

10 Hacks to maximize your time & investment

1. *Cool it*
2. *Tool time*
3. *Right solutions deliver 100% results*
4. *Speed uptake*
5. *Slice and Dice--ragged edges not allowed*
6. *Handle with Care*
7. *Prevent splashing*
8. *Stripping happens best in the privacy of your home*
9. *Cure Brain Freeze*
10. *Germs stink*



1. COOL IT: Cold temperatures slow death rate of flowers. Fluctuating temperatures result in condensation with invites Botrytis disease.

Cooler Set points

Back Stock Cooler: 34-36F

Tropical Cooler: 50-55F

Display Cooler: 34-42F

Relative humidity: 50%

Recommendation: Schedule cooler service prior to Valentine's Day action. Vacuum coils, check humidity level, Compressor check, thermometer verification

2. TOOL TIME: Sharp and clean tools are important to prevent cross contamination and maximize solution efficacy. Sharpen choppers and cutters as needed at least once a month. Sanitize tools and choppers 2 x day by dipping or spraying blades with ready-to-use bucket cleaner (not bleach)

- Dull tools give ragged stems that bleed organic juices and cells into solutions. Bacteria thrive on organic juices and cells.
- Polluted water does not efficiently flow through stems.

3. RIGHT SOLUTIONS DELIVER RESULTS

Different flowers have different needs. Check suppliers for specific solutions such as Bulb & rose food.

4. SPEED UPTAKE: Cold water travels faster through stems than warm water

- Treated water with pH level in range of pH 4 travels most efficiently through stem cells
- Clarifiers are pH dependent which means they are 100% at pH range of 4

5. SLICE AND DICE—*Cut 1-2 inches off every stem. 80% of germs, bacteria and crud gets lodged in bottom inch of stems so it is important to remove it and calloused tissues for robust stem flow*

6. HANDLE WITH CARE—dumping out a box of mini carnas onto a cutting table, brushing past gerbera trays in a cooler, dropping boxes on pallets in coolers, reaching past lower buckets to grab from the top shelves--all causes problems. Rough handling likely won't show for 24-48 hrs, but it predisposes flowers to disease problems and stress. Stress causes internal production of ethylene. Ethylene kills flowers and plants fast.

7. PREVENT SPLASHING—keep petals and flower heads dry. Even a micro-film of moisture is enough for Botrytis spores to start germinating.

- Keep blooms dry.
- Keep cooler floors dry. If product arrives with lots of condensation inside sleeves, allow time outside the cooler for evaporation.

8. STRIPPING IS BEST CONFINED TO THE PRIVACY OF YOUR HOME

- Remove only the leaves falling below water level.
- Leaves contain the plumbing system to pull solution into stems. No leaves, no uptake.

9. CURE BRAIN FREEZE: Take out the guess-work!! Develop written instructions on specific treatments for specific flowers. Include photos, measuring guides and injector settings for various flower treatments.

10. GERMS STINK: Prepare cleaning schedules for sanitation protocols. Include bucket washing, table sanitation, cooler deep-cleaning and tool care. Post info so entire staff knows the procedures

HACK BUSTERS:

- Flower food clogs stems. **No, it stimulates free-flow in stems**
- Add a little each day. **Follow the dosing instructions. The amount of water to flower food is super-important**
- Flower food burns foliage. **No, no, no!**
- Vase solution needs to be changed every other day. **No. properly mixed food is effective for 4-5 days at room temperature**
- Home brews work as well as the packets. **No. Research shows commercially formulated flower food gives superior results over all home-made recipes**
- Mix packets with warm water. **Use COLD water for fastest flow into stems**
- Doesn't matter if you give stems a fresh cut or not. **Yes it matters. Always cut stems to remove callous tissues for solution uptake**
- Only / always cut on an angle. **Straight or angled OK-- makes no difference in terms of up-take**
- Flower food is poisonous. **Not recommended for human consumption, but NOT poisonous**
- Vodka keeps tulips upright. **Research has never been able to support this statement**
- Add Ice. **NO! Ice dilutes the dose of flower food. Pre-chill water first, instead of adding ice**

BEST PRACTICES for Flower Prep

- Prep buckets with COLD water --even better, pre-chill buckets day ahead
- Get the dose right -- Over-dosing wastes \$\$\$, Under-dosing wastes time & \$\$\$
- 1/3 fill level is good. Keep leaves out of water
- Quick transfers into solution after cutting stems is super-important to reduce air-bubbles getting sucked into stem
- No ice—dilutes the dosage
- Never combine old solutions with fresh.
- Top-up with flower food, not H₂O
- DRY, Dry, dry. Avoid dripping on petals and flowers.