







Gleanings



(articles and photos selected from chapter newsletters, our journal **Gesneriads**, and original sources)

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This issue includes photos of gesneriads blooming now and John deSaavedra's experiences and observations with growing the genus *Streptocarpus*, and information about the virtual flower show.

Hope you enjoy Gleanings!

An unnamed Sinningia speciosa hybrid grown from seed supplied by the late Charles Lawn from Australia. Eileen McGrath grew the beautiful specimen on the right and above.



Eileen McGrath photo

Gesneriads Blooming Now



Eileen McGrath planted rhizomes of *Achimenes* 'Glory' and *Achimenes* 'Yellow English Rose' in the same pot for fun. (You could not enter them in a show this way.) Notice the pots of achimenes growing on the floor of her solarium.



Karyn Cichocki photo

This hybrid was created by Shu Li, Yi-Gang Wei and Fang Wen. It is a cross between *Primulina liboensis* and *Primulina rongangensis*. Wallace Wells gave me this plant a couple years ago and it has been growing very slowly. I noticed a few weeks ago that there were buds forming and last week saw a flower stalk emerging. I was quite surprised to see it in full bloom today. Many of us who grow primulinas know how agonizingly slow they can be from bud appearance to actually blooming. It is in a three-inch pot to give some size reference. I think it is blooming quite well for a small plant.

Karyn Cichocki

The photo on the right from Vicki Ferguson is the first bloom on a *Sinningia speciosa* seedling that resulted from a cross made when Jay Sespico demonstrated how to hybridize at the Ohio State African Violet Society show in 2018.



Streptocarpus 'DEM-Tokyo' Mel Grice photo





First blooms on a unnamed sinningia hybrid grown from GHA seed fund seeds.

https://www.gesneriadsociety.org/ the-gesneriad-hybridizersassociation/

Mel Grice photo

My Experience Growing Streptocarpus

Successful Propagation —

John deSaavedra

There are many options for cutting leaves. The most difficult method to execute is to place a whole leaf upright with the bottom end in potting mix. It is cumbersome to support the leaf upright, and the most plantlets one can expect is two or three, if any. Splitting the leaf and removing the midrib before inserting the cut edge in potting mix is the most recommended by others, and with many varieties, success can be had. I have found something more practical. I prefer a method by which the leaf is cut into sections or slices. On varieties with smaller leaves, the midrib can be cut in one inch sections and inserted bottom end down, ¼" into potting mix, along with the leaf sections. I first cut off the leaf tip, 1" or 2-3 ribs into the leaf. This piece is inserted cut end down ¼" into the uncompacted mix. This tip will

produce one to three plants. I then cut along both sides of the midrib. If the leaf is small, I snip each leaf half between every third rib. Medium size leaves get cut between every other rib, and large leaves are cut between each vein. The cut pieces are inserted ¼" into potting mix with enough space between for plants to get light. Once the cutting bed is prepared and labeled, the mix is watered with fertilizer solution and domed or bagged with a clear cover. The domed container is placed in growing light at or near 70° F. Rooting in water is cumbersome and unnecessary, but it will work. I don't recommend it. There are people who have to see the roots to believe they are there. I have rooted over 100 leaf pots using these methods.



What matters -

Proper potting mix matters. I use two parts Pro-Mix BX and three parts super coarse screened perlite, also described as chunky perlite for wick and mat watering. I have been wetting the perlite and Pro-Mix BX prior to mixing to reduce airborne dust. There are many good soilless mixes on the market. There are also poor and inconsistent mixes to watch for. I have found that mixes made with Canadian peat work well. Mixes made from dark, mostly decomposed peat often perform poorly. Unless a soilless mix is specifically formulated for wicking, you will need to amend it with a significant amount of screened perlite for wick or capillary mat watering. Coarse, unscreened perlite contains too much fine material to benefit aeration and should be avoided at all costs. If you already have a large bag, it can be screened outdoors through a ¼" hardware cloth screen box.

