

RINGKASAN

Penelitian ini bertujuan untuk (1) mengetahui pengaruh media tanam terhadap pertumbuhan, hasil, dan mutu hasil tanaman tomat cherry, (2) mengetahui pengaruh dosis kompos terhadap pertumbuhan, hasil, dan mutu hasil tanaman tomat cherry, (3) mengetahui pengaruh interaksi media tanam dan dosis kompos terhadap pertumbuhan, hasil, dan mutu hasil tanaman tomat cherry dan, (4) memilih perlakuan yang paling baik atas dasar hasil pertumbuhan tanaman tomat cherry. Penelitian ini dilaksanakan pada bulan April sampai Juli 2020 di *Screen House* Pertanian Organik di Desa Melung, Kecamatan Baturaden, Kabupaten Banyumas. Penelitian ini merupakan percobaan dengan menggunakan Rancangan Acak Kelompok Lengkap (RAKL) faktorial dengan 2 faktor dan 3 ulangan. Faktor pertama adalah komposisi media tanam yaitu tanah : arang sekam : pasir (1:0:0), tanah : arang sekam : pasir (1:1:0) dan tanah : arang sekam : pasir (1:1:1). Faktor kedua adalah dosis kompos kotoran sapi yaitu 0 g/tanaman, 750 g/tanaman, 1.500 g/tanaman. Variabel yang diamati meliputi tinggi tanaman, jumlah daun, jumlah cabang, bobot akar segar, bobot akar kering, bobot buah pertanaman, diameter buah, indeks warna buah, kadar vitamin C, dan kandungan likopen. Hasil penelitian menunjukkan pemberian perlakuan komposisi media tanam tanah : arang sekam : pasir (1:1:0) memberikan pengaruh dalam meningkatkan variabel tinggi tanaman, jumlah daun, jumlah cabang dan indeks warna buah, pemberian perlakuan dosis kompos kotoran sapi sebesar 750g memberikan pengaruh dalam meningkatkan variabel bobot akar segar, bobot akar kering, bobot buah pertanaman dan diameter buah, tidak terdapat interaksi antara komposisi media tanam dan dosis kompos kotoran sapi untuk meningkatkan pertumbuhan, hasil dan mutu hasil tanaman tomat cherry, perlakuan komposisi media tanam M₁ (tanah : arang sekam : pasir (1:1:0)) menghasilkan komposisi terbaik terhadap variabel tinggi tanaman, jumlah daun, jumlah cabang, dan indeks warna buah. Perlakuan dosis kompos kotoran sapi 750 g menghasilkan dosis terbaik terhadap variabel bobot akar segar, bobot akar kering, bobot buah pertanaman, dan diameter buah.

Kata kunci: tomat cherry, komposisi media tanam, kompos kotoran sapi

SUMMARY

This purpose of this research is to: (1) know the effect of growing media composition on the growth, yield and quality of cherry tomato crops, (2) know the influence of compost dose on the growth, yield and quality of cherry tomato crops, (3) know the effect of growth media and compost dose interaction on the growth, yield and quality of cherry tomato crops and, (4) choose the best treatment on the basis of cherry tomato crops growth yield. The research was conducted from April to July 2020 at The Organic Farm Screen House in Melung Village, Baturaden sub-district, Banyumas regency. This study was an experiment using a complete randomized design of the complete group (RAKL) factorial with 2 factors and 3 replications. The first factor is the composition of growing media namely soil : charcoal chaff : sand (1:0:0), soil : charcoal chaff : sand (1:1:0) and soil : charcoal chaff : sand (1:1:1). The second factor is the dose of cattle manure compost which is 0 g / plant, 750 g / plant, 1,500 g / plant. Observed variables include plant height, number of leaves, number of branches, fresh root weight, dry root weight, crop weight, fruit diameter, fruit color, vitamin C content and lycopene content. The results showed the treatment of soil growth media composition : charcoal chaff : sand (1:1:0) exerts influence in increasing the high variable of plants, the number of leaves, the number of branches and the color index of the fruit, the treatment of a dose of cow dung compost by 750 g exerts an influence in increasing the variable weight of fresh roots, the weight of dried roots, the weight of the plant fruit and the diameter of the fruit, there is no interaction between the composition of the planting media and the dose of cattle manure compost to increase the growth, yield and quality of the cherry tomato plant, the treatment of the composition of the M₁ growing media (soil : charcoal chaff : sand (1:1:0)) produces the best composition of the plant's high variables, the number of leaves, the number of branches, and the color of the fruits. The treatment of 750 g doses of cattle manure compost produces the best dose against variable fresh root weights, dry root weights, crop weights, and fruit diameters.

Keywords: cherry tomatoes, growth media composition, cattle manure compost