Succulents are Plants that Solve Problems

Succulent foliage comes in red, pink, lavender, yellow and blue as well as stripes, blends and speckles. The plants also produce lovely flowers.
Succulents look great with minimal care, won't wilt if you forget to water them, and are delightful to collect and use in gardens and containers. The more you know about these intriguing plants, the more you’ll enjoy growing them.

Chances are you’re familiar with jade and big agaves (century plants), but did you know that nearly 20,000 varieties of succulents exist? Many of those currently available in nurseries and garden centers were introduced to the marketplace during the last few decades.

Succulent leaves, which typically are thicker than those of other plants, range in size from dainty beads to 6-foot swords. Some succulents, notably cacti, are as round as balls. A few, particularly euphorbias, resemble undersea creatures. Agaves and furcraeas have upright, fountain-like leaves. *Aloe bainesii* (aloe tree) and *Dracena draco* (dragon tree) form trunks and grow tall.

Ice plants with vivid blooms make eye-catching groundcovers and are good for slopes. Vining and pendant succulents are perfect for hanging containers. Succulents such as adeniums store water in bulbous roots, which can be exposed to show them off.

Photographers, collectors, landscapers and container garden enthusiasts prize dwarf and diminutive succulents with geometric shapes. Among these are sempervivums (hens and chicks), echeverias, agaves and aloes.

Most cacti are leafless succulents with spines that radiate from central points. All cacti are succulents but not all succulents are cacti. Some have long, overlapping spines that create starburst patterns. Collectible cacti include those covered with what appears to be white hair. Such filaments serve as a frost blanket in winter and shade the plants in summer.

Nearly all succulents do well in pots, terraces and planter boxes. Some varieties (such as jade), when confined, will naturally bonsai, maintaining the same size for years. Even those with the potential to become quite large stay smaller longer in containers.

Most succulents need protection from below-freezing temperatures, but frost-tolerant succulents do exist. Among them are yuccas, sempervivums (hens and chicks), many sedums (stonecrops), and some agaves and cacti.

Altman Plants has been devoted to succulents for over 40 years. It is our pleasure to welcome others into the delightful hobby and landscape use of succulents. We hope you become fascinated with the huge variety of shapes and colors of these plants.

Their amazing endurance make them relatively carefree. Succulents are graceful about allowing you to take your vacation and have happy plants when you return.

Altman Plants has a robust breeding program that allows us to offer new plants on a continuous basis. We hope that you come to enjoy both the new and the old.

~ Ken Altman
Why Use Succulents?

The Ultimate Easy-Care Plants

In the Southwest, before automatic irrigation became the norm, aloes, agaves, jade, yuccas and shrub aeoniums — along with geraniums — were default plants. Homeowners used these plants to fill bare dirt when they didn’t want to spend time gardening or having to remember to water.

When irrigation systems made watering easy and conserving water was yet to be a concern, the typical yard incorporated thirsty tropicals, citrus, rose bushes, annuals and a lawn.

Today, due to a growing awareness that the Southwest is basically an irrigated desert — prone to drought and with limited water for a surging population — things have come full circle. Many homeowners no longer want high-water, high-maintenance yards and lawns.

Fortunately, there now are more waterwise, easy-care succulents in garden centers than ever before, and new varieties are continually being introduced. It is now possible to have a landscape that is colorful, verdant and interesting in ways low-water gardens never were before.

They make good-looking container plants for your home and garden, are easy-maintenance, and are fun and interesting to collect. And because succulents don’t mind neglect, you needn’t worry about them when you’re away.

Much of the appeal of succulents is the way they look. They’re often described as “geometric,” “architectural” and “sculptural.” Succulents are not difficult to grow and, in fact, are perfect for brown-thumb gardeners. Because the plants don’t need a lot of care, growing them frees time that otherwise would have been spent on yard work. Succulents also are friendly to the ecology, posing no threat to birds or other wildlife. Nor do the plants encroach, like weeds, where they’re not wanted.

Other uses for spiky cacti and agaves are as security plants under windows or along property lines. But perhaps the most unusual — and important — use for succulents (typically jade, ice plant, aloes and prickly pear cactus) is as a wildfire barrier. Because of their high moisture content, the plants are slow to catch fire and do not transmit flames.

A garden comprised primarily of succulents needs trimming four times a year or less.

