



Yellowing and Granulation of 'Magallanes' Pummelo (*Citrus maxima* [Burm. ex Rumph] Merr) Fruit as Influenced by 1-Methylcyclopropene

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Abstract

The yellowing, granulation, and other physico-chemical characteristics of 'Magallanes' pummelo [*Citrus maxima* (Burm. ex Rumph) Merr] fruit treated with 1-methylcyclopene (1-MCP) for 8 h at 0, 50, or 500 nL L⁻¹) were evaluated. L*, a*, b*, chroma and hue values gradually increased during 12 weeks of storage at ambient conditions (26.4 °C, 83.3% RH). Rind color became more vivid and yellow. Decay, juice content, and electrolyte leakage were similar among treatments. However, weight loss, visual quality, shriveling, pH, total soluble solids (TSS), titratable acidity (TA), and TSS:TA were affected by 1-MCP. Weight loss was lowered by 50 nL L⁻¹ at 6 weeks after treatment (WAT). Treated fruit had better visual quality than control fruit at 6 and 9 WAT because of lesser shriveling. At 12 WAT, fruit treated with 500 nL L⁻¹ exhibited highest %TA and lowest TSS:TA ratio. Granulation or vesicle drying was most frequently observed initially in the middle and stylar ends of fruit segments. Granulated samples exhibited higher pH and lower TSS than the non-granulated segments. 1-MCP but not storage period showed similar yellowing and granulation of 'Magallanes' pummelo as the control lot. 1-MCP maintained a good fruit visual quality longer.