

RINGKASAN

Bayam merupakan salah satu sayuran yang banyak dikonsumsi oleh masyarakat Indonesia. Peningkatan produksi bayam seiring dengan meningkatnya jumlah penduduk. Oleh karena itu, perlu dilakukan upaya peningkatan produksi bayam dengan cara memperbaiki tingkat kesuburan tanah yang dapat dilakukan dengan memberikan media tanam yang sesuai untuk pertumbuhan. Penelitian ini bertujuan untuk: 1) mendapatkan macam media tanam yang terbaik untuk meningkatkan pertumbuhan dan hasil tanaman bayam merah; 2) mendapatkan konsentrasi pupuk organik cair limbah kulit buah yang terbaik untuk meningkatkan pertumbuhan dan hasil tanaman bayam merah; 3) mengetahui interaksi antara macam media tanam dan konsentrasi pupuk organik cair limbah kulit buah terhadap pertumbuhan dan hasil tanaman bayam merah.

Penelitian ini dilaksanakan di *screen house* Fakultas Pertanian Universitas Jenderal Soedirman pada bulan Maret sampai dengan bulan Mei 2019. Rancangan penelitian menggunakan Rancangan Acak Kelompok Lengkap (RAKL), terdiri dari 3 ulangan. Perlakuan pada penelitian ini adalah kombinasi antara macam media tanam (tanah, tanah+kompos, dan tanah+kompos+arang sekam) dan konsentrasi pupuk organik cair (0%, 10%, 20% dan 30%). Variabel yang diamati yaitu tinggi tanaman, jumlah daun, luas daun, bobot akar segar, bobot akar kering, bobot tajuk segar, bobot tajuk kering, bobot tanaman segar dan bobot tanaman kering. Data yang diperoleh dianalisis menggunakan uji F, apabila terdapat keragaman dilanjutkan *Uji Duncan's Multiple Test* (DMRT) taraf 5% dan 1%.

Hasil penelitian menunjukkan, macam media tanam tanah+kompos+arang sekam meningkatkan pertumbuhan dan hasil tanaman bayam merah, pupuk organik cair limbah kulit buah dengan konsentrasi 20% meningkatkan pertumbuhan akar tanaman bayam merah dan tidak ada interaksi antara macam media tanam dan konsentrasi pupuk organik cair limbah kulit buah terhadap pertumbuhan dan hasil tanaman bayam merah.

SUMMARY

Spinach is one of the vegetables consumed by many Indonesians. Increased spinach production along with the increasing population. Therefore, efforts need to be made to increase spinach production by improving soil fertility levels by providing appropriate planting media for growth. This research aims to: 1) obtain the best types of planting media to increase the growth and yield of red spinach; 2) obtain the best concentration of liquid organic fertilizer from fruit skin waste to increase growth and yield of red spinach; 3) knowing the interaction between the types of planting media and the concentration of liquid organic fertilizer of fruit skin waste on the growth and yield of red spinach.

This research was carried out at the screen house of the Faculty of Agriculture, General Sudirman University in March to May 2019. The research design used a Completely Randomized Block Design (RAKL), consisting of 3 replications. The treatments in this study was a combinations of types of planting media (soil, soil + compost, and soil + compost + husk charcoal) and the concentrations of liquid organic fertilizer (0%, 10%, 20% and 30%). The variables observed were plant height, leaf number, leaf area, fresh root weight, dry root weight, fresh canopy weight, dry canopy weight, fresh plant weight and dry plant weight. The data obtained were analyzed using the F test, if there was diversity followed by The Duncan Multiple Test (DMRT) level of 5% and 1%.

The results showed, that various types of soil growing media + compost + husk charcoal increased growth and yield of red spinach, liquid organic fertilizer of fruit skin waste with a concentration of 20% increased the growth of red spinach plant roots and no interaction between types of planting media and the concentration of liquid organic fertilizer of fruit skin waste on the growth and yield of red spinach.