

Share Your Plants with Others

by Debbie Lauer, Bell County Master Gardeners

One of the many joys of gardening is sharing your favorite plants with other people. It is also a lot of fun and in some cases challenging to see which of your plants that you can reproduce, or propagate, in order to share them with your friends, family, and neighbors. Plants can be propagated many ways; with seeds, stem cuttings, leaf cuttings, root cuttings, tip layering, simple layering, air layering, by stolons and runners, with offsets, by separation of corms and by division. With so many choices it is hard to decide where to start. Stem cuttings are easily taken from plants that don't develop corms or rhizomes and can be taken with little harm to your "mother" plant.

One of the easiest methods of creating the right conditions for successful propagation of a stem cutting is using the soda bottle propagation method. A lot of the materials needed for this project are easily found around the house. An empty, clean, 5 or 6 inch plastic pot, an empty 2 or 3 liter CLEAR soda bottle, sharp scissors or pruners, a pencil, rooting hormone (powder, liquid or gel), and rooting media. Rooting hormones and rooting medias (soils) are not that expensive and can be found just about anywhere you buy plants, potting soils, or fertilizer. Rooting media can be a variety of things, ranging from a peat and perlite mix, straight perlite, perlite and vermiculite mix and others such as potting soil with large additions of perlite and/or vermiculite. You can purchase something labeled rooting media, or buy the ingredients and make your own. The main thing you are looking for here is a fine, light mix that will hold water without being soggy and is light and airy enough to allow room for the growth of small delicate roots.

Next you need some cuttings from your "mother" plant. Many plants can be reproduced with this method. Antique roses, rosemary, American Beautyberry and many different house plants are some of the plants that we have been successful in rooting stem cuttings and creating new plants. You are only limited by your imagination and willingness to try different plants. Select healthy looking newer growth and snip off approximately 4 to 6 inch long cuttings. Avoid cutting growth that is very new or old, woody growth. These cuttings should have 3 to 6 nodes (bumps on the stem where the leaves are attached) on them. Remove the leaves from the bottom half of the stem. Fill your pot with rooting media and water until it runs out of the bottom of the pot. Put it aside until it quits draining. Rooting media should be damp but not soggy.

Now dip your cuttings in the rooting hormone. To prevent contamination, never dip the cuttings directly into the hormone bottle. Instead, remove some from the bottle and dip your cuttings into that. If you are using rooting powder, dip the cutting into water first then into the powder. Gently tap off excess powder. Now use your pencil to make a hole in the wet rooting media for the cutting. Without touching the sides of the hole insert the cutting and tap the rooting media in around the stem.

Clean out the soda bottle and remove any labels. Cut off the bottom of the bottle. Before covering the cutting, put a plant label with information such as the type of plant and date planted. Now fit the bottle into the pot over the cutting you just planted without disturbing it. The soda bottle should fit inside the rim of the pot and be pushed down into the rooting media to create a seal and reduce loss of moisture. The cap of the soda bottle should be left on until cutting begins to root. Place your soda bottle propagator in an area with bright light but not in direct sunlight.

You may want to place more than one cutting in the same pot, giving you a greater chance of success. Depending on the plant it may take 4 to 6 weeks or a couple of months for your cuttings to root. Signs that your cuttings have rooted are things like new growth on the cutting or seeing roots growing out the bottom of the pot. While waiting for the roots to appear you need to monitor the soda bottle incubator. Condensation inside the bottle is a sign that there is enough moisture. You should not have to add water for a couple weeks. Remove the soda bottle and add water a little at a time if condensation is totally gone. Cuttings can die from too much or too little moisture. If condensation is heavy open the lid of the soda bottle and let the soil dry out a little. What you want is some condensation, but not heavy enough to wet leaves.

Some tips for greater success rates include: when propagating a large leaved plant cut the leaves in half before putting on the soda bottle top, remove any flowers or flower buds, and don't let the leaves of your cuttings touch the sides of the soda bottle. If the leaves of the cutting appear to get any moldy looking

spots on them, take the cap off the bottle and let some of the moisture evaporate, also remove the infected leaves. If all the leaves fall off the cutting don't necessarily give up on it. We have seen roses root after all the leaves fell off the cutting. Above all else be patient!

Once the roots have become established, the new plant needs to be planted into a small pot containing regular potting mix. Careful handling of the plant with its delicate new roots is extremely important. Have the new pot with soil ready before removing plant from the soda bottle incubator. Again insert the pencil to make a hole for the new roots in the potting soil. Gently loosen the roots using that same pencil and carefully remove the plant from its rooting media. Immediately place it into the new pot and tap soil into place. Do not touch the roots with your fingers and do not allow the tender new roots to dry out. Once the plant has begun to grow and is well established, it is ready to be given away or planted in another spot in your garden.