# Multiply your Succulents with Cuttings

Growing succulents from leaf and stem cuttings is a reasonably quick way of increasing your plant numbers, and, as the common species are also easy to propagate they are perfect for the novice gardener to begin with. Plants reach maturity faster than those grown from seed and grow true to the original species, and the home gardener can grow a generous number of new plants from just one parent.

The best time to strike both leaf and stem cuttings vary between species, and growers also have seasonal preferences. Some take cuttings in the autumn months when the hormones can stimulate healthy root growth, and then in the summer once flowering is over. Others prefer growing from cuttings taken at the end of the dormant period or the beginning of active growth in the spring and into summer.

### Tools:

 Use a sharp, sterilised blade or knife to remove a stem cutting off of the parent plant as pruning shears crush tissues and a simple tear creates jagged edges. A sharp knife creates a cleaner cut, reducing stress to the cutting, so increasing the chances of successful propagation with fewer diseases.

### Materials:

- Small, shallow pots or seedling trays: clean any reused pots and seedling trays to prevent the spread of diseases.
- Growing medium: the most critical component of succulent propagation is the soil. Geoff Nichols
  recommends a mixture of equal parts sieved, good quality commercial potting soil and coarse river
  sand. What you're looking for in a growing medium is rapid draining yet enough fine material that
  will hold and stabilise the roots. Make a hole with a pencil or stick rather than push the cutting into
  the medium. Tamp the soil down firmly around the stem.

# Where to place them:

- Potted cuttings need a warm location with bright indirect light out of direct sunlight to prevent scorching of the leaves.
- Raise pots/ trays off the ground as snails and slugs are attracted to the soft, succulent leaves. This
  raised position also allows for better ventilation. You may need to water the trays more often as,
  with all sides exposed, containers dry out faster. Protect the propagation area from drying wind.

### Watering:

Most succulent cuttings need watering every day, others only when the growing medium dries out. But all cuttings need a mixture that drains well. Recommendations from succulent growers encourage gardeners to collect rainwater for succulent propagation. Municipal water often contains salts that can retard the growth of some succulents. Do not be tempted to place a dome over them as they will rot. Water carefully, either, stand the pot in half its height of water for a few minutes, or water from the top but gently so as

not to wash the top dressing away. In both cases, allow the pot to drain thoroughly. Professional growers use mist Method:

Propagate plants with longer stems, like *Aloe*, *Crassula*, *Kalanchoe*, *Cotyledon*, and *Euphorbia* via stem cuttings. Crassulas also grow well albeit slower, from leaf cuttings. Those with very short stems, whose leaves sit close to or on the ground, like *Gasteria* and *Haworthia*, are best propagated via leaf cuttings, while *Stapeliads* are more successfully grown from stem cuttings.

All cuttings need time for the wound (cut end) to callous over; place them in light shade and warm air. Cuttings taken in summer may need 2 weeks to dry out. While many species will happily grow by simply breaking off a piece and sticking it directly into the ground in the desired position, this method is more reliable.

## Leaf cuttings:

This method takes longer than stem cuttings to form a viable plant but is the preferred method for certain species. You'll have the best success with leaf cuttings from new, actively growing shoots, and those that include the entire base of the leaf stalk. Allow the leaf to sit just long enough for the cutting wound to scab over. If a leaf cutting begins to wilt during callus formation, there is a reasonable chance that it will not root very easily. Experiment a bit to find the most suitable method as your climate, the soil mix used, even differing perceptions of watering quantities will influence your success! Many gardeners have battled with cuttings inserted into the soil mix but had better success with those set on top of the soil where roots grow above ground.

Water containers when they dry out with a mist spray to get the top of the soil wet.

#### When to take cuttings:

Gasteria, Crassula, Kalanchoe, Sansevieria, Haworthia: In spring, or in summer after flowering. Most crassulas will grow from a single leaf. Kalanchoe and cotyledons will grow this way provided a small section of stem is still attached, but you can grow these species faster from stem cuttings.

Gasteria: All but *G. rawlinsonii* grow well from leaf cuttings. Cut away any dead or diseased material and insert into a sandy rooting medium. Best done in the warmer months of October, November or March. Keep mixture moist, but it must drain well. Place containers in light shade.

Haworthia: Remove the leaf from the parent plant with a small piece of stem tissue attached. You'll have more success with species with hard, chunky leaves. Those with soft leaves don't strike easily from leaf cuttings.

#### Stem cuttings:

Stem cuttings are the most common method used to multiply succulent species. Take cuttings 10 - 15 cm long, depending on the size of the mother plant, with 3 - 4 nodes. Make the cut just below a node. Avoid taking stem cuttings that are too long as they do not root out well. It is better to take shorter cuttings from young, growing shoots. Remove the lower leaves, leaving 5 to 10 cm of bare stem exposed.

*Vygies:* Take cuttings from September to October. Use a knife (secateurs bruise the stem) Make a cut just below the node (the point at which leaf or flower grows) and plant in coarse river sand. Woody species especially, like Lampranthus and Ruschia, prefer a course mix which dries rapidly with little compaction.

*Crassula and Kalanchoe:* Strike during the warm months in a sandy mixture. Keep soils relatively moist, and roots will form within days.

#### Aloes:

- Most tree and shrub-like species grow easily from stem cuttings; allow the wound to dry out for a couple of weeks before planting directly into the desired spot. Otherwise, root species like *A. arborescens*, *A. ciliaris*, *A. striatula* and most other multi-branched (shrub-like) aloes in a sandy mix.
- Suckering species that form multiple rosettes: Remove small plantlets with a sharp knife, allow to dry. If offsets already contain roots, plant them in their final position. Otherwise, plant in a sandy mix until roots develop enough to plant out.
- Offsets: Many aloe species (*Aloe pluridens*) form small pups or offsets, small growths at the base of the parent. The process takes just moments and rejuvenates the parent. Some plants will break off easily; otherwise, make a clean cut without cutting into the stem of the parent plant. Let a callous form before planting into a small pot of well-draining medium.

Euphorbias: strike cuttings in the warmer months – December to February. Cuttings need to dry out for a couple of weeks (smaller species, and large tree-like species such as *E. cooperi, E. ingens* and *E. triangularis*). Dip the cut end in dry sand for a short time to stem the flow of latex. Root cuttings in sand; keep fairly dry until cuttings roots, then water once daily in hot weather.

Adeniums and pachypodiums: stem cuttings strike easily if done from late spring onwards. Take cuttings of 10 – 22 cm long, and seal with tree sealer or other mixture to prevent rotting. Dry out for about 8 days.

While a sand mix will work, the most effective growing medium for these species is:

- 4 parts fine river sand
- 4 parts coarse river sand
- 1 part sieved, well-rotted compost
- 1 part perlite
- 1 part vermiculite
- 1 part Styrofoam pellets

Keep the growing medium fairly dry until roots form.

**Division:** a slower process than cuttings. Aloes (those that grow in clumps like the grass aloes), asclepiads, *Haworthia* and some Mesembs.

### Planting out:

The cutting should establish a strong root system in this warm weather quickly, but this will vary from a couple of weeks to a few weeks depending on the species – and your propagation skills. When ready, transfer them into a larger container filled with a well-drained potting soil and water immediately.

| Gradually expose the new plants to sunlight until they have hardened off sufficiently to cope with normal garden conditions at which time they're ready for planting out. |
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