Volume 23, Issue 1: KUS: 1413: xx-xx: 14052025: 2026

KHULNA UNIVERSITY
STUDIES

journal homepage: www.kus.ku.ac.bd

Research article

An Annotated Checklist of the Cladocera (Crustacea: Branchiopoda) of Bangladesh Based on Published Records

Md. Abdula Al Sad[1]*, Md. Samir Islam[1], Md. Abu Bakkar[2] and Md. Mashrafi[1]

[1]*Department of Zoology, University of Chittagong, Chattogram-4331, Bangladesh*
[2]*Department of Geography and Environmental Studies, University of Chittagong, Chattogram – 4331, Bangladesh*

ABSTRACT

This study presents an updated and annotated checklist of freshwater Cladocera (Crustacea: Branchiopoda) of Bangladesh based on published records from 1983 to 2025. A total of 61 cladoceran taxa were documented, comprising 40 species-level and 21 genus-level records, distributed across 25 genera and 10 families. Chydoridae (31.15%) and Daphniidae (26.23%) were the most taxonomically dominant families, followed by Bosminidae and Moinidae (each 9.84%) and Sididae (8.20%), reflecting patterns typical of South Asian freshwater ecosystems. Marked spatial variation in reported richness was evident, with Chattogram showing the highest diversity, while several districts remain poorly studied. The frequent occurrence of genus-level records highlights limitations in earlier taxonomic resolution and uneven research effort. This checklist provides a standardized baseline for cladoceran biodiversity in Bangladesh and underscores the need for systematic surveys and integrative taxonomic approaches.

ARTICLE INFO

Article timeline:
Date of Submission:
14 May, 2025
Date of Acceptance:
14 April, 2026
Article available online:
23 April, 2026

***Keywords*:**
Cladocera
Freshwater Zooplankton
Annotated Checklist
Distribution
Bangladesh

Introduction

Zooplankton are a fundamental link in transforming energy from producers to consumers, playing a crucial role as efficient filter feeders on phytoplankton and as a food source for various invertebrates, fish, and their larvae (Saler & Selamoglu, 2020). They are considered one of the best indicators of biological productivity and the ecological condition of aquatic habitats (Roy et al., 2008). These organisms include protozoa, cladocerans, copepods, and rotifers, which can serve as indicators of water quality. The study of zooplankton is essential in fisheries, aquaculture, and paleolimnological research (Guy, 1992). They are widely recognized as pollution indicator organisms in aquatic environments (Lomartire et al., 2021). Zooplankton distribution is not homogeneous; some species are predominantly found in littoral waters, while others are restricted to selected limnetic waters (Mandal & Mukherjee, 2011).

Cladocera, a group of microcrustaceans, are key components of aquatic ecosystems and play an important role in ecosystem functioning (Geraldes & Boavida, 2004). Owing to their feeding habits, they influence the dynamics of phytoplankton, bacterioplankton, and protozoa, as well as the availability of detrital resources. Cladocerans form an important link in aquatic food webs, serving as prey for predatory copepods, aquatic insect larvae, fish fry, and adult planktivorous fish (Dole-Olivier et al., 2000; Tessier et al., 2001; Sommer et al., 2003).

The study of Cladocera dates back to the second half of the seventeenth century, when O. F. Müller initiated research on this group (Frey, 1982). In 1829, the taxon was recognized as an independent group by Latreille (Fryer, 1987). Intensive taxonomic and faunistic investigations, however, began between 1840 and 1870, a period characterized by limited species differentiation, a pattern also observed in studies of other freshwater microinvertebrates. This development occurred relatively late compared with taxonomic studies of other organisms such as insects, birds, and mammals. Cladocera taxonomy gained greater attention during the 1970s, driven by increasing interest in documenting local faunas, providing detailed morphological descriptions, and conducting genetic studies (Korovchinsky, 1997).

Bangladesh's rich mosaic of aquatic habitats—including rivers, haors, beels, ponds, and floodplains—provides suitable environments for diverse cladoceran communities. Cladocerans play a central role in freshwater food webs: they are major grazers of phytoplankton and an important prey source for fish, facilitating energy transfer to higher trophic levels and supporting secondary production (Sarma et al., 2005). In particular, genera such as *Daphnia* and *Moina* are not only ecologically important

*Corresponding author: <mdabdulaalsad@yahoo.com>
DOI: https://doi.org/10.53808/KUS.2026.23.01.1413-ls

but are also widely used in aquaculture and fisheries as live feed, highlighting their economic importance (Rottmann et al., 1992; Lavens & Sorgeloos, 1996).

