Title Role of ascorbic acid on vase life of red ginger (Alpinia purpurata (Vieill.) k. Schum)

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Abstract

Role of ascorbic acid on vase life of red ginger flowers was investigated. The respiration and ethylene production in red ginger flower were significantly different higher during the vase period ($P \le 0.05$). Flowers held in 0.1% ascorbic acid had the lowest respiration rate while the respiration rate of untreated (control) flowers was the highest and reached the peak in the day of senescence. Besides, treatment of 0.1% ascorbic acid had consistent ethylene production throughout experimental period, contrast to the untreated flowers, which the ethylene production increased and reach the peak in the day of senescence. No significant differences in fresh weight and water uptake were observed among treatments. However, vase life of the flowers treated with ascorbic acid was significantly longer than that of untreated (control) flowers ($P \le 0.01$). Flowers held in 0.1% ascorbic acid had the longest vase life (11.6 d) while the vase life of control flowers was shortest (8 d).