Collectors have enjoyed succulents (the more bizarre the better) for decades. The Cactus & Succulent Society of America now has chapters in every major city, and many host exhibitions. Also well worth seeing are public gardens and nurseries with idea-rich plantings of succulents (see Resources, p. 27).
Why Use Succulents?

Agaves, aeoniums and sedums planted here with durable perennials make a colorful, easy to care for garden.

*Agave parryi truncata, Aeonium arboreum 'Zwartkop', Sedum nussbaumerianum ~Design by Jeff Moore, Solana Succulents*
Succulent Plant Care

Given rich, friable soil and regular water, succulents grow lush and fill in rapidly. *Agave attenuata variegata*, *Echinocactus grusonii* (golden barrel), *Agave parryi truncata*

If garden plants such as geraniums, philodendrons, hibiscus and bougainvillea are prevalent in your area, it means that frost is not a concern, and you can grow succulents outdoors year-round.

Even if temperatures occasionally drop below 32ºF, many succulents — once established or in the right location — handle cold better than one would expect. Your garden likely has microclimates that are significantly warmer than exposed areas. Walls radiate heat, as do pavement, hardscape and boulders. Keep in mind that southern exposures are warmest; northern, coldest. Also, the slightest cover, such as an eave or tree branch, will provide some frost protection.

Surprisingly, a little more cold, sun or dryness than the plants prefer may serve to make them even lovelier. The colors of the leaves of certain succulents (notably jades, aloes and echeverias) will intensify when they are stressed, turning them vivid shades of orange and red.

Most succulents do best when given bright light (several hours of sun daily). Although many will grow in shady or indoor conditions, the plants may stretch toward light. Rotating potted succulents 180 degrees once a week or so will keep growth balanced.

Succulents are among the most pest-free plants, especially when grown outdoors. Good air circulation prevents harmful insects from settling on the plants. Occasionally, however, mealy bugs (which look like bits of cotton) may appear where leaves join stems. Aphids, which look like black or yellow pinheads, are attracted to new growth — especially flower buds. Hosing the plant will dislodge aphids. For houseplants, keep rubbing alcohol diluted to half strength handy, and spray pests, should they appear. Or, dab them with a cotton swab dipped in alcohol.

A little grooming will keep your succulents tidy. When flowers are finished, snip stems close to the plant. As old leaves turn dry and brown, cut or pull them off. If bits of debris or dry leaves fall into a dish garden or become stuck to a cactus, extract them with long-handled tweezers. And if you need to pull weeds from around spiky cacti and agaves, you’ll find that fish hook pliers come in handy.
Cold Tolerance

Although succulents are often associated with warm climates, there are many varieties that can withstand even the coldest of winters. With careful selection, succulents can be grown all over the US, no matter how harsh the climate.

Below are some examples, with varying degrees of cold hardiness.

**FROST TOLERANT**

- Echeveria ‘Sahara’, Echeveria ‘Crimson Tide’
- Sedum adolphi ‘Firestorm’
- Many Agaves, Echeverias, Sedums, Aeoniums, Cotyledons and Senecio mandraliscae.

**COLD TOLERANT**

- Calandrinia spectabilis
- Echinocactus grusonii
- Espostoa lanata
- Sedum Spurium Voodoo

**SUPER COLD HARDY**

- Dasylirion wheeleri, Hesperaloe parviflora, Opuntia violacea ‘Santa Rita’, and many others, Sedums, including ‘Blue Spruce’, all of the spuriums (‘Ruby Mantle’, ‘Tricolor’, ‘Voodoo’ and others), nearly all Sempervivums, Agave parryi, Agave parryi truncata.

**To enhance cold tolerance:**

- Establish root systems months prior to the first frost.
- Allow plants to ease into winter with time to acclimate to the cold.
- Plants in the ground vs containers are better able to tolerate cold temperatures.
- Use cloth, newspapers, or frost cloth as a covering or blanket.
- Plant near south-facing structures to provide the most sunlight and protection.
Water, Soil & Fertilizer

Most succulents are capable of going without water significantly longer than similarly-sized garden plants, but they do need regular water to look their best. Depending on the weather, the plant and the size of the container, this might be as often as once a week or as infrequently as once a month or even less.

The fatter the succulent, the more water it holds and the less it needs. Golden barrel cactus is an example of a succulent that does fine in the arid Southwest on rainfall alone. With its shape, color and texture, the plant also makes a wonderful landscape enhancement.

