Floristic survey of the freshwater Naviculales (Bacillariophyceae) from the state of São Paulo.

Author: Bartolomeu Tavares.
Supervisor: Carlos Eduardo de Mattos Bicudo.

Abstract

Floristic survey of order Naviculales (Bacillariophyceae), except for Pinnulariaceae, in the state of São Paulo, southeastern Brazil, based on analysis of 104 sampling units gathered from 59 municipalities round the state. Seventeen genera and the total of 87 taxa were identified, including 64 species and 8 varieties that are not the typical of their respective species. Five populations could not be identified even to genus level due to differences in diagnostic morphological features. Families Naviculaceae (that included 64.1% of total species identified), Sellaphoraceae (45.5%), and Diadesmidaceae (38.7%) are the best represented in terms of species identified. *Brachysira serians* var. *serians*, *Luticola mutica* var. *mutica*, *Navicula cryptocephala* var. *cryptocephala*, and *Sellaphora pupula* var. *pupula* are the best represented taxa geographically in the area, occurring in more than 50% of sample units examined. Twenty-three taxa are the least represented species, since each one was collected from just one locality in the state. Sixty three taxa were new citations for the state.

**Keywords**: taxonomy, floristic survey, Bacillariophyceae, Naviculales, diatoms, Brazil.