African Violets

Presented By Dennis Morgeson

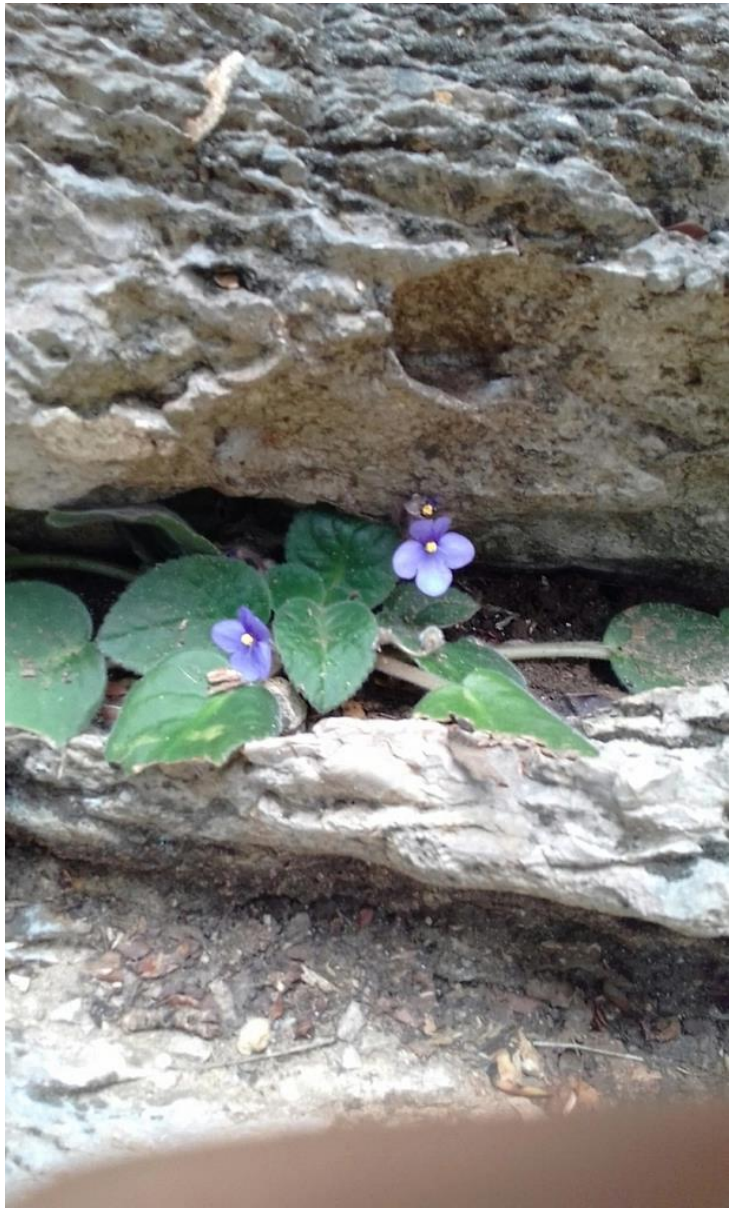
Agent For Horticulture

Washington County

University of Kentucky
College of Agriculture, Food and Environment
Cooperative Extension Service

Background

- **African Violet,** Actually unrelated to violets, but with petals shaped like those of violets and often violet in color. The genus (*Saintpaulia*) contains about 20 species of small, hairy, herbaceous perennials with clusters of leaves at the base. All are native to the mountains of Tanzania and Kenya.
- **Scientific classification:** African violets belong to the family Gesneriaceae.



Background

- In 1892 Baron Walter von Saint Paul-Illaire, German Governor of a province in what is now Tanzania collected samples of a new interesting plant….
- He sent them to his father Baron Ulrich von Saint Paul-Illaire who was a patron of a botanic garden in Hanover Germany. Baron gave them to Herman Wendland the botanic garden director who classified and named this new plant Saintpaulia after the father son founders.
- The first commercially produced plants where offered by Friedrich Benary in Erfurt Germany in 1893.
- To date there are 21 species, six variants, and two natural hybrids identified in the wild

