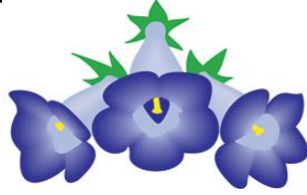


Petal Tones



National Capital Area Chapter of the Gesneriad Society Newsletter

Volume 48 Number 9

September 2017



Barb's *Streptocarpus* 'Tunnel Vision'

Hello folks! Barb asked if I can write a letter from the Editor this month, so here goes!

First and foremost, this Saturday, September 9th we are meeting at Behnkes in the Bonsai House. This is a room where we can listen to Jim give his Ecuador talk and not have a challenging time hearing him! I cannot wait to see his pictures and hear all about Jim and Drew's adventures! Meeting time is the usual, 10:30am. Hard to believe summer is winding down. I have had *Sinningia tubiflora* blooming just about all summer. And it is joined by S. Carolyn and now *Sinningia* 'Butter and Cream' courtesy of Mary Schaeffer. She gave me a giant pot! I emailed her to see if she had a tuber to exchange because she said she was looking for Carolyn so in chatting we found

NCAC meetings are held at BEHNKES NURSERIES

11300 Baltimore Ave, Beltsville, MD 20705
Behnkes opens at 8:00am if you would like to browse and shop before the meeting. We gather at 10am to get set up, with the meeting beginning at 10:30am. Meet the second Saturday of the month. \$10 yearly dues.

September 9th: Jim and Drew's Ecuador Trip:
Gesneriads in the Wild

October 14th: Judging School, 10-3. Jim's home.
Registration needed.

October 21st: Meeting at Behnkes with a Webinar:
Intro to Gesneriads or Streptocarpus.

out we live pretty close to one another, yes at least on the same side of the Chesapeake! So we got together and had fun talking about plants. She also gave me some *Episcia* 'Pink Dreams' plants that I have for the raffle table. Then, cleaning up after one of the rain storms, a plant shelf on my deck fell. Thank goodness all plants were ok, except a pot of tubiflora cuttings. All the cuttings and soil went all over the deck but when I was picking them up I noticed little baby tubers growing at the bottom of the cuttings. I would never have pulled up a cutting at that stage to look at it and so I got an education from a near catastrophe! So I went and grabbed my phone to take some pictures. Donna



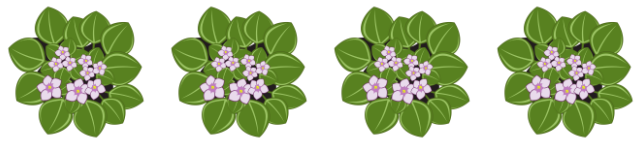
Plant of the Month – Gasteranthus

Jim Roberts

Gasteranthus is one of my favorite genera in the Gesneriad family. They're generally relatively small growing, which is good since most won't grow outside of a terrarium with 100% humidity. There are about 35 species which have been named and described in the literature, many by our own Larry Skog. The genus has many species which are in danger of extinction, and at least one is extinct in the wild. Hans Weihler introduced *Gasteranthus atratus* to cultivation in the early 1980's. When he returned to the location where he originally collected it, the entire area had been developed and no other collections have been made. It is presumed gone. HOWEVER, it was such a nice species and relatively easy to grow and flower, that it has survived and actually thrived in hundreds of private collections in the US. As long as it is enclosed in a high humidity chamber it will keep its nice rich dark brown glossy foliage and produce large bright yellow flowers. Flowering will start when the plant is only 6" tall, but will continue until the plant is over 18" high (if you can find a terrarium that big to keep it in).

Other species are not necessarily more difficult to grow. However, they usually get taller and the foliage isn't usually as showy as that of *G. atratus*. Therefore they aren't as widely grown and many are in danger of real extinction, not just in the wild, but total extinction.

