Produksi dan laju dekomposisi serta kontribusi potensi unsur harga serasah mangrove di Cagar Alam Pulau Dua Serang, Banten = As well as the production and decomposition rate contributions potential elements hara Litter mangove in island nature eagar two Serang, Banten

Indria Wahyuni, author

Abstrak

Penelitian telah dilakukan di kawasan hutan mangrove cagar alam Pulau Dua Serang, Banten pada bulan September hingga November 2011. Tujuan dari penelitian adalah untuk mengetahui produksi dan potensi unsur hara, serata menduga pelepasan unsur hara dari serasah ke lingkungan perairan laut. Pengambilan sampel untuk analisis vegetasi mangrove dilakukan dengan menggunakan metode transek-kuadrat. Guguran serasah ditangkap dengan littertrap dan besarnya serasah yang dilepas ke perairan laut dilakukan pengujian dengan menyaring serasah di aliran air yang menghubungkan antara hutan mangrove dengan perairan laut, untuk produksi potensial unsur hara dari serasah dilakukan analisis unsur hara (C, N, P) di laboratorium. Hasil penelitian menunjukkan bahwa jenis mangrove yang mendominasi yaitu Avicennia marina dan Rhizophora apiculata dengan kerapatan relatif sebesar 51,43% dan 36,19%. Hutan mangrove cagar alam Pulau Dua menghasilkan total rata-rata serasah sebesar 4,05 gr/m2/hari atau 14,78 ton/ha/tahun dengan penyumbang terbesar dari serasah daun. Produksi potensial unsur hara serasah yang dihasilkan sebesar 0,3456 gr-C/m2/hari atau 1,2616 ton-C/ha/tahun, 0,0091 gr-N/m2/hari atau 0,0333 ton-N/ha/tahun, 0,0008 gr-P/m2/hari atau 0,0031 ton-P/ha/tahun. Hutan mangrove cagar alam Pulau Dua turut menyumbangkan serasahnya ke perairan laut sebesar 855,4724 gr/m3/hari.

.....

The research has been conducted at mangrove forest of Pulau Dua conservation in Serang town of Banten province from September to November 2011. The purposes of study were to know the production and potential nutrient of mangrove litter and to expect the nutrients released into marine environment. The sample was taken by employing transect-square method. Mangrove litter avalanches were caught by litter-trap and the size was examined by filtering the litter in water flow which connected mangrove forest and marine. The potential nutrient production of mangrove litter was analyzed by administering nutrient analysis of C, N, and P in laboratory.

The findings showed that the dominating mangrove types were Avicennia marina and Rhizophora apiculata with 51.43% and 36.19%. of relative density. The mangrove forest of Pulau Dua conservation produced 4.05 gr/m2 /day litters on average total or 14.78 ton/ha/year litters, and the largest contributor was leaves. The production of litters' potential nutrient achieved 0.3456 gr-C/m2/day or 1.2616 ton-C/ha/year, 0.0091 gr-N/m2/day or 0.0333 ton-N/ha/year, 0.0008 gr-P/m2/day or 0.0031 ton-P/ha/year. Mangrove forest of Pulau Dua conservation also contributed 855.4724 gr.day/m3 litters to marine waters.