

Title The responses of different cut inflorescence of orchid hybrids to various 1-MCP concentrations

Authors K. Obsuwan, A. Uthairatanakij

Citation ISHS Acta Horticulturae 755:465-470. 2007.

Keywords Dendrobium Aroon White; Mokara Jairak Gold; Vascostylis Sakura; display life

Abstract

The effectiveness of 1-MCP on extending display life of various cut flowers has been reported. However, the effects of 1-MCP depend on concentration, duration time of fumigation and temperature. The objective of this research was to examine the responses of *Dendrobium* Aroon White, *Mokara* Jairak Gold and *Vascostylis* Sakura to various concentrations of 1-MCP at 25°C. Inflorescences were harvested at commercial stage. They were placed in distilled water and fumigated with 1-MCP at 0, 250, 500 or 1000 $\text{nl}\cdot\text{L}^{-1}$ for 1.5 h. The result showed that all 1-MCP concentrations significantly prolonged display life of *Dendrobium* Aroon White (14 days compared to 11 days of control) by delaying flower drop and increasing water uptake. But *Mokara* Jairak Gold and *Vascostylis* Sakura did not respond to 1-MCP. In conclusion, the responses of orchid hybrids to 1-MCP fumigation are discussed.