

WELCOME Sept. 2019

Library Talks

Tips for Success with Succulent Plants



UC Master Gardeners of Napa County



University of California

Agriculture and Natural Resources

¹

UCCE Master Gardener Program



Today's 1 Hour Highlights

Learn about these easy-care plant families you can grow indoors and out. UC Master Gardeners will teach you the basics of choosing, designing, and growing the right plant in the right spot.

- ☐ Identification & Taxonomy
- ☐ Cool Season Winter Growers vs. Warm Season Growers
- ☐ Design
- ☐ Soil/Potting Mixes – drainage, drainage, drainage
- ☐ Watering
- ☐ Propagation, Dividing, Rejuvenating
- ☐ Hands-on Demonstrations – your succulents



How will I know what will grow successfully in my environment?

- ☐ Identification & Taxonomy
- ☐ Cool Season Winter Growers vs. Warm Season Growers
- ☐ Designs
- ☐ Soil/Potting Mixes – drainage!
- ☐ Watering – it depends!
- ☐ Maintenance, Propagation, Dividing
- ☐ Hands-on Demonstrations

What is a succulent? What is a cacti?

Spiral Aloe
genus Aloe



Spiral Cacti
genus Mammillaria

Eight Genera of Familiar Succulents



Aeoniums (a-OH-nee-ums)

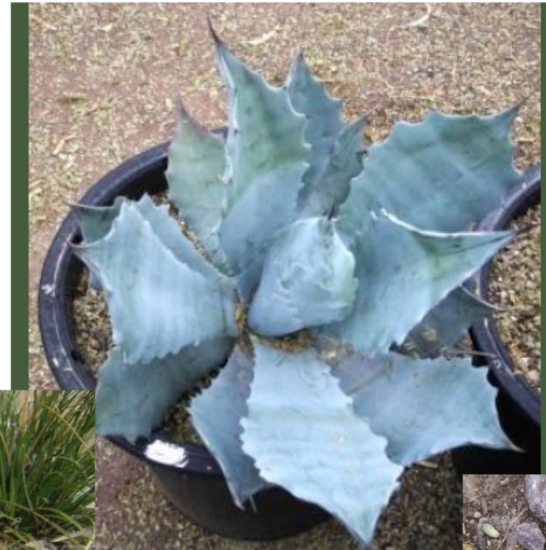


A. arboreum 'Zwartkop', Summer dormant/winter grower

Agaves (ah-GAV-ehs) Native to North America



Agave colorata



Agave neomexicana



Agave victoriae-reginae

Aloes (AH-lohs)



Aloe striata

Aloe polyphylla



Dudleyas

Dudleya farinose



Dudleya brittonii



California Dept. Fish & Wildlife Officer prepares coastal native dudleya for replanting



Succulent Smugglers – Plant Poachers
UC Santa Cruz Arboretum and Botanical Story Sept. 2018
(photo credit: Patrick Foy)

Echeveria (ech-uh-VEH-ree-ah) Hens and Chicks

Echeveria



Gorgeous color!



Echeveria 3

Echeveria - Hens and Chicks



Debra Lee Baldwin



Debra Lee Baldwin

Euphorbia Succulents (u-FOR-bee-ah)



Euphorbia milii Succulent



Sempervivum (sem-per-VEE-vum)

Sempervivum



Houseleeks, Hen
and Chicks
Summer-dormant



A myriad of colors and leaves!

Sedum

Sedum



Sedum 2



Sedums go on and on!



Please don't walk on me.



Right Plant, Right Place

You've heard it before.... and
you'll hear it again!

What's your microclimate?
Read the plant label!



Before you pick up that plant..... where are you going to put it? Microclimates

- A pot inside, a hanging basket on the patio or a specimen for the front garden?
- Will this plant live in a garden bed outside? In bright sun or dappled shade? Under a grow light or on a sunny window sill?

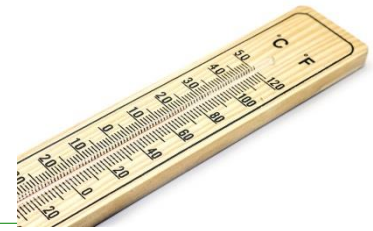


Outside

- Consider how large a plant can grow.... A thorny Agave can be a hazard when planted too close to a sidewalk or driveway. Pets, children and adults.
- Succulents and Cacti CAN be used as barriers.
- Look at the drainage and correct for the needs of your succulent. Group succulents in natural groupings with similar light and water requirements.
- Lawns and succulents have different needs.
- You can mix succulents and other types of plants with similar water, light and drainage needs!



