

# Exploring Succulents



**Walton County Master Gardeners**

# UGA

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# What are succulents?

Succulents are plants which have leaves, stems and/or roots that can store water more effectively than most plants.



Fleshy leaves

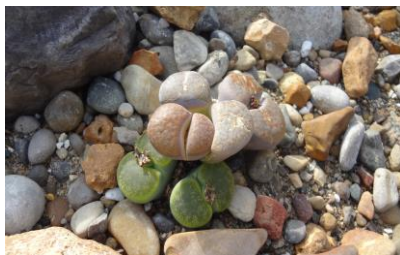


Fleshy stems

Therefore, they are more drought tolerant.

There are over 10,000 succulents around the world and many new cultivars are being produced. They come from every continent except Antarctica.

House plants like jade and lithops



Yard and garden plants such as sedum and agave



Cacti and orchids are also succulents



# Why grow succulents?

- ▶ **They are so beautiful!**
- ▶ **Wide variety of shapes, colors, sizes**
- ▶ **Easy care**
- ▶ **Easy propagation**
- ▶ **Year round gardening**



## When you first bring them home

- ▶ Inspect plants closely.
- ▶ Isolate any plants with insect or disease problems.
- ▶ Leave in the original container for a few weeks.
- ▶ Place them in appropriate light environment.
- ▶ Research each plant.



# Care of Succulents

- ▶ Soil:
- ▶ Mix your own soil using this recipe:
  - ▶ 2 parts potting soil
  - ▶ 2 parts coarse sand (not playground sand) or grit
  - ▶ 2 parts peat or coconut coir
  - ▶ 1 part perlite or crushed charcoal
  - ▶ or
- ▶ Use a premixed succulent potting soil



# Care of Succulents

- ▶ Water:
- ▶ Use a pot that drains well.
- ▶ Allow the water to run through and soak the soil. A second application of water may be necessary.
- ▶ After 10 - 15 minutes, pour out any water left in the saucer or tray.
- ▶ **OVER WATERING IS THE NUMBER ONE KILLER OF SUCCULENTS.**
- ▶ Wait until the soil is completely dry before watering again.



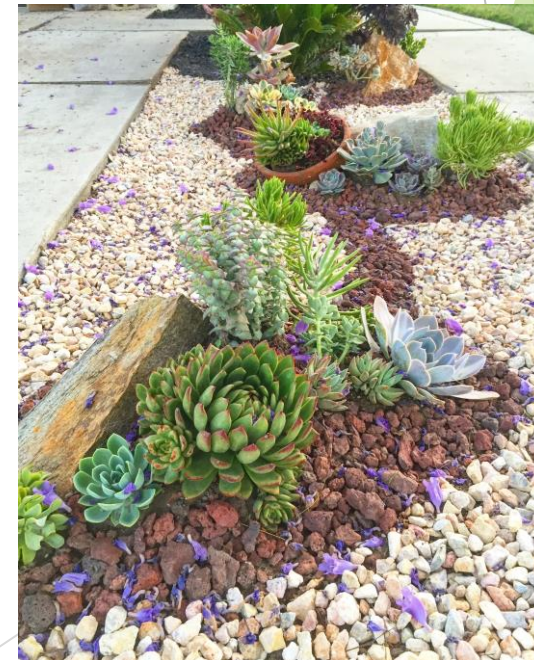


# Care of Succulents

- ▶ **Fertilization:**
- ▶ **Feed indoor succulents in growth months.**
- ▶ **Use ½ strength houseplant fertilizer.**
- ▶ **Fertilize no more than once every two weeks during this time.**

