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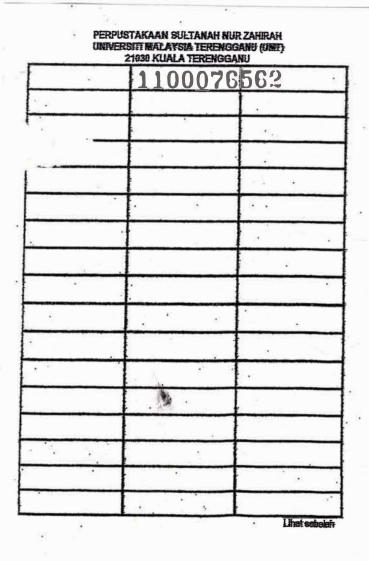




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Effect of mixed loading of pineapple and mango during storage at ambient temperature / Azlina Anuar.

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HAK MILIX PERPUSTAKAAN SULTANAH NUR ZAHIRAH UMT

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THE EFFECTS OF MIXED LOADING OF PINEAPPLE AND MANGO DURING STORAGE AT AMBIENT TEMPERATURE

By AZLINA BINTI ANUAR

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

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



FAKULTI AGROTEKNOLOGI DAN SAINS MAKANAN UNIVERSITI MALAYSIA TERENGGANU

PENGAKUAN DAN PENGESAHAN LAPORAN PROJEK ILMIAH I DAN II

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DECLARATION

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

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ABSTRACT

Studies on the storage of pineapple with mango were conducted. Pineapple is non climacteric but sensitive to presence of ethylene which can induce it's ripening. Common assumption when pineapple are mixed load with ethylene producer, i.e. mango it will cause adverse effect on pineapple. The aim of this study is to see the effects of ethylene produced by mango on pineapple during storage at ambient temperature. In this study, 1.4 kg of pineapple are packed together with mango in 1.4:0, 1.4:1.0, 1.4:2.0, and 1.4:4.0 ratio by weight. Evaluation of ripening of pineapple based on total soluble solids, ascorbic acid, total titratable acidity and pH were conducted every 2 days for up to ten days. For total soluble solids and pH, treatment 1 that is storing pineapple and mango with ratio 1.4:1.0 appears to give minimal effect on ripening of pineapple whereas treatment 2, ratio 1.4:2.0 and 3, ratio 1.4:4.0 are about the same. This is due to 2 kg of mango is sufficient to produce the concentration of ethylene to its saturation point. For ascorbic acid and total titratable acidity, treatment 1 also appears to give minimal effect on ripening of pineapple. Meanwhile, treatment 2 and 3 give higher impact on ripening of pineapple. In conclusion, the best ratio by weight if mixed load is unavoidable is 1.4 kg of pineapple to 1 kg of mango for ten days of storage where the ripening effect of pineapple based on the parameter that has been determined is minimal.