Regardless of which succulents you grow, make sure water drains rapidly from the soil. There are many successful soils for succulents (they are not fussy), but the ideal mix contains about equal parts organic material like peat or ground bark, and inorganic material like pumice or perlite (but not more than 10% sand).

Dry soil weighs less than wet, so one way to tell if a potted succulent needs water is to lift it, or push a wooden chopstick into the soil. If the stick is damp when you pull it out, with soil adhering to it, don’t water. When you do water, let it flow out the holes in the bottom of the pot to flush salts that may have built up in the soil.

During the growing season (spring and summer for most succulents), commercial growers use dilute fertilizer to encourage lush and rapid growth. But if you’re pleased with the size of your succulents and the way they look, you needn’t fertilize them at all. Or simply apply a balanced liquid fertilizer diluted to half the recommended strength, once or twice a year.

What happens to a succulent if its soil goes completely dry? As the plant draws on stored moisture, its leaves may lose their sheen and shrivel. Yet these are tough plants. Even when neglected for a month or more, most succulents recover when watered again.

A rule of thumb is to let soil go nearly dry between waterings.

Caring for indoor succulents:
- Make sure their containers have excellent drainage.
- Allow soil to go completely dry in between waterings.
- Give some time in the sun.
- Varieties that are green in color tend to do better in lower light conditions.
Succulent Plant Care

Inspiration

Wondrous Details

Left and below: *Fenestraria aurantiaca* (baby toes) (left) and *Lithops* (Living Stones) have transparent windows that enable sunlight to enter.

Below: Twisting *Cereus peruvianus ‘Spiralis’* is remarkable in the landscape.

Further down: The hairs of *Oreocereus celsianus* provide protection.

Right: *Aloe Barberae* grows to 10 to 20 feet.

Design by Solana Succulents
Inspiration

Textural Cactus

A recently dug-up ferocactus is easily carried with a length of hose.

Tips for Transplanting Cacti

When transplanting, loop a rolled newspaper or twisted cloth around the widest part of the plant. An efficient way to carry a barrel cactus is to lasso it with a length of soft hose. Tall columnar cacti often are transported wrapped in carpet.

Left: The sun intensifies the purple of *Opuntia violacea* ‘Santa Rita’ in blue pots. Below: *Oreocereus* (right) and *Echinocactus grusonii* (golden barrel) (left) combine with flowering osteospermum.


A recently dug-up ferocactus is easily carried with a length of hose.
Surprisingly, some of the most beautiful flowers in the plant kingdom are those of cacti.

Below: Aloe arborescens flowers in January.
Bottom: Euphorbia milii (crown of thorns) blooms in shades of red, pink, yellow, peach, white and bi-colors.
Right: Lampranthus aurantiacus (gold ice plant)

Above: Intense magenta blooms of a cactus- Trichocereus grandiflora hybrid.
Below: Aeonium flowers
Inspiration

In the Landscape

Left: Echeverias and graptoverias form stripes. Below: Rosea ice plant surrounds aeoniums and Agave attenuata.

~ Design by Matthew Maggio for Sherman Gardens

Before

Two years later

Right: A bedding planter is filled with green and cream colored Aeonium ‘Sunburst,’ and coordinating variegated phormium. The pot at the far left is planted with Furcraea foetida ‘Mediopicta.’

~ Design by Chicweed
for Elanit Abrams

~ Design by Deena Altman
Below: Blue Echeveria imbricata rosettes alongside Agave bracteosa which has smooth, supple leaves. Further down, Portulacaria afra formis ‘Variegata’ combines with assorted aeoniums.

Above: A front-yard garden combines yellow-edged Agave americana variegata (in back), red-tipped Kalanchoe luciae, a flowering aloe, blue Senecio mandraliscae, golden barrel cactus and dudleya (in front).
Below: Aeonium decorum, Kalanchoe luciae, Aloe ‘Rooikappie’ and Sedum reflexum ‘Blue Spruce’ border a walkway.
Inspiration

Around the House

Left: Vibrant *Kalanchoe luciae* (flapjacks) contrasts with a simple glazed pot. 
**Below Left:** Burgundy-tipped *Aeonium atropurpureum* in burgundy bowls enhance entry pedestals. **Below:** Single and mixed plantings are brought together in a collection of terracotta pots. ~Design by Schnetz Landscape

**Below:** Tuck sedums into steps. From top step, down: *Cotyledon ladismithensis*, blue *Senecio mandraliscae*, *Echeveria gibbiflora* hybrids, *Sedum rubrotinctum*. ~Design by Amelia Lima

**Below:** Renew a strawberry pot with a showcase of succulents: *Senecio jacobsenii* cascades from the top; side pockets feature echeveria and *Sempervivum* rosettes, as well as trailing *Ceropegia woodii variegata* (String of Hearts).
Patio Gardens

Use a high quality soil media in the container, such as commercial Succulent mix. Or create your own mix of equal parts potting soil and pumice or perlite. Place plants to your liking, fill recesses with soil, tamp firmly and water. Place in bright light or dappled sunlight. Water well when soil is dry to the touch. Trim plants to maintain desired shape.

