



Anil Ranwala, PhD.
Chief Scientist

Floralife® Bulb Flower Food Efficacy Trials

Background

Bulb crops provide a wide array of flowers with vibrant colors and various shapes that make them a very attractive fresh cut flower choice. Most of these flowers are now available year-round with the inventions of new bulb storage and growing techniques. Proper postharvest practices are essential for obtaining best possible vase life of these flowers. Important attributes of flowers such as flower opening, petal color, petal retention and leaf quality are largely dependent on proper postharvest practices. Flower foods aid in hydration and supply of essential nutrients to flowers at optimum levels.

Research

Vase life tests were conducted in the Floralife North America Laboratory, Floralife Holland Laboratory and FloraHolland (The Netherlands) Laboratories to evaluate the performance of Floralife® Bulb Flower Food. Varieties of different bulb flowers were obtained from commercial sources for these experiments. The ends of the flower stems were recut with a clean knife at least 1 inch (3 cm) upon arrival and the leaves that would be below the solution level were removed. The flower stems were then placed in vases containing 1 liter use solution of either Floralife® Bulb Flower Food or plain water. Flowers were then held in an interior evaluation room at 68 - 70° F (20 - 21° C) with 12 hours of lighting to monitor vase life performance.

Results

| Flower Type | Vase life in Floralife® Bulb Flower food (# days) | Vase Life in water (# days) | % vase life increase with Floralife® Bulb Flower Food |
|-----------------------------|---|-----------------------------|---|
| 'Pavia' LA lily | 17.0 | 11.6 | 47% |
| 'White Heaven' Asiatic lily | 18.7 | 11.9 | 57% |
| 'Tresor' Asiatic lily | 16.1 | 8.5 | 89% |
| 'Dreamland' Asiatic lily | 17.2 | 11.6 | 48% |
| 'White Gazer' Oriental lily | 14.8 | 12.3 | 20% |
| 'Helvetia' Oriental lily | 11.6 | 8.3 | 40% |
| 'Soldera' Oriental lily | 13.5 | 10.0 | 35% |
| 'Broadway' Oriental lily | 12.3 | 10.6 | 16% |
| 'Diamond' Alstroemeria | 10.1 | 7.9 | 28% |
| 'Virginia' Alstroemeria | 17.3 | 15.9 | 9 % |
| 'Viking' tulip | 11.9 | 9.0 | 32% |
| 'Silver Dollar' tulip | 9.1 | 7.8 | 17% |
| 'Debutante' tulip | 9.0 | 6.3 | 43% |
| 'Monte Carlo' tulip | 14.1 | 8.9 | 58% |
| 'Prof. Blaauw' Iris | 7.6 | 5.6 | 36% |
| 'Case Blanca' Iris | 9.9 | 6.3 | 57% |
| 'Red River' Freesia | 17.7 | 13.3 | 33% |
| Average | 13.4 | 9.8 | 37% |



Control: Water



Treated: Floralife® Bulb Flower Food

Photos taken on Day 13 of Vase Life Experiment



Control: Water



Treated: Floralife® Bulb Flower Food

Photos taken on Day 7 of Vase Life Experiment

Conclusions

The use of Floralife® Bulb Flower Food was beneficial for all fresh cut bulb flowers tested in these experiments. On average, there was an increase of 37% vase life, which translates to 3.6 days more than with the use of plain water. Floralife® Bulb Flower Food increased the quality, freshness, and vase life in all trials.