

Title            Effect of 1-MCP on physiological changes in mango 'Nam Dokmai'  
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#### **Abstract**

Mangoes (*Mangifera indica* L.) are tropical fruit that have highly potential in Thai economic because of a number of exporting fruit each year. Mangoes are classified as climacteric fruit that respond to ethylene and cause ripening and deterioration on quality and storage life of the mangoes. A study of the effect of 1-MCP, an ethylene action inhibitor was investigated. 'Nam Dokmai' mangoes were fumigated with 250 500 and 1000 ppb 1-MCP for 24 hours at 25°C and stored at 20°C. Mangoes treated with 250 ppb 1-MCP showed the most effective to delay firmness until the end of storage. While treatments with higher concentrations of 1-MCP (500 and 1000 ppb) resulted in lower respiration rate and ethylene production, L\* and b\* values tended to increase during storage. Color changes were delayed in mangoes treated with 1-MCP. 1-MCP treatment also prolonged the shelf life of mango to 15 days of storage at 20°C.