

INTISARI

Penelitian ini untuk mempelajari pengaruh pemberian pupuk guano terhadap pertumbuhan dan hasil tanaman kedelai (*Glycine max* L.) dan untuk mendapatkan dosis pupuk guano yang mampu memberikan pertumbuhan dan hasil tanaman kedelai (*Glycine max* L.) terbaik. Penelitian ini telah dilaksanakan di kebun percobaan *Teaching and Research Farm*, Fakultas Pertanian, Universitas Jambi, Desa Mendalo Indah, Kecamatan Jambi Luar Kota, Kabupaten Muaro Jambi. Berlangsung selama kurang lebih 4 bulan yaitu dimulai pada bulan juli sampai bulan oktober 2024. Penelitian ini dilakukan dengan menggunakan Rancangan Acak Kelompok (RAK) 1 faktor yaitu pupuk guano dengan taraf 5 level perlakuan, g0: 0 ton ha⁻¹ pupuk guano, g1: 1 ton ha⁻¹ pupuk guano, g2: 2 ton ha⁻¹ pupuk guano, g3: 3 ton ha⁻¹ pupuk guano, g4: 4 ton ha⁻¹. Variabel yang diamati yaitu tinggi tanaman, umur berbunga, jumlah cabang primer, jumlah polong per tanaman, jumlah polong berisi per tanaman, bobot 100 biji dan hasil per hektar. Hasil penelitian menunjukkan bahwa pupuk guano mampu memberikan pengaruh terhadap pertumbuhan tanaman kedelai pada variabel tinggi tanaman, jumlah polong per tanaman dan jumlah polong berisi per tanaman kecuali pada umur berbunga dan jumlah cabang primer. Namun tidak mampu memberikan pengaruh terhadap hasil tanaman kedelai yaitu pada bobot 100 biji dan hasil per hektar. Pemberian pupuk guano 2 ton ha⁻¹ memberikan hasil tanaman kedelai terbaik yaitu 3,63 ton ha⁻¹.

Kata Kunci: Kedelai, Pupuk Guano, Pertumbuhan dan Hasil Tanaman

ABSTRACT

*This study aims to examine the effect of guano fertilizer application on the growth and yield of soybean (*Glycine max* L.) and to determine the optimal dosage that provides the best growth and yield performance. The research was conducted at the Teaching and Research Farm, Faculty of Agriculture, University of Jambi, located in Mendalo Indah Village, Jambi Luar Kota Subdistrict, Muaro Jambi District. The study lasted for approximately four months, from July to October 2024. The experiment was arranged using a Completely Randomized Design (CRD) with one factor guano fertilizer at five levels: g0: 0 tons ha⁻¹, g1: 1 ton ha⁻¹, g2: 2 tons ha⁻¹, g3: 3 tons ha⁻¹, and g4: 4 tons ha⁻¹. Observed variables included plant height, flowering age, number of primary branches, number of pods per plant, number of filled pods per plant, weight of 100 seeds, and yield per hectare. The results showed that guano fertilizer significantly influenced plant growth, particularly plant height, number of pods per plant, and number of filled pods per plant. However, it had no significant effect on flowering age or the number of primary branches. Moreover, guano fertilizer did not significantly affect yield components such as the weight of 100 seeds or yield per hectare. The application of 2 tons ha⁻¹ of guano fertilizer produced the best soybean yield, reaching 3.63 tons ha⁻¹.*

Keywords : Soybean, Guano Fertilizer, Growth and Yield of Plants.