Title	The effect of harvesting time on the respiration and vase life of three cut rose cuitivars 'Golden Gate', 'Duett', and 'Cream Prophyta'
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Abstract

In recent years the production centre for cut flowers have developed further from the consumption areas. This poses a challenge for the growers to be able to harvest the flowers at the correct stage in order to reach the consumer in the right condition. In this regard harvesting time is fundamental as it has an effect on the final quality of the flowers. Harvesting when the temperatures are high results in a rapid loss of the turgor and senescence of the flowers. The effect of harvesting time on the vase life and quality of dry stored cut flower stems of Rosa hybrida 'Duett', 'Golden gate' and 'Cream prophyta' was investigated. The flowers were stored at 2°C, and alternated between 2 and 15°C with changes made every 2 days for 8 days. Control flowers were placed in vases without a storage period. Flowers harvested in the afternoon had a lower respiration rate of 89.20 ml $C0_2$/kg/hr compared to 96.13 ml $C0_2$/kg/hr of the morning harvested flowers. This result coincided with the vase life of the flowers being lower for morning harvested than afternoon harvested by an average of two and a quarter days. Duett had the lowest respiration rate while there was no difference in the respiration rate of 'Cream prophyta' and 'Golden gate', however the surprisingly 'Duett' had the shortest vase life while 'Cream prophyta' lasted longer.