On our recent trip to Ecuador, Drew and I found 8-12 Gasteranthus species, most in flower but quite a few that we think were different species but were not in bloom and therefore unidentifiable. On our second day Drew saw a bright yellow patch by the side of the road as we were driving along. Usually it was our driver/ guide Gilberto who noticed plants that we were passing by. But Drew saw this one and Gilberto backed up the car. The yellow patch turned out to be the flowers on a two-foot tall *Gasteranthus leopardis*, a beautiful species that had been described but never grown in the US. The plant was growing by the side of the road in tall grass (its only shade). Plants found further into the woods behind this open location had more of the maroon spotting, which is where the name *leopardis* obviously came from. Another interesting find was the elusive pink Gasteranthus. I know many years ago Elizabeth Varley was on one of Hans Weihler's expeditions in Ecuador and they came across a pink flowered Gasteranthus.



The Mid-Atlantic African Violet Society will be holding its 2017 Convention and Show in Fredericksburg, Virginia at the newly renovated Fredericksburg Hospitality House, October 26th - 28th. This year's show theme is "Timeless Violets."

If you're interested in showing, either African violets, other gesneriads, or if you are interested in entering any of the various design classes, you must be a member of MAAVS. Annual dues for membership are \$15.00 individual and \$20.00 joint.

You do not have to be a MAAVS member to attend the Show, but you do have to be registered with the Convention to attend the programs that will be offered. Also, there will be a commercial sales room featuring several notable vendors open to the public, good for anyone who would like to day trip for a little shopping and to view the Show.

So save the date. For updated Show information and a copy of the Show Schedule, please visit the website at maavs.org. If you have questions, please feel free to call Kitty Hedgepeth at 804-358-1879 or you may email her at EEQUAT@aol.com.



This is the unknown Colombian Gasteranthus that Gilberto is growing in his shade house.

She was working at Longwood Gardens at the time and told me about this pink flowered Gasteranthus that she was trying to keep alive. She failed and so

did Hans. Well, we found it and hopefully it's in our new collection of *Gasteranthus*. I showed Elizabeth a picture of what we collected and she got really excited. "That's it! That's Little Pink!" Little Pink and another plant called Big Pink have reddish stems and a pink pouch shaped flower.



Little Pink with the red stems.

Many of the other *Gasteranthus* we collected were plants that we know are already in collections, but we didn't have them before. Typical orange pouches, either in clusters on the flower stem or singly, with smooth pouches or bumpy. We didn't see any of the open tube types such as *atratus* or *venticosa* until we got to Gilberto's greenhouse. There we saw a beautiful, low growing *Gasteranthus* with large leaves and a large white flower with very heavy and distinct striping on the face and into the throat of the



Leopardus in the sun

tube. Most of the plants we found were not along the road, but deep in the shade along the banks of the many, many, many small streams flowing down the mountain sides. It's hard to imagine that any would be optimal sites for development. The banks along the stream sides were steep and tall, and there was not much above the steep banks except for more muddy steep banks. They were far enough off the road that even if the road were widened to 4 lanes (from one in some places) the plants still wouldn't be disturbed.

A bit more about *Gasteranthus* in general: They are closely related to *Besleria*, which I think tend to get bigger with more woody stems.



Notice the typical long spur at the back of the flower.



Species with clumps of orange pouches on long peduncles.



Large clusters of round pouches on very short stems. In Gilberto's shade house.



Leopardus in the shade

The major differences are that the Gasteranthus get a fleshy capsule whereas Besleria form a berry containing the seeds. Also, the stomata – kind of like breathing tubes on the undersides of the leaves – are clustered on the backs of Gasteranthus leaves but



Large extended pouch on a long pedicel.

spread out on the backs of Besleria. They are found in a very wide area from Southern Mexico all the way down to Bolivia in South America. The individual species however are all located within a very small natural range. What's found along one stream on one mountain may not be found anywhere else. That's what makes them so subject to extinction. The stream that they grow next to may not be directly damaged by construction. But if a dam is constructed that stops that little stream and many other little streams entire populations of a species may get wiped out. Finally, there are two groups of Gasteranthus. The group with white to yellow bell or tube shaped flowers is probably pollinated by euglossine bees. The other group with orange, red or PINK pouched flowers is probably pollinated by hummingbirds.



