# Postharvest senescence of *Alpinia* floral stems: antioxidative effect of pulsing

**M.B. Morais, M.M.A. Silva, L. Herculano, T.R. Camara, L. Willadino**

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## Abstract

The cut flower market demands quality and postharvest longevity, requiring research to identify physiological processes characteristic of senescence. This work aimed to evaluate the effect of the application of pulsing in postharvest senescence of *Alpinia purpurata*, on the assessment of relative water content (RWC) and catalase (CAT) activity. The flower stems were maintained during 24 h in solution containing sucrose 40% and ascorbic acid 10 mM solution and control in water. After pulsing, the floral stems were kept in water for 9 days. The flower bracts that were pulsed retained their hydration, since the reduction in RWC was only 17% during 10 days. In control stems the reduction amounted to 35% in the same period. Stems that received the pulsing showed lower enzymatic activity in bracts and leaves. In control treatment, bracts and leaves showed high activity, highlighting the oxidative stress characteristic of the senescence. Positive effect of pulsing consists in reducing oxidative stress and ensuring the hydration of red ginger inflorescences, improving the vase life.