Perbandingan Struktur Komunitas Fitoplankton Di Sungai yang Melewati Kota Yogyakarta

INTISARI

Kota Yogyakarta dilalui oleh 3 sub daerah aliran sungai yaitu sungai Winongo, Code dan Gajah wong. Fitoplankton memiliki peranan penting di suatu perairan, karena dapat menunjukkan respons terhadap perubahan lingkungan. Tujuan penelitian ini untuk mempelajari struktur komunitas fitoplankton sebagai bioindikator di sungai Winongo, Code dan Gajah wong pada kawasan yang tercemar limbah. Penelitian ini dilakukan pada bulan Juni dan Agustus 2015 dengan total 18 stasiun di ketiga sungai. Hasil menunjukkan bahwa total genus yang ditemukan ada 27 genus fitoplankton. Genus Navicula dan Nitzschia hampir ditemukan di semua stasiun pengamatan. Genus Tabellaria di sungai Winongo pada bulan Agustus lebih mendominasi. Hasil analisis Simpson menunjukkan bahwa tidak ada dominansi genus tertentu di ketiga sungai. Faktor yang berpengaruh terhadap kemelimpahan fitoplankton antara lain pH, suhu air, alkalinitas, CO_2 dan kecepatan arus

Kata Kunci: Sungai, Fitoplankton, Struktur Komunitas.

Comparison of Fitoplankton Community Structure in the River passing through the city of Yogyakarta

ABSTRACT

Yogyakarta city is traversed by three sub watershed that are Winongo river, Code river and Gajah Wong river. Phytoplankton has important role are in a water body, because it can indicate a response to environmental changes. The purpose of this research was to study the phytoplankton community structure as bio-indicators in the contamine area Winongo river, Code river and Gajah Wong river. This research was conducted in June to August 2015 with a total of 18 stations on the three rivers. The results showed that there were 27 genus of phytoplankton. Genus *Navicula* and *Nitzschia* were hardly found at all observation stations. Genus *Tabellaria* dominated in the Winongo river in August. Simpson analysis showed that there was no particular genus dominance in all three rivers. Factors that affect the abundance of phytoplankton included pH, water temperature, alkalinity, CO_2 and flow velocity.

Keywords: River, Phytoplankton, Community Structure.