

# What's Happening with Succulents?

Annette Meyer Heisdorffer, Ph.D.  
Extension Agent for Horticulture Education—  
Daviess County



Kentucky Cooperative Extension



***It starts with us***

# What are succulents?

- "Succulents are drought-resistant plants that have adapted to dry, arid environments."
- "They store water in their leaves, stems, and roots, causing them to appear fleshy."
- "They can be grown indoors and outdoors and are suitable in any window that receives at least six hours of light."

Source: West Virginia University Extension Service, "Succulents 101," <https://extension.wvu.edu/lawn-gardening-pests/indoor-plants/succulents-101>



# What are succulents?



# Succulents require:

- Well-drained soil
- Potting soil made for succulents
- One-part potting soil mixed with one-part coarse sand
- Maybe other materials like perlite to add to soilless mix



'Pork and Beans'



# Succulents require:

- Little water
- Amount depends on:
  - Type of plant
  - Size of plant
  - Time of year
  - Potting soil used
- Touch soil to determine when water is needed – once per week to every two to three weeks



# Succulents require:

- Indoors require bright light or direct sun
- Outdoors most prefer partial shade to bright, indirect light
- Avoid hot, middle-of-the-day, intense sun
- Gradually change intensity of light as you move them inside for the winter or outside for the summer



# Succulents require:

- Little fertilizer
- Know the growing period
- Once or twice a year to three times a year
- Use general houseplant fertilizer at  $\frac{1}{2}$  the rate recommended



# Different Types of Succulents

## Grouped by Genus

# *Aloe*

- Many large plants
- Look for dwarfs for mixed containers
- Does not tolerate freezing weather
- Leaves are smooth, bumpy, or prickled with toothed margins

Left: 'Blue Elf'  
Middle: 'Cat's Tail'  
Right: 'Pink Blush'



# *Aeonium*

- Partial shade to bright shade
- Needs low humidity
- Summer dormant—grows in early winter
- Does not tolerate heat
- Takes a long time to bloom but dies after blooming
- Cut off rosette as leaves fall off and start new plant

Left: 'Dinner Plate'  
Middle left: 'Irish  
Rose'  
Middle right and  
right: 'Sunburst'



# *Braunsia*

- Considered shrublets or creepers
- Tolerates heat
- Needs bright light in summer
- Tolerates about 23 degrees F
- Blooms in winter to spring

Left: 'Beads Lampranthus'  
Right: 'Ice Plant'



# *Crassula*

- Plants like jade plant; others have stacking leaves
- Some may have thick stems
- Could grow into a small tree or use for bonsai
- Some with stacked leaves look threaded through a wiry stem
- Do not tolerate freezing temperatures

Left: 'Baby's Necklace'



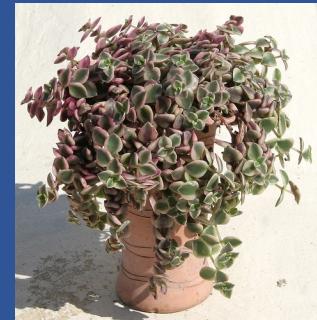
Middle left: 'Jade'



Middle right: 'Pink Joy'



Right: 'Calico Kitten'



# *Delosperma*

- Ice plant
- Full sun but tolerates light shade
- Ground cover 3-6" tall and spreads
- Bloom colors vary from red, yellow, purple, or orange depending on cultivar
- Zones 5-10

Left: 'Gold Nugget Ice Plant'

Middle: 'Pickle Plant'

Right: 'Tufted Ice Plant'



# *Echeveria*

- Rosette
- Leaf edges could be wavy or smooth
- Leaf color available: green, blue, lavender, shades of pink
- Some may tolerate 20 degrees F
- Partial shade in summer

Left: Nodulosa

Left Middle: 'Paul  
Bunyan'

Right Middle:  
'Topsy turvy'

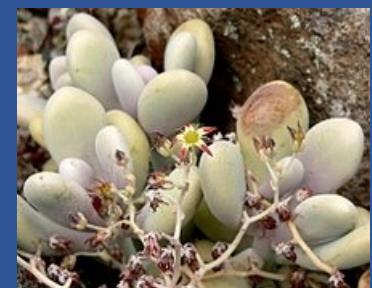
Right: 'Perle von  
Nurnberg'



# *Graptopetalum*

- Grows in a sunny location outside and inside, but partial shade is good
- Leaves may be a blue-gray or pinkish yellow in hot, dry conditions
- Leaves fall off easily
- Easy to propagate
- May tolerate freezing conditions but for Zone 7

