

RINGKASAN

Penelitian ini bertujuan untuk mengetahui konsentrasi nutrisi tanaman dan media tanam yang paling tepat terhadap pertumbuhan dan produksi tanaman stroberi (*Fragaria ananassa*) dengan sistem budidaya hidroponik terapung. Penelitian ini dilaksanakan di rumah kaca berada di Lubuk Pakam Kabupaten Deli Serdang, Provinsi Sumatera Utara dengan ketinggian tempat ± 20 mdpl, dilakukan dari bulan Desember 2020 – Mei 2021. Penelitian ini disusun berdasarkan Rancangan Acak Lengkap (RAL) faktorial yang terdiri dari 2 faktor perlakuan faktor pertama jenis media tanam terdiri atas 2 taraf yaitu M1 = sekam padi dan M2 = arang sekam sedangkan faktor kedua konsentrasi nutrisi AB mix terdiri atas 3 taraf yaitu K1 = 2 ml/liter air, K2 = 4 ml/liter air, dan K3 = 6 ml/liter air. Berdasarkan hasil yang didapat perlakuan pemberian beberapa jenis media berpengaruh tidak nyata terhadap rata-rata tinggi tanaman, jumlah daun, dan jumlah sulur rata-rata perlakuan yang tertinggi terhadap perlakuan M1 (media tanam sekam padi) yaitu pada rata-rata tinggi tanaman 25.13 cm, rata-rata jumlah daun 8.46 helai, rata-rata jumlah sulur 2.17, rata-rata jumlah bunga 2.38, rata-rata jumlah buah 1.29, dan rata-rata berat buah 4.80 g dan pemberian beberapa konsentrasi nutrisi berpengaruh tidak nyata terhadap rata-rata tinggi tanaman, jumlah daun, dan jumlah sulur rata-rata perlakuan yang tertinggi terhadap perlakuan K3 (konsentrasi 6 ml/ liter) yaitu pada rata-rata tinggi tanaman 25.33 cm, rata-rata jumlah daun 8.56 helai, rata-rata jumlah sulur 2.25, rata-rata jumlah bunga 2.50, rata-rata jumlah buah 1.38, dan rata-rata berat buah 5.08 g. Sedangkan perlakuan interaksi pemberian beberapa jenis media dan konsentrasi nutrisi berpengaruh tidak nyata terhadap rata-rata tinggi tanaman, jumlah daun, dan jumlah sulur rata-rata perlakuan yang tertinggi terhadap perlakuan M1K3 (media tanam sekam padi dan konsentrasi 6 ml/ liter) yaitu pada rata-rata tinggi tanaman 25.56 cm, rata-rata jumlah daun 8.63 helai, rata-rata jumlah sulur 2.38, dan rata-rata jumlah bunga 2.63, rata-rata jumlah buah 1.50, dan rata-rata berat buah 5.57 g.

Kata Kunci : *Nutrisi, Media, Tanaman Stroberi dan Hidroponik Terapung*

SUMMARY

This study aims to determine the most appropriate concentration of plant nutrients and growing media on the growth and production of strawberry plants (*Fragaria ananassa*) with a floating hydroponic cultivation system. This research was carried out in a screen house located in Lubuk Pakam, Deli Serdang Regency, North Sumatra Province with an altitude of ± 20 meters above sea level, carried out from December 2020 - May 2021. This study was compiled based on a factorial Completely Randomized Design (CRD) consisting of 2 factors, the first factor treatment the type of planting media consists of 2 levels, namely M1 = rice husk and M2 = husk charcoal while the second factor is the concentration of AB mix nutrients consisting of 3 levels, namely K1 = 2 ml/liter of water, K2 = 4 ml/liter of water, and K3 = 6 ml / liter of water. Based on the results obtained, the treatment of giving several types of media had no significant effect on the average plant height, number of leaves, and the number of tendrils the highest treatment was on treatment M1 (rice husk planting media), namely at an average plant height of 25.13 cm, an average number of leaves 8.46 strands. , the average number of tendrils is 2.17, the average number of flowers is 2.38, the average number of fruit is 1.29, and the average fruit weight is 4.80 g and the provision of several concentrations of nutrients has no significant effect on the average plant height, number of leaves, and the highest average number of tendrils in the K3 treatment (concentration of 6 ml/liter) that is, the average plant height is 25.33 cm, the average number of leaves is 8.56 strands, the average number of tendrils is 2.25, the average number of flowers is 2.50, the average number of fruit is 1.38, and the average fruit weight is 5.08 g. Nutrients had no significant effect on the average plant height, number of leaves, and the number of vines on average The highest treatment for the M1K3 treatment (rice husk planting medium and a concentration of 6 ml/liter) was at an average plant height of 25.56 cm, an average number of leaves 8.63, an average number of tendrils 2.38, and an average number of flowers 2.63, an average number of fruit 1.50 and average fruit weight 5.57 g.

Keywords: Nutrition, Media, Strawberry Plants and Floating Hydroponics