Back To The Basics

Mrs. Charles S. Hawley

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In the beginning it is just one violet; then two or three purchased compulsively in a super market or garden center. A broken leaf is placed in water and eventually sprouts tiny little plants. Then for some unknown reason disaster strikes; a plant will become limp, the leaves become smaller with longer petioles and there is no bloom. Outer leaves will begin to die and when removed, a long stem (neck) develops with a few sparse leaves at the end resembling an ostrich more than an African violet. Then comes the inevitable comment, "I just do not have a green thumb!"

At this point encouragement is needed and the place to begin is to dispel that age-old myth about some people having a green thumb and others do not. The green thumb comes from a combination of enjoyment with plants and acquiring knowledge on how to care for them.

Because African violets are so adaptable to every kind of environment it is no mystery as to why it has become the most popular house plant to grow; but, a certain amount of rudimental knowledge is necessary if success is to be achieved. There are ten factors that unite to produce a beautiful African violet. They are: Proper Soil, Water and watering methods, Fertilizer, Light, Temperature, Air circulation and spacing, Humidity, Potting and Spraying. Now let us examine them one at a time.

Soil

We begin with soil which is of the greatest importance. It not only supports the plant but supplies it with the necessary moisture and nutrients. If plants are not grown in the right soil the other factors are of little use. For proper growth and development solid should have physical properties that enable free root development together with passages for air and water. It should be slightly acid (6.4-6.9 pH) and contain all proper nutrients. In order to insure it against disease organisms and soil insects all soil mixes must be sterilized and stored in clean airtight containers so there is no danger of re-contamination. There are special violet solids that are commercially prepared and these are usually already sterilized. Some hobbyists prefer to mix their own; one of the more popular type of mixes is the "Soil less Mix". The following formula is an example:

(Unit of Measure – One Pound Coffee Can)
3 parts Canadian Sphagnum Peat
2 parts Vermiculite
1 part Perlite
¼ part Ground Charcoal
2 Tablespoons Dolomite Lime
1 Tablespoon Bonemeal
1 Tablespoon Superphosphate

This formula should be used with a constant feed program using a weak solution of an African violet soluble fertilizer at each watering (1/4 recommended strength).

Water and Watering Methods

Any good drinking water should be suitable for watering African violets; water softeners added to this water source would be damaging, however. The preferred method of watering is to thoroughly water over the top of the soil. The water should be permitted to run through the pot and drain off. Violets should NEVER set in this water residue; it contains toxic salts harmful to the roots. Violets will not thrive in wet, saturated soil and they should be watered only when the top of the soil feels dry to the touch. Although violets do best when watered in this manner, the wick or mat method of absorbing the moisture from the bottom can be successfully used. However, the soil should be flushed thoroughly with clear water every month or six weeks; this reduces the possibility of any harmful salts build-up in the soil. Tepid water should always be used and if it is accidentally dropped onto the leaves it should be immediately absorbed into a soft paper towel. Sunshine or intense light shining on the leaves where drops of water are standing will leave unsightly rings.

Fertilizer

A good well balanced fertilizer should always be used. It should contain nitrogen, phosphorous and potassium which are the three necessary elements. Nitrogen, promotes growth; phosphorous is necessary for root development and bloom; potassium is the catalyst that regulates the whole process.

There are many fertilizer formulas on the market and each label will show them. (formula examples: 12 - 36-14 or 15-16-17). These numbers represent the proportion of nitrogen, phosphorous and potassium in each formula. It is wise to select fertilize rs that also list the trace elements. For plants to grow normally all these ingredients should be in good balance. Fertilizers should be used as they are recommended on the label. The only exception is when a "constant feed" program is being considered. Then the amount is reduced to ¼ the recommended strength and the plants are watered with this solution at every watering. A plant that has been permitted, for some reason, to become dry and wilted should never be fertilized. It must first be watered wi th clear water at intervals with small applications until it has become completely turgid once again. Then the fertilizer may be applied.

Light

Without good light African violets will not bloom. When leaves are small and the petioles elongated it is a good indication that the plant is not getting enough light. Adequate light will be usually available in the East or South windows. But shade trees, porch roofs or a heavy roof overhang will cut down the light source. The further a plant is placed away fro m the window the less light is available to it. Hot noon day sunlight in the summer is detrimental because of the heat that is generated through the window; it will burn the leaves. During these hours sheer curtains should be drawn across the window for protection. Plants that are window grown should be rotated one fourth turn every day to prevent crooked stems. If a violet receives the correct amount of light, evenly supplied, it will grow into a lovely symmetrical rosette. If tiny little plants or si de shoots appear along the stem or at the axil of the leaf they should be removed before they become too large. This will help to maintain this symmetry.

