❀❀ SOIL MIXTURES FOR AFRICAN VIOLETS ❀❀

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Everyone has their favorite recipe for growing African violets. Although additives can vary, the most important constituents in a good mixture are sphagnum peat moss, vermiculite and perlite. No true garden soil should be used for violets, as this soil contains a lot of clay and heavier constituents that are difficult for violet roots to penetrate. Wild African violets grow in a forest humus made from decaying plant matter, producing a light, airy, well-drained medium. Therefore, these conditions need to be mimicked for the hobby grower. Several commercial soilless mixes are available for African violets, but these mixes often contain soil and are too heavy for violets. Some commercial mixes can be adulterated with additions of vermiculite and perlite to lighten the mix and make it appropriate for growing violets. Some of these commercial mixes include Pro-Mix, Fafard, Sunshine, Premier, and Metro. Of course, many commercial violet nurseries offer pre-blended mixes that are usually a safe bet without any additional work!

Because of asbestos contamination, horticultural vermiculite is slowly disappearing from the commercial market. Several adequate substitutes are becoming available, including a red lava rock that has produced some positive results.

Following is a recipe for a good, well-fortified soilless potting mixture for African violets developed by Cornell University.

CORNELL MODIFIED PEAT LITE MIX

A one-pound coffee can is used as a measure. Most ingredients can be purchased in a good garden center.

4 ½ cans shredded sphagnum peat moss
2 ½ cans vermiculite or appropriate substitute
2 ½ cans perlite
2 ½ tablespoons dolomite limestone
1 ¼ teaspoons 20% powdered superphosphate
3 ¾ teaspoons granulated water-soluble fertilizer (Peter's or Miracle-Gro are fine)
¼ teaspoon Peter's soluble trace elements

Because perlite can contain traces of fluorine, which is harmful to plants, rinse perlite with warm water and allow to drain. Poking holes through the bag facilitates this procedure.

Peat moss should be sterilized before use. Dampen peat moss and place in a warm oven (200°) until a thermometer placed in the soil reads 180°, then cooking the soil for an additional 30 minutes. A damp soil mix can also be put in the microwave on high for several minutes (depending on your microwave) to sterilize soil. As peat moss is commonly the source for most insect pests and diseases, this is an important step! Even if using a commercial mix, it should still be sterilized just to be safe!

Place all ingredients in a large plastic garbage bag, seal, and roll bag on floor to blend ingredients. Store soil in an uncovered or loosely covered contained, as an airtight container may promote mold and other diseases.

As sphagnum breaks down, it becomes acidic. Dolomite limestone acts as a buffer to prevent high acidity, it also supplies magnesium, an essential nutrient and component of chlorophyll.

Superphosphate, fertilizer, and trace elements are added to supply essential nutrients for plant health, growth, and flower production.

Other additives can be useful, depending on your preference and needs. Some suggestions include:

- Bonemeal (One tablespoon, supplies nutrients)
- Bloodmeal (One tablespoon, supplies nutrients)
- Sterilized play sand (8 tablespoons, enhances soil structure and improves drainage)
- Horticultural charcoal (½ can, absorbs soil toxins and conditions soil)
- Diatoms (Several tablespoons, pest preventative)
- Powdered fungicide (One teaspoon, prevents fungal diseases such as crown rot)
- Polymer crystals (New product on the market, several tablespoons added to the soil mix is helpful for those who forget to water their plants!)

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