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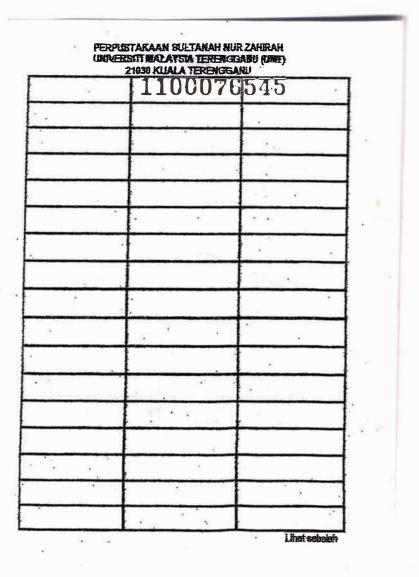
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Effects of calcium dips, chitosan coating and their combinations on post harvest quality of sapodilla (Manilkara zapota L.) / Mariah Moidin.



HAK MILIK PERPUSTAKAAN SULTANAH NUR ZAHIRAH UMT

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## EFFECT OF CALCIUM DIPS, CHITOSAN COATING AND THEIR COMBINATIONS ON POST HARVEST QUALITY OF SAPODILLA (Manilkara zapota L.)

By Mariah Binti Moidin

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

Department of Agrotechnology FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE UNIVERSITI MALAYSIA TERENGGANU 2009

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### DECLARATION

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

Signature : .. Name : Mariah Binti Moidin Matric No : UK 14011 : 27 April 2009 Date

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God bless us. Thanks~

#### ABSTRACT

The effect different concentrations of calcium dip, chitosan coating and their combination were tested in sapodillas fruits stored at two different temperatures. Both calcium dips and chitosan coating have ability in minimizing the disease incidence and disease severity in sapodillas at 28°C and 15°C. Meanwhile, at 15°C, sapodillas treated with chitosan 1.5% gave greater firmness compared with other treatments. In contrast, a combination of calcium and chitosan coating did not have ability in maintaining firmness and reducing disease infection at both storage temperatures. The results of this study suggests that chitosan 1.5% has potential to maintain firmness and reduce post-harvest disease of sapodillas when stored at 28°C and 15°C.