

**MORFOLOGI DAN PRODUKSI BIOMASSA KACANG KORO PEDANG
(*Canavalia ensiformis*) PADA LEVEL PUPUK NPK BERBEDA
DI KAWASAN HUTAN BLORA**

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian level pemupukan NPK yang berbeda terhadap morfologi dan produksi biomassa kacang koro pedang (*Canavalia ensiformis*) di kawasan Hutan Blora. Penelitian dilakukan di Dusun Setren, Desa Megeri, Kecamatan Kradenan, Kabupaten Blora, Jawa Tengah. Waktu penelitian dimulai dari bulan Maret 2024 dan berakhir pada bulan Mei 2024, yang dilakukan secara langsung selama 70 hari di lahan sekitar hutan Blora. Pengambilan data morfologi tanaman antara lain, tinggi tanaman, panjang tanaman, jumlah node, jumlah daun, panjang tangkai daun, panjang internode, diameter batang dan produksi biomassa hijauan. Penelitian dilakukan dengan menggunakan 4 level pemupukan yaitu 0 (kontrol), 150 kg/ha, 300 kg/ha, dan 450 kg/ha. Masing-masing perlakuan dilakukan pengulangan sebanyak 3 kali dengan menggunakan model percobaan Rancangan Acak Kelompok (RAK). Hasil penelitian menunjukkan bahwa morfologi *Canavalia ensiformis* terdapat perbedaan nyata pada jumlah node dan jumlah daun dengan level pemberian pupuk NPK 300 kg/ha tertinggi dibandingkan level pemberian pupuk NPK 450 kg/ha, 150 kg/ha, dan 0 kg/ha. Produksi biomassa berupa produksi segar dan bahan kering *Canavalia ensiformis* tidak menunjukkan adanya perbedaan yang nyata. Berdasarkan hasil penelitian dapat disimpulkan bahwa pemupukan NPK kurang efektif digunakan pada *Canavalia ensiformis* yang ditanam di kawasan hutan jati Blora.

Kata Kunci: Karakteristik morfologi, Level pemupukan, Produksi biomassa

**MORPHOLOGICAL AND BIOMASS PRODUCTION OF JACK BEAN
(*Canavalia ensiformis*) AT DIFFERENT NPK FERTILIZER LEVELS
IN THE BLORA FOREST AREA**

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ABSTRACT

This study aims to determine the effect of different levels of NPK fertilizer application on the morphological characteristics and biomass production of jack bean (*Canavalia ensiformis*) in the Blora Forest area. The research was conducted in Setren Hamlet, Megeri Village, Kradenan District, Blora Regency, Central Java. The research time began in March 2024 and ended in May 2024, which was conducted directly for 70 days in the land around the Blora Forest. Morphological data collection included plant height, plant length, number of nodes, number of leaves, petiole length, internode length, stem diameter, and forage biomass production. The experiment was conducted using four fertilization levels: 0 kg/ha (Control), 150 kg/ha, 300 kg/ha, and 450 kg/ha. Each treatment was replicated three times using a Randomized Block Design (RBD). The results showed that the morphology of *Canavalia ensiformis* had a significant difference in the number of nodes and number of leaves, with the 300 kg/ha NPK fertilizer level being the highest compared to the 450 kg/ha, 150 kg/ha, and 0 kg/ha levels. Biomass production, in the form of fresh production and dry matter of *Canavalia ensiformis*, did not show any significant difference. Based on the research results, it can be concluded that NPK fertilization is less effective for *Canavalia ensiformis* grown in the Blora teak forest area.

Keywords: Morphological characteristics, Fertilization levels, Biomass production