

SHASTA NEWSLETTER

We are going to try something new for this issue of the newsletter. By putting it on our website we can include links to many articles out there in the World Wide Web.

Here is one link that appeals to me:

<http://learningtogardenwithbarbara.com/planting-seeds-indoors-browallia-marine-bells/#more-295> that's not really me and the web site is no longer active but you can see some of the archived material

Since this is the perfect time for cuttings here is a very good article with good drawings. I hope you try some cuttings of your favorite plants.

Plant Propagation by Stem Cuttings: Instructions for the Home Gardener

**Erv Evans, Extension Associate Frank A. Blazich, Professor
Department of Horticultural Science**

Propagation by stem cuttings is the most commonly used method to propagate many woody ornamental plants. Stem cuttings of many favorite shrubs are quite easy to root.

A greenhouse is not necessary for successful propagation by stem cuttings; however, maintaining high humidity around the cutting is critical. If rooting only a few cuttings, you can use a flower pot (Figure 1). Maintain high humidity by covering the pot with a bottomless milk jug or by placing the pot into a clear plastic bag. Cuttings can also be placed in plastic trays covered with clear plastic stretched over a wire frame (Figure 2). Trays must have holes in the bottoms for drainage. The plastic will help keep the humidity high and reduce water loss from the cuttings.



Figure 1.

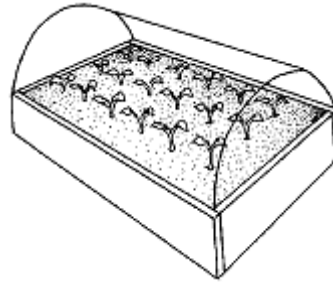


Figure 2.

If you need more elaborate facilities, you can construct a small hoop frame and/or use an intermittent mist system

Types of Stem Cuttings

The four main types of stem cuttings are herbaceous, softwood, semi-hardwood, and hardwood. These terms reflect the growth stage of the stock plant, which is one of the most important factors influencing whether or not cuttings will root. Calendar dates are useful only as guidelines. Refer to Table 1 for more information on the best time to root stem cuttings of particular ornamental plants.

SW = softwood, SH = semi-hardwood, HW = hardwood

Herbaceous cuttings are made from non-woody, herbaceous plants such as coleus, chrysanthemums, and dahlia. A 3- to 5-inch piece of stem is cut from the parent plant. The leaves on the lower one-third to one-half of the stem are removed. A high percentage of the cuttings root, and they do so quickly.

Softwood cuttings are prepared from soft, succulent, new growth of woody plants, just as it begins to harden (mature). Shoots are suitable for making softwood cuttings when they can be snapped easily when bent and when they still have a gradation of leaf size (oldest leaves are mature while newest leaves are still small). For most woody plants, this stage occurs in May, June, or July. The soft shoots are quite tender, and extra care must be taken to keep them from drying out. The extra effort pays off, because they root quickly.

Semi-hardwood cuttings are usually prepared from partially mature wood of the current season's growth, just after a flush of growth. This type of cutting normally is made from mid-July to early fall. The wood is reasonably firm and the leaves of mature size. Many broadleaf evergreen shrubs and some conifers are propagated by this method.

Hardwood cuttings are taken from dormant, mature stems in late fall, winter, or early spring. Plants generally are fully dormant with no obvious signs of active growth. The wood is firm and does not bend easily. Hardwood cuttings are used most often for deciduous shrubs but can

be used for many evergreens. Examples of plants propagated at the hardwood stage include forsythia, privet, fig, grape, and spirea.

Early morning is the best time to take cuttings, because the plant is fully turgid. It is important to keep the cuttings cool and moist until they are stuck. An ice chest or dark plastic bag with wet paper towels may be used to store cuttings. If there will be a delay in sticking cuttings, store them in a plastic bag in a refrigerator.

While terminal parts of the stem are best, a long shoot can be divided into several cuttings. Cuttings are generally 4 to 6 inches long. Use a sharp, thin-bladed pocket knife or sharp pruning shears. If necessary, dip the cutting tool in rubbing alcohol or a mixture of 1 part bleach to 9 parts water to prevent transmitting diseases from infected plant parts to healthy ones.

Remove the leaves from the lower one-third to one-half of the cutting (Figure 4). On large-leaved plants, the remaining leaves may be cut in half to reduce water loss and conserve space. Species difficult to root should be wounded.



