

ABSTRACT

Anggia Wulandari. 2022. Eco-Enzyme Potential Test on the Growth of Green Lettuce Vegetables (*Lactuca sativa* L) Using Hydroponic Techniques. Prof. Dr. Toto Sutarto G.U. M.Pd and Dr. Hj. Mia Nurkanti, M.Kes

*Garbage is a problem that is still faced in almost all countries in the world. Organic waste can be made into a product that has other benefits. This organic waste by turning it into a liquid eco-enzyme where one of its uses in agriculture is to help accelerate the growth of vegetable crops. The liquid extract eco-enzyme obtained comes from the fermentation of vegetable and fruit residues with the help of brown sugar or molasses as a substrate. In Indonesia, green lettuce (*Lactuca sativa* L.) has become one of the most popular vegetables or loved by the public. Hydroponic planting technique is a planting technique which in its agricultural activities replaces the soil medium by using water that has been drained. The purpose of this study was to determine the potential of giving eco-enzyme and to compare the differences in the results of the eco-enzyme potency test on the growth of green lettuce (*Lactuca sativa* L). The method used is Completely Randomized Design (CRD) with 2 treatments and 4 repetitions. The first treatment was green lettuce with the provision of eco-enzyme and without eco-enzyme. Parameters observed were the number of leaves, leaf width, and weight of green lettuce. The data obtained were then analyzed using anova. The results showed that the administration of eco-enzyme resulted in the highest value of 21, the number of leaves, the width of the leaf 11 cm and the largest weight of 130 grams, while non eco-enzyme 11 pieces of the number of leaves, 8 cm of leaf width, and plant weight of 70 grams. Test the instrument and test the hypothesis that eco-enzyme gives the best results on the growth of green lettuce plants as a whole and has a significant effect.*

Keywords: *eco-enzyme; hydroponic; green lettuce; organic waste*