

METHODS OF PROPAGATION

By Margaret P. Sharpe
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AIR LAYERING A ROSE BUSH

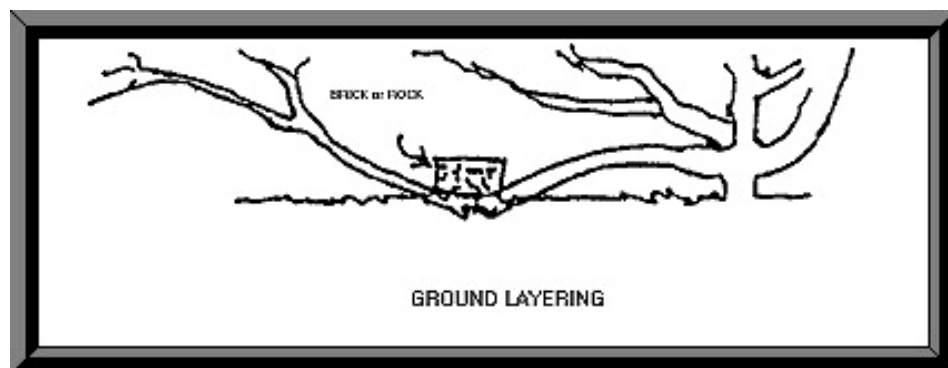
The quickest way to get a nice size rose bush on its own root is to air layer it. In the illustration, you see a bush with a cane that is growing in the wrong place and needs to be removed, even though it is a healthy cane. This is what should be chosen to make a new plant. By air layering



the cane at the dashed line-roots may be started and the cane removed and planted in a container or in the ground for the new roots to develop and the top will continue to grow and perhaps bloom. Container planting is preferred as the plant may be moved to desirable locations and cared for better. It is important that the plant be well staked so that it cannot possibly move and break the tender new roots. Bright light is important but full sun is not desirable. It is important, however, to keep the soil in the container as cool as possible as well as moist. Low or filtered light does not encourage bloom and the plant will spend more strength making underground growth instead of top growth.

GROUND LAYERING

We layer in different ways. Probably the most familiar method is ground layering where we pull a limb down to the ground and make a cut or break in it, cover the fresh break with soil and weight it down so that it will not move. After the tip end shows ample growth, indicating it has rooted securely; we cut it from the main plant, dig up the roots and transplant it to the desired location.

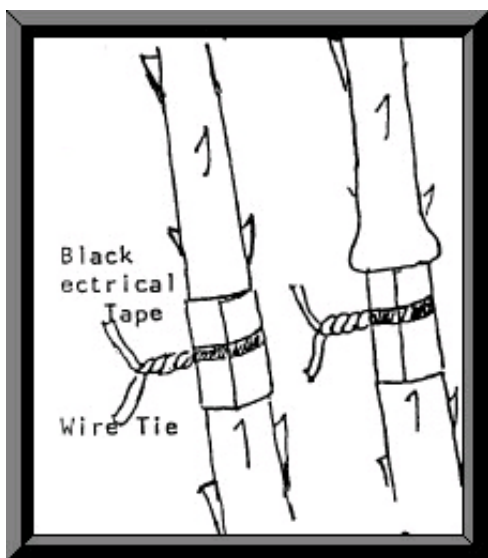


AIR LAYERING

There are two major methods of air layering:

- The tape method
- The moss method

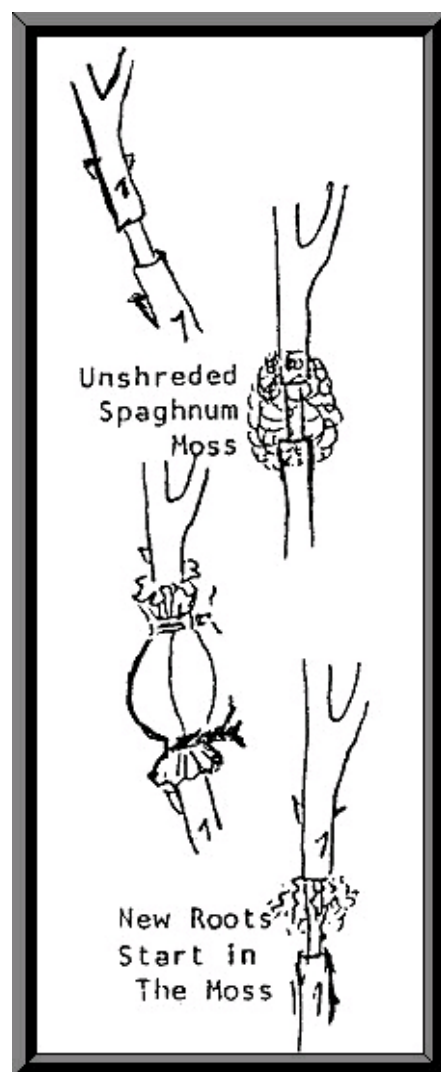
The TAPE METHOD of air layering is one used world-wide under different names. Electrical tape may be used, either the vinyl or the coated cloth. The cloth may be best as one can pull it tighter and secure it better. The object is to wrap the tape around the cane so tightly that the fluids just under the bark (phloem) are blocked and cannot descend to the roots. This causes a swelling just above the wrapped area that appears in a very few days - if it does not appear in 5 days the tape has not been wrapped properly and should be removed and redone. The swollen area looks like it is very tender about 3 days after appearing and like it is about to burst - it is. At this point cut the cane off through the wrapping and remove the tape. Plant the cane in a container of appropriate soil for rooting. Follow the



procedure-described above in staking and caring for it. New roots will burst from the swollen area, so it is important that the cane be well watered and the top should be misted daily for a while. Keep growing in the container about one year before planting it the garden.