Violets can be grown with great success anywhere in the house with the use of artificial lighting. T he most popular type is a 48 " fluorescent light fixture that contains two tubes. A combination of one cool white and one warm white fluorescent bulb has proven to be the most efficient and most effective by hobbyists over the years. As a general rule pla nts are placed so that the crown is about 12 inches below the light. The photoperiod is about 14 hours per day. Distance from the light and the length of time the planst are exposed to it varies under some conditions. This is a place where experiment ma y be necessary. When experimenting with any idea one should try it on a few plants at a time; never expose an entire violet collection to a new idea.

Temperature

The ideal temperature for African violets is from 65 °F to 75 °F. They will not grow to their potential in temperatures below 60 degrees but they will survive. A temperature below 50 degrees is fatal. But, because of their adaptability they will do well in temperatures that range from 75 to 90 degrees if adequate water, fertilizer and air circulation is provided.

Air Circulation and Spacing

In addition to fertilizer, violets also require, in abundance, the elements Carbon, Hydrogen and Oxygen. These are found in water and also in the air. Good air circulation is therefore very important. Stale stagnant air will cause mildew to form on the leaves and blossoms of the plant. Plants also receive some air through the roots; this is one reason why they will not survive in a heavy soil that is water saturated. Strong cold drafts must be avoided, however.

Allowing adequate space between violets on a bench or table permits good air circulation around them. It also has another purpose; when violets are crowded together there will be a decrease in light penetration and plants will grow unshapely, and the re is more chance of a transfer of diseases or insects from one plant to another if these undesirables are present.

Humidity

Ideal humidity is from 40 to 50 percent, both for violets and humans. This is difficult to maintain, at times. One can increase t he humidity by elevating the plants above pebbles which are constantly kept moist. Care should be taken to never let the water level around these pebbles reach the bottoms of the pots. Placing the plants on a grill or wire which covers saucers or trays w ill also increase the humidity; these containers should always be kept filled with water. Plants that are placed in this manner will also permit the excess water to drain into the receptacles when they are watered. This, in turn, increases the humidity. Misting with a fine spray is helpful and will raise the humidity but it should always be done with warm water and never in bright sunlight.

Potting

One important rule to remember when potting African violets is that they grow and bloom better in small pots. Small plantlets taken from rooted cuttings should be planted into 2" pots. They should remain in this pot until blooms begin to appear; this is an indication that good roots have been established. At this time they should be repotted into 3" pots. They should be left in this size pot until the plant measures at least

nine inches in diameter. Then it can be transplanted into a 4" pot. Pots can be either plastic or clay. Plastic pots permit a longer time between watering and so your plants will require less attention. Clay pots provide more aeration and there is less danger of over-watering.

To start new plants, remove a fresh leaf from any plant where it will not destroy the symmetry; cut the petiole off with a sharp knife about one inch from the leaf. This cutting may be placed in a small container of vermiculite and perlite (2-1 proportion) and placed near the light. This must be kept moist at all times. When the cutting becomes rooted, watering with a weak fertilizer solution will promote faster development of new plantlets.

Spraying

Much controversy surrounds this aspect of violet growing, especially for the home hobbyist. There are some disease organisms and insects that will attack African violets; the best method for dealing with them is prevention. Where good sanitation practices are observed where violets are grown there will be little necessity for a spray program.

Pests and diseases can be brought into the home on hands and clothing from the garden, from cut flowers or from newly purchased plants. Although the area surrounding violets need not be hospital sterile, their method of clean hands, clean clothes and clean utensils is a good pattern to follow. New plants, even if they are gifts from friends, should be isolated from other violets for at least two months. They should be watched for problems and treated if something occurs. Old blossoms and leaves must be removed at once. Sometimes if a certain plant begins to look strange it would be better to destroy it. This will help to prevent a disease or insect from spreading to an entire collection. In the long run it is cheaper.

There are many chemical sprays on the market today but most of them are not available to the home hobbyist. But if a spray program is indicated then only those chemicals recommended for use on African violets should be considered and all information and precautions printed on the package should be followed to the letter. This information is there for the protection of the plants and the user. Spraying should never be done in areas where one sleeps or eats. The room must be well ventilated during the spraying process and immediately following it. It is preferable to do it out of doors. NEVER remain in the area after the spraying is completed; leave it at once! Rubber globes should be worn as well as protective clothing and a mask. Hands and all exposed skin should be washed with soap and water immediately following the use of pesticides. In storing these chemicals be sure they are out of the reach of children and that they are marked "POISON". Do not leave any spray solution in the sprayer; empty it at once and rinse it well before storing it away.

All of this information is just the beginning. The real enjoyment in this hobby is the studying, the learning and the experimenting. \The African Violet Magazine is the best source for new knowledge but the Handbook for Judges and Exhibitors which is available at the AVSA Office is another helpful source of information.

Nothing in this life remains constant and without change; there is always the new, the fresh and improved to ponder on. So it is with violets and all good violet hobbyists must stand as vanguards of progress.

AVSA
2375 North Street
Beaumont TX 77702
to subscribe to the African Violet Magazine
http://www.avsa.org
Tel: 409-839-4725
email: avsa@earthlink.net