

BUD OPENING OF 'ROSEY FUTURE' CARNATIONS

Seward T. Besemer and Raymond F. Hasek*

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The objective of this experiment was to test a new carnation cultivar for its ability to open from bud. The seven solutions tested included two typical Cornell-type solutions, two containing Durafloris® (a new product manufactured in Mexico),¹ one with Everbloom®, one silver nitrate and sugar solution, and the control. Tap water containing about 800 ppm dissolved solids was used in five treatments. Distilled water was used for the control treatment and one of the two Durafloris® solutions. (See table 1.)

Buds of 'Rosey Future'² carnations were harvested on December 14, 1972, when petals were straight up from the calyx. Ten buds were used in each of the seven solutions. The temperature in the opening and keeping room was a constant 78° F.

Flower life ended when flowers showed loss of turgidity.

The Cornell solution with 5 percent sucrose in tap water was the second best treatment with an average keeping life of 8.6 days. These flowers also retained their true color and had good form. Flowers in all other treatments turned blue and their form was fair to poor.

Durafloris® appears to be formulated for use with tap water containing large amounts of dissolved solids. It also prevented carnation blueing. Further testing of this product should be directed toward testing the reproducibility of these two apparent benefits.

* Respectively, Farm Advisor, San Diego County, and Extension Environmental Horticulturist, Davis.

RESULTS AND DISCUSSION

Flowers in all treatments opened well from buds within 72 hours, including the control treatment of distilled water. The cultivar 'Rosey Future' seems to be very adaptable to opening from buds. Table 1 shows keeping life. The best treatment was Durafloris® at 20 grams per liter in tap water. Keeping life averaged 10 days; the flowers maintained their true bright pink color; and flower form was best. Color and form were also excellent in Durafloris® at 20 grams per liter in distilled water, but keeping life was 7.9 days.

TABLE 1. Average Days of Keeping Life of 'Rosey Future' Carnation Buds Opened in Seven Solutions.

Solution	Keeping Life ¹
Durafloris® - 20 grams per liter (2% sucrose), tap water	10.0
Cornell ² - 5% sucrose, tap water	8.6
Durafloris® - 20 grams per liter (2% sucrose) distilled water	7.9
25 ppm silver nitrate, 2% sucrose, tap water	6.9
Cornell - 2% sucrose, tap water	6.1
Everbloom® ³ - 20 grams per liter (2% sucrose), tap water	6.0
Distilled water only	5.5

¹ The contents of Durafloris®, as stated on the package label for 20 grams of dry mix, are: sucrose 97.4989 percent (2 percent sucrose in solution); 8-Hydroxyquinoline citrate 2.4988 percent (500 ppm in solution); silver acetate 0.0022 percent (about 44 ppm in solution); and sodium bisulfide 0.0001 percent (about 4 ppm in solution). The 20-gram package is recommended for 1 liter of solution.

² Patented non-'Sim' cultivar developed by Dr. Leonard Carrier, Leucadia, California.

¹ Includes bud opening time from start of experiment.
² 200 ppm 8-HQC, 50 ppm aluminum from aluminum sulfate, 25 ppm silver nitrate.
³ Product of W. Atlee Burpee Co.

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