STRESS BUSTERS Use commercially produced solutions that contain acid, nutrients and germicides to reduce the "stress" flowers endure in summer months, when inside and outside temperatures fluctuate.

BEAT THE HEAT

> It's hot, and you need your flowers cool. Follow these tips for keeping flowers fresh and hydrated through the warm summer months.

Prevent Parching

When temperatures fluctuate, as they do between air-conditioned rooms and the summer outdoors, flowers get stressed. And stress reduces vase life. Flowers also get stressed if they're processed into, say, bleach water, aspirin or penny-infused solutions rather than a commercially produced solution that has the acid, nutrients and germicides the flowers so desperately need. Without the germicide, the flower stem gets plugged, preventing the bloom from drinking and sapping the buds of the energy needed to open and last in the vase.

Be sure to process dry-pack flowers as soon as they arrive at the shop. Make sure their first drink is slightly acidic, cold and contains a germicide.

It's tempting during hot months to submerge flowers — blooms and all — in water to revive blooms. Consider the downsides: Any fungus spores that are present will trigger Botrytis infection. So allow the flowers to drip dry before going into the cooler. The same goes for misting corsages, bouquets, stephanotis and boxed roses; let them dry before returning them to the cooler.

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.

The warm weather is particularly tough on flowers that are left dry on design tables, so avoid that when possible. And don't forget to tell your delivery drivers not to smoke or allow exhaust to be sucked into the cargo area, which causes ethylene damage.

Skip Shortcuts

Hotter weather is also a good time to increase the solution level in vases or buckets. Sunflowers, roses, chrysanthemums, dahlias and bouvardia can easily go through a bucket of water in 24 hours on a hot day. Fill those buckets higher than you typically would. Never combine an old solution with a new one. Even though consolidating buckets may seem the most efficient thing you can do, it's like throwing money down the drain: Old solution plus new solution equals a useless solution!

And if you tinker in growing your own cut flowers on the side — or buy from local hobbyists — process them the same as you would the flowers from your wholesaler: Prep a bucket of flower food so you can immediately place blooms in feeding solution, not tap water, because they drink the most in the first hour. Use clean, sharp shears because 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 flowers from drinking through vascular tissues.

Gay Smith is the technical consulting manager at Chrysal Americas in Miami. gaysmith@earthlink.net