Despite their importance, comprehensive and updated checklists of cladoceran species in Bangladesh are lacking. This taxonomic and faunistic knowledge gap limits our understanding of aquatic biodiversity, ecosystem functioning, and the impacts of environmental change. The absence of a verified species checklist has direct implications for both research and commercial sectors. Inaccurate or outdated biodiversity data hinder effective monitoring of ecosystem health, the development of sustainable aquaculture practices, and the optimization of zooplankton production for fisheries.

Addressing this research gap is critical to advance aquatic biodiversity studies in Bangladesh, informing conservation and management strategies, and supporting economically vital industries. An updated, species-level inventory will not only enhance local ecological knowledge but also contribute to global understanding of freshwater zooplankton diversity, especially in underrepresented tropical regions.

Materials and Methods

Literature Search and Data Selection

A systematic literature review was conducted to compile published records of Cladocera from Bangladesh covering the period 1983–2025. Literature searches were performed using multiple sources, including Google Scholar, Web of Science, and Scopus, as well as local and regional journals not consistently indexed in international databases. Additional records were identified through backward citation tracking of relevant articles. Search terms included combinations of keywords such as "Cladocera," "zooplankton," "Branchiopoda," "freshwater zooplankton ," "Bangladesh," and family- or genus-level names (e.g., *Daphnia*, *Moina*, *Chydorus*). Searches were conducted in English, as the vast majority of relevant publications from Bangladesh are available in this language.

Inclusion and Exclusion Criteria

Publications were included if they (i) reported the occurrence of Cladocera taxa within Bangladesh, (ii) provided identifiable taxonomic names at either species or genus level, and (iii) were published in peer-reviewed journals, books, or authoritative monographs. Grey literature such as theses, unpublished reports, and conference abstracts was excluded to ensure data reliability and consistency. Records lacking sufficient taxonomic information or clear geographic attribution were also excluded. When multiple publications reported the same taxon from the same locality, records were consolidated to avoid duplication. Entries marked as 'Data Unavailable' in the tables indicate cases where the original published source did not report specific waterbody information, rather than inaccessibility of the source.

Taxonomic Standardization and Synonymy Resolution

All taxonomic names were standardized to current valid nomenclature using the Freshwater Animal Diversity Assessment (FADA, 2013) checklist and the World checklist of freshwater Cladocera (Kotov et al., 2025). When conflicting identifications or outdated names occurred in the source literature, the most recently accepted taxonomic status was adopted. Records identified only to genus level in the original publications were retained as genus-level taxa and were not treated as confirmed species-level identifications. Original identifications were not reinterpreted and are reported as published, reflecting limitations in historical taxonomic resolution. Due to inconsistent reporting, data on first records, locality counts, and explicit confidence levels could not be standardized; taxonomic confidence is therefore indicated by species-level versus genus-level records.

District-level Synthesis of Distribution Records

District-wise occurrence of recorded Cladocera taxa was summarized based on published locality information reported in the reviewed literature. Records were grouped by administrative district to identify areas of relatively high, moderate, and low reported richness across Bangladesh. Because locality information was inconsistently reported across historical sources, district-level patterns are presented as a qualitative textual synthesis rather than a spatial map.

Results and Discussion

Overview of Bangladeshi Cladocera

A total of 40 taxa identified to species level have been documented from Bangladesh. When 21 additional genus-level records are included, the checklist comprises 61 recorded cladoceran taxa, representing 25 genera and 10 families (Tables 1–4).

Table 1: Checklist of Cladocera taxa belonging to the family Chydoridae

CLADOCERA	WATERBODY	AUTHORS
CHYDORIDAE		
Alona rectangula	Lake, Wetland	Bhouyain (1983); Biswas & Panigrahi (2015)
Alona intermedia	Lake	Bhouyain (1983)
Alona quadrangularis	Wetland	Biswas & Panigrahi (2015)
Alona costata	Data unavailable	Bhouyain & Asmat (1992)
Alona guttata	Pond	Islam et al. (2020)
Alonella sp.	Wetland, Pond	Biswas & Panigrahi (2015); Islam et al. (2022); Hosain et al. (2014)
Camptocercus macrurus	Data unavailable	Bhouyain & Asmat (1992)
Camptocercus sp.	Data unavailable	Chakraborty (2023)

