Pulsing treatment with gibberellic acid in cut *Heliconia psittacorum x H. spathocircinata* 'Golden Torch' inflorescences

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Acta Horticulturae 1060: 121-126. (2015)

Abstract

The objective of this study was to evaluate the effect of gibberellic acid (GA_3) pulsing treatment on the longevity and quality of *Heliconia psittacorum x H. spathocircinata* 'Golden Torch' inflorescences stored at room temperature. The treatments consisted of 0, 0.25, 0.50 or 1 mM GA_3, and storage time of 0, 1, 2, 4, 6, 8 and 10 days. The fresh weight decreased by 2.9% on the tenth storage day. The water uptake increased by 47% within the first four days, followed by reduction at the end of the storage period. There was an increase in the flower opening and decreased levels of soluble sugars in bracts after the treatment, by increasing levels of GA_3 (0.25, 0.50 or 1 mM). The inflorescences treated with 0.25, 0.50 or 1 mM GA_3 had three expanded bracts compared to the pointer stage, while the flowers with two sheath leaves from the control exhibited expanded and closed bracts. Postharvest application of 1 mM GA_3 provides an increase in flower opening with no reductions in the quality of the flowers. The longevity of inflorescences of 'Golden Torch' heliconia, treated or not with GA_3 is approximately ten days when stored at room temperature.