

Mastering Azaleas

Part 3. Azalea Propagation— Evergreen Cuttings

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This next series of how-to articles will venture into the rewarding methods of propagating azaleas from cuttings from new shoots. If you wish to reproduce an azalea flower that is an exact copy of the flower of the parent plant, then cloning is the method and there are a number of tried-and-true ways of accomplishing the task. I mention only for reference here that among those methods are ground-layering, air-layering, and mound-layering, which are viable alternative means of cloning.

Some of the prostrate, low, or very dwarf azaleas will ground-layer themselves with no effort on the part of the gardener. Air- and mound-layering requires a concerted effort on the part of the propagator to succeed. New shoot cuttings require the same dedication, though they are easy to root if given the proper conditions of

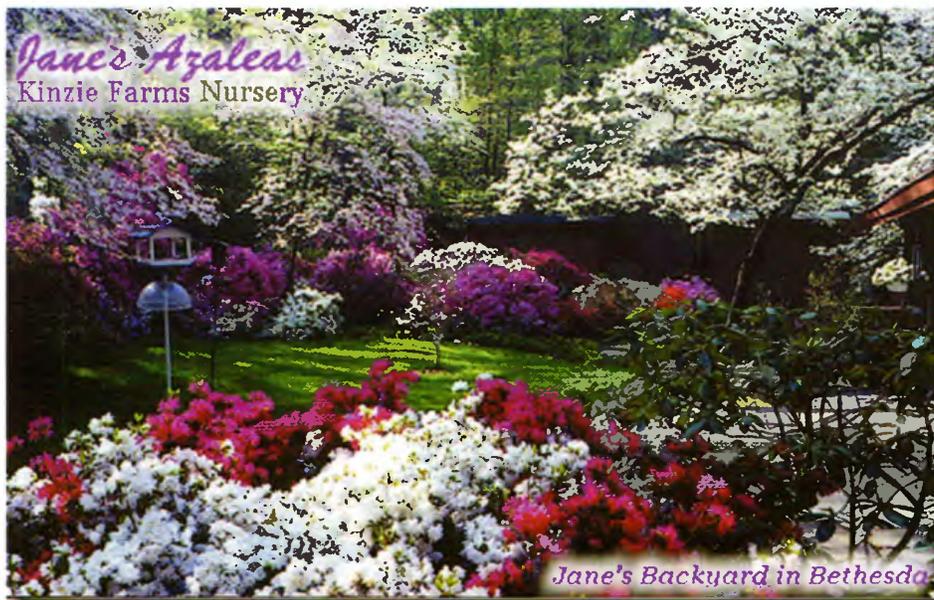
moisture, humidity, temperature, a well-drained medium, and light.

My first venture into rooting cuttings happened to coincide with my lack of knowledge of the correct methods and resulted in an astounding 100% success. There is a lot to be said about dumb luck, and ignorance is bliss. It was late into the season, actually November of 1967, when I prepared wooden flats with a mixture of 50% sphagnum peat moss and 50% coarse sand. The cuttings I took were hardwood, but I did give them a treatment of the rooting hormone aid Rootone*, stuck the cuttings, and placed the flats into a modified cold frame with heat tape running through (under) the medium, and light bulbs placed above the cuttings. A good friend told me that I should not expect the hardwood cuttings to root, but as stated above, we both were

amazed at the success that defied logic or the knowledge of the day.

Now, let us move on to the methods I have used through the years to root and grow evergreen azaleas with great success. Through trial and error, I have learned that we should take cuttings from vigorous, well-maintained mother plants. In my experience, I have learned that:

- Cuttings taken from plants that have been given a high dose of high-nitrogen fertilizer will result in fewer cuttings that root.
- Cuttings taken from plants that are wilted from lack of moisture will also have the same results.
- Cuttings taken from plants that are diseased or have numerous insect pests will also have lower rooting percentages.



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Thus, experience tells us to select from mother plants that are healthy.

