

Abstract

Filamentous conjugating algae have a cosmopolitan distribution. They often inhabit fragile freshwater habitats such as temporary hydrated ditches or puddles of melting snow. Occurrence in this environment entails having to deal with extreme conditions. That helps them to variously adaptation and also the formation of resistant stages. Algae belonging to this group have an important role in nature, because they are often the first species that inhabit newly created habitats and consequently also often become the dominant species. Diversity, as well as the ecological requirements of individual representatives, is unclear. Taxonomy of filamentous algae is conjugating is most based on morphological characters that are not very reliable. For filamentous conjugating algae is polyploidy really frequent. With changeable ploidy relate also morphological variability and different environmental requirements.