

EFFECT OF POTASSIUM PERMANGANATE AND SILICA GEL ON  
THE SHELF LIFE OF BANANA (*Musa paradisiaca*)  
AT ROOM TEMPERATURE

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SHELF LIFE OF BANANA (*Musa paradisiaca*) AT ROOM TEMPERATURE

By

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FAKULTI AGROTEKNOLOGI DAN SAINS MAKANAN  
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PENGAKUAN DAN PENGESAHAN LAPORAN  
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Adalah ini diakui dan disahkan bahawa laporan ilmiah bertajuk:

EFFECTS OF POTASSIUM PERMANGANATE AND SILICA GEL  
ON THE SHELF LIFE OF BANANA (Musa Paradisiaca) at  
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oleh.. NOOR SHAZAU YANA BT.M. ROSLI, No.Matrik ..UK 12917.... telah diperiksa  
dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan  
AGROTEKNOLOGI sebagai memenuhi sebahagian daripada keperluan  
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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

A study was carried out to determine the effect of  $\text{KMnO}_4$  act as ethylene absorber and silica gel act as moisture absorber on the shelf life of banana (*Musa paradisiaca*) at room temperature. Hand of banana were packaged in the plastic bag with the combination of scrubbing formulation were specified as follow; T0: untreated banana, T1: hand of banana with moisture absorbent, T2: hand of banana with  $\text{KMnO}_4$  and T3: hand of banana with  $\text{KMnO}_4$  and moisture absorbent. All the samples were kept at room temperature. After 3 days, all the samples were taken out for determination of colour peel, total soluble solid (Brix° value), firmness of the banana pulp and weight loss. After 9 days, the result of this experiment have shown that the fruits which with  $\text{KMnO}_4$  without silica gel gave significant different compared with other treatment in reducing the weight loss (significant different =0.000). Treatment with  $\text{KMnO}_4$  (T2) also gave significant different in maintaining the colour changes and sugar content of banana. It was conclude that  $\text{KMnO}_4$  without moisture absorbent (T2) delayed the ripening of banana for at least 9 days.