

Growing Guide: Succulents

Fun Facts

- The word *succulent* isn't a true scientific classification; rather, it's a word used to group plants that have fleshy leaves and stems.
- Succulents' leaves and stems are adapted to hold water. The plants can take up and store water when it's available, and use the stored water when conditions are dry.
- The desert, with its arid climate and scarce rainfall, is an obvious habit for succulents, and indeed some of the most recognizable ones, such as the prickly pear cactus shown below left, call the desert their home.
- However, there are also succulents native to the rainforest. Perched high in the trees, far from access to water in the soil, plants such as tillandsia (also known as air plants) absorb water from the humid air around them. This adaptation makes them popular, easy-care houseplants; they are often displayed perching on a branch, shown below right.



- Many succulents have intriguing, architectural forms and alluring coloration. Some varieties of agave produce large, sword-like leaves in a beautifully symmetrical form. The leaves of echeverias grow in mesmerizing rosettes in shades of green, gray, blue, orange, pink, and multi-colored.

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- Succulents include some of the easiest plants to propagate. The name of one succulent, a type of kalanchoe dubbed “mother of millions” (shown right) hints at this characteristic. It sprouts an abundance of tiny plantlets at the top of its growth. When they drop to the ground, the plantlets quickly establish roots and begin to grow.

Adaptations for Survival

The qualities that make succulents so well adapted to challenging environments also make them attractive to gardeners. Most types tolerate the “arid” conditions caused by central heating, and can go for long periods without water or fertilizer.



That said, it’s no surprise that plants adapted to take up and store water in dry climates have also adapted strategies to protect themselves from thirsty passers-by that might be tempted take a juicy bite. Indeed, some of these strategies make the plants unattractive for growing in homes and landscapes. Cactus spines are an obvious defense that screams “stay away!” Some agaves sport leaves with razor-sharp edges and dagger-like tips.



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Other plants reveal their defenses in more subtle ways. Euphorbias, for example, exude a white latex sap that causes skin irritation on contact and is toxic if ingested. Even aloe, a common houseplant with gel-like sap that's a go-to treatment for burns, can be toxic if ingested.

How to Grow Succulents

The range of plants called succulents is large and varied. In arid climates, native succulents are the logical choice for outdoor plantings, requiring far less water than thirsty lawns and many common perennials and annuals. Landscaping using water-thrifty plants is called xeriscaping (ZARE-eh-scape-ing). The image below, taken at the Desert Botanical Garden in Phoenix, Arizona, shows how beautiful and varied a low-water landscape can be.



The succulent family includes familiar houseplants, such as jade plant and aloe, as well as echeveria, kalanchoe, aloe, haworthia, and many more. Although they share some attributes and care requirements, it's important to identify the specific plant you have, so you can give it the best possible care. Here are some general guidelines.

Planters

Shallow dish planters are ideal for small, low-growing, shallow-rooted succulents such as echeveria and haworthia. Requiring similar care, they're compatible companions, inviting you to create artistic plantings. Tall, top-heavy succulents, such as aloe and agave, need heavy pots to prevent toppling.

Light

Succulents grow best in bright, indirect light. Some will tolerate direct sun. Others, such as aloe — the plant famed for treating burns! — will get sunburned if exposed to intense bouts of full sun.

Although the plants can be displayed for short periods of time in low-light conditions, such as in a centerpiece, most succulents won't thrive

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there. Supplemental light from full-spectrum grow lights will help plants thrive, especially during the shorter days of winter.

Water

Succulents require excellent drainage. The roots of most succulents are adapted to dry soils and will readily succumb to root rot if their potting mix remains saturated for prolonged periods. Plant them in freely draining mix, such as blends formulated for cacti, and always empty saucers or cachepots after watering so the pots aren't sitting in water.

Although it's tempting to water plants on a schedule, it's best to check the soil moisture regularly and water succulents only when they need it. Some succulents will alert you when it's time to water because leaves that are normally rounded will begin to shrink inward or flatten. When it comes to succulents and water, less is usually better.

Indoor/Outdoor Plants

It may be tempting to move that lovely dish garden outdoors come summer, but it may not be the best choice for the plants. Although many succulents are sun-lovers in their native habitats, plants that have been growing indoors for many months will have adapted to the lower light levels. An abrupt move outdoors, into full summer sun, may cause irreparable damage. If you want to bring plants outdoors, do so incrementally over the course of several weeks to allow them to acclimate.

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