

## Getting Started with Succulents



Produced by [Root Simple](#)  
for participants in the

**Los Angeles County Natural History Museum's**  
*Summer Nights in the Garden*

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Photos by Root Simple unless otherwise noted.



From left to right: *Lithops marmorata*, *Frithia pulchra*, *Lithops aucampiae*, photo by [Mokkie](#)

## WHAT IS A SUCCULENT?

Succulent is a general purpose name for a plant which stores water in its leaves. It's not a scientific term, but rather a descriptive one. The name derives from the Latin *succos*, meaning juice. In English, succulent means full of juice, juicy. And this trait —thick, juicy leaves, and the ability to store water in their flesh—is what binds together a big group of plants from all over the world. Cactus, agaves, and aloes are all succulents, along with plants most people would identify as succulents, such as stonecrops (*Sedums*) and “hen and chicks” (*Sempervivum*) and jade plants (*Crassula ovata*).

Succulents are popular plants in both containers and in the landscape—and for good reason. They are low maintenance, drought-tolerant and super easy to maintain. Even “brown thumb” types can keep a succulent alive — particularly in Southern California, where succulents thrive.

Succulents are also popular because they are so beautiful in their own surreal way. Succulents may come from all over the world, but most of them look like they come from outer space—or from deep beneath the sea. Their strong, architectural forms, gorgeous colors and intriguing textures will bring out your inner artist--and their seemingly infinite variety will tempt you to become a collector. Very few people can stop after just one succulent!

## THE BASICS OF SUCCULENT CARE



### SOIL

All succulents require excellent soil drainage—this means the water should run through the pot fast, so the plant’s roots don’t get waterlogged. Succulents can die from being planted in ordinary potting soil. When potting succulents, use a bagged soil labeled as being especially for Cacti and Succulents—this is easily found at most nurseries.

If you want to mix your own soil, you will find many recipes available in books and on the Internet, and will have to decide which one works best for you. Some of the most common recommendations are mixing potting soil 1:1 with perlite. You could also mix ordinary potting soil 1:1 with sharp sand (also called builder’s sand). Or you could try 2 parts potting soil to 1 part perlite to 1 part tiny gravel. If you squeeze a handful of moist soil in your fist and let it go, it should not hold shape but fall apart.

### WATER

Succulents are adapted to survive in harsh, dry conditions by storing water in their flesh. However, this doesn’t mean that they don’t like water when they can get it. (They’re a little like camels in this way!) The one major tip for growing succulents is simply that they don’t like being soggy. You are far more likely to kill your succulent by overwatering it than by under-watering it.

It’s important that you let the soil in the pot dry out a little between waterings. In general you’d want to give your plants just enough water to keep their leaves plump, and no more. It’s

hard to generalize, but this may mean giving potted plants a drink once every week or so, depending on conditions. A pot on a hot patio may appreciate more water than one kept indoors. A small pot dries out faster than a big pot. Plants need more water in summer than in winter. Touch the soil to find out if it's dry or not. Succulents in the ground will want water every two weeks or so, again, depending on conditions. Remember it's better to let them get a little dehydrated than to overwater them.

When you water, water until the water soaks through and comes out the bottom of the pot. It's important to have fast draining soil and drainage at the bottom of the pot so the bottom of the pot doesn't get waterlogged.

**Signs of over-watering:** Leaves become squishy and change color, becoming paler, even white, or perhaps brown. If you lift the plant out of its pot you will see rot in the roots. To rescue the situation, cut off the healthiest looking parts, and repot them in dryer soil.

**Signs of under watering:** When stressed for water, succulents begin to use the water in their leaves and stems, giving them a thin, wrinkled appearance. This is not as serious as the rot from overwatering. They will plump up again after a good watering. They are amazingly resilient—but they're not indestructible, and if they go too long without water, they will drop all their leaves.

*Note:* Some succulents go dormant during portions of the year and do not want to be watered during this time. Our native California succulents, like *dudleyas* go dormant in the summer, growing only in winter, in conjunction with the rains. They'd rather not be watered in the summer.

## LIGHT

Succulents evolved in dry climates, but shouldn't be confused with tough desert cactus. They like light, but the sun in Southern California is strong, and it may be too much to put your succulents out on a south-facing patio to bake all day long. Generally speaking, full sun outdoors is okay for aloes and agaves, but echeverias (many of the rose or cabbage shaped succulents are echeverias) prefer a bit of shade, or dappled sunlight. Most succulents appreciate some shade during the hottest part of the day.

You can keep potted succulents indoors, but they don't do well in dim light situations. Try to find a sunny window for them, and give them "sun vacations" outdoors.

**Signs a plant is getting too much light:** The leaves may scorch, have brown, black or white patches, or just look burnt or withered. Green succulents may turn pretty shades of red and yellow when stressed by bright sun. This is attractive, but also a signal that you should be paying close attention to make sure they don't get *too* stressed. Consider moving the pot to a less sunny location.