Proper temperature matters. It is best to maintain the temperature as close to 70° F as you can. Too cool, and growth slows. Too warm, and the plants and cuttings will be stressed. I have seen excess yellowing of the cuttings and plantlets at or above 75° F. In the summer, a lower shelf is best. My growing conditions are cool in the winter, so they go on the top shelf from October through April.

Proper humidity matters. Bagging or doming with a small vent is essential to propagation success. Too low humidity and the cuttings will wilt and fail, and too high humidity will rot the cuttings. A good rule of thumb is to see some light patches of condensation on the side of the dome or bag opposite the light source. If the inside of the dome or bag is covered in condensation, more air is needed. If there is no condensation, either more water or less air is needed.

Proper light matters. Growing plants and cuttings need the same lighting conditions. The cuttings are alive and will need light to continue producing food for healthy root and plantlet growth. You can read and compare manufacturers' specs and claims all day but the only thing that matters to the plant is proper intensity at the leaf, proper spectrum, and proper duration. Plants will grow and survive, often despite what we think we know. Give them what they need and spend your effort on all the other aspects of growing. Remember the plantlets will also need light for growth. Don't skimp on light thinking you can make up for the lack of light later. Your plantlets will be spindly.

Proper watering matters. This is mostly dependent of your mix quality. Reams of watering advice have been published warning against overwatering. Many beginners have damaged or killed plants out of fear of overwatering. Water restriction is unnecessary if the growing mix has adequate air spaces. If you achieve good aeration, you can water freely as long as the plant is not left standing in water. I water each leaf pot until it drains out the bottom before doming or bagging, then not again until it begins to dry.

Proper water matters. Water quality is an important factor. If you are using municipal water, ask for an analysis. Chlorine is toxic to all life and must be removed before using the water. Chloramine is a chemical compound that produces chlorine over time and must be chemically removed. Reverse osmosis water is mostly devoid of minerals. Any pure form of water will not have adequate minerals present without using a fertilizer containing micronutrients.

Proper fertilizer matters. You should be using a complete fertilizer. It would be silly to invest hundreds of dollars in plants and growing equipment only to try to save a few cents or some search effort on a cheap fertilizer. Also, I am not recommending organic fertilizers.

Beginners have spent tons of money imagining they are getting alternatives to "chemicals." What they don't understand is organic means fish processing residue. Fish parts don't travel through a wick, and they have a characteristic aroma you might not want to share with friends and family.

I have heard vigorous arguments either supporting, or condemning the use of urea in fertilizer. Our modern food production depends on the use of urea to keep us fed. However, I am told that streps are unable to utilize urea in its original form. Soil bacteria metabolize urea and convert it to nitrates which are readily available. So, what's the problem? First, we grow streps, as well as other house plants in nearly sterile soilless mixes. This avoids a host of problems and tedious preparations that challenged our grandparents on a regular basis. Without soil, there is no community of soil bacteria. Secondly, urea-converting bacteria become inactive at temperatures below 70°F. This means if you use cool windows or basement growing areas, urea buildup and nitrogen deficiency is a real problem, especially in winter. Why stop feeding and growing just because it's winter?

Proper pots matter. I have found that most streps do well in standard pots. Many medium to large varieties grown well in 3½" to 4½" plastic pots. However, once the pot is crowded, they can benefit from potting up one size. Smaller and more compact plants can grow in smaller pots. Watch for fast drying of top-watered plants and pot up accordingly. Some varieties excel in 5" pan pots, while others stall out in the first year for lack of adequate soil. There is no one-size-fits-all streptocarpus pot. I don't recommend clay pots unless you can compensate for the rapid drying.





Growing Streptocarpus: myths and fact -

Many sources I found state that streps need brighter light than African violets. My experience indicates the opposite is true. I was unable to grow and maintain show quality streps until I reduced light intensity between 15% and 30% from the shelves that were growing happy African violets.

Many sources available to the public indicate that streps need to dry out between waterings. Drying between watering is a major cause of leaf damage, stunted growth, and damage leading to root rot. I believe that drying of the top is a good indicator of watering time, however streps tend to be thirsty and often the whole root ball is desiccated by the time you discover drying on top.