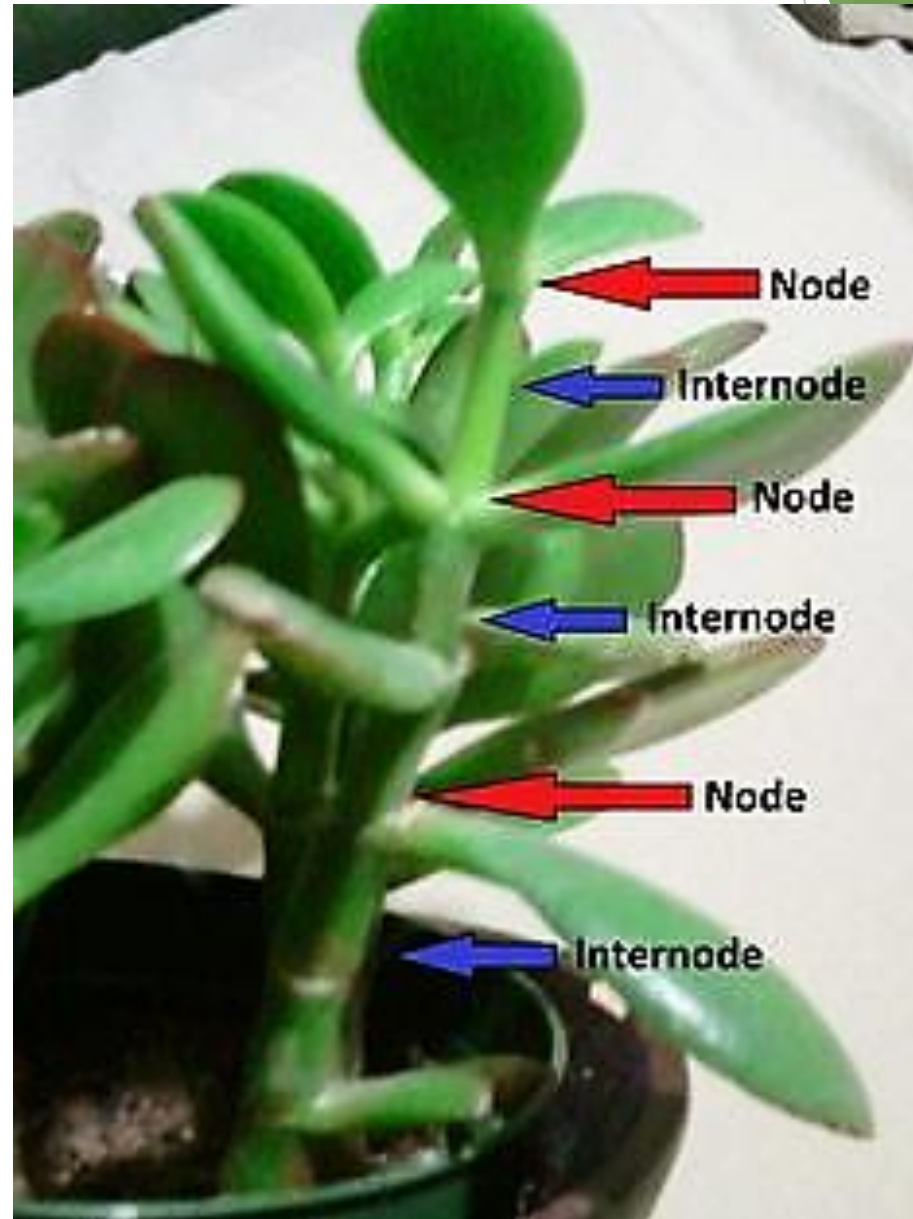


**Succulents planted in the ground may not need additional fertilizer.**



# Care of Succulents

- ▶ Pruning:
- ▶ Prune succulents for propagation, shaping or managing size
- ▶ Water the plants the day before if pruning for cuttings
- ▶ When you cut, leave at least two nodes (where leaves are attached to the stem) to allow for new growth, and possibly the propagation of new “pups”



# Care of Succulents

- ▶ Acclimation to outdoors:
- ▶ Wait until outdoor temperatures are well above 40°.
- ▶ When moving plants outside, place them in part shade and give them a little more light each day for 1-2 weeks.
- ▶ Do not place them in direct sun immediately. Sunburn will not heal.
- ▶ Check for hardiness zone to see if plants can be planted in the ground and left outside.



# Care of Succulents

- ▶ **Light:**
- ▶ Check light requirements for planting outside.
- ▶ Most succulents need a minimum of 6 hours of sunlight a day.
- ▶ For indoor plants, supplement with plant lights if necessary. Some plants will stretch or elongate if they need more light.



# Succulent Pests

- ▶ What to do about houseplant pests:
- ▶ Purchase pest free plants.
- ▶ Remove light infestation of mealybugs or aphids using 70% alcohol with a q-tip or a spray bottle.
- ▶ Isolate infected plants, outside or in another room, if possible.
- ▶ Use insecticidal soap on heavier infestations.
- ▶ Very heavy infestations may call for disposal (not in your compost).
- ▶ Do not introduce beneficial insects indoors.



