AMAZING AEONIUMS

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A Journey to Travel the Wide World of Aeoniums

- Why are they a separate genus?
- Where to did come from?
- How does their origin influence their lives today?
- What do we need to know to be successful in growing them in the DC area?

Why is the Aeonium Genus Different?

- Aeoniums are a member of the large
 Crassulaceae Family
- What distinguishes plants grouped together in this Family?
- What separates Aeoniums from the other members of the Family?

Family Crassulaceae: aka "Stonecrop"

- Large Family
 - 20 genera with 1300 species
 - Most are leaf succulents, some are stem succulents and a few are both
 - Widespread in temperate and tropical regions of the New and Old World
 - Grown indoors, in green houses, and outdoors, these succulents are valued for their decorative foliage

Stonecrop Family Members

- Adromischus
- Aeonium
- Cotyledon
- Crassula
- Dudleya
- Echeveria
- Graptopetalum
- Kalanchoe

- Pachyphytum
- Sedum
- Sempervivum
- Tacitus
- Tylecodon

Note: Greenovia is now considered an Aeonium

Why these Genera are grouped in the Stonecrop Family

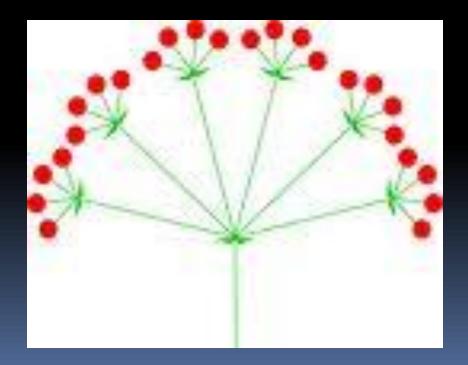
Answer: It is the "flower" and how it is constructed

Stonecrops have small bisexual flowers in large groups to make one blossom (inflorescence)

- In "Plant Speak" this type blossom is called an Umbel

Umbel?

- Sounds a lot like "Umbrella"
 - Even looks like one!



Why is the Aeonium Genus Different?

- Like other Family members, the Genus Aeonium is characterized by umbels
- But its individual flowers have a slight but significantly different arrangement
- Many Aeonium flowers are yellow as shown in the next slide

Examples of Aeonium Flowers





Aeoniums

- The name, "Aeonium," from ancient Greek "aionos" meaning Immortal
- Known in Europe since at least 1711
- Grown in gardens for hundreds of years
- Spread around the world by sailing ships which stopped for provisions in the Canary Islands
- Have attractive rosette shapes

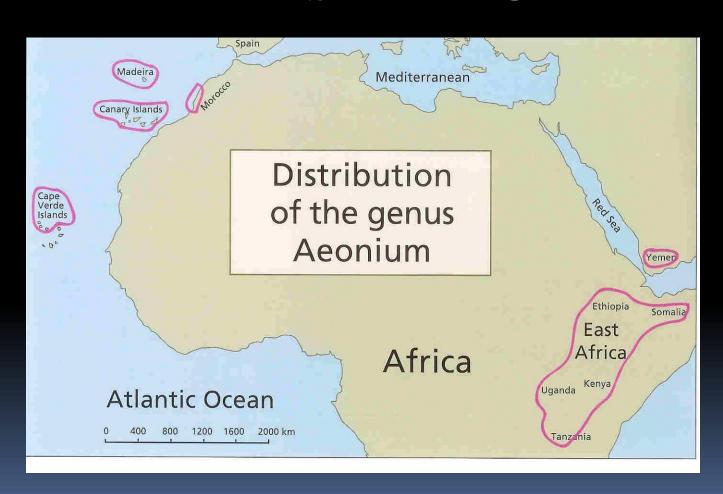
Aeonium vs. Sempervivum

- Aeoniums were originally lumped with
 Sempervivums but separated to its own genus in
 1836
 - Share same growth & floral characteristics
- Unlike Semps, Aeoniums are not winter hardy
- Like Semps, their flowers are monocarpic:
 - Plant blooms once then dies

Aeonium Diversity

- A small genus, Aeonium contains about 35 species
- Aeoniums show a remarkable variation in size, color, and form
 - Foliage color varies from yellow green to almost black purple
 - However, extensive hybridization has expanded their range considerably

