SUCCULENTS ARE FUN AND EASY
San Joaquin UC Master Gardeners'
Smart Gardening Conference
September 29, 2012

Presented by:
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EXPLORING SUCCULENTS

By Leslie Oliver
San Joaquin Master Gardener
BEWARE!
SUCCULENTS CAN BECOME AN OBSESSION
Agenda

✓ Describing succulents
✓ Families of succulents
✓ Myths of succulents
✓ Planting
✓ Watering
✓ Temperature
✓ Pests and Diseases
✓ Propagation
✓ Art
✓ Succulent Gardens
✓ Resources
What are Succulents?

• All cacti are succulents, but not all succulents are cacti.

• Succulents are plants that store water in their leaves, stems or roots.

• There are an estimated 20,000 species of succulents in the world.
Origin of Succulents

- Succulents are found primarily in Mexico, South America, Central America, East Africa, Arabia, Madagascar and India.

- Native habitats of Cacti are in North and South America

- Succulents grow well in California because of the similarity of climates.
Stem Succulents

- Store large amounts of water in round or columnar fleshy stems.
- Rarely have leaves.
- Water loss is kept to a minimum by the small surface area in proportion to volume.

Nearly all cactus are stem succulents.
Stem Succulents

Firesticks

Plumeria

Euphorbiaceae

Old Man of the Andes

Cactaceae

Peanut Cactus
Leaf Succulents

- Leaves can vary in size and form depending on water availability

- Leaves contain water storage cells
  - Leaves thick and fleshy with plentiful water
  - Leaves shrivel or shed in drought
Leaf Succulents

Coral Yucca*

Shaw Agave*

Century Plant
Ruth Bancroft Garden

Gasteria-Haworthia

Aloe*

*Demonstration Garden

Agavaceae

Asphodelaceae
More Leaf Succulents

Aeonium

Crassulaceae

Hen & Chicks

Kalanchoe

Jade

Sedum
More Leaf Succulents

Blue Chalk Sticks

Asteraceae

String of Pearls

Mesembryanthemaceae

Split Rock

Aptenia
Root Succulents

- Store water underground in tuberous or swollen roots
- Can survive long droughts because moisture loss occurs more slowly

Pictures: cactus-art.biz
Myth Busters

- They’ll grow anywhere—you don’t need to worry about soil
- You rarely if ever need to water succulents
- They all like full sun
- Cold weather won’t hurt them
- Pests and diseases don’t attack succulents
- You can’t kill a succulent
Growing Indoors

• Most succulents are successful indoors
• Need plenty of light
• Water when dry
• Be creative with containers and arrangements
Indoors

Big Box Stores are now advertising succulents they ordinarily sell as outdoor plants as indoor plants.
Outdoors in Containers

- Keep in mind potential size and shape
- Small plants: small pots
- Shallow pots are good for most succulents
- Drainage is essential
- Be prepared to repot when they outgrow
- Use your imagination
Small Pots
Large Pots

Master Gardener
Cherie Sivelle’s Yard
Other Containers

Rosalie Osman’s Collection
More Containers

More by Rosalie
How to Plant: containers

• Check for drainage

• Place rock over hole (pottery shard or screen)

• Add gravel

• Add Cactus mix

• Plant

• Add top dressing
Soils for Potting

Potting Mix is missing sand
How to Plant: Outdoors

- Keep in mind future size and shape
- Consider sun/shade needs of plants
- Make sure there is plenty of drainage—soil and elevation
- Consider height, shape, and color
Outdoors in the Landscape
More of Rosalie’s
Plan Ahead

March 2012
April
May
June
July
August
Watering Succulents

- Water only when soil is dry
- Generally growth in spring & fall—need more water
- Some go dormant in summer, some in winter—less water
- Ceramic pots retain moisture longer than clay
- Don’t leave in standing water (dump saucers)
Temperature

• Most succulents don’t like direct Valley sun all day

• Some like shade

• Some like filtered sun

• Most don’t like freezing weather

• Some should be sheltered if it gets below 40 degrees
Pests and Diseases

• Most common pests
  - Red spider mites
  - Mealy bugs
  - Snails and slugs
  - Aphids
  - White flies
  - Scale
Pests and Diseases

- Most common diseases
  - Root rot
  - Fungal leaf spot
  - Corky scab

Most problems with succulents occur
- because of too much water (or too little)
- because of too little light (or too much sun)
- because of temperature too cold (or too hot)
Reality Check: Myth Busters

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- You rarely if ever need to water succulents
- They all like full sun
- Cold weather won’t hurt them
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Propagating

Cuttings:
- Cut with sharp knife
- Dry until cut edge has scarred over
- Plant in dry soil
- Wait about a week to water

Leaves
- Dry until edge scars over
- Lay in pot against side for support
Propagating

Pups

• Many succulents have pups (Hen and Chicks)

• Carefully cut away from mother

• Plant if there are roots
Succulent Art

The Good

The Bad

The Ugly
Mary Fry, Master Gardener
Public Gardens to View Succulents

- Ruth Bancroft Gardens, Walnut Creek
- UC Botanical Garden, Berkeley
- San Francisco Arboretum, Golden Gate Park
- Lotusland, Santa Barbara
- Huntington Memorial Gardens, San Marino
- Wrigley Memorial Gardens, Catalina Island
- Getty Museum, Los Angeles
Resources and References

• Altman, Ken (2011) *At Home with Succulents* (Free from Home Depot)

• Amazon Books ($0.01-$1.25)
  - Andersohn, Gunter (1984) *Cacti and Succulents*
  - Hecht, Hans (1994) *Cacti & Succulents*
  - Luebbermann, Mimi (1997) *Cactus & Succulents*
  - Mace, Tony and Suzanne (2001) *Cactus and Succulents*
  - Perl, Philip (Time-Life Encyclopedia of Gardening) (1978) *Cacti and Succulents*
  - *Sunset Books* (1991) *Cactus & Succulents*
Resources and References, continues

• Expensive books
  o Baldwin, Debra Lee, *Designing with Succulents*
  o Baldwin, Debra Lee, *Succulent Container Gardens*
  o Smith, Gideon and Van Wyk, Ben-Erik (2008) *The Garden Succulent Primer*

Stockton Cactus and Succulent Society
Meetings: 4th Thursday, 7:00 p.m.
2720 Transworld Drive
San Joaquin Education Building
Stockton
Contact: Roelyn Poot (209) 599-7241
IT LIVES!

September 2012