Chydorus sphaericus	Lake	Bhouyain (1983)
Chydorus globosus	Data unavailable	Bhouyain & Asmat (1992)
Chydorus sp.	Pond, River, Oxbow lake	Hosain et al. (2014); Khan & Abdul Bari (2019); Ahsan et al. (2012)
Kurzia latissima	Data unavailable	Bhouyain & Asmat (1992)
Oxyurella tenuicaudis	Data unavailable	Bhouyain & Asmat (1992)
Oxyurella sp.	Data unavailable	Chakraborty (2023)
Pleuroxus hamulatus	Lake	Bhouyain (1983)
Pleuroxus trigonellus	Data unavailable	Bhouyain & Asmat (1992)
Pleuroxus sp.	Pond	Hosain et al. (2014)
Leydigia acanthocercoides	Data unavailable	Bhouyain & Asmat (1992)
Leydigia sp.	Data unavailable	Bhouyain & Asmat (1992)

Note: Taxonomic confidence is inferred from species- or genus-level records due to inconsistent reporting in the original literature.

Table 2: Checklist of Cladocera taxa belonging to the family Bosminidae

CLADOCERA	WATERBODY	AUTHORS
BOSMINIDAE		
Bosmina sp.	Wetland, Pond, River, Estuary, Oxbow lake	Roy et al. (2010); Mozumder et al. (2015); Sharif & Hoque (2017); Sharif et al. (2016)
Bosmina longispina	River	Mojumder & Bhuyan (2020)
Bosmina longirostris	River	Mojumder & Bhuyan (2020)
Bosmina coregoni	Lake, Pond	Bhouyain (1983); Islam et al. (2020)
Bosminopsis deitersi	Lake	Bhouyain (1983)
Bosminopsis sp.	Pond	Khan & Abdul Bari (2019)

Note: Taxonomic confidence is inferred from species- or genus-level records due to inconsistent reporting in the original literature.

Table 3: Checklist of Cladocera taxa belonging to the family Daphniidae

CLADOCERA	WATERBODY	AUTHORS
DAPHNIIDAE		
Ceriodaphnia cornuta	Pond, River	Islam et al. (2020); Mojumder & Bhuyan (2020)
Ceriodaphnia reticulata	Pond	Naz & Najia (2009)
Ceriodaphnia laticaudata	Data unavailable	Bhouyain & Asmat (1992)
Ceriodaphnia pulchella	Data unavailable	Bhouyain & Asmat (1992)
Daphnia similis	Lake, Wetland	Bhouyain (1983); Biswas et al. (2015)
Daphnia lumholtzi	Lake, Pond, River, Oxbow lake	Reema et al. (2024); Mozumder et al. (2010); Mojumder et al. (2020)
Daphnia carinata	Wetland	Biswas & Panigrahi (2015)
Daphnia pulex	Wetland	Biswas & Panigrahi (2015)
Daphnia parvula	Pond	Naz & Najia (2009)
Daphnia longispina	Pond	Naz & Najia (2009)
Daphnia magna	Pond	Akther et al. (2016)
Daphnia sp.	Pond, River, Estuary	Haque et al. (2018); Hossain et al. (2020)
Scapholebris kingi	Lake	Bhouyain (1983)
Scapholebris sp.	Pond	Khan et al. (2020)

Simocephalus serrulatus	Data unavailable	Bhouyain & Asmat (1992)
Simocephalus sp.	Lake, Pond	Bhouyain (1983); Khan et al. (2020)

Note: Taxonomic confidence is inferred from species- or genus-level records due to inconsistent reporting in the original literature.

† ***Daphnia magna*** — Primarily Palearctic in distribution; its reported occurrence in Bangladesh is based on published records and requires confirmation.

Table 4: Checklist of Cladocera taxa belonging to the families Moinidae, Sididae, Macrothricidae, Podonidae, Ilyocryptidae, Leptodoridae, and Polyphemidae recorded from Bangladesh

