



Cultivation Note

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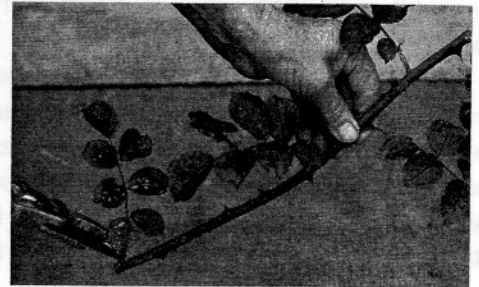
Propagating Woody Plants by Cuttings: Confessions of a Fraud by Gil Moore

I shall begin by confessing that I am a bit of a fraud on the subject of propagating shrubs by cuttings. Scientific studies have been done and treaties written on this subject, and what you are about to read is neither of those. Indeed, my experience has been both unscientific and haphazard. But, I have enjoyed some success with the techniques described here—along with a few failures—and learned a lot about plants en route. So I pass along my experience with the familiar endorsement, “It works for me.” I suppose it should be stated that propagating by cuttings does nothing for biodiversity or genetic improvement, since the product is purely a clone of the parent. There are, however, some clear advantages. Useful plants can be produced quickly and the often complex requirements involved with seed germination are bypassed.

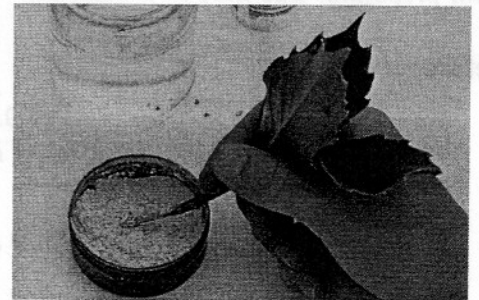
My first propagation was as a twelve-year-old. I was given a cutting of Ninebark shrub and told to stick it in the ground, invert a mason jar over it, and keep the soil moist. To my great delight it worked, and I’ve been hooked ever since. Over the years I have discovered a few more tricks to improve the odds. First, wash the containers to be used with soap and hot water to eliminate potential sources of disease. Second, use a good rooting medium. One that has worked well for me is a mixture of 50% peat moss and 50% perlite. Perlite alone also works. Dampen the medium before inserting the cuttings—it should be moist but not wet. Third, cuttings should be taken from current year growth that has started to harden up, usually in late June or early July. This can be determined by watching the new growth change color. New growth typically emerges from the bud in spring as distinctively green shoots. As the terminal growth stops the new shoot begins to harden up and change to the brown color of last year’s stem.

Cuttings should be 6–8 inches in length. If they are not going to be processed immediately put them in water to prevent wilting. The bottom cut should be made at a node (where leaves join the stem) and leaves removed from the bottom half of the stem. A rooting hormone will speed up rooting time. This can be purchased under various names at garden centers. Dip the bottom end of the cutting in water, then into the rooting hormone powder. (Don’t return used powder to the original container—it can pick up a fungus or disease and contaminate your supply). Use a stick to make a hole in the medium and insert the prepared cutting into the hole. Ensure that there is good contact between the medium and the base of the cutting. Finally, firm the medium around the cutting with your fingers. One species of plant per pot seems to work best, and you will want to take more than one cutting per plant to increase your chances of success.

Tent the pot with a clear plastic bag held above the cuttings using a stake and an elastic band around the pot. If you are able to keep the medium evenly moist, the plastic bag will help avoid the chance of fungus destroying the cuttings. Beware. The pots cannot be allowed to dry out—ever! Put them in a shaded place because sunlight will cook a cutting, especially if tented. Bottom heat, however, is useful. To illustrate: I have a shrub, *Genista tinctoria*, that is being shaded out. Mature plants of this specimen can’t be moved, so I tried rooting cuttings on three occasions without success. A friend asked if he could try and his cuttings took root. The only difference was that he used



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bottom heat. I now use a heat mat for that purpose. Some species are more easily rooted than others. To find out which is which, check nursery references such as Michael A. Dirr's *Manual of Woody Landscape Plants*, or just give them a try. The Ninebark that got me started is obviously easy, and so are roses.

