

Propagating *Daphne*®

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Ten years ago I first learned the miracle of plant propagation from my friend Bill Callina, chief bottle washer at New England Wildflowers Society Garden in the Woods. He went with me to the swamp to collect the sphagnum, helped me drag an old aquarium up the cellar steps and showed me how to stick rhododendron cuttings in a terrarium. When half of them grew roots, success went to my head.

I was soon screeching to a stop by the side of the road, jumping out of the car, Felcos in hand, and hauling home a myriad of unknown genera. It's taken a few years to identify all that stuff and some of it still grows at my home in Connecticut. Some needed several applications of Roundup before it would go away! Boy, those invasive plants sure do smell good! Having no real direction back then, I became known as one of those "she'll try anything" people and the recipient of garbage bags full of intriguing and mysterious cuttings. In one of those bags came my first *Daphne* branches.

For those uninitiated souls, the genus *Daphne* consists of 50 species ranging in origin from Europe to Asia, from the Caucasus to Siberia, from Zones 4 to 7. *Daphne* can be deciduous or evergreen. To my knowledge, all are extremely fragrant and all have a very bad (and in my opinion) somewhat undeserved reputation for "sudden death syndrome."

This might be the time to impart to you one of my most tried and true propagation principles: "It's really easy to root really difficult plants if you don't know they're difficult." Back then I would just pull those unknowns out of the bags, clean them up, and stick them under my "miracle mist" leaf apparatus and...voila! Then I started to read — about only in spring (or winter), only new wood (or old), only this powder (or liquid), and my favorite "next to impossible from cuttings." Someone would say, "Wow, I didn't know you could root yellow magnolias like that." And that would be the end of that free ride. But the *daphne* stayed easy. So I must admit to chuckling a bit when Brian Maynard asked me to speak on the rooting process of one of my favorite plants. I probably said, "Rooting is the easy part." The problem is how to keep them alive the next year.

At the risk of offending half the world, the technical term for my cutting method is "Chinese Haircut." It's such a perfect description. Everyone gets it, and since half of my genes are Chinese, I hope to get away with it. Basically you would gather as much of the plant you were cutting in your hand, at the height you wanted to trim, and cut above your fist. At the same time as you are taking your cuttings, you are pruning the donor. Cleaning up the cuttings involves cutting each to about 3–4 inches, leaving only 4–6 leaves at the top, and dipping the finished cuttings in a disinfectant solution. I use 1 tablespoon of Greenshield to 1 gal of water, or a solution of bleach and water (1 : 9, v/v). This last stage seems to help keep the remaining leaves from dropping — a common problem.

After a dipping in Hormodin #1 powder, the cuttings are stuck in trays filled with perlite, which is used to assure absolute drainage. At Prides Corner we powder them by the fistfuls and stick them 200 to a tray. At home I use a 50 tray where

they root in individual cells and perhaps are stressed less when removed for potting. You'll probably need to break up the perlite a little before sticking, as it tends to bind up pretty tightly after watering.

After 3 or 4 weeks in a light mist, the rooted cuttings are allowed to acclimate to a dryer world and then are gently lifted from the tray and root pruned if necessary. The liner tray is 5 inches deep to try to compensate for that daphne top root and can be stripped from the bottom up at the potting shed for easy removal. One year I used 1 × 12-inch Anderson band pots for a few. The *D. ×burkwoodii* 'Carol Mackie' rooted to the bottom in 3 weeks. After potting, the rooted cuttings get a light pruning and go out to benches in a minimum heat (34 °F) liner house. We have also left small amounts in an unheated house and found they come through our Zone 5 winter just fine.

As to the time sequence, we try to do our cuttings August through September. But I have had some of the best successes in December (all species). I know one propagator who takes very soft cuttings May and June and has fine results. The cuttings hopefully get potted and taken to the liner house in late September to October. After at least two prunings, one in the winter and one after new growth in the spring, the liners will be sent to potting in June – July.

A few other observations that might be helpful:

Daphne love lime so make sure you check the pH in the liner mix and again at potting time. These mixes seem to work well: (unit = 15 gal pot)

1) Liner soil:

- 3 peat 2 cups rootshield,
- 4 bark 4 cups Harrells,
- 5 perlite balanced fertilizer,
- 10 Cups 1/2 cup micros.

2) Grow on soil:

- 28 yards southern pine 7 bags Harrells 14–16–7,
- 10 yards sand 50 bags Scotts Polys,
- 2 yards peat 8 bags Harrells Boster Mix,
- 7 bags lime.

We pot liners into 9-inch × 7-inch fiber pots which serves several purposes:

- Height allows for tap root growth.
- Daphne roots need to be kept as cool as possible. Comparable tests of black pots versus fiber in the sun, show the plastic at 105 °F while the fiber stayed at 75 °F.
- Control of irrigation is very important. The daphne is kept in a roll-up side white plastic house which enables you to control watering and temperature to some degree.
- Fiber holds up about 1-1/2 years with the bottoms dipped in paraffin and kept off the ground on pallets. About the same time as the plants become saleable, the fiber pots begin to break down. Dropping them into a plastic pot of the same size ensures safe shipping and handling. The customer can then lift the fiber pot and plant the whole thing, keeping the root system intact.

There are two new commercially available *Daphne*. *Daphne ×transatlantica* 'Summer Ice' has a delicate variegation around its leaf edge and grows vigorously. *Daphne ×transatlantica* 'Eternal Fragrance' has dark green succulent-like

leaves and blooms on new wood as well as old. 'Eternal Fragrance' comes from Holland through Plant Haven. 'Summer Ice' was found by Robert Ticknor. Both decide early whether to live or die. Those that choose life grow more vigorously than 'Carol Mackie' and rebloom quite profusely in September.

In closing I would once again say I have never found the rooting stage of growing daphne to be the hardest. Don't listen to the rumors of difficulty, doom, disaster, and failure. Give it a try. Remember "Beginners Luck." I'm sure those of you who have had success will agree. It really is one of the easiest plants to put roots on.