

Title Effects of ethylene inhibitors on indoor quality and longevity in potted carnations
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Abstract

Potted carnations are intensively produced and distributed for the Mother's Day in Japan. The quality of potted carnations is often lowered by shipping and indoor environmental condition. In order to improve the postharvest quality of potted carnations, several studies were performed. Ethylene production by florets showed climacteric pattern in 'Scarlet', 'Lemonsoft' and 'Annemarie' but did not in 'Polaris'. There was no correlation between wilting floret and leaf explants in ethylene production. Potted carnations 'Scarlet' were treated with silver thiosulfate (STS) and 1-methylcyclopropene (1-MCP). Longevity of floret and potted plants were slightly prolonged by spraying with 0.1 mM STS before placement to the indoor condition. Treatments of 1 ppm 1-MCP during shipment for 48 hours promoted flowering and slightly prolonged longevity of indoor 'Scarlet' plants. Longevity of florets was significantly increased by the treatment with 1 ppm 1-MCP.