Left: Color me red! Geraniums, Kalanchoe luciae (flapjacks), and Aloe cameronii. Below: Sweet and simple: Echeveria agavoides with sprigs of Sedum ‘Angelina’, dressed with pebbles.

Below: Echeveria rosettes form a beautiful pattern.
Right: A variety of echeveria rosettes mixed with sedums and senecios.

~ Designed by Chicweed
Inspiration

Living Spaces

Cacti and succulents bring texture and interest to any room in the home.

The variety of shapes, patterns, textures and colors make these plants enticing to collect. Perfect for decorating an office, windowsill, patio, dorm, kitchen or bath, these easy-care plants will start conversations and inspire the designer in you.

Simple containers allow the plant and your other treasures to shine.

Interior succulent gardens can be suited for both modern and traditional decor.

Echeverias in martini glasses.

Succulents replace votive candles.

Traditional settings and mute colors offset vibrant succulent plantings.
Inspiration

Personalize every room in the house by adding exciting succulent color combinations in your favorite planters.

Living Spaces

Use succulent dish gardens to create a warm and inviting atmosphere in any room of your house for everyone to enjoy.

Ordinarily sterile environments spring to life through the use of colorful containers with easy to care for succulent plants.

Aloe vera is decorative and can be used to treat minor cuts, scrapes and sunburns.
Creativity

Cacti and succulents are wonderful for small collections and as well as large-scale collectors. Modern containers showcase succulent mixes.

Mixed succulents rooted in picture frame.

Succulents create unforgettable table settings.

Succulent cuttings take root in a wreath form.

Succulent plantings can be suited for both interior and exterior decorating.

With a little floral wire for support, Echeverias make beautiful additions to floral arrangements.

Succulent cuttings take root in a wreath form.
Adding succulents to any form or found object can create one-of-a-kind planters or garden installations.
Breeders are continually selecting new cultivars and creating new hybrids to offer plant lovers. This may be for better hardiness, bug and disease resistance, purely for aesthetics, or for any and all of those reasons. Examples of this are the Chamaelobivia cacti hybrids that result from crossing Chamaecereus sylvestrii (peanut cactus) with Lobivia species. The resulting hybrids are more robust and disease resistant. The exceptionally large flowers come in a variety of gorgeous colors. If a new hybrid displays significant aesthetic appeal or vigor, it may be eligible to be patented. The patented and selected varieties shown here are from Altman Plants in Vista, California. (Patented plants are issued a patent number that is often included in its name.)

Left: Echeveria 'Neon Breakers' PP
Below Left: Aloe 'Blizzard' PPA
Below Below-Middle: Echeveria 'Chroma'
Below-Right: Chamaelobivia 'Rose Quartz' (Peanut Cactus)

Above: Opuntia subulata cristata 'Three- headed Cerberus'  Above-Middle: Echeveria 'Gorgon's Grotto' PPA
Above-Right: Echeveria 'Cloud'

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New Cultivars

Varieties

**Aeonium**

Aeoniums have a distinctive, daisy-like appearance. Amazingly, the leaves of aeoniums can vary in color from black to rose and yellow. The rosettes grow on the ends of stems that, depending on the variety, may be a quarter inch or more in diameter.

**Adenium**

*Adenium obesum*

Free-flowering patio or windowsill plant. 36" tall over time.

**Aeonium ‘Blushing Beauty’**

Grows to 14" tall x 24" wide. Clustering rosettes are an unusual chocolate color.

**Aeonium ‘Kiwi’**

*Aeonium perecarneum ‘Kiwi’*

Grows to 15" tall x 24" wide. Bright yellow variegation is stunning.

**Aeonium ‘Voodoo’**

*Aeonium undulatum x Aeonium arboreum ‘Zwartkop’*

Low clumping; great color.

