

BIOMASSA SERESAH DAN PERSEN PENUTUPANNYA DI LANTAI HUTAN PADA TEGAKAN JATI (*Tectona grandis*), MAHONI (*Swietenia macrophylla*), DAN AKASIA MANGIUM (*Acacia mangium*) DI HUTAN PENDIDIKAN WANAGAMA I KABUPATEN GUNUNGKIDUL

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INTISARI

Hutan Pendidikan Wanagama I memiliki struktur vegetasi yang bervariasi di setiap petaknya. Berbagai macam jenis pohon dikembangkan baik secara homogen maupun heterogen. Seresah yang terakumulasi pada tanah dalam waktu yang lama akan mempertebal solum tanah serta menyediakan unsur hara, air, dan udara yang baik bagi pertumbuhan tanaman, selain itu dapat mencegah erosi tanah, memperbaiki sifat fisik tanah, kondisi aerasi, dan drainase tanah.

Penelitian ini dilakukan pada musim kemarau pada tegakan jati (*Tectona grandis*) petak 17, mahoni (*Swietenia macrophylla*) petak 16, dan akasia mangium (*Acacia mangium*) petak 14 Hutan Pendidikan Wanagama I. Pengambilan seresah dilakukan dengan meletakkan tali kuadrat berukuran 0,5m x 0,5 m secara diagonal pada sembilan petak ukur permanen yang sudah ditentukan sebelumnya. Pada petak penelitian dilakukan pula kegiatan inventarisasi hutan dan pengukuran kondisi lingkungan. Seresah yang berada di dalam tali kuadrat diambil dan dimasukkan ke dalam amplop sesuai dengan lapisannya yaitu *fragmented 1*, *fragmented 2*, dan humus, serta dipisahkan berdasarkan jenisnya seperti daun maupun ranting. Seresah dilakukan pengovenan dengan suhu 60°C dan penimbangan hingga mencapai berat kering konstan.

Hasil penelitian menyatakan bahwa total biomassa seresah tertinggi yaitu pada tegakan jati sebesar 1,92 ton/ha. Sedangkan pada tegakan mahoni sebesar 1,45 ton/ha dan tegakan akasia sebesar 1,34 ton/ha. Persen penutupan seresah di lantai hutan jati sebesar 72,40%, mahoni sebesar 72,29%, dan akasia sebesar 52,27%. Penyebab total biomassa seresah dan persen penutupannya yang berbeda-beda diakibatkan oleh kondisi lingkungan serta kerapatan tegakan.

Kata kunci : Biomassa Seresah, Persen Penutupan Seresah, Jati, Mahoni, Akasia

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LITTER BIOMASS AND THE PERCENTAGE OF THE CLOSURE ON THE FOREST FLOOR OF TEAK STANDS (*Tectona grandis*), MAHONI (*Swietenia macrophylla*), AND MANGIUM (*Acacia mangium*) IN WANAGAMA EDUCATION FOREST I DISTRICT GUNUNGKIDUL

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ABSTRACT

Wanagama Education Forest I has varied vegetation structure in each plot. Various types of trees are developed both homogeneous and heterogeneous. Litter that accumulates on the soil for a long time will thicken the soil solum and provide good nutrients, water and air for plant growth, while it can prevent soil erosion, improve soil physical properties, aeration conditions, and soil drainage.

This research was conducted in the dry season in teak stands (*Tectona grandis*) plot 17, mahogany (*Swietenia macrophylla*) plot 16, and acacia mangium (*Acacia mangium*) plot 14 in Wanagama Education Forest I. Litter taking is done by placing a quadratic rope measuring 0.5m x 0.5 m diagonally on nine permanent plots that have been predetermined. In the observation plot, forest inventorying and measurement of environmental conditions were also carried out. Litter which is inside the quadratic rope has taken and put in envelopes according to the layers, namely fragmented 1, fragmented 2, and topsoil, and separated by type such as leaves or twigs. Litter is put into the oven at 60°C and weighing until it reaches a constant dry weight.

The results of the study stated that the highest total litter biomass was in teak stands is 1.92 tons / ha. Whereas in mahogany stands is 1.45 tons / ha and acacia stands is 1.34 tons / ha. Percent of litter closure on teak forest floor was 72.40%, mahogany 72.29%, and acacia 52.27%. The causes of different total litter biomass and percent cover are due to environmental conditions and stand density.

Keywords: Litter Biomass, Litter Closure Percent, Teak, Mahogany, Acacia

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