

# Missouri Environment & Garden

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## Winterizing Roses

“Of all flowers, methinks rose is best,” said Shakespeare. That sentiment still holds true today, since (arguably) rose is America’s most popular flower. Perhaps the fragile nature of the rose (and the plant on which it is borne) is a part of its mystique. In other words, if roses were easy to grow they might not be as popular among gardeners. A major factor contributing to plant fragility is a lack of cold hardiness of many popular types of rose. Early December is an ideal time to get rose plants ready for the upcoming winter or, in short, to “winterize” them.

Most of our modern roses, (e.g. hybrid tea, floribunda and grandiflora) need some type of protection during the winter. Since the past growing season was fairly kind to garden plants, most roses are going into the winter in relatively good condition. The goal of winterization is to keep them that way.

Protection from cold especially is important for the graft union—the point at which the named cultivar was budded onto a more vigorous rootstock. Abrupt changes in temperature (especially from fairly mild to very cold) can be especially damaging. Many of the things done to winterize rose plants are aimed at keeping temperatures more uniform throughout the winter.

Winterizing roses starts with thoughtful pruning. Remove excessive top growth, especially where rose plants have become over-grown. Tall canes (e.g. four to five feet) should be cut back about two-thirds of their length. Canes that are short but have abundant, bushy growth at their top should be pruned to allow about three-fourths of their height to remain. At the same time, weak, thin canes emanating from lower on the plant should be removed. Canes such as these can be damaged by winter winds.

In addition to pruning the top of the plant, application of mulch around the base of the plant is considered the best way to protect the delicate graft union. As previously mentioned, the graft union is the part of the plant most

sensitive to cold temperatures. During severe winters, the root system of unprotected plants might be the only part that survives. The result will be the



production of root suckers the following season. If the suckers flower at all, the flower will not be similar to the named cultivar that was budded onto the rootstock.

Any one of a number of mulches can be used to protect roses over the winter. Soil is excellent, readily available and inexpensive. If soil is used, it should not be dug from between plants unless spacing is quite wide. Additionally, bark, wood chips, aged sawdust or any other fairly dense material can be used. For best results, form a mound about 10 to 12 inches high and 18 inches wide at the base of the plant, covering the stem and bud union. Additional mulch may need to be added during the course of the winter should the original application settle.

Carefully remove all plant debris around the base of the plant before applying mulch. The inoculums of trou-

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blesome diseases such as blackspot may be present on this debris and will serve as a source of infection the next growing season. Any diseased leaves that remain on the rose plant should be removed as well.

The timing of rose winterization is important. Because of the latent heat contained by the ground, mulch applied too early will keep the stem of the rose warm and moist. The latter encourages the establishment of stem cankers. Delay winterization until several "hard" (killing) frosts have occurred but before the soil freezes should prevent the previously-mentioned problem. Treating the stems with a fungicide used to control blackspot before mound-

ing is a good precautionary measure, but not an absolute necessity.

Winterizing shrub roses such as the very popular cultivar 'Knock Out' is not necessary at our latitude. The latter was bred, along with other desirable traits, to be very cold hardy.

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## Buddha's Hand Citron- A Truly Extraordinary Fruit



*Photo credit: Daniel Mosquin*

Shopping for a unique gift for avid cooks or gardeners? How about adding an extraordinary Buddha's hand or fingered citron (*Citrus medica* var. *sarcodacylis*) citron to perk up your usual fruit basket? These fruits are about six to twelve inches long with five to twenty segmented carpels that look like long gnarled fingers (Figures 1 and 2). At maturity, the leathery rind is yellow and extremely aromatic.

The rind, or flavedo contains essential oils that are mostly derived from a beta ionone compound. Underneath the rind, there is seedless white tissue, called the albedo, with little or no juicy pulp. Unlike other citrus, the albedo lacks intense bitter flavors so the entire fruit is edible. Zest or tiny bits of the fruit are used for flavoring savory fish dishes and teas. It has also been used to infuse vodka, for preserves, and when candied, the peel is added to biscotti and desserts, such as pane forte. These fruits are also used as a natural air freshener and provide fragrance to cosmetics.



*Photo credit: David Karp*

This unique type of citron is thought to have originated in northeastern India, where Buddhist monks carried it to China sometime after the fourth century

A.D. "Fo-shou" or Buddha's hand citron is a symbol of happiness and long life in China, where it is used as an offering at Buddhist temple altars. It has also been used for medicinal purposes. Currently, in southern China four major types of fingered citrons are grown including the Guang fo-shou from Guangdong and Guangxi, Chaun fo-shu for Sichuan, Yun fo-shou from Yunnan, and Jin fo-shou from Ahejiang. In Japan, this citron is known as "bushukan" and is a popular gift to a household at New Year's as it symbolizes good fortune. Buddha's hand citron is thought to have been introduced into California from Japan in the late 1880's. In the United States, it was mostly grown as a rare citrus species in private gardens until the 1980's when there was about 25 acres of commercial production in California. At University of California-Riverside, researchers are currently conducting citron molecular marker studies and maintain plants in the UCR Citrus Variety Collection. Plants are also available for adventurous hobbyists from nurseries found online.

