

Ratina Dewi NRP 09.03.111.00002. Respon Pertumbuhan dan Hasil Tanaman Ubi Jalar Ungu Var. Ayamurasaki (*Ipomoea batatas*. L) Akibat Pengolahan Tanah dan Dosis Pupuk Kotoran Sapi, dibawah bimbingan Mustika Tripatmasari, SP. M.SI. dan Dr. Ir. Ahmad Arsyad Munir, MS.

ABSTRAK

Perlakuan pengolahan tanah yang dikombinasikan dengan macam dosis pupuk kotoran sapi diharapkan mampu meningkatkan pertumbuhan dan hasil tanaman ubi jalar var. *Ayamurasaki* (*Ipomoea batatas*. L). Penelitian ini bertujuan mengetahui respon pertumbuhan dan hasil tanaman ubi jalar ungu var. *Ayamurasaki* (*ipomoea batatas*. L) akibat pengolahan tanah dan dosis pupuk kotoran sapi. Penelitian ini dilaksanakan di kebun percobaan Fakultas Pertanian Universitas Trunojoyo Madura pada bulan Desember 2012 sampai Maret 2013. Rancangan penelitian yang digunakan adalah Rancangan Acak Kelompok dengan 3 kali ulangan yang disusun secara faktorial. Faktor I adalah macam olah tanah yang terdiri dari 3 taraf yaitu T1= tanpa olah tanah, T2= olah tanah 1x, T3= olah tanah 2x, dan faktor II adalah macam dosis pupuk kotoran sapi dengan 3 taraf yaitu D1= 10 ton/Ha, D2= 15 ton/Ha, D3= 20 ton/Ha. Hasil penelitian menunjukkan terjadi interaksi antara macam dosis pupuk kotoran sapi dan olah tanah pada parameter jumlah daun, luas daun, bobot basah tanaman dan bobot kering tanaman, akan tetapi perlakuan macam olah tanah berbeda nyata terhadap parameter luas daun, bobot total basah, dan berbeda sangat nyata terhadap bobot basah umbi, bobot kering umbi, jumlah umbi per tanaman, sedangkan perlakuan macam dosis pupuk kotoran sapi berbeda nyata terhadap panjang tanaman, bobot kering umbi, dan jumlah umbi per tanaman. Perlakuan olah tanah yang memberikan nilai rata-rata tertinggi adalah T3 dan perlakuan macam dosis pupuk kotoran sapi rata-rata tertinggi adalah D3, terhadap semua parameter pengamatan di semua umur pengamatan.

Kata kunci: *Ubi jalar, pengolahan tanah, dosis pupuk kotoran sapi.*

The Growth and Crop Responses of Purple Sweet Potato, Ayamurasaki Variety (*Ipomoea Batatas*. L) Due to The Land Processing and Distribution of Cow Manure Dose, Advisors: Mustika Tripatmasari, SP., M.SI. and Dr. Ir. Ahmad Arsyad Munir, MS.

ABSTRACT

The soil processing treatment which was combined with kinds of cow manure dose is expected to be able to increasing the growth and crop of purple sweet potato Ayamurasaki (*Ipomoea batatas*. L) variety. This study is aimed to understand the growth and crop responses of purple sweet potato, Ayamurasaki variety (*Ipomoea Batatas*. L) due to the soil processing and distribution of cow manure dose. The study is conducted in a trial garden of Agricultural Faculty of University of Trunojoyo Madura since December 2012 until March 2013. The study plan that is used in this study is a Group Random Plan with three times of repetition which arranged by factorial. Factor I is kinds of soil processing which are composed of 3 levels that are T1= without soil processing, T2= one time soil processing, T3= two time soil processing, and factor II is kinds of cow manure dose with 3 levels that are D1= 10ton/Ha, D2= 15ton/Ha, D3= 20ton/Ha. The result of the study shows that there was an interaction between the kinds of cow manure dose and soil processing to the parameter of leave's wide and quantity, crop wet weight, and crop dry weight, however, the treatment of kinds of soil processing was really different toward the parameter of leave's wide, the total of wet weight, and very extremely different to the tuber wet weight, tuber dry weight, and a quantity of tuber in each crop, whereas the treatment of kinds of cow manure dose was really different toward the length of crop, tuber dry weight, and the quantity of tuber in each crop. The treatment of soil processing which gives the highest average value is T3 and the treatment of kinds of cow manure dose gives the highest average in D3 toward all of the monitoring parameter in all of monitoring age.

Keywords: *Sweet Potato, Land Processing, Cow Manure Dose.*