Herrenhausen Gardens

African Violet

- Very popular indoor flowering plant
- Small stature plants fit nicely on windowsills, plants come in miniature (plants 6 inches or less in diameter) to large (over 16 inches in diameter)
- Flower colors include blue, purple, lavender, pink, red, and white as well as bicolors and multicolor
- Flower shapes also offer variations including single, star-shaped, doubles, semi double, fringed, and ruffled
- Leaves offer ruffles, scallops, quilted, and variegated
- For more information about the classes and cultivars visit the African Violet Society website at http://www.avsa.org/Home.html

Keys To Growing African Violets

- Light
- Temperature
- Humidity
- Soil
- Potting
- Water
- Fertilization
- Propagation

Light

- African violets need more light than most think, bright indirect light is best, a window facing north or east is best especially during the summer
- Avoid direct sun as it can burn the leaves
- Be sure to turn the plants occasionally as they will turn to the window
- How do you know if your plant is happy? Thin dark green leaves and long petioles (leaf stalk) indicates too little light. Too much light results in stunted plants with short petioles and small, crinkled, and leathery leaves
- If growing under artificial light aim for 600 foot candles

Temperature

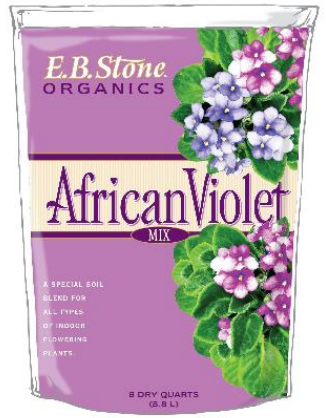
- The best growth occurs at 65-70 degrees F
- Night chilling if close to the window can occur especially if the window is drafty (remove violet from window at night or place a sheet of paper between violet and window)
- Chilled violets will turn dark and whither
- If temperatures are over 70 the light needs to be optimum as well as an increase in humidity
- Temperatures over 80 causes slow growth and reduced flowering

Humidity

- African violets come from high humidity regions and benefit from added humidity in homes
- Consider running a humidifier in winter
- Basement conditions are beneficial
- High humidity rooms such as kitchens and baths
- Other ways?

Soil

- Soils mixes need to remain loose and well drained
- High organic matter is needed and generally that means peat moss
- You can mix your own mix with a one to one mix of peat and perlite
- Unless you are growing on a commercial scale it is more practical to purchase a premixed specialized African violet mix. These generally have peat, perlite, vermiculite, and or calcined clay and have the already have the required pH 6.0-6.6