**Sign a plant is getting too little light:** A plant desperate for sun will reach or lean toward the light. Sometimes it will throw a lot of energy into elongating its stem to as if it would

stretch all the way out the window to better light. This is what is called “getting leggy.” Legginess is a sure sign of light starvation. Leggy plants can be trimmed into a more attractive form and repotted (See Tips for Arranging Pots) , then moved somewhere brighter. Light deprived plants can also become just generally sickly, and will be more susceptible to insect infestation.

If you do decide to move a pot to brighter light, particularly if you’re moving it from indoors to outdoors, give it some time to adjust. Let it spend its first couple of days outdoors in the shade, then in in dappled sun. Moving it straight into full sun might shock the plant, and cause it to burn.

## PESTS

Succulents are pretty tough, but they can still have problems with insects and other pests: snails and mealy bugs are two common foes. Here are helpful pages from the Integrated Pest Management (IPM) program at UC Davis. (The IPM website is a great resource for any weed or pest question you might have.)

This page on pests of the agave applies to other succulents as well: <http://www.ipm.ucdavis.edu/PMG/GARDEN/PLANTS/agave.html>

On snails and slugs: <http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7427.html>

## CONTAINERS

Succulents adapt well to many types of containers, from fancy ceramics to funky found art objects. They are shallow rooted as a rule, so can thrive in containers too shallow for regular plants. The one important rule for containers is that they should have drainage holes. It’s trendy these days to pop succulents into all sorts of containers, like canning jars or antique vases, but if the container does not have a drainage hole at the bottom, you will be at high risk for overwatering your plants.

The good news is that you can make a drainage hole in almost anything with an electric drill — there are specialty drill bits different materials, including glass and ceramics. Ask at your local hardware store for a bit which will match your container. While you’re at the hardware store, buy some 3 in1 oil—use this on ceramic bits to keep them from smoking. Metal containers are perhaps the easiest to work with: you can make holes in tin cans and old metal containers with just a hammer and nail.

If you decide to skip the drainage hole, water *sparingly* and hope for the best. In such cases, taller containers work better than shallow ones, because the water tends to gather in the low parts of the pot, so short-rooted succulents have some hope of keeping their feet dry if all the water sinks to the bottom of a deep pot. It’s also okay to treat your succulents more like cut flowers, and put together arrangements which are meant to be temporary—a table centerpiece, for instance. In these cases you don’t have to worry about drainage, or light, or anything else.

## A NOTE ON TEMPERATURE

Your outdoor plants should be fine down to 40°F or a bit lower, which is no great challenge in the Los Angeles area. Freezing temperatures can damage succulents, with the exception of certain stonecrops and semperviviums, which are cold tolerant. If we get a rare cold snap in Southern California, you may find your landscape succulents damaged—but most likely they will recover. If you hear there is going to be a frost, bring your potted succulents inside, or into shelter, like a garage. In places with frosty winters succulents need to be potted up and moved to shelter from the entire winter.

## MORE INFORMATION

A good, concise resource for succulent care basics is offered by The Cactus and Succulent Society of San Jose, “Cactus and Succulent Care for Beginners”:

[http://www.csss.org/welcome\\_visitors/basic\\_culture.html](http://www.csss.org/welcome_visitors/basic_culture.html)

## PROPAGATING SUCCULENTS



### FROM CLIPPINGS

One of the most fun things about succulents is how easy it is to make more succulents — this is called propagation. Succulents easy to grow from clippings, easy to share with friends, They can also be reproduced quite inexpensively: if you have a little patience, you could easily make enough succulents to landscape your whole yard out of a few clippings.

You see, if you plant a single leaf or cutting from most types succulents, it will root and make an whole new plant. For instance, prickly pear cactus, which is a succulent plant, drops its heavy pads on the ground when its branches become too heavy. The fallen pads will sprout new plants, and in this way prickly pears can make whole forests of copies of themselves. You may have seen these colonies growing in the hills.

To propagate succulents, all you do is cut off a piece of an existing plant and pop it in some soil. If you've ever worked with geranium cuttings, it's very similar. You can plant a stem with leaves on it—cut off all but about half an inch of stem and nestle the cutting into the soil. Remove any leaves which would end up beneath the soil.

You can also plant a single leaf: lay whole leaves on the surface of the soil. Each leaf will yield a new plant. The single leaf has to be snapped off the stem or rosette as whole as possible, with the base of the leaf intact—a half leaf will not root.

Keep newly planted leaves and cuttings in the shade or indoors and water very, very sparingly until they get new growth (which might take two weeks to a month)--otherwise rot might set

in.

When it comes to instructions, one picture is worth a thousand words. For good, illustrated instructions on propagating succulents from cuttings, and for dealing with succulents which have gone all gangly, see this post on the Needle and Leaves blog: “Propagating Succulents” :

<http://needlesandleaves.net/blog/2013/5/31/propagating-leggy-succulents>

One last piece of advice: When taking cuttings, it's a good idea to allow the cutting to air-dry a little between cutting and planting. This allows the cut edge to dry up and harden (form a callus), and so keeps rot from setting into the new cutting. All you have to do is spread the cuttings out in the shade for a couple of days, a little longer if the weather is wet or cold. You are waiting for the cut stem ends to dry up—you will be able to see when this happens. Allowing a drying period is a good practice, but in reality, many local gardeners just pop fresh cuttings straight into the soil, skipping the drying period, and find they rarely have any problems. This may be because Los Angeles is relatively dry and warm, so our plants are less likely to rot. Still, if you are invested in the plant, be safe and let it callus.

