

University of Missouri Extension

G6601, Reviewed October 2004

Roses: Care After Planting

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Roses are well adapted to many different environmental conditions. However, proper care after planting is essential to develop the plants into beautiful and productive specimens.



The Meidiland rose is a disease-resistant cultivar that can be grown as an unpruned hedge.

Watering

Roses must have good drainage and perform best when they have abundant water. The soil around the roots should always be damp but never saturated with standing water. Add water when the soil is dry in the upper 1 to 2 inches.

Thorough, deep watering is important. Never give light surface waterings. Water should be applied slow enough to prevent surface runoff and long enough to ensure deep soil penetration. Until you become familiar with your soil and watering technique, dig into the bed after watering a given length of time to see how deep the water has penetrated. At each watering, soil should be soaked at least to a depth of 1 foot.

There are many methods for watering roses. One of the best is the sprinkler hose that has many fine holes, which produce a fine mist that is slow to run off. Don't water with a strong stream from the hose. This compacts the soil, causes erosion and spreads disease.

Overhead sprinkling is usually the most convenient method of watering. However, it washes insecticides and fungicides from the foliage. Therefore, dusts should be applied after watering while the foliage is still damp. Sprays should be applied the next day or after the foliage has dried from the

watering.

Wet foliage promotes spread of the disease black spot. Keep the foliage dry as much as possible. Water in the morning or early in the afternoon so the foliage will be thoroughly dry by evening. Consider installing a drip irrigation system in rose beds.

Mulching

All roses benefit from a mulch placed over the bed or around individual plants. Make the mulch 2 to 3 inches deep. This will help to keep the roots cool, moist and reduce watering. Don't place the mulch against the stem, but keep it about 6 inches away from the base of the plant. This forms a basin to aid in watering.

Fertilizing

Roses are hungry plants and, once established, need additional fertilization for best performance. If soil has been properly prepared for planting, maintenance fertilization will be relatively simple. Use either inorganic or organic fertilizers. A combination of both often provides best results. Inorganics are quicker acting and more concentrated. Organics are more slowly available and contribute fertility over a longer period of time. Some contribute humus to the soil.

Inorganic materials

Complete inorganic fertilizers as used on the vegetable garden are convenient and easy to use. The amount of nutrients in a fertilizer is indicated on the label. Usually it is given in three numbers (Example: 5-10-5). The first number always indicates the percent nitrogen; the second, phosphorus; and the third, potash (potassium). Thus, a 5-10-5 fertilizer contains 5 percent nitrogen, 10 percent phosphorus and 5 percent potash. Generally, roses need a higher percentage of phosphorus than the other two nutrients. Therefore, analyses such as 5-10-5, 4-8-4, or 4-12-4 are good maintenance fertilization for roses. However, if unable to find fertilizers with these or similar analyses, a 1-1-1 ratio such as 8-8-8 or 12-12-12 may be used.

Generally, when a complete fertilizer is used, about 3 pounds should be applied per 100 square feet or 1 heaping tablespoon per plant. Spread the fertilizer evenly around the plants and scratch it into the soil surface. This should be done before a rain or before watering.

The first application should be given in spring after danger of severe freeze is past. Additional applications should be made about every six weeks. Don't fertilize after July. It is best to reduce fertility in the fall to help harden the plants for winter.

Organic materials

Manure is excellent for a mulch or for incorporating into the soil. Only aged manure should be used, as there is chance of burn from fresh manure. All types add organic matter and are good soil builders. Manures should be spread on the surface to a depth of 2 to 3 inches.

Liquid fish fertilizers supply a quickly available source of nitrogen as well as some other elements. Follow the manufacturer's directions on the label when applying. The strong, fishy smell of these materials may be objectionable.

Bone meal is a valuable source of slow-acting and long-lasting phosphorus. It should be mixed into the soil since it does not move down readily with watering. Use about 1 heaping tablespoon per plant.

Blood meal is a source of organic nitrogen. Use it carefully since an excess can burn roots. Generally, 1 level tablespoon applied around each plant is adequate.

Lime

Roses prefer a soil pH slightly acid — from 5.5 to 6.5. Ground limestone is the best material for adjusting the pH. It supplies the plant with calcium. A soil test should be taken before roses are planted and necessary amounts of limestone applied. If this was not done, gradually increase the pH by applying 2 tablespoons of ground limestone per bush per year.

