

## Phytoplankton investigations as a supplement to all the previous limnological studies carried out in Lake Terkos (Istanbul, Turkey)

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**Abstract** – The phytoplankton community was investigated at two stations during 16 cruises on Lake Terkos between May 2000 and July 2001. In 2000–2001 a total of 78 phytoplankton taxa was encountered in quantitative samples. 72 taxa from station 1 and 61 taxa from station 2 were identified. At station 1 the largest amount of biomass was produced by *Fragilaria ulna* var. *acus* (Kütz.) Lange-Bertalot (syn. *Synedra acus* Kützinger 1844) and *Ceratium furca* (Ehr.) Clap. et Lach.; at station 2 the maximum amount was produced by species *F. ulna* var. *acus* and *Fragilaria ulna* (Nitzsch) Lange-Bertalot (syn. *Synedra ulna* (Nitzsch) Ehrenberg 1832). The phytoplankton biomass was strongly dominated by diatoms (*Cyclotella pseudostelligera* Hust., *F. ulna* var. *acus*, *Navicula gracilis* Ehr., *Asterionella formosa* Hassal and *F. ulna* and by Cryptophyceae members (*Cryptomonas erosa* Ehr. and *C. ovata* Ehr.). The maximum biomass value was 1091,6 and 361,4 mg m<sup>-3</sup> at station 1 and 2 in Lake Terkos.

**Key words:** Lake Terkos, phytoplankton, abundance, biomass, species diversity, seasonal, vertical variations.