

Moh. Suci Hermawan (11.03.1.1.1.00028). Pertumbuhan, Hasil dan Kandungan Pigmen Karotenoid Tanaman Bayam Merah (*Alternanthera amonea* Voss.) pada Berbagai Warna Sungkup Plastik dibimbing oleh Ir. Sinar Suryawati, MSi dan Ir. Suhartono MP

ABSTRAK

Penelitian ini dilakukan untuk mengetahui pertumbuhan, hasil dan kandungan pigmen karotenoid tanaman bayam merah (*Alternanthera amonea* Voss) pada berbagai warna sungkup plastik. Penelitian dilaksanakan pada Bulan Februari hingga Maret 2015, di lahan percobaan Jurusan Agroekoteknologi Fakultas Pertanian Universitas Trunojoyo Madura, Kecamatan Kamal, Kabupaten Bangkalan yang terletak 5 m dpl. Rancangan penelitian yang digunakan adalah Rancangan Acak Lengkap (Completely Randomized Design) dengan 4 ulangan. Perlakuan yang dicoba yaitu aplikasi warna sungkup plastik (bening, merah, biru, dan hijau) dan tanpa sungkup. Variabel yang diamati meliputi: intensitas cahaya, penerusan intensitas cahaya, tinggi tanaman, jumlah daun, luas daun, berat segar, berat kering, dan kandungan pigmen karotenoid daun tanaman bayam merah. Hasil penelitian menunjukkan perlakuan warna sungkup plastik berpengaruh terhadap semua variabel yang diamati. Sungkup bening menghasilkan pertumbuhan (tinggi tanaman, jumlah daun, luas daun) dan hasil (berat segar, berat kering) tanaman bayam merah terbaik sedangkan tanpa sungkup menghasilkan kandungan pigmen karotenoid terbaik pada daun tanaman bayam merah.

Kata kunci: warna sungkup plastik, intensitas cahaya, bayam merah, pigmen karotenoid

ABSTRACT

This research was conducted to determine the growth, yield and content of carotenoid pigments of red spinach plant (Alternanthera amonea Voss) in various color plastic cover. The experiment was conducted in February until March 2015, at the experimental land of Agroecotechnology Department, Faculty of Agriculture, Trunojoyo Madura University, District Kamal, Bangkalan located 5 m above sea level. The research design used was completely randomized design with 4 replications. Attempted treatment is the application of color plastic cover (colourless, red, blue, and green) and without cover. Variables observed included: light intensity, forwarding light intensity, plant height, number of leaves, leaf area, fresh weight, dry weight, and the content of carotenoid pigments plant red spinach leaves. The results showed color plastic cover treatment effect on all observed variables. The colourless plastic cover generates growth (plant height, number of leaves, leaf area) and yield (fresh weight, dry weight) are the best of plant red spinach, whereas the without plastic cover to produce the best content of carotenoid pigments in the leaves of spinach plants red.

Keywords: *color plastic cover, light intensity, red spinach, carotenoid pigments*