

**RESPON PERTUMBUHAN DAN HASIL TANAMAN KACANG
PANJANG (*Vigna sinensis* L.) PADA DOSIS PUPUK HAYATI MIKORIZA
DAN PENGATURAN JARAK TANAM**

**Oleh: Riska Ariyani
Dibimbing oleh: Suwardi**

ABSTRAK

Kacang panjang mengandung gizi yang cukup lengkap. Penelitian ini bertujuan untuk menentukan dosis pupuk hayati mikoriza dan jarak tanam terbaik, serta perbedaan antara perlakuan kontrol dengan kombinasi perlakuan. Percobaan lapangan menggunakan Rancangan Acak Kelompok Lengkap (RAKL) faktorial dengan 2 faktor dan 1 kontrol. Faktor pertama dosis pupuk hayati mikoriza 3 taraf yaitu 5, 10, dan 15 g/tanaman. Faktor kedua jarak tanam 3 taraf yaitu 50 cm x 30 cm, 50 cm x 40 cm, dan 50 cm x 50 cm. Hasil yang diperoleh menunjukkan terdapat interaksi antara dosis pupuk hayati mikoriza dan pengaturan jarak tanam terhadap jumlah daun 49 HST, jumlah polong per tanaman, dan bobot polong segar per tanaman. Dosis pupuk hayati mikoriza 10 g/tanaman memberikan hasil terbaik pada tinggi tanaman 21, tinggi tanaman 35 HST, jumlah daun 21 dan jumlah daun 35 HST. Jarak tanam 50 cm x 30 cm memberikan hasil terbaik pada tinggi tanaman 35 HST. Kombinasi perlakuan nyata lebih baik daripada kontrol pada tinggi tanaman 35 HST, jumlah polong per tanaman, dan bobot polong segar per hektar.

Kata kunci : Kacang panjang, mikoriza, jarak tanam

GROWTH AND YIELD RESPONSE OF LONG BEAN PLANTS (*Vigna sinensis* L.) TO DOSES OF MYCORIZA BIOFERTILIZATION AND PLANT SPACING

By: Riska Ariyani
Supervised by: Suwardi

ABSTRACT

Long beans contain fairly complete nutrients. This study aims to determine the optimal dosage of mycorrhizal biofertilizer and the best planting distance, as well as to compare the control treatment with the combination treatments. The field experiments using factorial Randomized Complete Blok Design (RCBD) with 2 factors and 1 control. The first factor is the doses of mycoriza biofertilizer consists of 3 levels, namely 5, 10, and 15 g/plant. The second factor is the plant spacing consists of 3 levels, namely 50 cm x 30 cm, 50 cm x 40 cm, and 50 cm x 50 cm. The results obtained showed that there was an interaction between the dose of mycorrhizal biofertilizer and the arrangement of planting distance on number of leaves 49 DAP, number of pods per plant, and fresh pod weight per plant. Mycoriza biofertilizer dose of 10 g/plants gave the best result on plant height 21, plant height 35 DAP, number of leaves 21 and number of leaves 35 DAP. Plant spacing 50 cm x 30 cm resulted in the best outcomes for plant height 35 HST. The combination treatment was significantly better than the control on plant height 35 DAP, number of pods per plant, and fresh pod weight per hectare.

Keywords: *Long bean, mycoriza, plant spacing*