

Abstract:

The use of an LPE dip on the vase life of short-lived, fragrant roses 'Lavande' and 'Sensation' was investigated. LPE is a natural phospholipid that has been demonstrated to retard senescence of leaves, fruits, and cut flowers. The roses were placed in vases containing a combination of LPE and chemicals to retard the growth of microorganisms. They were then moved to an environmentally controlled room and the aesthetic value was rated every twelve hours. Loss of aesthetic value was defined as the point at which a consumer would discard the flower due to complete opening or due to bentneck. LPE alone caused these roses to open more slowly, thus prolonging their vase life. By titrating the concentration of LPE, sugar, and biocide, the optimal formulation was determined. Results indicated that LPE can increase the vase life of 'Lavande' and 'Sensation' roses by at least 30% over standard industry practices.