LAYERING – A NO-FAIL WAY TO ROOT PLANTS by Paul Thompson, Urban Horticulture Agent

Have you ever envied a friend’s or neighbor’s beautiful shrub? Maybe it is something common, or uncommon, or maybe they just don’t know the name of the variety they are growing. Plants can be reproduced by rooting cuttings, but this is not always successful unless you have the time and motivation to care for them for a period of time. Layering is a way of rooting plants without taking cuttings and is relatively simple to do, and you don’t have to spend time caring for the future plant because what you are rooting is still being supplied with water and nutrients from the mother plant while it is developing roots.

There are many methods of layering. Simple layering has been done by knowing gardeners for ages. In fact, often this happens all by itself when a low branch in contact with the soil or covered with mulch will produce roots which can be pruned from the mother plant and transplanted elsewhere. Azaleas are a common shrub that will often do this, but you can layer just about any plant this way.

To perform simple layering, find a branch close to the ground that is flexible enough to manipulate. Branches should be around ½ inches in diameter or less. Dig a shallow trench in line with the direction the branch is growing. Wound the branch by removing several inches of bark along the bottom of the stem that will be in the trench. Cover the wounded area with rooting hormone, making sure to coat the edges of the wound where the bark is still intact. Cover the stem with soil, leaving the leafy end sticking out of the trench. Use a landscape fabric staple or just a heavy rock or brick over the buried branch so that it will not spring out of the soil. All you have to do now is wait. You can do this any time of year, but if done during the early summer you should have a well-rooted stem that can be pruned from the plant and transplanted this time of year. If you do not have any low flexible branches that can be bent to the ground, you can use a slightly more complicated method called air-layering. This is best done when air temperatures are warm over a two to four-month period. To air-layer you will need the following supplies: a sharp knife, an 8 to 12 inch square of clear plastic and aluminum foil, two twist-ties, rooting hormone, a large handful of un-milled sphagnum moss, and a small bucket of water.

The area to layer will be a foot or so from the end of a leafy branch, and should be located on the previous year’s growth, not the new, still-green twigs. Wound the stem with your knife by removing a narrow, 1 to 2-inch strip of bark on opposite sides of the branch. Apply rooting hormone two both wounds making sure it is in contact with the edges of the wound where the bark is still intact (depending on plant species, rooting hormones are often not necessary). Grab a large handful of sphagnum moss and wet it in the bucket of water. Squeeze out the excess moisture. Flatten the ball of moss into a small pancake and wrap it around the branch over the wound. The moss only needs to cover 3 to 4 inches of the branch. Next, wrap the plastic tightly around the branch and moss and secure with a twist-tie above and below the moss. Lastly, the aluminum foil (shiny side out) is used to cover the plastic to block the sunlight so that it does not heat up, but also creating a dark environment for roots to grow.

Check the progress every couple of months by removing the aluminum foil and looking for good root development that you can see through the plastic. Once the are many visible roots, you can prune off the rooted branch and either grow it in a pot for several months to encourage more root growth, or just transplant to its new home.

Air-layering can also be used to propagate tropical woody indoor plants, especially those that might need pruning anyway because they are overgrown.