

Title Compensation for Water Loss in Vacuum-Precooled Cut Lily Flowers
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Abstract

Vacuum cooling is a widely used rapid cooling method for vegetables. However, the inherent weight loss limits its use in other areas of the horticultural industry. In the current study, cut white lilies (*Lilium 'white elegance'*) were vacuum cooled in pilot-scale equipment with different treatments to reduce weight losses. The vase life of the cut flowers was monitored following the cooling treatments for two procedures: cold stored and unstored flowers. The results show that by spraying adequate water on the cut flowers prior to vacuum cooling, weight loss can be eliminated. Spraying water also improves the cooling rate leading to lower temperatures. It was found that vacuum cooling is effective for extending the vase life of cut flowers especially when stored flowers are sprayed with water before cooling.