CHANGES IN ANTIOXIDANT ACTIVITIES IN CHRYSANTHEMUM CUT SPRAYS DURING STORAGE AND PACKAGING

The effect of different packaging materials (polyethylene, polypropylene, cellophane and news paper) on retarding senescence of the florets of cut chrysanthemum flowers was studied. All substances tested extended the vase life, limited fresh weight loss and increased carotenoid content as compared to the without packaging. Polyethylene was found to be best packaging material for post harvest storage. Physiological changes and level of different antioxidant enzyme activities were studied during post harvest storage of chrysanthemum. Significant increase in MDA concentration was observed in non-packaged sprays and comparatively less in all packaged materials indicating less post harvest stress. This hypothesis was also confirmed by increases in SOD, APX, POD, CAT and GR in non-packaged sprays results in increased stress condition compared to the other packaging materials.