

COOPERATIVE EXTENSION

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Fact Sheet 01-86

Methods for Propagating House Plants

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There are many ways to increase the number of indoor plants by propagation. Grow new plants from parts of existing plants. The simplest ways are stem cuttings, leaf cuttings, layering, and seeds.

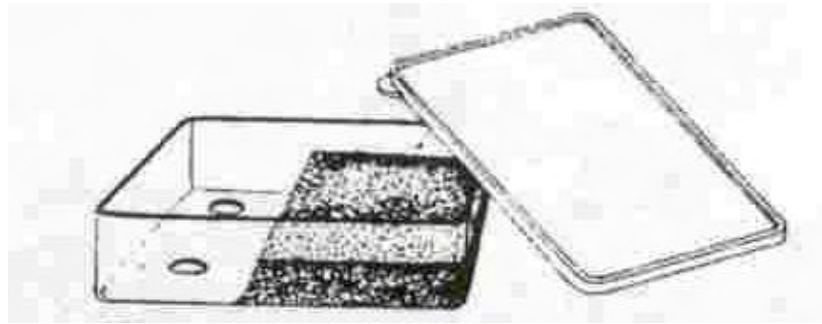
Stem Cuttings – Houseplants, that grow upright with long stems, can be propagated by snipping off and planting sections of the stem. Select vigorous, upright-growing shoots, three to five inches long, with four to six leaves. Cut these from the plant with a sharp knife or shears. The rooting medium can be purchased or mixed at home. Vermiculite or perlite are two substances that hold moisture well and can be purchased in varying quantities. Both are excellent for root cuttings. A mixture of half perlite and peat moss in equal amounts, can be used. Peat moss, by itself, drains poorly and cuttings rot when placed in it.



For a few cuttings, a plastic or clay pot can be used. Fill within ½” of the top with the rooting medium and water it thoroughly. While it drains, trim the bottom leaves off the cuttings. Make a straight, clean cut just below the bottom bud. A bud is a small protuberance on the stem, containing an undeveloped shoot, leaf, or flower. Dip the stem into a hormone rooting powder. Tap the cutting to remove the excess rooting hormone.

Using a pencil, poke a hole at least an inch deep and insert the cutting. Space the cuttings without crowding. Water again to settle the rooting medium around the cuttings. Cover the pot and cuttings with a plastic freezer bag or sandwich bag.. Secure the covering with a rubber band or tape. Place cuttings in bright light, but not direct sunlight. Water when necessary. Remove the plastic cover when new leaves start to grow.

For rooting a greater number of cuttings, use a transparent plastic box with a lid. It should be at least six inches deep. Poke a ¼” hole every two inches, in the bottom of the box, to permit excess water to drain. Fill the box about 1/3 full with rooting medium. This allows space for the cuttings to stand upright when the lid is closed. As before, using moist rooting medium, trim the lower leaves, and insert cuttings with the hormone rooting powder at least an inch deep and put on the lid. Keep out of direct sun.



Sections taken from the long woody stems of plants, such as *Dracaena* and *Dieffenbachia*, will root if placed in damp sand or sphagnum moss. Cut pieces several inches long, and lay them on their sides. Press them down into the rooting medium so just a small portion of the back shows. In several weeks, undeveloped buds, which look like bumps on the stem, will sprout roots and new plants. These may be potted immediately.

Leaf Cuttings – African violets can be rooted from leaves. Each leaf must have half inch of the leaf stem attached to it when it is removed from the plant. Insert the stem end of the leaf in a rooting medium that has been moistened. After roots form, about four weeks, small plantlets will start to grow at the base of each leaf. Sometimes plantlets take about two months to form, so be patient. Cut each new plant from the mother leaf and pot separately.



Many have been successful in rooting African violet leaves in water. Use a rubber band to secure a piece of aluminum foil over the top of a small glass filled with water. Poke a hole in the foil and insert the stem in the water. Keep the glass in indirect light.

Succulent and cacti can be propagated with leaf cuttings but they must be allowed to dry for a few days before planting in a moist mix of equal parts of sharp sand and peat, or purchase a special media for succulents and cacti.

Offsets – Many plants multiply by producing babies or offsets, in the soil. Rooting offsets is one of the easiest ways to multiply plants. By the time leaves show above the soil, a root system has been formed. To remove an offset with the least disturbance to the rest of the plant, insert the blade of a sharp knife down, around, and under the offset. Avoid cutting off roots. Lift the offset and pot immediately in moist media or vermiculite. Water well and keep out of direct sun to prevent leaf wilt.

