

Rose Propagation From Cuttings

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One of the joys of growing old roses is the fact that most of them thrive as own root plants; that is, they will grow as well - or better - from cuttings as they do when grafted onto a rootstock, the way most modern roses are grown and sold.

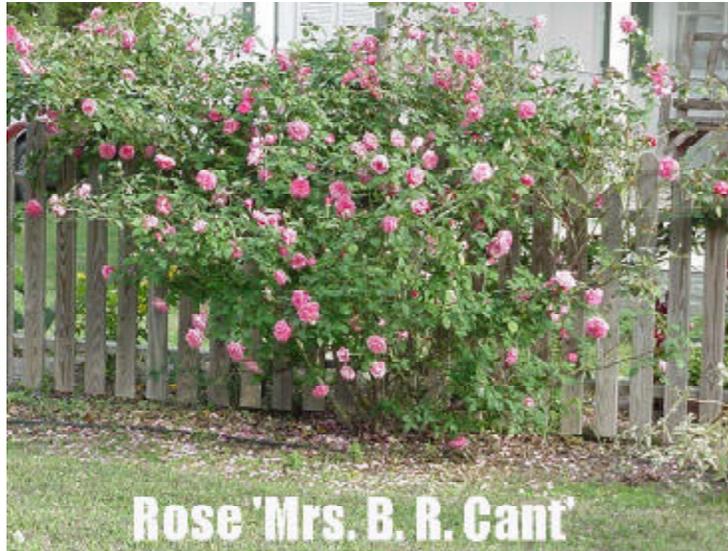
Rooting cuttings is a relatively simple matter. It is the way most old roses were handed down from one family member or friend to another, and the way many old rose collectors prefer growing them today. Fortunately for us in Texas and the South, most of our better adapted old roses are particularly well adapted to growing on their own roots and can be successfully propagated by anyone interested in making the effort. Remember that roses still under patent (17 years from date of introduction) cannot be legally propagated without paying a royalty to the holder of the patent.

Some old roses, like those in the Gallica and Rugosa classes, tend to sucker badly and may spread into areas where they are not welcome. If this is a concern, varieties that sucker may be grafted or budded onto a rootstock that does not have this characteristic, such as *R. fortuniana* or *R. multiflora*.

The following suggestions for rooting rose cuttings are not likely to result in 90 to 100 percent rooting, but neither do they require special structures, watering systems, or daily supervision. Success will vary because of the large number of variables involved, but many people report 50 to 75 percent of the cuttings they treat in this manner develop into usable plants.

When to take the cuttings

Roses may be rooted at any time of the year, but for home gardeners, success is much more likely during the



cool months from November through February. Late fall is a favorite time because there are usually a few blossoms still remaining on everblooming types to identify them.

How to take cuttings

The easiest part of the rose to root is the tip of stems that have recently bloomed. Ideally, these tips have withered flowers, or hips, beginning to form. The flower heads or hips should be removed down to the first set of healthy leaves. Cuttings should be 6 to 8 inches long and be cut from the parent plant with a sharp knife or pruning shears at about a 45 degree angle. It is important that the cuttings not be allowed to dry out or be exposed to extreme heat or cold, at least until they are stuck into the rooting medium. Experienced old rose collectors often carry styrofoam ice chests, plastic bags, a small amount of water, and ice if they are likely to be in very hot conditions before getting the cuttings to the rooting area. Cuttings may be stored for several days in this manner, if necessary, but the sooner they are stuck, the better.

Preparing the Cuttings

The use of rooting hormones has been shown to increase the percentage of cuttings to root and the number of roots per cutting, but it is not necessary for success.

Rooting hormones are commercially available in powder form and are popular with some rose growers. Others also like to use one-inch sections of cut branches from willows, cut both horizontally and laterally, to soak in a pan of water that has been brought to a rolling boil (rainwater is ideal). Allow the willow pieces to steep in the water overnight. It should look like weak tea. Remove the willow pieces and soak the rose cuttings in the concoction for several hours. It is helpful to recut the rose cuttings about a half-inch from the ends before placing in the willow water. Willow water may be prepared in advance to facilitate the process. It may also be used for the initial watering of the newly stuck cuttings. Although it sounds a bit far out, research at the Ohio State University has shown that willows (apparently any species of *Salix*) contain substances that can induce rooting and prevent 'damping off' or canker in other plants. This substance can be successfully removed from the willow wood by the method described, and has been shown to improve the percentage of cuttings rooting in controlled experiments.