**Aeonium ‘Zwartkop’**

*Aeonium arboreum atropurpureum ‘Zwartkop’*

Grows to 30" tall x 24" wide. Tall stems are topped with the deep burgundy rosettes.

**Thread Agave**

*Agave filifera*

Grows to 24" tall x 24" wide. White filaments line narrow-leaved rosettes.

**Artichoke Agave**

*Agave parryi truncata*

Grows to 18" tall x 30" wide. Classic agave – makes a great statement in the landscape.

**Tequila Agave**

*Agave tequilana*

Grows to 8’ tall x 8’ wide. The heart of the plant is used for making tequila.

**‘Confederate Rose’ Agave**

Grows to 14' tall x 16” wide. Fast off-setting, durable agave forms attractive clumps.

**Aloe ‘Blue Elf’**

*Crocodile Plant*  

*Aloe brevifolia*

Grows to 12” tall x 12” wide. Durable, clustering plant.

**Climbing Aloe**

*Aloe ciliaris ‘Firebreak’*

Grows to 24” tall x 18” wide. Free flowering in February/March.

**Agave**

Agaves are native to the Southwest and Mexico. Depending on the variety, leaves may be several inches to several feet long. Agaves have crisp silhouettes that look great in front of boulders and walls. Large agaves make excellent garden focal points. Diminutive agaves are ideal for pots and for massing in garden beds.
Varieties

Cacti

Cacti are highly efficient moisture-storage vessels. Their spines, which in some varieties overlap to form intriguing patterns, protect, shade and/or collect moisture for the plants. Cacti can be spherical, columnar or pad-forming, and all varieties produce satiny flowers. As living sculptures, cacti make excellent potted plants.

Aloe

Aloes hail from South Africa. The dozens of varieties of aloe range from fist-sized to trees, but all have gel-filled leaves in common. Aloes bloom for several weeks, often in winter, sending up waxy, torchlike flowers in brilliant shades of orange, yellow or rose-red.

Aloe ‘Crosby’s Prolific’
Grows to 10” tall x 15” wide
A classic, clumping aloe. Flowers easily.

Aloe ‘Firebird’
Grows to 6” tall x 10” wide. Repeat-flowering miniature aloe that blooms almost all year.

Fan Aloe
Aloe plicatilis
Grows slowly to 4’ x 4’. A slow growing tree aloe with leaves forming fans.

Aloe ‘Crosby’s Prolific’
Grows to 10” tall x 15” wide
A classic, clumping aloe. Flowers easily.

Rock Purslane
Calandrinia spectabilis
Forms a low, dense mound about 10” tall and to 36” across. Vivid purple flowers on tall stems.

Climbing Onion
Bowiea volubilis
“Onions” grow to 6” in diameter over time. Perfect windowsill plant.

Peanut Cactus
Chamaelobivia ‘Rose Quartz’
Grows to 5” tall x 4” wide. Free flowering, clustering cactus.

String of Hearts
Ceropegia woodii variegata
Vining and trailing to 30”.

Aloe ‘Firebird’
Grows to 6” tall x 10” wide. Repeat-flowering miniature aloe that blooms almost all year.

False Ocotillo
Alluaudia procera
Grows to 12’ tall x 2’ wide. Madagascar origin. Sculptural spires of stems.

Living Stone
Aloinopsis schooneesii
Grows to 1” tall x 1.5” wide. Miniature mimicry plant from South Africa.

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Anacampseros
Anacampseros telephiastrum variegata
Grows to 2” tall x 3” wide. Small, jewel-like succulent.

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Cissus tuberosa
Grows to 8” tall x 4” wide. From the grape family. Good bonsai.

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Grows to 8” tall x 4” wide. From the grape family. Good bonsai.

Medicinal Aloe
Aloe vera
Grows to 24” tall x 18” wide. Medicinal aloe used for sunburn and minor skin scrapes.

Anacampseros
Anacampseros telephiastrum variegata
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**Crassula**

Crassulas are either shrub-forming or trailing, and are good container plants. Jade plants, the best known *Crassula*, are common in frost-free gardens and are grown worldwide as houseplants. Crassulas have many leaf shapes, from paddle to bean to tubular, and come in silver-gray, green, orange and red-tipped.

- **Silver Torch**
  *Cleistocactus strausii*
  Grows to 4’ tall x 18” wide.
  Clustering columnar cactus.

