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Effects of Floralife® PRG Pretreatment Solution on Cut Gerbera Flowers

Background

Gerberas are very popular cut flowers due to a wide availability of varieties with vibrant petal colors and flower forms. The vase life of gerberas can vary significantly depending upon the postharvest care and degree of sanitation provided. Petal wilt, flower stem bending (commonly called “bent neck”) and disease, such as *Botrytis*, are commonly the basis of reduced vase life with the Gerbera flower. They are very susceptible to debris and bacterial contamination in water during hydration and vase flower treatments. The clogging of vessels inside the flower stem impedes water uptake, thus reducing hydration effectiveness and resulting in a shortened vase life.

Floralife® PRG Pretreatment product has been specially formulated for use immediately after harvest, as well as after a prolonged dry transport, to aid in vase life for rose and Gerbera cultivars. The product is a tablet form and needs to be mixed with water to make the final use solution. The treatment helps to condition the water and keep it clean, while facilitating good hydration and sanitation through the flower stems.

Research

An experiment was conducted at the Floralife, Inc. Postharvest Laboratory to evaluate the effects of Floralife® PRG Pretreatment on several varieties of cut flower Gerberas. Untreated flowers were obtained from a farm and shipped dry to the lab. Upon arrival at the lab, approximately 1 inch of the end of the stems was recut with a clean, sharp knife in order to remove debris and contamination. The flower stems were then placed into buckets containing either untreated plain water, “Control,” or Floralife® PRG Pretreatment. One tablet of Floralife® PRG Pretreatment was mixed with one gallon (3.8 L) of water as the treatment solution. The Gerbera flower stems were held in these two different solutions for 48 hours inside a cooler at a temperature around 36° F (2° C). At the end of the treatment, the flowers were then transferred into clean glass vases containing Floralife Crystal Clear® Flower Food. The flowers were held in an interior evaluation room at 68° F (20° C) with 12 hours of light in order to monitor the vase life performance.

Results

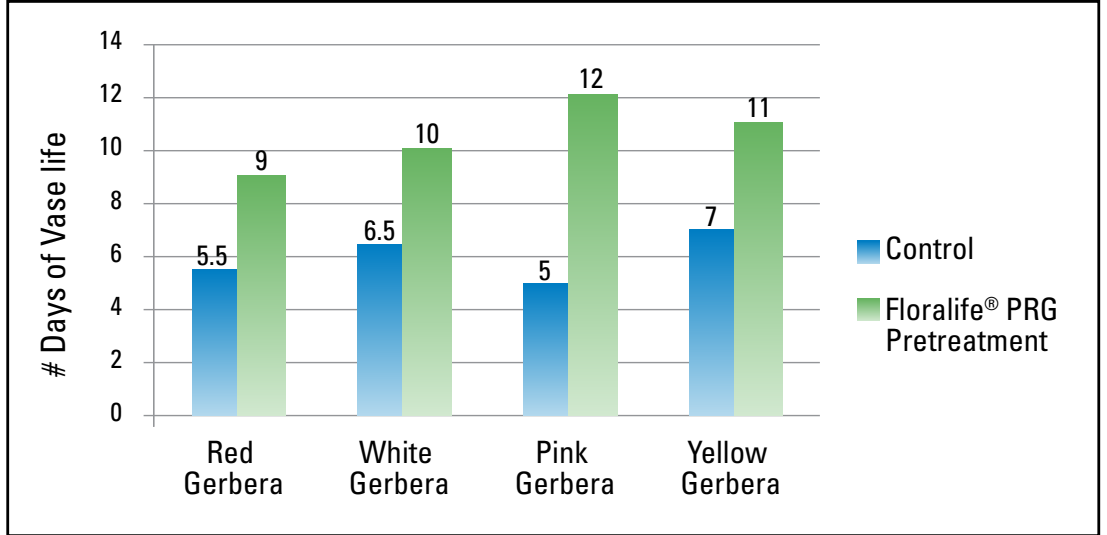


Control - Untreated



Treated - Floralife® PRG Pretreatment Solution

Vase Life - 7 Days



Conclusions

Floralife® PRG Pretreatment product improved the quality and vase life of cut gerbera varieties tested in this experiment. Flower stems treated with Floralife® PRG Pretreatment solution maintained stem turgidity and reduced the “bent-neck” flowers which decrease flower vase life.