Title Growing conditions, plant appearance and postharvest performance

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Abstract

The present study evaluated the effect of different night temperatures, CO_2 levels and light intensities on plant appearance at the end of production and subsequent postharvest performance in *Rosa hybrida* 'Kiss' (miniature rose). In miniature rose the most pronounced difference at the end of production was in the number of flower buds, where plants grown at high light intensity and increased CO_2-level had the highest number. The production time was not influenced by the tested light or CO_2-levels, but the lower the night temperature, then the longer the production time. During the subsequent postharvest test the number of open flowers only differed slightly and differences were only significant around day 20 when plants grown at high light or increased CO_2-level had more open flowers. Plants grown at low night temperature had a reduced quality after 29 days in a postharvest test, both in terms of number and percentage of open flowers.