

RINGKASAN

Penelitian ini dilaksanakan di Kebun Percobaan Fakultas Pertanian Universitas Islam Sumatera Utara, Kelurahan Gedung Johor, Kecamatan Medan Johor, Kota Medan, Provinsi Sumatera Utara dengan ketinggian tempat \pm 25 mdpl dan topografi datar. Penelitian dilaksanakan pada bulan Juli sampai bulan Oktober 2021. Penelitian ini dibimbing oleh Bapak Ir. Aldy Waridha, MP. sebagai Ketua Pembimbing dan Bapak Ir. Arif Anwar, MM. sebagai Anggota Pembimbing. Penelitian ini bertujuan untuk mengetahui pengaruh jarak tanam dan konsentrasi pupuk organik cair kulit pisang yang tepat terhadap pertumbuhan dan produksi tanaman kedelai.

Penelitian ini menggunakan Rancangan Petak Terpisah (RPT) dengan petak utama yaitu jarak tanam dan anak petak yaitu konsentrasi POC kulit Pisang. Petak utama yaitu: jarak tanam terdiri dari 3 taraf yaitu : J₁ (25 cm x 20 cm), J₂ (25 cm x 25 cm) dan J₃ (25 cm x 30 cm). Anak petak yaitu: konsentrasi POC kulit pisang terdiri dari 4 taraf yaitu : P₀ (kontrol), P₁ (1 %), P₂ (2 %) dan P₃ ((3 %)). Parameter yang diamati adalah tinggi tanaman, jumlah cabang, jumlah polong per tanaman, bobot polong per tanaman, bobot polong per plot dan bobot biji 100 butir.

Hasil penelitian menunjukkan bahwa Jarak Tanam berpengaruh terhadap pertumbuhan tinggi tanaman, jumlah cabang, jumlah polong per tanaman, bobot polong per tanaman dan bobot polong per plot tetapi tidak berpengaruh terhadap bobot biji 100 butir. Pemberian konsentrasi POC kulit pisang berpengaruh terhadap pertumbuhan tinggi tanaman, jumlah cabang, jumlah polong per tanaman, bobot polong per tanaman dan bobot polong per plot tetapi tidak berpengaruh terhadap bobot biji 100 butir. Interaksi antara jarak tanam dan konsentrasi POC kulit pisang tidak berpengaruh terhadap seluruh parameter yang diamati.

Kata Kunci : Tanaman Kedelai, Jarak Tanam, Pupuk Organik Cair Kulit Pisang

SUMMARY

This research was conducted at the Experimental Garden of the Faculty of Agriculture, Islamic University of North Sumatra, Gedung Johor Village, Medan Johor District, Medan City, North Sumatra, Gedung Johor Village, Medan Johor District, Medan City, North Sumatra Province with an altitude of ± 25 meters above sea level and flat topography. The research was conducted from July to October 2021. This research was supervised by Mr. Ir. Aldy Waridha, MP. as Chief Advisor and Mr. Ir. Arif Anwar, MM. as a Advisory Member. This study aims to determine the effect of plant spacing and the right concentration of liquid organic fertilizer banana peel on the growth and production of soybean plants.

This study used a Split Plot Design (SPD) with the main plot, namely the spacing and the subplots, namely the concentration of POC Banana peel. The main plots, namely: spacing consists of 3 levels, namely: J1 (25 cm x 20 cm), J2 (25 cm x 25 cm) and J3 (25 cm x 30 cm). Sub-plots, namely: banana peel POC concentration consisted of 4 levels, namely: P0 (control), P1 (1 %), P2 (2%) and P3 (3 %). The parameters observed were plant height, number of branches, number of pods. per plant, pod weight per plant, pod weight per plot and seed weight of 100 grains.

The results showed that Planting Distance had an effect on plant height growth, number of branches, number of pods per plant, pod weight per plant and pod weight per plot but had no effect on seed weight of 100 grains. The concentration of POC in banana peels affected the growth of plant height, number of branches, number of pods per plant, weight of pods per plant and weight of pods per plot but had no effect on seed weight of 100 grains. The interaction between planting distance and banana peel POC concentration had no effect on all observed parameters.

Keywords: Soybean Plants, Planting Distance, Liquid Organic Fertilizer Banana Peel