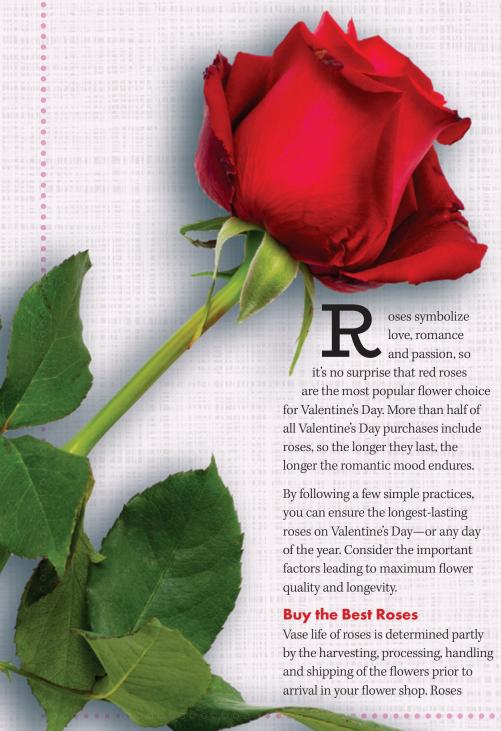
Care and Handling 101

Making Sure Your Roses Look Their Best



should be harvested at the correct stage of development, properly hydrated and free of leaf browning and diseases. *AFE*-supported research shows that many rose varieties are sensitive to ethylene. Flowers produce ethylene internally if stressed by temperature, vibration or disease. Symptoms of ethylene damage vary with variety but include petal and leaf drop, failure to open and reduced vase life. Growers can treat roses to prevent ethylene damage; be sure to ask your suppliers for this special treatment.

Process Roses Immediately

Most roses are shipped dry for long distances over several days and may have been harvested well in advance of the holiday. The care roses receive at the wholesale and retail points is critical to quality and vase life. Use of proper hydration and flowerfood solutions will increase vase life by three to five days or longer for consumers.

When your roses arrive, recut the stem ends with a sterilized cutter (unless using a no-cut flower food solution), and place flowers into sanitized buckets with a properly proportioned flower-food solution. Removing the sleeves at this time will reduce moisture on the flowers, reducing the possibility of *Botrytis* growth. Once processed, move the roses to a flower cooler.

Be Clean

Bacteria and flower diseases (Botrytis) can be spread from flower to flower with dirty clippers, knives and design tables. Clean tools, design tables and other work surfaces often, ideally after every arrangement but at least several times daily. Empty garbage cans into trash containers outside the shop. The flower and plant debris in garbage cans can be a source of disease spores that can contaminate flowers. And be sure to totally clean the cooler at least once each month by wiping down all surfaces with a sanitizing solution, to prevent bacteria and disease spores spreading to other flowers in the cooler. Use the specially formulated floral sanitation solutions that are available from your favorite wholesaler.

Use Hydration and Flower-food Solutions

The importance of water and flower food for flower quality and longevity cannot be overemphasized. Water allows cells to expand, which is necessary for flowers to open. The process of moving water from the base of the stem to the flower requires energy derived from sugars. These sugars occur naturally within the flowers, but once the flowers are harvested. their natural sugar supply gets used up quickly. The additional sugar provided by flower food is needed for flowers to open and to last. Without water and sugar, flowers will die prematurely.

Keep Roses Cold

Cold storage temperature (34 F to 36 F) slows respiration (conserving natural

sugars), reduces the natural production of ethylene and limits the growth of Botrytis. Check cooler temperature regularly. Cooler humidity should be between 70 percent and 80 percent to help maintain flower hydration. Humidity levels approaching 90 percent and higher will promote Botrytis growth. Cold temperatures contribute to vase life, but cold will not substitute for good sanitation, proper hydration and use of flowerfood solutions.

Provide Customers with Flower Food

Include flower food in all vases and arrangements, and provide customers with extra flower food for replenishing the solutions. Containers are often filled only halfway to avoid spilling during delivery. Educate customers about the importance of maintaining water in the container and using flower food. After all, encouraging proper care of your flowers is caring for the success of your business.



For optimum flower quality, establish good care and handling practices using the three "C"s: Cooling, Care and Cleanliness.

COOLING Maintain roses in a 34 F to 36 F cooler, with a humidity level of 70 percent to 80 percent.

CARE Use properly proportioned flower-food solutions and hydration solutions.

CLEANLINESS Use only clean, disinfected flower storage containers. Sanitize buckets, cutting tools, design tables and other work surfaces frequently.

FREE POSTER!

Educating everyone in your shop on how to properly care for and handle flowers is a priority. The American Floral Endowment (AFE) is offering a FREE CARE AND HANDLING POSTER that you can hang in your shop for training purposes or just as a constant reminder. Visit Endowment.org to request your FREE poster today!

AFE also encourages florists to have every shop employee watch the 30-minute YouTube video on care and handling, at youtube. com/watch?v=IAJemhBXQvM.





Funding Generations of Progress Through Research and Scholarships

The American Floral Endowment (AFE) is the trusted source and catalyst for floriculture advancement through funding of innovative research, scholarships, internships and educational grants that best serve the dynamic needs and demographics of all industry sectors. Visit endowment.org.

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