# Succulent Pests

- ▶ The most common insect pests found on succulents:
- ▶ Spider mite - are 1/50" and produce webbing. They look like small brown dots which when leaves are tapped over a white paper, look like dust.
- ▶ White Flies - are 1/16", triangular and found on the underside of leaves.
- ▶ Aphids - are 1/25" - 1/8", green, brown, black, pink or colorless and have two "tubes" on the rear of their abdomens.
- ▶ Fungus gnats - are 1/8" - 1/16", black and hover above the soil. The larvae live in the soil and damage roots. Let the soil dry out completely.
- ▶ Scale - are 1/8" - 1/3" and dome shaped with a hard waxy covering. You may need to scrape them off and then dab with alcohol or a forceful spray of lukewarm water
- ▶ Mealybugs - Are 1/5" - 1/3" and look like white cotton found along leaf veins, joints or spines and the underside of leaves.
- ▶ Extension.uga.edu Bulletin 1318 pp 15-16



Aphid



Mealybug

# Propagating Succulents

- ▶ **Stem Cuttings:**
- ▶ Water succulents the day before taking cuttings for propagation.
- ▶ Take pieces of stem having at least two nodes and remove the lower leaves.
- ▶ Let the cuttings callus for 3-7 days out of bright light. The cut surfaces will dry out and harden.



# Propagating Succulents

- ▶ **Stem Cuttings:**
- ▶ **Use a moist (not wet) succulent potting mix.**
- ▶ **Place the cuttings in the soil with the lower nodes in the soil.**
- ▶ **Do not water for at least a week and then water lightly until roots appear.**
- ▶ **Start fertilizing after roots appear.**





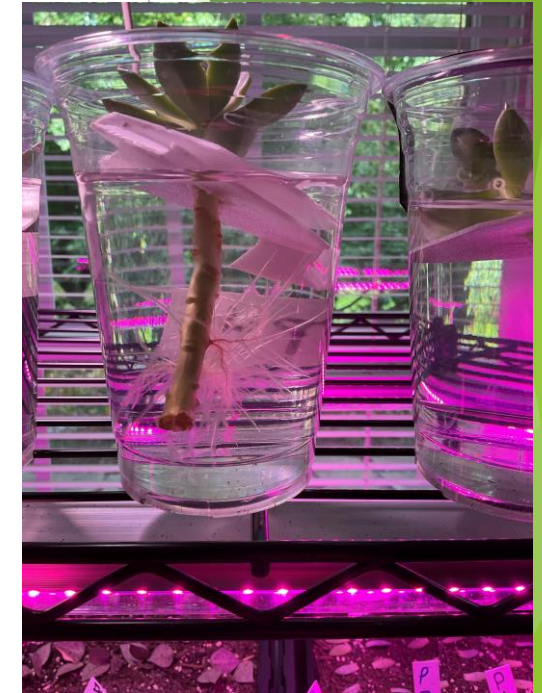
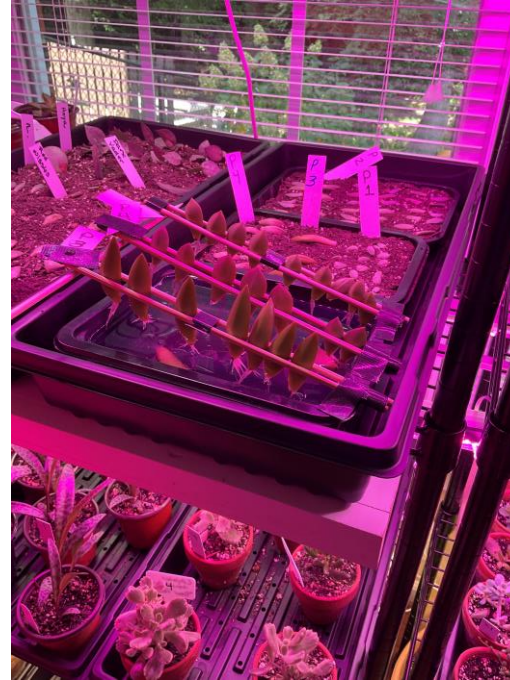
# Propagating Succulents

- ▶ Leaf Cuttings:
- ▶ Water plants the day before taking cuttings for propagation.
- ▶ Remove leaves gently using a side-to-side rocking motion.
- ▶ Let the leaf cuttings callus for 3-7 days out of direct light. Then, place the leaves on dry succulent potting mix.
- ▶ Do not water until roots appear. Use a squeeze bottle to water lightly around the roots.
- ▶ Rosettes will appear after the first roots.



