The phytoplankton from Tierra del Fuego

Gabriela Mataloni

With 5 figures and 4 tables

Abstract: Tierra del Fuego constitutes the only insular and southernmost province of Argentina. Its landscape varies from a lowland, dry steppe in the north to the Andean ridges in the southwest, which surround deep glacial valleys and descend to an extensive peatland area in the southeast. These features divide the province into four hydrological watersheds (North, Central, South and East), which host a wide variety of lentic water bodies, from very large ultraoligotrophic glacial lakes to eutrophic coastal ponds and small humic ponds in peat bogs. All along the province, a large number of lotic and lentic environments have been extensively studied within the framework of a major floristic survey. Nevertheless, studies dealing with the phytoplankton community are far scarcer, and were carried out almost exclusively in lentic water bodies. Results of these efforts – some of which constitute ongoing research lines – are reunited and commented in this article.

Keywords: Phytoplankton, Tierra del Fuego, peat bogs, lakes

Introduction

Tierra del Fuego attracted the attention of researchers since early XX century, among which some of the first taxonomic surveys of freshwater phytoplankton can be counted (Borge 1906, Thomasson 1955, 1957). Nevertheless, this also largely prevented the continuous research of its freshwater ecosystems until late in the same century.

Phytoplankton studies have partially covered the wide variety of water body types from this province, which range from small eutrophic ponds to the very large glacial ultraoligotrophic lakes that occupy some of the valleys in the southern Andean region (Mariazzi et al. 1987, Tell et al. 2011). Other valleys in this area encompass some of the southernmost and largest peatlands in the Southern Hemisphere, which display a large variety of polihumic, acidic water bodies. At the Patagonian Plateau, occupying the northern region of the province, geoenvironmental conditions are very different, with smaller shallow lakes characterized by high conductivity gradients and large amounts of suspended solids.

Author’s address:
Grupo de Biodiversidad, Limnología y Biología de la Conservación, Instituto de Investigación e Ingeniería Ambiental (3iA), Universidad Nacional de San Martín, UNSAM, Belgrano 3563, (1650) Pdo. de San Martín, Prov. de Buenos Aires, Argentina.
E-Mail: gmataloni@unsam.edu.ar

DOI: 10.1127/1612-166X/2014/0065-0046 1612-166X/2014/0065-0046 $ 4.50 © 2014 E. Schweizerbart'sche Verlagsbuchhandlung, 70176 Stuttgart, Germany