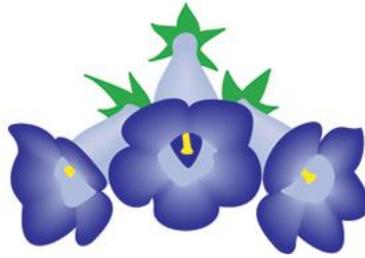


Petal Tones



Volume 44 Number 8

September 2013



Columnnea lehmanni (looks like candy corn) grown by Barb Stewart

President's message: Corey Wickliffe

Hello all!

It's hard to believe that summer is supposed to be over when we are still getting temperatures in the 90s! I just got back from the beach (and even managed to tan a little instead of looking like cooked lobster) and the way my *Episcias* are growing I know the temperatures are still high even in my apartment. Soon enough they will pout with cooler temperatures, but for now they are sending out stolons with a vengeance. Outdoors it seems the perfect weather for some sun loving larger *Sinningias*, but the writing is on the wall it seems... days are getting shorter and some of the *Gessies* that love that sort of thing are putting on a show.

NCAC meetings are held at the National Arboretum, Washington, D.C. Use the entrance at 24th & R Streets, NE, off Bladensburg Road

Doors open at 10:00am with the meeting starting at 10:30am usually on the second Saturday of the month.

September 14th President, Corey Wickliffe speaking about hybridizing Double *Sinningias*

October 26th Guest Speakers Bob & Dee Stewart speak about growing *Streptocarpus*

December 14th Christmas Party

I can't grow *Smithiantha* to save my life, but I keep hearing reports that this is their time to shine. Time soon enough for some to hit dormancy, but for now there seems to be a lovely show. The only thing I can think of is how much I can't wait for things to slow down... I have so much plant work to do!

As I plan to repot and break plants down for the winter months, I'm excited by some of the up and coming plants I will be able to share, and plants that will hopefully continue to mature and grow well as possible show candidates in the spring. I'm determined to bring some interesting species to our show, and encourage others to do the same. My goal is interesting and different rather than show perfect - I don't grow to show, but I'm more than happy to show what is interesting to grow!

So if you don't have something you think you may

want to show in the spring, then grab a plant from the raffle table and try something different. This month I'll have a few young *Amalophyllon sp.* RM2006 Dark Form on the table that would be great to experiment with if you haven't grown them before.

Last month we took a stunning tour around China hunting for *Gesneriads* with Stephen Maciejewski, but this month we're taking it back to the New World with *Sinningia* and how we're trying to break nature's rules! I will be talking about the educational journey I've taken around *Sinningia* over the last year, exploring not just species, but interesting traits and hybrids that have been developed in the genus as well as some of the future in hybridizing. Also make sure to mark your calendars for October 26 - Dee and Bob Stewart will be visiting us to give a talk on Species *Streptocarpus*!

Other thoughts to discuss at our meeting: should we talk about doing a little show? When is the next Brazil Seed order? Hope to see you Saturday!

Corey

Seeing Double - Hybridizing Double Flowering Sinningias

By Corey Wickliffe

It's amazing how an offhand comment can lead off into a host of new ideas to explore. I know exactly when this train of thought started, and it was like being hit by a brick. When explaining my *Sinningia* hybridizing goal of making a micro in any color other than white, lavender, or purple it happened - "Why are you only looking at color? Why not try for other traits too? You know, like doubles." Well... huh.

There was absolutely no good reason why not, and even in my evaluation of what hybrids I wanted to use in my project a number of doubles showed up on the list. I would not even need to take an extra step (which can actually end up being multiple generations!) if I wanted to add them to the mix. My investigative little brain got rolling and I immediately started hunting down information on doubles - which included chatting with Dale Martens who has been lucky enough to use both traits in her hybrids over

the years. She was kind enough to give me the basic run down which I can now pass on to you.

Turns out there are multiple doubles - calyx and petal doubles - that you're most likely to come across in the mini to compact sizes (*S. speciosa* hybrids also have a double trait, but since I'm unsure how it relates I've not included it here). While they achieve a look of ruffled heavy flower similar in look of a rose they do it in completely different ways. The differences in how they change a flower also translates over to how you use them in hybridizing - both traits force the plant to only be a seed parent or pollen parent, but which is which depends on which trait the flower has.

Petal Double

Typically when people are referring to "double" *Sinningia* they are talking about the Petal Double mutation. In this case you see extra petals in the center of the flower, while the outside of the flower is otherwise normal looking.

