Perbedaan Karakteristik Habitat Hutan Mangrove Di Zona Pemanfaatan Bedul Taman Nasional Alas Purwo

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Abstrak

Hutan mangrove merupakan salah satu hutan yang memiliki karakteristik khusus dan bernilai konservasi. Secara global, dalam satu abad terakhir keberadaannya terus menurun hingga 30-50% akibat pemanfaatan yang berlebihan. Taman Nasional Alas Purwo marupakan taman nasional yang memiliki 27 jenis mangrove sejati, 2 diantaranya termasuk dalam kategori langka secara global dan berada di zona pemanfaatan Blok Bedul. Kawasan ini memiliki ketebalan mangrove yang berbeda di Bedul Utara dan Bedul Selatan. Hal ini dapat dipengaruhi oleh berbagai faktor habitat berupa faktor biotik dan abiotik. Penelitian ini bertujuan untuk mengetahui kerapatan mangrove, kepadatan plankton, serta kualitas fisik kimia perairan dan perbedaannya di Bedul Selatan dan Bedul Utara.

Pengambilan data dilakukan di Zona Pemanfaatan Blok Bedul dengan total luas 31,3 ha. Penentuan jumlah sampel dilakukan dengan menggunakan intensitas sampling sebesar 2% sehingga terdapat 62 petak ukur. Data yang diambil pada komponen biotik berupa kerapatan vegetasi dan kepadatan plankton, sedangkan pada komponen abiotik berupa kedalaman lumpur, DO, salinitas, pH, dan kejernihan air. Petak ukur yang digunakan berbentuk *nested sampling* dengan ukuran 10 x10 meter. Analisis yang digunakan pada penelitian ini adalah uji beda *Chi Square* dengan nilai signifikansi 0,05.

Hasil penelitian menunjukan total kerapatan vegetasi di Blok Bedul adalah 343.000 individu/ha didominasi oleh jenis *Ceriops tagal*. Total kepadatan plankton di blok Bedul adalah 4.950.000. Hasil analisis menunjukan bahwa tidak terdapat perbedaan yang signifikan pada variabel salinitas, kedalaman lumpur, pH, dan DO dengan nilai signifikansi bertururt-turut sebesar 0,273; 0,304; 0,509; and 0,172. Perbedaan yang signifikan hanya terdapat pada variabel kejernihan air dengan nilai 0,043.

Kata kunci: hutan mangrove, faktor biotik, faktor abiotik

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The Difference In The Characteristics Of Habitat In Mangrove Forest In The Utilization Zone Of Bedul In Alas Purwo National Park

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Abstract

Mangrove forest is one of forests that have a particular characteristic with conservational values. Globally, in the last decade, its existence has been decreasing by 30-50% due to the excessive utilization. Alas Purwo National Park has 27 species of real mangrove, two of which are globally categorized as the endangered plant located in the utilization zone of Bedul Block. This zone has some different thickness of mangrove compared to the one in North Bedul and South Bedul. This might be influenced by any habitat factors in the form of biotic and abiotic factors. This research aims to observe the density of mangrove, density of plankton, and physical and chemical quality of waters and its differences compared to the South Bedul and North Bedul.

The data collection was carried out in the Utilization Zone of Bedul Block with the total area of 31,3 ha. The determination of the sample number was done using the sampling intensity of sebesar 2% to obtain 62 plots. The data taken from the biotic component was in the form of the density of vegetation and density of plankton. Meanwhile, in the abiotic component, it was in the form of the depth of mud, DO, salinity, pH, and water clarity. The plots used were in the form of the 10 x10 meter *nested sampling*. The analysis used in this research was the *Chi Square* difference test with the significance value of 0,05.

The result of the research showed that the total density of vegetation in Bedul Block was 343.000 individual/ha dominated by the species of *Ceriops tagal*. Meanwhile, the total density of plankton in Bedul Block was 4.950.000. The result of the analysis showed that there was no any significant difference in the variables of salinity, mud depth, pH, and DO with the significance values of 0,273; 0,304; 0,509; and 0,172 respectively. A significant difference was only found in the variable of water clarity with the value of 0,043.

Keywords: Mangrove forest, biotic factor, abiotic factor

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