THE 2ND INTERNATIONAL CONFERENCE ON
ORGANIC AGRICULTURE IN THE TROPICS

ORGATROP

Book of Abstract

"Organic Agriculture as a sustainable agro-system to support agriculture production and food safety under the threat of climate change"

Online Conference
Faculty of Agriculture Universitas Gadjah Mada
October 28th & 29th, 2021

Organized by

UNIVERSITAS GADJAH MADA
FACULTY OF AGRICULTURE

Supported by

ISOFAR

Friday, 29th October 2021 **Parallel Session 4 (15.00 – 16.30)**

Production, and food safety – Breakout Room 1

Moderator: Dr. Ir. Sri Nuryani H.U, M.Sc.

No.	Code	Name	Title	Time
1	SAF-P 028	Sulakhudin	Effect of Combination of Inorganic Fertilizer and Biochar-Coastal Sediment on Nutrient Availability and Growth of Corn Plants in Alluvial Soil	14.30 – 14.45
2	SAF-P 007	Riwandi Riwandi	Improvement Quality of Vermicompost Using Earthworms (Perionyx Excavates) In Four Types of Animal Manure	14.45 – 15.00
3	SAF-P 024	Suria Darma	The Effect of Gamal Leaves (Gliricidia Sepium) And Banana Stem Bokashi On the Growth and Yield of Cherry Tomato (Lycopersicum Cerasiforme Mill.)	15.00 – 15.15
4	SAF-P 009	Siti Mariyam	Improving Coffee Quality Through Yeast Addition in The Fermentation Process to Support Sustainable Coffee Production	15.15 – 15.30
5	SAF-P 033	Erwin Prastowo	The Potential and Challenges of Organic Coffee Development	15.30 – 15.45
6	SAF-P 017	Adipati Napoleon	Application of Vermicompost With Shell Oil Palm as on Chemical Character of Ultisol To Growth and Production of Red Spinach (Amaranthus Tricolor L.)	15.45 – 16.00
Discussion (Q & A)				16.00 – 16.30

SAF-P 024

THE EFFECT OF GAMAL LEAVES (*Gliricidia sepium*) AND BANANA STEM BOKASHI ON THE GROWTH AND YIELD OF CHERRY TOMATO (*Lycopersicum cerasiforme* Mill.)

S. Darma[1*], O.F. Kurniadinata[1], A. Ayuri[1]

[1]Fakultas Pertanian, Universitas Mulawarman, Jl. Pasir Balengkong, Kampus Gunung Kelua, Samarinda 75123, Kalimantan Timur, Indonesia, suriadarmaidris@gmail.com

The effect of gamal leaves (*Gliricidia sepium*) and banana stem bokashi on the growth and yield of cherry tomato (*Lycopersicum cerasiforme* mill.). The demand for cherry tomatoes is increasing along with the growth of the small and medium enterprises culinary, but their production is still limited. Efforts to increase production are carried out by applying organic fertilizers. Gamal leaves (*Gliricidia sepium*) and potential banana stems as materials for organic fertilizer. Bokashi is a compost produced from the fermentation process of organic matter with EM4 products. The aim of the study was to determine the effect of bokashi dose of gamal leaves, banana stems and a combination of both on the growth and yield of cherry tomato plants. Experiments in polybags were arranged in a non-factorial randomized block design with 10 treatments with five replications. Treatment doses of bokashi gamal leaves, banana stem bokashi and combination treatment of bokashi leaf and banana stem were 0 (control), 300, 600, and 900 g/polybag, respectively. The analysis used variance with the F test and continued with the Least Significant Difference Test (BNT) with a level of 5%. The results showed that all treatments of gamal leaf bokashi, banana stem bokashi and their combination showed significant and significantly different effects on all growth parameters and yields of cherry tomatoes. The number of flowers planted, the number of fruit planted, the weight of the fruit, the dry weight of the fruit, and the total length of the roots were obtained in treatment k9 (900 g/polybag bokashi gamal leaves and banana stem bokashi).

Keywords: *cherry tomatoes, organic fertilizer, bokashi leaf gamal, banana stem bokashi*