Title Effect of 1-MCP treatment on the postharvest quality of banana fruit (cv. Kluai Kai)

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Abstract

Banana (Musa AA Group, cultivar locally known as Kluai Khai) has s short life storage due to fast turning yellow then browning and softening after harvesting. The effects of exposure to 1-MCP on the quality of bananas were determined. Bananas were treated with 100 200 400 and 600 ppb 1-MCP at 25°C for 24 h in each treatment then transferred to 13°C for storage. 1-MCP treatment delayed turning yellow and extended the storage life to 30 days at l3°C while non-treated banana had only 20 days storage life. Firmness was decreased in response to 1-MCP by 600 ppb 1-MCP maintaining firmness than other treatments. Color L value tends to increase in association with turning yellow of bananas during storage. A 600 ppb of 1-MCP treatment was extremely effectively in delaying of turning yellow of banana and also decreasing of Hue value. Exposure to 1-MCP at 100 to 600 ppb 1-MCP decreased the respiration rate and ethylene production of bananas when 600 ppb 1-MCP showed the lowest of respiration rate and ethylene production.