# Cooperative Extension Service Agricultural Experiment Station 


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Today's gardener has a tremendous number of rose species and cultivars available to plant around the home. Roses vary from miniature plants only 18 inches tall to vigorous climbers that can cover the side of a house. Besides their beauty and fragrance, the flowers come in almost all colors of the rainbow and add to the popularity of roses.

Before purchasing rose plants, analyze your garden or yard to determine what size, type and color would be most pleasing. Also consider your own interests and ability in gardening or yard work. Perhaps a rose requiring relatively little care would be more attracfive than a hybrid rose whose potential is never reached due to lack of care. Above all, do not purchase a plant before considering a place for it. If you do not have a landscape plan to work with, at least give some thought to the effect the rose will have in your yard.
Roses require a certain amount of care and attentimon since they may be susceptible to various diseases and insects. Information about pests that attack roses is given in CIS 794, Roses: Types, Selection and Environmental Requirements for Idaho Gardens. Before buying any rose plant, check to see if it is particularly resistant or susceptible to any pests.


## uality Standards

Roses are usually sold as 2-year-old, fieldgrown plants. Plants are graded according to standards established by the American Association of Nurserymen. Grade 1 plants are the best quality roses. They must have three or more strong canes with two of the canes having a length of 18 inches before pruning. Plants this large have
usually grown 2 years in the field. For this reason, most roses are started and grown in California, Arizone, Texas and Florida or other areas that have a yearround growing season. Grade $11 / 2$ plants have the same size cane as a Grade 1 plant but have only two canes. Grade 2 plants have smaller canes and less vigorous roots and top growth. All grades are usually harvested at the same time from the same field.
The size of top grades will vary with variety, but always select the top grade available. Most nurseries handle only Grades 1 and $1 \frac{1}{2}$. These grades are normally worth the extra investment since they produce more vigorous plants with an abundance of flowers the first year. "Bargain" roses are often culls from the growing field and are below Grade 2. They are generally not a bargain. For the most part, you get what you pay for with roses.


## ays to Buy

Bare Root
You can purchase roses as bare root plants from local nurseries, mail-order nurseries and many other stores. When selecting these plants in a store, make sure that the canes are plump and green with smooth, unshriveled bark. If roots can be seen, select a well-balanced root system with a fresh appearance. A plant in good condition will feel heavy. A dried-out plant will feel comparatively light, and its twigs will be brittle if bent.
If you purchase rose plants from a local store, select them as soon as possible after the shipment has arrived. Stores are often too warm, and the dormant rose plants soon develop premature, weak growth. Given a few weeks, these warm indoor temperatures can weaken or even kill the plant. ontainer
You can purchase and plant containerized roses almost any time during the growing season. You can even purchase them in flower and plant them for immediate effect. Select Grade 1 and $11 / 2$ roses that are in 2-gallon containers or at least 8 -inch diameter pots. Field-grown plants that are potted in small containers often have had too many roots removed to grow vigorously after planting.

Potted plants are usually potted by the nursery or the nursery's supplier, and the plant has not been in the container long enough to develop an extensive root system. Containerized plants are more expensive but transplant better and may save money in the long run.

Roses tolerate many soil types but grow best in well-drained locations. Heavy clay subsoil or sandy soil with low fertility must be improved if roses are to be grown successfully.

When available, aged manure is one of the best soil additives for roses. Peat moss or leaf compost is also beneficial. Add about one-half pound of superphosphate to each bushel of organic material to stimulate root development.

Apply a layer of organic matter 2 to 4 inches thick on the soil surface of the plant bed. Mix the material into the soil as thoroughly as possible. Preferably, dig up the area well in advance of planting. Many gardeners prefer to turn the soil in fall and again in spring. When digging the planting hole, remove all the soil and thoroughly mix it with the organic matter. Use about 1 part organic material to 2 parts soil. Don't work soil when it is excessively wet because the resulting compaction will reduce drainage and impair root growth.

pacing
Temperature can influence spacing of rose plants. Plants growing in areas with severe winter temperatures will be smaller than the same cultivars growing in a milder climate. In most of Idaho, hybrid tea roses should be spaced 2 to 3 feet apart. Large, vigorous growers such as hybrid perpetuals need 3 to 5 feet of space, and climbing roses need from 8 to 10 feet of space.


## epth of Planting

Modern hybrid roses are budded on special rootstocks. The point where the top and roots are grafted together is known as the bud union. The union is sometimes called a "knuckle" because of its swelled, lumpy appearance. If this union is injured by cold weather, the entire top may die, and the roots will produce a different and probably undesirable rose plant. Plant roses so the bud union is 1 to 2
inches below the soil level. Make the hole deep enough for proper positioning of the bud union without crowding roots.


