Produktivitas primer di perairan tambak kawasan Blanakan Kabupaten Subang, Jawa Barat = Primary productivity of Blanakan fishpond at Subang, West Java

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Abstrak

ABSTRACT
Kabupaten Subang merupakan salah satu sentra perikanan di Provinsi Jawa Barat. Sebagai salah satu kawasan tambak terbesar, penting untuk menjaga kualitas perairan tambak di Blanakan, Kabupaten Subang. Produktivitas Primer dapaat digunakan untuk mengetahui kualitas suatu ekosistem, termasuk perairan tambak. Penelitian ini bertujuan untuk mengetahui nilai produktivitas primer serta kandungan unsur hara dan kelimpahan fitoplankton pad perairan tambak di Blanakan. Pengambilan sampel dilakukan pada tiga stasiun penelitian dan masing-masing terdiri dari 3 titik kedalaman, yaitu 0,5 m, 1 m, dan 1,5 m. Pembagian stasiun didasari pada vegetasi mangrove masing masing tambak, stasiun I memiliki vegetasi Avicennia marina, stasiun II Rhizopora mucronata, dan stasiun III memiliki vegetasi campuran kedua jenis dalam 1 tambak. Nilai produktivitas primer dilakukan menggunakan metode botol gelap-terang. Dari hasil penelitian diperoleh rata-rata nilai produktivitas primer yang berkisar antara 152,083 ndash; 260,417 mgC/m3/hari dengan rata-rata tertinggi diperoleh pada stasiun I dan terendah pada stasiun III. Dari hasil uji statistik diketahui bahwa nilai produktivitas primer antar stasiun tidak berbeda signifikan. Berdasarkan hasil analisis korelasi pearsondiketahui bahwa produktivitas primer berkorelasi sangat kuat terhadap unsur hara nitrat, fosfat, klorofil-a dan kelimpahan fitoplankton.
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ABSTRACT
Subang regency is one of the largest fisheries area in West Java. As one of the largest fishpond area in West Java, it is important to maintain the quality of fishpond area in Blanakan, Subang. Primary productivity can be used to defined the quality of an ecosystem include fishpond. The aim of this research was to measure the value of primary productivity in Blanakan fishpond, know the correlation among phytoplankton abundance, nitrate, phosphate, and chlorophyl a with primary productivity, and analyze the significance differences of primary productivity among three stations. The samples were collected from three sampling station based on its mangrove vegetation, station I consists of Avicennia marina, station II Rhizopora mucronata, while station III is a mixed mangrove vegetation fishpond consists of Avicennia marina and Rhizopora mucronata. Each of the stations were divided into three points based on different depth which consist of 0,5 meters, 1 meters, and 1,5 meters. The measurement of primary productivity was done by light dark bottle method. Meanwhile, the concentration of nitrate, phosphate and chloropyl a were measured by spectrophotometer method. The result showed that the value of primary productivity ranged from 152,083 to 260,417 mgC m3 day with the highest value obtained at station I and the lowest value at station III. According to statistical test, there is no significance differences of primary productivity value among three stations. Correlation analysis also showed that primary productivity was correlated strongly with niitrate, phosphate, chloropyl a and phytoplankton abundance.