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Floralife® Premium Rose Flower Food Efficacy Tests

Background

The rose is one of the most economically important and popular cut flowers around the world. Rose varieties are diverse in terms of color, shape and postharvest characteristics, such as flower opening and vase life. For all rose varieties, proper postharvest care and handling is critical for obtaining optimum vase life, flower opening and petal color development. Fresh cut flower food plays an important role in their postharvest performance by providing essential nutrients in the proper balance. Floralife, Inc. has done extensive research on the postharvest aspects of roses and introduced a flower food specifically formulated to improve their quality. Floralife® Premium Rose Flower Food is available in either a powder or concentrated liquid formulation.

Research

Vase life tests were conducted in the Floralife, University of Florida Floral Postharvest Research, and FloraHolland (The Netherlands) Laboratories to evaluate the performance of Floralife® Premium Rose Flower Food. In these tests, the efficacy of Floralife® Premium Rose Flower Food was compared to Floralife Crystal Clear® Flower Food – an all crop flower food, and plain water. Commonly purchased rose varieties were obtained from commercial sources for these experiments.

With the Floralife lab test the ends of the flower stems were re-cut upon arrival and leaves removed that would otherwise be in the flower food solution. The flower stems were then placed in vases containing 1 Liter of either type of flower food solution or plain water. Flowers were held in an interior evaluation room at 68 - 70° F (20° - 21° C) with 12 hours of lighting to monitor vase life performance. For the University of Florida and FloraHolland tests, standard vase life test procedures of the respective laboratories were followed.

Results

Floralife, Inc. Data: Rose Vase Life Performance with 3 different treatments

Rose Variety	Vase Life (# days)		
	Water	Floralife Crystal Clear® Flower Food	Floralife® Premium Rose Flower Food
Charlotte	5.0	8.8	12.3
Gold Strike	7.5	9.4	11.9
Freedom	6.0	9.4	10.2
Valentino	3.5	9.2	12.3
Sonrisa	6.8	9.1	11.8
Sombrero	3.7	7.0	9.7
Jade	6.1	8.8	10.5
Royal Propytha	7.2	11.6	15.9
Light Orlando	6.5	8.8	11.3
Eskimo	7.5	12.7	14.6
Average	6.0	9.5	12.1

'Charlotte' and 'Light Orlando' Roses



Water



Floralife Crystal Clear®
Flower Food



Floralife® Premium
Rose Flower Food

Day 7 vase life photo

University of Florida Data: Rose Vase Life Performance with 3 different treatments

Rose Variety	Vase Life (# days)		
	Water	Floralife Crystal Clear® Flower Food	Floralife® Premium Rose Flower Food
Erin	11.4	15.4	16.1
Charlotte	7.8	10.4	13.4
Osiana	11.7	20.0	22.4
Average	10.3	15.3	17.3

'Osiana' Rose



Water

Floralife® Premium
Rose Flower Food

Day 21 vase life photo

FloraHolland Laboratory Data: Rose Vase Life Performance Compared to Water

Rose Variety	Vase Life (# days)	
	Water	Floralife® Premium Rose Flower Food
Akito	5.2	9.8
Aqua	5.0	6.8
Son Risa	6.1	9.7
Tropical Amazon	6.7	10.1
Valentino	10.2	19.9
Average	6.6	11.3

Conclusions

Both types of flower food performed better than just water used with all varieties in the treatments. With the Floralife tests, the vase life performances of Floralife Crystal Clear® and Floralife® Premium Rose Flower Food were better than water by 58% and 102%, respectively. Floralife® Premium Rose Flower Food provided a greater increase in vase life of 27% compared with the Floralife Crystal Clear® Flower Food. In the University of Florida independent tests, the vase life performances of Floralife Crystal Clear® and Floralife® Premium Rose Flower Foods were better than water by 49% and 68%, respectively. In the FloraHolland Laboratory independent tests, Floralife® Premium Rose Flower Food performed better than water by 71%. Based upon the results, to enhance freshness and the quality of roses, Floralife® Premium Rose Flower Food provides the best performance.