This was a mutation that evidently showed up in a miniature *Sinningia* hybrid of Treva McDaniel and was named 'Emily'. This hybrid was the parent to the petal double mini sinningias that are still popular today, and this trait is still being hybridized by a number of people including Dale Martens and David Harris (of the "Ozark" series). Having developed in minis originally, this mutation is typically found in plants smaller than the Calyx Doubles.



Calyx double on the left split open, no green calyx, see the fat style? That's deformed. Notice it has filaments with anthers attached. The flower on the right is a double petal. No anther and the style is normal. Photo courtesy Dale Martens.



Calyx Double on top with no separate green calyx
Petal double on bottom. Photo Dale Martens

Calyx Double

A Calyx Double is a whole different kettle of fish. Rather than having the extra petals on the inside, the extra petals are on the outside of the flower. The calyx are typically the leafy green bits that protect the bud as it forms and is where the flower attaches to the stem, but in the case of this mutation they are actually mutated into additional petals.



Gabriel's Horn with a calyx double with split calyx.
Photo by Kyoto Imai

This mutation originated in *Sinningia cardinalis* and started out as strap-like extensions of the calyx around the tube of the flower. You can still see this in hybrids such as the ever popular 'Gabriel's Horn'. Due to the species background of these plants they tend to be larger/compact and are not miniature in size.



Heartland's Double Dilly a petal double hybrid
grown by Tim Tuttle photo by Kyoto Imai

Evidently the strap-like extensions was not attractive to everyone, so a current goal of hybridizers is to have joined calyxes which results in a "hose-in-hose" look to the flowers. This can be seen on Dale Marten's hybrid 'Playful Porpoise' - a very popular hybrid parent. This trait has been passed on by hybridizers such as Thad Scaggs (with hybrids such as 'Diva' and 'Party Dress') as well as gaining popularity in Asia through hybridizers such as Vivan Liu (hybridizer of the only yellow calyx double - 'An's Nyx').

Hybridizing with the Doubles

Now that we can tell the differences, what's stopping us from having doubles of everything? I can't help but look at my micros and want to start crossing them with a few petal and calyx doubles just to see what happens... but what do I need to know to be successful? It goes back to both not having all their reproductive parts working - and the key is to remember which is which.

The Petal Double mutation is taking the male flower parts and turning them into petals. While you get a corolla tube full of petals you don't get pollen, so a

Petal Double can only be a seed parent. Since nothing is every easy the catch to this method is that this trait doesn't seem to be particularly strong - the first generation of a cross may result in few, if any, doubles. Crossing that generation to get a second generation from that cross seems to increase the rate they show up, so keep crossing and keep hoping!



Sinningia Danielle grown and photographed by Kyoto Imai

The Calyx Double mutation seems like it shouldn't influence the reproductive ability of the plant but it does - the ovaries on these plants seem to be deformed. Some are obviously so, while in at least one recent hybrid ('An's Nyx') the ovaries don't look deformed, but setting seed on this plant hasn't happened yet as far as we know, despite attempts. It is unknown if the ovaries are causing the issue, or maybe it is just a genetic incompatibility in the hybrid given it's complex species history. Ah, the joys of complex hybrids! Thankfully they seem to have a good amount of pollen, and barring any complex genetic issues they can still be used for hybridizing. The trait also seems to be pretty strong and up around 50% of the seedlings may be calyx doubles! Just remember if you have a developing seed pod to remove the flower yourself - because of the modified calyx the flower does not fall off on its own and typically has to be removed by hand.

Time to go find some doubles and splash around some pollen!

A big thanks goes out to Dale Martens for sharing this information, providing photos, and mentoring me on my Sinningia hybridizing travels.

EPISCIA – GROWING FOR SHOW

By: Lee Linett

One of the popular names for *Episcia* is “Peacock Plant,” no doubt due to the variety of foliage colorations, and whether you grow them at home to add a spot of color here and there or you grow *Episcias* to enter in flower a show, just a few steps will ensure they'll come through with flying colors. This is how I grow *Episcias* under my growing conditions:

1. Temperature range: 70-80 degrees F.;
2. Atmospheric humidity: 40% - 60%;
3. Water: Evenly moist, Not Wet;
4. Potting medium: Must be well-draining (1-1-1 works well). You can also use Metro Mix or Pro Mix B with an addition of 1/2 part plain kitty litter;
5. Pot: Either plastic or clay; I like to use azalea pots
6. Fertilizer: 1/4 strength every watering with a variety of fertilizers. Flush with plain water every fifth watering.
7. Light: For a 2-tube 40 watt fluorescent set-up, I use one cool white plus one daylight with the *Episcias* placed 4” – 6” from the tubes. North East and East windows also provide good light. Fluorescents are on for 14-16 hours per day.



