

Title Effects of antimicrobial compounds on the postharvest life of rose
Authors Singh, R.
Citation Journal of Applied Horticulture (Lucknow) Vol: 4 (2002); 52-53

Abstract

The effects of 8-hydroxyquinoline citrate (HQC), 8-hydroxyquinoline (HQ), CoSO_4 and $\text{Al}_2(\text{SO}_4)_3$ at 200 ppm each, incorporated into the vase solution containing 4% sugar and 200 ppm citric acid, on the vase life of rose cv. Superstar were studied. Weight gain was greatest on the 3rd day in HQC (3.75 g) and CoSO_4 (3.70 g) solutions, and lowest in distilled water (2.00 g). Weight loss at senescence was greatest in flowers kept in distilled water (1.99 g), HQ (1.85 g) and HQC (1.75 g) solutions, and lowest in flowers maintained in $\text{Al}_2(\text{SO}_4)_3$ solution (1.50 g). The antimicrobial agents were equally effective in enhancing flower diameter. The greatest uptake of solution was observed in flowers kept in HQC (24.0 ml) and CoSO_4 (23.0 ml) solutions, whereas the lowest was observed in flowers maintained in distilled water (14.00 ml). Flowers in HQC and CoSO_4 solutions had the longest vase lives (15.20 and 14.56 days, respectively). Flowers kept in distilled water had the shortest vase life (10.00 days). HQ and $\text{Al}_2(\text{SO}_4)_3$ had similar effects on weight gain and solution uptake. Among the antimicrobial compounds, HQC and CoSO_4 were the most effective in the enhancement of the vase life of rose cv. Superstar.