

July 2014

The African Violet Way

An E-Newsletter by Ruth Coulson

A free download from www.africanvioletsforeveryone.net

Here at last is the new issue of “The African Violet Way”. There was no issue in May as I was overseas. I am glad to be able to give a brief report on the AVSC Convention, but unfortunately the rest of my trip didn’t go according to plan and thus there are no photos of African violets in any other part of the world as I wasn’t able to see any!

Now that I am home again, I am turning my thoughts towards the problem of potting mix. If you mix your own potting mix you might like to look at my article about my experiences with the different possible substitutes for sphagnum peat moss—a diminishing resource.

In April I was invited to be a speaker at the African Violet Society of Canada Convention. There is also a brief report on that event.

Note that a couple of the photographs this issue are of poor quality—that is because they were taken a very long time ago, but do illustrate a point.

Ruth

On the Fringe—A Favourite

“Single white pansy/thin green edge. Medium green scalloped (leaves)” It was hybridised by Margaret Taylor.

I am constantly surprised by how long the flowers last. It was well into flower when I arrived home from overseas ten weeks ago, and I only needed to remove six flowers before taking the photo. Great for a white flower!



Potting Mix – what to use instead of Peat Moss?

For a lot of African violet growers high quality sphagnum moss has long been the material of choice as a basis of their potting mix. It is gathered from peat bogs around the world: places like Ireland, Germany, Canada, Russia and the Netherlands. There has been a wide discussion for some years now about just how long it will continue to be available.

Peat bogs are wildlife habitats and purify and store water as well as together forming the world's largest carbon "sink". The destruction of peat bogs is likely contributing to climate change. Not only is supply becoming a problem in many places, but there is a definite movement to conserve what peat bogs exist. Regeneration of already mined peat bogs is very slow.

Quality sphagnum peat moss is becoming difficult to access already so some growers are phasing out its use. The problem is to find the best substitute. Peat moss has been used in potting mixes because of its ability to hold a lot of moisture making it available to roots over a long period. It also decays very slowly. Any substitute has to have at least these two advantages.

If you make up your own potting mix you might have already decided on an alternative.

I first became interested in looking for a peat substitute about twenty years ago. I acquired several different materials by gift and purchase. They included: coir, bark fines, rice hulls, garden compost, 50/50 perlite and vermiculite and a commercial mix.

The experimenting I did twenty years ago was inconclusive, partly because it is difficult to work with a large enough sample in limited accommodation. For what it is worth here are my conclusions.

Coir – Now used in many commercial mixes and by quite a few hobby growers, this is the ground fibre from coconut husks. It did very badly my experiment. The plants suffered a lot of salt encrustation early on and even when they outgrew that they never thrived, remaining smaller than others, with pale leaves and no flowers. Where I used half coir and half garden compost to substitute for peat moss the results were much better.

Some years later I purchased a different brand of coir and tried that with good results. I was most successful when I substituted just half the peat moss for the coir. I used this mix for a couple of years, but when that

brand became unavailable and I had a bad experience with another one I just never went back to coir. I do know of at least one grower who uses coir as a full substitute for peat moss with spectacular results. I think I may give it another try sometime.

Bark fines – Sold to me by an orchid nurseryman who found it a satisfactory substitute for peat moss in his nursery. The size of the granules was 3-4mm. At first I thought this couldn't possibly work as it looked more like something you would use for aeration rather than water holding, but I mixed it up as a complete substitute for peat moss. It was initially difficult to wet but eventually plants grew on quite well, although never growing as large and lush as some other mixes. The mix did appear to hold sufficient moisture, but the roots only grew over part of the mix in the pots, although they appeared healthy enough. I decided this was not a product for me to use for growing African violets although it may be good for outdoor plants.

Rice hulls – I was given a bale of these to try as a peat moss alternative, although once again I was inclined to think they looked more likely to lighten the mix rather than improve its water holding capacity. I tried it as a full substitute for peat moss. The plants suffered a lot of salt encrustation early and just got worse over time. After four months they were just starting to grow but were discarded at that point. The roots were weak and only through part of the pots. At that stage they were discarded. I later used the rice hulls to help the clay soil in my garden.

Garden compost is, I believe a viable option. Early in my growing career I could not justify the expense of peat moss so I used the composted leaves from my oak trees instead. As the years went on I added lawn clippings and other garden waste to the compost. I found a very satisfactory compromise was to use only half the amount of peat moss normally used and half of garden compost. The plants did grow very well. In fact, if I had somewhere to create the compost I would use it still.