Selecting the Location and Sticking the Cuttings

Selecting the site for sticking the cuttings is very important. Roses prefer a sunny location, but for rooting purposes it is usually best that they be shielded from the hot afternoon sun. Bright light, but not direct sunlight, is ideal. It is also good if a location can be chosen where the soil is sandy and well-drained, and where drip from the roof helps to keep the area moist. An east or north facing flower bed against a house or other structure is usually a good choice. The sand or sandy soil should be amended with 1/4 to 1/3 peat moss, composted pine bark, or similar material. The cutting bed should be well tilled or spaded to insure a good blend of the soil and organic materials.

Foliage on the lower half of the cuttings should be removed, but allowed to remain on the upper part. After dipping into powdered rooting hormone, soaking in willow water, or with no hormone treatment at all, the cuttings are ready to stick into the media. If a powdered hormone is used, remove some of the material from the

container, roll or dip each cutting into the material and tap the cutting lightly to remove any loose powder. Use a wooden pencil or dibble to make a hole for each individual cutting. The cuttings should be stuck several inches or about half the length of the cutting into the media. This will prevent damaging the cutting as it is stuck or unnecessarily removing rooting hormone. Place the cuttings 6 or 8 inches apart in rows, and label each row with a permanent marker stating the variety, if known, or the site where collected. Also include the date the cuttings were stuck. Be sure to firm the soil carefully around each cutting and water thoroughly. Some growers like to use large plastic or styrofoam cups with drainage holes added, sinking the whole thing in the bed to facilitate later removal. This method requires more careful monitoring, since the individual pots will dry out more quickly than cuttings placed directly in the bed.

Other methods include sticking cuttings in a plastic flower pot of potting medium and bringing a clear, thin polyplastic bag, such as vegetable produce is sacked in, up over the pot and cuttings, twisted shut at the top and secured with a rubber band or 'twistem'. A stick or clipped wire clothes hanger in the pot higher than the cuttings keeps the bag from collapsing down around the plant material. This will keep humidity constant inside the bag, while the cuttings are growing roots. Sometimes a glass jar is placed over cuttings planted in the flower bed to keep the plants humid while getting established. You must be sure that direct sun does not overheat the contents of the jar. It is also possible to put trimmed rose lengths into potting mix in a ziplock bag which is then hung up on a clothesline in bright shade. It will be easy to tell when roots have appeared as they will be seen through the transparent plastic.

Care During the Rooting Period

It is especially important early in the rooting period of the cuttings that they not be allowed to dry out. This may require watering every other day or so if rain does not occur. It may not be necessary to provide cold protection to the rooting cuttings in most of Texas and the Gulf Coast, but in the upper South extreme cold can cause damage that could have been prevented by covering for a few hours or days.

During the first month or two after being stuck, the cuttings begin to develop what is called 'callus tissue'. It is a swelling on the cutting tip and other areas where

roots are to develop. As winter begins to turn to spring, the cuttings will sprout roots and new growth. This is a critical time for the new plants and it is important that they not be allowed to dry out. Although the plants are usually well rooted by late April or May, it is best to leave them in place until the next fall or winter. The young plants are extremely vulnerable to stress the first summer and are best left to develop a good root system.

Transplanting to a Permanent Location

By late fall or winter the young plants should be ready to move to a permanent location in the landscape. They will be small, but most varieties grow quickly and produce a fair quantity of flowers by next spring. To protect them from wind damage, it is a good idea to prune back any tall shoots and thin the plants sparingly, if possible, at the time they are being transplanted. During the naturally dormant period in late winter the plants may be dug either with a ball of soil or bare root. For best results, plant in locations receiving at least a half day of sun in well prepared soil. A regular fertilizer program may be started by mid-spring.