

# Abundance and Distribution of Phytoplankton in Mainit Lake, Mainit, Surigao del Norte

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## ABSTRACT

Abundance and distribution of phytoplankton in four stations of Mainit Lake were studied. A total of 26 species comprising 9 species of diatoms, 9 species of green algae, 4 species of blue-green algae, 2 species of dinoflagellates, and 1 species of euglenophyta. Species were categorized taxonomically and into the nearest taxa showing their respective density (cells/mL). Diatoms of the division Bacillariophyta were the most dominant group in all areas. It is followed by the green algae species and dinoflagellates. The least distributed species is the euglenophyta. Moreover, the quantitative and qualitative distribution of diatom population can be used as bases in developing an effective environment assessment and monitoring. Furthermore, Shannon-Weiner ( $H'$ ) shows that the diversity of phytoplankton species is stable and that the species are evenly distributed in all areas.

**Keywords:** abundance, distribution, species diversity, phytoplankton, taxonomy