Hardy Succulents for Outside



- Agaves thrive in full sun and can survive to 10 °F.
- Hens and Chicks are all frost resistant and grow in full sun to shade. Avoid over watering!
- Aloes thrive in many conditions.
- Sedums are hardy to Zone 9 (USDA hardiness zone) and make a good border plant.



- Aeoniums resemble large daisies with fleshy petal-like leaves in green, yellow, garnet....
THRIVES in dappled shade. Frost tender.
- Sedum (stonecrop) trailing succulents with oval or bean shaped leaves. Protect from high heat and strong sun. Frost tolerant.
- Sempervivums (Hens and chicks) resemble Echeverias but rosettes have thinner, pointed leaves with a more compact spherical form.
Thrive in cold climates and dislikes hot sun.



Right Plant ...Right Place

- ☐ Soil/Drainage
- ☐ Sun/Shade requirements
- ☐ Water
- ☐ Plant habit
- ☐ Traffic
- ☐ Hardiness zone
- ☐ Maintenance requirements



Succulents for Inside

- Jade Plant (*Crassula* group)
- Aloe Vera
- Echeveria (Hens and Chicks)
- Zebra Plant (*Haworthia attenuata*)
- Mother-in-law's tongue (*Sansevieria* species)



Best Succulents for Kids

Encourage a child's interest in gardening...

- *Haworthia attenuata* (Zebra plant)
- *Kalanchoe tomentosa* (Panda plant)
- *Sedum rubrotinctum* 'Pork and Beans' stonecrop
- *Senecio radicans* 'Fish Hooks'

Succulent-Topped Pumpkins - September Library Talks Designer: Laura Eubanks



Which
can be
great fun.



Color





Billows of warm
charteuses and
oranges repeat in
round forms.



Textural play of
greens against a
rough stone wall.



**Dense mix, or
room to grow?**





Tale of a Garden

March 2014



May 2016



June 2018



Containers & Growing Medium





DIY Growing Medium

UC Davis Arboretum Recipe

- 1 part ground sphagnum peat
- 1 part uniform coarse sand (no silt)
- 2.5 parts white pumice
- 1 part redwood compost

Very low in organic material.

Specialty Mix Blends

Cactus & Succulent Example:
pumice, aged fir bark, aged redwood and sand





Advantages of Containers



- Drainage: Fast, no standing water
- Soil: Porous, coarse aggregate, low organic content
- Location: Sheltered from frost, harsh sun
- Mobility: Can be relocated with changing conditions
- Style: Size, shape, color, form to suit plants and preferred style

Outdoor Vertical Propagation Containers





Planning Your Container

- **KNOW YOUR PLANT(S):** Research plants' needs: Water, light, exposure, drainage, fertility, eventual size.
- **GROUP PLANTS** with similar requirements.
- **CHOOSE A CONTAINER** compatible with plants' shallow roots (or modify) and design style desired.
- **ARRANGE PLANTS** for size and color.
- **PLANT GENTLY**, from tallest/largest to smallest/lowest.
- **PLACE** container where plants will receive appropriate light and shelter. Turn if needed to prevent elongating toward light.



designwithdiversity.com

Design

Location

Function

Form

Style

Color

Repetition



Formal or
whimsical



Repetition



Planting Considerations in the Garden

Location:

- **Higher ground:** Mounds or slopes for improved drainage and frost protection.
- **Morning light or shelter from hottest sun.**
- Bright light shade for Dudleyas and other plants from coastal areas.
- **Generally, at least 3 hours of sun or bright light to avoid elongation.**
- **Fast-draining soil.** Plant rosettes at an angle to allow centers to drain.
- **Shelter from rain during dormancy** (Best if bright, dry, and cool.)

Function:

- Structure/"bones", filling middle ground, ground cover?
- **Near parking, path, or play area? No sharp points please!**



Location/Function/Scale: Near paths? Foot traffic? Small tight area?

