

Title A study of the types of ethylene absorber use on banana Barangan (*Musa paradisiaca* L)

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Abstract

Banana barangan (*Musa paradisiaca* L) is a perishable commodity and must be stored at low temperature (14°C) before sold or eaten. Ethylene is a growth hormone produced from the result of normal metabolism in plants. Production of ethylene and its activity strongly influenced by the temperature of refrigeration and cold storage temperature settings will hinder the fruit maturity. Ethylene absorber may inhibit fruit maturity so as to extend the shelflife of fruit. Difference type of ethylene absorber (Activated charcoal, Potassium permanganate (KMnO₄), and Salicylic acid) that use on banana barangan during cold storage assumed will be influence chemical content of fruit. This research aims to observe the effect of different type and concentration of ethylene absorber in inhibiting of banana's barangan (*Musa paradisiaca* L) maturation so can be stored for longer. Analysis performed included: The water content, total acid, and starch content. The results obtained are bananas with treatment of ethylene absorber ripe after 2 weeks of storage, while the banana without treatment (control) ripe after I week storage. Bananas are treated with ethylene absorber tends to decrease in moisture content, total acid and starch content after 14 days of storage. Based on observations, the best results were obtained on a banana with salicylic acid 3% as ethylene absorber at 14 days storage with water content of 67.07%, 0.008% total acid, starch content, and 19.30 mg/100g materials.