

Ask a Master Gardener
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Marilyn Van Pelt
Carroll County Master Gardener Extension Volunteer

Like It? Clone It

Gardeners delight in propagating plants to use in their own gardens and to give to friends. Designing and creating a garden often means the purchase of plants, seeds and bulbs from nurseries or garden centers. However, this can be expensive, and if you already have your own well established plants that you love, then why not try propagating your own stock?

The major methods of asexual propagation (using vegetative parts of any plant rather than seeds or spores) are cuttings, layering, division, and grafting. Cuttings involve rooting a severed piece of the parent plant; layering involves rooting a part of the parent and then severing it; and budding and grafting is joining two plant parts from different varieties. Grafting and air layering require a bit more skill than the other methods so I won't describe them in this article, but they are very useful methods for home gardeners and growers. Some of our beautiful specimens may be grafted on to a very hardy but different root stock.

Many types of plants, both woody and herbaceous, are frequently propagated by cuttings. A cutting is a vegetative plant part which is severed from the parent plant in order to regenerate itself, thereby forming a whole new plant. Who hasn't put a plant stem in a vase in the window to root? When I found small roots on a curly willow branch from a cut flower arrangement from my daughter's wedding, I planted it. I had to cut that tree down a few years later!

Cuttings are easy, use a sharp blade to reduce injury to the parent plant. Dip the cutting tool in rubbing alcohol or a mixture of one part bleach to nine parts water to prevent transmitting diseases from infected plant parts to healthy ones. Remove flowers and flower buds from cuttings to allow the cutting to use its energy and stored carbohydrates for root and shoot formation rather than fruit and seed production. To hasten rooting, increase the number of roots, or to obtain uniform rooting, use a rooting hormone, preferably one containing a fungicide. Prevent possible contamination of the entire supply of rooting hormone by putting some in a separate container for dipping cuttings.

Insert cuttings into a rooting medium such as coarse sand, vermiculite, soil, or a mixture of peat and perlite. In general, the rooting medium should be sterile, low in fertility, drain well enough to provide oxygen, and retain enough moisture to prevent water stress. Moisten the medium before inserting cuttings, and keep it evenly moist while cuttings are rooting and forming new shoots.

Place stem and leaf cuttings in bright, indirect light.

Layering is cloning plants from one parent specimen. The propagated sections remain attached to the parent throughout the majority of the rooting process. Layering has two major advantages over other methods of propagation. It can create larger plants faster than small cuttings and seeds, and it does not deplete the plant of water and nutrients while the roots are forming. Ground layering is one easy method of plant propagation. It happens all the time in nature when a branch touches the ground and grabs on, starting its own root system. Strawberries are a good example of plants that ground layer themselves. This method is used mainly for shrubs with flexible branches, such as Hydrangea, Forsythia, Spirea, and Rambler Rose. I like to ground layer my favorite hydrangeas in my garden. I recently found that a winter jasmine branch had rooted itself so I detached it and used my new plant elsewhere.

To ground layer, select one or more branches close to the ground. Remove the leaves for about 5-6 inches at the spot where the branch touches the ground and scrape a little of the bark off the underside of the branch in this area. Make sure at least one leaf node will be under the ground. The leaf node is where a leaf comes out of the branch and most roots will form. Do not cut the branch off the mother plant. Dig a little trench about 2 inches deep and lower the branch into it and cover generously with good soil.

Put a brick or stone on the buried area so that it will stay under the soil. This also helps to hold the moisture around the branch. Keep it watered occasionally. When roots form, the branch can be removed from the mother plant, potted up and treated like a mature cutting. Don't forget to look for naturally layering branches underneath plants.

For more information on all of your horticulture questions, contact a Carroll County Master Gardener Extension Volunteer at the UGA Extension Office at 900 Newnan Road, Carrollton. 770-836-8546 or via email at ccmg@uga.edu.