

INTISARI

Penelitian yang berjudul “Pengaruh Berbagai Takaran Air Kelapa terhadap Pertumbuhan dan Hasil Dua Kultivar Tomat (*Lycopersicum esculentum* Mill.)” bertujuan untuk memperoleh hasil interaksi yang terbaik antara takaran air kelapa dengan kultivar tomat dalam menunjang pertumbuhan dan hasil tomat, memperoleh takaran air kelapa yang optimum dalam menunjang pertumbuhan dan hasil tomat, dan mengetahui kultivar tomat yang adaptif terhadap pemberian air kelapa. Penelitian dilaksanakan pada bulan Desember 2018 – April 2019 di *Screenhouse* Balai Penyuluhan Pangan, Pertanian, dan Perikanan Wilayah V, Blembem Lor, Jl. Pakem-Turi km 1, Plembon, Harjobinangun, Pakem, Kabupaten Sleman, Daerah Istimewa Yogyakarta.

Metodologi penelitian yang digunakan adalah RAKL dua faktorial. Faktor yang pertama adalah takaran air kelapa dengan lima aras yakni 0, 10, 20, 30, dan 40 %. Air kelapa yang digunakan berasal dari kelapa muda hijau. Faktor yang kedua adalah dua jenis kultivar tomat yakni Servo yang merupakan tomat dataran rendah dengan tipe pertumbuhan *determinate* dan Ultima yang merupakan tomat dataran tinggi dengan tipe pertumbuhan *indeterminate*. Data pengamatan yang diperoleh diuji dengan analisis varians dan diuji lanjut dengan LSD dengan taraf nyata 5 %. Berdasarkan hasil penelitian didapatkan interaksi antara takaran air kelapa dan kultivar tomat terjadi pada jumlah akar 40 hspt serta klorofil a, b, dan total 20 hspt. Kecenderungan semakin meningkatnya takaran air kelapa hingga 40 % terhadap kultivar Servo adalah menurunkan, sebaliknya pada kultivar Ultima cenderung meningkatkan jumlah akar dan kandungan klorofil a, b, dan total; Takaran air kelapa hingga 40 % belum mampu meningkatkan bobot buah total per tanaman dibandingkan dengan kontrol; Kultivar Ultima meskipun memiliki jumlah buah yang nyata lebih rendah, akan tetapi memiliki rerata bobot buah yang nyata lebih tinggi dibandingkan kultivar Servo, sehingga hasil akhir bobot buah per tanaman menjadi sama.

Kata kunci: air kelapa, tomat, zat pengatur tumbuh

ABSTRACT

This research titled "The Effect of Different Dosage of Coconut Water on Two Tomato (*Lycopersicum esculentum* Mill.) Cultivars' Growth and Yield" aimed at obtaining the best interaction between coconut water dosage and tomato cultivars in bolstering up tomato's growth and yield, obtaining optimum dosage of coconut water in bolstering up tomato's growth and yield, and finding out tomato cultivar that is adaptive to coconut water. This research was done in December 2018 – April 2019 in Food, Agriculture, and Fisheries Counseling Hall Area V, Blembem Lor, Jl. Pakem-Turi 1st km, Plembon, Harjobinangun, Pakem, Sleman District, Special Region of Yogyakarta.

This research used a Randomized Complete Block Design (RCBD) with two factors. The first factor was the levels of coconut water. There were five levels of coconut water dosage, they were 0, 10, 20, 30, and 40 %. The coconut water which was used was obtained from young green coconut. The second factor was two tomato cultivars consisted "Servo" as a low-land tomato with a "determinate" growth type, and "Ultima" as a high-land tomato with an "indeterminate" growth type. The observation data then were analyzed with Variance Analysis and was continued with LSD with a 5% confidence level as a posthoc test. The results showed that there were some interactions between the coconut water dosage level and tomato cultivars. The interactions resulted in the number of roots on 40th days after transplanting; and the number of A, B chlorophylls, and total chlorophyll on 20th days after transplanting. The tendency of escalating coconut water dosage up to 40% on "Servo" was decreasing, while on "Ultima" tended to escalate the numbers of roots and A, B, and total chlorophyll content; Coconut water dosage up to 40 % could not rise the weight of total fruits per crop compared to control; Although "Ultima" had total fruits which were significantly lower than "Servo", yet it had an average of fruit weight greater than "Servo", so the result of fruit weight per crop was the same.

Keyword: coconut water, tomato, plant growth regulator
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