Species with single orange pouches flowers on shorter stems

Auxins

Carol Ann Bonner

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Nashville, Tennessee, USA

How is it that you can grow a gesneriad (or a peperomia or crassula or begonia, for that matter) from a leaf? A stem already has nodes, and nodes can produce more leaves or adventitious roots, but a leaf! It doesn't have much of anything. The answer is complicated, but it pretty much boils down to auxin. Auxins are plant hormones that promote growth in specific areas depending on what the plant needs to



respond to its surroundings, and they work even though they occur in minute amounts. For example, the weight of hormones in the common pineapple plant compared to the weight of the plant is equivalent to the weight of a needle in 44,000 pounds of hay! Indole acetic acid or IAA, the most common naturally occurring auxin, is produced in various parts of a plant, primarily the stem tips, and in the African violet, the leaf blade. Auxin is continuously

transported down to other parts of the plant, for example, to the growing roots. When the leaf is removed from the plant, IAA is still transported down the petiole where it now accumulates at the base and develops a mass of parenchyma and meristematic cells called a callus. Parenchyma cells retain the ability to divide after maturity while meristematic cells have no predetermined form; they can become phloem or xylem or epidermis — whatever. As the IAA continues to travel to the callus, the increasing concentration eventually stimulates roots to form. The root tips now produce cytokinin, a different type of plant hormone that causes cell division and differentiation, i.e., it causes the cells to develop into specialized types. The cytokinin is transported back to the callus where it stimulates shoot formation, and a young plantlet is born. Commercial rooting powders are made from various synthetic auxins at low concentrations. I'm not sure many gesneriad growers use rooting powders anymore. (We have used them only once, I believe, while working at Atlanta Botanical Gardens.) Whether that is because the synthetic auxins aren't as effective with gesneriads as the naturally occurring forms, or the low concentration is too low, or the inert ingredients like talcum powder inhibit growth, I don't know. It's possible to buy pure forms of synthetic auxins, but remember the vanishingly small doses that exist in the plants in nature — too high a concentration not only won't stimulate growth, it can kill your plant! After all, 2,4- dichlorophenoxyacetic acid is a synthetic auxin — and also half of the infamous herbicide Agent Orange.

Sources: <http://www.biologie.uni-hamburg.de/b-online/ibc99/koning/vegpropa.html>

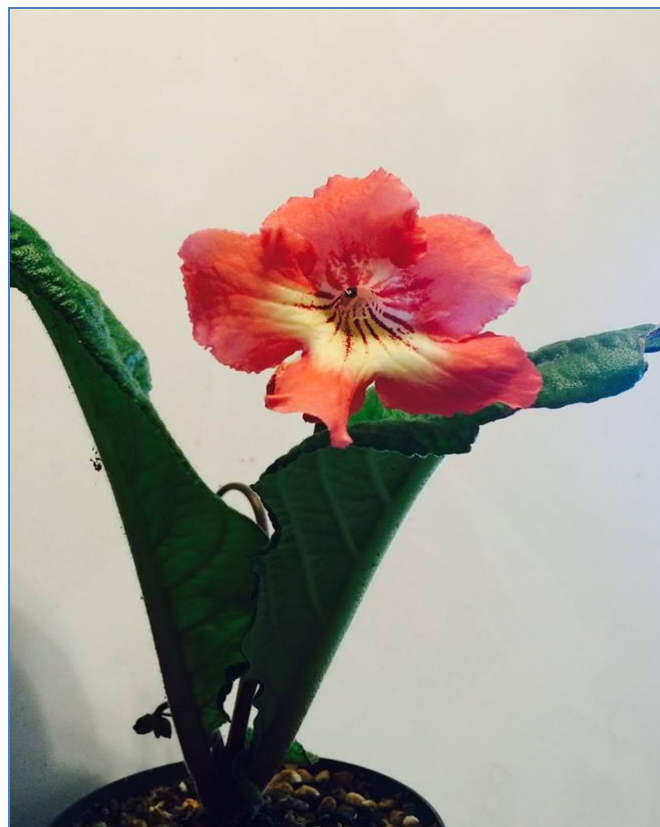
Peter H. Raven, Ray F. Evert Biology of Plants (New York, Worth Publishers, 1981) Callus and root formation image above from <http://masteringhorticulture.blogspot.com/2011/03/starting-lifeall-over-again.html> — excellent article, too. Here's a link to some interesting pictures of A.V. explants and the results of balance versus imbalance between the auxins and other substances needed for growth: http://www.liv.ac.uk/~sd21/tisscult/av_pics.htm A

