PENGARUH KOMBINASI KONSENTRASI PUPUK CAIR BONGGOL PISANG DAN TAKARAN PUPUK NPK TERHADAP PERTUMBUHAN DAN HASIL TANAMAN MENTIMUN (*Cucumis sativus* L)

Oleh
FAHMI ABDUL AZIZ
205001003

Dosen Pembimbing:
Prof. Dr. H. Rudi Priyadi, Ir., M.S.
Nur Arifah Qurota A'yunin, S.TP., M.Sc.

ABSTRAK

Mentimun adalah jenis tanaman budidaya tropis yang terkenal dengan kebutuhan unsur hara yang tinggi pada saat budidaya sehingga memerlukan konsep pemupukan yang baik, salah satunya dengan mengombinasikan pupuk cair bonggol pisang dengan pupuk majemuk NPK. Penelitian ini bertujuan untuk mengetahui kombinasi konsentrasi pupuk cair bonggol pisang dan takaran pupuk NPK yang berpengaruh paling baik terhadap pertumbuhan dan hasil tanaman mentimun. Penelitian dilakukan di lahan percobaan Fakultas Pertanian Universitas Siliwangi, dilaksanakan pada bulan Maret sampai Juni 2024. Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) non faktorial yang terdiri dari 9 perlakuan yaitu, pupuk cair bonggol pisang 20% + tanpa pupuk NPK, pupuk cair bonggol pisang 20% + pupuk NPK 100 kg/ha, pupuk cair bonggol pisang 20% + pupuk NPK 200 kg/ha, pupuk cair bonggol pisang 30% + tanpa pupuk NPK, pupuk cair bonggol pisang 30% + pupuk NPK 100 kg/ha, pupuk cair bonggol pisang 30% + pupuk NPK 200 kg/ha, pupuk cair bonggol pisang 40% + tanpa pupuk NPK, pupuk cair bonggol pisang 40% + pupuk NPK 100 kg/ha, pupuk cair bonggol pisang 40% + pupuk NPK 200 kg/ha. Hasil penelitian menunjukkan bahwa kombinasi konsentrasi pupuk cair bonggol pisang dan takaran pupuk NPK berpengaruh terhadap tinggi tanaman, jumlah daun, luas daun, jumlah buah, bobot buah per buah, bobot buah per tanaman dan bobot buah per petak dan tidak berpengaruh terhadap diameter buah dan panjang buah. Pupuk cair bonggol pisang konsentrasi 20% yang dikombinasikan dengan pupuk NPK takaran 200 kg/ha dan pupuk cair bonggol pisang konsentrasi 40% yang dikombinasikan dengan pupuk NPK takaran 100 kg/ha memberikan pengaruh paling baik terhadap tinggi tanaman pada umur 28 HST, jumlah daun pada umur 21 HST dan 28 HST, luas daun, jumlah buah per tanaman, bobot buah per buah, bobot buah per tanaman dan bobot buah per petak.

Kata Kunci: mentimun, pupuk cair bonggol pisang, pupuk NPK

EFFECT OF COMBINATION OF BANANA WEEVIL LIQUID FERTILIZER CONCENTRATION AND NPK FERTILIZER DOSAGE ON THE GROWTH AND YIELD OF CUCUMBER (*Cucumis sativus* L)

By
FAHMI ABDUL AZIZ
205001003

Under Guidance by:
Prof. Dr. H. Rudi Priyadi, Ir., M.S.
Nur Arifah Qurota A'yunin, S.TP., M.Sc.

ABSTRACT

Cucumbers are a type of tropical cultivated plant that is known for its high nutrient requirements during cultivation, so it requires a good fertilization concept, one of which is by combining banana weevil liquid fertilizer with NPK compound fertilizer. This study aims to determine the combination of banana weevil liquid fertilizer concentration and NPK fertilizer dosage that have the best effect on the growth and yield of cucumber plants. This research was conducted in the experimental field of the Faculty of Agriculture, Siliwangi University, carried out from March to June 2024. This research used a single Randomized Block Design (RBD) consist of 9 treatments, namely, 20% banana weevil liquid fertilizer + without NPK fertilizer, 20% banana weevil liquid fertilizer + 100 kg/ha NPK fertilizer, 20% banana weevil liquid fertilizer + 200 kg/ha NPK fertilizer, 30% banana weevil liquid fertilizer + without NPK fertilizer, 30% banana weevil liquid fertilizer + 100 kg/ha NPK fertilizer, 30% banana weevil liquid fertilizer + 200 kg/ha NPK fertilizer, 40% banana weevil liquid fertilizer + without NPK fertilizer, 40% banana weevil liquid fertilizer + 100 kg/ha NPK fertilizer, 40% banana weevil liquid fertilizer + 200 kg/ha NPK fertilizer. The results showed that the combination of banana weevil liquid fertilizer concentration and NPK fertilizer dosage affected to plant height, number of leaves, leaf area, number of fruits, fruit weight per fruit, fruit weight per plant and fruit weight per plot but did not significantly on fruit diameter and fruit length. Banana weevil liquid fertilizer with a concentration of 20% combined with NPK fertilizer at a rate of 200 kg/ha and banana weevil liquid fertilizer with a concentration of 40% combined with NPK fertilizer at a rate of 100 kg/ha had the best effect on plant height at 28 days after planting, number of leaves at 21 and 28 days after planting, leaf area, number of fruit per plants, fruit weight per fruit, fruit weight per plants and fruit weight per plot.

Keywords: cucumber, banana weevil liquid fertilizer, NPK fertilizer