When grown outdoors, these evergreen small trees or shrubs are typically six to ten feet tall. However, they are quite frost sensitive and are adapted to sites within the USDA Hardiness Zones 10 and 11. However, they may also be grown in large containers in colder regions and overwintered indoors in a sunny location. Buddha's hand citron can also be used as bonsai plants. Flowers range in color from white to lavender and are fragrant. The fruit is purple when small, but turns green as it enlarges, and becomes bright yellow when ripe. Fruits are generally found in supermarkets from November through January. Pests, such as the citrus bud mite, citrus rust mite, and snow scale have been reported on Buddha's hand citron trees.

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# January Gardening Calendar

## Houseplants

- **Weeks 1-4:** To clean heavily encrusted clay pots, scrub them with a steel wool pad after they have soaked overnight in a solution consisting of one gallon of water, and one cup each of white vinegar and household bleach.
- **Weeks 1-4:** Some plants are sensitive to the fluorine and chlorine in tap water. Water containers should stand overnight to allow these gases to dissipate before using on plants.
- **Weeks 1-4:** Wash the dust off of houseplant leaves on a regular basis. This allows the leaves to gather light more efficiently and will result in better growth.
- **Weeks 1-4:** Set the pots of humidity-loving houseplants on trays filled with pebbles and water. Pots should sit on the pebbles, not in the water.
- **Weeks 1-4:** Allow tap water to warm to room temperature before using on houseplants.
- **Weeks 1-4:** Fluffy, white mealy bugs on houseplants are easily killed by touching them with a cotton swab soaked in rubbing alcohol.
- **Weeks 1-4:** Insecticidal soap sprays can be safely applied to most houseplants for the control of many insect pests.
- **Weeks 1-2:** Quarantine new gift plants to be sure they do not harbor any insect pests.
- **Weeks 2-4:** Amaryllis aftercare: Remove spent flower after blooming. Set the plant in a bright sunny window to allow the leaves to fully develop. Keep the soil evenly moist, not soggy. Fertilize occasionally with a general purpose houseplant formulation.

## Ornamentals

- **Week 1-4:** Gently brush off heavy snows from tree and shrub branches.
- **Week 1-4:** Limbs damaged by ice or snow should be pruned off promptly to prevent bark from tearing.
- **Week 1-4:** Check stored summer bulbs such as dahlias, cannas and gladioli to be sure they are not rotting or drying out.
- **Week 1-4:** To reduce injury, allow ice to melt naturally from plants. Attempting to remove ice may damage plants further.
- **Week 1-4:** Use sand, bird seed, sawdust or vermiculite to gain traction on icy paths. Avoid salt or ice melters as these may injure plants.
- **Week 1-4:** Make an inventory of the plants in your home landscape. Note their location and past performance. Plan changes on paper now.
- **Week 2-4:** Sow pansy seeds indoors now.

## Miscellaneous

- **Week 1-4:** Avoid foot traffic on frozen lawns as this may injure turf grasses.
- **Week 1-4:** Make a resolution to keep records of your garden this year.
- **Week 1-4:** Store wood ashes in sealed, fireproof containers. Apply a dusting around lilacs, baby's breath, asters, lilies and roses in spring. Do not apply to acid-loving plants. Excess ashes may be composted.
- **Week 1-4:** Check all fruit trees for evidence of rodent injury to bark. Use baits or traps where necessary.
- **Week 1-4:** Cakes of suet hung in trees will attract insect-hunting woodpeckers to your garden.
- **Week 1-4:** Brightly colored paints applied to the handles of tools will make them easier to locate in the garden.
- **Week 1-2:** Seed and nursery catalogs arrive. While reviewing garden catalogs, look for plants with improved insect, disease and drought-tolerance.
- **Week 1-2:** Old Christmas trees can be recycled outdoors as a feeding station for birds. String garlands of peanuts, popcorn, cranberries, fruits and suet through their boughs.
- **Week 1:** Christmas tree boughs can be used to mulch garden perennials.
- **Week 1:** If you didn't get your bulbs planted before the ground froze, plant them immediately in individual peat pots and place the pots in flats. Set them outside where it is cold and bury the bulbs under thick blankets of leaves. Transplant them into the garden any time weather permits.
- **Week 2-4:** Try sprouting a test sample of left over seeds before ordering new seeds for spring. (Roll up 10 seeds in a damp paper towel. Keep moist and warm. Check for germination in a week. If fewer than half sprout, order fresh seed.)
- **Week 4:** Swap seeds and plant information with your gardening friends.

*Gardening Calendar supplied by the staff of the William T. Kemper Center for Home Gardening located at the Missouri Botanical Garden in St. Louis, Missouri. ([www.GardeningHelp.org](http://www.GardeningHelp.org))*