

BASIC AFRICAN VIOLET MIX FOR USE IN FLORIDA



Because of the relatively humidity in Florida, most serious African Violet growers use a basic 1-1-1 mix, consisting of one part peat moss, one part coarse Vermiculite and one part coarse Perlite. Many growers create their own mixes by adding other ingredients. The pre-mixed soil that our club members have found the most effective (and which we sell during our Easter show) is the following recipe:

Soiless Mix for African Violets in Florida

- 8 Qts. Canadian Sphagnum Peat Moss
- 8 Qts. Coarse Vermiculite
- 8 Qts. Coarse Perlite
- 1 cup Horticultural charcoal (powder)
- 2 Tbsp. Dolomite Lime

This formula should be used with a constant feed program using ¼ tsp. African Violet fertilizer per gallon of water at each watering.

This is called “soiless” because the ingredients are inorganic. It is critical for the soil to have excellent porosity so the roots of the African violet can thrive. The ideal porosity is about 33% air, which means that the components must be slightly chunky so that the air spaces are not compressed. The looser and more aerated the soil, the healthier the roots will be.

MAIN COMPONENTS:

1. Sphagnum peat moss used in potting soil is the top-most layer of decomposed plant life that has been dried and milled. It is naturally sterile and has the ability to suppress fungal diseases. The best sphagnum peat moss is from the Canadian peat bogs, is slightly brown in color and turns very dark (almost black) when wet.

Stay away from sphagnum peat moss that tends to be black (in the package) and smeary when rubbed between the fingers. These are from sedge peat bogs. It compacts very tightly and retains too much water. Stay away from peat moss that includes “black” in its description.

2. Vermiculite is a sterile, lightweight, brownish soft mica ore, expanded to many times its original size through intense heat. It has excellent water absorption capabilities especially the coarse variety. It increases the porosity of the soil.
3. Perlite is the third basic component. It also increases the porosity of the soil, especially the coarse variety. It is a lightweight, porous material manufactured from crushed lava rock and expanded to many times its original size through heat. It has a neutral pH. Since

coarse perlite is difficult to find, the club has found that a great substitute is Styrofoam bbs. It has all of the benefits of perlite and does not disintegrate. It maintains the porosity of the soil.

ADDITIVES:

1. Horticultural charcoal is an organic material used for drainage and to keep the soil and water fresh. The charcoal acts as a filter to remove chemicals that might be toxic to the plants. Charcoal absorbs the toxins and holds them.
2. Dolomite lime is composed of magnesium carbonate and calcium carbonate. It is an acid neutralizer. Added to a peat base soil, it will bring the pH to neutral or alkaline depending on how much is added. Soil that is too acid or alkaline will “lock up” the nutrients and starve a plant even though the nutrients are present. Maintaining the pH (6.5-7 is ideal) is very important since the decomposition of the peat causes the soil to turn acidic.
3. Diatomaceous Earth is a fully inert, non-volatile substance recommended as an alternative to traditional chemical treatments for controlling insects and pests including soil mealy bugs. Diatomaceous Earth (DE) is made from the skeletal remains of diatoms, a microscopic form of algae. When processed into DE, these skeletal remains form razor-sharp particles which cut into the soft bodies of small insects. While controlling insects, DE does not harm African Violets.

Some growers do not use DE because it might be an inhalation hazard (even though it is described as inert, and non-volatile).

4. Some growers like to add fungicides or insecticides to the soil mix. I used to add a little bit of CYGON to my soil. This sometimes resulted in some deformed leaves in the initial growth, but later leaves tended to be very healthy. I stopped doing this when I read that these chemicals can be readily absorbed through the skin.
5. Some growers add bone meal, blood meal, fish meal, kelp meal, alfalfa meal, ground eggshells, superphosphate, dehydrated cow manure, etc. If you wish to experiment do so with SOME of your violets, and NOT all of them.

SUBSTITUTIONS:

Some growers substitute pre-mixed African Violet soil for the sphagnum peat moss part of the mix. This has worked for me, but remember to do the following:

1. Remove all the large pieces of bark and twigs.
2. Miracle Gro African Violet soil has fertilizer pellets mixed with it. DO NOT fertilize your plants for four weeks after you repot. When repotting babies, do not plant them too deep into the soil. You might notice some fertilizer burn (orange marks on the leaves), but succeeding leaves will not have this.