CLADOCERA	WATERBODY	AUTHORS
MOINIDAE		
Moina brachiata	Lake, Pond	Reema et al. (2024); Naz et al. (2009)
Moina micrura	Wetland, Pond, River	Sultana et al. (2023)
Moina macrocopa	Pond, River	Sultana et al. (2023)
Moina irrasa	Pond	Naz et al. (2009)
Moina sp.	Wetland, Pond, River, Estuary, Oxbow lake	Mozumder et al. (2015); Haque et al. (2018); Rahman et al. (2006)
Moinodaphnia sp.	Pond	de Magny et al. (2011)
SIDIDAE		
Diaphanosoma leuchtenbergianum	Pond, River	Reema et al. (2024); Naz et al. (2009)
Diaphanosoma brachyurum	Pond, River	Islam et al. (2020)
Diaphanosoma sp.	Pond, River, Estuary, Oxbow lake	Hossain et al. (2020); Sultana et al. (2023); Mozumder et al. (2010)
Penilia sp.	Estuary	Sharif & Hoque (2017)
Sida sp.	Pond	Islam et al. (2022)
MACROTHRICIDAE		
Drepanothrix dentata	Pond	Naz et al. (2009)
Macrothrix laticornis	Lake	Bhouyain (1983)
Macrothrix rosea	Data unavailable	Bhouyain & Asmat (1992)
Macrothrix sp.	Pond, River	Khan et al. (2020); Ahsan et al. (2012)
PODONIDAE		
Evadne sp.	Estuary	Sarker et al. (2023)
ILYOCRYPTIDAE		
Ilyocryptus sp.	River, Estuary	Sharif & Hoque (2017); Sharif et al. (2016)
LEPTODORIDAE		
Leptodora sp.	Pond	Chakraborty (2023)
POLYPHEMIDAE		
Polyphemus pediculus	Pond	Naz et al. (2009)
Polyphemus sp.	Wetland	Biswas & Panigrahi (2015); Chakraborty (2023)

Note: Taxonomic confidence is inferred from species- or genus-level records due to inconsistent reporting in the original literature.

† ***Polyphemus pediculus*** — A Holarctic species; its reported occurrence in Bangladesh is biogeographically unusual and requires verification.

Familywise Composition of Cladocera

Based on a total of 61 recorded cladoceran taxa (including both species- and genus-level records), the family Chydoridae represented the highest proportion, comprising 19 taxa (31.15%), of which 13 were identified to species level and 6 to genus level. This was followed by Daphniidae, with 16 taxa (26.23%), including 13 species-level and 3 genus-level records.

Both Bosminidae and Moinidae contributed 6 taxa each (9.84%), with 4 species-level and 2 genus-level records per family. Sididae accounted for 5 taxa (8.20%), comprising 2 species-level and 3 genus-level records, while Macrothricidae included 4 taxa (6.56%), of which 3

were identified to species level and 1 to genus level. The remaining families were sparsely represented: Podonidae, Ilyocryptidae, and Leptodoridae each contributed a single genus-level record (1.64% each), whereas Polyphemidae comprised 2 taxa (3.28%), including one confirmed species-level and one genus-level record (Figure 1).

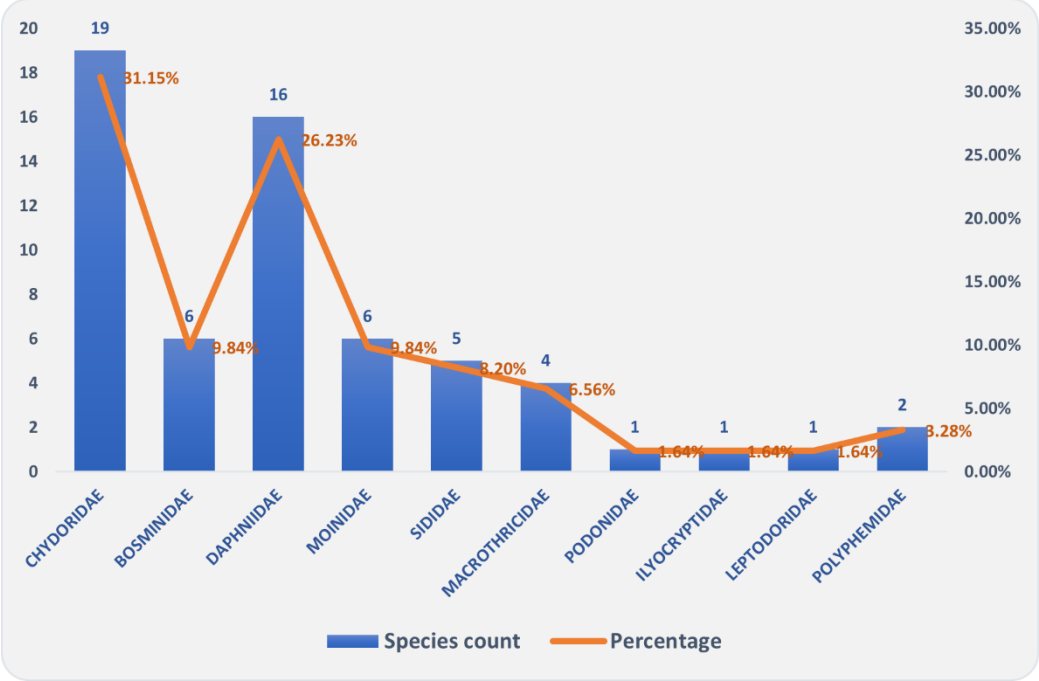

Figure 1: Family-wise percentage distribution of Cladocera taxa recorded in Bangladesh

The numerical dominance of Chydoridae and Daphniidae in Bangladesh is consistent with patterns reported from neighboring countries such as India, Nepal, and Myanmar, where these families similarly dominate freshwater cladoceran assemblages (Gogoi et al., 2018; Padhye & Dumont, 2021). This concordance indicates that the observed family-level composition reflects broader South Asian biogeographical patterns rather than a country-specific anomaly.

