## **ABSTRACT**

Rizki Dwimas Firdaus. 2020. The Use of Enzact 01 Enzymes for Growth of Tilapia (Oreochromis niloticus) in Achieving Independent Food Security. Supervised by Dr. H. Mia Nurkanti, M.Kes., and Fitri Aryanti, S.T., M.Pd.

The development of intensive tilapia aquaculture in Indonesia has not been very encouraging because of several factors, including low production efficiency, low fish prices in the market, and difficulty in procuring quality seeds and broodstock. To reduce the relatively high cost of tilapia feed and increase production yields, a study entitled "Use of Enzact 01 Enzymes for the Growth of Tilapia (Oreochromis niloticus) in Creating Independent Food Security" will be conducted. The method used in this research is a quasi experimental design method. The research design used in this study using Enzact 01 enzymes was using the Independent Sample T-Test. Independent Sample T-Test is part of the parametric inferential statistics (difference test or comparison test). This research was conducted in the Cikapundung river, Bandung Wetan District, Bandung City, West Java. This study aims to identify the response of the enzyme content to tilapia and differentiate between tilapia using enzyme 01 in their feed and to assess the growth of tilapia through two treatments, namely fish using enzyme enzymes in their feed and fish that do not use enzyme enzymes in their feed and through parameters. tilapia fish weight and length. From the results of the paired sample t-test regarding the weight of tilapia, which has a significant value of 0.084 (treatment> 0.05), and the length of tilapia has a significant value of 0.069 (treatment> 0.05), it can be concluded that there is no difference. The real difference between the weight and length of tilapia contained in the treatment cages did not use enzact enzymes with the length yields of tilapia found in treated cages using enzact enzymes.

Key words: Enzact 01 enzyme, Tilapia (Oreochromis niloticus), Independent Food Security.