POTENTIAL OF [illegible] PEEL EXTRACT AS A BIOFUNGICIDE AGAINST POST-HARVEST PATHOGEN OF SALAK MADU

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FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE
UNIVERSITI MALAYSIA TERENGGANU

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Potential of unripe papaya peel extract as a biofungicide against post-harvest pathogen of salak madu / Jean Ivy Denis.

Lihat sebelah

POTENTIAL OF UNRIPE PAPAYA PEEL EXTRACT AS A BIOFUNGICIDE AGAINST POST-HARVEST PATHOGEN OF SALAK MADU

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This project report is submitted in partial fulfillment of the requirement of the degree of Bachelor of Science in Agrotechnology (Post Harvest Agrotechnology)

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2008

This project report should be cited as:

Jean Ivy, D. 2008. Potential Of Unripe Papaya Peel Extract As A Biofungicide Against Post-Harvest Pathogen Of Salak Madu. Undergraduate thesis, Bachelor of Agriculture (Post Harvest Technology), Faculty of Agrotechnology and Food Science, University Malaysia Terengganu, Terengganu. 63p.

ACKNOWLEDGEMENTS

First and foremost, praise to the Lord for giving me the courage to start this research and strength together with great passion throughout the accomplishment of this research project.

I wish to acknowledge assistance, guidance, suggestion, advice and encouragement of my supervisor, Dr. Chuah Tse Seng, who always leads, supervises and educates me with great passion even in the darkest hour of this research project so that this research project will be completed.

My sincere appreciation to my industrial training supervisor, Pn. Hamidah who is responsible to introduce me to the world of plant pathology which have brought me to the accomplishment of this wonderful research project and Pn. Junaidah who never fail to give me the most valuable guidance and advice in understanding the laboratory technique especially in pathology laboratory. Their assistance have been a great help to me.

Sincere thanks to En. Kamarul, Pn. Rafidah, Pn. Maizatul, En. Khairy, En. Fauzi and Kak Kiah for their cooperation and facilities in conducting this research project.

Enormous thanks to Sudau and Patricia for giving their moral support and their invaluable time helping me to brave the hardship of accomplishing this research project.

Last but not least, it is with a sense of pride and pleasure I record my profound appreciation to my inspiring father, Denis Gompion, my encouraging mother, Sabrina Ekeh, my lovable siblings, Jane Evytha and Todd Denis for their affectionate encouragement and loving care that allow me devote my time in making this research project a realization.

ABSTRACT

This study was conducted to isolate *Fusarium oxysporum* from salak madu (*Salacca sumatrana* Becc.) and determine the suitable unripe papaya peel extract concentration on inhibition of *F. oxysporum* under laboratory conditions. It is found that unripe papaya extracts exhibited fungicidal effect against *F.oxysporum* at 0.08 gml^{-1} in the *in vitro* study. In the *in vivo* study, application of unripe papaya peel extracts at 0.24 gml^{-1} had antifungal activity against *F.oxysporum* curatively and protectively on salak fruits based on quality attributes such as, disease severity, disease incidence, and flesh firmness as compared to untreated fruits. However, protective and curative treatments had no influence on pH, total soluble solid, chroma and hue angle on fruits. This result suggests unripe papaya peel extracts has a potential to be used as a biofungicide against *Fusarium oxysporum* of salak fruit.