

Putri Marlinda Nurwati (210311100114). Pengaruh jenis media tanam terhadap pertumbuhan dan kandungan vitamin C tanaman *microgreen* bayam merah (*Amaranthus tricolor* L.). Dibimbing oleh Ir. Sinar Suryawati, M.Si dan Dr. Mustika Tripatmasari, S.P., M.Si.

ABSTRAK

Pertumbuhan populasi yang pesat menyebabkan keterbatasan lahan pertanian, sehingga diperlukan alternatif budidaya tanaman seperti *microgreen* yang dapat dilakukan secara *indoor*. *Microgreen* merupakan tanaman yang dipanen pada usia sangat muda sekitar 7 hingga 14 hari setelah tanam. Penelitian ini bertujuan untuk mengetahui pengaruh kombinasi media tanam terhadap pertumbuhan dan kandungan vitamin C tanaman *microgreen* bayam merah (*Amaranthus tricolor* L.). Penelitian dilaksanakan di Laboratorium Produksi Tanaman Universitas Trunojoyo Madura menggunakan Rancangan Acak Lengkap dengan lima perlakuan kombinasi media tanam (M0 = cocopeat, M1 = cocopeat + vermikulit, M2 = cocopeat + perlit, M3 = cocopeat + arang sekam, M4 = cocopeat + pasir) yang diulang lima kali, hasil pengamatan dianalisis varian dan uji lanjut duncan taraf 5%. Hasil penelitian menunjukkan bahwa jenis media tanam memiliki pengaruh nyata terhadap parameter pertumbuhan tanaman yaitu presentase daya berkecambah, tinggi tanaman, panjang akar, total berat basah dan susut bobot tanaman. Perlakuan M1 (cocopeat + vermikulit) menghasilkan pertumbuhan yang lebih bagus dibandingkan perlakuan lainnya. Peningkatan kandungan vitamin C tertinggi ditemukan pada umur 7 HSS dan menurun dengan bertambahnya umur tanaman. Perlakuan M2 (cocopeat + perlit) memberikan hasil kandungan vitamin C tertinggi (3,31%) dan yang terendah (0,86%) pada perlakuan M3 (cocopeat + arang sekam).

Kata kunci: bayam merah, *microgreen*, media tanam, vitamin C

Putri Marlinda Nurwati (210311100114). The effect of the type of planting media on the growth and vitamin C content of *microgreen* plants of red spinach (*Amaranthus tricolor* L.). Supervised by Ir. Sinar Suryawati, M.Si and Dr. Mustika Tripatmasari, S.P., M.Si.

ABSTRACT

Rapid population growth causes limited agricultural land, so alternative plant cultivation such as microgreens that can be done indoors is needed. Microgreens are plants that are harvested at a very young age around 7 to 14 days after planting. This study aims to determine the effect of the combination of planting media on the growth and vitamin C content of red spinach microgreen plants (Amaranthus tricolor L.). The study was conducted at the Plant Production Laboratory of Trunojoyo University, Madura using a Completely Randomized Design with five treatments of planting media combinations (M0 = cocopeat; M1 = cocopeat + vermiculite, M2 = cocopeat + perlite, M3 = cocopeat + rice husk charcoal, M4 = cocopeat + sand) which were repeated five times, the results of observations were analyzed for variance and further duncan test at a level of 5%. The results showed that the type of planting media had a significant effect on plant growth parameters, namely the percentage of germination power, plant height, root length, total fresh weight and plant weight loss. Treatment M1 (cocopeat + vermiculite) produced better growth than other treatments. The highest increase in vitamin C content was found at 7 DAS and decreased with increasing plant age. Treatment M2 (cocopeat + perlite) gave the highest vitamin C content (3.31%) and the lowest (0.86%) in treatment M3 (cocopeat + husk charcoal).

Keywords: red spinach, microgreen, growing media, vitamin C