

## ABSTRACT

MUHAMMAD BAHRUDDIN SEPTIANTO. Inhibition Activity test from Methanol Extract, Ethyl Acetate Fraction, and *n*-Hexane Fraction of *Muntingia calabura* L. Leaves and Stem Bark Regional Origin Sukabumi, West Java. Skripsi. Jakarta: Program Studi Kimia, Faculty of Mathematics and Science, State University of Jakarta, 2016.

This study was conducted to obtain extract, fraction and enzyme inhibition test from *Muntingia calabura* L. leaves and stem bark. Methanol extract, *n*-hexane fraction and ethyl acetate fraction of *Muntingia calabura* L. leaves and stem bark's  $\alpha$ -glukosidase enzyme inhibition activity is tested *in vitro* using *p*-nitrophenyl- $\alpha$ -glukopyranose substrate.  $\alpha$ -glukosidase enzyme inhibition activity's result shows that methanol extract and ethyl acetate fraction can inhibit the  $\alpha$ -glukosidase enzyme's activity.  $IC_{50}$  value of methanol extract and ethyl acetate fraction from leaves is 14,72 ppm and 3,24 ppm.  $IC_{50}$  value of methanol extract and ethyl acetate fraction from stem bark is 5,65 ppm and 2,77 ppm, while *n*-hexane fraction doesn't have any inhibition activity..

keyword: *Muntingia calabura* L.,  $\alpha$ -glukosidase enzyme inhibition activity, *in vitro*