It is commonly stated that streps need to be root bound to grow well. My experience indicates they do best when they have adequate soil. Most people would define "rootbound" as the pot being completely occupied by roots. My experience shows this is the time for a larger pot so fresh growth can continue. With fresh growth comes new leaves with blossoms. Proper pot size is important to mitigate excess sogginess, especially for top-watered plants. Provide too small of a pot and it becomes impossible to maintain proper moisture.

Most sources indicate over-watering as the most common cause of failure. I have discovered that improper potting mix causes **far more** problems than over-watering. I once tested this assumption by growing a specimen of Saintpaulia 'LE Violetta' on capillary matting in a compacted potting mix for over a year before it finally suffered from root rot. Based on the widely published and accepted advice, it should never have grown. Divisions were taken and the plant was regrown in a proper mix and is doing well. I have seen two or three instances of root rot in a year, and all were from compacted mix caused by fine material in the perlite. I have tossed a dozen plants that stalled due to inadequate organic material.

Streps respond well to a lower phosphorus fertilizer. A very successful and experienced grower produced excellent specimens using Michigan State University orchid formula 13-3-15 fertilizer at 1/8 tsp/gallon, constant feed. I am also seeing good results with Better-Grow Orchid Plus 20-14-13 at 1/8 tsp/gallon, constant feed.

Streps don't need a perlite filter in the bottom of every pot. I have tried this practice for over a year and did not see a benefit. It does not achieve the desired effect for me. When I found a stalled plant that had stopped growing, I found the roots had colonized the outside along the pot with a dead zone starting in the perlite layer extending up the middle of the root ball. At best this perlite filter deprives the plant of pot space. At worst, it pushes the wettest part of the root ball upwards due to the difference in surface tension between milled peat and chunky perlite, contributing to root rot. I believe this practice started with the "Texas-style watering system" described in 1980 in *Growing to Show*. When I found problems with this practice, I tried a few with the extra chunky perlite mixed in the soilless mix, instead of a bottom layer, and nothing bad happened! I have abandoned the practice with streps and African violets and I am growing better plants. There is still a time and place for perlite in the bottom, but be aware of your reason for using it.

Grooming -

Once your plants are established, it is time to start grooming. Grooming means removing buds until the leaves are established, or until the leaves are developed to where they will support copious bloom. Also look for opportunities to remove immature leaves. If your conditions are correct, you will have very few yellowed leaves to remove. If you pay attention and gradually reposition leaves, and occasionally remove an errant leaf, the plant will have better symmetry. The blossoms will emerge easier and leaves won't compete for space. Experienced growers can improve the blossom count and fill the pot faster with multiple plants. Some varieties lend themselves to multiple plantings and some don't. Look for a plant

with somewhat narrower leaves and an upright, arching habit as a candidate. Flat-growing, broad-leaved cultivars don't share space.

Disbudding-

Streps respond well to disbudding to encourage plant development. It is somewhat counter-intuitive when you consider each leaf has a finite number of buds, then it's done. If you consider how much energy a plant expends to bloom, then it becomes apparent that delaying blooming can allow a plant to produce many more blossom-producing leaves in a shorter time.

Insects and bugs —

We aren't the only ones who appreciate and enjoy streps. I have encountered several pests that like them too.

The easiest to get is thrips. Thrips are tiny insects that infest and ruin the blossoms or leaves on about anything that blooms. The Western Blossom Thrips is what we mostly deal with. Leaf Thrips is another pest that can wreak havoc in a collection. They affect greenhouse crops and outdoor plants alike. They are tiny, barely visible, and overwinter in the northern tier states outdoors. One prolific author insists that you can starve them out by disbudding for three months, but what about outdoor thrips? Prevention is virtually impossible due to their flying and hitchhiking habits, however reasonable biosecurity can dramatically reduce the likelihood of infestation. Integrated pest control is how you deal with them. Be vigilant and aware of the signs. Discover them early! Have a plan and follow it. Disbud and treat according to the listed insecticide instructions. Leave home remedies to someone else less serious about success.