Reprinted from Gesneri-Eds, the newsletter of the Tennessee chapter of the Gesneriad Society, Volume 42, issue 3, March 2014, Carol Ann Bonner and Julie Mavity-Hudson, editor Gleanings January 2015

Desperately Seeking

Jim Roberts.....Gesneria christii
 Jim RobertsGesneria ventricosa
 Jim RobertsGasteranthus eburnea

Bloomin' Now



Brian Connor' *Streptocarpus* 'Blask'
 hybridized by Piotr K with an excellent melon-pink color (almost orangey). It is #7134 for his hybrids.

The Delaware African Violet and Gesneriad Society Presents

Violets Visit Venice

Please join us at the
 Delaware Center for Horticulture,
 1810 N. DuPont St. Wilmington, DE 19806

Plant sale on Friday, October 6, 2017
 2:00 – 5:00pm

Show & plant sale on Saturday, October 7, 2017
 10:00am – 4:00pm

Plant sales including Africa Violets, Gesneriads and companion plants. Hope to see you there!



Donna's *Sinningia* 'Carolyn' with butterfly bush



Barb's *Sinningia Leucotricha*'s first blooms



Barb's *Petrocosmea formosa*



Barb's *Sinningia Leucotricha* in full bloom. "It is interesting to watch this plant grow and change through its cycle."



Barb's *Kohleria* 'Heartland's Blackberry Butterflies'



Barb's *Achimenes* 'Yellow Beauty'



Barb's *Achimenes* 'Harry Williams'



Barb's *Achimenes* 'Robert Dressler'



Dave's *Sinningia macropoda*



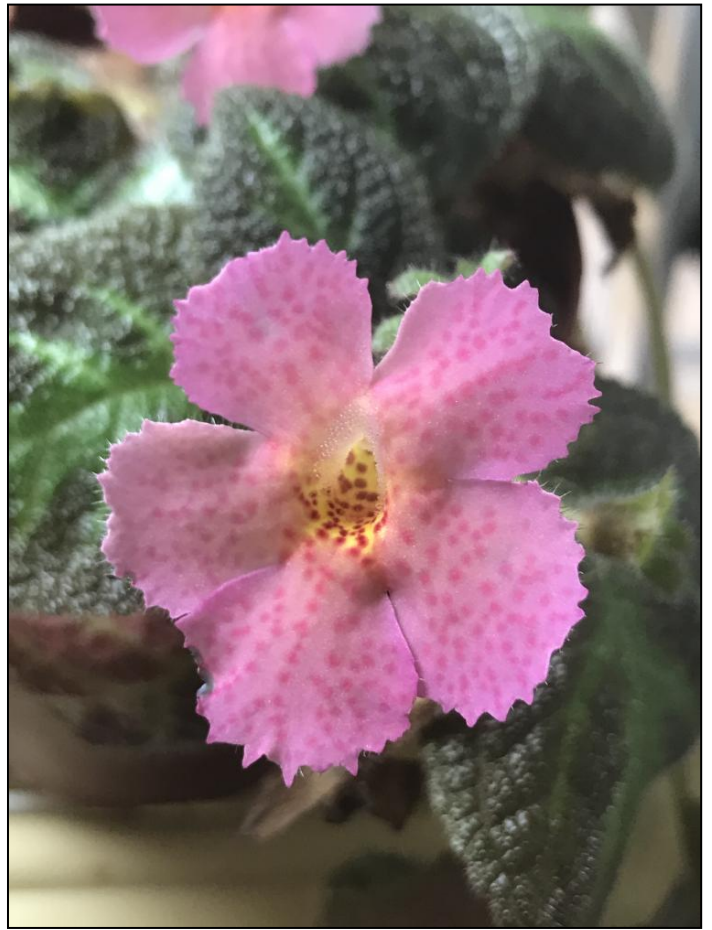
Dave Anderson's *Streptocarpus* 'Tequila Sunrise'