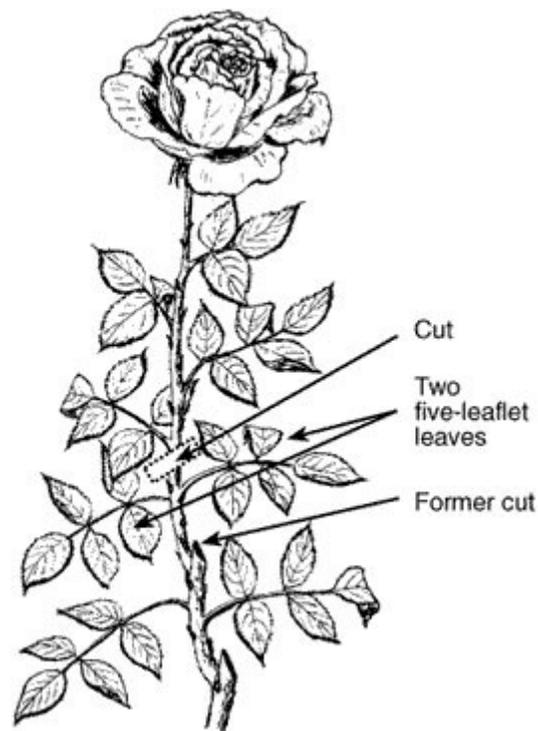


Figure 1

When cutting roses, allow at least two, five-leaflet leaves to remain on each shoot.

Pruning

Cutting flowers

Every time rose blooms are cut off, plants are partially pruned. If plants are new or weak, cut the flower stems short to leave as much foliage on the plant as possible. It is usually best not to cut flowers from a new planting until fall of the first season.

Even after plants are well established, never cut stems longer than needed. Allow at least two leaves to remain on each stem (Figure 1). Weak stems may be cut shorter to force out lower, stronger growth. Thick vigorous stems may be cut higher.

Seasonal pruning

Climate often determines the best pruning time. Roses normally need a light fall pruning and a more thorough spring pruning.

There are several factors to keep in mind when pruning all types of roses:

- Remove all dead wood.
- Remove any wood that is diseased, broken or injured in any way.
- Remove any basal shoots on budded plants that are different from the main plant.
- Remove branches that cross through the center of the plant or rub on other branches.
- Prune to improve the shape of the plant.
- Prune to provide good air movement through and around the plant.
- Make cuts slightly above a strong bud that faces the outside of the plant.
- Make all cuts clean and smooth by using sharp pruning shears or knives.

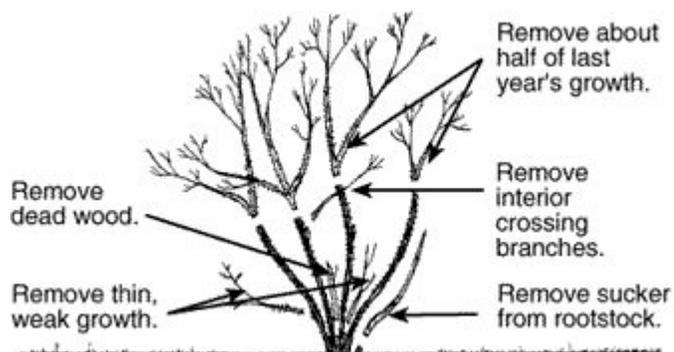


Figure 2

Pruning hybrid teas, floribunda, or grandiflora roses.

Hybrid tea, floribunda, grandiflora

Where winter temperatures may be damaging, it is best not to prune severely in fall. Take off only tops of canes with branching growth that tends to catch winds. Pruning in spring means a more thorough cut-back. Normally, prune stems to about half the length they have grown the previous season (Figure 2). Generally do not cut back hybrid teas, floribundas and related types to less than 18 inches unless winter cold has killed them lower.

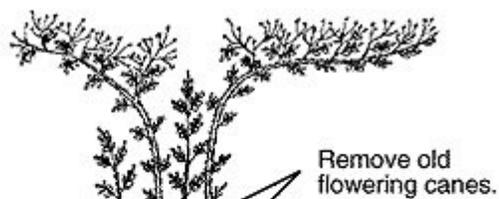
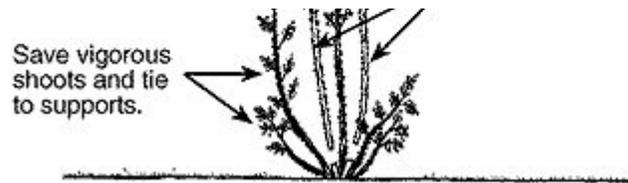


Figure 3

Prune vigorous climbers and ramblers after flowering.



Climbers

Pruning differs slightly from hybrid teas. Very vigorous types, known as ramblers, should be pruned in late spring immediately after flowering (Figure 3). All old canes that have flowered should be removed close to the base of the plant. This will force out young vigorous canes for bloom next year.

