



Success with Succulents

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Interesting Question

- Which are the native habitats of succulents?
 - Desert wastelands
 - Mountain tops
 - Jungles
 - Near oceans
- All of the above are true!

A **succulent** is any plant with thick, fleshy (succulent) water storage organs.

Succulents store water in their leaves, their stems or their roots.

These plants have adapted to survive arid conditions throughout the world, from Africa to the deserts of North America.

Succulents are popular

- There are over 10,000 species worldwide
- Succulents are about 3% of the flowering plants of the world
- They are beautiful and nearly indestructible
- Interesting plants with a variety of plant shapes, and leaves
- Easy to propagate

Succulents need:

- Light
- Temperature
- Water
- Potting Soil
- Fertilizer
- Location

Light

- Prefer bright light - as a south facing window
- Some will scorch if given direct light
 - Leaves will turn brown or white as they bleach out
- Under lit succulents will stretch and elongate – called etiolation

Temperature

- Succulents are more cold tolerant than most people believe
- Prefer daytime temps between 70-85° F.
- Prefer nighttime temps of 50-55° F.
- If you leave succulents outside during winter, you may want to use frost cloth, pillow cases, sheets, cotton backed plastic tablecloths to cover them.
- But, don't cover with plastic.

Watering

- Should be watered generously in the summer.
- Allow to dry between waterings.
- During winter, indoor plants should be watered once/twice a month.
- Succulents should never sit in water.
- Overwatering is the single most cause of death of succulents.

Signs of overwatering

- Soft and discolored
- Leaves may lose color or be yellow or white
- Remove from pot and inspect the roots
- If brown and rotted, remove dead roots and plant in a drier medium
- Take a cutting from mother plant and repot new cutting

Signs of underwatering

- First it will stop growing
- May shed leaves
- May develop brown spots on leaves

Watering in pots

- Glazed pots hold water longer
- Unglazed/clay pots lose moisture quicker

Fertilizer

- During the summer, fertilize as you would other houseplants
- Feed monthly with a quarter-strength water-soluble fertilizer.
- Avoid fertilizing during the winter
- You can also mix pellet fertilizer into soil mixture.
- Water one day, next day fertilize at $\frac{1}{4}$ strength during growing season

Potting soils

- Succulents should be planted in a fast draining mixture
- Good mixture - 5 gallon container
 - 4 qts. Medium grit sand
 - 4 qts. Perlite/pumice
 - 4 qts. Potting soil
 - ½ c. bone meal
- You can also use potting soil with perlite.

Location

- Most succulents do best outdoors
- Succulents prefer morning light
- Protect them from afternoon sunlight- they can scorch
- Many prefer shade

When planting succulents in the ground

- If you have clay soil, amend with riverbed sandy soil
- Make sure to elevate and mound the area with dirt (sandy soil) so water can drain quickly
- Use a mulch or top dressing to retain water – pea gravel, lava rock, bark
- Use large boulders for focal points
- Agaves, yuccas, some aloes, dasylirions, ice plants, columnar cactus will take full day sun

10 Main Groups of Succulents

- Group 1 Agavaceae Agave
- Group 2 Apocynaceae Milky sap (MS)
- Group 3 Asphodelaceae Aloe
- Group 4 Asteraceae Daisy
- Group 5 Cactaceae Cactus
- Group 6 Crassulaceae Jade
- Group 7 Euphorbiaceae Euphorbia (MS)
- Group 8 Mesembryanthemaceae Ice Plant
- Group 9 Unusual Stem Succulents
- Group 10 Unusual Leaf Succulents

SUMMER GROWERS

Common Winter Dormancy Succulents

- Adenium
- Echeveria
- Euphorbia
- Ficus
- Lithops
- Pachypodium
- Plumeria
- Stapelianthus

WINTER GROWERS

Common Summer Dormancy Succulents

- Aeonium
- Aloe
- Crassula
- Dudleya
- Gasteria
- Graptopetalum
- Graptoveria
- Haworthia
- Kalanchoe
- Pelargonium
- Sansevieria
- Sedum
- Senecio
- Sempervivum

Aeonium



Aloe



Agave



Crassula



Dudleya



Echeveria



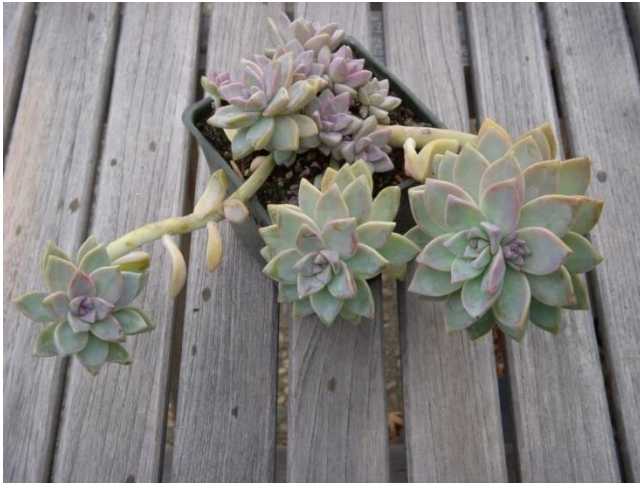
Euphorbia



Gasteria



Graptopetalum



Haworthia



Kalanchoe



Sansevieria



Sedum 6



Senecio



What's wrong with your succulent?