Episcia hybrids assortment

To grow a show plant, you must start with healthy cuttings that should not have more than two sets of almost-mature leaves.

- ❖ Fill an azalea pot (4" – 6" in diameter) with your potting mix to within 1" of the pot rim. Tap the pot to settle the mix and water with warm water to thoroughly moisten.
- ❖ Poke a hole for each cutting and sink each cutting to just below the bottom leaves. Firm the mix around each cutting and when the pot is full, water from the top, let drain, and enclose in a glass covered terrarium or plastic bag.
- ❖ Put the potted cuttings at the end of the tubes or out of direct sun for a week and then remove from the terrarium or bag. Note: Humidity should be at least 40%.
- ❖ Leave the potted cuttings at the end of the tubes for another week; by this time they will be rooted and well on their way to the show.
- ❖ For the next 2 months, remove all stolons that form as well as any flower buds that pop up. The plan is, grow nice leaves as large as possible on a plant (several cutting in a pot are considered to be one plant) that is as symmetrical as possible.
- ❖ If you are using a 1-1-1 mix, you will have to begin fertilizing as soon as the cuttings have rooted; if using a soil-based mix, wait a month after roots form.
- ❖ For the entire time up to show, you will need to adjust the amount of light the *Episcia* receives by moving the pot closer to the center of the tubes.

Broadly speaking, *Episcias* are not high light growers, nor do they do best in low light condition; however, for good flower production they should receive more light than if grown only for foliage.

At the end of the 2-3 months, allow stolons to form, but only at the bottom. Continue removing stolons that form at the top and middle and remove flower buds. Because *Episcias* are fairly symmetrical plants, you want to maintain this symmetry with the largest leaves on the bottom along with the largest stolons. Removing the competing stolons that grow higher up on the plant will ensure this.

At the end of 3 months, stop removing stolons except for those that spoil the symmetry; allow them to grow out to their full potential. You will see that the stolons produced are shorter, sturdier and have larger leaves.

In another week, allow flower buds to form if you plan to show the *Episcia* with flowers. Note: The larger, older stolons should also have flowers or buds showing color.

I have found that *Episcia* 'Temptation' and *Episcia*. 'Silverdust' grow in sort of a cascading style that begins almost as soon as the plant/cutting has rooted and will grow this way no matter what you do; most of the stolons are produced at the top of the plants and tend to cascade downwards, but with a bit of judicious leaf realigning, you can maintain symmetry as best as possible.

In 5 months of growing, it is possible a bottom leaf or two will have to be removed – remember the 1" space you left in the pot? That is so you can add some fresh potting medium if needed which always looks good before a show although, for *Episcias*, you should not be able to see anything but leaves when you look down at the plant sitting on the table.



Episcia 'Strawberry Patch' – grown by Carol Hamelink

You will notice that I have not addressed the subject of pests and diseases, so suffice it to say that *Episcias* are subject to the same pests and diseases that affect other gesneriads and can be treated with the same remedies. Cleanliness and common sense go a long way in keeping your *Episcias* healthy: isolate newly-

acquired plants; keep the growing area clean and make sure all potting and grooming material is clean & sterilized; do groom your *Episcias* as needed; keep the air moving with a small whisper fan; dust the lights.

Over the years I have grown dozens of *Episcias* and am always willing to try new ones, yet I always return to the same ones which have proven very reliable for flowering, foliage, and ease of growth: 'Acajou'; 'Cotton Candy'; 'Keewee'; *lilacina*' 'Malay Ebony'; 'Malay Ruby'; 'Pink Panther'; 'Plum Country'; 'Tricolor'; 'Tropical Topaz'; 'Temptation'; and *xantha*.

For something different (as in – you don't know what you'll get), try growing from seed. The Gesneriad Society has mixed *Episcia* seed and there is every chance you will be able to grow some really nice plants. NOTE: When transporting *Episcias*, A.V. rings are useful for keeping leaves and stolons from touching the bottom of the box – or you can snuggle the pots into Styrofoam peanuts to cushion them.



Episcia 'Unpredictable Valley'

De-static the peanuts by placing them in a large bag with two or three unscented dryer sheets, shake them around, and let them sit in the bag a half hour. Rings of tightly coiled newspaper also will stabilize pots in a box; use tissue paper underneath leaves and stolons to protect them. Bubble wrap should be placed as a "top covering" over the plant(s) in the box when transporting in cool weather.

I would encourage people to bring cuttings or stolons to share for the raffle table. This is a great way to increase your collection and acquire new varieties.