The relatively high proportion of genus-level records, particularly within Chydoridae and Sididae, highlights limitations in species-level resolution in earlier studies. This likely results from the morphological complexity of small-bodied taxa, limited diagnostic detail in older literature, and sampling bias toward littoral and benthic habitats where chydorids are most abundant (Dole-Olivier et al., 2000; Damme et al., 2013; Adamczuk, 2022).

District-wise Distribution of Recorded Cladocera Taxa

In addition to family-level patterns, published records indicate clear variation in reported Cladocera richness among districts in Bangladesh. Chattogram shows the highest documented richness (≥15 taxa), likely reflecting both genuine diversity and greater research effort. Noakhali, Jhenaidah, and Rajshahi exhibit moderate richness (8–14 taxa), whereas several districts—including Dinajpur, Mymensingh, Tangail, Dhaka, Manikganj, Munshiganj, Chandpur, Khulna, Barisal, and Bhola—report low richness (1–7 taxa). Districts lacking published records highlight substantial geographic gaps in sampling.

Two taxa reported from Bangladesh—*Daphnia magna* and *Polyphemus pediculus*—warrant cautious interpretation. *Daphnia magna* is primarily a temperate Palearctic species and is rarely documented from tropical South Asia. Its record from Dinajpur (Akther et al., 2016) may reflect misidentification or the presence of a closely related taxon, as confusion within the *Daphnia magna* species complex is well documented.

Similarly, *Polyphemus pediculus* is a Holarctic species, and its reported occurrence in Bangladesh is biogeographically unusual. These records are retained here as published reports but should be considered provisional until confirmed through detailed morphological re-examination and molecular analyses.

Overall, these patterns should be interpreted cautiously, as uneven research intensity strongly influences the apparent distribution of cladoceran diversity and reinforces the need for targeted surveys to refine national biodiversity estimates.

Conclusion

This study presents an updated and annotated checklist of freshwater Cladocera of Bangladesh based on published records from 1983 to 2025, documenting 40 taxa identified to species level and 21 additional genus-level records, resulting in a total of 61 recorded cladoceran taxa across 25 genera and 10 families. Chydoridae and Daphniidae were the most taxonomically represented families, consistent with patterns reported from other South Asian countries. Spatial variation in reported richness reflects both ecological heterogeneity and uneven research effort,

with several regions remaining poorly documented. The frequent occurrence of genus-level records highlights limitations in historical species-level resolution and underscores important taxonomic and geographic knowledge gaps. Overall, this checklist provides a transparent baseline for future research and emphasizes the need for systematic field surveys, improved morphological resolution, and molecular approaches to refine species identities and strengthen freshwater biodiversity assessments in Bangladesh.

Acknowledgement
The authors gratefully acknowledge all researchers whose studies provided the foundation for this checklist. The authors thank the reviewers for their constructive comments, which improved the manuscript. This study received no specific funding.

Conflict of Interest
The authors declare that there are no conflicts of interest related to this study.

Data Availability
The data supporting the findings of this study are derived from published sources and are included within this article and its tables.

References

Adamczuk, M. (2022). Spatial distribution of Cladocera in a stratified Palaearctic lake. *Water, 14*(17), 2667. https://doi.org/10.3390/w14172667

Ahsan, D. A., Kabir, A. N., Rahman, M. M., Mahabub, S., Yesmin, R., Faruque, M. H., & Naser, M. N. (2012). Plankton composition, abundance and diversity in hilsa (Tenualosa ilisha) migratory rivers of Bangladesh during spawning season. *Dhaka University Journal of Biological Sciences, 21*(2), 177–189. https://doi.org/10.3329/dujbs.v21i2.11516

Akther, S., Ashaduzzaman,.-., & Hossain, M. J. (2016). Abundance of zooplankton in Ramsagar-Dighi, Dinajpur, Bangladesh. *Bangladesh Journal of Zoology, 43*(2), 303–312. https://doi.org/10.3329/bjz.v43i2.27400

Bhouyain, A. M. (1983). Cladocera of Foy's Lake, Chittagong. *Chittagong University Studies, Part II, 7*(2). https://www.researchgate.net/publication/324006259_Cladocera_of_Foy%27s_Lake_Chittagong (Accessed on 15 December 2024).

