

## Prove It

By Cindy Hoogasian

DO HYDRATING SOLUTIONS, FLOWER FOODS AND commercial post-harvest products produce better results than homemade alternatives? Doubters may need proof.

Dean Knight of Knight's Flowers in Clinton, Tenn., has conducted post-harvest research on rose cultivars for years. Florists can apply his methods to any post-harvest product or use them to compare different cultivars.

### 10 Basic Steps

Knight buys test cut flowers by variety (usually roses or carnations) because test flowers must be as similar as possible to control variables. Let's assume you are testing one brand of flower food to determine how those flowers perform compared to flowers in plain water.

1. If possible, order the same variety of flowers, grown at the same farm, cut on the same day and at about the same time of day. Order enough to set up six vases of five stems each. Determine how long the flowers were in transit from the farm to your door. Note that information for future reference.

2. Ensure you are using high-quality blooms by recording the flowers' conditions upon receipt, including:

- Mechanical damage from packing or transport.
- Flower temperature, especially if the box arrived hot.
- Details such as whether flowers were in sleeves or bunches.
- Stem length (measure each stem).
- Head size (for roses).

3. Cut stems under water. Remove leaves that fall below the water line.

4. Place all test flowers in the same brand of hydrating solution, prepared at the manufacturers' recommended rate, for the same amount of time, per label directions.

5. Clean and disinfect six identical vases. Mark each according to its contents: water or food. Number the vases in each category as one, two or three.

### Other Tests

Use the same methodology to test the effectiveness of any post-harvest product. For example, if you are testing the efficacy of a hydrator, treat all flowers the same until you get to the hydration step. Then skip the hydrator for the control group and apply the hydrator to the experimental group.

Remember, always confirm data from one test with additional tests.

— C. H.

■ Fill three of the vases with a measured amount of clean, warm tap water and three with a measured amount of flower food, prepared according to label directions.

■ Place the six vases in an environment that simulates a consumer's home (12 hours of light daily, 72°F and draft-free).

6. Randomly place five stems in each vase. Tag each stem with a number so you can record stem performance. Note the time and date the flowers go into the solution. Photograph each vase separately.

7. Evaluate and photograph the condition of each stem daily, at the same time every day. Do this several times a day, if time permits. Label photos with the date and time.

■ Measure **bloom opening**, either mechanically or visually. If measuring visually, use the same words to describe the various stages, such as tight bud; one-fourth open; one-half open; three-fourths open; fully open. If measuring mechanically, use inches and fractions of inches.

■ Establish a standard for when the **blooms are considered dead**. Apply the same criterion to each test flower.

■ Note the rate of **fluid absorption**. Top off fluid in vases as necessary and record when that is done.

8. Record when each flower in each vase begins to decline.

9. Record when each flower in each vase has ended its decorative life. Discard the flower from the vase.

10. Determine the results of the experiment. Representatives at Floralife Inc. in Waterboro, S.C., recommend deriving an average vase life for each container in your experiment. Record the number of days each stem lasted and divide the sum by the number of stems per vase. Derive an average vase life for each treatment method by totaling the average number of days for each jar. Divide by three. This will produce an average vase life for the food group and the water group. 🌹



### Info To Go

#### Rose Guarantee

Dean Knight of Knight's Flowers in Clinton, Tenn., made the cover of Floral Management in November 1998 for his eight-day rose guarantee. Read the story by clicking on the Info to Go logo on SAF's member Web site,

[www.safnow.org](http://www.safnow.org), or get it via Fast Fax by calling (888)723-2000 and requesting document #724.



**Cindy Hoogasian** is co-author of "In Season," a post-harvest care book. She has been widely published in industry publications and has written numerous articles on the care and handling of flowers from the retail florist's perspective.