

**PURIFICATION OF HIGH-GRADE PAPAIN FROM LATEX OF CARICA
PAPAYA**

By

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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, not material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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Date

ABSTRACT

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Dr. Maruli Pandjaitan, Thesis Advisor

Ir. Tutun Nugraha MASc. PhD. as Thesis Co-advisor

High quality papain, especially high in enzyme activity is always in great demand by many industries such as pharmaceutical, food and beverage industries worldwide. However, some of the extraction processes damage the activity. In order to keep the enzyme activity, some processes that related to heat should be avoided. High temperature will damage the enzyme and causes it to denaturize. Hence, freeze dry was applied in the final drying process following the extraction stage. The process applied has yielded good results. At the end of the process, the specific activity of the enzyme was 148 u/mg protein. By avoiding heat process and some other processes that can cause the enzyme to denaturize, the experiment has produced high enzyme activity of papain.

DEDICATION

I dedicate this thesis to my family for all patience, understanding, support and their love they gave along the thesis progress.



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