

THE EFFECTS OF MIXED LOADING OF BANANA WITH
MANGO DURING POST HARVEST STORAGE
UNDER AMBIENT TEMPERATURE

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**THE EFFECTS OF MIXED LOADING OF BANANA WITH MANGO DURING
POST HARVEST STORAGE UNDER AMBIENT TEMPERATURE**

**By
Noor Anizah binti Maarof**

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

**Department of Agrotechnology
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UNIVERSITI MALAYSIA TERENGGANU
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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.

Signature :.....

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ABSTRACT

Banana which is a climacteric fruit has unique characteristics. Unripe bananas showed a constant low level of ethylene production. Therefore, bananas need to be treated to trigger their ethylene production as an example via treatment of mixed loading with mango. The aim of this study is to see the effects of ethylene produced by mango on banana fruit during storage under ambient temperature. In this study, 1 kg of banana were packed together with mango in 1:0, 1:1, 1:2, and 1:3 ratio by weight. Evaluation of ripening of banana based on the surface color change, loss of firmness and the total soluble solid (TSS) contained in banana were taken daily for seven days. For surface color change, treatment of banana: mango (1:3) gave the higher impact on degreening of chlorophyll in banana during second days of storage because it showed a positive a^* value compared to the other treatments and control. On the other hand, for loss of firmness treatment of banana: mango (1:2) and treatment of banana: mango (1:3) had the low firmness value day to day through the time of storage. For the last parameter which is total soluble solid contained treatment of banana: mango (1:3) had the higher brix value compared to the other treatments on the second day of storage because starch started to convert into sugar. These indicate that treatment of banana: mango (1:3) had faster ripening rate compared to the others. In the conclusion, treatment of banana: mango with (1:3) ratio by weight is the best ratio to fasten the ripening process for banana fruit which is until two days earlier if compared with control and 1 day earlier compared to the other treatments.