

Title Potential of spectral reflectance as postharvest classification tool for flower development of calla lily (*Zantedeschia aethiopica* (L.) Spreng.)

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Abstract

Unsuitable postharvest management is one of the most serious problems that floriculture has to face. An option for reducing postharvest losses is to use automatic systems for flower sorting and classification, which yield consistent results, reduce costs and speed up these tasks. The objective of this work was show the potential of spectral reflectance to distinguish different postharvest development stages of calla lily flowers, *Zantedeschia aethiopica* (L.) Spreng., aiming the use of this technology within automatic systems for flower classification. The measuring equipment was a spectrometer connected to a portable computer and configured for reflectance data acquisition in the 400 to 1000 nm range. Based on the results, it was verified a differentiation between the spectral reflectance curves of calla lily flowers, with gradual decreases on the measured values according to the increase of the senescence stages. Thus, the spectral reflectance has potential to be used in the development of automatic systems for postharvest classification of calla lily flowers.