

Title The effects of sucrose, citric acid and calcium sulfate on vase life of Lisianthus cut flowers
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Abstract

To extend the vase life of 'Mariachi Bleu Fonce' lisianthus cut flowers different floral preservative solutions were prepared using factorial combinations of different levels of sucrose(at 0, 20, 40 and 60 g L⁻¹), citric acid (0 and 160 mg L⁻¹) and calcium sulfate(O and 240 mg L⁻¹). Cut flowers were treated with different combinations of the compounds during 34 days storage at ambient temperature. Amount of water uptake and percentage of dry weight were measured during and at the end of vase life. The results showed that the vase life of control flowers treated with only pure water was 14 days whereas it was 31 days in cut flowers supplied with 60 g L⁻¹ sucrose in combination with citric acid. The 40 and 60 g/L sucrose with 240 mg L⁻¹ calcium sulfate were the most effective in maintaining flower dry weight. The effects of sucrose, citric acid and calcium sulfate on amount of water uptake have also been discussed.