



Flower School: This is the second in a five-part series on extending flower life and maintaining flower quality.

KEEP IT CLEAN

> Cleanliness is a key component in flower care and handling. Flowers — and everything that touches them — should be as clean as possible for best performance. Dirty conditions in coolers, work/design rooms, buckets used for hydrating flowers and even delivery trucks translates to opportunities for disease and shorter vase life. Let's look at a cleanliness program that works for growers, wholesalers and retailers.

Clean Water, Buckets and Vases

As we discussed last month, water is essential for flower life and flower opening. Water is pulled up the stem by a pressure differential between the leaves and the base of the stem. Microbial growth occurs when there are dirty conditions in vases or hydration containers, or if vase solutions are reused. These microbes block the flow of water up the stem. Using clean buckets with properly mixed hydration and flower food solutions will minimize microbial growth and maintain a steady flow of water up the stem. Many discussions of cleanliness end with the discussion of clean buckets. But this is just the beginning.

Clippers, Cutters, Knives, Work Surfaces, Hands and Clothing

Microbes and disease spores collect on clippers, work surfaces and coolers. Aggressive and frequent cleaning is the

only approach that works to prevent contamination from spreading to petals, leaves and stems. Use an alcohol solution or disinfectant to clean clippers and knives and antibacterial solutions on cutting surfaces and design tables. As you'll recall from last month's column, cutting stems underwater leads to contamination quickly. When researchers cut 300 rose stems under water, vase life was reduced by 40 percent compared to stems cut dry and placed directly in properly mixed hydration solutions. And keep in mind that disease spores can reside on hands or on clothes too — so wash your hands and aprons frequently.

Disease Spores: They're Everywhere

Disease spores are not visible to the human eye except at very high infestation levels, but they are always present and are easily dispersed in the air. Picking up flowers in the cooler may release spores into the air, onto clothing, and onto cooler benches, the floor and the walls. These disease spores may remain for at least a year, unless you remove them by cleaning. At the present time, there is no scientific evidence that air-scrubbing devices are sufficient to solve the problem of airborne contamination of disease spores, so it's key that you deep-clean your shop regularly.

Cleanliness Checklist

Avoid flower loss and increase profits by following these recommended practices:

- Wash hands frequently.
- Sterilize cutting tools as often as you can.
- Clean and sterilize buckets between each use.
- Wash design tables with antibacterial solution several times daily.
- Remove flower waste remaining from designs and dead and diseased flowers from the processing and design area frequently.
- Cover garbage cans containing flower and plant debris.
- Sweep floors several times daily.
- Avoid underwater cutters.
- Wash walls, floors and tables/benches in coolers monthly.
- Clean the interior of delivery trucks at least weekly. 🌿

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GO DEEPER

For additional information, read the American Floral Endowment's report "The Three C's of Success With Fresh Cut Flowers - Cleanliness," at safnow.org.moreonline.