

# PROPAGATION

## Propagation

You can propagate plants from cuttings or by division. When propagating, be sure that you

- Divide the plants under hygienic conditions with clean tools and hands.
- Choose healthy and vigorous plant material for propagation.
- Knock the plant out of its pot, and free the roots of surplus soil.
- Pull the plants gently apart, and single out each with separate stem, leaf or crown.
- Plant each division as a different plant in a suitably sized pot using a good potting soil

## How to Propagate Plants from Cuttings

There are 2 main methods of propagating – taking cuttings and dividing plants. This guide refers to taking cuttings.

### Here's how to take a softwood stem cutting:

- Cut a 4- to 5-inch-long (10 to 12 cm) stem (or side shoot) just below a leaf, and remove all but two or three leaves at the top.
- Make sure you use a sharp knife to minimize damage.
- Dip the cut end into rooting hormone.
- Rooting hormone is a powder or liquid containing growth hormones that stimulate root growth on cuttings. Some also contain a fungicide to control root rot. Local nurseries or garden centers carry the product.
- Insert the cutting into a box or container, filled with about 3 inches (8 cm) of moistened pure builder's sand, vermiculite, or perlite.
- The ideal container should have drainage holes.
- Slip the container into a self-sealing plastic bag.
- Prop up the bag with something like toothpicks or short twigs so that the plastic doesn't touch the leaves. Seal the bag to minimize water loss, but open it occasionally to let in fresh air.
- Place the covered container in indirect light.
- Easy-to root perennials include begonia, candytuft, chrysanthemum, carnations or pinks (Dianthus), geraniums (Pelargonium), penstemon, phlox, sage, sedum. Woody plants that you can root include bougainvillea, fuchsia, gardenia, heather, honeysuckle, ivy, pyracantha, star jasmine, and willow.
- ) and plant them in their permanent garden location.




Geraniums, succulents, cacti. can be propagated easily by simply sticking them in a pot.

Hardwood cuttings can be taken in the winter when the plants have lost their leaves ie...roses , deciduous shrubs.

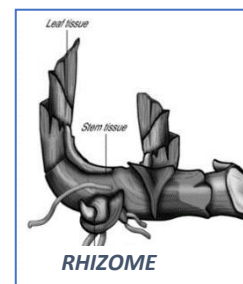
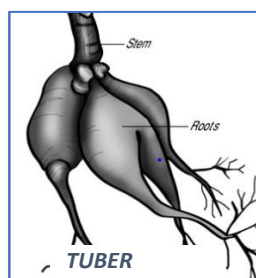
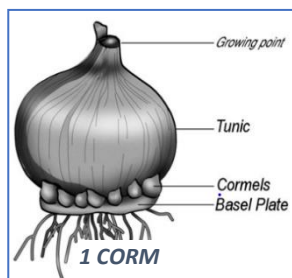
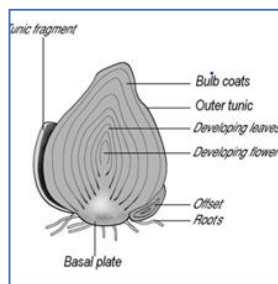
There are no guarantees, so always take more cuttings than you need ,and you might be surprised. Hardwood cuttings can be taken in the winter when the plants have lost their leaves ie...roses , deciduous shrubs.



## Propagation of plants by division:

What can you divide	Examples	What to do
<b>CLUMPS</b> Plants which grow in clumps and produce masses of stems at ground level.	Most of the herbaceous perennials, aster, chrysanthemum, russelia, catmint, brachysome, agapanthus, blue fescue grass, mondo grass, liriope, daylilies, rudbeckia, clumping bamboo, hostas and bromeliads	Separate clumps into individual plants 
<b>RHIZOMES</b> Rhizomes, are stems that grow horizontally underground and form buds on the stem which grow roots	<b>Grasses:</b> lomandra, dianella (flax lily) bamboo, <b>Flowering:</b> I rises, cannas, lily of the valley, and sympodial orchids. <b>Edible :</b> asparagus, hops, rhubarb, ginger, turmeric, and lotus.	The thick root stems can be divided into sections that contain a bud or root. 
<b>STOLONS(Runners)</b> Stolons, or runners, can occur at soil level or underground. They have thin stems with roots at intervals.	Strawberries, Mint. Spider plant Lilacs and forsythia	Cut underground runners between the main plant and the new plants .For surface runners, cut stems about 2cm each side of the roots plant in in ground or pots. 
<b>BULBS, CORMS AND TUBERS</b>		
These all store nutrients that feed the flowers and foliage. When flowering has finished, the bulb, corm or tuber builds up nutrients for the following season from the leaves, which is why it is important to leave the leaves to die. So don't do anything until this happens. They do not have to be lifted each year; they can stay in the ground and multiply until you want to thin and or divide them.		
<b>Bulbs</b> are layered and have a flat base there roots and offsets (daughter bulbs) grow	Tulips, daffodils and hyacinths, along with onions, shallots, chives and leeks.	Bulbs can be lifted and separated once leaves have died.
<b>Corms</b> have a solid stem tissue and like bulbs have a flat base where the roots grow and new corms grow for next season	Crocuses, gladioli and freesias.	A corm only grows for one season but produces new corms at its base and these can be divided flowering and then dies.
<b>Tubers</b> are modified stems with growing points that thicken each year	Crocuses, gladioli and freesias.	Tubers can be lifted and the tuberous stems divided,

For information about growing these



Illustrations from <https://www.dummies.com/home-garden/gardening/flower-gardening/gardening-what-are-bulbs-corms-tubers-and-rhizomes/>