Use the Highest Quality African Violet Potting Soil

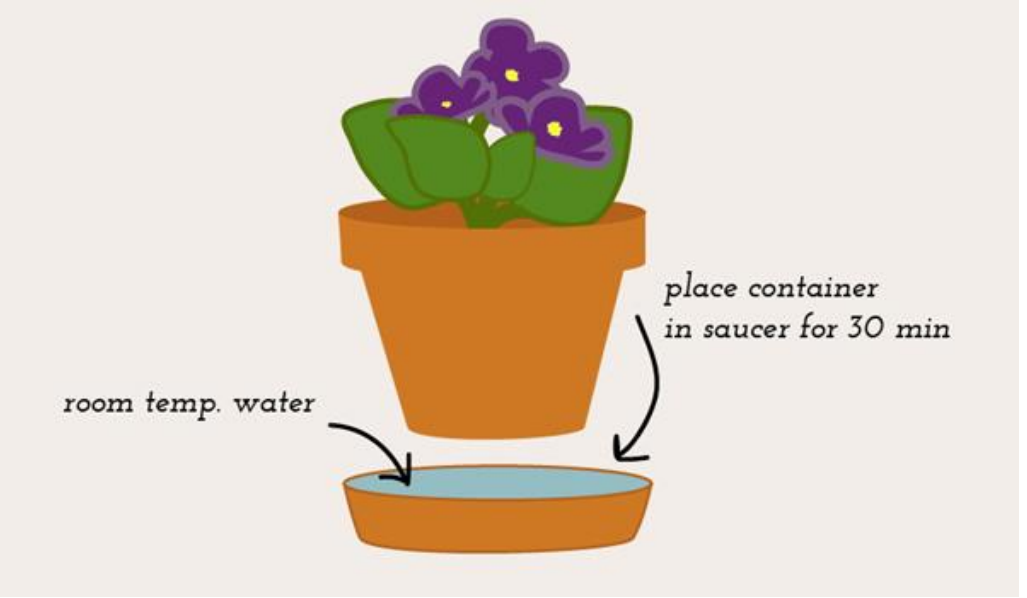
Potting

- Almost any container can be used for violets as long as it has drainage holes!
- Decorative pots with no drainage should only be used if sitting the plastic or clay pot with drainage holes inside of it
- When potting the soil mixture should be just moist not wet
- Fill pots to within ¼ inch of top of pot to aid in watering
- Hint: allow plant to wilt slightly before repotting to limit breakage

Watering

- There is no set rule on watering however amount and frequency will vary according to soil mix, size of plant and pot, drainage, and environmental conditions
- Avoid wetting leaves and the crown of the plant
- Allow water to come to room temperature before using
- Watering from the top is the easiest method however you can also water from the bottom and/or continuously.

If you are using a bottom watering method flush soil once per month to reduce salt buildup



Fertilization

- Over-fertilization is usually a bigger problem than under
- Generally you should allow the plant to determine fertilizer amounts, if growth and flowering slow and the plant looses its deep green color start a fertilizer program
- During winter fertilizing can be omitted unless grown under artificial light
- During Spring, Summer, and Fall any fertilizer labeled for flowering houseplants can be used….liquid, granular, etc.

Espoma African Violet Potting Mix & Schultz African Violet Fertilizer
Providing optimal soil conditions and necessary nutrients is a key practice. This will promote blooms and healthy foliage.

Propagation Leaf Cuttings

- Prepare Growing Medium-the goal is to have a light growing medium…you can use vermiculite and perlite or African violet soil. (soil may stay too wet)
- Fill a 2 inch pot for each cutting (yogurt cups work great).
- Wet the growing medium and allow to drain.

Propagation
Take Cuttings

- For best success, take your leaf stem (petiole) cutting from the third row of leaves from the center of the plant.
- Looking from above, you can see that the leaves grow in circles around the middle.
- The youngest leaves are small and often unsuitable for propagation.
- The oldest, outer leaves often have tough or woody stems that make it difficult to root.
- Choose your leaf stem cutting from the middle of the plant, ensuring that the stem is still tender and not tough.

Propagation
Take Cuttings

- You can root cuttings from leaves that have broken off the plant, if they are healthy, or twist them off at the base of the stem, if you can reach in there without damaging the rest of the plant.
- I like **to use a scalpel**, getting a nice, clean cut. The tool you see here is marketed as a quilting tool, used to remove tight stitches.
- Always clean the blade with rubbing alcohol between uses.

Propagation
Trim the Leaf Stem (petiole)

Place the leaf stem (petiole) cutting on a table with the fuzzy side facing up.
Cut the stem at approximately one-inch in length.
Next, make an angled cut down the stem, removing a wedge-shaped piece with the deepest cut at the base.
This is the section of the plant that will produce the new plantlets.

Propagation
Should you trim the leaf?

- Not necessary, however the leaf may grow plantlets a little fast if it is trimmed.

Propagation
Dib and plant.

- Using a dibber (or the end of a pencil), create a hole in the growing medium to accommodate the leaf stem. You want it on an angle so the cutting will sit at 45-degrees with the fuzzy side up.
- Insert the leaf stem cutting, ensuring that the bottom of the leaf is just above soil level.

Propagation
Cover to hold moisture.

