Abstract

Biomonitoring is a method of ecosystem properties determination based on its biological properties, especially composition of the biota. Based on various aquatic-oriented biomonitoring systems, it is possible to quantify, for example, water purity or trophic index for water management purposes or to characterize the ecological status of the ecosystem for scientific and conservation purposes. While water quality-oriented biomonitoring systems are widespread and routinely used, ecology state-oriented (quantifying qualities like succession stage or stability) are less exploited and their wider use in the future could help understanding and management of some aquatic ecosystems.

One of the ecology-oriented biomonitoring systems is NCV index (natural conservation value index) oriented to wetlands which it evaluates through their desmid biota, measuring species diversity, rarity of represented species and ecosystem maturity for which they are typical, and rarity of represented species NCV index aims to describe the value of the ecosystem in terms of its replicability.

Key words: biomonitoring, peatlands, desmids, NCV index, trophic state, saprobity, acidification, eutrophication