

Struktur Komunitas Fitoplanton di Waduk Cacaban Kabupaten Tegal

Title	Struktur Komunitas Fitoplanton di Waduk Cacaban Kabupaten Tegal
Author Order	2 of 3
Accreditation	4
Abstract	<p>Phytoplankton has an important role in an aquatic ecosystem because it is autotrophic and also a source of natural food for fish. Phytoplankton will interact with other biotic factors to form a community structure that is useful for the sustainability of the ecosystem. Therefore, this research is needed to determine the phytoplankton community structure in Cacaban Reservoir because the community structure can show the water conditions. The purpose of this research was to determine the composition, abundance, and diversity of phytoplankton at each station and the most dominant type of phytoplankton in Cacaban Reservoir. The result showed that there are 18 species of phytoplankton in Cacaban Reservoir. The four phytoplankton divisions found were Chlorophyta with 8 species, Bacillariophyta with 5 species, Cyanophyta with 3 species, and Charophyta with 2 species. The abundance is in the medium category, with the abundance of <i>Chlorella</i> sp. the highest at stations I, III and IV; and <i>Microcystis</i> sp. at stations II and V. The diversity index ranges between 1,227-1,766 and was in the low category which indicates low community stability. The dominance index range between 0,648-0,791 and was in the high category. The dominant phytoplankton in the Cacaban Reservoir is from the Chlorophyta division, which is also a type favored by fish.</p>
Publisher Name	Fakultas Biologi Universitas Jenderal Soedirman
Publish Date	2022-05-10
Publish Year	2022
Doi	DOI: 10.20884/1.bioe.2021.3.3.4247
Citation	
Source	BioEksakta : Jurnal Ilmiah Biologi Unsoed
Source Issue	Vol 3 No 3 (2021): BioEksakta
Source Page	163-175
Url	http://jos.unsoed.ac.id/index.php/bioe/article/view/4247/2931
Author	Dr Dr Dr Dr Dra DIANA RETNA UTARINI SUCI RAHAYU, M.P