Rooting Media

In what do we root our cuttings? Containers come in many forms. I have used milk cartons, flower pots, wood flats, plastic trays of many varieties, the one gallon plastic milk or water jugs, peat pots, and even Styrofoam® cups. All will work, if excellent drainage is provided, and the container is free of plant pathogens.

As with containers, soilless mixtures also come in many forms using various combinations of peat moss, sand, Perlite®, pine bark, or other coarse material, even small gravel. A lot depends upon the care you plan on giving the stuck cuttings. If you plan on sticking the cuttings and forgetting them for a while, then use more peat moss in the mix to retain moisture over a longer period.

The mixture I use is 30% coarse Perlite®, 40% ground composted pine bark fines, and 30% screened peat moss. I do root under a mist system that provides a timed interval of on/off mist during the daylight hours. Cuttings stuck in small containers may be placed in the Zip-Loc® type plastic bags and sealed to retain moisture. Another method utilizes a flow-erpot filled with the pre-moistened mixture, the stuck cuttings, and a clear three-liter drink jug placed over it. The pot is then placed in some shady place where direct sunlight does not over-heat the mini-greenhouse.

Do we use rooting hormones? I do use them with the evergreen cuttings, particularly with hardwood cuttings. Any of the trade named rooting aids work well, but as a rule, I use 2,000 ppm (parts per million) IBA for softwood or semi-softwood cuttings and 4,000 ppm for hardwood. Some propagators do not use any and have great success, even with dormant cuttings.

Taking Cuttings and Aftercare

How do we take and treat the cuttings? I prefer to take cuttings in the

morning when the temperature is cooler in June or July. I will often put the cuttings in a plastic bag and slip them in the refrigerator for chilling for 24 hours. This seems to aid the process, though I have no definitive proof. As I stick the cuttings, I remove all but the top three leaves, remove the flower bud that has formed, and sink the prepared cuttings in cool water. Some propagators use a bleach solution or a fungicide to prevent plant pathogens from forming, but that is optional.

How far apart do we stick the cuttings? Usually, I prefer to stick the cuttings about 2" apart or in flats on 2" centers. First, I plunge a 10-penny nail into the moistened mixture to make a hole, then slip the cutting into it and gently firm the soil around the stem with my fingers. Do not put the cutting all the way to the bottom of the container, for that will often cause it to die and rot. Once all the cuttings are stuck in a container, I gently mist them, cover, or put under the mist system. Do not allow them to dry out, but do not over-water.

How long will it take to root a cutting? In most cases, it will take about five to six weeks for roots to start forming along the lower stem. Do not pull or push on the cuttings to see if they are rooted, for that will break the tender roots and loss of the plant may result. Patience is preferred. Once you see new growth initiated, you may assume some roots have formed and that it is time to give the small plants some liquid fertilizer, but do not feed after late August.

I like to put the small plants in a cold frame for winter protection, though you may use a basement or heated garage for that purpose. My first rooted cuttings were put in a compost heap and mulched with pine needles for protection. It all depends upon your individual winter climate. In years past, I planted the rooted cuttings in beds, but do not wait too late in the fall season, or you may find them heaved out of the ground.

Pest Control

One last area to cover is pests. They come in many shapes and forms. Keep in mind that deer love to munch on the tender shoots of azaleas. So do rabbits, field mice, gophers, chipmunks, and an abundance of insects. The family dog or cat can become one of the pests. Our Great Dane of many years ago loved to dig and trample, and no amount of scolding ever broke her of those problems, but this topic will be discussed in a later article.

I hope you have found a few bits of information that help you propagate our favorite shrub, the azalea. Part 4 of the series will delve into rooting deciduous cuttings. If you have questions, please feel free to contact me.

References

Previous Mastering Azaleas Series articles by Joe Schild:

Part 1. "Don't Plant That Azalea in That Hole!" 2003. *The Azalean* 25(1): 16-17.

Part 2A. "Azalea Propagation—Seed Collecting, Cleaning, and Storing." 2003. *The Azalean* 25(2): 32-33.

Part 2B. "Azalea Propagation from Seed—Planting and Seedling Care." 2003. *The Azalean*. 25(3): 63-64.

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