

Abstract

Flowering stems of *Curcuma alismatifolia* (Zingiberaceae) cv. Chiang Mai Pink contain small flower buds and open flowers, surrounded by large pink bracts. Vase life is limited by browning at the bract tips. This browning may relate to ethylene production as it was hastened by treatment with exogenous ethylene. Browning was apparently not due to lack of carbohydrates, as sugar treatment had no effect, and was also apparently not due to xylem plugging with microbes because antimicrobial compounds (8-hydroxyquinoline sulphate (HQS) and dichloroisocyanuric acid (DICA)) were ineffective.

The stems had a very short vase life after 3 days of dry storage. When stored in water, the optimum temperature for storage was 7 °C. After 3 or 6 days of storage at 7 °C the vase life was not different from that of unstored controls (about 18 days). However, if flowers were held at 5 °C for 3 days they had a vase life of only 2 days. It is concluded that *C. alismatifolia* is an attractive cut flower with a considerable length of vase life (usually more than 2 weeks, in freshly harvested stems). The flowers are chilling-sensitive, and cannot be stored dry but they can be stored in water at 7 °C for about 6 days. Since vase life is rather long, it is also possible to store the flowers in water for a few days at ambient temperatures.