



Plants for Free

An Overview of Plant Propagation

PLANT DIVISION:

..the crown is the place where the shoots meet the roots. Division involves cutting through the crown, down through the roots,

Many plants can be propagated by separating or dividing them into smaller clumps.

Division is one of the easiest and quickest ways to propagate perennials. Divide overgrown perennials when the plants are dormant, just before a new season of growth. Simply loosen the soil around the perimeter of the plant and carefully dig under the roots with a garden fork to free the plant from the soil. Divide the clump into several sections. Make sure that each section has several stems and some roots attached.

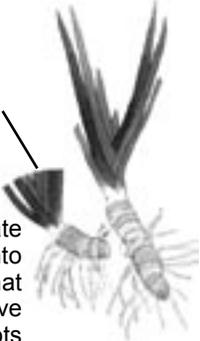
Bulbs such as daffodils, tulips, amaryllis, and hyacinths, and corms such as crocus, freesia and gladioli, form offspring around their base. These offshoots of the mother plant form clumps. Dig up the clumps every 3 to 5 years, after the leaves have withered. Gently "separate" the bulblets/cormels away from the main bulb/corm. Replant them immediately so their roots can begin to develop or dust them with a fungicide and store them in a cool place until planting time. Newly separated bulbs/corms may not flower for 2-3 years.

Plants that form rhizomes (swollen stems just below or at the soil surface) such as the iris, can be also be propagated by division. Dig up the rhizomes after flowering. Cut the rhizomes into sections with a sharp knife. Each section must contain a leaf and a portion of rhizome with roots attached. Trim the leaf to form a fan (to reduce damage by rocking in the wind) and replant each section. Plants that form tubers such as dahlias can also be divided in the same way as rhizomes. Cut the tuber to contain a dormant bud on each section.

Trim leaves to a fan shape.

Separate rhizomes into sections that each have leaves and roots attached.

Break cormels or bulblets off the main corm or bulb.



California Garden Clubs, Inc.



Grow With Us

Exchange Plants

As you clean up dried seed pods and overgrown plants in your garden, remember to collect the seeds and divide the clumps to create new plants for your garden... and to share with friends.

Plant propagation is defined as the process of reproducing or creating a new plant or seedling. Any gardener who has ever helped mother nature create a brand new plant truly has experienced the joy and wonder of gardening.

Plants are not like people. People and animals have only one way to reproduce, but members of the plant kingdom are far more versatile! Different types of plants reproduce in different ways. And, unlike the animal world, many plants can reproduce in several different ways.

New Plants from Seed

The most common way that plants reproduce is by seed, and seeds are generally easy to collect. Flowers produce the seed. Seeds are usually found in the ovary, or fruit, at the base of the flower. Leave the seeds in the seed head (fruit) for as long as possible. Collect the seeds as the plant begins to die back for winter. Spread the seeds on newspaper for a day or two to dry, covering them lightly with a paper towel so they don't get blown away.

Seed from hybrid plants will not always produce the exact same plant. Also, when more than one variety of the same plant lives nearby, cross pollination may occur. Results can be unexpected and fun. After drying, place your seeds in envelopes or in the plastic canisters from 35 mm film. Always remember to carefully label your seeds. Keep them cool and away from moisture and direct light. Normally, seeds should be planted the season after they are gathered to ensure the best germination rates.



CUTTINGS: Plants from Plant Parts



Some plants, like succulents, begonias and African violets, propagate well by LEAF CUTTINGS. A leaf is either placed in water to root, or placed directly into moist soil. Some leaf cuttings will grow pinned to the surface of the soil. A new plant will root from the veins where they touch the moist soil.

A cutting is a plant part which is cut from the parent plant and allowed to grow into a whole new plant. This is the second most common form of plant propagation, but it is sometimes the most difficult.

To start, select a cutting tool with a sharp blade. Dip it in rubbing alcohol or a mixture of one part bleach to nine parts water to prevent transmitting diseases from infected plant parts to healthy ones.

