

Title Role of benzyladenine on vase life and quality of cut lisianthus flowers
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Abstract

Lisianthus (*Eustoma grandiflorum*) is one of the cut flowers that demonstrates postharvest problems which cause loss of quality and shorter vase life. In this research, effects of benzyladenine (BA) pulse treatment in combination with 3% sucrose on the quality and vase life of cut *Eustoma grandiflorum* flowers were investigated. The flowers were pulsed in different concentrations of BA (25, 50 and 75 mg • L⁻¹) for 24 h. Results showed that the BA delayed flower senescence and ethylene production as well as decreased fresh weight loss. In addition, these treatments also increased anthocyanin concentration and decreased chlorophyll degradation. The 50 mg • L⁻¹ BA treatment was the most effective on vase life of cut *Eustoma* flowers. Moreover, results showed that the ethylene production in flowers is an important factor in determining the vase life of cut *Eustoma grandiflorum* flowers.