## lanting Bare Root Roses

After purchase, unpack the plants at once. Examine bare root roses before planting. Trim off any broken roots or stems. Most new plants have been pruned and rarely need additional pruning. Plants sold in a bare root condition are often slightly dried. If you plan to set them out the same day or the following day, soak the roots for several hours before planting. Soak plants only if they can be planted promptly. Soaking for more than 24 hours may damage them.

If plants will not be set out within 24 hours, moisten the packing material and repack the plants. Keep them in a cool place above freezing. They can be kept 2 or 3 additional days this way. If the plants must be held longer, heel them in outdoors by laying the plants in a shallow trench and covering the roots with soil (Fig. 1). If the tops are dried out, place the entire plant in the trench and cover both top and roots until planting. Make sure heeled-in plants are kept moist.


Fig. 1. "Heeling-in" a rose plant. This procedure is used to protect bare root roses from drying out if the bushes cannot be planted immediately after purchase.

When you are ready to plant the new roses, be careful that the roots don't dry out while the soil is being prepared. Keep them in moist wrappings or in a bucket of water while you prepare the planting site.

Dig the hole large enough to permit the roots to be spread fully without touching the edges of the hole (Fig. 2). This will require holes at least 12 to 16 inches deep and 18 to 20 inches wide. Larger holes are usually better unless a rose is to be planted in heavy clay soil. Then its hole should be only as deep as its roots are long. A shallower hole will prevent the plant from settling too deeply in the soil and prevent water from collecting around the canes. Roses planted too deep are susceptible to crown rot.

After you have dug the hole, fill it about half full with a good garden soil. Build a cone-shaped mound


Fig. 2. Side view of a planting hole for a bare root rose. Note the depth and diameter of the hole are large enough to spread the roots. The dashed line indicates the relationship between the bud union and ground level.
of soil at the bottom of the hole (Fig. 2) and firm it slightly to eliminate air pockets. Notice that when the roots of the rose plants are spread, they form a type of cone that should fit over the mound. Look at each individual plant. Make the soil mound tall enough so that when the roots are fitted over it, the bud union will be at the proper depth. If the root spread is too large for the hole, dig a larger hole. If the hole is the proper size, spread the roots over the mound and begin covering them with soil. Pack the soil gently around the roots until the soil is almost level with the surrounding area.

Next, fill the hole with water and allow the water to soak in. Repeat this procedure a second time. Apply at least 1 gallon of water at planting time. After the water has drained, mound up soil slightly around the base of the plant. This will allow for settling. As an extra measure of protection, allow the plant to settle overnight and then mound soil up 6 to 8 inches around the canes. This will keep the canes from drying during establishment. After the buds break, carefully remove the mound of excess soil back to ground level.

When planting tree roses, climbers or ramblers that have long stems, tie them to stakes or supports immediately after planting.
Make sure that the roses don't dry out during the establishment or growing periods (first several months) after planting. Don't fertilize until the plant is well established.

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## lanting Potted Roses

Potted roses can be planted almost any time of year. Dig the hole about 6 inches larger in diameter than the container. Before planting, remove containers not made of decomposable paper. If you have questions about the composition of the container, ask your nurseryman.
To remove the container, cut the sides so the root ball can be removed with as little root damage as possible. If the roots are circling the pot, however, slice the soil ball about 1 inch deep in three or four places. Cutting the roots this way causes them to grow out and enables the plant to become more quickly established in the landscape. Spacing and planting depth for containerized plants will be the same as for bare root plants. If you are planting potted roses in midsummer when temperatures are very high, place a temporary shading structure over the plants until they are established.


## are After Planting

Information on the proper cultural practices for growing roses is given in CIS 796, Roses: Care After Planting.

[^0]Other College of Agriculture publications you will want to get on home gardening are:
CIS 226 Garden Vegetable Insect Control . . . . . . . . . . . . . . . . 35 cents
CIS 427 Gardening - Vegetables for Freezing or Canning . . 35 cents
CIS 446 Onions, Leeks, Shallots, Chives and Garlic for the Home Garden

35 cents
CIS 658 Gardening - Growing Beans and Peas . . . . . . . . . . 25 cents
CIS 659 Gardening - Growing Peppers . . . . . . . . . . . . . . . . . . 25 cents
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CIS $755 \begin{aligned} & \text { Vegetable Gardening - Planning and Preparing } \\ & \text { the Site . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } 35 \text { cents }\end{aligned}$
CIS 756 Gardening - Growing Cucumbers . . . . . . . . . . . . . . 35 cents
CIS 794 Roses: Types, Selection and Environmental Requirements

35 cents
CIS 796 Roses: Care After Planting . . . . . . . . . . . . . . . . . . . . . 35 cents
CIS 799 Vegetable Gardening - Growing Melons . . . . . . . . . 35 cents
CIS 800 Growing Vegetable Seedlings for Transplanting .... 35 cents
CIS 803 Vegetable Gardening - Growing Asparagus . . . . . . . 35 cents
EXT 617 When to Harvest Vegetables . . . . . . . . . . . . . . . . . . . 50 cents
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