

Effects of different pulse solutions on vase life and quality of roses (*Rosa hybrid L.*)

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Abstract

Roses from different continents travel long distances to reach the international flower market in Holland and result in them reaching the market while they have aged thus reducing vase life and quality which are vital for consumer satisfaction. An experiment was carried out to assess the effects of five different pulse solutions (distilled water, aluminium sulphate + HTH + V90, aluminium sulphate + pentakill + V90, 3% sucrose solution + aluminium sulphate + V90, and water acidified with citric acid to a hydrogen potential of 4.2) on preserving the vase life of three rose (*Rosa hybrid L.*) varieties (Amore, Escimo and Calibra). The experiment was arranged as a 3×5 factorial treatment structure laid out in a completely randomised design (CRD). There was an interaction ($p < 0.001$) between the three rose varieties and the five different pulse solutions. Escimo and Amore recorded the highest vase life days in solution containing 3 % sucrose averaging 19 and 18 days respectively. Calibra recorded the least vase life (17 days) in water acidified with citric acid to a hydrogen potential of 4.2. It was concluded that pulsing solutions prolong vase life of roses.