Barb's *Episcia* 'Cleopatra'



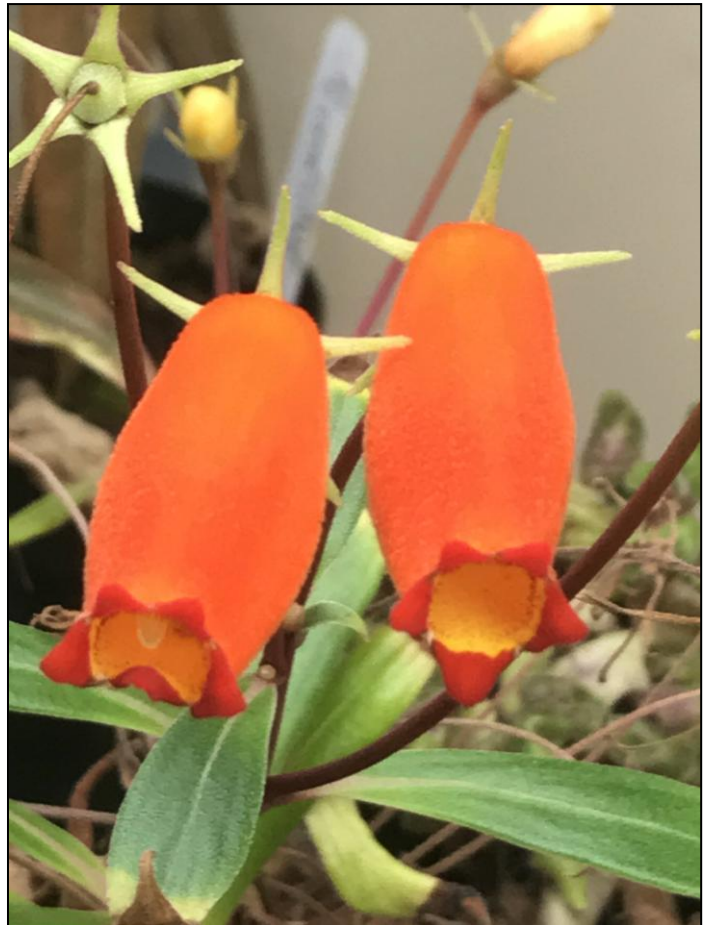
Barb's *Sinningia* 'Scoundrel x self'



Jim's *Episcia* 'Jim's Canadian Sunset'



Barb's *Saintpaulia* 'Lyon's Fireworks'



Jim's *Seemannia* 'Medea'



Brian's *Streptocarpus* 'DS Angelito'



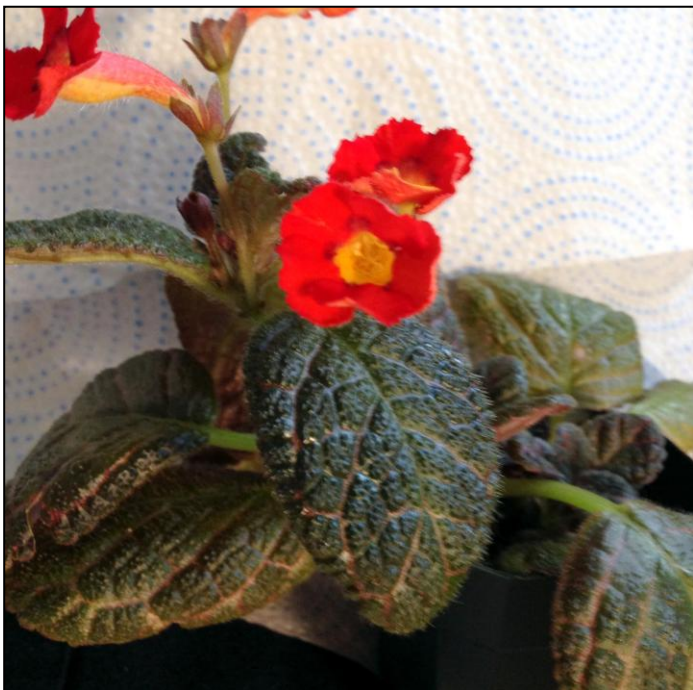
Brian's *Primulina* 'Kitaguni' close up



Brian's *Primulina* 'Kitaguni' full of buds and blooms!



