



Roses

Historically, roses have been a favorite plant in the garden, grown for the beautiful flowers they produce. The ease or difficulty in growing roses depends on the class of plant selected.

More recently, the hardier shrub roses have gained popularity because of their landscape value and hardiness in the Kansas climate. Shrub and carpet roses are grown on their own root (not grafted) and have relatively few disease problems. They do not need supplemental winter protection. Maintaining 2 to 3 inches of mulch is sufficient. Shrub roses grow to 2 to 4 feet, and carpet roses grow to 18 inches. Spring pruning of dead or damaged tips is all that is required.

There are two general groups of roses: the bush form and climbing type. Bush-type roses have several classifications and many species and varieties.

Hybrid tea roses

The most outstanding flower performance is found on grafted, hybrid varieties that come in a wide range of colors. Most are fragrant. These plants are semi-hardy and require winter protection. They are susceptible to aphids and black spot. The plants grow 2 to 5 feet tall. The blooms are borne on single-flower stems and make excellent cut flowers. This group has also been called a monthly rose because it does not bloom continually.

Floribunda roses

Floribunda roses refer to a shorter rose bush with large clusters of flowers. Floribundas are very hardy and require less care. The flowers may be single or double, and the shrub ranges from 1-1/2 to 2-1/2 feet tall. Included in this group are other classifications of roses. The Polyanthas are

low-growing continuous blooming roses with flower clusters at the tips of the plant. Shrub roses are a miscellaneous group of wild rose cultivars that are vigorous, hardy, dense bushes, resistant to most common rose diseases and insects. Heritage roses are a classification of old roses developed in the 19th century.

Grandiflora roses

Grandiflora roses have characteristics of both hybrid tea and floribunda roses. Grandiflora roses grow 3 to 5 feet tall and bear five to seven blooms in a candelabra-like arrangement on each long stem. They make excellent cut flowers and bloom more frequently than the hybrid teas. Grandifloras must be monitored for insects and disease, and they require winter protection.

Climbing roses

Climbing roses produce vigorous canes up to 20 feet long. They need a support structure to keep them upright and produce showers of clustered roses.

Culture

Roses may be purchased bare root, in a dormant stage or actively growing in containers. Bare root plants should be planted immediately before they begin to leaf. Choose a sunny site where roses will not have competition from other plants. Roses require at least five hours of daily sunlight to bloom properly. Prepare the bed by spading to a depth of 2 feet. Add organic matter and starter fertilizer at a rate of 2 pounds of nitrogen per 100 square feet of bed. Prune bare roots, leaving 8 inches of healthy roots, and remove any broken or discolored roots. Canes should also be pruned to thin out weak canes, leaving three to four strong canes and five to seven leaf buds. Dig a hole large enough to comfortably accommodate the roots. Mound soil in the center of the hole and spread the roots over the mound. Any graft union should be planted several inches below the soil line. Fill two-thirds of the hole around the



roots with amended soil. Roses are susceptible to iron chlorosis. Incorporate 2 teaspoons of powdered sulfur into the soil to increase iron availability. Water well to allow the soil to settle around the roots without compacting the soil. Fill the remainder of the hole and water again.

Container planting uses the same method, but roots do not need to be pruned, and mounding soil in the center of the hole is not necessary. Prune any damaged or weak canes at planting time. The hole should be dug approximately 8 inches larger than the root ball, and then filled.

Fertilize roses three times a year: just before flower bud break in the spring, once during the flowering season and once in mid-August. Withholding fertilizer after mid-August will help the plant go into dormancy in the fall.

Prune roses in the spring just before new growth appears. Prune with a sharp, sterile pruning shear and cut at a 45-degree angle a half inch above a dormant bud, preferably on the outer side of the stem. Prune to remove dead wood. Diseased canes should be trimmed to the base of the plant. Remove weak canes and suckers from the rootstock, and trim the canes back 8 to 12 inches from the ground. Climbing roses should be cut back to 30 inches or pruned to thin and remove wild-growing canes. Removing faded flowers during the growing season will encourage subsequent flowering.

Common Concerns

Hybrid roses are most susceptible to insects and disease problems. Black spot, which is dark spots surrounded by a yellow halo, is infectious and can be prevented with fungicide. Spray the top and underside of foliage. Stem canker is a dark lesion, cracking bark or sooty patches on the stem or leaves. Prune out any canker areas just below the discoloration and continue with a regular fungicide schedule. Powdery mildew is another fungal condition due to cool night temperatures, humid conditions or periods of rainy weather.

The main insect problem on roses is aphids. Aphids are small, pear-shaped, soft-bodied insects that attack leaves and buds. The plant loses vigor as the insect feeds on the plant and deposits "honeydew" secretions. Aphids are controllable with contact or systemic insecticides.

Grafted roses require winter protection. Winterizing roses should be done in late fall after a hard frost to protect the plant from temperature fluctuation. In Kansas, this is recommended after the leaves drop or in mid- to late November. Trim extremely long canes to 24 inches from the ground. Spray the rose canes with a fungicide and mound soil and leaves or straw 10 inches high around the canes. In late March, gently remove the mounding to allow for new growth to emerge. Take care not to damage new tender growth during the removal.

For more information, refer to K-State Research and Extension publication MF-799, *Growing Roses*.

Emily Nolting, Ph.D.

Commercial Horticulture Specialist K-State Research and Extension enolting@oznet.ksu.edu