum: Arthropoda Class: Malacostraca Order: Mysida Family: Mysidae Genus: Mysis Species: *Mysis* sp.		[60]
217.	Nemertea			[60]
218.	Penaeidae shrimp	Phylum: Arthropoda Class: Malacostraca Order: Decapoda Family: Penaeidae		[4,60]
219.	Plecoptera	Phylum: Arthropoda Class: Insecta Order: Plecoptera		[60]

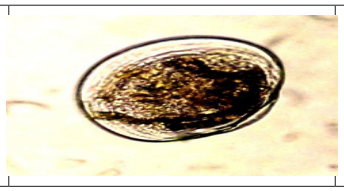
220.	Polychaeta	Phylum: Annelida Class: Polychaeta		[60]
221.	Porifera			[4,60]
222.	Spider Mite	Phylum: Arthropoda Class: Arachnida Order: Trombidiformes		[60]
223.	Trichoptera	Phylum: Arthropoda Class: Insecta Order: Trichoptera		[60]
224.	Zoea larva			[4,59-60]
225.	*Euglena acus*	Phylum: Euglenozoa Class: Euglenophyceae Order: Euglenales Family: Euglenaceae Genus: Euglena Species: *Euglena acus*		[21]
226.	*Euglena oxyuris*	Phylum: Euglenozoa Class: Euglenophyceae Order: Euglenales Family: Euglenaceae Genus: Euglena Species: *Euglena oxyuris*		[21]
227.	*Euglena sanguinea*	Phylum: Euglenozoa Class: Euglenophyceae Order: Euglenales Family: Euglenaceae Genus: Euglena Species: *Euglena sanguinea*		[21]

228.	*Ceratium hirund-inella*	Phylum: Dinoflagellata Class: Dinophyceae Order: Gonyaulacales Family: Ceratiaceae Genus: Ceratium Species: *Ceratium hirundinella*		[21]
229.	*Anuraeopsis fissa*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Anuraeopsis Species: *Anuraeopsis fissa*		[21]
230.	*Filinia brachiata*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Testudinellidae Genus: Filinia Species: *Filinia brachiata*		[21]
231.	*Monostyla bulla*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Lecanidae Genus: Monostyla Species: *Monostyla bulla*		[21]
232.	*Lindia* sp.	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Lindiidae Genus: Lindia Species: *Lindia* sp.		[21]
233.	*Mesocyclops edax*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: Mesocyclops Species: *Mesocyclops edax*		[21,55]
234.	*Chydorus* sp.	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Chydoridae Genus: Chydorus Species: *Chydorus* sp.		[21]
235.	*Balanus* sp.	Phylum: Arthropoda Class: Hexanauplia Order: Sessilia Family: Balanidae Genus: Balanus Species: Balanus sp.		[60]

236.	Ciliophora			[60]
237.	Cumacea	Phylum: Arthropoda Class: Malacostraca Order: Cumacea		[60]
238.	Fish larvae			[4, 59]
239.	Gastropoda	Phylum: Mollusca Class: Gastropoda		[60]
240.	Hydroida	Phylum: Cnidaria Class: Hydrozoa Order: Hydroida		[60]
241.	Mites	Phylum: Arthropoda Class: Arachnida		[60]
242.	Mysid	Phylum: Arthropoda Class: Malacostraca Order: Mysida		[4, 59]
243.	Odonata	Phylum: Arthropoda Class: Insecta Order: Odonata		[60]
244.	Oligochaeta	Phylum: Annelida Class: Clitellata Order: Oligochaeta		[60]

245.	Ostracoda	Phylum: Arthropoda Class: Ostracoda		[1,4,46]
246.	Chaetognatha			[59]
247.	Fish egg			[59]
248.	Mollusc larvae			[59]
249.	*Philodina roseola*	Phylum: Rotifera Class: Bdelloidea Order: Bdelloida Family: Philodinidae Genus: Philodina Species: *Philodina roseola*		[55]
250.	*Platyias quadri-cornis*	Phylum: Rotifera Class: Monogononta Order: Ploima Family: Brachionidae Genus: Platyias Species: *Platyias quadricornis*		[55]
251.	*Bosmina longispi-na*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Bosminidae Genus: *Bosmina* Species: *Bosmina longispina*		[55]
252.	*Diaphanosoma brachyurum*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Sididae Genus: *Diaphanosoma* Species: *Diaphanosoma brachyurum*		[55]
253.	*Moina macrocopa*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Moinidae Genus: *Moina* Species: *Moina macrocopa*		[55]

254.	*Ceriodaphnia cornuta*	Phylum: Arthropoda Class: Branchiopoda Order: Cladocera Family: Daphniidae Genus: *Ceriodaphnia* Species: *Ceriodaphnia cornuta*		[55]
255.	*Skistodiaptomus pallidus*	Phylum: Arthropoda Class: Copepoda Order: Calanoida Family: Diaptomidae Genus: *Skistodiaptomus* Species: *Skistodiaptomus pallidus*		[55]
256.	*Cyclops varicans rubellus*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: *Cyclops* Species: *Cyclops varicans rubellus*		[55]
257.	*Microcyclops rubellus*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: *Microcyclops* Species: *Microcyclops rubellus*	 	[55]
258.	*Thermocyclops crassus*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: *Thermocyclops* Species: *Thermocyclops crassus*		[55]
259.	*Thermocyclops oithonoides*	Phylum: Arthropoda Class: Copepoda Order: Cyclopoida Family: Cyclopidae Genus: *Thermocyclops* Species: *Thermocyclops oithonoides*		[55]

260.	Pelecypod larva			[55]

Conclusion

Zooplankton plays a vital role in the freshwater/ river ecosystem. They provide food and nutrients to the organisms belong to the upper stages of the food chain. They have a great impact on nutrient recycling. This review study will help the researchers to carry out the further taxonomic and advanced study on fresh/river water zooplankton.

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