RINGKASAN

Bawang daun (*Allium fistulosum* L.) merupakan tanaman sayuran yang banyak diminati dan dimanfaatkan sebagai penyedap rasa pada masakan. Produktivitas bawang daun dapat ditingkatkan dengan cara pemupukan dan pemilihan media tanam. Pemupukan diharapkan dapat mencukupi kebutuhan nutrisi tanaman agar hasilnya meningkat. Penelitian ini bertujuan untuk (1) mengetahui pengaruh konsentrasi kompos cair limbah ikan (campuran berbagai ikan) terhadap pertumbuhan tanaman bawang daun, (2) mengetahui perlakuan konsentrasi kompos cair limbah ikan (campuran berbagai ikan) yang paling baik untuk pertumbuhan tanaman bawang daun.

Penelitian dilaksanakan pada bulan Januari 2022 sampai Juni 2022 di *screenhouse* Fakultas Pertanian Universitas Jenderal Soedirman dan Laboratorium Agronomi dan Hortikultura Fakultas Pertanian. Rancangan yang digunakan adalah Rancangan Acak Kelompok Lengkap (RAKL) dengan 1 faktor yang terdiri dari 6 perlakuan dan 3 sampel. Faktor yang digunakan adalah konsentrasi kompos cair limbah ikan I0= 0 ml/L, I1= 100 ml/L, I2= 200 ml/L, I3= 300 ml/L, I4= 400 ml/L, dan I5= 500 ml/L. Media tanam yang digunakan adalah tanah inseptisol. Variabel yang diamati yaitu tinggi tanaman (cm), jumlah daun (helai), bobot tajuk segar (g), bobot tajuk kering (g), bobot akar segar (g), bobot akar kering (g). Data yang diperoleh dianalisis menggunakan analisis sidik ragam pada taraf kesalahan 5%, apabila berpengaruh nyata dilanjutkan dengan uji *Duncan's Multiple Rang Test* (DMRT) α=5%.

Hasil penelitian ini menunjukan bahwa pemupukan kompos cair limbah ikan meningkatkan bobot tajuk dan bobot akar. Konsentrasi kompos cair limbah ikan 500ml/L memberikan hasil tertinggi pada variabel bobot tajuk segar 88,42 g; bobot tajuk kering 10,83 g; bobot akar segar 11,87 g; dan bobot akar kering 3,22 g.

SUMMARY

Spring onion (Allium fistulosum L.) is a vegetable plant that is in great demand and is used as a flavoring in cooking. Spring onion productivity can be increased by fertilization and selection of planting media. Fertilization is expected to meet the nutritional needs of plants so that their yield increase. This research aim to (1) determine the effect of the concentration of fish waste liquid compost (a mixture of various fish) on the growth of spring onion plants, (2) find out the best treatment for the concentration of fish waste liquid compost (a mixture of various fish) for the growth of onion spring plants.

The study was conducted from January 2022 to June 2022 in the screen house of the faculty of Agriculture and the Laboratory of Agronomy and Horticulture, Faculty of Agriculture, Jenderal Soedirman University. The experimental design used was a randomized completely block design (RCBD) with 1 factor consisted by 6 treatmens and 3 samples. The factor used were the concentration of fish waste liquid compost I0= 0 mL/L, I1= 100 mL/L, I2= 200 mL/L, I3= 300 mL/L, I4= 400 mL/L, and I5= 500 mL/L. The planting media was used is inceptisol soil. The variables observed were plant height (cm), number of leaves, fresh shoot weight (g), dry shoot weight (g), fresh root weight (g), dry root weight (g). The data obtained were analyzed using analysis of variance at 5% error rate, then if it had a significant effect, it was continued with the Duncan's Multiple Range Test (DMRT) α=5%.

The results showed that the concentration of fish waste liquid compost fertilization increases shoot weight and root weight. The concentration of fish waste liquid compost 500 ml/L gave the highest yield on variable fresh shoot weight 88,42 g; dry shoot weight 10,83 g; fresh root weight 11,87 g; and dry root weight 3,22 g.