# **Care and Handling**

## SHRINK YOUR SHRINK: THINK SAVINGS

> The popular just-in-time inventory concept is both smart and dumb when your product is highly perishable. Global production has eliminated the notion of "seasonal" flowers from the average consumer's mindset — consumers feel confident that any flower is available at any time (thank you, Martha and your cohorts). Retailers work out of their wholesalers' coolers. Wholesalers buy as late as possible. All of these last-minute actions are done to reduce waste. But there are other ways to shave a percentage point or two from monthly shrink costs that don't involve living a last-minute life.

### Keep it Cold

Managing temperature is all about slowing down the aging rate of flowers — a critical consideration since 75 percent of all production is off-shore. Just as the bananas at your local market didn't get off-loaded from Costa Rica yesterday, the same scenario holds for flowers.

To prepare flowers for transit, blooms must be cooled soon after harvest and then hydrated four to 13 hours. Hydrating reestablishes the water relationship broken at harvest; and lowering the temperature to 33-35F slows respiration and, consequently, aging. This is critical during high-demand periods, such as Valentine's Day and Mother's

#### **BUY RIGHT**

If your buyer is smarter than a fifth grader, she knows to ask suppliers what treatment flowers receive post-harvest. One-size-fits-most protocols doesn't ensure quality product. The most glaring example is purchasing a flower sensitive to ethylene exposure, like sweet peas, and not checking to ensure it is treated in postharvest with STS or 1-MCP. Another specialized need: Protea need high-sugar flower food solutions starting at the grower level so leaves don't blacken. Ask if tuberoses are held too cold for too long, because the tube florets will shrivel and die rather than opening. A good buyer avoids the "don't ask, don't tell" method of purchasing and never bases purchase decisions solely on price.

Day, when demand requires importers and growers to backstock inventory.

Respect the cold chain, and you'll reduce shrink. Once flowers are cold, keep them cold. Wholesalers who pull product from coolers to the sales floor during market days may entice customers to buy, but they are robbing them of days of

vase life by letting flowers sit at ambient temps. According to data from George Staby, Ph.D., of Perishables Research Organization, and Michael Reid, Ph.D., of University of California-Davis, a rose's respiration rate is three times higher at 50F compared to 32F.

Respecting the cold chain applies to retailers, too. When receiving deliveries, process them immediately — never have the drivers drop the packages in the back room to be processed after the morning's orders get out. Instead, reduce stress and Botrytis potential by getting flowers immediately into the cooler. Set up buckets the day before, and pre-chill solutions. When cold flowers go into cold solutions, little condensation develops inside sleeves or on petals, which makes for drier heads, less Botrytis risk and, ultimately, reduced shrink.

#### Clean up Your Act

With a bit of tweaking, it's easy to reduce shrink just by ramping up sanitation practices. If you don't want to or can't take the time to sanitize buckets, consider using a thin plastic liner. Change it with every bucket use. If you're scrubbing, add a flower-friendly detergent to your bleach solution. Clean solutions flow; bacteria-laden solutions don't. What about the condition of cutters, choppers or shears? Dull choppers are worthless. Ragged stems leak organic cells, elevating bacteria populations fast. Wholesalers, why not spray the chopper blade or packing tables



ROUGH RIDE Avoid slamming boxes down during processing or risk decapitated and bruised buds.

with cleaner solution between orders? Botrytis and bacteria wait to launch onto exposed surfaces and both Chrysal Cleaner or Floralife DCD require no drying between uses.

#### Be Gentle

Too often, a box of flowers is dropped on a pallet or dumped onto processing tables without much attention to internal bruising, impact damage and the fact that heavy handed handling flips on the internal ethylene trigger. Ethylene comes in two ways: internal as a response to wounding or damage and externally from exhaust, dirty bucket water and cigarette smoke. Ethylene kills flowers fast. Dead flowers go on the shrink list as a line item under cost of goods.

Any article about saving money and reducing shrink has to include a few words about solution use. Measure when mixing. Follow manufacturer's instructions to get your money's worth. Don't kid yourself into thinking plain water is good enough. Tons of research shows that flowers last between two to five days longer in a flower-appropriate solution compared to plain water.

Smart is the new sexy!

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