Title Effect of 1-MCP on senescence of *Dendrobium* flowers in simulated shipment for export

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Abstract

The effect of 1-methylcyclopopene (1-MCP) was investigated on the quality and vase life of *Dendrobium* 'Jacky' inflorescences during simulated shipment. Cut *Dendrobium* 'Jacky' inflorescences with wet-packing were treated with 300 or 500 nl L⁻¹ 1-MCP at 25°C for 4 h and held in cardboard boxes at 25°C for 3 days for simulation of air transportation. Upon unpacking the flowers were individually held in 15 ml centrifuge tubes containing distilled water at 25°C. The 1-MCP treatment showed less flower abscission and less wilting of open flowers and flower buds. The 1-MCP treatment also reduced the ethylene concentration inside the boxes. It is concluded that a pretreatment with 1-MCP can be commercially applied for export of orchid flowers.