RINGKASAN

Selada (*Lactuca sativa* L.) merupakan salah satu tanaman semusim yang banyak diminati oleh masyarakat Indonesia karena memiliki banyak manfaat dan nilai ekonomis yang tinggi. Kebutuhan dan konsumsi selada di Indonesia selalu meningkat setiap tahunnya. Kebutuhan selada di masyarakat dapat dipenuhi dengan melakukan budidaya tanaman selada pada tanah inceptisol yang merupakan jenis tanah dengan persebaran paling luas di wilayah Indonesia. Beberapa tanah inceptisol memiliki unsur hara yang rendah, sehingga penambahan unsur lain yang dapat memperbaiki sifat fisik dan kimia tanah sangat diperlukan. Salah satu upaya dalam meningkatkan produktivitas tanaman selada di tanah incepisol adalah dengan penambahan limbah media tanam jamur kancing dan pupuk kandang sapi. Limbah media tanam jamur kancing merupakan media tanam jamur yang sudah tidak digunakan kembali, namun masih terkandung beberapa bahan organik yang dapat menunjang kebutuhan hara tanaman. Penelitian ini bertujuan untuk mengetahui pengaruh dosis limbah media tanam jamur kancing dan pupuk kandang sapi terhadap karakteristik kimia tanah, karakter agronomi dan hasil tanaman.

Penelitian dilaksanakan di *screen house*, Laboratorium Agronomi & Hortikultura, Laboratorium Tanah & Sumberdaya Lahan, Fakultas Pertanian Universitas Jenderal Soedirman. Penelitian dilakukan dari bulan Februari 2023 sampai dengan Juni 2023. Penelitian ini dilakukan dengan rancangan acak kelompok lengkap (RAKL) yang terdiri dari 2 faktor dan 3 ulangan. Faktor pertama adalah dosis limbah media tanam jamur kancing yang terdiri dari 3 taraf yaitu kontrol, 20 ton/ha, 40 ton/ha dan faktor kedua adalah dosis pupuk kandang sapi yang terdiri dari 3 taraf yaitu kontrol, 6 ton/ha, 12 ton/ha, sehingga terdapat 9 (3 x 3) kombinasi perlakuan. Perlakuan diulang 3 kali sehingga terdapat 27 unit percobaan. Variabel yang diamati meliputi tinggi tanaman (cm), jumlah daun, panjang akar (cm), bobot segar tanaman (g), bobot kering tanaman (g), bobot segar akar (g), bobot kering akar (g), P-Total, P-Tersedia, K-Total, K-Tersedia, dan C/N rasio. Data hasil percobaan dianalisis dengan menggunakan uji F, jika hasil yang diperoleh menunjukan pengaruh nyata, maka dilakukan uji DMRT (*Duncan Multiple Range Test*) pada taraf kesalahan 5%.

Hasil penelitian menunjukan pemberian dosis limbah media tanam jamur kancing sebanyak 40 ton/ha berpengaruh sangat nyata terhadap tinggi tanaman, bobot segar tanaman, bobot kering tanaman, K-Tersedia dan P-Tersedia. Pemberian dosis pupuk kandang sapi tidak menunjukan pengaruh nyata pada semua variabel pengamatan. Perlakuan pemberian dosis limbah media tanam jamur dan pupuk kandang sapi menunjukan terdapat interaksi terhadap hasil produksi yaitu bobot tanaman segar dan pada bobot kering tanaman.

SUMMARY

Lettuce (Lettuce sativa L.) is one of the annual plants that is in great demand by Indonesian people because it has many benefits and high economic value. The need and consumption of lettuce in Indonesia always increases every year. In order to meet the needs of lettuce in society, lettuce plants can be cultivated on inceptisol soil, which is the type of soil with the most widespread distribution in Indonesia. Some inceptisol soils are low in nutrients, so the addition of other elements that can improve the physical and chemical properties of the soil is very necessary. One effort to increase the productivity of lettuce plants in inceptisol soil is by adding compost from waste to champignon mushroom growing media and cow manure. Waste champignon mushroom growing media is mushroom growing media that is no longer reused, but still contains some organic materials that can support the plant's nutrient needs. This research aims to determine the effect of the dose of champignon mushroom growing media waste and cow manure on soil chemical characteristics, agronomic character and yield.

The research was carried out in screen house, Agronomy & Horticulture Laboratory, Soil & Land Resources Laboratory, Faculty of Agriculture, Jenderal Soedirman University. The research was conducted from February 2023 to June 2023. This research was conducted with a completely randomized block design (RAKL) consisting of 2 factors and 3 replications. The first factor is the dose of champignon mushroom growing media waste which consists of 3 levels, namely control, 20 tons/ha, 40 tons/ha and the second factor is the dose of cow manure which consists of 3 levels, namely control, 6 tons/ha, 12 tons/ha, so there are 9 (3 x 3) treatment combinations. The treatment was repeated 3 times so that there were 27 experimental units. Variables observed included plant height (cm), number of leaves, root length (cm), plant fresh weight (g), plant dry weight (g), root fresh weight (g), root dry weight (g), P-Total, P-Available, K-Total, K-Available, and C/N ratio. The experimental data were analyzed using the F test, if the results obtained showed a real effect, then the DMRT test (Duncan Multiple Range Test) at a 5% error rate.

The results of the research showed that administering a dose of button mushroom planting media waste of 40 tons/ha had a very significant effect on plant height, plant fresh weight, plant dry weight, K-Available and P-Available. Giving doses of cow manure did not show a real effect on all observed variables. The treatment of dosing mushroom growing media waste and cow manure showed that there was an interaction with production results, namely fresh plant weight and dry plant weight.