If the plants still look healthy in about six weeks there is a good chance that you have succeeded. Test a cutting by grasping it between thumb and forefinger and give it a tug. If it gives, no roots have formed yet, so cover and let them go for 10 days or so and try again. If the cutting resists when you tug it, you have roots. Dig one out. If the roots are over an inch long, they are ready to pot, but before doing that take the new plants out of the tent and put them in a shady place for two or three days to expose the plants to air. If they wilt, water and mist them, but don't over water. They are now ready for potting. Use a sterile potting soil, water them with a very weak fertilizer solution, and keep them shaded.

During the first winter your new plants will need protection. A cold frame works well. If you don't have one, a cardboard box can be used. Place the pots in the box with space around each of them. Fill in this space with leaves and put the open box in a sheltered place. They will need to be watered by you or by rain until they freeze. Rodents can easily wipe out all your hard work. To avoid this, I place boxes of De-con in with the pots. In the spring you can put your plants in the ground or move them to larger pots.

Gil Moore is a long-time member of RIWPS, a life-long gardener, and a successful plant propagator who lives in Slatersville.

References:

Peter Anderson and Alan Toogood. 1999. *American Horticultural Society Plant Propagation: The Fully Illustrated Plant-by-Plant Manual of Practical Techniques*. Doring Kindersley.

Tony Avent. 2003. *So You Want to Start a Nursery*. Timber Press.

Geoff Bryant. 2003. *Plant Propagation A to Z: Growing Plants for Free*. Firefly Books Ltd.

Michael Dirr and Charles Heuser. 1987. *The Reference Manual of Woody Plant Propagation: From Seed to Tissue Culture: A Practical Working Guide to the Propagation of over 1100 Species*. Varsity Press.

Michael Dirr. 1998. *Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation and Uses*, 5th edition. Stipes Publishing, LLC.

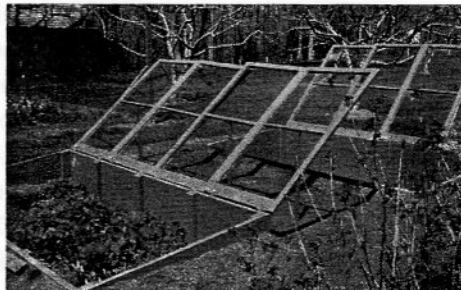
Ken Druse. 2000. *Making More Plants: The Science, Art, and Joy of Propagation*. Clarkson N Potter Publishers.

Peter Thompson. 1993. *The Propagator's Handbook, Fifty Foolproof Recipes, Hundreds of Plants for Your Garden*. Newton, Abbot, Devon: David & Charles.

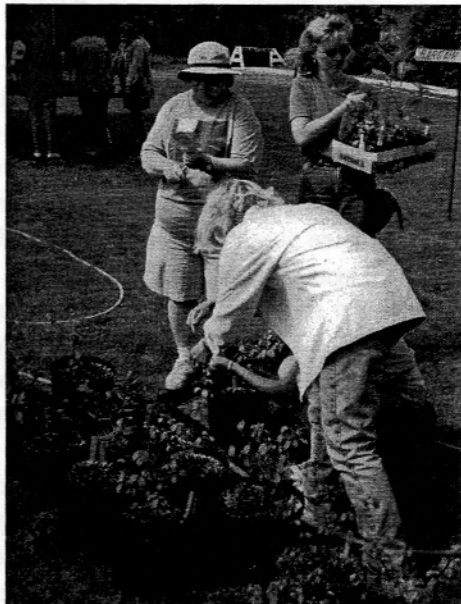
The Rhode Island Wild Plant Society. 2004. *Cultivation Notes #1-39*.



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The Seed Starter's are always looking for new members to help propagate plants for the annual RIWPS plant sale. It is a great opportunity to learn more about propagation. Contact us at (401) 453-3777 for more information.



RIWPS Policy

Never dig plants in the wild or without the written permission of the landowner. Please take seeds and cuttings sparingly.