

20 or 27? Physan or Phyton? It's so confusing!

by Joyce Stork

When two fungicides begin with the letters PHY and end with numbers, it is no wonder that we sometimes get confused about which is which and how to use them. Physan 20 and Phyton 27 are both good products, but they are used for different but similar purposes. If you aren't sure what the difference is, read on.

DoDe Whittaker wrote an excellent article for the African Violet Magazine in June of 1983 explaining how to use Physan 20. There she explained what a safe product this was for controlling the growth of algae in water reservoirs and for cleaning pots, tools, and growing areas. Here are some of the high points of her article:

Physan 20 is a biodegradable product with no odor and one which really goes into mixture easily. It does not leave a residue or marking on the plant foliage. This product is a wonderful overall sterilizing agent.

The following are some of the many ways in which Physan 20 can help you:

Spray workbenches and working surfaces before, during and after planting with 1 tablespoon of Physan 20 per gallon water.

Wash pots and flats, then soak them in solution of 1 tablespoon Physan 20 per gallon water for 10 minutes. Do not rinse.

Soak cutting edges of tools in 1 teaspoon Physan 20 per gallon water before use.

Keep hands and tools damp with Physan 20 solution when working with plants so not to spread disease. Use 1- teaspoons Physan 20 per gallon of water.

Soak small plantlets for 1 minute in solution of 1- teaspoon Physan 20 per gallon of warm water to help eliminate dampoff. Spray with this mixture once a week to prevent dampoff while the plantlets are becoming established.

Spray or immerse plant and pot in solution of one tablespoon Physan 20 to four gallons of water to ward off and control fungal problems.

Adding one teaspoon of Physan 20 to each gallon of water used in floral arrangements will extend the flower life and control odor.

Physan 20 is helpful in preventing algae on capillary matting when used at the rate of 1 tablespoon per gallon of water and placed in the reservoir and/or on the matting with each watering. Three fourths of a teaspoon of Physan 20 may be added to each gallon of water used in individual reservoirs. This also acts as a fungicide.

While **Physan 20** is effective for sanitizing surfaces and can prevent algae and disease, it is not effective against pathogens that have invaded the plant tissue. **Phyton 27** is the product that works better once a specific disease has become established. They are not interchangeable.

The Phyton Corporation lists their Phyton 27 as being effective in fighting Powdery Mildew as well as controlling Botrytis (including Botrytis Blossom Blight). With either disease the recommended dosage is 1.3-1.5 fluid ounces per 10 gallons of water (approximately 3/4-1 teaspoon Phyton 27 per gallon of water). Similarly, the same dosage may be used as a drench to treat Phytophthora, which is one of the more common diseases causing root rot in African violets. The company strongly recommends that the lowest dose be used, since it is often just as effective as the higher dose. The company warns that the low dose may not be effective against persistent established Powdery Mildew. It may be applied as often as every 3-5 days when specific disease is well established.

One of the best benefits of Phyton 27 is the fact that it has systemic properties, helping plants to resist Botrytis, Powdery Mildew and Phytophthora. The manufacturer claims it will not spot flowers except for gloxinia. Phyton 27 will, however, cause any plant tissue that is diseased to become desiccated. For example, a leaf with covered with Powdery Mildew will develop brown patches on the leaf where the mildew had invaded the tissue. Compared to other products, it is relatively inexpensive and useful on many other

plants including orchids and garden plants. Using any chemical is hazardous and the Phyton 27 label recommends protective clothing including chemical-resistant gloves when handling their product. For more information see the company's website www.phyton27.com.

Do your best to keep the two products straight! Many growers with collections of 50 plants or more consider Physan 20 to be an important part of their cultural practices. It is a fine product for prevention. On the other hand, if you are having persistent problems with Powdery Mildew, Botrytis, or Phytophthora (root rot), you might want to consider using Phyton 27. It is a fine product for treating disease. Both are good chemicals, but they are not to be confused! Happy Growing!