

ABSTRACT

RESPONSE OF SWEET CORN (*Zea mays saccharata*) AS APPLIED BY THE COMBINATION OF INORGANIC AND SOLID BIOSLURRY FERTILIZER

By

Muhammad Yudi Pratama

Demand for sweet corn (*Zea mays saccharata*) are increasingly causing difficulties to meet market needs. Increasingly rare and high prices of inorganic fertilizers today, poses its own problems for farmers. The use of organic materials such as fertilizers bioslurry is one way to solve the above problem. This study aims to (1) determine the best dose combination between inorganic fertilizers and bioslurry to the production of sweet corn; (2) study the response of the combination of inorganic fertilizers and bioslurry to the sweet corn crop production. This study was conducted at Jl. Cut Nyak Dien, Gang Sukajadi, Palapa, Bandar Lampung, from December 2014 through February 2015. The experimental design used was a randomized block design with seven treatments. If the result of F test is significant at the level of 5%, then conducted a further test of orthogonal contrasts comparison. The results showed that (1) combination of the best fertilizer for corn production yield/plot is full dose of inorganic fertilizer with 1,000 kg ha⁻¹ bioslurry, which has value not much different with 3/4 dose of inorganic fertilizer with 2.000 kg ha⁻¹ bioslurry; (2) the response between

Muhammad Yudi Pratama

combination of full-dose of inorganic fertilizer with 1,000 kg ha⁻¹ bioslurry has value that is not much different from 1/2 dose of inorganic fertilizer with 2.000 kg ha⁻¹ bioslurry for the value of production of sweet corn.

Keywords: bioslurry, sweet corn, combination, fertilizer.