## **FROM SEEDS AND OTHER METHODS**

Succulents can also be grown from seeds. This is more trouble than using clippings, but may be necessary if you wish to propagate a rare or hard to obtain form of succulent, or wish to grow succulents in volume. In addition, some cacti and agaves propagate from bulblets and offsets rather than cuttings.

For more information and instructions for seed propagation, as well as other forms of succulent propagation, see this fact sheet from the Arizona Master Gardeners:

<http://ag.arizona.edu/pubs/garden/mg/cacti/Propagation.htm>

## LANDSCAPING WITH SUCCULENTS



*Three varieties of stonecrop (sedum) — a succulent ground cover easily found in nurseries*

Succulents make cute potted plants and table arrangements—even bridal bouquets!—but in our Mediterranean climate here in Los Angeles, they also make gorgeous, low maintenance, water-wise landscape plants.

Succulents come in all sizes and shapes, and can play many roles in a garden, providing color, texture and drama. Imagine a giant blue agave spreading its arms in that hot, bright spot in your yard, or consider using one of the many colorful, low growing stonecrop (sedum) plants as a water-wise ground cover. They get along well with other drought-tolerant plants, too. Although succulents prefer fast draining soil, they are adaptable to many soil types. If you have clay soil, remember to be sparing with the water. There's sure to be a spot in your yard for just a few succulents—and who knows, you might get addicted!

### LADWP INCENTIVE PROGRAM

Did you know that due to the California drought, as of the July 1, 2014 the Los Angeles Department of Water and Power is, for a limited time, offering homeowners **\$3.00 for every square foot of lawn they remove?** (This is called the [California Friendly Landscape Incentive Program](#)) If you own a home, and have a lawn, this is a good time to consider taking up at least some of that grass and replacing it with easy care succulents.

### SEARCH FOR INSPIRATION

To find inspiration, look around your neighborhood, talk to the folks at your local independent nursery, keep your eye out for garden tours and home tours, and remember, the Natural History Museum's Nature Garden has some lovely native succulent specimens to admire. Here's a hint: many of them are growing in the garden walls!

To get you started, check out these photo overviews of some of the most popular succulent landscape plants:

Monrovia Nurseries: <http://www.monrovia.com/plant-catalog/collections/succulents-plant-collection/>

Fine Gardening Magazine: <http://www.finegardening.com/10-outstanding-succulents>

Pintrest is also a great resource for design ideas: <http://www.pinterest.com/alisak1/succulent-and-cacti-landscape/>

## TIPS FOR ARRANGING A POT OF SUCCULENTS



*This little Altoid tin arrangement doesn't follow any of the rules below, except that it is planted with an odd number. What works, works!*

### PREPARATION

The best pots for succulents have drainage holes. Use soil specifically for cacti and succulents (see Soil section). There's no need to put rocks at the bottom of the pot—that's just an old gardening legend. Fill the pot with lightly pre-moistened soil. Then you can tuck in potted plants from the nursery, or plant cuttings, or both (see Propagation). It only takes a couple of minutes to plant a succulent!

### THINK ABOUT COLOR

The prettiest arrangements have contrasting colors. Succulents come in so many shades, you'll have a hard time choosing!

### THINKS ABOUT SHAPE

Look for plants which stand tall, some of which grow low, and some of which creep or spill over the sides of the pot. Some are round, others are spiky, some are delicate, others are chunky. Try to highlight a mix of shapes and textures in your pot.

## REMEMBER THE RULE OF THREE

For some strange reason, the human eye likes odd numbers better than even, and it really likes 3's. Succulents are so bold and sculptural that it often works just fine to have only one plant in a pot—that way the shape of the succulent is showcased. Three different plants in a pot look balanced yet dynamic. But two plants in a pot can look awkward, as if they are competing with each other. Similarly, three different colors in a pot look better than two different colors. Always, odd numbers seem to work better: five is better than four, and so on.

## PACK THEM IN

Succulents are easy to trim and repot, and don't grow super fast, so don't be afraid to fill your pot up with plants—that way it will look good from the start. Later you can pull or cut back plants if it starts to look crowded. All those cuttings can be used to make new plants!

## KEEP IT IN THE FAMILY

Succulents have such specific water and soil needs that it is easiest to plant succulents with other succulents, rather than making arrangements with succulents mixed with other types of plants.

## FRESHEN UP YOUR POTS

Succulents grow, so eventually you might find your cute arranged pot isn't so cute anymore, but instead sprawling and leggy and tired looking. This is easy to fix! Using propagation techniques, you can trim and repot your succulent in just a few minutes, and probably have enough extra material to make new pot.

Check out **Gardening Gone Wild** "How to Fluff Your Succulents" for tips on how to trim and repot an overgrown succulent arrangement:

<http://www.gardeninggonewild.com/?p=17601>

## ABOUT US

We are Kelly Coyne and Erik Knutzen,  
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