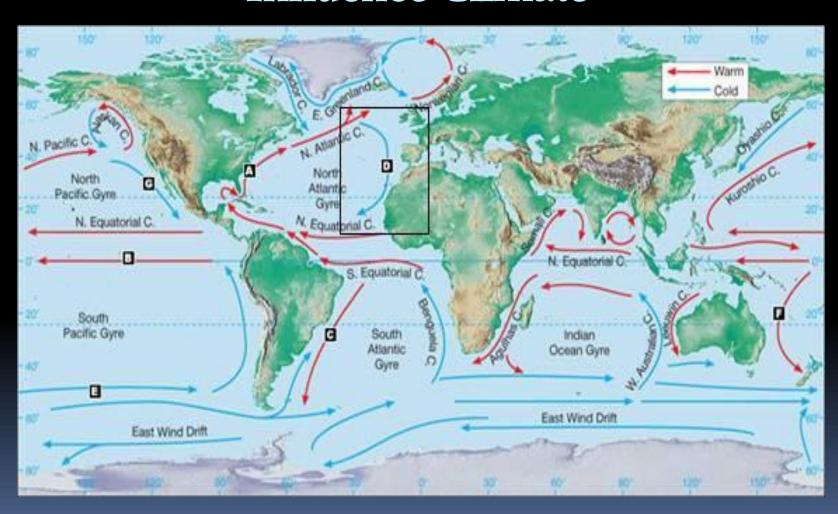
Aeoniums: Where the Species Originated



However, Almost All Came from the Northwestern Coast of Africa

- Majority came from the Canary Islands: 29
- Madiera: 2 species
- Morocco: 1 species
- Cape Verde: 1 species
- East Africa: 2 species

Ocean Currents: Influence Climate



Most Aeoniums Originated in the Canary Islands



Canary Islands "Pleasant Living"

- The south flowing Atlantic Ocean current through these islands is cold "Canary Current"
- Average summer temperature is 75 degrees F
- Average winter temperature is 64 degrees F
- Mediterranean Climate
- Major tourist attraction

Aeoniums in the Canary Islands

- The higher and more rugged the island, the more diverse the species
 - Due to a wider variety of habitats created
- The largest island Tenerife is the most rugged and has the most species: 13
- Of the two flatter islands, Fuerteventura, lacks any native species and Lanzarote has only two

Influence of Mediterranean Climate on Aeoniums

- Aeoniums expect cool damp winters and warmto-hot dry summers
- Gradually go into dormancy as warm weather approaches
 - From mid-summer to 1st cool rain, rosettes drop & close to protect growing tip
- Look best in Autumn after the first rain occurring since late Spring

"Naturalized" Aeoniums

- Aeoniums are not "home bodies" but like to travel
- Are able to "set down roots" in almost any location with a Mediterranean type climate, especially coastal areas of
 - New Zealand
 - Australia
 - California: even on Alcatraz Island (former prison)
 - Serving Life Sentences?

Growing Aeoniums in the Washington, DC area

- Our climate is definitely *not* Mediterranean, as we have *cold* wet winters and *hot wet* summers
- So what can we do to insure we grow healthy attractive Aeoniums?
- For starters, Aeoniums must be potted plants and not grown in the garden
 - Fortunately, many are suitable for pot culture
 - Do not use terra cotta pots

The Aeonium Way of Life

- Rudolf Schulz, author of "Aeonium in Habitat and Culture," observed on his visits to various countries that Aeoniums are flexible in their growing habits
 - Fortunately, it is the more attractive and commonly seen cultivars that are have the most flexibility
 - And has offered tips for growing Aeoniums in our area, i.e., Approach #1 and modified Approach #2

Approach #1 Summer & Winter Dormancies

- Keep dry & dormant in Winter
- Water in the Spring April & May
- Once the Summer heat hits, plants go dormant but can still take some water
 - Keep in a dry location after plants stop growing and losing leaves
- In September bring out and water through mid
 November before Winter dormancy
 - Be sure to bring them in ahead of cold temps.