The rooting medium should be sterile, low in fertility, and well-drained to provide sufficient aeration. It should also retain enough moisture so that watering does not have to be done too frequently. Materials commonly used are coarse sand, a mixture of one part peat and one part perlite (by volume), or one part peat and one part sand (by volume). Vermiculite by itself is not recommended, because it compacts and tends to hold too much moisture. Media should be watered while being used.

Insert the cuttings one-third to one-half their length into the medium. Maintain the vertical orientation of the stem (do not insert the cuttings upside down). Make sure the buds are pointed up. Space cuttings just far enough apart to allow all leaves to receive sunlight. Water again after inserting the cuttings if the containers or frames are 3 or more inches in depth. Cover the cuttings with plastic and place in indirect light. Avoid direct sun. Keep the medium moist until the cuttings have rooted. Rooting will be improved if the cuttings are misted on a regular basis.

Rooting time varies with the type of cutting, the species being rooted, and environmental conditions. Conifers require more time than broadleaf plants. Late fall or early winter is a good time to root conifers. Once rooted, they may be left in the rooting structure until spring.

Newly rooted cuttings should not be transplanted directly into the landscape. Instead, transplant them into containers or into a bed. Growing them to a larger size before transplanting to a permanent location will increase the chances for survival.

What to do in June

- Pinch back any annuals, *Geraniums*, *Cosmos* or any other plants that might be getting a little leggy.
- Pinch your *Chrysanthemum*'s to encourage them to be bushier and have more blossoms. Pinch them again, every 6 inches or so, as they grow.
- Divide spring flowering perennials like, *Primroses*, *Arabis*, and *Aubrietia*.
- Check your roses for mildew, aphid, black-spot or other insect or disease problems and if they appear take steps to control them right away.
- Roses will need to be fertilized each month through the summer.
- Make sure your climbing roses are securely tied into position. Prune them after blooming.
- Deadhead your annuals to encourage more flowers.
- Remove dead foliage from your spring flowering bulbs, but only after it has died back naturally.
- Sow seeds for Flowering Kale and Flowering Cabbage for colorful plants next fall and winter.
- As the weather dries out, your container plants may need daily watering especially if the pots are exposed to the drying sunlight.

- Once the foliage of Daffodils has died back, you may divide and move the bulbs to a new spot. Daffodil clusters should be divided up every 3 years to ensure good blooming.

Shrubs and trees

- This is a good month for shearing, pinching or pruning Junipers, Cypress or Conifers.
- Fertilize flowering shrubs like Rhododendrons, Camellias and Azaleas immediately after they have finished flowering with a 'Rhododendron' or 'Evergreen' type fertilizer.
- Dead head the developing seed pods from your Rhododendrons and Azaleas to improve next years bloom. Be careful not to damage next year's buds which may be hidden just below the pod.
- It's hedge trimming time!

Conserving Water

We have had some nice rain recently, but it isn't expected to last so plan now for water conservation. Use mulch to help hold in the moisture. Depending on your garden type, you can use gravel, de-icing sand or several of the bark products. Montague's Shasta Forest Products carries several varieties: walk on bark which is a semi shredded bark, soil conditioner which is finer, and orchid bark which is small chunks less than one inch. Apply at least one inch in depth around plants but keep it away from tree and shrub trunks. You can buy any of these in 2 yard lots or the orchid bark and the soil conditioner by the bag.

SOME USEFUL LINKS

<http://aggie-horticulture.tamu.edu/floriculture/container-garden/index.html> this has ideas for container gardens

<http://www.backyardgardener.com/index2.html> this has several links to alpine plants

<http://wildgingerfarm.com/index.htm> this is a commercial nursery with great articles

so that's a sample of what's out there. If you have a favorite site contact Barbara or Peggy and we can share it with everyone

SUMMER ACTIVITIES

If you are interested in making a trough this summer please contact Barbara Coatney (barcoat@sisqtel.net). Pat Swanson has offered to lead a class in this fun project. This usually takes about 2 hours and you need a 5 gallon bucket, rubber gloves, and a container to mold the trough (dish pans are good, also Styrofoam boxes or a board to carry it on if you want to do a free form trough.

Here's a site for a system using Styrofoam boxes

http://lowescreativeideas.com/idea-library/projects/Homemade_Hypertufa_Planter_0609.aspx

For those of you without computers the idea is to cover the box with chicken wire and then apply the mix. Don't forget that you can also use the library computers to download any of the links and print out the information.