SOIL PROBLEMS/MY PLANTS ARE FREAKING ME OUT!
By Kathy Bell

Since a lot of us are having problems with our violets I asked the commercial growers and Dr. Jeff Smith from Indian University who works with AVSA for some help. Of the commercials only Joyce Stork has responded.

My question to Dr. Smith: “we are having problems with our plants and I think it is the soil since the companies are adding fertilizer.” I described the problems we were having with our plants and he agreed it is the added fertilizer.

His response: You might try going to a totally soil-less mixture. The trouble with using anybody’s soil mix is that you never really know exactly what they have in it. The soils may already have had some fertilizer content before they added any fertilizer. The percentages they report on the bags are likely what they added in, not what is actually in the soil. If the soil contained some fertilizer already, the actual amounts are likely higher. Sometimes you don’t really want to know where a company got its base for mixing up a soil product. What you might try is to mix up a couple of different soil mixes and try rooting leaves in them. Whatever works well for the leaves will likely work well for your plants in general. This might give you a faster response time in your experiment and a smaller investment of plant material than repotting up a bunch of plants into a new mix. Another possibility is to pot up new babies into different soil mixes and see how they thrive.

My question to the Commercial growers: “Some of us are changing to sphagnum peat moss, perlite, vermiculite and charcoal mix. Some of the members don't want to use the peat so we are trying some different soils too. Earthgro soil has no fertilizer in it and uses Hypnum peat which is from stems and leaves from various Hypnum moss species. Sphagnum peat moss is decomposed sphagnum moss. Do you know if the different type of peat will make a difference in the plants?”

Joyce’s response: Hypnum peat is generally considered to be inferior. Greenhouses usually don't want it so it is marketed primarily as a bagged potting mix for landscapers and unsophisticated growers. It tends to be finer and it decomposes more rapidly causing it to pack down around the roots. It's also black and smeary when rubbed between the fingers. It has a higher pH and could affect your growing depending on the pH of your water. I would use it very cautiously on just a few plants at first. Because of your lower humidity, it is possible that it would work better for you than it would in other areas of the country. Volkmann Bros has a mix that lots of growers like that uses the sphagnum peat and has no fertilizer charge. I might suggest that you try it if you decide the Hypnum peat isn't for you.

“Another problem we are having is vermiculite is very fine now is that a problem?”

Joyce’s response: Fine vermiculite is not as good as coarse, but it is very difficult to find the good stuff. Vermiculite not only provides chunkiness, but it also absorbs water. This allows the soil to stay moist without being saturated. Peat moss does the same thing but the moist peat fibers are able to compact, which is why we need to add the chunky materials to get more porosity.
I also asked Joyce about using Pumice it would take the place of perlite and vermiculite. What is in the nurseries is too large. I may have a local source for some that is smaller. I will keep you posted after I try it.

**Joyce’s response:** A very few commercial AV mixes use pumice so there is little evidence one way or the other. Pumice is much heavier and is more commonly used in cactus and bonsai gardens where stability is an issue. I'm not sure how that weight would affect delicate violet roots. If you have local sources, it might be worth a try... again, do it cautiously with just a few plants.

**My challenge to all members:** I know some members are using Black Gold soil and it is a little pricey so we all need to experiment on a few plants and see if we can come up with an inexpensive soil mix. I am using Hattie’s mix and it has only been a month or so and so far so good and we all saw Hattie’s plants so I think it will work out just fine. It does cost a little more than what I was paying for the Supersoil, but still reasonable.

If you are using the club soil mix you will probably be okay if you don’t put fertilizer in your water for three months. If you repot all your plants at the same time you shouldn’t have any problems keeping track of who will get plain water or fertilized water and when.

We will figure it out so keep growing and don’t give up.