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## Floralife® Premium Rose Flower Food Use Increases Vase Life

### Background

Fresh cut roses have been associated with Valentine's Day since the Middle Ages, traditionally a day in which couples express their love for each other with the gift of flowers. A high percentage of the flower industry's total sales of fresh cut roses are sold on this one special holiday. Thus it is critical to provide high quality flowers at a time when you can reach the greatest number of customers and provide them with a satisfying experience and sense of enjoyment. Satisfied consumers become repeat customers.

No matter the rose variety being sold, proper postharvest care and handling is critical for obtaining optimum vase life, flower opening and brilliant petal color. Using fresh cut flower food plays an important role in postharvest performance by providing essential nutrients in the proper balance. Crop specific flower food, such as Floralife® Premium Rose Flower Food, is specially formulated with unique ingredients which enhance rose performance by increasing quality and vase life substantially over the use of standard flower food or plain water.

### 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. Commonly purchased rose varieties were obtained from commercial sources for these experiments. In the tests 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® Premium Rose Flower Food solution 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

The following photographs show different attributes of Floralife® Premium Rose Flower Food.

#### *Prevention of Bent Neck*



**Control: Water**



**Treated: Floralife® Premium Rose Flower Food**

**Photos taken on Day 7 of Vase Life Experiment**

### *Development of Intense Petal Color*



**Control: Water**



**Treated: Floralife® Premium Rose Flower Food**

**Photos taken on Day 7 of Vase Life Experiment**

### *Proper Opening of Flowers*



**Control: Water**



**Treated: Floralife® Premium Rose Flower Food**

**Photos taken on Day 7 of Vase Life Experiment**

### *Optimum Vase Life*



**Control: Water**

**Treated: Floralife Crystal Clear®  
Flower Food**

**Treated: Floralife® Premium Rose  
Flower Food**

**Photo taken on Day 10 of Vase Life Experiment**

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Rose Variety	Vase life (# days)		
	Water	Floralife Crystal Clear® Flower Food	Floralife® Premium Rose Flower Food
'Charlotte'	4.2	12.6	15.0
'Circus'	6.3	11.6	14.3
'Eskimo'	7.5	12.6	15.0
<b>Average</b>	<b>6.0</b>	<b>12.3</b>	<b>14.8</b>

### Conclusions

The research results showed the use of flower food, whether it was Floralife Crystal Clear® or Floralife® Premium Rose Flower Food, greatly improved the overall quality and freshness of the flowers versus only using water. Specific use of a specialty rose food, such as Floralife® Premium Rose Flower Food resulted in enhanced flower petal development, petal color, and optimum vase life versus water. Vase life increased on average 20% with these particular rose varieties tested over the use of the all-purpose Floralife Crystal Clear® Flower Food. Vase life increased when using either Floralife® Crystal Clear or Floralife® Premium Rose Flower Food versus water by 105% and 146% respectively.