There are just two things to keep in mind when entering *Episcias* in a show:

1. Foliage MUST be distinctive (either by means of color, pattern or texture) to enter in the foliage class, and

2. Flowers should be evenly distributed around the plant for the flowering class.

In the home, grow *Episcias* for spots of color and enjoy them in hanging baskets, terrarium plantings, strawberry jars, or just cascading over their pots! Enjoy !!!

August 2013 Meeting by Harold Belcher



Stephen's presentation was excellent! He mentioned that it was 7,872 miles from Philadelphia to Guiyang, China. Guiyang is the capital of the Guizhou Province in Southwest China. There is only one time zone in China, which I found interesting.

The average temperature in Guizhou is 75 to 85 degrees, although they may get snow in the winter. Dr. Hue was Stephen's guide during the trip, and Mr. Tang was his driver. Dr. Hue is trying to preserve as many endangered species of gesneriads.

He has traversed much of the region and was able to show Stephen many specimens of *Primulina* throughout the area, some of which grow close by the entrance in caves. Stephen mentioned that Chinese folk like variety in their diet in that they don't like to eat the same meal twice in the same month.

Our members were treated to slides of *Primulinas* growing near waterfalls as well as slides of the "One Hundred Demon Cave", amazing stonework, arches and beautiful views. We were also treated to sights of culinary delights such as marijuana soup, fried bee's larva and ball tea. I noticed some rhododendrons in some of the slides. Chinese dam

and road construction may cause some of the gesneriads species to be lost. Another reason for the problems that those plants face in the wild is that they are used for medicinal purposes.

Global warming and climate change may also cause some plants to be lost. Some of the populations of *Paraboea* and *Primulina* have less than 1,000 plants left in the wild.

Stephen also travelled to Vietnam to visit some of the gardens in that country. The gardens in Vietnam were quite impressive, especially those with tigers chained to pedestals. The tigers and visitors seemed to get along quite well together. The whole trip cost about \$3,500.00 for 15 days and two countries. The flight was about \$1,700.00, hotels were around \$12.00 per night and meals were \$5.00 per day. He is planning on making a March 20, 2014, trip and additional trips each year.

If you are interested in traveling to enjoy gesneriads, I would plan to be a part of one of Stephen's trips! It was a wonderful presentation and NCAC plans on inviting Stephen back to speak of some of his other trips!

Bloomin' Now



Achimenes 'Harry Williams' grown by Barb Stewart who donated it to the raffle table in August and it bloomed for Donna on her back deck underneath umbrella-ed table.



Andrew Norris with one of his amazingly beautiful plants. This one is a variegated *Streptocarpus*!



Streptocarpus Rondul's Kazia by Andrew Norris



Streptocarpus 'Suzie' by Andrew Norris



XGloximannia 'She's Dancin' by Andrew Norris



Streptocarpus 'Birdie' by Andrew Norris



Sinningia speciosa hybrid white



Saintpaulia 'Celina Elegance' by Andrew Norris



Jim's hybrid *Gloxina* 'Dragonsong'



Sinningia Speciosa 'Bristol's Galaxy Tour'
Andrew Norris



Barb Stewart's *Achimenes* 'Purple King'



Jim Roberts at the August Meeting showing off some examples of Primulina's.

NCAC website:

www.nationalcapitalgesneriads.org

NCAC Blog:

<http://dcesneriads.blogspot.com/>

Website & Blog: Kyoko Imai

web@nationalcapitalgesneriads.org

President: Corey Wickliffe

CEwickliffe@gmail.com

Vice President: Jim Roberts

Marriottsville, MD 21104

410-227-2324

jim.roberts@wildblue.net

Treasurer: Barry Woolf

1301 Malus Court

Fallston, MD 21047

410-879-1654

Woolfphoto1@comcast.net

Secretary: Harold Belcher

3006 Crest Avenue

Cheverly, MD 20783-1103

301-773-3006

hbelcher2@verizon.net

Directors: Andrew Norris, Kyoko Imai,
Donna Beverin

Committees:

Hospitality: Pat and Harold Belcher

Membership: Kyoko Imai

Programs: Jim Roberts

Newsletter Editor: Donna Beverin

editor@nationalcapitalgesneriads.org

or

Petaltones@gmail.com

or

Donnabeverin@gmail.com

Website and Blog: Kyoko Imai

web@nationalcapitalgesneriads.org

<http://dcesneriads.blogspot.com/>

[dcesneriads -at- gmail.com](mailto:dcesneriads-at-gmail.com)

The Gesneriad Society website:

www.gesneriadsociety.org