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Vase Life Study Results of Fresh Cut Flowers Using Flower Food

Background

Maintaining biological functions of both flowers and leaves at the proper level is important to obtain quality vase life for fresh cut flowers. For cut flowers to fully open and stay fresh they need a continuous supply of nutrients and water, along with free-flowing vessels inside the stems that easily transport these materials. Properly formulated professional cut flower foods can provide such necessary conditions. Much research has shown numerous types of cut flowers benefit from the use of flower food.

Research

The following table contains a compilation of vase life data for different species and varieties of cut flowers from recent experiments conducted in the Floralife, Inc. postharvest laboratory. It compares the vase life of these flowers when using properly mixed Floralife® flower food compared to using only water.

Results

| Crop | Flower Food | Vase life in flower food (# days) | Vase Life in water (# days) | % vase life increase with flower food |
|--------------------------|---|-----------------------------------|-----------------------------|---------------------------------------|
| 'Charlotte' Rose | Floralife Crystal Clear® Flower Food-liquid | 14.3 | 5.5 | 160% |
| 'Light Orlando' Rose | Floralife Crystal Clear® Flower Food-liquid | 10.0 | 6.1 | 64% |
| 'Miracle' Rose | Floralife Crystal Clear® Flower Food-liquid | 9.6 | 6.5 | 47% |
| 'Mustang' Rose | Floralife Crystal Clear® Flower Food-liquid | 10.1 | 3.9 | 159% |
| 'Freedom' Rose | Floralife® Premium Rose Food- powder | 11.0 | 6.5 | 69% |
| 'Hot Prince' Rose | Floralife® Premium Rose Food- powder | 13.8 | 5.7 | 142% |
| 'Forever Young' Rose | Floralife® Premium Rose Food- liquid | 13.2 | 5.8 | 128% |
| 'Royal Prophyta' Rose | Floralife® Premium Rose Food- liquid | 15.0 | 6.4 | 134% |
| 'Galliaro' Chrysanthemum | Floralife Crystal Clear® Flower Food-liquid | 15.0 | 10.2 | 47% |
| 'Factor' Chrysanthemum | Floralife Crystal Clear® Flower Food-powder | 14.1 | 9.9 | 42% |
| 'Polyanna' Asiatic Lily | Floralife® Bulb Food - powder | 17.7 | 10.8 | 64% |
| 'Balance' Alstroemeria | Floralife® Bulb Food - powder | 16.7 | 12.0 | 39% |
| 'Telstar' Iris | Floralife® Bulb Food - powder | 10.8 | 6.8 | 59% |
| 'Atlantis' Chrysanthemum | Floralife Crystal Clear® Flower Food-liquid | 21.2 | 13.2 | 61% |
| 'Dazzle' Asiatic lily | Floralife® Bulb Food - powder | 17.3 | 12.8 | 35% |
| 'Orinoko' Chrysanthemum | Floralife Crystal Clear® Flower Food-liquid | 12.8 | 6.8 | 88% |
| 'Delphi' Carnation | Floralife Crystal Clear® Flower Food-liquid | 15.5 | 9.7 | 60% |
| 'Shocking' Oriental lily | Floralife® Bulb Food - powder | 14.0 | 10.7 | 31% |
| 'Soldera' Oriental lily | Floralife® Bulb Food - powder | 13.5 | 10.0 | 35% |
| 'Nelson' Carnation | Floralife Crystal Clear® Flower Food-powder | 21.7 | 12.9 | 68% |
| Purple Liatris | Floralife Crystal Clear® Flower Food-liquid | 13.3 | 10.9 | 22% |
| 'Bellamosa' Delphinium | Floralife Crystal Clear® Flower Food-liquid | 7.9 | 6.3 | 25% |
| 'Alice' Lisianthus | Floralife Crystal Clear® Flower Food-powder | 12.4 | 3.9 | 218% |
| 'World Favorite' Tulip | Floralife® Bulb Food - powder | 8.1 | 6.2 | 31% |
| 'Blue Magic' Iris | Floralife® Bulb Food - powder | 8.6 | 4.5 | 91% |

continued



Water Only



Floralife Crystal Clear® Flower Food

Day 8 Vase Life

Conclusions

The above results show the use of a professionally formulated flower food when properly used is beneficial in adding a minimum of 21% vase days of life, up to a maximum of 218% more than simply using water, as tested in these experiments. Data test results can vary substantially based upon species and variety as indicated above. Other factors such as disease and bruised flowers due to improper handling can have impact on vase life. Multiple vase life tests per species and variety should always be conducted to determine a constant benchmark range for a particular flower.