

## Making New Plants From Stem Cuttings

**Materials Needed**-Clippers and/or scissors, rooting hormone, a sharp knife, potting medium, small pots, a greenhouse environment

**Potting medium and pots**-I use 2x2" black plastic pots that fit 32/tray, but you can use other sizes. Make sure they are clean...rinse with a 10% Clorox solution if you are re-using pots to prevent the spread of disease. Soilless potting mix should consist of 85% aged pine bark (not green) and 15% river sand (optional).

**Rooting Hormone**-"Hormodine 3" is the preferred brand, cheaper brands work on plants that are easy to root. I have never had much success with liquids, but they are widely used.

**Greenhouse Environment**-(semi-ripe cuttings only)Any structure covered completely by clear plastic. It should be in the shade. Sun will heat it up like an oven and cook the cuttings.

### Two Types of Cuttings-Hardwood and Semi-ripe

**Hardwood cuttings** are pieces of branch cut from a deciduous plant during the dormant season when it has no leaves (Feb). **Semi-ripe cuttings** are pieces of branch (stem cuttings) taken during the growing season (May/June typically) with leaves on the cutting.

**Hardwood Cuttings**-In February cut a branch that is the thickness of a pencil or smaller. Cut that branch into 7-8" long pieces. Make sure you know which way is up and which way is down! Barely scrape 1" of the bark from one side of the bottom of the cutting and dip it into the rooting hormone. Tap off the excess hormone. Stick it in 1)a hole in the ground or 2)in a pot...in the shade...with approximately 1-2" sticking out of the ground (pre-poke your hole). It will root after the ground warms. Lightly fertilize with granular or ½ strength liquid fertilizer after new leaves emerge. Leave it in the ground until the next dormant season and then dig it out and pot it up. Keep evenly moist, not soggy, never allow to dry out. Plants that root well from hardwood cuttings include crapemyrtle, forsythia, and butterfly bush.

**Semi-ripe Cuttings greens**-Most shrubbery root well from semi-ripe cuttings. Easy ones to root include azaleas, butterfly bushes, hydrangeas, forsythia, roses, aucuba, and hibiscus.

Fill your pots with pre-moistened soilless mix and pre-poke holes for the cuttings with a pencil. Timing is key when taking semi-ripe cuttings. For most plants it is **late May to mid-June**. The stems should be firm but not brown. The leaves *must* be ripe or the cutting will wilt in the summer heat. **Take your cuttings in the cool of the morning**, and take no more than you can handle in 30 minutes. Each cutting should be about the length of your forefinger. Strip the leaves off the stem, leaving just a few at the top of the cutting. If the leaves are large (like hydrangea or aucuba), remove all but the top two leaves and cut those leaves in half. Scrape the stem on one side. It is best to have a 1" wound which starts at a growth node. Dip the cutting in the rooting hormone so that the 1" wound is covered, tap off the excess, and stick it into your pot. Place the cuttings in your greenhouse and leave them alone. It may need watering in a few weeks, but over-watering is deadly. Some plants will root in just two weeks, so check for roots at two week intervals, and then fertilize with ½ strength liquid fertilizer when they develop. When the roots fill the pot, pot up into larger pots with time-release fertilizer. Grow on until they are ready to sell or plant in the ground.