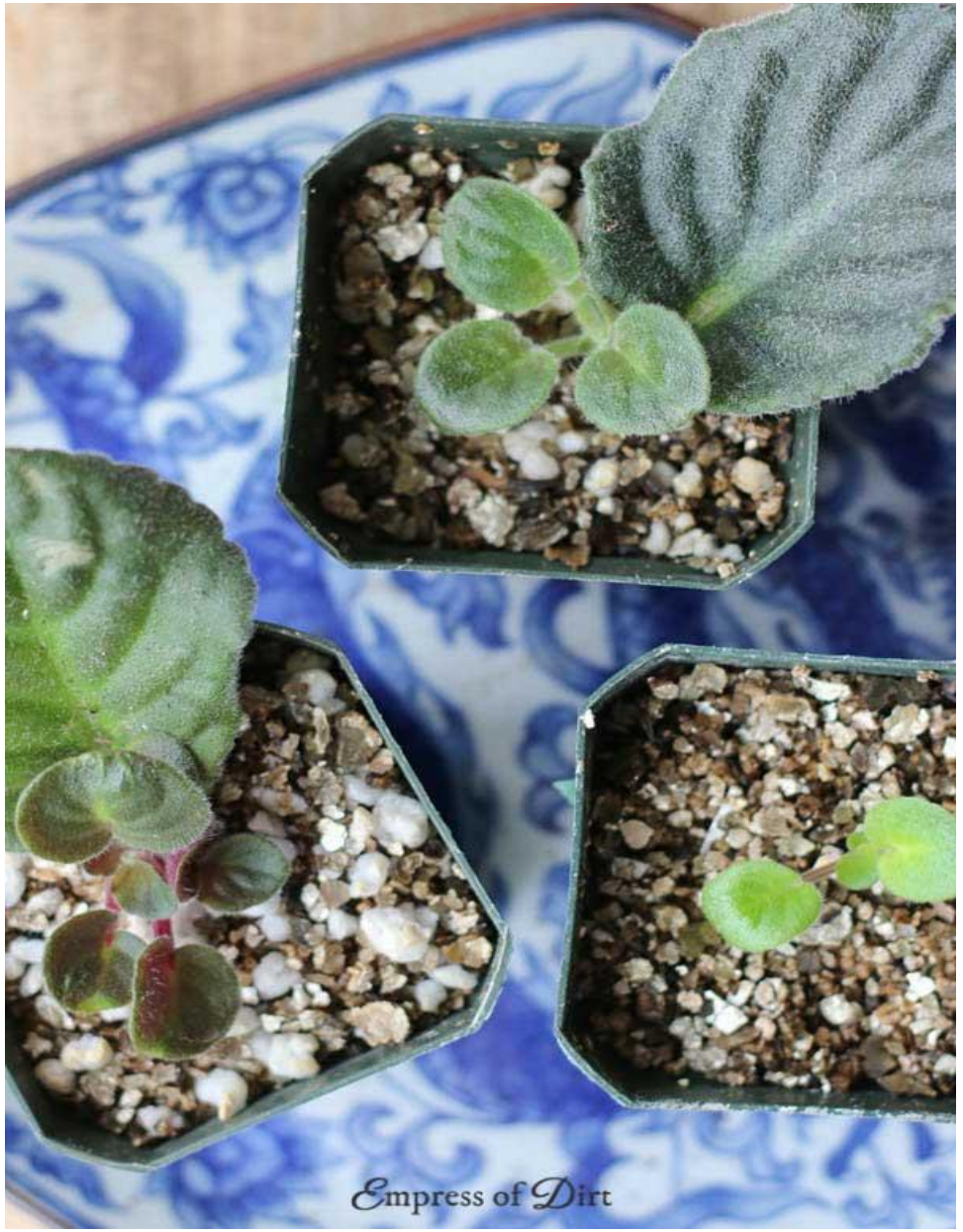
A clamshell creates a terrarium-like environment for the cuttings. You can also sit a plastic bag over top or simply ensure that your growing space has decent humidity.
Place under grow lights for 12 hours per day or provide gentle, east-facing natural light.
Maintain consistent conditions the best you can, avoiding any drastic temperature, light, or moisture changes.

Propagation
Keep moist.

How often you water the growing medium will depend entirely on the humidity levels and other growing conditions in your home. Water droplets should form on the inner side of the clamshell lid. If they are present, no watering is necessary.

Propagation
Watch for growth.

In 2-3 months, you should notice little green balls appearing at soil level. These will grow into new stems and leaves.
When there are at least four strong leaves, you can repot into **African violet growing mix** in a tiny pot (they do not like big pots), or you can wait it out if everything still looks strong and healthy.
Sometimes I have had the original cutting die off naturally during this time, other times it hangs in there.
Also, not every new stems may survive or you may need to reduce how many you keep to ensure that they each have adequate growing space.



