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Effect of Chemicals on Keeping Quality and Vase Life of Carnation (Dianthus caryophyllus L.) Cv. Eskimo

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Abstract : The experiment under discussion was carried out to check the effect of different concentrations of sucrose (2%, 4%, 6%), CuSO4 (200ppm, 300ppm, 400 ppm), GA3 (25ppm, 50ppm, 75 ppm), and combinations of sucrose and GA3 (2% +25 ppm), (4%+50 ppm), (6%+75 ppm) on the carnation cut flower. Visual symptoms of flower senescence, changes in weight (g) of a flower was observed and recorded by using weight balance. The experiment was laid out according to CRD (Complete Randomized Design) it was two-factor factorial, the software used for the analysis was Statistix. Maximum TSS were found in 6% sucrose + 75 ppm GA3 (8.3 %) followed by CuSO4 400 ppm, 4% sucrose + 50 ppm GA3 and 6% sucrose + 75 ppm GA3. Maximum vase life in term of days was recorded in treatment. CuSO4 400 ppm and 6% sucrose + 75 ppm GA3 (8 days) followed by CuSO4 200 ppm (7.7 days). CuSO4 300 ppm & 6% sucrose + 75 ppm GA3 were at par (7 days). Maximum water uptake was also observed in 6% sucrose + 75 ppm GA3 (56.7 ml) followed by CuSO4 400 ppm (49.7 ml) and 50 ppm GA3 (45 ml). Hence, CuSO4 400 ppm found best in all aspects.

Keywords : carnation, vaselife, GA3, CuSO4, sucrose
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