Bhouyain, A. M., & Asmat, G. S. M. (1992). *A guide to study of freshwater zooplankton from Bangladesh.* Ghazi Publishers. https://opac.cu.ac.bd/bib/45677 (Accessed on 12 November 2023).

Biswas, B. C., & Panigrahi, A. K. (2015). Ecology and zooplankton diversity of a wetland at Jhenidah District, Bangladesh. *International Journal for Innovative Research in Science & Technology*, 1(9), 246–249. https://www.ijirst.org/articles/IJIRSTV1I9038.pdf (Accessed on 15 December 2024).

Chakraborty, B. (2023). Status of plankton and benthos in the aquaculture field of Bangladesh. *International Journal of Biological Innovations, 5*(1), 91–102. https://doi.org/10.46505/IJBI.2023.5107

de Magny, G. C., Mozumder, P. K., Grim, C. J., Hasan, N. A., Naser, M. N., Alam, M., Sack, R. B., Huq, A., & Colwell, R. R. (2011). Role of zooplankton diversity in Vibrio cholerae population dynamics and in the incidence of cholera in the Bangladesh Sundarbans. *Applied and Environmental Microbiology, 77*(17), 6125–6132. https://doi.org/10.1128/AEM.00559-11

Dole-Olivier, M. J., Galassi, D. M. P., Marmonier, P., & Creuzé des Châtelliers, M. (2000). The biology and ecology of lotic microcrustaceans. *Freshwater Biology, 44*(1), 63–91. https://doi.org/10.1046/j.1365-2427.2000.00590.x

FADA – Freshwater Animal Diversity Assessment. (2013). *FADA database*. Belgian Biodiversity Platform. http://fada.biodiversity.be (Accessed on 15 December 2024).

Frey, D. G. (1982). Questions concerning cosmopolitanism in Cladocera. *Archiv für Hydrobiologie, 93*, 484–502. http://pascalfrancis.inist.fr/vibad/index.php?action=getRecordDetail&idt=PASCALZOOLINEINRA82X0206042 (Accessed on 15 December 2024).

Fryer, G. (1987). Morphology and the classification of the so-called Cladocera. *Hydrobiologia, 145*, 19–28. https://doi.org/10.1007/BF02530261

Geraldes, A. M., & Boavida, M. J. (2004). What factors affect the pelagic cladocerans of the meso-eutrophic Azibo Reservoir? *Annales de Limnologie – International Journal of Limnology, 40*(2), 101–111. https://doi.org/10.1051/limn/2004008

Gogoi, B., Sousa, F., & Das, D. (2018). Faunal diversity of Cladocera (Crustacea: Branchiopoda) with notes on biogeographically important species in the floodplain wetlands of the Subansiri River Basin, India. *Annales de Limnologie – International Journal of Limnology, 54*, 36. https://doi.org/10.1051/limn/2018022

Guy, D. (1992). The ecology of the fish pond ecosystem with special reference to Africa. In D. J. De Silva (Ed.), *The ecology of the fish pond ecosystem* (pp. 220–230). Pergamon Press. https://doi.org/10.1007/978-94-017-3292-5

Haque, M., Jewel, M. A. S., Khatun, S., & Khanom, A. (2018). Water quality and plankton composition in fed and unfed fish ponds in Rajshahi district, Bangladesh. *University Journal of Zoology, Rajshahi University, 35*, 17–29. https://www.ru.ac.bd/zoology/wp-content/uploads/sites/48/2022/07/Water-quality-and-plankton-composition-in-fed-and-unfed-fish-ponds-in-Rajshahi-district.pdf (Accessed on 15 December 2024).

Hosain, M. E., Kabir, A. K. M. N., Hossain, M. R. A., & Naser, M. N. (2014). Substrate-based zooperiphyton diversity of National Museum Pond, Dhaka, Bangladesh. *Bangladesh Research Publications Journal, 9*(3), 147–153. http://www.bdresearchpublications.com/admin/journal/upload/1309122/1309122.pdf (Accessed on 15 December 2024).