STEM CUTTINGS: Chose a plant that is healthy, growing well, and has not gone dormant. Generally, the newer and fresher the growth, the faster it will root. But act fast, because new growth wilts quickly. Cut off the end of a stem to a length of four to six inches long. Remove flowers and flower buds so the cutting will use its energy and stored carbohydrates for root and shoot formation rather than fruit and seed production. Remove the bottom leaves. There should be only four to six healthy leaves on the cutting. To hasten root formation, dip the end of the cutting into a rooting hormone, preferably one containing a fungicide.

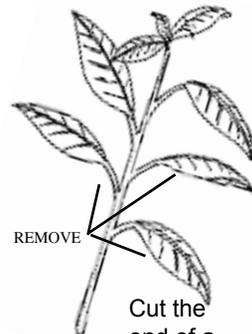
Some cuttings need to be put into water while others should be put into a rooting medium such as coarse sand, vermiculite, potting soil, or a mixture of peat and perlite. It is usually best that the rooting medium be sterile, low in fertility, and drain well enough to leave room for oxygen. Cover loosely with a plastic bag. Care must be taken to make sure the tender new roots do not dry out, yet do not get soggy and rot.

Place stem cuttings in bright, indirect light. After a healthy new root system is formed, transplant the cutting into a container or into the garden.

ROOT CUTTINGS: Root cuttings are usually taken from 2 to 3 year old plants during their dormant season when they have a large carbohydrate (food) supply. Cut a 1 to 2 inch section of a root. Lay the cutting sideways about 1/2 inch deep in a rooting medium. Root cuttings should be kept in the dark and evenly moist (not dry but not wet) until new shoots appear.

Typical plants propagated from stem cuttings:

- Abelia
- Azalea
- Camellia
- Coleus
- Chrysanthemums
- Hydrangea
- Ivy
- Jasmine
- Lilac
- Pelargonium
- Rose
- Spirea
- Wisteria

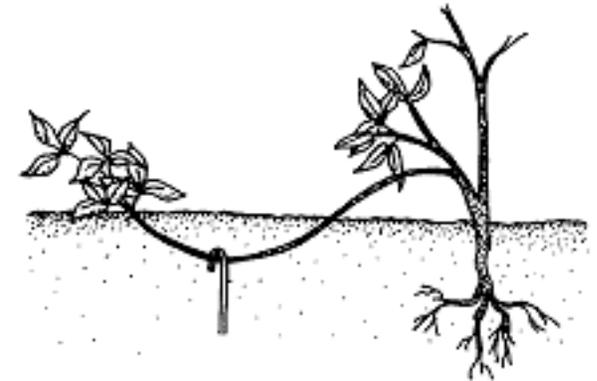


REMOVE
Cut the end of a stem four to six inches long. Remove the bottom leaves.

TIP: If your soil is heavy, add some grit or gravel to improve drainage and aeration.

LAYERING

Layering is another simple method for propagating plants. Layering happens naturally in some plants, especially plants with flexible stems such as vining plants, when their stem touches the ground and forms roots. Layering is similar to cutting except that the “cutting” is rooted on the mother plant before it is detached. When separated from the parent plant, the rooted stem becomes a separate, new plant.



Gardeners can easily use layering to create new plants. Simply bend the stem of a plant over to the surface of the soil or to a rooting medium and hold it there by pinning or weighing it down. Bending the stem very sharply or wounding the stem at the point of contact with the soil will often encourage roots to form.

When sufficiently rooted, the new plant can be cut from the mother plant and be repotted. The rooting medium should always be crumbly to allow the roots to get air. Keep the soil evenly moist, but not wet, to provide a constant supply of water. Layering has a high success rate because it eliminates stress during rooting.



Runners and offsets that form on plants such as strawberry and spider plants are specialized structures that may be rooted while still attached to the parent, or they may be detached and placed in soil or a rooting medium.