

Abstract

Carnation is one among the important commercial flower crops grown in the world. Quality of carnation cut flower is greatly influenced by both pre and post-harvest practices. Some of the postharvest practices such as determining right harvest stage, method, time of harvest, sanitation and use of floral preservatives are known to affect the postharvest quality. In this connection, investigations were carried out during 2001-2002 to know the effects of pulsing with different concentrations of sucrose and cobalt sulphate for varying periods on postharvest physiology of carnation flowers. Harvesting of cut carnations at cross bud stage showed good results with respect to uptake of water, transpiration loss, water balance, fresh weight and vase life (10.5 days) when compared to tight bud and paint brush stages which recorded the vase life of 8.75 days each. Pulsing of carnation with 10 and 15 percent sucrose recorded vase life of 11.00 and 9.67 days, respectively. The pulsing of 200 ppm CoSO_4 resulted in higher water uptake, water balance, fresh weight in turn higher vase life (12.15 days) whereas, the flowers pulsed without cobalt sulphate (control) recorded minimum vase life of 8.72 days. The flowers pulsed for four hours were better (11.06 days vase life) when compared to two hours pulsed flowers (9.86 days). The carnation cut flowers harvested at cross bud stage pulsed with 10 percent sucrose and 200 ppm cobalt sulphate for four hours would help in reducing the postharvest losses and extends the vase life of flowers.