Title Effect of different concentrations of 8-hydroxyquinoline citrate and sucrose on vase life of lily

cut flowers

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Abstract

To study the effect of different concentrations of 8-hydroxyquinoline citrate and sucrose on vase life and some qualitative and quantitative attributes of oriental lily cut flowers, a study was conducted using a factorial design with either continuous application of 8-hydroxyquinoline citrate (0, 100 & 200 ppm), sucrose (0, 2 & 4 %) in vases or spray application of a mixed solution of GA₃ and BA (1:1) at two concentrations (0 & 50 ppm). Vase were placed in chambers at 25°C, relative humidity about 70% with a 14 h photoperiod maintained using fluorescent lamps (light intensity of 15 mmol m² s¹) at the top of the corolla. Data were recorded for some qualitative and quantitative attributes including vase life, fresh weight, solution uptake, changes of chlorophyll concentration in leaves. 8-hydroxyquinoline citrate at 200 ppm concentrations along with 4% sucrose and 50 ppm mixed of solution GA₃ and BA were the most effective in increasing vase life and maintaining keeping quality of cut lily flowers increased from 12.3 days in (control to22 days in the best treatment.