Left and Middle:  
'Ghost Plant'  
Right: 'Lavender  
Petals'



# *Haworthia*

- Low light conditions indoors
- Filtered sunlight outdoors
- Does not tolerate freezing temperatures
- Stays small
- Some have narrow leaves and some have thicker leaves
- Some have white dots which make a pattern

Left: 'Lime green'  
Middle: 'Zebra'  
Right: 'Pearl'



# *Kalanchoe*

- Variety of leaf shapes—jagged, smooth, nubby
- Variety of leaf colors—green and glossy to shades of dark maroon
- Variety of leaf surface textures—hairy and smooth
- Does not tolerate freezing temperatures
- Tolerates more sun. Needs direct light indoors
- Certain varieties grow plantlets on leaf edge

Left: 'Panda'



Middle left: 'Paddle'



Middle right: 'Chocolate Soldier'



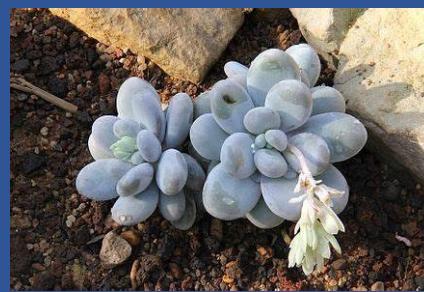
Right: 'Supermarket'



# *Pachyphytum*

- Thick leaves that are round
- Protect from freezing
- Tolerates more sun
- Stem elongates
- Grows in the spring and late fall

Left: 'Captain Jessop'  
Middle: 'Moonstones'  
Right: 'Little Jewel'



# *Sedum*

- Large group
- Bloom in summer and fall
- Variety of colors, shapes, and sizes
- Groundcover, low-growing or trailing growth habit
- Some sedums tolerate freezing temperatures and some do not
- Partial shade for some

Left: 'Dragon's Blood'  
Middle: 'Coppertone  
Stonecrop'  
Right: 'Lime Twister'



# *Sempervivum*

- Hens-and-Chicks or Houseleeks
- Hardy to zone 6
- Many species and thousands of cultivars
- Rosettes flower in summer and then die
- Leaves are thin, pointed at the tip, form a rosette
- Prefer cool, dry location and good drainage
- Partial shade

Left and Middle Left: 'Hens-and-Chicks'

Middle Right: 'Spider Web'  
Right: 'Houseleeks'



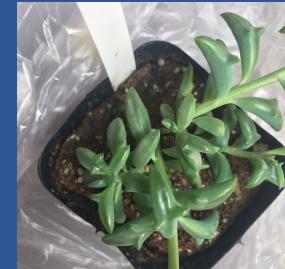
# *Senecio*

- Produce daisy-like flowers but cut off if desired
- Summer dormant and grows in winter
- Can suffer heat stress; does not tolerate freezing temperatures
- Prefers filtered sunlight and 50-80 degrees F for *Senecio rowleyanus* 'String of pearls'
- Some are small shrubs

Left: 'Fish hooks'



Middle left: 'String of dolphins'



Middle right: 'Trident Blue'

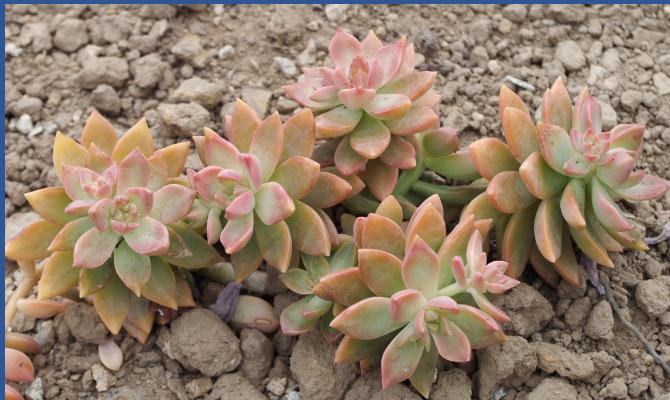


Right: 'String of pearls'



# *Graptosedum 'California Sunset'*

- Cross between *Graptopetalum paraguayense* and *Sedum adolphi*
- Needs sun for pinkish color
- Trailing habit



# Different Ways Succulents Are Used and Displayed

Kentucky Cooperative Extension



 Cooperative  
Extension Service

***It starts with us***

# Succulents as Center Pieces



# Succulents in Containers



Kentucky Cooperative Extension

 Cooperative  
Extension Service

***It starts with us***

# Succulents as Wall Hangings



Kentucky Cooperative Extension

 Cooperative  
Extension Service

***It starts with us***

# Succulents in Bouquets/Boutonnieres/Corsages



# So Much More!

## Enjoy Growing and Using Succulents!

Kentucky Cooperative Extension



***It starts with us***



In accordance with Federal law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, disability, and reprisal or retaliation for prior civil rights activity. (Not all prohibited bases apply to all programs.)

