ABSTRACT

EFFECT OF FERTILIZATION ORGANIC SLUDGE TAPIOKA WASTE AND DOSAGES OF NPK TO GROWTH AND PRODUCTION OF PAKCHOY *(BRASSICA CHINENSIS* L*)*

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Lampung Province has tapioca industry which produce many waste like hard waste. This waste usually just stacked on the disposal basin and has not managed optimally. One attempt to manage agricultural waste is used as fertilizer. This purpose of the research (1) Determine the influence of sewage sludge organic fertilizer on the growth tapioca plant height and number of leaves also pakchoyproduction. (2) Determine the influence of the dose of NPK on the growth tapioca plant height and number of leaves also pakchoy production. (3) Knowing the interactions between organic fertilizer sewage sludge tapioca and size of the dose of NPK on the growth tapioca plant height and number of leaves also pakchoy production. The hypothesis proposed that (1) Disposal of Organic sludge tapioca waste fertilizer influence the growth of plant height and number of leaves and pakchoyproduction. (2) Disposal dose of NPK fertilizer influence the growth of plant height and number of leaves and pakchoy production. (3) There is interaction between Organic sludge tapioca waste

fertilizer and dose of NPK fertilizer to growth of plant height and number of leaves and pakchoy production.

This research was conducted from May to July 2014 and conducted in Lampung experimental garden. Treatment arranged with randomized block design (RBD) with 10 (ten) treatment and three (3) replicates. The treatment consisted of A (control), B (without waste + 50g NPK), C (without waste + 100g NPK), D (without waste + 150g NPK), E (without waste + 200g NPK), F (5kg tapioca waste sludge 0g + NPK), G (5kg sewage sludge 50g tapioca + NPK), H (sewage sludge 5kg 100g tapioca + NPK), I (sewage sludge 5kg 150g tapioca + NPK), J (sewage sludge 5kg 200g tapioca + NPK). Data were analyzed with the Bartlett test for homogeneity Tukey test to added data. Then analyzed by analysis of variance at 5% level and to test the value of the test is being conducted Honestly Significant Difference (HSD).

The results of research showed (1) Provision of sewage sludge tapioca 5 kg / m2 significant effect on all the variables of observation, such as plant height, number of leaves, fresh weight and dry weight. (2) Provision of NPK dose of 100g / m2 gives greater influence on plant height, number of leaves, fresh weight and dry weight of plants pakchoy. (3) There is interaction are giving tapioca waste sludge 5 kg / m2 and NPK dose of 100 g / m2 on variable fresh weight of pakchoyplants.

Keywords: Pakcoy (Brassica chinensis L.), Sludge Tapioca Waste, NPK fertilizer.