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# Growing Roses

## Rose classification

### *Old Fashioned Roses*

Shrub roses: “Species” or shrub roses are varieties of the original (“wild”) forms and are referred to by Latin name; for example, *Rosa rugosa* and *Rosa virginiana*. They are hardy and native to the northern hemisphere.

### *Modern Roses*

Hybrid teas: The most popular of the roses. They are characterized by having large solitary blooms on long stems, which are ideal for cutting. Plants grown 3 to 5 feet tall.

**Floribundas:** Literally means “abundant flowers.” Floribundas used to be called hybrid polyanthas. Clusters of smaller blooms are produced on lower-growing, more compact plants. They will provide masses of color in the landscape.

**Grandifloras:** They have similar characteristics of both hybrid teas and floribunda types. Plants are vigorous, producing more flowers per stem than hybrid teas, but have fewer and larger flowers than floribundas.

**Miniatures:** Normally reach a height of less than 12 inches. These naturally small-growing plants are true roses in every way, with miniature flowers and tiny thorns. Ideal for edging borders and container growing.

**Climbers:** Climbing roses grow long canes which are best supported by a trellis. They include the ramblers, climbing hybrid teas and floribundas, everblooming climbers and trailing roses.

## Hardiness

Hardiness is the first consideration when deciding to grow roses. Rose plants can be grown on their own roots or bud grafted onto a hardy rootstock. Most climbers, old-fashioned shrub roses, and miniatures are grown on their own hardy root system. Hybrid teas, floribundas, and grandifloras are sold as bud-grafted plants because their own root systems are usually not hardy in northern climates.

## Site

Roses require at least six hours of sunlight each day. Although some shade in the afternoon is desirable, roots or nearby trees will compete for water and nutrients. Provide good air circulation by proper location and spacing of rose plants. Offer some protection from high winds using hedges walls or fences.

## Site preparation

Any deep, fertile, well-drained garden soil rich in organic matter can produce good roses. The optimum pH for roses is between 5.5 and 6.5. A soil test is recommended to determine lime and fertilizer requirements.

Poorly drained soils can be corrected through the use of tile or trenches that direct water away from beds. A gentle slope may be effective in carrying off surface water.

Prepare the rose bed by spading or tilling to a depth of 12 inches. Work in 8 to 10 bushels of organic matter (well-rotted manure, peat, leafmold or compost) per 100 square feet. If available, well-rotted cow manure is an excellent soil amendment which also provides carbon dioxide for foliar growth.

## **Fertilizing**

Apply a commercial fertilizer, such as 5-10-10 or its equivalent, at the rate of 2 pounds/100 square feet after plants have put forth 4 to 6 inches of new growth in the spring. If the weather is dry following fertilization, water plants well.

Apply fertilizer again in June if the plants are showing nutrient-deficiency symptoms, such as pale green or yellowing leaves. Do not exceed 2 pounds of 5-10-10 per 100 square feet at this time. Fertilizer applications should not be made after July 1<sup>st</sup> as they may encourage the development of soft wood that will be injured by cold winter temperatures.

## **Planting**

Roses are best planted in the spring when soil crumbles and is not too wet. Hybrid teas and vigorous floribundas should be spaced 3 feet apart, climbers about 5 feet apart. Adequate spacing ensures good air circulation, which helps to reduce disease problems.

Plant bare-rooted, grafted rose plants with the graft union 1 inch below the soil surface. Dig the hole large enough to spread the roots in a natural manner. Cover the roots with soil, tap it firmly, and water thoroughly.

For containerized roses, dig a hole only as deep as the plant's rootball. Thoroughly loosen an area at least twice as wide as the rootball. Remove the container and set rootball into the hole. The plant's rootball should not be planted deeper or higher than the original container depth. Fill in the hole, tamping soil firmly and water thoroughly.

A small cone-shaped pile of soil placed in the center of the planting hole aids in spreading the roots uniformly in the hole and in adjusting the planting depth of the bush. When the plant is set on the cone, the bud union should be slightly below ground level.

Continue to water newly planted bushes with deep, thorough soakings as needed until the plants are established. Mulching with bark chips or other loose organic material will help suppress weeds and retain soil moisture.

## **Pruning**

The technique used when pruning climbing, pillar and rambler roses depends on the growth habit of the particular variety. Most ramblers and some climbing and pillar types send up prolific canes each spring. These canes are removed after they flower. *Do not break or bruise new canes for they carry next year's blooms.*

On other climbers where new canes are not so numerous, or where the older canes seem to bloom regularly, only the older and less-vigorous canes should be removed. Climbing roses bloom more prolifically when the canes are trained horizontally along a trellis, fence or arbor. Pillar roses are trained vertically and bloom along their upright stem.

All other types are pruned in the spring after danger of winter injury is past. Remove all winter-killed canes. Cut out weak, spindly growth, provided there are two or three more vigorous canes left. Prune back remaining canes to a point below which no winter injury is evident.

Little pruning is necessary during summer. In cutting flowers, leave at least two nodes at the base of each flowering shoot. Remove all faded flowers. Just before the plants are mounded with earth for winter protection, shorten the vigorous canes to prevent them from whipping in the wind. After a few years, experience will indicate the average amount of winter-kill to expect and canes can be cut back accordingly.

## **Diseases and insects**

The two most serious diseases attacking rose foliage are black spot and powdery mildew. These diseases can infect the canes and overwinter in plant tissue. Black spot appears as blackish spots with fringed margins on the leaves. The leaves turn yellow and drop off. Powdery mildew appears as white mold on the leaves, buds, and canes. It causes curling and purple to black discoloration of leaves.

The following cultural practices can reduce the severity, but not eliminate, these two diseases:

- Plant resistant varieties
- Prune and destroy infected plant parts
- Remove and destroy fallen leaves and prunings
- Space and locate plants to encourage rapid drying of leaf surfaces
- Avoid overhead waterings

Many insects feed on roses, including Japanese beetles, rose chafers, caterpillars and aphids. For specific recommendations on these potential problems, call UNH Cooperative Extension's Family, Home & Garden Education Center at 1-877-398-4769 weekdays between 9 A.M. and 2 P.M.

## **Winter protection**

Most modern roses will not survive many seasons in New Hampshire unless they receive winter protection. In late fall after the first hard frost, mound soil around the base of each plant to a height of 10 or 12 inches. Do not take soil from over the roots as the exposure will cause injury. Special protective devices, such as polystyrene cones, may be placed over the entire plant. The cap can be temporarily removed during warm spring days. Level or remove the mounded soil and the protective device when the danger of serious freezing weather (20° F) has passed.

For climbers, lay the canes on the ground and mound soil over the base of the plants. It may be necessary to hold down the canes with stakes. Cover the canes lying on the earth with a lightweight organic mulch and spun-bound polyester material. For more detailed information, request the fact sheet entitled "Winter Protection of Roses."

*This article was compiled by Virginia Hast, Program Associate, UNH Cooperative Extension, from "The Culture of Garden Roses," by R.E. Kozlowski and R.E. Lee, Cornell University; and The American Rose Society publication, "Be Your Own Rose Expert," by D.G. Hessayon and H. Wheatcroft.*

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