Approach #2 Summer Dormancy only

- In summer keep Aeoniums in a dry location that receives morning and late afternoon sun but never allow the soil to go "bone dry"
- Start watering in late September and continue through mid June
- After bringing them indoors for the winter, place in a moderately bright location or place under artificial lights
 - Prevent from becoming 'etiolated' caused by too little bright light

Aeonium Species, Varieties, Cultivars, and Hybrids

For the Washington, D.C. Area

Review of Terms

- Cultivar: Derived from the words cultivated and variety, designates a variety found only in cultivation
 - Usually not in Latin
 - Often with single quotation marks
 - Sometimes designated as cv.
- Variety: Assigned to plants displaying marked differences occurring in nature
 - Sometimes designated as var.
- Variegate: Marked with patches or spots of different colors

Aeonium arboreum

• For the DC climate, Rudolf Schulz recommends Aeonium arboreum, its cultivars, and its hybrids

The next few slides will present some of various Aeonium arboreums

Aeonium arboreum –The Species



- aka Aeonium arboreum var.
 arboreum
- Endemic to most of the Canary Islands
- Very common Aeonium species
- Its varieties differ mainly on leaf coloration
- Its bright yellow inflorescences are pyramidal in shape

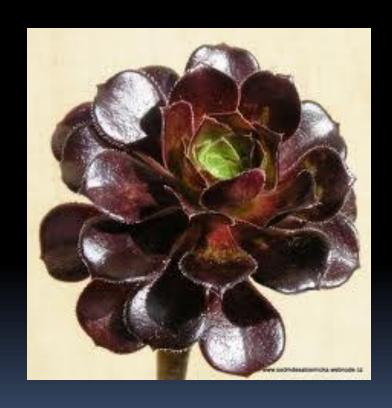
Aeonium arboreum var. holochrysum



- A variety of Aeonium aboreum, i.e., it occurs naturally
- Another widespread
 Aeonium species not
 only in the Canary

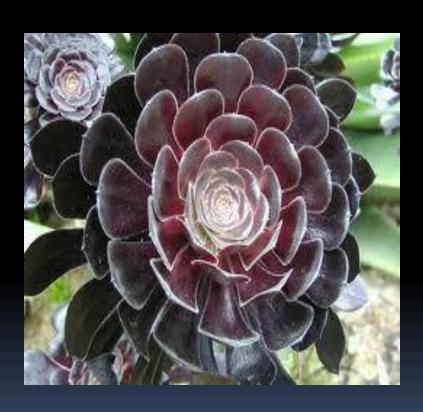
 Islands but worldwide
- Has a flat rosette

Colorful Cultivar A. arboreum 'Atropurpureum'





Another Colorful Cultivar A. arboreum 'Zwartkop'





Aeonium arboreum variegates





More Aeonium arboreum variegates





Example of an Aeonium Hybrid A. 'Blushing Beauty'

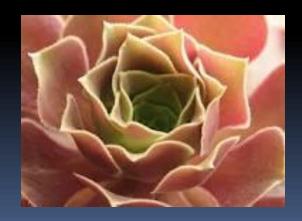
- See how appearances can be impacted by many factors such as
 - Season
 - Climate
 - Sunlight
 - Humidity
 - Soil Conditions
 - Growing Conditions
 - Age

A. 'Blushing Beauty' – Hybrid A. canariensis x arboreum

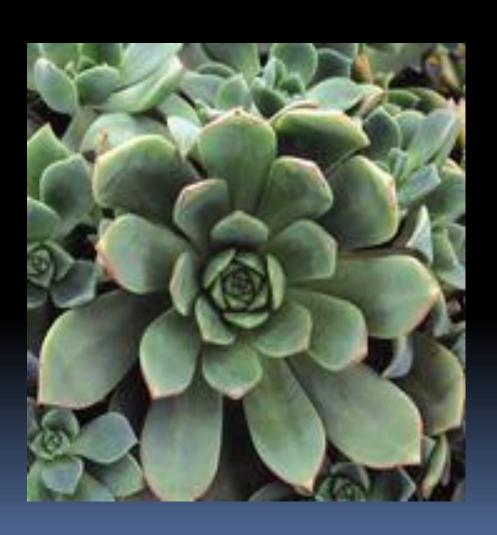








Another Aeonium Species for DC A. haworthii



- Widespread species
 found outside its habitat
- Almost a weed in some countries
- Has many attractive hybrids and variegates