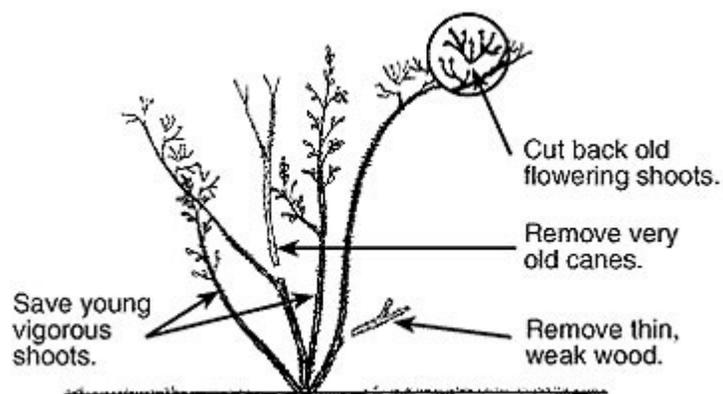


Figure 4

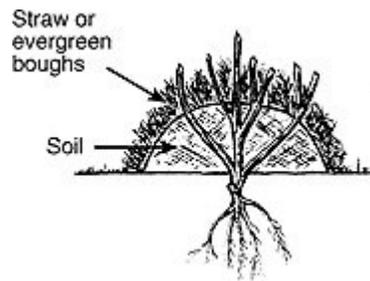
Prune repeat blooming climbers while dormant.

Climbing hybrid teas and some other large-flowered, everblooming climbers

These don't need such severe pruning. Many should have little or no pruning for the first two to three years. Prune only to shape the plants and remove dead canes. Prune these climbers late in the dormant period just as buds are breaking as for the hybrid tea types (Figure 4). Maintain two to three major canes. As new, vigorous canes develop from the base, allow them to remain and develop. After they develop, remove any old canes close to ground level to maintain the basic two or three vigorous basal canes. The best blooms of hybrid climbing teas are produced on short branches coming from 2- to 3-year-old wood. Allow these short branches to remain and cut them back to two or three vigorous buds per shoot. In summer, remove blooms as soon as they have faded.

"Old-fashioned" species and shrub roses represent many different growth habits. Proper pruning results from becoming familiar with the growth habit of a particular type. In general, pruning of these types is little more than cutting back canes to shape the plants, removing dead flowers or removing old poor-growing canes as new vigorous ones develop.

Winter protection

**Figure 5**

Protect roses in winter with a mound of soil 10 to 12 inches deep. Tender varieties may benefit from layer of straw or evergreens over soil mound.

Many old-fashioned, shrub and ramblers are reliably hardy and need little or no winter protection. The hybrid tea floribunda, grandiflora and climbing hybrid tea roses may be injured during severe winters. For this reason, some protection is necessary to ensure their survival. Planting in protected locations reduces the need for special winter protection.

The best form of winter protection is to mound up each plant at its base with loose, friable (crumbly) soil that drains well (Figure 5). This soil should be mounded up around the base of the canes to a height of 10 to 12 inches. Don't scrape up soil from between the plants or roots may be injured. Bring it from another spot in the garden.

Loose compost or aged sawdust may be used in place of soil for winter protection. Don't use leaves, grass clippings, manure or materials that would remain wet or rot around the canes and promote disease. Evergreen branches or straw placed over the mounds will give additional protection.

Proper summer care is an added means of winter protection. A vigorous bush is much more able to stand cold than one in a weakened condition. Some of the most tender climbers may need to have their branches laid on the soil and covered with soil, straw or evergreen branches to keep them in good condition through the winter so they will flower next year.

Carefully remove the covering in spring after danger of severe freeze is over. Don't be too anxious to remove it as the soft, tender shoots that develop beneath it are easily killed by light freeze. Keep some straw or mulch material handy to cover plants in case of late frost.

Pests

There are many pests of roses; however, few are especially serious. Most can be controlled with spray materials available from garden supply stores or nurseries. The key to good control is in identifying the problem. A successful control program includes a regular spray program, using the materials carefully as directed by the manufacturer. Thorough spraying of both the upper and lower leaf surfaces is important. Liquid sprays are generally more effective than dusts, especially for disease control. The following is a list of some of the most common problems.

Diseases

**Figure 6**

Black spot infects leaves in wet weather. If black spot is not controlled, most leaves will drop by mid to



late summer.



Figure 7

When cutting roses, allow at least two, five-leaflet leaves to remain on each shoot.