Hossain, Z., Hossain, M. S., Uddin, M., Rahman, Z., & Hossain, Z. (2020). Present status of fish and plankton biodiversity at the Padma River in Munshiganj District, Bangladesh. *World Applied Sciences Journal, 38*, 386–394. https://doi.org/10.5829/idosi.wasj.2020.386.394

Islam, M. S., Azadi, M. A., Nasiruddin, M., & Islam, M. S. (2020). Zooplankton abundance, diversity and its relationship with physicochemical parameters of three ponds in Chittagong University campus, Bangladesh. *International Journal of Fisheries and Aquatic Studies, 8*(3), 626–632. https://doi.org/10.22271/fish.2020.v8.i3h.2240

Islam, M. S., Uddin, M., Jaman, A., Bhowmik, S., Rifa, T., Mashkova, I., & Khan, N. (2022). Freshwater zooplankton in rain-fed wild ponds: A perspective on species diversity and water quality. *Current World Environment, 2*(1), 28–32. https://doi.org/10.54479/ce.02.2022.0106

Khan, N., & Abdul Bari, J. (2019). The effects of physico-chemical parameters on plankton distribution in poultry manure and artificial formulated feed treated fish ponds, Noakhali, Bangladesh. *International Journal of Fisheries and Aquatic Studies, 7*(5), 1–7. https://www.fisheriesjournal.com/archives/2019/vol7issue5/PartA/7-4-31-763.pdf (Accessed on 15 December 2024).

Khan, N., Islam, M. S., Abdul Bari, J., & Tisha, N. (2020). Water quality evaluation by monitoring zooplankton distribution in wild ponds, Noakhali, Bangladesh. *Nature Environment and Pollution Technology, 19*(4), 1767–1770. https://doi.org/10.46488/NEPT.2020.v19i04.050

Korovchinsky, N. M. (1997). On the history of studies on cladoceran taxonomy and morphology, with emphasis on early work and causes of insufficient knowledge of the diversity of the group. *Hydrobiologia, 360*, 1–11. https://doi.org/10.1023/A:1003156802800

Kotov, A., Forró, L., Korovchinsky, N. M., & Petrusek, A. (2025). World checklist of freshwater Cladocera species (Jan 2013 version). In *Catalogue of Life* (Version 2025-04-10). https://doi.org/10.48580/dgjc7-3d9

Lavens, P., & Sorgeloos, P. (1996). *Manual on the production and use of live food for aquaculture*. Food and Agriculture Organization of the United Nations. https://www.fao.org/4/w3732e/w3732e00.htm (Accessed on 15 December 2024).

Lomartire, S., Marques, J., & Gonçalves, A. (2021). Biomarkers based tools to assess environmental and chemical stressors in aquatic systems. *Ecological Indicators*, 122, 107207. https://doi.org/10.1016/j.ecolind.2020.107207

Mandal, B., & Mukherjee, A. (2011). Diversity and diel variation of zooplankton in two ponds at Barrackpore, West Bengal. *Proceedings of the Zoological Society, 64*, 132–136. https://doi.org/10.1007/s12595-011-0019-7

Mojumder, I., & Bhuyan, M. (2020). A baseline taxonomic study of zooplankton in the lower Halda River, Bangladesh. *Global Journal of Zoology, 5*(1), 1–8. https://doi.org/10.17352/gjz.000013

Mozumder, P. K., Naser, M. N., Ali, M. S., Alam, M., Huq, A., Sack, R. B., & Colwell, R. R. (2010). Qualitative and quantitative analysis of zooplankton of some coastal water bodies of Bakerganj, Bangladesh. *Bangladesh Journal of Zoology, 38*(1), 127–132. https://doi.org/10.3329/bjz.v50i3.65539

Mozumder, P., & Naser, N. (2015). Abundance of zooplankton and physico-chemical parameters of a polyculture fish pond of Manikganj, Bangladesh. *Bangladesh Journal of Zoology, 43*(2). https://doi.org/10.3329/bjz.v42i1.23337

Naz, S., & Najia, S. (2009). Study on the zooplankton of Sona Dighi in Rajshahi, Bangladesh. *University Journal of Zoology, Rajshahi University, 27*. https://doi.org/10.3329/ujzru.v27i0.1945

Padhye, S., & Dumont, H. J. (2021). Faunal patterns in the Cladocera (Crustacea: Branchiopoda) on the Indian subcontinent with special emphasis on their body size distribution. In H. J. Dumont & S. Padhye (Eds.), *Recent advances in freshwater crustacean biodiversity and conservation* (1st ed., pp. 239–254). CRC Press. https://doi.org/10.1201/9781003139560-8

Rahman, M. M., Begum, A., & Ali, M. S. (2006). Abundance and seasonal variation of zooplankton in relation to some physicochemical factors in the Hamil Beel of Bangladesh. *Bangladesh Journal of Zoology, 34*(1), 7–12. Https://www.researchgate.net/publication/332873896_Abundance_And_Seasonal_Variation_Of_Zooplankton_In_Relation_To_Some_Physicochemical_Factors_In_The_Hamil_Beel_Of_Bangladesh (Accessed on 15 December 2024).