Examples of A. haworthii variegates









More Aeoniums for DC

- Examples of Aeoniums that I grow or have attempted to grow
- This list is *not* complete
- Try some yourself

Aeonium tabuliforme



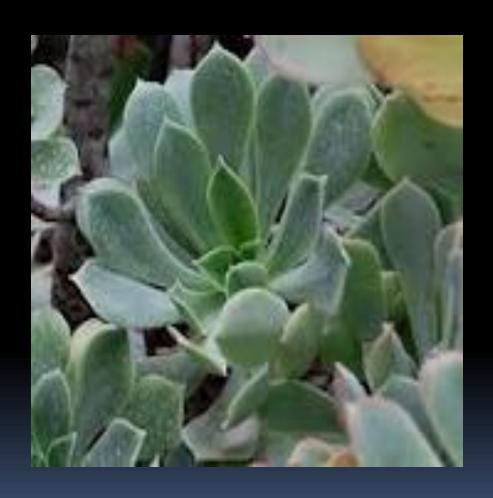
- Rosettes flat with many leaves
- Leaves have hairs on the edges
- Flowers are white
- Can be grown in a pot

Aeonium castello-paivae variegate

- Generally a clumping species
- Placing in shade increases the size of the rosette
- Easily propagated by stem cuttings
- Somewhat common



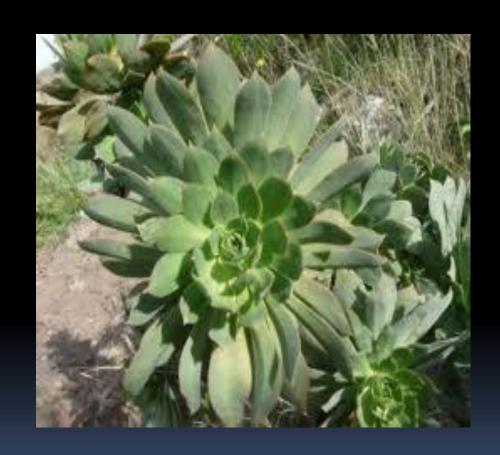
Aeonium lindeyi



- Common in many collections
- Can withstand hot summers
- But needs a wet autumn to spring period
- Makes a good potted plant

Aeonium percarneum

- Low branching shrub in native habitat
- Leaves have purplish color if grown in bright light
- Makes a good potted plant
- Easy to propagate



Aeonium 'Irish Bouquet'

- A cultivar found in the DC area
- Small thick leaves
- Worth trying
- Not in Schulz' book



Aeonium sedifolium



- Not easy to recognize as an Aeonium
- Suitable for indoor culture
- Can be grown in shade
- But needs sun to bring out full color
- Easy to propagate

Aeonium Species Not Recommended

- These species are especially dormant in the Summer: too easy to over water
- Rudolf Schulz has specifically mentioned A. smithii as a difficult species for our area

Not Recommended



A. smithii



A. aureum

Not Recommended







A. spathularum

Pest Problems

- Worst scourge for Aeoniums is mealybugs especially for potted ones
 - Often found near the center of rosettes where the most nutrients and thinnest skin are found
 - Root mealybugs are also a problem but to a lesser degree
- Other Pests which are minor include scale, spider mites, snails, slugs, deer, grasshoppers, etc.

Propagation

- Stem Cuttings
 - Take during the growth period (best in October), dry overnight, and place in fresh potting soil
 - Some Aeoniums root much more quickly than others, e.g., A. haworthii and A. arboreum and its hybrids
 - Can also try placing cutting directly in water like
 Geranium cuttings

Propagation cont.

- Leaf cuttings are less successful but the only way to propagate stemless rosettes such as A. tabuliforme
 - Skill is needed is using this technique
- Seeds will work for all species and is cheap but slow
- Terminal bud removal technique is used for producing variegated offsets

Conclusions

- Aeoniums are delightful succulents that have a variety of colors and shapes
- They are predisposed to a Mediterranean climate and are considered "winter growers"
- However, with the proper cultivation techniques we can enjoy them in our area
- They are worth the effort!

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