# Propagating Succulents

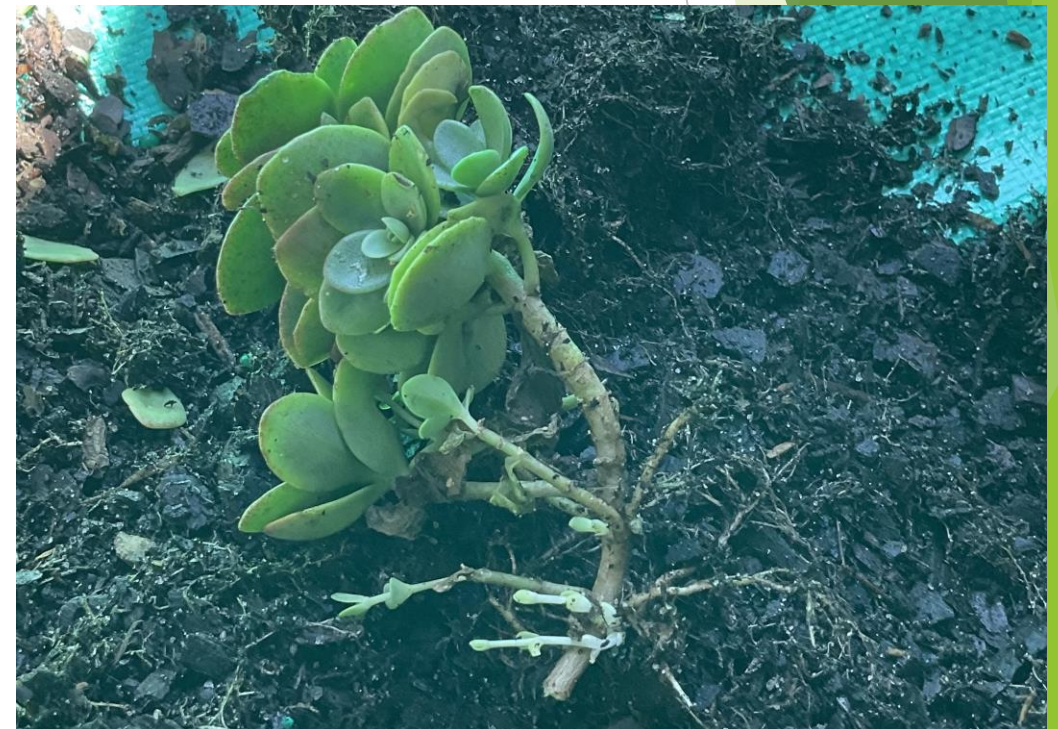
- ▶ Some stem and leaf cuttings can be started in water and then planted in soil.



The best time to propagate stem and leaf cuttings is in the actively growing season.

