

Propagating Plants from Cuttings By Robyn Lowenthal

Propagating plants from cuttings, aka asexual or vegetative propagation, is one of the easiest methods of making new plants and is ideal for plants that are hard to start from seed. The new plant will be an exact replica -- a clone - of the parent plant.

Stem cuttings include herbaceous, softwood, semi-hardwood and hardwood. Leaf cuttings may be used when working with fleshy plants such as begonias, African violets and succulents.

Keep in mind that when you are doing this type of plant propagation, you are doing “plant surgery.” Take cuttings from healthy plants. Good sanitation is vital; always use a clean, sharp knife and sterile rooting medium. The cuttings must be given the proper growing environment; the main “enemies” of cuttings are drying out and/or rotting. When propagating with cuttings, always remember that plants have tops and bottoms. Always plant your cuttings with the up end up!

Cuttings can be “held” for a while, by putting them in water, in a sealed plastic bag, or wrapping them in damp paper towels. When taking cuttings from succulent plants, it is best to allow the cutting to callus for a few days, to help prevent rotting when placed in soil.

Some cuttings need rooting hormone. Pour just the needed amount of rooting hormone into a small cup or onto a paper towel. Never stick cuttings into the container of rooting hormone. This will degrade the remaining hormone in the container. Discard any leftover rooting hormone.

How: Take cuttings just below where a leaf attaches to the stem (the node) because roots tend to grow from nodes. If you leave a section of stem below the node, it often rots. Remove all but the top 3 or 4 leaves. Leaves can be trimmed to reduce the chance of drying out. Remove any flowers. Make some holes in your soil, using a dowel or pencil, a little larger than the diameter of the stem. Dip the cutting into water, then into rooting hormone (if needed), and stick them into the holes. Firm up the

soil around the cutting to provide good contact. If high humidity is needed, place the entire pot into a plastic bag. Fill the bag with air and seal with a rubber band or twist tie. Check the cuttings regularly. A sure sign of root development is the appearance of new growth. Remove the plant from the bag and place under lights.

When:

Herbaceous plants – anytime. Softwood cuttings – spring to early summer.

Semi-hardwood cuttings – late spring to late summer.

Hardwood – during dormancy.

Herbaceous plants, 3” and 5”. Depending on type of plant, rooting hormone and/or high humidity may or may not be necessary.

Softwood cuttings, 3”– 5”, are taken from the new, soft growth of woody plants. Rooting hormone is necessary, and bottom heat is helpful. This type of cutting is vulnerable to moisture loss. Trim leaves and keep in a very humid environment, such as in a terrarium or plastic bag.

Semi-hardwood cuttings, 3” – 6”, are partially mature wood from the current season’s growth. Rooting hormone is necessary, and “wounding” may help root development. They don’t require a very humid environment.

Hardwood cuttings, from deciduous or evergreen plants, 4”–30” , should include at least two nodes. Rooting hormone is necessary.

Leaf cuttings. Begonias, African violets - Cut a healthy leaf with the petiole. Reduce leaf size, but retain central veins. Stick petiole into the soil, with the leaf making contact with the soil. Water and put into a plastic bag until a baby plantlet appears.

Succulents – Remove a healthy leaf. Allow it to dry for a few days, then stick it into soil. When a baby plantlet appears, you know roots have developed.



THIS ARTICLE IS A HANDOUT FOR THE NEXT SEED EXCHANGE, NOW RESCHEDULED FOR FALL 2017.