

Forced-Air Cooling on a Small Scale

Despite all the publicity in publications and seminars since 1977 on the advantages of forced-air pre-cooling of floral crops, only about a dozen major pre-cooling installations have been made in all of California. A few companies which showed leadership in using pre-cooling were Suyeasu, Cut Flower Exchange, Wilsey Bennett Trucking, Mellano and Company and Thompson Roses. Why did these companies invest? - because they sincerely wanted to deliver a superior product to the marketplace.

One simple item about pre-cooling is that it works! Also, it can be done on a small scale, basically in any floral refrigeration unit. A unit for 8 to 10 boxes is completely described and pictured on page 6 of the USDA Leaflet 21058 entitled, "Handling, Pre-cooling and Temperature Management of Cut Flower Crops for Truck Transportation." It is still available (for free) from your friendly farm advisor.

Gerberas - Postharvest Care

Cut gerberas need special attention to assure that consumers receive maximum value (vase life). First, cultivars of gerberas vary immensely in their genetic makeup and predictable vaselife. According to a recent report from the University of Florida by B. Tija and M.N. Rogers, the average days of vase life in plain deionized water was: Apple Blossom (9.0), Friendship (6.2), Tropic Breeze (4.2), Tropic Cloud (7.7), Tropic Lady (2.9), Tropic Princess (4.6), Tropic Summer (6.3), Tropic Sunset (4.4) and Tropic Tiger (6.5). This is a lot of variability. There are enough commercial varieties of gerberas to select ones with vaselife of seven days or more.

Second, several gerbera varieties are like some rose varieties and suffer notoriously from "bent neck." The Florida report showed a percentage of bent necks as follows (in deionized water): Apple Blossom (0), Friendship (60), Tropic Breeze (67), Tropic Cloud (20), Tropic Lady (75), Tropic Princess (20), Tropic Summer (20), Tropic Sunset (20) and Tropic Tiger (67).

Third, bent neck could largely be eliminated and vaselife could be extended at least 50 percent by: Pulsing for at least four hours in a solution of deionized water plus either 700 ppm clorox or 200 ppm 8-HQC.

Fourth, gerberas require a very clean water with absolutely no sediment or micro-organisms. Their stems are apparently more sensitive to plugging than other flowers. Using clean containers, deionized water, a bacteriacide such as clorox, Physan-20 or 8-HQC and perhaps even two percent sugar, and maybe more than four hours of pulsing, all seem like good things to try with cut gerberas.

Longevity of Lilies with STS

Using a STS (silver thiosulphate) pulsing for 24 hours (0.2 mM of STS in solution) nearly doubles the life of Enchantment Lilies. This is especially true if lilies have been exposed to ethylene.

In planting lily bulbs, emergence can be improved if dipped 24 hours in a solution of 0.2 mM STS. Even the bulbs are delayed by ethylene during storage!!