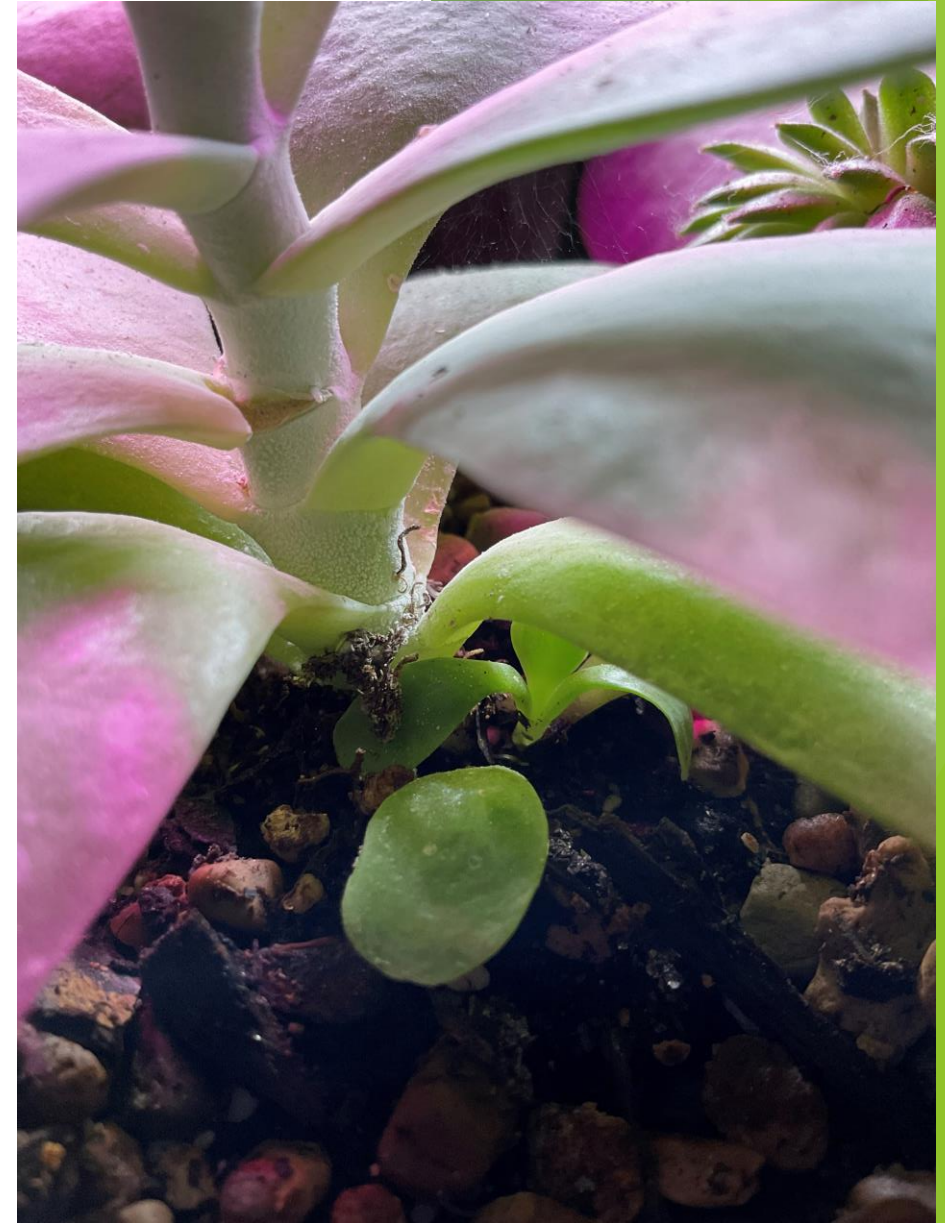
# Propagating Succulents

- ▶ **Division:**
- ▶ Remove the plant from the pot and gently separate at the root area, inflicting as little root damage as possible.
- ▶ Prepare a new pot with damp succulent potting mix.
- ▶ Spread the roots in the new pot and water just enough to settle the soil.
- ▶ After one week, begin watering and fertilizing on your regular schedule.



# Propagating Succulents

- ▶ Offsets (also known as pups or chicks):
- ▶ If they are growing in the soil around the base of the mother plant, gently remove them. If they have roots, plant them in moist succulent potting mix.
- ▶ Lightly water to settle soil.
- ▶ After one week, begin to water and fertilize as usual.

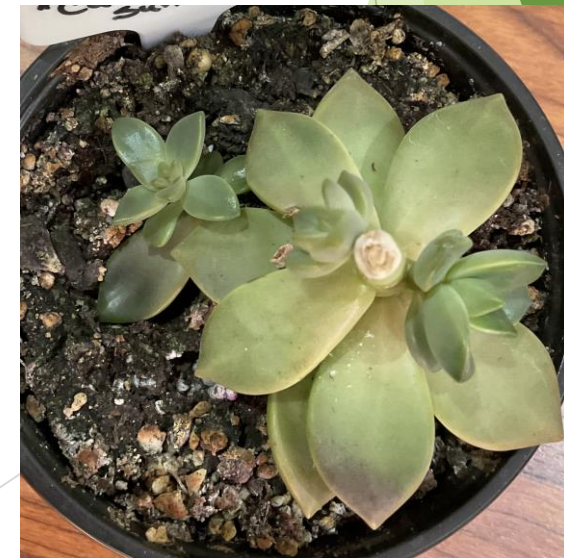


# Propagating Succulents

## Offsets:

If they do not have roots or are growing on the stem of the mother plant, gently remove them with your fingers or a sharp knife and treat as stem cuttings.

Offsets can be encouraged by “beheading” the mother plant.