Division– This is an easy way to produce more plants with almost 100% success. This method involves digging up an established plant and separating it into several pieces. All that’s needed for division is a tool to dig up the plant, and hands or a sharp implement to separate the pieces. spring or fall is the best time to divide most plants.

Air Layering – This form of propagation causes roots to form on a stem, which is then cut from the mother plant and grown separately. It is an excellent way for cutting down to size the houseplant that has grown too tall, especially Ficus, Dieffenbachia, and Dracaena. Several air layers can be made on multi-stemmed plants at the same time.

To air layer Ficus, Dieffenbachia, or Dracaena, make a cut halfway through the main stem about one-third down from the growing tip. Insert a small piece of toothpick to keep the cut slightly open. **(Figure 1)** Dust the area with a hormone rooting powder to encourage rooting. Wrap thoroughly dampened sphagnum moss around the cut area. **(Figure 2)** Tie a piece of plastic sheeting around the moss and make it airtight by securing it above and below with string. **(Figure 3)** Some plants root more quickly if the hole is covered with aluminum foil to keep the area dark. Care for the plant normally. Roots will form inside the ball of moss in several weeks to several months, depending on the variety of plant, and the environment. When roots are visible through the plastic, cut the plantlet from the mother plant just below the plastic wrapping. Plant it, and, for a few days, keep it covered with a plastic bag to give the roots time to establish themselves. Now there are two plants: the newly rooted top, and the original one. It will resprout if cared for normally.



Figure 1



Figure 2

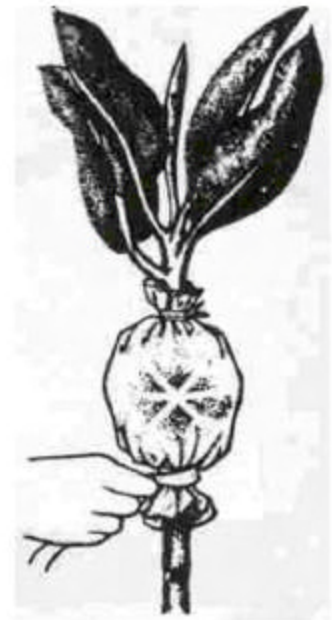
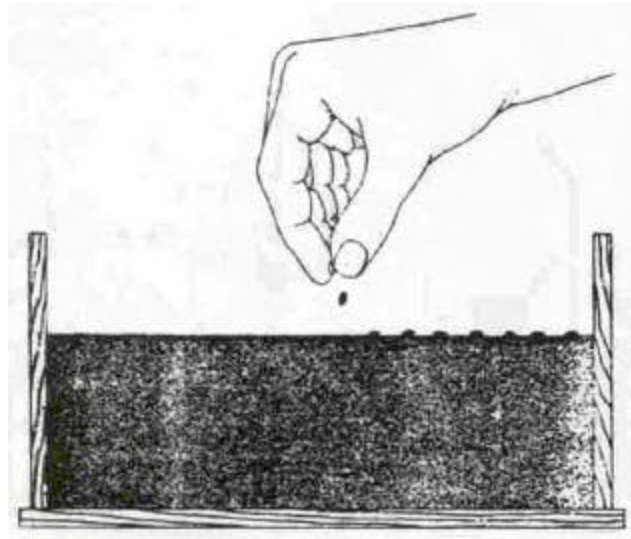


Figure 3

Planting from Seeds – Starting a plant from seed is a bit more specialized than other types of propagation. It is one way of getting some of the more unusual types of plants. Seed requires time to germinate. For this reason, it is practical to start them in covered, transparent containers, such as plastic refrigerator dishes or glass jars. Sow seeds in vermiculite, sphagnum moss, or house plant mix, as the growing medium.

Drop seeds about half an inch apart, on slightly dampened growing medium. Cover with a fine layer of sterile vermiculite or moss, and water lightly. Loosely wrap the pot or flat with a plastic cover. Set in dim light in a warm area until seedlings have developed two or four sets of leaves. Remove plastic cover. Keep soil damp, not soaked. Turn the container often so seedlings will grow straight. When seedlings are several inches high, and crowding each other, transplant to two or three inch pots, depending on the mature plant size.



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