

ABSTRACT

MAPPING THE ACTIVITY OF CHITINASE ENZYMES AND DEACETYLASE CHITIN OF ISOLATING *Actinomyces* ANL-4 IN CHITIN DEGRADATION DURING INCUBATION TIME FOR 24 HOURS

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The activity of enzyme is the size or amount of products resulting from the process of a substrate degrading. The activity of chitinase enzymes and deacetylase chitin can be expressed as the number of glucosamine produced from the breakdown of chitin during the time of fermentation. The study is done to see the activity of chitinase enzymes and deacetylase chitin of *Actinomyces* ANL-4 in degrading substrate chitin to be a glucosamine based on the number obtained the time within 1 hour to 4 hours of the time of fermentation. Condend of glucosamine fermentation determined based on the method of UV-Vis spectrophotometry. The research results show weight glucosamine which was highes obtained at the time of incubation 3 hours of 69,5 % with purity of 99,712 %.

Keywords : *Actinomyces* ANL-4, Activity of an enzyme, Chitin, Glucosamin, UV-Vis Spectrophotometry