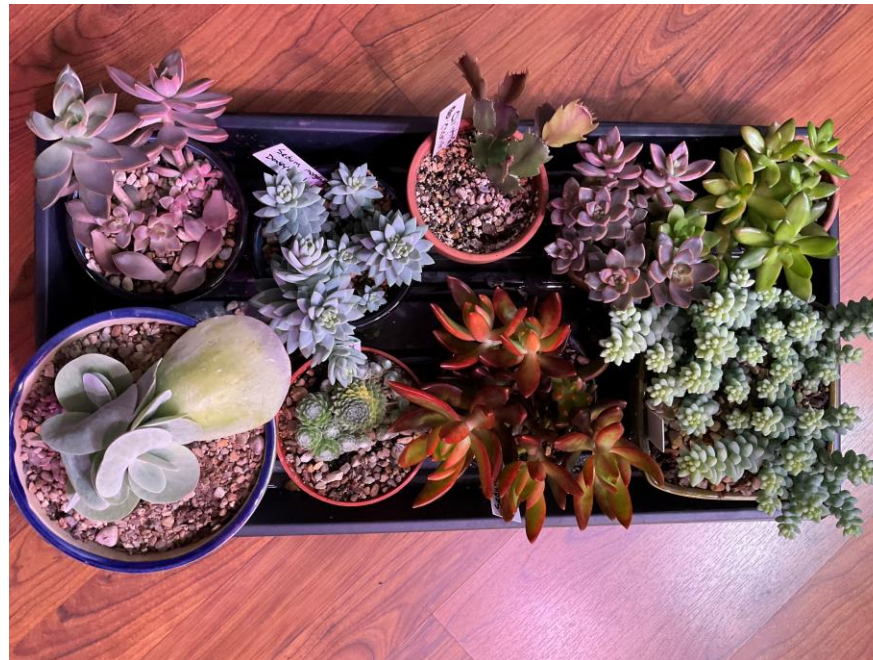
# Propagating Succulents

- ▶ **Seeds:**
- ▶ Spread the seeds on the surface of moist succulent potting mix in a seed tray with holes in the bottom to allow water to drain. Place this seed tray in a solid seed tray (no holes) to allow for bottom watering.
- ▶ Cover the tray with a clear lid or plastic wrap and place in indirect light.
- ▶ Keep the soil moist but not wet.
- ▶ When leaves appear and are plump, let the soil dry out between waterings.
- ▶ Transplant when they are 2" - 4" tall or rosettes are at least 1 ½" wide.



# Uses for succulents

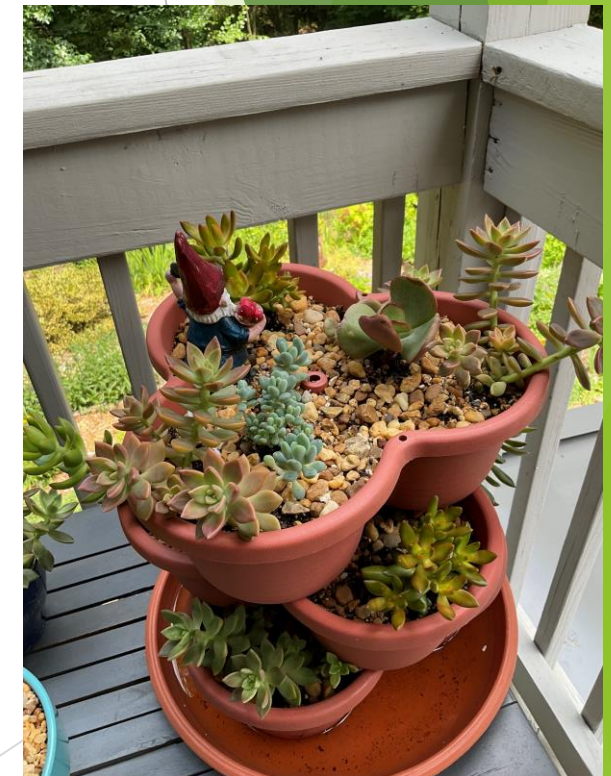
- ▶ Indoor succulents can be planted with a single species in one pot.
- ▶ Can easily match pot to conditions
- ▶ Easier for propagation



# Uses for Succulents

- ▶ Mixed planters can be more interesting. All plants in the same container must need the same conditions and have compatible growth habits.
  - ▶ Light and water requirements
  - ▶ Growth rate
  - ▶ Shape