Reema, S. S., Sad, M. A. A., Islam, M. S., Mashrafi, M., & Hoque, H. (2024). Seasonal succession of zooplankton of three distinct aquaculture ponds in Chattogram, Bangladesh. *Journal of Bangladesh Agricultural University, 22*(4), 517–529. https://doi.org/10.3329/jbau.v22i4.78871

Rottmann, R. W., Graves, J. S., Watson, C., & Yanong, R. P. E. (1992). *Culture techniques of Moina: The ideal Daphnia for feeding freshwater fish fry*. University of Florida IFAS Extension. https://doi.org/10.32473/edis-fa024-1992

Roy, K. R., Islam, A. B. M. W., Khan, M. A. M., Rahman, M. M., & Zaman, M. (2008). Zooplankton in a managed pond in Rajshahi, Bangladesh. *Khulna University Studies, 9*(1), 91–100. https://doi.org/10.53808/KUS.2008.9.1.0821-L

Roy, U., Shaha, B. K., Mazhabuddin, Kh., Haque, M. F., & Sarower, M. G. (2010). Study on the diversity and seasonal variation of zooplankton in a brood pond, Bangladesh. *Marine Research and Aquaculture, 1*(1), 30–37. https://ggfjournals.com/assets/uploads/30-37.pdf (Accessed on 15 December 2024).

Saler, S., & Selamoglu, Z. (2020). Zooplankton diversity of three dam lakes in Turkey. *Iranian Journal of Fisheries Sciences, 19*(5), 2720–2729. https://doi.org/10.22092/ijfs.2019.118064

Sarker, M. J., Sarker, P., Cahoon, L., Kabir Dipty, A., Bashar, M. A., Hasan, M. M., Mahmud, Y., & Sarker, M. (2023). Seasonal variation in the epibenthic feeding habits of hilsa shad (*Tenualosa ilisha*) in the Upper Meghna River Estuary, Bangladesh. *Fishes, 8*(7), 335. https://doi.org/10.3390/fishes8070335

Sarma, S. S. S., Nandini, S., & Gulati, R. D. (2005). Life history strategies of cladocerans: Comparisons of tropical and temperate taxa. *Hydrobiologia, 542*, 315–333. https://doi.org/10.1007/s10750-004-3247-2

Sharif, A. S. M., & Hoque, M. N. (2017). A preliminary taxonomic checklist of zooplankton in the Karnaphuli River Estuary. *Discovery, 53*(259), 133–146. https://www.discoveryjournals.org/discovery/current_issue/v53/n254/A4.pdf (Accessed on 15 December 2024).

Sharif, A. S. M., Chowdhury, S., & Islam, M. (2016). Seasonal occurrence and distribution of zooplankton with reference to biodiversity in the Karnaphuli River of Bangladesh. *International Journal of Taxonomy and Biodiversity Research, 7*, 33–42. Https://www.researchgate.net/publication/316171110_Seasonal_Occurrence_and_Distribution_Of_Zooplankton_With_Reference_To_Biodiversity_In_The_Karnaphuli_River_Of_Bangladesh (Accessed on 15 December 2024).

Sommer, F., Santer, B., Jamieson, C., Hansen, T., & Sommer, U. (2003). Daphnia population growth but not moulting is a substantial phosphorus drain for phytoplankton. *Freshwater Biology, 48*(1), 67–74. https://doi.org/10.1046/j.1365-2427.2003.00971.x

Sultana, S., Khan, S., Hena, S., Ahmed, M., Sultana, M. S., Akhi, M., Mahmud, Y., & Hossain, M. (2023). Seasonal dynamics of zooplankton in a eutrophic fish pond of Bangladesh in relation to environmental factors. *Journal of Aquaculture & Marine Biology, 12*(1). https://doi.org/10.15406/jamb.2023.12.00365

Tessier, A. J., Bizina, E. V., & Geedey, C. K. (2001). Grazer–resource interactions in plankton: Are all daphniids alike? *Limnology and Oceanography, 46*(7), 1585–1595. https://doi.org/10.4319/lo.2001.46.7.1585

Van Damme, K., Maiphae, S., & Sa-Ardrit, P. (2013). Inland swamps in Southeast Asia harbour hidden cladoceran diversities: Species richness and the description of new paludal Chydoridae (Crustacea: Branchiopoda: Cladocera) from southern Thailand. *Journal of Limnology, 72*(S2), e10. https://doi.org/10.4081/jlimnol.2013.s2.e10