Style

Dense, varied, colorful



Open, airy, serene

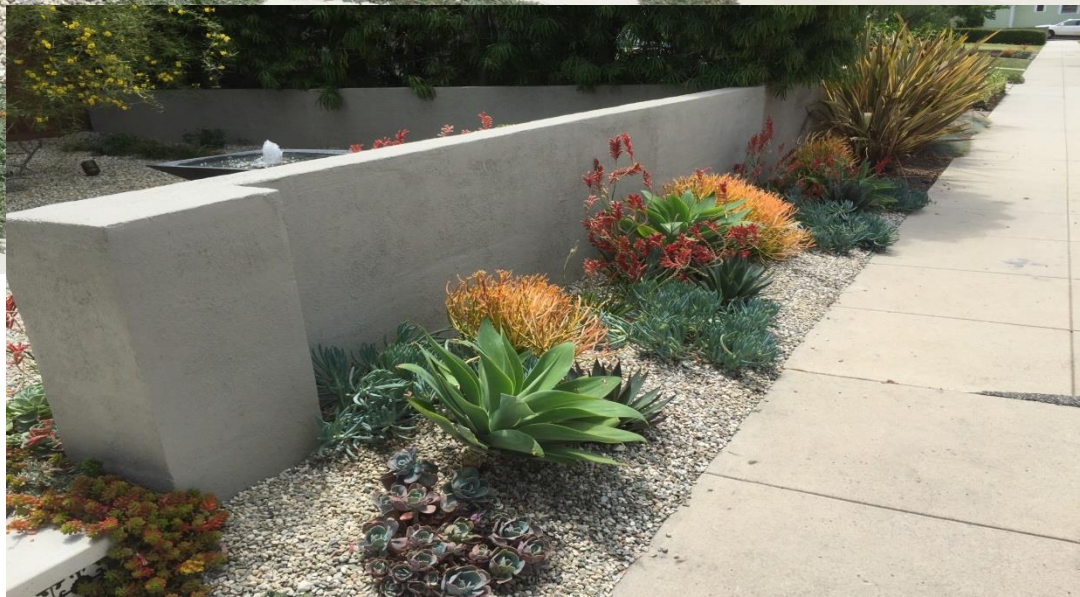




Structure and
Texture



Form and
Repetition





Billows of warm
charteuses and
oranges repeat in
round forms.



Textural play of
greens against a
rough stone wall.





Plan ahead
or
Plan to redo!



Maintenance

How Do I Take Care of This Thing?

- The positive is - growing succulents requires very little maintenance!
- Watering & Fertilizing
- Light (Read plant labels, reference literature)
- IPM – snails, slugs most common
- Grooming
- Re-potting

Self Propagation – plant does it on its own

- Air Rooting Echeveria and Euphorbia





Are You Ready?

Vegetative Plant Propagation

- ✓ Pots
- ✓ Succulent-Cactus Potting Mix for Rooting
- ☐ Tools
 - + Gloves
- ☐ Disinfect
 - Rubbing Alcohol
- or
 - Mix 1 part bleach + 9 parts water





Select Healthy Cuttings

Shoots, Stems

- Tip cuttings – 2- to 6-inch piece of stem with terminal bud
- Medial cuttings – cut above & below nodes(“eyes”) with axial buds

Leaves

- Whole leaf with petiole or without
- Leaf section

Leaf





Propagation from Leaves

- Let leaf dry out in shady location 2 – 7 days
Optional – Dip basal end in rooting hormone
- Lay leaf on top of moist soil/potting mix
- Place in warm airy location, keep soil moist & mist leaves
- Small roots appear and new succulent plant will appear at base
- Plant being careful not to disturb roots, old leaf can be removed
- Reduce watering as plant develops



Propagation of Stems - Demo

- Let cutting dry out in shady location
 - Cut ends need 1 – 2 days drying time
 - Optional – Dip cut end in rooting hormone
- Plant in moist soil/potting/rooting mix
- Place in warm airy location, bright indirect light
- Mist as needed to keep soil mix slightly moist
- Mist leaves
- Reduce watering as plant develops roots



Additional Prop. Techniques

Layering

- Tip layering
- Simple layering
- Compound layering

Other

- Stolons or runners (Spider plants)
- Offsets (rosetted succulent types)



References

Books

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Websites

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- <http://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=23262>
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- <http://ucce.ucdavis.edu/universal/printedprogpageshow.cfm?pagenum=6142&progkey=2080&county=5576>

A list from the UC Botanical Garden:

- <http://ucbgllcs.blogspot.com>
- <https://debraleebaldwin.com/echeveria-varieties-labeled/>
- <https://shopsucculents.com/pages/succulent-plant-types>



UC MG WEBSITE NAVIGATION

Go to UCMG website
<http://napamg.ucanr.edu/>

For more research based gardening
information from University of California
Go to Gardening Resources

For slides and references for this
workshop and other past events
Go here

Each link opens a new page with more links. Just click on the items you'd like to investigate

TAKE TIME TO EXPLORE [ALL](#) THE LINKS ON OUR WEBSITE
WE HAVE LOTS TO OFFER!



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THANK YOU

- Questions
- Hands-on sharing of your succulents
- Easy home propagation techniques