In this trial I used the compost in various ways. As mentioned above I substituted the peat moss with half coir and half compost. This produced reasonable plants with some buds appearing in 3-4 months.

I made a mix of just compost and perlite with a little charcoal. The result of this was good, the plants having large strong rich green leaves, even symmetrical growth and buds also appearing in 3-4 months.

I even made a mix of 4 parts of compost and 3 parts of fine aquarium gravel. This produced good plants with rich green leaves and strong roots. Once again buds appeared in around 3-4 months.

The result of using garden compost:

This is an old photograph—taken in 1986. It does illustrate that the plants I was growing then—using large quantities of garden compost in the mix did grow quite well.

I was usually pleased with the results and would willingly go back to this sort of mix.



When I completely substituted compost for peat moss I also had good results, the plants having strong flexible leaves, even growth pattern and healthy roots.

Note: In making potting mix for African violets I cooked the compost in the oven for an hour in an effort to eradicate damaging organisms and eradicate any weed seeds.

Commercial mix – I tried a well-known and widely available mix. I will not name the manufacturer as I don't believe this is the composition of their current product. It was sold labelled "African Violet Mix". I understand the components were: crushed pine bark (55%), hardwood sawdust (20%), river gravel (15%) and brown coal (10%).

This mix wasn't as bad as I expected. The plants didn't grow as large as I believed they should and the outside leaves were a little pale. The other leaves were of a healthy colour but much smaller than expected. A few tiny buds appeared after 4 months.

I also tried using the commercial mix as a substitute for peat, adding perlite and vermiculite to it. The result of that was no better than using the commercial mix straight, and in fact actually a bit worse.

I therefore decided commercial mixes were not for me. Perhaps if no other mix was available I would use such a mix again.

More recently I have become aware of a material called **diatomite**. This and similar products (think cat litter), have been used by some growers.

It clearly holds a lot of moisture but as I haven't trialled this myself I cannot judge. I also know of at least one African violet grower who used **vermicompost** (the compost generated from a worm farm) as a basis for potting mix. In the case of the vermicompost I was told that it is very high in nutrients and can cause burn to the roots and the centre leaves of an African violet. One would therefore use it in only a small proportion in the potting mix. I have seen 10% to 20% recommended. It may be more useful as a fertiliser additive than a substitute for peat moss.

I have even read of using coffee grounds or tea leaves as the basis for a potting mix. I would never drink enough coffee or tea to have the requisite spent leaves and grounds to even think of making this experiment, so I have no way of knowing its value. I suspect it would be best used as an additive, rather than as the base material.

Another grower told me he believed it perfectly possible to grow quality violets using just **perlite and vermiculite** so I tried using that also. My results were inconclusive. The plants were good initially, but did not fully develop in the way I like. After four months they were smaller than expected, the outer leaves a little pale and roots that did not develop through the whole pot. Buds were being produced freely, though. I felt that I could use this to grow in if necessary.

My normal potting mix turned out to be what I really preferred, which, at that time had the following composition:

Compost – 7 parts, peat moss – 6 parts, perlite – 6 parts, vermiculite – 6 parts and charcoal 2 parts and I persisted with that until after moving house I had no more compost. These days I use a mix with just peat moss, perlite and vermiculite with a little charcoal.

What would I use, if I have to substitute something else for the peat moss in my mix? On previous experience I would definitely choose garden compost. Failing that coir would be my choice. I haven't heard terribly good reports of diatomite for growing African violets but perhaps that should be my next trial. Whichever way I choose, I do know that eventually I am unlikely to be using sphagnum peat moss.

If you are interested in the problems caused by using peat moss, you might like to read the following article:

Linda Chalker-Scott, Ph.D., Extension Urban Horticulturist and Associate Professor, Puyallup Research and Extension Center, Washington State University - "*The Myth of Permanent Peatlands*": http://puyallup.wsu.edu/~linda%20chalker-scott/Horticultural%20Myths_files/Myths/Horticultural%20%20peat.pdf

African Violet Society of Canada Convention 2014

At the end of April I was able to attend the African Violet Society of Canada Convention in Toronto. It was a most enjoyable occasion. If you ever have the opportunity to attend conventions and shows, you must do so. You will never go anywhere that the people you meet are more friendly.