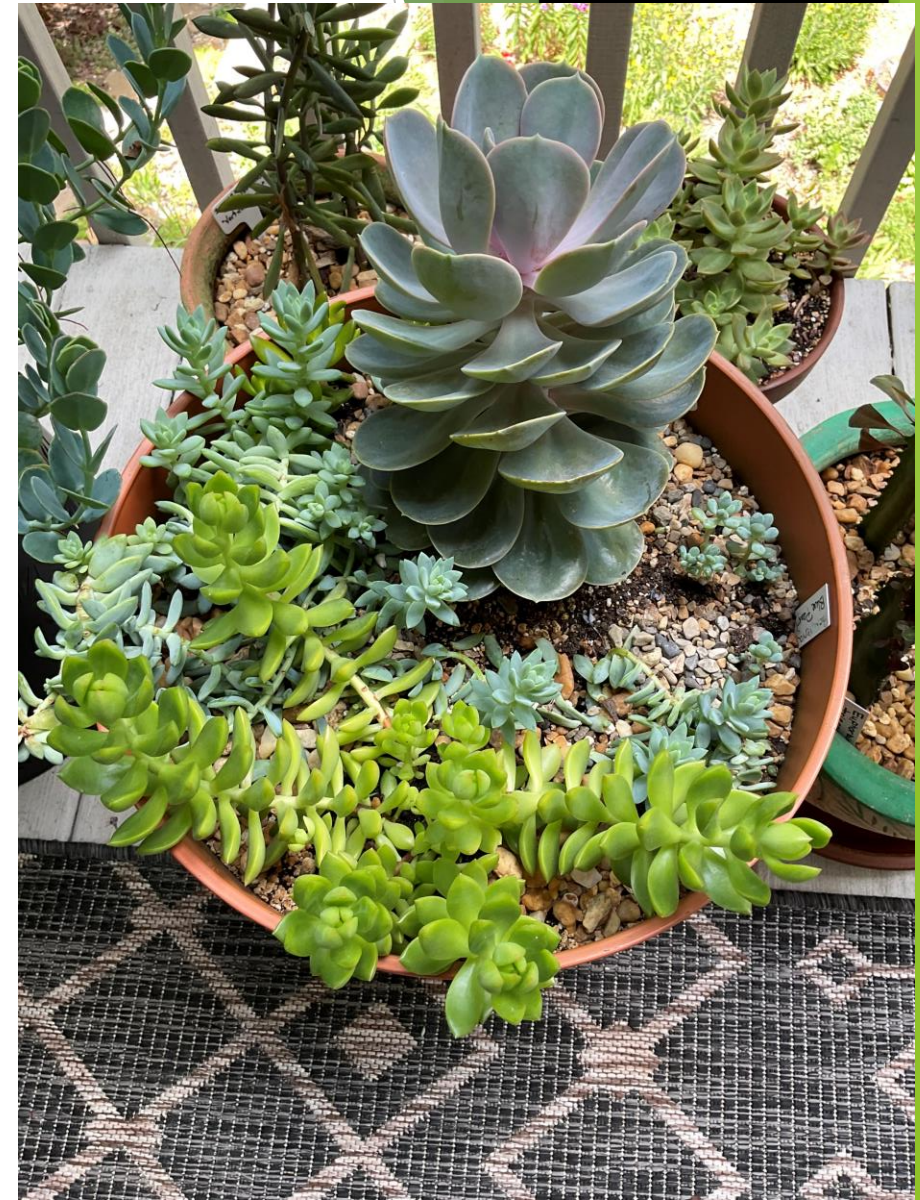
Use plants with different shapes, colors and textures.





