PHYTOPLANKTON DIVERSITY AND ABUNDANCE IN THE BACKWATERS OF MENGABANG TELIPOT, TERENGGANU, BEFORE AND DURING MONSOON

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Laporan Projek ini merupakan sebahagian
daripada keperluan untuk menadapatkan
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ABSTRACT

A study about phytoplankton diversity and abundance was done at the backwaters of Mengabang Telipot, Terengganu before and during monsoon season. The sampling areas cover 4 major sections: freshwater, brackish, estuarine and marine. The sampling was done at 0.5 to 1.0 meter from the water surface using a pail 6 liter. The water sample was filtered with a 20-µm net and stored in glass bottles. The sample was fixed with Lugol's solution. The salinity was taken by using refractometer.The dominant species before monsoon were *Nitzschia*, *Chaetoceros*, *Asterionella* and *Bacteriastrum* which were found at stations 3 to 8 (brackish, estuary and marine). *Clathrochloris* and *Streptococcus* were found dominant at station 1 and 2 (freshwater). There are no dominant species during monsoon season. The diversity index before monsoon ranged from 2.4 to 3.0 which are considered high, while during monsoon it ranged from 2.2 to 2.8. Evenness index ranged from 0.7 to 0.9 before monsoon. While during monsoon, this index was closer to 1.0 meaning there are no dominant species during monsoon season.

ABSTRAK

Kajian yang dijalankan adalah mengenai kepelbagaian dan kelimpahan fitoplankton di kawasan air di belakang Mengabang Telipot, Terengganu sebelum dan selepas monsun. Terdapat empat bahagian utama kajian iaitu air tawar, air payau, estuari dan laut. Penyampelan dijalankan pada 0.5 hingga 1.0 meter daripada permukaan air dengan menggunakan baldi yang berisipadu 6 liter. Sampel di tapis dengan menggunakan net 20 µm dan disimpan di dalam botol kaca. Sampel di campurkan dengan cecair Lugol's. Saliniti diukur dengan menggunakan refractometer. Spesies yang dominan sebelum monsun adalah *Nitzschia*, *Chaetoceros*, *Asterionella and Bacteriastrum* yang dijumpai di stesen 3 hingga 8 (kawasan air payau, estuari dan laut). *Clathrochloris* dan *Streptococcus* dijumpai dominan di stesen 1 dan 2 (air tawar). Tidak ada spesies yang dominan semasa monsun. Indeks diversiti bagi sebelum monsun adalah antara 2.4 hingga 3.0 di mana nilai tersebut dianggap tinggi manakala bagi semasa monsun adalah antara 2.2 hingga 2.8. Indeks evenness bagi sebelum monsun adalah antara 0.7 hingga 0.9. Bagi semasa monsun, keputusan menunjukkan bacaan hampir kepada 1.0. Ini menunjukkan tiada spesies yang dominan semasa monsun.