## *ABSTRACT*

***Hani Aprilia. 2022. Eco-Enzyme Potential Test on Romaine Lettuce (Lactuca sativa var Longivolia) Growth Using Hydroponic Techniques. Supervised by Mr. Prof. Dr. H. Toto Sutarto G. U, M.Pd., and Mrs. Dr. H. Mia Nurkanti, M.Kes.***

*Lettuce is one of the horticultural crops that have good prospects and commercial value. Lettuce can be grown in the lowlands and highlands. To produce maximum growth requires the addition of organic liquid fertilizer. Eco-enzymes are liquids produced by fermenting organic waste. Eco-enzymes have a function as natural fertilizers and Eco-enzymes are useful as plant fertilizers. So this study intends to determine the differences produced by Eco-enzymes on the growth of romaine lettuce using hydroponic techniques. This study used a completely randomized design (CRD) with 2 treatments with 4 repetitions. The first treatment was romaine lettuce that did not use Eco-enzymes and the second treatment was romaine lettuce that used Eco-enzymes. Parameters observed were leaf width, number of leaves and plant weight of romaine lettuce. The results showed that the average romaine lettuce that did not use Eco-enzymes produced a leaf width of 6-9 cm, a leaf number of 11-12 leaves, and a plant weight of 55-70 grams. Meanwhile, romaine lettuce plants that used Eco-enzymes produced leaf widths of 11-12 cm, number of leaves 17-21 leaves and plant weight of 90-108 grams. The results of the Anova (Analisis Varians) test showed that the Eco-enzyme gave the best growth results and had a significant effect on romaine lettuce on the observed parameters.*



**Keywords :** ***Eco-enzyme,Romaine lettuce (Lactuca sativa* var *longivolia)***