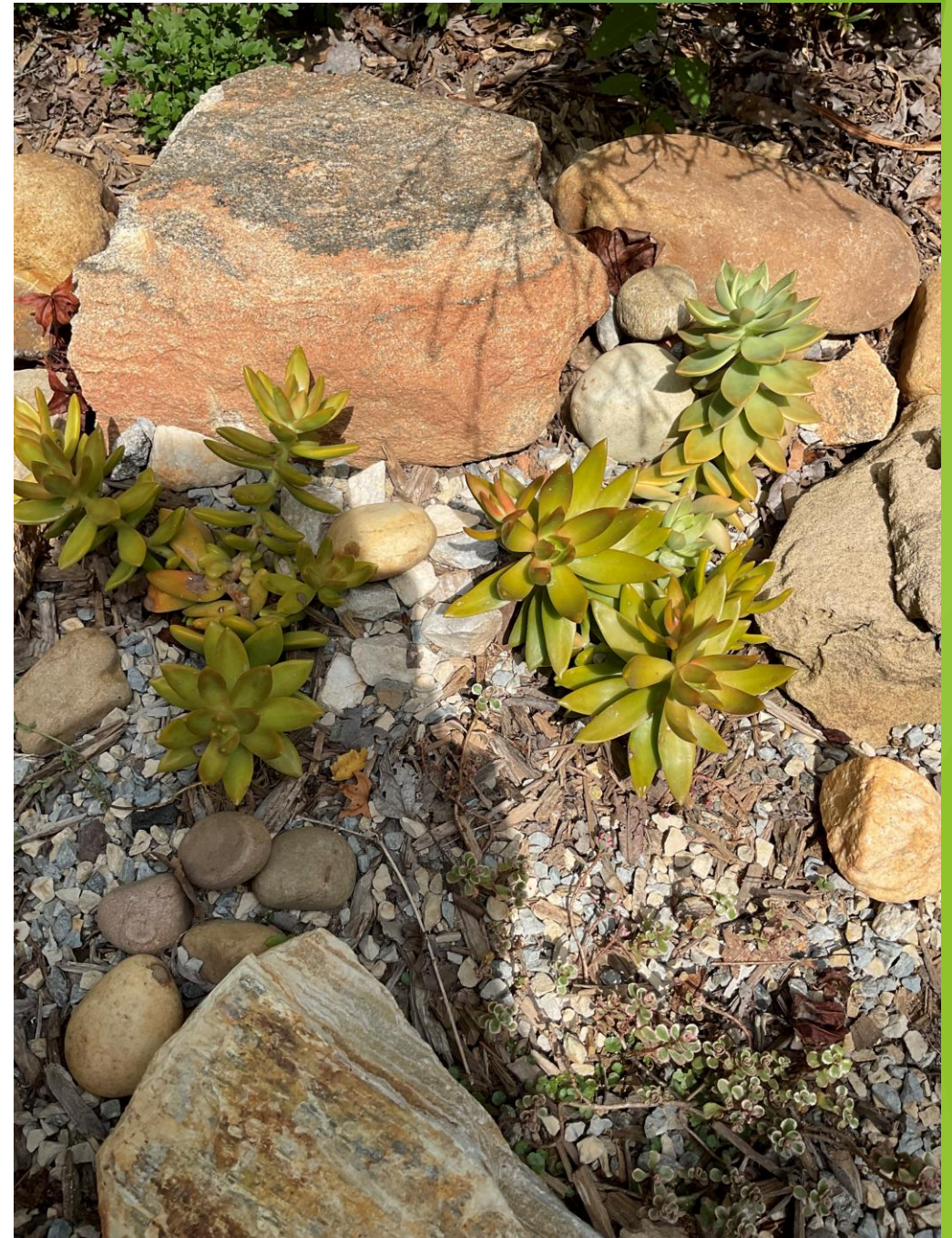
# Uses for Succulents

- ▶ **Outdoors in containers**
  - ▶ Succulents can be moved outdoors after the frost free date (USDA says March 30).
  - ▶ Start in the shade and slowly move plants into direct sunlight.
  - ▶ Morning sun is probably best to begin, so avoid mid-day sun.
  - ▶ Direct sun may affect the color of the foliage



# Uses for Succulents

- ▶ Planting directly into the soil outdoors
  - ▶ Acclimate plants coming from indoors
  - ▶ Plant in good draining soil and location
  - ▶ Non-hardy plants can be treated as annuals
  - ▶ Take cuttings in summer to propagate new plants for next year



Winter hardy plants may include some Sedum, Sempervivum (hen and chicks), Agave, Opuntia (prickly pear), and others.



# Resource list:

- ▶ University and research centers are very reliable sources for gardening information:
  - ▶ <https://www.missouribotanicalgarden.org/>
  - ▶ <https://extension.uga.edu/>
  - ▶ <https://hgic.clemson.edu/>
  - ▶ <https://extensiongardener.ces.ncsu.edu/>
  - ▶ <https://extension.wvu.edu/>
- ▶ Commercial Sites:
  - ▶ [worldofsucculents.com](http://worldofsucculents.com)
  - ▶ [mountaincrestgardens.com](http://mountaincrestgardens.com)



*Walton County Master Gardeners invite you to*  
**Free Fall 2024 Gardening Talks**

**Mondays 2:00–3:00 p.m.**

**O’Kelly Memorial Library**

**363 Conyers Road, Loganville GA**

**Sept 9: Exploring Succulents**

**Sept 16: Putting the Garden to Bed  
for the Winter**

**Sept 23: Fall is the Best Time to Plant!**

**Sept 30: Hügelkultur—An Ancient  
Way to Garden**

**Oct 7: Powerhouse Sun Perennials**



Walton County Master Gardeners invite you to  
**Free Fall 2024 Gardening Talks**

Tuesdays 4:00–5:00 p.m.

W.H. Stanton Memorial Library  
407 W. Hightower Trail, Social Circle GA

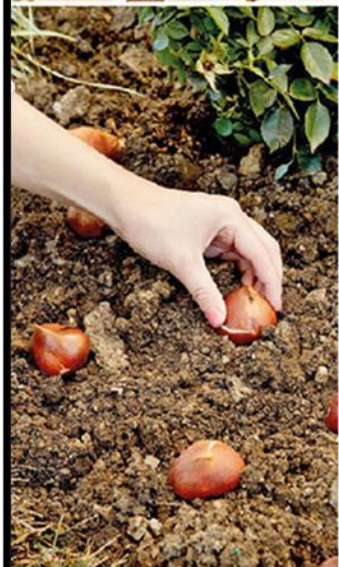
**Sept 10: Exploring Succulents**

**Sept 17: Putting the Garden to Bed  
for the Winter**

**Sept 24: Fall is the Best Time to Plant!**

**Oct 1: Hügelkultur—An Ancient  
Way to Garden**

**Oct 8: Powerhouse Sun Perennials**



*Walton County Master Gardeners invite you to*  
**Free Fall 2024 Gardening Talks**

**Wednesdays 2:00–3:00 p.m.**

**New UGA Extension Office  
1258 Criswell Rd SE, Monroe GA**

**Sept 11: Exploring Succulents**

**Sept 18: Putting the Garden to Bed  
for the Winter**

**Sept 25: Fall is the Best Time to Plant!**

**Oct 2: Hügelkultur—An Ancient  
Way to Garden**

**Oct 9: Powerhouse Sun Perennials**

