



Department of Horticulture

Purdue University Cooperative Extension Service • West Lafayette, IN

African Violet Care

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The African violet, known botanically as *Saintpaulia*, is one of the most popular flowering houseplants. African violets are easy to grow for the beginning gardener, yet offer a wide range of cultivars to satisfy the serious grower. African violets adapt well to typical growing conditions found in the home. Because of their small stature, they also adapt well to limited space gardens such as those in apartments with just a few windowsills.

Many cultivars of African violets are available, ranging from miniatures (plants 6 inches or less in diameter) to large (over 16 inches in diameter). Flowers come in blue, purple, lavender, pink, red, and white as well as bi-colored and multi-colored forms. Flower shapes also vary from single, star-shaped blooms to double, semi-double, fringed, and ruffled. Even the leaves come in different types, including ruffled, scalloped, quilted, and variegated. For more information about the various classes and cultivars of African violets, contact the African Violet Society of America (<http://www.avsa.org/Home.html>).

Light

Proper light is a necessity for good bloom. African violets need more light than most growers think. Thin, dark green leaves and long petioles (leaf stems) indicate that the plant is getting too little light. Too much light results in stunted plants with short petioles and small, crinkled, and leathery leaves.

Avoid putting African violets in direct sunlight, which can yellow and burn the leaves. A window facing north or east is usually the best, especially during the summer. For more even growth, turn the plants occasionally so different sides face the light.

Most violet fanciers find plants grown under artificial light will flower more profusely. If fluorescent light is the total light source, the violet will require approximately 600 foot-candles of light for 15 hours per day. Two 40-watt fluorescent tubes suspended 12 to 15 inches above the plants will provide 600 foot-candles of light. For best results, use the wide spectrum fluorescent tubes. However, regular tubes plus one or two incandescent bulbs will suffice.

Whether you use artificial light or not, remember both the intensity and the length of light are important. The closer the plant is to a light source, the greater the intensity. Also, the longer the exposure period, the greater the total amount of light.

Temperature

African violets grow best at a 65° to 70°F night temperature, with a 10° to 15° increase during the day. To guard against night chilling, remove your violets from the window at night, or put paper between the plants and the window. Chilled violets turn dark within 24 hours, become water-soaked, then wither.

If the temperatures are higher than 70°F, light conditions should be near optimum, and a higher humidity is desirable. If temperatures exceed 80°F, growth and flowering will be slowed. Air-conditioned rooms are especially beneficial.

Humidity

High humidity is beneficial. Homes with humidifiers and basement growing areas are well suited for violet culture.

Individual potted plants can be placed on a metal or plastic container filled with gravel, perlite, or sand. A shallow layer of water for evaporation in the atmosphere can be maintained in the container bottom. However, do not set the bottom of the pot directly in the water.

Soil

Soils for growing African violets need to remain loose and well-drained for several years. Thus, most garden soils are unsatisfactory when used alone. High organic matter is recommended. Sphagnum peat moss is the best source of organic matter.

Excellent plants may be grown in a mixture of soil, sphagnum peat, and perlite (1 part each by volume). Totally artificial mixes such as sphagnum peat moss and either perlite, vermiculite, or calcined clay can also be used. The soil mixture should also be slightly acidic (pH 6.0 to 6.5).

Potting

African violets can be grown in nearly any container as long as it has drainage holes. For decorative effect, clay or plastic pots can be set inside decorative pots.

When potting, the soil moisture should be just moist enough to squeeze together slightly. Fill the pot, carefully centering the plant in the soil mixture. Firm the soil carefully, but allow at least 1/4 inch for top watering.

Position the plant crown slightly above the rim of the plant. Use foil or some tape along the rim of a clay pot to keep the leaf petioles from rotting.

Plants should be shifted to larger pots as they grow. Fewer leaves are broken if the plant is allowed to wilt slightly before repotting.

Watering

The amount of water and frequency of watering will vary according to the soil mixture used, size of the pot, drainage, and the environmental conditions under which the plants are grown. Both over-watering and under-watering can injure roots.

Watering methods for African violets are a source of controversy. Any method which maintains an adequately moist soil is satisfactory. Keep the crown dry, keep cold water off the leaves, and use room temperature water.

Watering from the top is the easiest way to give your plants the moisture they need. Apply water to the surface of the soil until it starts to drip out of the drainage hole at the bottom of the pot.

To water from the bottom, fill the saucer under the pot with water and let stand until the soil surface becomes moist, then drain off any excess water. Whether watering from the top or bottom, wait until the top inch of soil feels dry to the touch before watering again.

Or, water continuously by slipping one end of a fiberglass wick through the hole in the pot, fraying it so it spreads over the bottom of the pot. Pot your plant over the frayed end, and water for the first time from the top until the wick drips. After that, put the wick in a water reservoir under the pot so watering is continuous (Figure 1).



Figure 1. Wick method of watering.

However, when plants are continuously watered from the bottom, salts tend to collect on the top of the soil. The concentration of salts may become high enough to injure the plants. Flush with water from the top about once a month to prevent salt accumulation.

Fertilization

Over-fertilization is usually a bigger problem than under-fertilization. The plant itself will determine the degree of fertilization necessary. If the growth rate decreases and the leaves gradually become lighter green, fertilizer may be needed. During the winter months, fertilization can be omitted, unless the plants are grown under artificial light. During the active growing season (spring, summer, and fall), any complete, water soluble fertilizer, applied as directed on the label, can be used; one formulated for blooming houseplants is preferred.

Propagation

The easiest and best way to make new plants is by rooting leaves. Break mature but not old leaves flush with the stem of the parent plant. Leave 1 to 1 1/2 inches of the leaf petiole attached to the leaf blade. Place the petiole (stalk) into a rooting media of coarse sand, vermiculite, or half vermiculite and half sand. Firm gently and water thoroughly. Cuttings root best at 65° to 75°F with a high relative humidity.

Roots usually appear within 4 to 6 weeks, and leaves 4 to 8 weeks later. Petioles inserted too deeply will require a longer time to root.

Usually several plants are formed around each petiole base. If you want multiple-crown plants, plant the entire group. For single-crown plants, carefully separate each plant by gently pulling apart. Each new plant with its root system should be potted in a 2 or 2-1/2 inch pot.

Divide old plants with multiple crowns by carefully cutting the crowns with a sharp razor blade so that each has a portion of the original root system. Enclose the plant in a ventilated plastic bag to maintain high humidity and prevent wilting until the new root system develops.

It is critical that all tools and working surfaces are clean during propagation of plants. A solution of 5% chlorine bleach (1 part chlorine bleach:5 parts water) will insure a clean propagation area.

For more information on the subject discussed in this publication, consult your local office of the Purdue University Cooperative Extension Service.