

Propagation Methods – Stem Cuttings

There are several ways to propagate new plants. One of the easiest can be done during spring through midsummer. It is called **softwood cutting** – using pieces of stems, roots and leaves to start new plants.

First, using a sharp knife, cut a 4 to 5 inch long stem of new growth just below a leaf, and remove all but two or three leaves at the top. If there are blooms, remove those also. Next, dip the cut end into rooting hormone. This is generally a powder or liquid that contains growth hormones which stimulate root growth. Some also contain a fungicide to control root rot. A well known brand is Roottone.

Insert the cutting into a box or container, with drain holes, that is filled with about 3 inches of half-and-half peat moss and perlite, or with perlite alone. Dampen soil mix. Place the container into a self-sealing plastic bag or cover with plastic wrap that is securely tied. This will act like a mini-greenhouse to minimize water loss. Be sure to open it up occasionally to let in fresh air. The plastic should not touch the cutting or leaf, so you may need to prop it up with a small stick or toothpick.

Put the covered container where it will receive indirect light. The plants should be well-rooted in four to eight weeks, and should also be putting on new stem and foliage growth. This is the time to transplant them into individual containers with potting soil. As they grow, gradually expose them to more light.

As they are more established, you can harden them off and plant them in their more permanent location. To harden off, you gradually expose the plant to longer periods of time outside, so that the plant is not shocked by sudden temperature change.

Fall is a great time to take **hardwood cuttings**, as this is the beginning of the dormant season. Most deciduous shrubs and trees can be propagated by this method. This would include fruit trees and grapes, as well as dogwood, forsythia, roses, willow and crape myrtle.

Take cuttings from last season's growth. It will be lighter in color than the older wood. Using a sharp knife, cut pencil thin stems 1 to 2 feet long. Next, you will cut off the top inch or two of each stem and discard. Then cut the stems into 6 to 9 inch lengths, each with about two or three nodes. Cut about ½ inch above or below a node. The top cut should be at a slant to help you remember which is the top. Then dip the flat end, or bottom, of the stem into rooting hormone.

In the Pacific Northwest, the ground often freezes during the winter time, so cuttings may be stored in a bundle (fasten with rubber bands) and laid in slightly moist sawdust or sand. Cover them completely. Put them in an unheated space such as your garage or shed. During winter, the cuttings will begin to form calluses from which the roots will grow.

In early spring, plant the cuttings in an area which is protected from wind, about six inches apart. They can be planted directly into a trench, filled with soil mixed with compost or perlite, leaving only the top bud exposed.

Water as needed during the growing season, keeping the soil moist, and protecting the cuttings from direct sun. A shade cloth may be used. By the next fall or the following spring, the new plants will be ready for permanent planting.

Cuttings of evergreens may be done similarly. Look for small shoots which have ripened at the ends, and that are around 6 inches long. Pull them away from the main stem with a little "heel" of bark at the base. Dip this "heel" into rooting hormone and insert the cuttings into trays of a sandy mix of soil and perlite. These will overwinter in a cold frame or unheated greenhouse, and should have rooted by the following spring.

Resources

Atha, Antony; Courtier, Jane; Crowther, Margaret; Hook, Sue; and Squire, David, *The Ultimate Book of Gardening*, Paragon Publishing, UK, 2002.

[Propagation by cuttings](#), retrieved 8/28/2006.

[Plant Propagation by Stem Cuttings: Instructions for the Home Gardener](#), retrieved 8/26/2006.

[Basic Plant Propagation](#), retrieved 8/26/2006.