

**Title** Effects of temperature on some senescence parameters during dry storage of cut flowers of *Gerbera* 'Suzanne'

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#### **Abstract**

*Gerbera* flower is one of the most popular cut flowers in the world but longevity can be shorter than desired by consumers, mainly for those that are dry- stored. The effect of dry storage was investigated on one of Brazil's most popular *Gerbera* cultivars, the orange-petaled Suzanne. Fresh cut flowers were packed in micro-perforated plastic and dry stored for 7 days under different conditions: 2°C, 85% RH; 4°C, 83% RH; 6°C, 80% RH or before transfer to 20°C, 70% RH. Every 3 days thereafter respiration rate, loss of fresh weight, dry weight, relative water content of the petals, water uptake, petal color, and both soluble and reductive carbohydrates were measured. The appearance, percentage stem break and longevity of the flowers was also recorded. Low temperatures, between 2 and 6°C, during dry storage, were effective for keeping postharvest quality of *Gerbera* 'Suzanne', with appearance and decorative quality best retained with storage at 2°C. Flowers kept at 20°C had an average longevity of 8.6 days, whilst at low temperatures it reached a maximum of 13.8 days (2°C).