- **Hobbit Jade**
  *Crassula argentea ‘Hobbit’*
  Grows to 42” tall x 42” wide.
  A fancy form of jade plant.

- **Crassula ‘Campfire’**
  *Crassula capitella ‘Campfire’*
  Blazing red foliage when grown in bright sun.

- **Propeller Plant**
  *Crassula perfoliata v. falcata*
  Grows to 15” tall x 10” wide.
  Fragrant red flowers.

- **Valentine Plant**
  *Crassula platyphylla*
  Grows to 4” tall x 12” wide.
  Red foliage – very attractive and easy to grow.

- **Echeveria ‘Encantada’**
  Grows to 6” tall x 18” wide.
  Strong, thick flower stalks on silver-white rosettes.

- **Hens and Chicks**
  *Echeveria ‘Imbricata’*
  Grows to 6” tall x 12” wide.
  Blue rosettes pup freely to form tight clusters.

- **Echeveria ‘Perle Von Nurnberg’**
  Grows to 5” tall x 8” wide.
  Pink rosettes margined with cream.

- **Echeveria ‘Topsy Turvy’**
  Grows to 6” tall x 9” wide.
  Tubular leaves and silvery color make this a standout.

- **Echeveria ‘Black Prince’**
  Grows 3” to 5” tall x 8” wide.
  Dark-leaved echeveria. Red flowers.

- **Desert Rose**
  *Echeveria gibbiflora*
  Grows to 6” tall x 14” wide.
  *E. gibbiflora* hybrids exhibit many different forms of leaf crinkles and color.

- **Miniature Echeveria**
  *Echeveria minima*
  Grows to 3” tall x 4” wide.
  Icy-blue rosettes.

**Echeveria**

Echeverias have rubbery leaves arranged like the petals of a rose. As such, they make wonderful additions to flower beds and floral-style container arrangements. Colors range from reddish-brown to icy blue and include shades of green, frosty violet, rose-red and nearly iridescent pastels.

- **Echeveria ‘Black Prince’**
  Grows 3” to 5” tall x 8” wide.
  Dark-leaved echeveria. Red flowers.

- **Echeveria ‘Perle Von Nurnberg’**
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  Pink rosettes margined with cream.

- **Echeveria ‘Topsy Turvy’**
  Grows to 6” tall x 9” wide.
  Tubular leaves and silvery color make this a standout.
Euphorbias, from Africa, are the Old World's equivalent to cacti. Succulent euphorbias come in a multitude of shapes, from chubby little balls like *Euphorbia anoplia* (which makes a delightful addition to pots) to tall, columnar *Euphorbia acurensis* (which is great for adding vertical interest to dry gardens).

**Echinocactus** *(Golden Barrel)*

There is arguably no greater design enhancement to a dry garden than these golden-yellow spheres. The color, texture and shape of golden barrels lend interest, definition and contrast to any composition. For maximum effect, group golden barrels in threes.

**Varieties**

- **Golden Barrel** 
  *Echinocactus grusonii*  
  Grows to 30" tall x 36" wide. Most popular cactus for gardens, landscapes and collectors.

- **Euphorbia acurensis**  
  Freely branching tree euphorbia.

- **Tanzanian Zipper Plant** 
  *Euphorbia anoplia*  
  Grows to 8" tall x 8" wide. Clustering, glossy and durable potted plant.

- **Firesticks** 
  *Euphorbia tirucalli*  
  Grows to 5" tall x 4" wide or more. Turns red in cool weather. One of the most striking succulents.

- **Medusa Plant** 
  *Euphorbia flanaganii*  
  Grows to 5" tall x 10"+ wide. Clusters of yellow flowers in spring.

- **Green Coral** 
  *Euphorbia flanaganii cristata*  
  The growing point is an undulating fan called a "crest."

- **Alabaster Swirl** 
  *Euphorbia lactea cristata variegata*  
  Dramatic, pink-edged crests become more convoluted over time.

- **Crown of Thorns** 
  *Euphorbia milii*  
  Blooms almost nonstop.

- **African Snowflake** 
  *Euphorbia polygona 'Snowflake'*  
  Grows to 18" tall x 8" wide. Silver-white stems slowly grow into clusters.

- **Good Luck Plant** 
  *Euphorbia trigona*  
  Grows to 6' tall x 3' wide in time. Good house plant.

- **Royal Red** 
  *Euphorbia trigona 'Royal Red'*  
  Grows to 6' tall x 3' wide in time. Red version of the green form.

