

## Solve the Solution Problem

By Gay Smith

ASK BUSINESS TRAVELERS TO RECITE THE PRE-FLIGHT safety announcement and they'll probably nail it, word for word. So why listen? Because if something goes wrong, we want to act automatically, rather than reaching for the instruction card. Is it fair to draw a correlation to flower care? Yes, because if you are reading this article, you can recite the basics of care and handling: Measure when mixing so the dosage is correct, give stems a fresh cut before placing them in solution, sanitize buckets every time one is emptied and maintain proper temperatures to maximize vase longevity. Yet, even while surveys tell us vase performance is directly tied to consumer satisfaction, a wide array of incorrect processing methods and home remedies still flourish. Confusion and carelessness in care and handling cost our industry sales because dissatisfied consumers rarely give flowers a second chance.

This problem may be related to the fact that in 30 years of visiting retail and wholesale locations, I've never seen a written explanation of what solution to use and how to use it posted in any processing area. Until that happens, think about this: Flower solutions are the best insurance you'll ever buy. Demystify the process by developing a system that works for you and your staff.

### Solution Primer

Correct solution use benefits flowers and your bottom line. First of all, when mixed according to instructions, you can use solutions for the maximum time they are active — usually three to six days. (Remember, smelling chlorine in the air says nothing about efficacy, only about the volatility of chlorine molecules.) Maximizing solution use also reduces water consumption and realizes a labor savings in time required to prep and change out buckets.

Not all solutions, however, are equal: Some are best applied at the grower level in post-harvest to prepare blooms for transport. The basic functions of post-harvest

### Try Out This Balancing Act

While spring's bulbous flowers are beautiful, they also are sensitive to premature foliage yellowing, bud stagnation, loss of color vibrancy and short vase life. Those quality problems are symptoms of imbalanced plant growth regulators, commonly called hormones. Rebalance the hormones and symptoms disappear and vase life improves. If you don't believe me, e-mail me your address for a sample of a bucket solution for bulbs and conduct your own test.

— G.S.

solutions are loosely categorized into four groups:

- **bacterial control** so the vascular systems remain clear;
- **boosting flow** through stems with use of wetting agents and pH adjustment;
- hormones to **improve longevity, foliage quality** and **prevent stem stretch** (tulips)
- and most importantly, **STS**, a systemic drink used to **prevent damage when blooms are exposed to ethylene**.

Some of the same solutions are used again when flowers arrive at bouquet-makers, wholesalers — even retail shops. Correct solution use depends on the flower type and transit method. Wilt-sensitive flowers such as hydrangeas and roses are best treated at the wholesale level in hydration solutions to kick-start flow after long periods of dry transit. Hydration solutions do not contain sugar because, if introduced too early in the chain, sugar *can* slow down the flow or stimulate leaf yellowing.

### Hit on Clean Hydration

Comprehensive hydration requires two to four hours, and hydration solutions can be reused for up to five to six days if buckets are held in coolers. For best results, skim green trash between uses and don't consolidate old solutions when levels gets low; start fresh instead. Don't forget "dirty" flowers such as dahlias, kale, snow on the mountain, zinnias and gerberas fare best in a slow-release chlorine solution. "Dirty" flowers bleed enzymes and organic juices when cut, causing bacteria to go crazy. Chrysal USA and Floralife have processing pills for these flowers that utilize a type of chlorine that provides germicide protection for two to three days compared to the four to six hours of control provided by liquid bleach.

### Proper Follow Through

Low-sugar solutions boost flow, keep pollution in check and provide a minimum amount of sugar to stabilize color and keep blooms turgid. These solutions can be reused for up to five days depending on how you display blooms — in the cooler or at room temperature. Display solutions come in liquid or pre-measured biodegradable packets that stay in the buckets for a visual check that flowers are in solution.

A final note: Blooms need a little sugar to reach their genetic vase potential. Photosynthesis basically stops at harvest, so flowers cannot replenish necessary carbohydrate reserves. By the time flowers go into the consumer's home, internal reserves are low or depleted. At this stage, blooms require a flower food with a maximum amount of nutrients to keep them upright and vibrant. Vase solutions provide 30 percent hydration and 70 percent nutrient (sugar). 🌿

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