WATER QUALITY ASSESSMENT OF DE LA SALLE UNIVERSITY-DASMARIÑAS LAKE DURING WET SEASON USING PHYTOPLANKTON AS INDICATOR

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ABSTRACT

This study was conducted to assess the water quality of DLSU-D lake due to continuous increasing number of polluting agents in the lake. Water samples were collected from three different stations monthly from July to November with three replicates. Collected phytoplanktons were counted using the Sedgwick-Rafter counting chamber and identified using algal keys. The quality of water was assessed with the use of Algal genera pollution index by Palmer (1969). Seventeen (17) phytoplankton species were identified by the researchers during wet season. Ten (10) out of seventeen (17) were found to be an indicator of pollution namely *Ankistrodesmus sp., Chlorella sp., Cyclotella sp., Euglena sp., Melosira sp., Navicula sp., Nitzschia sp., Oscillatoria sp., Phacus sp.,* and *Scenedesmus sp.* The organisms which live in the water respond to the totality of the environmental conditions such as light, temperature, nutrients and supply of oxygen. *Cyclotella sp.* with the importance value of 104.32 is the most abundant specie in all stations during wet season in DLSU-D lake. It has the highest importance value because it serves as a major food source for microscopic benthic organisms (Muylaert *et al.*1996). Based from the results, Palmer's index score ranging below 15 shows probable absence of high organic pollution in any of the sites at DLSU-D lake in all the five collections though some other factors interfere such as presence of inorganic pollution.