- **Tiger Jaws** 
  *Faucaria tigrina*  
  Grows to 6" tall x 12" wide. Yellow flowers in late summer/early fall. Leaf pairs look like a tiger's toothy jaws.
In the House

Most succulents can grow in a sunny window, but certain varieties do best as they are either adapted to low light or they grow so slowly that they maintain their shape for a long time. Sansevierias, haworthias, gasteraloes, most cacti, jade plants and aloes perform well as indoor plants.

Mimicry

Mimicry plants (living stones) resemble smooth rocks or pebbles. Their native habitats are among the harshest in the world, with only a few inches of rainfall a year. They grow in coarse sand with just their translucent tops showing, enabling sunlight to reach the interior of the plant.
Varieties

Opuntia cacti, commonly called prickly pear or beaver tail, have paddles that grow atop each other, creating the whimsical look of mouse ears. It is an excellent background plant, gets by on rainfall alone, and can be used as a firebreak. In Mexico and parts of the Southwest, opuntia pads are eaten as a delicacy known as nopales.

Old Man of the Andes
Oreocereus celsianus
Grows to 24" tall x 8" wide. Evolved hair to shade the body and capture moisture from mist.

False Saguaro
Pachycereus pringlei
Grows to 30' +. Classic columnar cactus.

Madagascar Palm
Pachypodium lamerei
Grows to 4' tall x 8" wide. Wonderful as a potted plant.

Opuntia

Elephant Bush
Portulacaria afra
Grows to 6' tall x 4' wide. Favorite food of elephants in Africa.

African Spear
Sansevieria cylindrica
Grows to 24" tall x 15" wide. Strong tubular leaves. An architectural, contemporary-looking plant good for indoors or shade.

Burro Tail
Sedum burrito
Trailing to 3'. Perfect for hanging baskets.

Split Rock
Pleiospilos nelii
Grows to 2" tall x 4" wide. Another mimicry plant from South Africa. Yellow flowers fade to salmon.

Corsican Stonecrop
Sedum dasyphyllum 'Major'
Grows to 3" tall x 8" wide. Miniature blue sedum.

Jelly Beans
Sedum hernandezii
Grows to 3" tall x 4" wide. Slow growing, bead-like sedum with yellow flower clusters.

Pork and Beans
Sedum rubrotinctum
Grows to 4" tall x 12" wide. High color on this special cultivar.

Trichocereus
Trichocereus pachanoi
Grows to 15' tall x 4" wide. Easy to grow, clustering, columnar cactus.
Many nurseries and garden centers, including national retailers such as Home Depot, Lowes and WalMart, offer succulents.

### Web Retail
- **Altman Specialty Plants**
  AltmanPlants.com

### Web Wholesale
- **The Cactus Collection**
  CactusCollection.com

### Retail & Wholesale
- **Oasis Water-Efficient Gardens**
  Escondido, CA • Oasis-Plants.com

- **Waterwise Botanicals**
  Bonsall, CA • WaterwiseBotanicals.com

### Organizations
- **Cactus and Succulent Society of America**
  CSSAinc.org

### Recommended Cacti & Succulent Books

- **Designing with Succulents** by Debra Lee Baldwin
- **The Timber Press Guide to Succulent Plants of the World** by Fred Dortort
- **Succulents for the Contemporary Garden** by Yvonne Cave
- **The Garden Succulents Primer** by Gideon Smith & Ben-Erik Van Wyk
- **Cacti & Succulents** by Terry Hewitt
- **The Plant Recipe Book** by Baylor Chapman
- **Succulents Simplified** by Debra Lee Baldwin
- **DIY Succulents** by Tawni Daigle

### Public Gardens with Succulent Plantings

- **Huntington Botanical Gardens**
  San Marino, CA • Huntington.org

- **LA County Arboretum**
  Arcadia, CA • Arboretum.org

- **San Diego Botanic Gardens**
  Encinitas, CA • SDBGarden.org

- **Santa Barbara Botanic Garden**
  Santa Barbara, CA • sbbg.org

- **Desert Botanical Garden**
  Phoenix, AZ • dbg.org

- **Ruth Bancroft Garden**
  Walnut Creek, CA • RuthBancroftGarden.org
At Home with Succulents explains what you need to know about plant care, soil and watering, offers creative design ideas, and includes an illustrated guide to great succulents for your home and garden.

*Free with purchase of an Altman Plants succulent.*