Root mealy bugs are disgusting and destructive creatures. They feed on roots out of sight until the plant fails from lack of roots. Also, they can hatch in numbers and emerge from the drain holes of your pots in search of new victims. Once you have them it is very difficult to eradicate them, but it can be done. You need to formulate a plan and stick to it. Again, prevention is the best policy. Isolate, and if possible, don't bring in plants with soil. Utilize a program of soil systemic insecticide. Inspection of the root-ball usually won't reveal anything but the worst infestation.

Leaves become yellow for a variety of reasons; too little nitrogen, too bright of light, too high of temperatures. When a streps receives inadequate nitrogen for any reason, the new growth will pull nitrogen from the older leaves. Heavy or continuous bloom can produce similar effects. When lights are too bright, the stress will also cause the plant to draw on the older leaves. Also, temperatures higher than 75° F will stress streps, forcing plants to reabsorb chlorophyll to produce nitrogen for new growth. Once the outer portions of the leaves give up chlorophyll, it will not return.

The key to growing good streptocarpus hybrids and species is pretty straightforward. Proper, consistent conditions and frequent observation are essential. Also consider that not all varieties will do well in a given situation. As with other plants, your expectations are important. Do you expect best-in-class show specimens or are you content with a couple of blossoms? There are small and large growers, heavy and shy bloomers. There are singles, doubles, ruffles, and bi-colors. However, ruffled blossoms tend to accompany ruffled foliage. Some heavy bloomers will bloom themselves to death if allowed, and shy bloomers will give you an occasional showing. Choosing the right variety means trying several and discarding the ones that you don't like. I hope you find this article helpful. I have been growing and learning. I have been fortunate to exhibit best in class entries and a few shows, which I find very rewarding. Each time I find a conflict between common knowledge and my personal experience, I have made a mental note to share this information. This article is a result of these observations.

2020 Convention Virtual Flower Show

As many of you know, the 2020 Convention in St. Petersburg, Florida was cancelled due to concerns related to the COVID-19 pandemic. As a result, many of us would not be able to attend presentations we were looking forward to, peruse the plant sales room for those long-sought gesneriads we had on our list and, most importantly for many of us, we would not be able to show our plants in the flower show.

When the convention was cancelled, a group of us who had been involved with the convention decided that an unjudged virtual flower show should be undertaken. An email was sent to all members of The Gesneriad Society for entries (a maximum of five per member) to be sent to us via email. We are quite pleased to say that 89 members submitted 339 photographs of a variety of gesneriads. Those 339 photos will be on the Gesneriad Society website [www.gesneriadsociety.org] on or about July 25th for everyone to look at.

As an added treat to the virtual show, we will be sponsoring a People's Choice award for the top five favorite entries. Everyone is invited to participate in the voting (you don't have to be a member of The Gesneriad Society). All you need to do is look at the photos, decide which one is your favorite and email the class number, exhibit name and the exhibitor's name to me at gesneriadawards@gmail.com. Only one vote per person (if you submit multiple votes, only the first email received will be counted). The deadline for voting is August 8.

Enjoy the show and don't forget to vote!

Paul Susi Virtual Show Coordinator



Just a sample of what you will see!

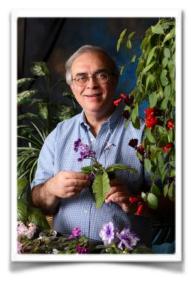


Petrocosmea xingyiensis Zhi-jing Qui

Streptocarpus 'Meadowlark' Terri Vicenzi



Sinningia 'Ozark Jumbo Sundae' Mary Corondan



From the editor —

Please continue to send me photos. Your articles would also be greatly appreciated. Enjoy the upcoming virtual flower show!

If you have suggestions, comments, or items for possible inclusion in future issues, please feel free to contact me at melsgrice@gmail.com

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WELCOME - membership in our international society includes quarterly issues of Gesneriads - The

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