

STABY

5. Keeping the flowers in a 2 percent Floralife vase solution their whole life after the overnight treatments, extended flower life by 2 or 3 days as compared to using only deionized water in the vase.
6. The take-home message. If all carnation growers would treat all flowers right after harvest in STS solution overnight, they would be providing a product that is 300 percent better !! This is the main factor behind Columbia's "Super Carnations".

Household Rose Keeping Recipes

This true story ! At the 1983 San Diego County Fair, our Cooperative Extension -
of California office had a booth featuring the county flower industry and
displaying a continuous demonstration of 6 vases of fresh red roses. The cultivar
"Cara Mia" was used most of the time because of its reputation for "neck droop" at
the consumer level.

All roses were trimmed, removing 50 percent of the leaves (lower, of course), soaked
under warm water (flowers and stems) for 30 minutes, recut under the water, and plac-
ed in the 6 vases with the following solutions, all made with San Diego tap water (ugh!)

- 1 - ½ pint regular 7-UP (diet type won't do!), ½ pint water, ½ teaspoon house-
hold bleach.
- 2 - 1 quart water + 2 Tablespoons vinegar, 1 Tablespoon sugar, ½ teaspoon bleach.
- 3 - 1 quart water containing 2 percent "Floralife"
- 4 - "Cornell Solution" = 200 ppm 8- hydroxyquinoline citrate, 50 ppm aluminum
sulfate, and 25 ppm silver nitrate plus 2 percent sugar.
- 5 - Tap water only (the control treatment)
- 6 - 1 quart of water, 2 Tablespoons lemon juice (fresh), 1 Tablespoon sugar,
½ teaspoon bleach.

The booth was in a hot natural sky-light, greenhouse-like tent. Basically, all
flowers in 5 repeated groups opened from their buds. However, neck droop and severe
wilt set in with treatment 2 and 5 within 2 days. I suspect that without the hydration
treatment, removal of leaves, and cutting under water, these flowers would not have
opened at all! Why the vinegar and sugar treatment failed, we don't know, unless
the pH was too low. The lemon juice-sugar-bleach treatment was absolutely superb.
The flowers opened fully and lasted 7 to 8 days. In fact, all four treatments:
(1) 7-UP-sugar-bleach, (3) 2% "Floralife", (4) "Cornell Solution" and (6) lemon
juice-sugar-bleach, were basically equal and excellent in performance. If you want
to get really particular, the Cornell solution was a hair better than all others be-
cause the aluminum sulfate kept the petals from blueing -- but the difference would
not be obvious to the average observer. My office staff often choose the blue-red
roses over the brighter-red in vase life experiments !!

The take-home message is that consumers can easily make excellent cut flower solutions
for roses and other flowers from their own available household ingredients. Our
"recipes" at the fair booth were well received and a favorite hand-out. But also
important, an overnight treatment by growers in a solution of 200 ppm citric acid
could do wonders for rose keeping quality.

Resemer '83