

NEW PLANTS FROM SOFTWOOD CUTTINGS by Sigrid Hewitt

Remember that warm, sunny day in late July? Remember seeing that leafy green stand of Summersweet (*Clethra alnifolia*) along the roadside in Charlestown? White blossoms and a sweet aroma? Our travelling handbook identifies it. It's growing vigorously here in its native habitat. Wouldn't it be great to make some copies of this plant to have it our own garden, maybe make enough new plants to give some away or donate to a sale? We could wait for seed to form, but *Clethra* grows well from softwood cuttings. This method will give us a blooming plant in far less time. Ideally, we would take cuttings earlier in the summer, but since this *Clethra* plant still has strong new growth, our cuttings should root well.



Clethra alternifolia
 (Summersweet)

First, some caveats: be sure the plant is not growing in a park or sanctuary where plants are protected, and cutting or collecting is prohibited. If it's on private property, you need the owner's permission. If it's in someone's garden, it may be a named cultivar, protected by plant patent law. Lastly, be sure that your chosen plant is healthy, without evidence of disease or insect damage

The processes of plant propagation have been studied extensively by scientists, and new technology is leading to even greater understanding of the way plants can reproduce themselves. Because cuttings produce a clone of the parent plant, unlike a seed which contains a mix of genetic material, commercial growers have long used cuttings to produce the large numbers of identical plants they need for sale. A rooted cutting can, with good care, be grown into a saleable plant much more quickly than a plant from seed. This speedy growth is appreciated by home gardeners as well. Cuttings can be made from hardwood, roots, and leaves alone, depending on the best method for individual plants. Using softwood cuttings from deciduous plants is only one method, but it can be done easily by individuals using simple techniques and equipment. Results happen in a reasonably short time.

A softwood cutting is taken from the top three to six inches of the tip of the soft, vigorous, new growth of the spring or summer. It will bend easily without breaking. Weak or thin branches should not be used, nor very heavy or thick ones. Lateral or side shoots make good cutting material. The cutting should have at least one node, preferably two, since the basal cut is made just below a node. The challenge, a delicate balance, is to initiate rooting before the cutting wilts or rots.

Before you can actually begin the process, you need clean pots and tools, a good rooting medium, and some plastic covering to protect the cutting while the roots are forming. This can be prepared in advance and kept covered and clean. Pots or containers as well as tools you will be using, must be absolutely clean. I use plastic 4" x 4" pots or small seed starting pans, at least 3" deep. Larger pans are fine for large numbers of cuttings, but since I usually have only half a dozen or so, I try to have each pot contain only one kind of cutting. It's easier to manage, and if one pot fails, another may not! Clean labels and a marking pencil are vitally necessary. You may think you'll remember which plant is in each bag, but it's better to be sure.

The rooting medium must allow the cutting to have moisture and oxygen, and must hold it firmly in place while the roots are forming. Different combinations of sand, peat moss, perlite, and vermiculite are all possibilities. Peat moss holds moisture well; sand (clean, sharp, plaster sand, not sandbox sand) and perlite give good drainage. Most growers eventually find a favorite formula after experimenting with one or more mixtures. I have tried several, but usually return to a 1:1 peat moss and sand (by volume) mixture. The peat moss must be thoroughly moistened before being

mixed with sand. The rooting medium should also be as clean as possible. A rooting hormone, applied to the base of the cutting, is helpful. Powder forms, such as Rootone, are available at garden centers and are easy to use.

If you're standing along that roadside and want to root some Clethra cuttings, I hope you brought some sharp clippers and a plastic bag. Look for vegetative shoots, those without flowering tips, and cut shoots about 8" long. They will be shortened later in the process. Pop them into a bag, keep them as cool as you can, label the bag, and race for home.

Back home, spread out clean newspaper, line up the pots needed and fill them with rooting medium. About four to six cuttings will fit into a 4" pot. Put some rooting hormone on a clean saucer. Now, with a sharp clipper or knife, cut the stem just below a node into a shorter, tip piece, about 3" to 5" inches, with preferably two nodes. Take off any lower leaves. Roll the cutting's end in the rooting hormone and, using a pencil, make a hole for it in the medium. Place the cutting gently, not pushing down, and firm the medium around the stem with your fingers. It should stand up sturdily. The cuttings can be set fairly close together, with leaves almost touching. If the cutting has very large leaves, they may be trimmed. If the medium has the right moisture, the cuttings shouldn't need extra water.

Next, put each pot carefully into a plastic bag, and secure the top, leaving an air space. Label the pot with the name of the plant and the date. The pot should go into a cool, shaded but light spot ideally between 65 and 75 degrees. If the cuttings wilt, they can be lightly misted. A more common danger is rot. Extra-warm temperatures or the presence of a fungus can lead to rot. Opening the bag to let in more air may help. The use of a fungicide, to dip the cuttings before insertion, has been recommended, and may be useful. Sometimes several tries are needed before success.

From left to right: Dipping the cutting in rooting hormone, placing it in the medium, and grouping the cuttings in the pot.



Rooting time can vary from two weeks or so to several months. One needs to keep a kindly eye on the nursery. If new growth appears, it is safe to give a cautious tug on the cuttings. Resistance may mean that roots have formed. If growth is vigorous, roots may appear at the bottom of the pot. The cuttings can benefit from very dilute fertilizer at this point. Later, they can be transplanted into larger pots, but should be sheltered for their first year. If they are overwintered outdoors, the pots should be plunged in an area sheltered from drying winds and too much winter sun.

Many native shrubs and some trees are readily propagated by this process, and once preparations are made, it is fun and easy to do. Possible plants include aronia, calycanthus, clethra, cornus (now called swida), halesia, hydrangea, physocarpus, rosa, and viburnum. There is a great deal of information in books and on the Internet about the propagation of individual species. The more one learns about this process, the more interesting it is to take this small part in the complexity of the natural world.

RIWPS Policy

Never dig plants in the wild or without the written permission of the landowner. Take seeds sparingly.

Note: "Cultivation Note" is a regular feature in WildfloraRI, the Bulletin of the Rhode Island Wild Plant Society. If you would be interested in writing a future cultivation note article or have suggestions of plants you would like to see included, please contact Dick Fisher at Richard.Fisher2@cox.net. The previous cultivation note topics are listed on the website and there is an easy to follow set of guidelines for the format of your article. — WildfloraRI Editorial Committee.

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