Propagation By Blossom Stem

- Step 1. Remove open blooms from plant, leaving only peduncles. Grow your plant as you normally would, but remove open blooms from the blossom stem (peduncle), before it fades. Carefully cut beneath the bloom, but above the next pedicle (joint from which another bloom or bud appears).
- Doing this does two things. First, it keeps the stem fresh. If all blooms are allowed to open and are kept until spent, the blossom stem will no longer be fresh enough to successfully root later. Also, we intend to produce plants from this stem, not flowers, so we don't want to discourage blossom production at much as possible--we want the blossom stem, not the blooms!

Propagation By Blossom Stem

- Step 2. Remove buds and pedicels above leaflets. Each blossom stem will have a pair of "leaflets" that appear on either side of the stem, just below the lowest-most pedicels (at the lowest junction). It is at this point that the stem will eventually produce real leaves. Therefore, cut away all the growth just above this point.

Propagation By Blossom Stem

- Step 3. Cut blossom stem below leaflets. You will need a small portion of the blossom stem to root, so cut the stem about 1/4" below the leaflets.
- Step 4. The cut blossom stems ready to root.

- At right is the original blossom stem, just after having been removed from the plant, then shown with the cuts made in steps 2 and 3.

- At near left are a number of cut blossom stems ready for rooting. Each is about 1/4" long with one pair of leaflets.

Propagation By Blossom Stem

- Step 5. Rooting the blossom stems. Fill a small pot with a light, porous, rooting mix. This should contain well over 50 percent of vermiculite and/or perlite. Water the mix so that it is damp, but not soggy.

- Next, make a small "pilot" hole in the soil for each of the stems you will be rooting in the pot (shown at near right). This will make it easier to insert the stems without damaging them.

- Then insert each of the blossom stems into the holes (shown at far right). Insert them fully, so that the small "leaflets" are at soil level. Be sure the stems are firmly in the soil and aren't loose or easily dislodged. They will root better if this is so. If you are successful, the stem will root below soil level, and leaves (and a plantlet) will appear at soil level from the "leaflets".

Propagation By Blossom Stem

- Step 6. Wait for the plantlets to appear!

- At far left is the finished pot of rooted blossom stems. We'll usually put 6 to 8 stems into a 2 1/4" pot.

- At near left is the a pot of rooted blossom stems about 3 months later, beginning to produce small plantlets. In another couple of months, these will be large enough to root individually.

Propagation By Blossom Stem

- Step 7. Separate and pot the plantlets.

- At near right is a pot of fully sprouted plantlets ready to pot into individual pots. At this point you can pot these plantlets in the same way as you would if they had been produced from leaf cuttings.

Propagation By Water

Separating Plantlets

Most likely insect problems

- Mealy Bugs- Leaf and Soil Types love African violets- soil mealy bug control, drench soil with malathion or acephate, alternative is diatomaceous earth. For foliar mealybugs use same products as a foliar spray, alternative dip cotton swab drench with alcohol on individual bugs…also imidichloprid

Other insects could occur…..

