

EFFECTS OF TARTARIC ACID ON BROWNING AND FIRMINESS
OF LEAF FRUITS AND SHREDDED CABBAGES
WITH DIFFERENT IMMERSION PERIOD

NORAINI BT MOHAMAD DAUD

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INSTITUTE OF AGRICULTURE, BIOTECHNOLOGY AND FOOD SCIENCE
UNIVERSITI MALAYSIA TERENGGANU

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Mohamad Daud.

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UNIVERSITI MALAYSIA TERENGGANU (UMT)
21000 KUALA TERENGGANU

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SPROUTS AND SHREDDED CABBAGES WITH DIFFERENT IMMERSION
PERIOD

By

Noraini bt Mohamad Daud

Research Report submitted in partial fulfillment of
the requirements for the degree of
Bachelor of Science Agrotechnology (Post Harvest Technology)

DEPARTMENT OF AGROTECHNOLOGY
FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE
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ENDORSEMENT

The project report **effects of tartaric acid on browning and firmness of bean sprouts and shredded cabbages** by **Noraini bt Mohamad Daud**, Matric No **UK15828** has been reviewed and corrections have been made according to the recommendations by examiners. This report is submitted to the Department of Agrotechnology in partial fulfillment of the requirement of the degree of Bachelor of Science Agrotechnology (Post Harvest Technology), Faculty of Agrotechnology and Food Science, Universiti Malaysia Terengganu.



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(DR CHUAH TSE SENG)

Main supervisor

Date: 29 APRIL 2010

DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged.

Signature : 

Name : NORAINI BT MOHAMAD PAUD

Matric No : 415828

Date : 29 APRIL 2010

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ABSTRACT

A study to investigate the effectiveness of anti browning agent of tartaric acid in inhibiting enzymatic browning and loss in firmness of bean sprouts and shredded cabbages was conducted under laboratory conditions. Tartaric acid, a member of phenolics acids group which belongs to carboxylic acid group was subjected to bean sprouts and shredded cabbages under ambient temperature (28°C) with different of immersion periods of two, four, six and eight hours and stored for 72 hours. The results of this study have shown that 0.0035% of tartaric acid can inhibit firmness loss in of bean sprouts and shredded cabbages when being immersed for two hours in tartaric acid solutions. Similarly, this combination exhibited significant effect on preventing bean sprouts and shredded cabbage from the occurrence of enzymatic browning.

ABSTRAK

Satu kajian untuk mengetahui ataupun mengenali keberkesanan ejen anti pemerangan asid tartarik dalam menghalang pemerangan berenzim serta juga kehilangan sifat kesegahan taueh dan hirisan kobis telah dijalankan di makmal. Asid tartarik merupakan kumpulan asid fenolik yang juga kumpulan asid karboksilik, iaitu merujuk kepada taueh dan hirisan kobis yang di bawah suhu bilik (28C) dengan perbezaan waktu rendaman iaitu dua, empat, enam dan lapan jam selama 72 jam. Hasil daripada kajian ini telah menunjukkan 0.0035% asid tartaric mampu menghalang taueh dan hirisan kobis daripada kehilangan sifat kesegahannya apabila direndam selama dua jam di dalam larutan asid tartarik. Tambahan pula, kombinasi ini memberikan kesan yang penting dalam menghalang taueh dan sayur kobis yang di potong halus daripada pemerangan berenzim.