

Summertime and the Handling Is Easy

By Gay Smith

HOT SUMMER DAYS ARE GREAT for pool parties and barbecues, but they're not so great for flowers — the hot temperatures can hurt flower performance. Knowing the basics about flower physiology, however, provides the tools needed to make good handling choices — even when the heat is (literally) on.

Warding Off Dehydration

Temperature fluctuations and dehydration rob flowers of vase life potential. Reducing stress at every step in the supply chain means a longer vase life for the consumer. Another stress factor is the depletion of energy reserves that begins when blooms are harvested and photosynthesis stops. Flowers processed into slightly acidified solutions with nutrients and germicides fare better than stems placed in bleach water, aspirin or penny-infused solutions. When the germicide is lacking, bacteria plug stems fast. Without sugar, buds don't have sufficient reserve of energy to continue opening and/or holding in the vase.

When flowers arrive dehydrated, some florists submerge stems (bloom and all) to revive blooms. There are downsides to this method: If fungus spores are present, moisture on the petals can trigger germination and subsequent Botrytis infection. Also, bunches need to drip-dry before going into cooler, which requires excessive handling and leads to mechanical damage. Misting corsages, bouquets, stephanotis florets and boxed roses before storing in the cooler can result in the Botrytis problems, too.

A good rule of thumb is to keep flower petals dry. This rule also applies to finishing sprays. Allow the spray to dry before placing bouquets in your cooler. Use distilled water when spraying stephanotis blooms to avoid any spotting from high salt concentration in tap water. Always use correct processing techniques: measure when mixing; set up buckets a day ahead to pre-chill solutions; allow time for condensation to evaporate inside sleeves before flowers go in coolers; give stems a fresh cut; and hydrate flowers for at least four hours before using them.

Flowers left dry on design tables dehydrate fast in warm weather. This causes unnecessary stress (read: reduced vase longevity). And don't forget to tell your delivery drivers not to smoke or allow exhaust to be sucked into cargo area, which causes ethylene damage.

When things start to sizzle in summer, consider increasing the solution level in vases and buckets. It's not uncommon for sunflowers, roses, chrysanthemums, dahlias and bouvardia to



ENERGIZE ME The sugar in flower food gives dahlias much needed energy to keep their blooms open.

suck a bucket dry in 24 hours. Always top off with fresh solution, not tap water. Never pour old solutions together when consolidating products in cooler or on floor display.

Summer Buds — from the Garden or Your Wholesaler

I'm often asked about "secrets" for treating summer flowers. One out-dated method suggests dipping **dahlia** stems in boiling water to prevent wilting, but far better results are obtained with a commercial flower food. The sugar improves vase life and provides needed energy to keep blooms open. These blooms don't

like extended cold temperatures, so minimize cooler storage to two to three days.

Zinnias and marigolds pollute the water fast, causing stem cells to shrink and collapse. Both flower types benefit from drinking water treated with slow-release chlorine. Zinnias don't fare well in the back stock cooler. They are happiest around 41°F to 50°F.

Rudbeckia and godetia, on the other hand, don't require special treatment except bacteria-free water — so slow-release chlorine pills work perfectly. Ask your wholesaler for either Professional Gerbera (Chrysal) or PAL (Floralife). Retailer BJ Dyer, AAF, AIFD, PFCI, of Bouquets in Denver, recently posted to the AIFD online forum that using organic materials underwater in designs "caused flowers to go down in no time," but since using these pills, he's "had absolutely no problem" with that.

Process stems cut from your garden to use in the shop, like commercially grown blooms: Prep a bucket of flower food so you can immediately place blooms into flower food solution, not tap water, because they drink the most in the first hour. Use clean, sharp shears and cut early in the day: Dull cutters smash stems or produce ragged cuts, intensifying the amount of cells released into the solution. Stems themselves exude enzymes, carbohydrates and amino acids when cut. All these organic bits cause a feeding frenzy for bacteria. Without a germicide to keep pollution in check, bacteria populations explode fast and block flow through vascular tissues.

Finally, make sure dry-pack flowers get processed as soon as they arrive to the shop and receive a first drink that is slightly acidic, cold and contains a germicide. Happy Summer! 🌸

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