Title Effect of 1-MCP on physiological changes in banana 'Khai'

Authors R. Jansasithorn and S. Kanlavanarat

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Abstract

Bananas are classified as climacteric fruit due to their ethylene response. The rate of respiration and the production of ethylene increase during banana ripening and accelerate senescence of plant. 1-Methylcyclopropene, ethylene perception inhibitor, effectively inhibits ethylene responses. Study of 1-MCP fumigation at 50 100 and 250 ppb for 24 hours on storage life and quality of 'Khai' Banana stored at 20°C was determined. The delay of firmness was found in bananas treated with 1-MCP by higher concentration showed more effective. In addition, bananas treated with 250 ppb 1-MCP showed the lowest respiration rate and ethylene production. However, there is no significant difference among treatments for color changes. 1-MCP treatments also prolonged the shelf life of banana to 20 days of storage at 20°C