Title Effect of storage conditions and packaging supplemented with different solutions (wet packing) on vase life of *Gladiolus*

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Abstract

During storage and transportation generally low temperature and high relative humidity (95 to 98%) are beneficial to reduce postharvest loss for most of the cut flowers. Moreover, the best flower turgidity without mechanical damages can be obtained under wet storage or a wet transportation method, i.e., when stem bases of flowers are stored in a container with water or with a floral preservative solution. To explore the applicability of this technique, the present experiment was carried out on *Gladiolus* 'Sylvia' at the Post Harvest Technology Laboratory of Bidhan Chandra Agricultural University during 2003-2005. Interactions among the different factors under the present investigation were studied following the method of the Principal Component Analysis. The percent floret display and vase life were higher in flowers wet packed with sucrose 4%, wrapped in polyethylene, up to 48 hours storage, even at ambient condition. However, for low temperature (10°C) storage, sucrose at 3% was more effective when wrapped with polyethylene. The findings of the present investigation revealed an extra opportunity to avoid cost input for maintaining low temperature by wet packing with 4% sucrose up to 48 hours. During wet packing, apart from maintaining a modified atmospheric condition due to packaging, flowers were continuously being supplied with an energy source by solutions of the pouches with which the cut end of the flowers were adhered. Thus, there was increased viability of flowers in vase due to wet packaging, even after storing at ambient conditions.