



## African Violet Care

African violets are one of the most popular houseplants in cultivation. There are more than 6000 different varieties in the world. They are popular because they are so easy to care for and yet they can provide enough of a challenge for a gardener to become hooked. The African violet actually originated in Africa. It was identified in 1892 by Baron Walter von Saint Paul, the German governor of a northeastern province in Tanganyika (now Tanzania). It was first horticulturally grown in Germany by von Saint Paul's father and didn't make it to North America until 1926. There are only 20 wild species of African violet, but hybridization has created thousands more. They have become one of the most popular houseplants because they grow well indoors, in most average home environments.



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.



The flowers on African Violets may be single, semi-double or double, fringed, or ruffled on the edges. They can have two shades of the same color, or two or more different colors on the same flower. There are even star-shaped flowers for those who prefer the more exotic types. Although many people believe the African Violet is a species of the violet family, they are not. They do not even grow like the English or Russian violets

### Light Intensity

For best growth and flowering, African violets require bright light. 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. You can also put them within 3 feet of a southeast or west facing window. For more even growth, turn the plants a quarter or half turn occasionally, so different sides of the plant face the light.



Lower light levels, for longer periods of time, are also adequate. The appearance of a plant will indicate whether light levels are too high, too low, or just right. If light is too low, leaves are usually thin, deep green, and appear to reach up for light. The plants may grow, but they will flower poorly, or not at all. In such instances, supplemental artificial light will help promote flowering.

Excessive light causes leaves to be pale or greenish-yellow. Some leaves may show dark green areas where they have been shaded by upper leaves. Growth slows when light is too high and plants become very compact. Flowering will also begin to decrease.



### Light Duration

Growth and flowering of African violets is also affected by the duration of exposure to light and darkness. To bloom, they need 8 to 12 hours (up to 16 hours) of light and at least 8 hours of darkness per night. A plant that gets the right level of light, but for too short a period of time, will grow poorly, compared to a plant given weak light for a long period.



### Artificial Light

Where natural light is unavailable or reduced, African violets can be grown under artificial light. Incandescent light may be used, but fluorescent lamps give better results, are less expensive to operate, and produce less heat. Plants grown entirely under fluorescent light should receive light for about 16 hours per day. This light can be provided by suspending two 40-watt fluorescent tubes 12 to 15 inches above plants.



### Temperature and Humidity

African violets prefer a night temperature of 65-70°F, but will grow satisfactorily at 60 to 80°F. Under prolonged high temperatures, growth and flowering is reduced. During hot weather, place plants in the coolest place in the home or in an air-conditioned room.



African violets grow best in high humidity. 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 and Pots

African violets like to be pot-bound. The less you have to replant them, the happier they are. However, in container gardening, nutrients are depleted quickly and need to be replenished either by repotting with fresh,



nutrient rich potting mixture or by adding fertilizer regularly.

Drainage is one of the most important considerations in choosing, or preparing a soil mixture, for African violets. Excellent plants can be grown in mixtures consisting of equal parts of peat moss, vermiculite and perlite. Pre-packaged African violet soil mixes are also available. Soil mixtures should have a pH of about 6.0 to 6.5 (slightly acid) for best results. Pots must have drainage holes. Old clay or plastic pots can be reused if you wash them thoroughly with soap and water or a dilute bleach solution.



## Watering

**Don't use soft water.** Tepid tap water or bottled water works fine. If you use tap water, let it sit overnight so that it's at room temperature at watering time. In addition, letting tap water sit helps to evaporate fluoride and chlorine, two harmful chemicals your African violet doesn't need.

Water that is satisfactory for human consumption can be used on African violets. They should not just be watered routinely, because their water needs vary with soil mixture, drainage, light, temperature and humidity. Plants in clay pots require more frequent watering than those in plastic pots, since evaporation is greater. In general, water African violets whenever the soil surface feels dry to the touch, but before it becomes hard or the plant starts to wilt.

African violets may be watered from either the top or the bottom. When watering from the top, apply enough water to thoroughly saturate the soil. Discard any excess water that drains through the bottom of the pot. Make sure the temperature of the water is the same, or slightly warmer, than that of the room. If cold water touches relatively warm leaves, it will cause yellowish spots or streaks on the upper leaf surfaces.

Watering from the bottom may be done by placing the pot in a container with about one inch of water. When the soil surface becomes moist, remove the pot, allow it to drain, and pour out the excess water. Self-watering pots can be purchased, or you can easily construct one. Create a "water wick" from a braided nylon stocking, or any other acrylic, nylon or synthetic material. Pre-soak the wick in water to saturate it and insert it into one of the drainage holes of a pot. Make a water reservoir from a lidded plastic container. Cut two holes in the lid; one for the wick and the other for adding water. Set the pot on the lid and feed the wick through one of the holes. Make sure it is long enough to reach the bottom. Plants should occasionally be watered from the top to flush accumulated fertilizer salts from the soil.

## Fertilizer

Over fertilization is usually a greater problem than under fertilization. Don't fertilize during the winter, unless the plants are grown under artificial light. During the active growing season apply an African violet food every four to six weeks.

Water-soluble fertilizers such as 10-10-10, or 15-30-15,

are commonly used on African violets. Mix the fertilizer in water at one-fourth the recommended rate and apply it each time you water. Do not ever fertilize a dry African Violet. If the soil is dry, water it and wait 24 hours before fertilizing the plant.

A gradual loss in leaf color, combined with reduced growth and flowering, usually indicates that the plant needs fertilizer. Over-fertilizing your African violet can result in as much harm as over-watering your plant. Over-fertilizing can cause leaves to become brittle and crack; it may also produce lesions on leaves and stems. It can curtail plant's ability to absorb beneficial elements, which results in wilting, leaf tip burning, and a decrease in blooming.



## Propagation

African violets are propagated easily by leaf cuttings. Select a healthy and firm leaf from the middle of the plant and snap or cut it off at the stem, leaving the petiole (leaf stem) intact. Trim the petiole to about 1 to 1 ½ inches in length. A combination of half vermiculite/half potting soil makes an ideal propagation medium. Insert the petiole into the mix by pushing it into a hole made with a pencil. Roots normally form at the petiole base in three to four weeks, and leaves of new plants appear three to four weeks after roots form. Plants will begin flowering six to nine months later.



Plants with multiple crowns can be propagated by division. Carefully divide the crowns so that each portion has some roots. Then pot each division separately.



Old plants often develop a stem that gives them a "leggy" appearance. These can be successfully re-rooted by cutting the plant off at the soil level and inserting it into a suitable potting mixture. Leggy plants can also be repotted; plant them so that the leafless stem is below the soil line, where it can grow new roots.

## Pest Management

Most insects and mites can be managed with insecticidal soap. Mealy bugs may be controlled by mixing alcohol with an equal amount of water, and touching each insect with a cotton swab dipped in the solution. Cottony egg masses should also be removed in this way. Cyclamen mites cause severe stunting of plants and are very difficult to control. Unfortunately, the best management strategy for this pest is to discard affected plants.

Root diseases are usually caused by over-watering. The first sign of this problem is usually a limp, unhealthy plant. In most cases, this plant should be discarded.

Petiole rot occurs when petioles touch the edge of the pot and develop brown, sunken areas at points of contact. This injury is caused by fertilizer salts that accumulate on the rims of pots. Petiole rot can be avoided by waxing the pot rim or covering it with aluminum foil.

Various diseases can affect African violets, but adequate spacing, use of sterilized soil, and prompt removal of faded flowers and leaves will help prevent many disease problems.

