LIYANA. 0416010791. Pengaruh Konsentrasi Pupuk Organik Cair dan Macam Media Tanam Terhadap Pertumbuhan dan Produksi Tanaman Bayam (*Amaranthus* L.) Secara Hidroponik di bawah bimbingan Ir. Eka Adi Supriyanto, M.P. dan Syakiroh Jazilah, S.P., M.P.

ABSTRAK

Penelitian bertujuan untuk mengetahui konsentrasi pupuk organik cair yang optimal dan media tanam yang terbaik terhadap pertumbuhan dan produksi tanaman bayam secara hidroponik. Penelitian telah dilakukan di Desa Kayu Geritan Kecamatan Karanganyar Kabupaten Pekalongan bulan Juli sampai Agustus 2020. Penelitian disusun dalam Rancangan Acak Kelompok (RAK) yang terdiri atas 2 faktor diulang 3 kali. Faktor pertama konsentrasi pupuk organik cair (tanpa pupuk organik cair, 5 cc/liter, 10 cc/liter, dan 15 cc/liter), faktor kedua macam media tanam (arang sekam, cocopeat, dan rockwool). Data dianalisis dengan uji F dan jika terdapat beda nyata dilanjutkan dengan uji BNT taraf 5 %. Hasil penelitian menunjukkan bahwa perlakuan konsentrasi pupuk organik cair berbeda sangat nyata terhadap semua variabel, kecuali berbeda nyata pada bobot segar daun. Konsentasi optimal 10 cc/liter. Macam media tanam berbeda sangat nyata terhadap semua variabel, kecuali berbeda nyata pada jumlah daun dan bobot basah akar. Media tanam terbaik cocopeat. Interaksi antara konsentrasi pupuk organik cair dan macam media tanam berbeda sangat nyata terhadap panjang akar terpanjang, berbeda nyata pada jumlah akar, volume akar, bobot kering akar, bobot segar brangkasan, berbeda tidak nyata pada tinggi tanaman, jumlah daun, luas daun terluas, bobot basah akar, dan bobot segar daun. Kombinasi terbaik pada konsentrasi pupuk organik cair 10 cc/liter dan media tanam cocopeat.

Kata Kunci*: bayam, konsentrasi pupuk organik cair, macam media tanam, hidroponik*

LIYANA. 0416010791. The Effect of the Concentration of Liquid Organic Fertilizers and the Variety of Growing Media on the Growth and Production of Spinach (*Amaranthus* L.) Plants by Hidroponics under the guidance Ir. Eka Adi Supriyanto, M.P. dan Syakiroh Jazilah, S.P., M.P.

ABSTRAK

This study aims to determine the optimal concentration of liquid organic fertilizer and the best growing media for hydroponic growth and production of spinach. he research was conducted in Kayu Geritan Village, Karanganyar District, Pekalongan Regency from July to August 2020. The research was arranged in a randomized block design (RBD) consisting of 2 factors repeated 3 times. he first factor is the concentration of liquid organic fertilizer (without liquid organic fertilizer, 5 cc / liter, 10 cc / liter, and 15 cc / liter), the second factor is the type of planting medium (husk charcoal, cocopeat, and rockwool). The data were analyzed by using the F test and if there was a significant difference, it was continued with the LSD test at the 5% level. The results showed that the concentration of liquid organic fertilizer was significantly different for all variables, except for the significant difference in leaf fresh weight. The optimal concentration is 10 cc / liter. Types of planting media were significantly different for all variables, except for significant differences in leaf number and root wet weight. The best planting medium is cocopeat. The interaction between the concentration of liquid organic fertilizer and the type of planting medium was very significantly different to the length of the longest root, significantly different in the number of roots, root volume, root dry weight, fresh weight of stover, not significantly different in plant height, number of leaves, widest leaf area, weight wet root, and leaf fresh weight. The best combination is the concentration of liquid organic fertilizer 10 cc / liter and cocopeat growing media.

Keywords*: spinach, concentration of liquid organic fertilizer, kinds of growing media, hydroponics*