- Mites
- Aphids
- Thrips
- Whiteflies
- Cabbage Looper

Fungal Problems-Crown Rot and Root Rot

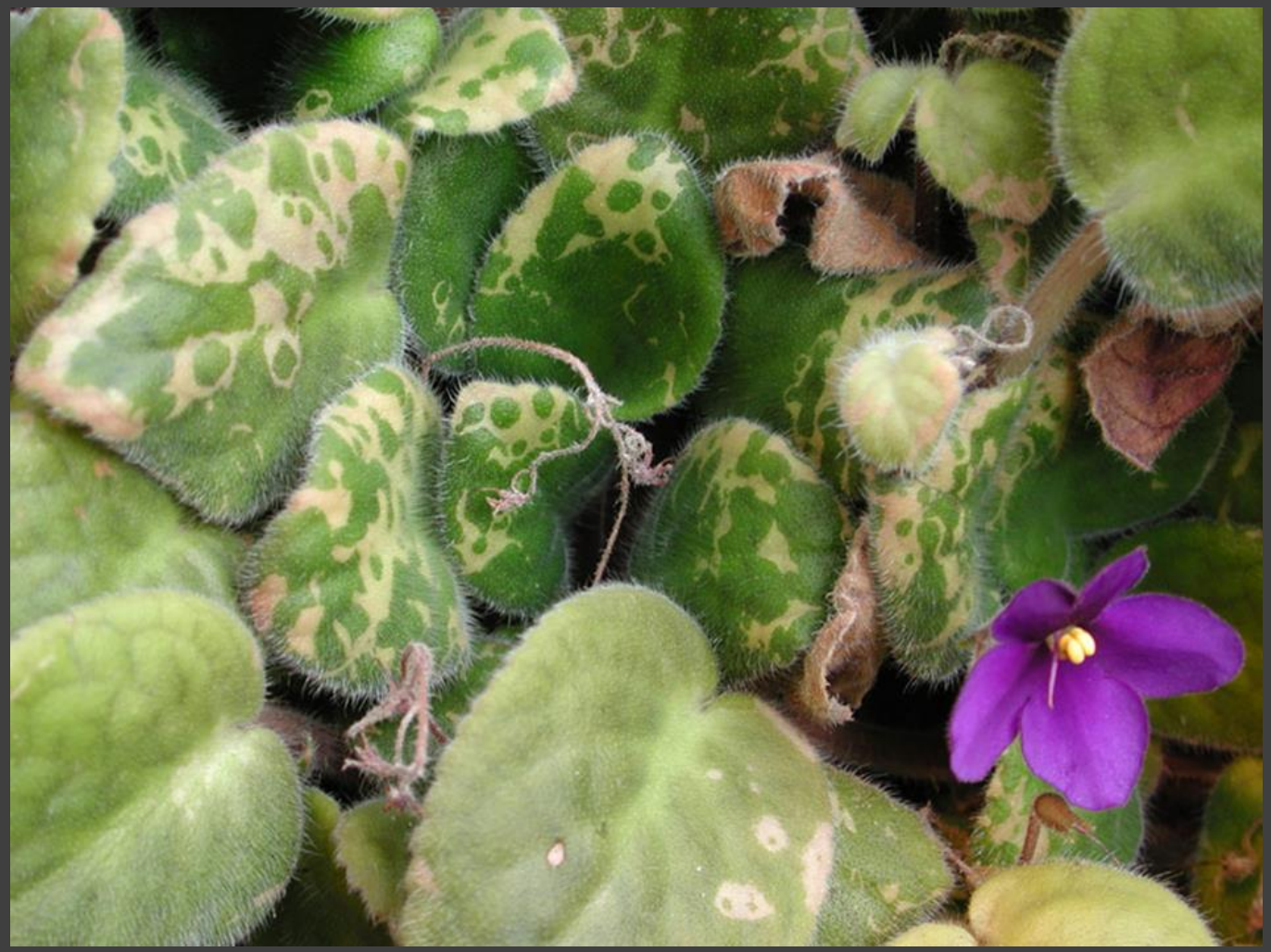
What if your violet develops a neck or multiple crown?



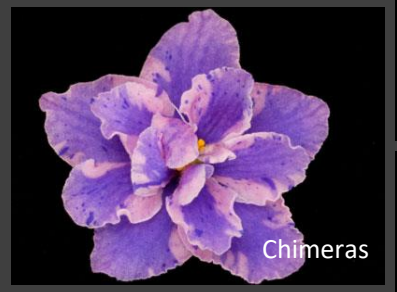





What is Wrong Here?




Standard


Chimeras


Thumbprint


Trailers


Ukrainian


Semi
Miniature


Miniature

Examples

Check Out What Is Out There

- http://www.myviolet.com/varieties
- https://www.violetbarn.com/shop/index.php?_a=category&cat_id=5
- http://lyndonlyon.com/store/index.php?main_page=index&cPath=1_5

Work Cited

- https://www.violetbarn.com/plant_care/lessons/restoringrestarting-african-violets/
- https://empressofdirt.net/grow-african-violets-leaf-cuttings/

Questions