The MOSS METHOD is the most commonly used on woody plants of all kinds. With a razor-sharp knife, cut a collar of bark off the cane where you desire roots. The collar should be no wider than the diameter of the cane and not over one-half and inch in any case on any plant.

The cut must go into the pithy core area of the cane, down to the white wood area all around the cane. If any green tissue is left to join the top and the bottom parts of the "collar" the new roots will not form and the entire cane may have to be destroyed.

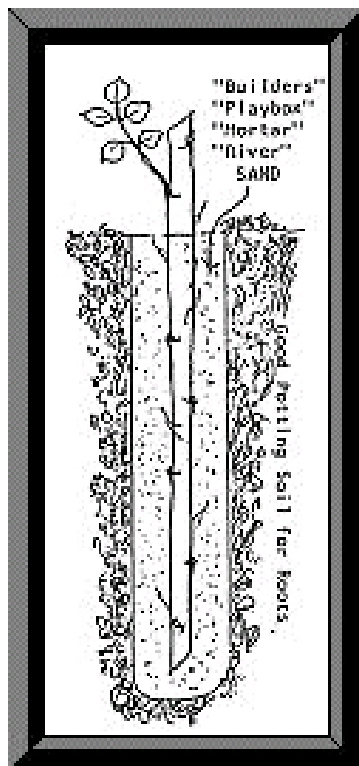


We recommend that the area where the collar of bark was removed be scraped vertically to assure the absence of any green tissue (cortex, phloem and cambium layers). This will force the plant to send out roots from the upper portion of the cutting because the plant fluids cannot descend in the plant.

Dust a very scant fleck of Rootone onto the scraped area, and wrap a handful of unshredded, damp sphagnum moss around the cane. Secure the moss around the collar with a wrapping of plastic that is firmly applied so it will not shift or fall from the cane after a wind or rain. Wire ties are best for this, but do not apply them tightly enough to choke the cane, as in the Tape Method.

After a few days the wrapped area may be observed. It may be noted that roots can be felt inside the moss. It would be remiss if one did not "take a peek" and gently unwrap the plastic to see if roots were present. If they are not present the wrapping may be left on the plant for as long as desired. If they are present the cane may be cut below the spot where the collar of bark was removed and planted in a container as described above.

MAKING CUTTINGS



CUTTINGS started in the ground are different from air layered cuttings as the ground started cuttings are from clippings removed from the parent plant.

Always remember that ROSES ROOT QUICKER IN MOIST SAND better than any other medium. The diagram illustrates a hole made in a container of soil. It may also be made in the open ground. The hole can be made by a piece of broom handle using builders sand (river sand) to pour around the cutting.

When roots form they will grow through the sand into the soil. Leave at least one set of leaves on the top because there is a definite relationship between the amount of leaf surface and the speed of root growth. No sun should shine on a cutting but bright light is needed.

Cuttings in pots can be moved as necessary.

TIPS AND TECHNIQUES FOR SUCCESS IN MAKING CUTTINGS

- Soil cleanliness cannot be stressed enough. Soil fungus kills more cuttings than any other problem.
- Spring and fall are the best times since rose roots are most active then.
- 3 to 5 leaf joints are plenty, the top joints being for one or two sets of leaves and other joints for roots below ground.
- In this Gulf Coast area cuttings are left outside to mature. We recommend they be protected by a fruit jar of glass, or a 2 liter plastic soft drink bottle that has the base cut off with a hot knife and placed over the cutting like a dome. The cap of the dome may be removed during hot weather and replaced in severe cold or wet weather.
- Care should be taken that good drainage is ever present and that the roots are never dried out.
- Never dig to take a peek to see if roots are growing as this is fatal.
- Roots may form in two weeks or as long as two months in this area.
- Roses in pots may be set in a pot dish after planting and water kept in the dish to provide soil moisture as needed and removed from the dish of water if a heavy rain occurs.
- The first leaves that grow are from strength in the stem or cane, not from any roots. The appearance of the second sets of leaves are from new roots.
- It is very important that the cutting not be jostled or moved as these roots will very easily break and kill the cutting.
- It may take a while for the second leaves to appear, but as long as the cutting does not darken or blacken at or above the soil line the cutting has not died from soil fungus.
- As the weather permits after the leaves are growing well the glass or plastic dome over the cutting may be tilted to one side during good weather and a small rock or block of wood put under the rim to allow fresh air to reach the plant. If a cool night is expected, it is best to not tilt the cover then.
- Gradually "harden off" the new plant over the period of 7 to 10 days and watch it closely before leaving the protection off permanently. In the wintertime we often leave cuttings covered for longer periods as the roots formed are actively storing starches to prepare for vigorous spring growth.
- Roses are seldom harmed until the temperature at ground level is below 26 degrees Fahrenheit.
- Continue growing uncovered in the same location for 8 or 9 months before transplanting it in another location, gradually introducing it to sunshine.

Margaret P. Sharpe
Houston, Texas
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