

STRAIGHT TALK ABOUT GERBERAS

THE PATIENT Gerbera daisy

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THE SYMPTOMS Stem bending

The Examination

Stems as weak as cooked spaghetti are not what retail florists or customers expect or deserve. But that's exactly what we found the minute we took these gerberas out of their protective flower sleeve and removed the plastic tubes carefully placed on the stems. We also noticed stem-bending following hydration in cold storage and shuddered to see the symptoms during simulated consumer tests. Imagine the recipient's disappointment when the flowers meant to lift their spirits drooped before their eyes.

Stem bending is a widespread problem for gerberas and frequently blamed on gravity or harvesting before the stem has sufficiently stiffened. But other factors are at play — ones you can control.

The Diagnosis

A major factor in stem bending is bacterial contamination of floral solutions. Bacteria in solutions enter and block xylem vessels, the water transport system of the stem, causing a reduction in the rate of water supply to flowers. Once these vessels are blocked, the stem will collapse and cause premature flower death. The stems of gerberas, like those of other flowers, tend to carry natural bacteria on their surfaces that easily contaminate solutions.

Reusing hydration solutions is just asking for trouble when it comes to gerberas. The bacteria buildup happens quickly — we found a 66 percent increase in the bacteria load in just a few days. Take a close look at the bent stems in the photo: They were hydrated in a reused solution; those on the left were hydrated in a fresh solution.

Gerberas are typically transported and stored cold (32 to 35 degrees), but we were startled to discover the incidence of stem bending on several gerbera varieties tested after they were

hydrated in retail display coolers at 35 degrees. Symptoms appeared in two days.

The good news is that stems of most varieties did straighten back up within 24 to 48 hours once removed from the display coolers and placed in simulated consumer conditions, but some varieties were affected long term.

The Cures

Clean and sanitize buckets, cutters, work areas and coolers to keep bacteria at bay. Always use freshly made hydration and flower-food solutions, as they contain effective biocides that help reduce microbial growth. Resist every temptation to reuse solutions, as they can be swarming with stem-plugging bacteria. Specialized products designed for sterilizing flower stems or made specifically for gerberas are highly recommended, as many of them control bacteria.

Always re-cut stems when first processing and between solutions to remove blockages and air bubbles. This promotes maximum water absorption up the stem. We do not recommend cutting underwater as it only promotes bacterial growth. Those chopped-off stems in the cutting tank are just the breeding ground for the bacteria you're trying to avoid.

Flower stems need to be physically supported while hydrating at low temperatures. Hang flowers through a mesh support or a shipping tray to prevent bending. Chicken wire is a low-cost solution that can easily be held in place over a bucket or Procona opening, allowing the base of the flower to be totally supported as the stem sits suspended in the floral solution. Floral wire is another option.



LAZY DAISY Bacteria can sap the strength from gerbera stems, leaving them hung over like those on the right.

Prevention

Do not store gerberas for longer than seven days. Although they have a remarkable ability to rehydrate quickly after dry storage, more than a week of storage will shorten subsequent vase life.

Store and display flowers in cold temperatures. Higher temperatures will reduce bending, but a warmer climate will also drastically reduce vase life — a tradeoff that's definitely not worth it for customers.

Gerberas love a neat freak. You can perfect temperature control but if it's a dirty environment, your gerberas will suffer. Sanitation is just as important as temperature in terms of longevity and minimal stem bending.

Choose varieties that are less susceptible to bending or that recover quickly and have a long vase life. Always supply flower-food packets to consumers to reduce bacterial growth and maximize vase life. 🌸

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