FloraCare® Research Update

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A Review of Cut Flower Storage

Store fresh flowers in a 34-38° F cooler with 80-90% relative humidity.

Temperature is one of the most important factors influencing the vaselife of flowers. By lowering the temperature, the flower's metabolism (respiration and transpiration) is greatly reduced. The result is a decrease in the natural chemical reactions that cause flower senescence (death). Ethylene action on flowers is greatly inhibited at lower temperatures (while in the cooler only). This slowing of metabolism resembles hibernation in some mammals. An example of the importance of temperature is shown in the chart below.

Relationship of Temperature to the Deterioration Rate of Many Flower Types

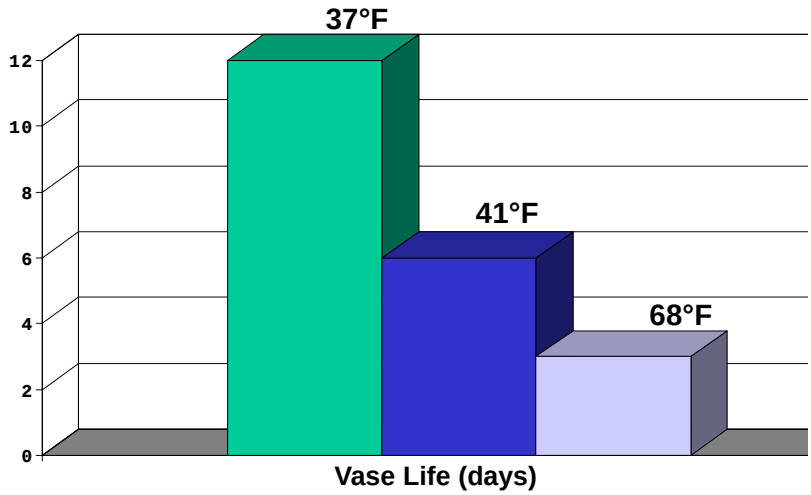
Temperature F	Relative Deterioration Rate
32	1- Reference Point
37	2-3
41	3-4
50	4-6
68	8-10

For example, at 41° F, a flower will deteriorate three-four times faster than a flower kept at 32° F. **Tropical flowers should be stored at 55° F or room temperature.**

Relative Humidity:

Relative Humidity is also a very important storage variable, especially if the temperature is above 32-34° F. The proper amount of water in the air will slow water loss from the cut flower (transpiration). When a flower goes through the process of transpiration, it loses water, causing water stress. Water stress can cause many undesirable effects like bent-neck and premature wilting. The relative humidity should be kept at 80-90%. If the relative humidity gets too high *(approaching 100%)* condensation will occur. Condensation on flowers can aggravate such problems as *Botrytis* (grey mold).

The Effect of Temperature on Vaselife



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