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Benefits of Saturating Floral Foam with Floralife® Flower Food

Background

Floral foam is widely used in the industry as a medium for designing flower arrangements. The life of flowers placed in floral foam is dependent upon the properties of the foam and properties of water, or flower food solution, used to saturate the foam. Properties of floral foam, such as cell size, structure, and water holding capacity, are important for water uptake by cut flowers designed in foam. Cut flower food facilitates proper hydration, supply of essential resources for continued development, proper bud opening, and freshness.

Research

At the Floralife Laboratory, several experiments were conducted to investigate the effects of flower life when floral foam was saturated with flower food solution. OASIS® floral foam bricks were soaked and saturated with either plain water or properly mixed Floralife Crystal Clear® flower food. Saturated OASIS® floral foam bricks were placed in plastic trays to prevent water/solution runoff. Flowers were recut with a clean knife and inserted into the OASIS® floral foam. Flowers were held in an interior evaluation room at 68 - 70° F (20 - 21° C) with 12 hours of lighting to monitor flower life performance. Additional water or fresh flower solution was added to the appropriate test trays to keep the OASIS® floral foam saturated throughout the experiment.

Results

The following table presents a compilation of flower life data from the experiments.

Flower Type	Flower Life in Water (# days)	Flower Life in Floralife Crystal Clear® Flower Food (# days)	% Flower Life Increase Using Flower Food
'Charlotte' Rose	10.1	13.5	34%
'Freedom' Rose	8.4	9.9	18%
'Chelsea' Rose	5.3	8.6	62%
'Valentino' Rose	7.7	9.3	21%
'Vendela' Rose	11.6	15.9	37%
'Delphi' Carnation	16.3	17.9	10%
Orange Gerbera	4.6	4.8	5 %
'Ile de France' Tulip	7.6	8.2	8%
'White Polaris' Chrysanthemum	9.2	14.0	52%
'Golden Polaris' Chrysanthemum	15.4	19.2	25%
White Snapdragons	6.2	9.6	55 %
'Gironde' Asiatic Lily	9.7	11.2	15%
White Dendrobium	13.9	14.9	7 %
Purple Aster	7.3	12.4	70 %
White Lisianthus	9.0	13.6	51 %
'Mozart' Mini Calla Lily	7.5	8.7	16 %
'Snow River' Freesia	10.3	12.6	22%
Light Blue Hydrangea	8.0	9.8	23%
Average Flower Life	9.34	11.89	27.3%

'Freedom,' 'Lindsey' and 'Vendela' Roses - Day 5 Experiment Photo



Control: Water



Treated: Floralife Crystal Clear® Flower Food

White Hydrangea - Day 7 Experiment Photo



Control: Water



Treated: Floralife Crystal Clear® Flower Food

'Charlotte' Rose, 'Delphi' Carnation and 'Golden Polaris' Chrysanthemum Day 10 Experiment Photo



Control: Water



Treated: Floralife Crystal Clear® Flower Food

Conclusions

Floralife Crystal Clear® flower food is beneficial for cut flowers when used as a saturation solution for floral foam. Results based upon 18 flower cultivars trialed on average showed an increase in flower life of 27% when Floralife Crystal Clear® flower food solution was used in saturating OASIS® floral foam, versus when using plain water.