Benthic soft-bodied algae as bioindicators of stream water quality

This review presents the state-of-the-art of benthic soft-bodied algae as biondicators of stream and river water quality, with emphasis on bioassessments set by the legislation (e.g., European Water Framework Directive, USA Clean Water Act) to promote the restoration and ensure ecological sustainability of water resources. The advantages and shortcomings of a variety of bioassessment field and laboratory methods for algae are discussed. The increasing use of soft-bodied algae in biotic indices to assess individual anthropogenic stressors, and in multimetric indices of biotic integrity to evaluate ecological condition in streams is summarized. Rapid microscopic and molecular approaches for inferring nutrient supply with heterocystous cyanobacteria and other sensitive algae are proposed. The need of better understanding of soft-bodied algae as bioindicators is discussed and suggestions are made for obtaining meaningful bioassessment information with cost-efficient efforts.

Auteurs du document : R. Stancheva, R. G. Sheath
Obtenir le document : EDP Sciences
Mots clés : Bioassessment, water quality, benthic soft-bodied algae, stream, river, évaluation biologique, qualité de l'eau, algues benthiques à corps mou, courant, rivière
Thème (issu du Text Mining) : MILIEU NATUREL
Date : 2016-03-30
Format : text/xml
Source : https://doi.org/10.1051/kmae/2016002
Langue : Anglais
Télécharger les documents : https://www.kmae-journal.org/10.1051/kmae/2016002/pdf
Permalien : https://www.documentation.eauetbiodiversite.fr/notice/benthic-soft-bodied-algae-as-bioindicators-of-stream-water-quality0