## **Care & Handling**

# **Gerberas Galore**

**By Gay Smith** 

THE POPULARITY OF GERBERAS HAS EXPLODED during the past few years. The colorful blooms dominate mixed bouquets and Gap clothing ads. No question, gerberas have risen to star status in consumers' eyes. Unfortunately, quality problems can sometimes cast a pall on the popular divas. Questions about solutions, Botrytis, collapsing stems, hydration problems and spotty petals abound in my e-mail inbox. It wouldn't be such a big deal, except it's hard to substitute a gerbera with another flower, especially since they have a significant position in consumers' décor consciousness. What conveys contemporary cheer and "retro" trends better than gerberas?

#### **Defend Against Infection**

Gerberas need buckets and solutions free of bacteria, molds, fungi and organic material (green bits). They're sensitive to Botrytis — some varieties more so than others. Often, when users pull a stem out, they inadvertently drip on another bloom's face or "eye." Sometimes, stem tissues scrape as they rub against the cardboard collar. Since the center of a gerbera (the disc) is tightly packed, water tends to snuggle in rather than run off or evaporate. Water, whether condensation or large droplets, doesn't evaporate rapidly from dense flower centers or flowers with packed clusters. If Botrytis spores are lurking, the water and cool temperatures provide a perfect breeding ground for infection. As it develops, the disease compromises the neck tissues in gerberas and heads rot off.

#### **Ditch Household Bleach**

In post-harvest, growers treat gerberas with chlorinated water, often using household bleach. Bleach (sodium hypochlorite) is cheap and aggressive but unstable. When diluted, it loses its antibacterial effect in as few as four hours — and a strong smell isn't a good gauge of its effectiveness. The active antibacterial power of bleach is a one-time expenditure. Whether it's fighting the bacteria in a dirty bucket or bacteria clinging to the stem of a flower, once bleach makes its fight, it becomes inactive. So, flowers set in dirty buckets never receive any benefits from bleach. Killing the pollutants in and on the bucket completely depletes the chlorine, and it never gets to clean up the solution the flowers drink.

The skyrocketing popularity of gerberas has forced post-harvest companies to develop more stable chlorine formulations available for grower investigation. New, better treatments have been introduced in the past year. These treatments are chlorine-based but utilize a different formulation of chlorine — instead of the short-lived formula of sodium or potassium hypochlorine used in bleach. Ask your supplier about new formulas; some provide a longer active life (up to three days) and are easy to apply (effervescent pill form), making them suitable for use at every level.

### **More Vase-Testing Needed**

Arketing successes aside, what about quality? If gerberas in a mixed bouquet droop, the entire "look" is lost. For insight on quality challenges, I've asked lots of questions as I visit growers, breeders and quality control experts. Overall, the industry needs more vase-testing on new varieties prior to market introduction — including simulating extended transit time and real-time handling practices. Some of my best friends are breeders, so I'll step carefully here, but it's no secret that the fast and furious onslaught of new introductions in the past 10 years may have resulted in some of the poor vase performance we struggle with today.

— G. S.

#### **Sugar-Free Fun**

Unlike almost every other flower family, gerberas don't like sugar as part of their handling regime. Flowers assimilate sugar, usually in the form of simple sugar such as glucose, more easily than sucrose (table sugar). Sugar stabilizes color, provides energy for buds to open and hold and enhances fragrance potential (if it exists). Gerberas arrive in the supply chain fully colored, open and fragrance-free, so sugar won't maximize vase performance. Instead, gerberas fare best in hydration solutions and chlorine solutions.

#### **Cold, Cut Advice**

Temperature management is important with gerberas, which fare best when handled and stored at temperatures no colder than 41°F. Since most flowers are shipped and held at temperatures between 34 and 38°F, holding gerberas at a slightly higher temper can be hard, but doing so (especially at the grower level) improves vase performance.

Cut point also affects vase performance. Cut too soon, and gerbera stems don't have sufficient ligneous material in the cells of the stem "neck," causing heads to droop. The correct cut-point is when two rings of anthers show in the flower disc.

Consumer interest in gerberas hasn't reached its zenith, so attention to post-harvest care, handling specifics and sanitation is important. Improved packaging and display methods make these gorgeous blooms easier to ship without sustaining mechanical damage and new processing solutions insure maximum vase-life.

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