Black spot

Probably the most destructive and discouraging pest of roses. As the name implies, black spots with fringed margins appear on the leaves (Figure 6). Spots enlarge as they develop, until the leaf yellows and finally drops off (Figure 7). This defoliation, if severe, will weaken the plant, reduce flowering and make the plant more subject to winter damage. It is most severe in wet seasons, in wet climates and on plants in locations where there is little air movement. A wet leaf surface is essential for its spread.

Plant roses where air movement is good and where the sun hits the plant early in the morning to cause rapid foliage drying. On the more susceptible varieties, a regular spray with a good fungicide is important. Frequent spraying may be necessary during wet periods. Spray shortly after rains whenever possible.

Cleanliness around plants is also important, since the fungus is carried over winter by dead leaves on the ground and infections on the stem. Rains and splashing water spread spores from old leaves or stems. If you have only a few plants and can watch them closely, pick off all infected leaves as soon as you see black spots developing. This is especially helpful in early spring when the disease is just getting started.

Mildew

A disease more common to some varieties and types than others. Leaves develop a grayish, powdery growth. Young leaves and tips are usually most seriously affected. Leaves become deformed and crumpled. The disease thrives best in high humidity. As a result, it becomes most severe on roses close to ponds, streams or other warm, damp conditions. Where this disease is a problem, fungicides can give good control. Thorough coverage is important. Ramblers are particularly susceptible to this disease.

Brown canker

Generally less serious than black spot or mildew, but very destructive when present. Infection may take place in summer. In late winter or early spring, these small purple-tinged or white spots develop into large brown patches. Infected canes may grow poorly or die. Best control is to cut out infected canes well below the lowest point of infection.

Other diseases include rust, crown gall, anthracnose and petal blight. These are generally less common, however, than the three previously listed.

Disease resistance

All classes of roses are susceptible to blackspot to varying degrees. Hybrid teas, grandiflora, floribunda and polyanthas all are quite susceptible. Varieties containing some wichuraiana and rugosa ancestry are more resistant. However, there is varietal difference as well. Yellow hybrid teas are generally more susceptible to blackspot than the other colors.

Ramblers are highly susceptible to powdery mildew, as are many hybrid teas and climbers. Wichuraiana is very resistant to this disease.

Many species, shrub, or "old-fashioned" roses have greater disease resistance than the new hybrid teas and their relatives. Therefore, where a lower maintenance rose garden is wanted and where mass effect is more important than flower form, these types should be selected.

Rose rosette disease

Rose rosette virus is a rapidly emerging problem on roses in the Midwest. It has been a serious problem on multiflora (wild) roses in pastures, woods and field edges. In past years a rapid emergence has been observed on domestic roses. It is often referred to as witch's broom, a disease that causes plant growth resembling a witch's broom. Early symptoms of this disease are rapid stem elongation, followed by certain branches of the plant developing thickened, abnormally thorny stems. Then, many short, deformed shoots will form, often displaying a red pigmentation and smaller, misshapen leaves. Usually plants die within a year or two as the disease spreads throughout the plant. The disease is moved from infected plants to healthy ones by insects and mites. Herbicide exposure can be mistaken as rose rosette, but the rose usually outgrows the effect of herbicide and the new growth is healthy. Roses affected by rose rosette disease never recover. At this time, there is no effective control for this disease. Infected plants should be removed and destroyed.

Insects

Aphids

These are the most common insect pests of roses. Sometimes called the plant lice, they are soft-bodied, green, brown or reddish colored. They are usually abundant in soft growing tips and on the stem immediately below the flower buds. Severe infestations may deform the leaves, stems or buds.

Several good insecticides are available for control. Begin sprays as soon as noticed in early spring. Summer infestations are usually not severe if spring control was obtained.

Red spider mite

Not as common as aphids, but when present are often difficult to detect and control. Mites are very small, hardly visible to the naked eye. Tiny webs between veins on lower sides of leaves give indication. As mites feed, the leaves become yellowish and finally brown. Mites are most serious in hot, dry weather.

When present, an effective miticide must be used frequently. In severe infestations, sprays about every four days will be necessary to clean up the pest. Damage can be reduced by spraying the plants daily with a strong stream of water to wash some of the mites off the leaves.

Other insect pests

Many leaf- or flower-chewing insects attack roses. Generally these are not a serious problem and, where they occur, can be easily controlled by using an effective insecticide. They are easily identified by their damage, which occurs as holes and cuts in leaves or petals.

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Related MU Extension publications

- G6600, Roses: Selecting and Planting
<http://extension.missouri.edu/publications/DisplayPub.aspx?P=G6600>
- MG8, Pruning Ornamental Trees and Shrubs
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