RINGKASAN

Tanaman selada merupakan sayuran daun yang memiliki peluang pasar yang cukup besar. Upaya yang dapat dilakukan untuk meningkatkan budidaya selada pada tanah inceptisol adalah dengan pemupukan menggunakan limbah baglog jamur dan pupuk kandang sapi. Penelitian ini bertujuan untuk mendapatkan dosis limbah baglog jamur terbaik untuk meningkatkan kesuburan tanah, pertumbuhan, dan hasil tanaman selada; mendapatkan dosis pupuk kandang sapi terbaik untuk meningkatkan kesuburan tanah, pertumbuhan, dan hasil tanaman selada; dan mendapatkan pengaruh interaksi antara limbah baglog jamur dan pupuk kandang sapi terhadap kesuburan tanah, pertumbuhan, dan hasil tanaman selada.

Penelitian dilaksanakan pada Januari sampai Juni 2023 di *screen house*, Laboratorium Agronomi dan Hortikultura, serta Laboratorium Tanah dan Sumber Daya Lahan Fakultas Pertanian, Universitas Jenderal Soedirman. Penelitian ini menggunakan Rancangan Acak Kelompok Lengkap (RAKL) faktorial dengan 2 faktor yaitu dosis limbah baglog jamur (kontrol, 20 ton/ha, 40 ton/ha) dan dosis pupuk kandang sapi (kontrol, 6 ton/ha, 12 ton/ha) yang diulang sebanyak 3 kali. Variabel yang diamati antara lain C-Organik, pH, N-Total, N-Tersedia pada tanah, diameter batang, luas daun, kehijauan daun, kadar klorofil total, serapan N tanaman, bobot tanaman segar, bobot tanaman kering, bobot tajuk segar, dan indeks panen selada. Data dianalisis dengan uji F (ANOVA) dan uji lanjut dengan *Duncan's Multiple Range Test* (DMRT) dengan tingkat kesalahan 5%.

Hasil penelitian menunjukkan bahwa pemberian limbah baglog jamur meningkatkan N-total, kehijauan daun, bobot tanaman segar, bobot tanaman kering, dan bobot tajuk segar, pemberian pupuk kandang sapi meningkatkan N-total, dan kombinasi terbaik pemberian dosis limbah baglog jamur dan pupuk kandang sapi pada hasil tanaman selada yaitu pada dosis limbah baglog jamur 40 ton/ha + dosis pupuk kandang sapi 12 ton/ha untuk meningkatkan bobot tanaman segar, bobot tanaman kering, dan bobot tajuk segar.

SUMMARY

Lettuce is a leaf vegetable that has quite a large market opportunity. Efforts that can be made to increase lettuce cultivation on inceptisol soil are by fertilizing using mushroom baglog waste and cow manure. This research aims to obtain the best dose of baglog mushroom waste to increase soil fertility, growth and yield of lettuce plants; get the best dose of cow manure to increase soil fertility, growth and yield of lettuce plants; and get the effect of the interaction between mushroom baglog waste and cow manure on soil fertility, growth and yield of lettuce plants.

The research was carried out from January to June 2023 in*screen house*, Agronomy and Horticulture Laboratory, and Soil and Land Resources Laboratory, Faculty of Agriculture, Jenderal Soedirman University. This research used a factorial Complete Randomized Block Design (RAKL) with 2 factors, namely the dose of mushroom baglog waste (control, 20 tons/ha, 40 tons/ha) and the dose of cow manure (control, 6 tons/ha, 12 tons/ha) which was repeated 3 times. The variables observed included C-Organic, pH, N-Total, N-Available in the soil, stem diameter, leaf area, leaf greenness, total chlorophyll content, plant N uptake, fresh plant weight, dry plant weight, fresh shoot weight, and lettuce harvest index. Data were analyzed with the F test (ANOVA) and further tests with *Duncan's Multiple Range Test* (DMRT) with an error rate of 5%.

The result of the research show that giving mushroom baglog waste increased N-total, leaf greenness, fresh plant weight, dry plant weight, and fresh shoot weight, giving cow manure increases N-total, and the best combination of giving a doses of mushroom baglog waste and cow manure to lettuce plants is a dose of mushroom baglog waste of 40 tons/ha + a dose of cow manure of 12 tons/ha to increase fresh plant weight, dry plant weight and fresh shoot weight.