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• What's wrong?	Cause	Remedy
<ul style="list-style-type: none">• Bleached leaves• Distorted buds• Cottony bits at roots• Webs and paprika spots	sun exposure aphids/thrips mealybugs	move to shade spray with isopropyl alcohol discard soil, wash pot, repot
<ul style="list-style-type: none">• Sickly look, brown bumps on stems• Holes in leaves• Collapsed, putty colored leaves	red spider mites scale	spray with isopropyl alcohol scrape off scale, spray with isopropyl alcohol
<ul style="list-style-type: none">• Squishy stem or trunk• Loss of sheen, shriveling	snails/slugs frost	hand pick, use Sluggo tent plants, use frost cloth, bring inside or provide shelter
<ul style="list-style-type: none">• Elongated leaves• Greening of red, orange, leaves	overwatering underwatering	take cuttings and repot water thoroughly, keep soil moist
<ul style="list-style-type: none">• Dry leaves rosettes• Closed or shrunken rosettes	lack of light pampering normal growth heat, drought, cold, dormancy	give greater sunlight stress the plant with less water, more sun peel them away move under an eave, leave plant alone

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How to make a strawberry succulent pot

1. To begin, choose your pot and plants.
2. Choose a variety of plant sizes, shapes and colors.
3. Keep tall plants on top and creepers on the side.
4. Use pottery shards, landscape fabric, coffee filter or craft plastic to cover the hole.
5. Add gravel to the bottom of the pot or use succulent/cactus soil.
6. Starting with the holes on the bottom, start filling the holes with plants. Backfill with soil up to the next level.
7. Stuff the next holes and fill in with soil. Leave room at the top for about 3-5 plants. Be careful not to break the foliage.
8. Cram in the last few plants and make sure to pack in enough soil. Top with pea gravel.

Planting Succulent Plants In A Strawberry or Other Planter

Martha Stewart, Candice Suter, Debra Baldwin

- <http://www.marthastewart.com/914549/planting-succulent-plants-strawberry-planter>
- <http://www.youtube.com/watch?v=2apPiHy8iY4>
- <http://www.youtube.com/watch?v=yj8vvZQAIDU>

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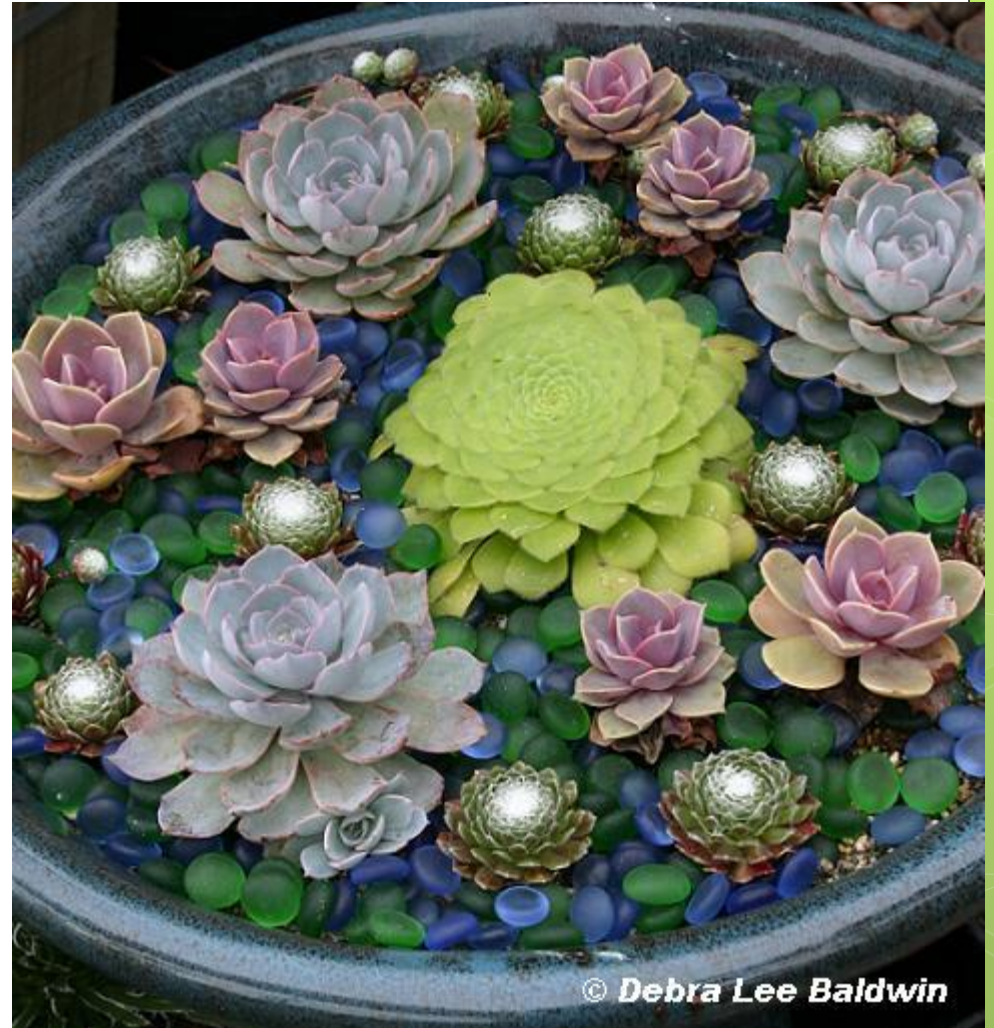
Unusual Pots/Planters

- Shoes or boots
- Wheel barrows
- Oak barrels
- Strawberry pots
- Hanging baskets
- Flat trays, Bonsai pots
- Picture frames
- Place in and around broken pottery
- Tier gardens using pots with a large bolt holding the pots in place
- Pumpkins

Succulents can grow in all types of containers – even yard sale finds!



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Planting succulents in glazed containers, which retain water longer, means you'll water them less.

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