## Powdery Mildew...What's A Girl To Do? By Jennie Lawrence, Laramie, Wyoming

Those who know me well know my love of African Violets, *Saintpaulia ionantha*. I am somewhat of a violet snob. I do have four "grocery store" or NoID (No identification) violets in my collection; all but one are the sad reminders of various people's deaths. The other grocery store violet, has pure white blossoms. I ran across it while on a trip to Nebraska recently to view the Sandhill Cranes (*Antigone canadensis*) annual migration. It stayed in the motel room for the duration of the trip and was carefully covered in the car to keep it warm during the journey back to the high country of Wyoming.



The Nebraska white African violet. Photo by the author.

What is a violet snob? We like our violets that have known lineage. The violet's name, description, hybridizer, and more are a matter of record With the African Violet Society of America (AVSA). These also come with some fancy names. For example, I have one named *Cajun's Delicate Touch*. My violet claim to fame is that this particular plant in my collection was named African Violet of the Day by the AVSA.



Cajun's Delicate Touch. Photo by the author, background, and script added by the African Violet Society of America.

This particular violet and two more in my collection were hybridized by a grower in Lousiana, U.S.A. Cajun violets are well known throughout the world of violet collectors, hybridizers, and serious hobbyists. In my experience, they are pretty hardy and bloom well. That is a must to earn a place in my collection.

The African violet genus *Saintpaulia* consists of six species in the family Gesneriaceae. They are native to tropical eastern Africa. They have become very common houseplants. Many bloom throughout the year. There are hundreds of different varieties, with three sizes of plants – minature, semi-miniature, and standard.

While many African violets are pretty hardy, all are prone to various problems periodically. These can range from serious insect invasions that all but wipe out a collection to more mundane issues like overcrowding, overwatering, root rot, and more.

One of the problems that affect most collectors at one time or another is an *Oidium* fungus, commonly called powdery mildew. This "fuzz" grows superficially on the plant's surface. It can be brought on by hot days that alternate with cold nights, overcrowding, poor air circulation, and

low light. The photo below shows powdery mildew growing on the posterior surface of a NoID blossom.



Powdery mildew on an African violet blossom. 3x magnification. Photo by the author.

I suspect the current outbreak in my collection was brought on by two factors: poor air circulation and temperature fluctuations. I grow my plants in south-facing windows. During the day, it can get quite warm in the sunroom. I have to block the direct light with white tea towels hanging from my grow shelves, so the violets do not sunburn. The tea towels impede airflow around the plants. We also heat primarily with a wood stove. That means it can get at low as 55 degrees F at night. These two factors create perfect conditions for the fungus to grow and spread.



Powdery mildew hyphae. 20x magnification. Photo by the author.

While powdery mildew can be an annoyance and, left untreated, can kill a plant, it is relatively easy to clear up. Treatment consists of increasing the airflow around the plants, spreading the plants out, and removing all blossoms from the plant and heavily infected leaves. I then use a cotton swab dipped in a 91% isopropyl alcohol solution that has been diluted by 50% with tap water to wipe down any other leaves that may have the fungus growing. Milk, diluted 1:10, is also a practical, common cure for small growers. There are also various chemical controls available, too.

Other species of fungus cause powdery mildew on melons, lilacs, and many other species of plants. Ongoing research involves finding more effective means of control, particularly in crops. Meanwhile, I will continue to address this minor annoyance in my little collection. In imitation of the Queen in Lewis Carroll's *Alice In Wonderland*, it is time to say, "Off with their little flower heads!"

Comments to the author Jennie Lawrence welcomed, email - misssjennae AT yahoo DOT com. Published in the April 2022 edition of *Micscape* magazine.

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