Brian's *Streptocarpus* window this month! Awesome!



Donna's *Episcia* 'Butternut' and H&HV bloom



Hearts and Honey Vine blooms sure look like the *Episcia* 'Butternut'!



Dave's *Sinningia globulosa*



Dave's *Columnnea scheidiana*



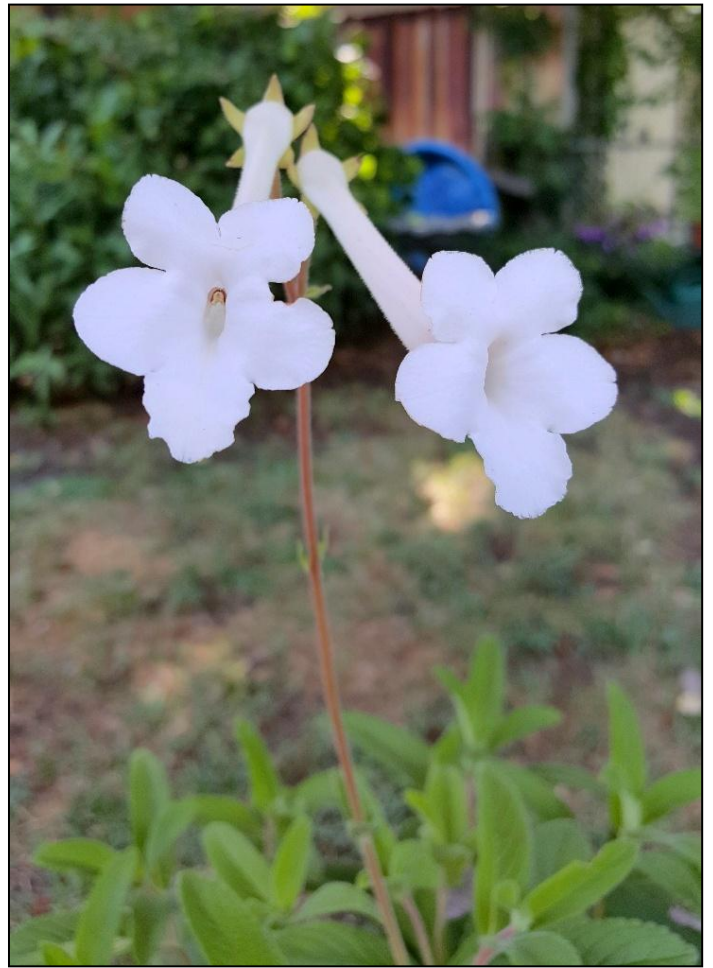
Dave's *Sinningia macropoda*



Donna's *Sinningia* 'Towering Inferno'



Barry's trays of beautiful Episcias in his greenhouse



Kitty's long awaited *Sinningia tubiflora* blooms!
Congratulations!



Kitty's *Streptocarpus* 'Angela'



Kitty's *Sinningia tubiflora* made a seed pod!



Kitty's *Achimenes* 'Deep Purple Dreaming'

Plants of the Month for 2017

February	<i>Lysionotus</i>
March	<i>Kohleria</i>
April	<i>Saintpaulia</i>
May	Show plants
June	<i>Nematanthus</i>
July	<i>Achimenes</i>
August	<i>Petrocosmea</i>
September	<i>Gasteranthus</i>
October	N/A
November	<i>Mini Sinningia</i>
December	<i>Streptocarpus</i>



Peggy: I would like to ask Mr G. about my sudden problem with my gesneriads, especially the streps. The leaves turned a silvery gray on my plant stand starting in June. I had to cut most of the plants back. Any idea of what conditions or disease could cause this problem?

