

Seasonal variation through one year in total nitrogen (TN), total phosphorus (TP), phytoplankton biomass, phytoplankton species composition and other environmental factors were examined in Lake Sonachi, a tropical meromictic soda lake. Mean concentrations of TN and TP were $11\,000\ \mu\text{g N l}^{-1}$ and $100\ \mu\text{g P l}^{-1}$, respectively. Maximum concentrations of TN and TP occurred in the monimolimnion. Phytoplankton biomass ranged from 350 to $1260\ \text{mg m}^{-3}$. *Synechococcus bacillaris*, a small coccoid cyanophyte, dominated the phytoplankton. The mean chlorophyll *a* concentration of $37\ \text{mg} \cdot \text{m}^{-3}$ was a modest value when compared with those of other tropical soda lakes. High TN:TP ratios indicated phosphorus limitation in the lake.