RINGKASAN

Kacang sacha inchi (*Plukenetia volubilis* L.) merupakan tanaman *perennial* dan merambat. Sacha inchi mempunyai potensi cukup besar karena manfaat kandungannya. Teknik budidaya tanaman yang intensif untuk hasil optimal dapat dilakukan dengan pemupukan dan pemangkasan. Penelitian ini menggunakan pendekatan peningkatan produksi kacang sacha inchi dengan pemangkasan dan jenis pupuk organik cair (POC) yang berbeda. Tujuan penelitian ini untuk mengetahui pengaruh pemangkasan dan jenis POC terbaik untuk meningkatkan hasil kacang sacha inchi.

Penelitian dilaksanakan di kebun kacang sacha inchi seluas ± 288 m^2 yang terletak di Desa Singasari, Kecamatan Karanglewas, Kabupaten Banyumas, Provinsi Jawa Tengah dan Laboratorium Agroekologi, Fakultas Pertanian, Universitas Jenderal Soedirman. Penelitian dilaksanakan mulai dari bulan Oktober 2023 - Mei 2024. Rancangan yang digunakan adalah Petak Terbagi dengan dasar Rancangan Acak Kelompok (RAK). Petak utama (*main plot*), yaitu tanpa pemangkasan (P0) dan pemangkasan (P1), sedangkan anak petak (*sub plot*), yaitu POC asam amino (C1), urine kelinci (C2), *eco enzyme* (C3), dan biosaka (C4). Kombinasi kedua faktor menghasilkan 8 kombinasi perlakuan dan dilakukan sebanyak 3 kali pengulangan, dimana pada masing-masing pengulangan terdapat 24 tanaman, sehingga total tanaman berjumlah 72 tanaman.Variabel pengamatan meliputi jumlah tunas baru, jumlah bunga, umur muncul tunas, umur muncul bunga, umur panen, luas daun, jumlah buah, bobot buah, bobot kering biji per petak, bobot kering biji per tanaman, bobot kering brangkasan, bobot kering 30 biji, jumlah polong dalam satu buah per tanaman, persentase bunga menjadi buah, dan produksi per hektar. Analisis data dilakukan dengan uji F pada taraf kepercayaan 95%. Apabila hasil uji F menunjukkan perbedaan yang nyata, maka dilanjutkan dengan uji *Duncan's Multiple Range Test*.

Hasil penelitian menunjukkan bahwa pemangkasan meningkatkan bobot kering 30 biji dengan persentase peningkatan sebesar 5,75% dibandingkan tanpa pemangkasan. Aplikasi urine kelinci meningkatkan jumlah tunas baru berkisar 27,77-38,03%, jumlah bunga berkisar 14,93-26,56%, dan bobot kering 30 biji berkisar 1,34-4,4% dibandingkan asam amino, *eco enzyme*, dan biosaka. Interaksi antara pemangkasan dan urine kelinci meningkatkan jumlah tunas baru dan umur munculnya berbunga, sedangkan interaksi antara tanpa pemangkasan dan urine kelinci meningkatkan bobot kering 30 biji.

Kata kunci: pemangkasan, POC, sacha inchi

SUMMARY

Sacha inchi (Plukenetia volubilis L.) is a perennial climbing plant. Sacha inchi has significant potential due to its beneficial content. Intensive cultivation techniques for optimal yield can be carried out through fertilization and pruning. This study uses an approach to increase the production of sacha inchi by applying different types of liquid organic fertilizers (LOF) and pruning methods. The purpose of this research is to determine the effect of pruning and the best type of LOF to enhance the yield of sacha inchi.

The research was conducted in a sacha inchi field of approximately 288 m² located in Singasari Village, Karanglewas Sub-district, Banyumas Regency, Central Java Province, and in the Agroecology Laboratory, Faculty of Agriculture, Jenderal Soedirman University. The study was carried out from October 2023 to May 2024. The design used was a Split-Plot Design based on a Randomized Block Design (RBD). The main plots consisted of no pruning (P0) and pruning (P1), while the sub-plots included amino acid LOF (C1), rabbit urine (C2), eco enzyme (C3), and biosaka (C4). The combination of the two factors resulted in eight treatment combinations, each replicated three times, with 24 plants in each replication, yielding a total of 72 plants. The observed variables included the number of new shoots, number of flowers, age of shoot emergence, age of flower emergence, harvesting age, leaf area, number of fruits, fruit weight, dry seed weight per plot, dry seed weight per plant, dry biomass weight, dry weight of 30 seeds, number of pods per fruit per plant, percentage of flowers that turn into fruits, and yield per hectare. Data analysis was performed using an F-test at a 95% confidence level. If the F-test results indicated significant differences, Duncan's Multiple Range Test was conducted.

The results showed that pruning increased the dry weight of 30 seeds by 5.75% compared to no pruning. The application of rabbit urine increased the number of new shoots by 27.77-38.03%, the number of flowers by 14.93-26.56%, and the dry weight of 30 seeds by 1.34-4.4% compared to amino acid, eco enzyme, and biosaka treatments. The interaction between pruning and rabbit urine enhanced the number of new shoots and the age of flowering emergence, while the interaction between no pruning and rabbit urine increased the dry weight of 30 seeds.

Keywords: pruning, LOF, sacha inchi