

A Cool Mandate

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TEMPERATURE IS A DOMINANT FACTOR AFFECTING cut flower vase life and quality. Traditional wisdom and practical experience have demonstrated that cut flowers, with the exception of tropicals such as ginger and anthurium, perform better when shipped and stored at cold temperatures. New research confirms the importance of temperature control at the retail level.

Many retail settings display flowers at room temperature, which can drastically shorten vase life intended for the consumer. Flowers held at cold temperatures, however, have reduced respiration, are less sensitive to ethylene, and produce less ethylene. Also, flowers that are kept cold are not subject to water stress. All of these factors translate to one very important quality conclusion for retail florists: your flowers will last longer for your customers if you keep them cold in your shop before and during display.

Check Your Cooler

Each morning, while your coffee's still hot, make certain your cooler is really cold. Two common mistakes often lead to improper cooler temperatures. First, retailers rely on a thermostat setting exclusively, and second, they place cooler thermometers incorrectly. Only one thing really matters: whether the *flowers* are at the correct temperature.

We recommend placing a thermometer in a bucket or jar of water on a shelf with the flowers. The water temperature will not be as affected by cooler doors opening, and you will obtain a much more accurate reading. Wall thermometers are too easily affected by the warm air that enters the cooler each time a door is opened. Once the temperature of the water is at the appropriate 35°F, check the cooler temperature setting and leave it there for optimal performance.

You may see some recommendations for cooler temperatures lower than 35°F. In most coolers, the thermostat has a temperature variance of +/- 2 to 4°F so that a cooler set for 35°F may go a few degrees lower than the set temperature. You do not want to risk lowering the temperature and having flowers freeze, so 35°F provides the necessary margin of safety.

Resist Room Temperature Display

Displaying most flowers, other than tropical flowers, at room temperatures for even a few days significantly reduces flower vase life for your customers. While you might be tempted to show off arrangements outside the cooler, you will doom your creations to an early death if you do. Over the past two years we have studied the impact of retail dis-



KEEP THEM COLD After eight days of storage, lilies displayed in 35°F (left) retail coolers lived twice as long as lilies displayed at room temperature (70°F) (right).

play temperatures on flower quality and longevity. COLD is critical. Lilies lose a day or more of flower life for every day they are held at room temperature. After eight days of display at 35°F, flowers had twice the longevity of flowers held at room temperature.

Vase life of roses is similarly reduced when displayed at room temperature. Displaying roses for six days at 35°F increased vase life of cut roses 61 percent over those displayed at room temperature, amounting to an extra six days of vase life for the consumer. If sales are slow, holding roses at 35°F buys you precious time, as we found no difference in vase life when displaying flowers for up to six days at 35°F. You will only lose precious time, however, if you display your roses at room temperature, as flowers will open and die more quickly under these circumstances. Some rose varieties show greater tolerance to temperatures slightly higher than 35°F but it is best to maintain flowers at 35°F.

Maintaining proper cooler temperatures is not difficult, but does need (and deserve) daily attention. Take a few moments and assess your procedures for keeping your flowers cool. You'll reap the benefits in terms of quality and repeat sales. 🌿

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