Mr. G: Peggy, It sounds like powdery mildew. This is usually caused by high humidity, a large temperature drop at night (10-15 degrees, or more) and poor air circulation. This is usually a winter problem, but if the plant room gets warm during the day and cools off at night it can happen. Try running your lights at night. This will keep the temps from dropping as much at night and also prevent the heat of the day. Also make sure the air is moving around the plants. It doesn't take a lot of air movement - just a small fan moving air through the collection. Treat the infected plants by removing damaged leaves. Treat everything with one of the commercial fungicides or mildewcides, even Lysol. If you use an aerosol can, don't spray the leaves directly. The cold of the spray will do even more damage. Rather spray over the plants and let the mist fall onto the leaves. It's a very discouraging problem. Plants can collapse almost overnight. The best medicine is prevention: air movement and decrease temperature swings. Good luck.

Mr. Gesneriad is here to help you with your growing questions! Just send a message to the editor and our expert will answer your question in the next issue! Photos are a help if you have concerns about pests or other subjects when pictures can really help Mr. "G" understand your problem! petaltones@gmail.com

DON'T FORGET THE RAFFLE TABLE!

At every meeting our members bring extra plants, cuttings, supplies donate them to the raffle table. Tickets for the raffle are only 3 for a dollar and everyone who attends the meeting gets one ticket just for showing up (including guests). Here's what you'll see on the table at a meeting:

**Gesneriad plants, rhizomes, tubers, cuttings, seeds
Companion and/or garden plants, cuttings**

Programs Planned for 2017

- January 14 - workshop on growing in feather rock.
- February 11 - Propagation Workshop
- March 11 - *Kohleria* - an interesting and easy to grow rhizomatous genus.
- April 8 - African Violets with unusual leaves or flowers (bustle leaves, spooned, girl, longifolia, chimera)
- May 13 - Show workshop - making sure everything is ready for the show on the 20th
- Show schedule: May 19 – 21, 2017
May 19 - Show entries and set-up
May 20 - last minute entries. Judging. Sales and show open until Sunday, May 21 at 4.
- June 10 - Growing Gesneriads outdoors for the Summer
- July 23 - Picnic with Begonia Society at Johanna's home 1:00pm
- August 12 – Peggy's home subject TBA
- September 9 - Jim and Drew's Ecuador trip PowerPoint
- October 14th: Judge's Training at Jim's home 10-4pm
- October 21 (third weekend - Orchid Show on second weekend) – How to Grow Gesneriads
- November 11 - Miniature Sinningia - growing these small wonders in Glass Containers - GREAT HOLIDAY GIFTS!
- December - Holiday Party at a member's home.



Raffle table at our July picnic with the Begonia Society.

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Propagation: Barb Stewart/Donna Beverin

Membership: Jim Roberts

Ways and Means: Brian Connor

Show: Jim Roberts

Directors:

Victor Nicholas

Brian Connor

Ki Imai

NCAC website:

www.nationalcapitalgesneriads.org
web@nationalcapitalgesneriads.org

NCAC Facebook page:

<https://www.facebook.com/groups/174442276299173/?ref=bookmarks>

The National Capital Area Chapter of the Gesneriad Society welcomes all interested Gesneriad growers. The most familiar Gesneriad is Saintpaulia, more commonly known as the African Violet.

Dues are \$10 per year (email copy of current year's newsletter). Back issues from previous years available on website.

The international Gesneriad Society is a not-for-profit corporation dedicated to the study, growing and enjoyment of the gesneriaceae. Membership dues are \$25 /year for individuals and \$26 for a family. Benefits include seed fund of hard-to-find plants, reference materials, yearly convention & cultural webinars.

Membership requests should be sent to Bob Clark, 1122 E Pike Street, PMB 637, Seattle, WA 98122-3916. Membership includes a subscription to the society journal, Gesneriads.
<http://www.gesneriadsociety.org/>

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