I was told that for a lot of the growers the winter was severely cold and was even then still hanging on. All the same there were many, many plants on the show benches. If there is one (very tiny!) criticism it would be that the standard African violets were a little smaller than normal, but that was surely because of the weather. Miniatures and semi-miniatures were especially good and also trailers. There were a good number of well grown plants of the other gesneriads, and the artistic work was really impressive.

I was interested to see plants of some of the Russian hybrid African violets, that I had only seen in photographs before this. They seem to specialise in some truly luscious flowers.

Many of my photographs of the plants at the show were of poor quality—mainly because the camera I had with me was not suitable for indoor photography. I have just a few photos here for you.

There were also talks and demonstrations as part of the event. The demonstration of using African violets in some very modern type arrangements by two very talented artists was entrancing. There is no other word for it. I can't wait for an opportunity to try some of these arrangements myself!

They used both full African violet plants, sprays of flowers and individual flowers. With them they had fresh foliage, dried foliage and some quite different materials indeed to make a terrific whole. Because they were just demonstrating they even used African violet flowers together with other flowers. Just lovely.



The plant in the top photograph is a Russian hybrid called LE-Visi-Pusi, a truly lovely flower. The centre picture is Rob's Cool Fruit, the Best Semiminiature in the show, and on the bottom is the lovely exhibit (by Sayeh Beheshti) that was awarded Best Container Garden. I was much taken with all the dish gardens—as I always am!



Here are just three of the splendid arrangements.



A part of the convention was a trip to the Allan Conservatory—a series of large glasshouses with an amazing selection of tropical and semi-tropical plants. They are apparently grown off site and moved into place when needed and in full perfection. There were a number of gesneriad plants in the glass houses, but I was thought with the use of African violets used in these garden beds as displays was truly excellent.

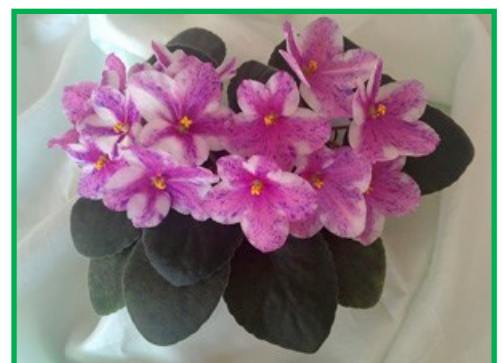


Stanley Ko's Amazing Chimeras

One other talk at the convention that really set my imagination going was by Stanley Ko. He is a grower from Hong Kong and he produces outstanding chimeras. Not just one or two occasionally as the rest of us may do—but heaps of different ones, time after time. Some plants just produce new chimera sports on a regular basis. Just wonderful to see the range of photographs he showed.

Stan Ko has explained that he believes there are very many more chimera sports produced if the potting mix is mildly acid and the temperatures are high. He also points out that you have to be alert and take advantage of what does happen, by propagating the flower shoot or shoots that have sported. I'm going to try.

At right is a photo of 'Ko's Smile' a chimera whose photograph he shared on the Facebook group Chimera African Violets.



Should I grow African violets under artificial lights?

From time to time I ponder this question—specifically when we receive the electricity bill. And I wonder . . .

Electricity costs are increasing everywhere you turn. Can the budget afford it? On the other hand, running one small stand for eleven hours per day isn't really a budget buster. Should I just grow fewer plants?

Is it environmentally friendly? Well, using the sunlight, which is free, is probably better. There is no carbon emission from growing plants in sunlight. But you are growing plants! That can't be bad for the planet.

Better plants result from growing under lights. The overhead light source promotes large flat rosettes with plenty of flowers.

Good light on dull days and in winter means there are always some flowers to see.

Health is a consideration, especially for older people. If I didn't grow my plants what would I do all day. Sit and watch television? Not good—and not me! Light exercise is needed for health. So maybe I am saving on medical costs.

Mental health is even more important. Time and again our growers have told me that working with their plants is what they do when they are depressed, under pressure or just stressed out. So I am definitely saving on psychiatry.

Can I afford **not** to grow my indoor plants as I do?



Growing in natural light and artificial light—both are good.

*I hope you enjoy this e-newsletter. You are welcome to distribute it to others if you wish. Articles reused must be acknowledged to source. There will be another in mid-September 2014. If you would like email notification of when that will be ready for download, please email me at coulson.ruth@yahoo.com.au. Otherwise just keep checking back to the website: www.africanvioletsforeveryone.net. Remember, too, all this information **and more** is available in the book - available from the website.*