Program information may be made available in languages other than English. Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, and American Sign Language) should contact the responsible State or local agency that administers the program or USDA's TARGET Center at (202) 720-2600 (voice) or contact USDA through the Federal Relay Service at (800) 877-8339.

To file a program discrimination complaint, a complainant should complete a Form AD-3027, USDA Program Discrimination Complaint Form, which can be obtained online, at [www.usda.gov/sites/default/files/documents/usda-program-discrimination-complaint-form.pdf](http://www.usda.gov/sites/default/files/documents/usda-program-discrimination-complaint-form.pdf), from any USDA office, by calling (866) 632-9992, or by writing a letter addressed to USDA. The letter must contain the complainant's name, address, telephone number, and a written description of the alleged discriminatory action in sufficient detail to inform the Assistant Secretary for Civil Rights (ASCR) about the nature and date of an alleged civil rights violation. The completed AD-3027 form or letter must be submitted to USDA by:

**mail:**

U.S. Department of Agriculture  
Office of the Assistant Secretary for Civil Rights  
1400 Independence Avenue, SW  
Washington, D.C. 20250-9410; or

**fax:**

(833) 256-1665 or (202) 690-7442;

**email:**

[program.intake@usda.gov](mailto:program.intake@usda.gov).

This institution is an equal opportunity provider.

Conforme a la ley federal y las políticas y regulaciones de derechos civiles del Departamento de Agricultura de los Estados Unidos (USDA), esta institución tiene prohibido discriminar por motivos de raza, color, origen nacional, sexo, edad, discapacidad, venganza o represalia por actividades realizadas en el pasado relacionadas con los derechos civiles (no todos los principios de prohibición aplican a todos los programas).

La información del programa puede estar disponible en otros idiomas además del inglés. Las personas con discapacidades que requieren medios de comunicación alternativos para obtener información sobre el programa (por ejemplo, Braille, letra agrandada, grabación de audio y lenguaje de señas americano) deben comunicarse con la agencia estatal o local responsable que administra el programa o con el TARGET Center del USDA al (202) 720-2600 (voz y TTY) o comunicarse con el USDA a través del Servicio Federal de Transmisión de Información al (800) 877-8339.

Para presentar una queja por discriminación en el programa, el reclamante debe completar un formulario AD-3027, Formulario de queja por discriminación del programa del USDA, que se puede obtener en línea, en [www.usda.gov/sites/default/files/documents/usda-program-discrimination-complaint-form.pdf](http://www.usda.gov/sites/default/files/documents/usda-program-discrimination-complaint-form.pdf), en cualquier oficina del USDA, llamando al (866) 632-9992, o escribiendo una carta dirigida al USDA. La carta debe contener el nombre, la dirección y el número de teléfono del reclamante, y una descripción escrita de la supuesta acción discriminatoria con suficiente detalle para informar al Subsecretario de Derechos Civiles (ASCR, por sus siglas en inglés) sobre la naturaleza y la fecha de la presunta violación de los derechos civiles. La carta o el formulario AD-3027 completado debe enviarse al USDA por medio de:

**correo postal:**

U.S. Department of Agriculture  
Office of the Assistant Secretary for Civil Rights  
1400 Independence Avenue, SW  
Washington, D.C. 20250-9410; o'

**fax:**

(833) 256-1665 o' (202) 690-7442;

**correo electrónico:**

[program.intake@usda.gov](mailto:program.intake@usda.gov).

Esta institución ofrece igualdad de oportunidades.

***It starts with us***



Kentucky Cooperative Extension

# COOPERATIVE EXTENSION



*College of Agriculture,  
Food and Environment*

**Cooperative Extension Service**  
Agriculture and Natural Resources  
Family and Consumer Sciences  
4-H Youth Development  
Community and Economic Development



COLLEGE OF AGRICULTURE,  
COMMUNITIES, AND THE ENVIRONMENT  
COOPERATIVE EXTENSION PROGRAM

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.  
LEXINGTON, KY 40546



Disabilities  
accommodated  
with prior notification.