

KANDUNGAN NUTRIEN TANAMAN KACANG KORO PEDANG (*Canavalia ensiformis*) PADA LEVEL PUPUK BEKAS LARVA MAGGOT (KASGOT)

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INTISARI

Penelitian ini bertujuan untuk mengetahui kandungan nutrisi tanaman kacang koro pedang (*Canavalia ensiformis*) pada berbagai level pemupukan kasgot. Penelitian ini dilakukan menggunakan Rancangan Acak Kelompok (RAK) pola searah dengan empat perlakuan level kasgot yaitu 0, 5, 10, dan 15%. Biji kacang koro pedang ditanam pada *polybag* berukuran 30x30 diisi media tanam sebanyak 4 kg atau sekitar 50% dari kapasitas total. Variabel kandungan nutrisi yang diamati meliputi bahan kering, bahan organik, protein kasar, lemak kasar, serat kasar, BETN, dan TDN. Data dianalisis menggunakan sidik ragam ANOVA dan dilanjutkan dengan uji *Duncan Multiple Range Test* (DMRT) pada selang kepercayaan 95%. Hasil penelitian menunjukkan bahwa penambahan pupuk kasgot meningkatkan ($P < 0,05$) kandungan lemak kasar dan BETN. Peningkatan level pemupukan hingga 15% menurunkan ($P < 0,05$) kandungan bahan kering dan bahan organik, meningkatkan protein kasar, menurunkan serat kasar hingga, serta meningkatkan TDN tanaman koro pedang dengan kandungan nutrisi tertinggi pada daun. Berdasarkan hasil tersebut, pemberian pupuk kasgot level 15% memberikan kualitas nutrisi terbaik bagi tanaman *Canavalia ensiformis*.

Kata kunci: *Canavalia ensiformis*, Koro pedang, Level pupuk kasgot, Kandungan nutrisi, Daun, Batang, Total

NUTRIENT CONTENT OF JACK BEANS (*Canavalia ensiformis*) UNDER DIFFERENT LEVELS OF BLACK SOLDIER FLY FERTILIZER APPLICATION

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ABSTRACT

This study aimed to analyze the nutrient content of jack bean (*Canavalia ensiformis*) under different Black Soldier Fly Frass Fertilizer (BSFF) levels and to determine the optimal level to enhance its nutritional quality. The research was conducted using randomized block design in a one-way pattern with four levels of BSFF: 0, 5, 10, and 15%. Jack bean seeds were cultivated in 30x30 cm polybags, each filled to 50% capacity with 4 kg of planting medium. The observed nutrient content variables included dry matter, organic matter, crude protein, crude fiber, ether extract, nitrogen-free extract and, and total digestible nutrients. Data were analyzed using Analysis of Variance (ANOVA) and further tested using Duncan's Multiple Range Test ($P < 0,05$). The results showed that the application of BSFF application increased ($P < 0,05$) ether extract and nitrogen free extract content. Increasing the fertilization level up to 15% resulted in decreased ($P < 0,05$) dry matter and organic matter, increased crude protein up to 27,02%, decreased crude fiber to 10,09%, and increased total digestible nutrient of jack bean plants to 76,15%, with the highest nutrient content found in the leaves. Based on these results, it was concluded that the 15% BSFF level provided the best nutrient quality for *Canavalia ensiformis*.

Keywords : *Canavalia ensiformis*, Jack bean, Black soldier fly fertilizer level, Nutrient content, Leaves, Stems, Total plants