TEST THE POTENTIAL OF ECO-ENZYME AGAINST PAKCOY PLANT GROWTH (Brassica rapa L.*) BY USING HYDROPONIC TECHNIQUES*

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Most of the land in Indonesia is used for the production process of the agricultural sector. Meanwhile, the narrow land makes it difficult for farmers to produce vegetable crops. The use of non-soil media that is suitable for use is hydroponics. Vegetable cultivation, which is currently needed by the community with a hydroponic system, one of which is pakcoy (Brassica rapa L.), to produce maximum growth, additional organic liquid fertilizers are needed, one of which is Eco-Enzyme. Eco-enzyme is a solution of complex organic substances produced from the fermentation process of organic waste, sugar and water which has benefits, one of which is as plant fertilizer.This study aims to determine the differences produced by Eco-Enzyme on the growth of pakcoy (Brassica rapa L.) using hydroponic techniques. The method used is Completely Randomized Design (CRD) with 2 treatments and 4 repetitions. The first treatment was pakcoy plants that were not given Eco-Enzyme and the second was pakcoy plants that were given Eco-Enzyme. Parameters observed were the number of leaves, leaf width and weight of pakcoy plants. The data obtained were analyzed by looking for the average results, then testing the hypothesis using the Independent sample t-test. The results showed that the average pakcoy plant that did not use eco-enzyme produced 12 leaves, 9-10cm wide leaves and 176 grams of plant weight. Meanwhile, pakcoy plants that used eco-enzyme produced 14 total leaves, 11cm wide leaves, and 224-233gr plant weight. From the results of instrument testing and hypothesis testing, it showed that Eco-enzyme gave the best results on the growth of pakcoy plants. Overall, the treatment had a significant effect on the observed parameters.

***Keywords** : Eco-Enzyme, pakcoy (Brassica rapa L.), hydroponic*