Mt. Hood Gesneriad Society

December 2020 Newsletter

Cross of Smithiantha canarina x Smithiantha multiflora

December's featured plant:

Smithiantha -

By Joan Sirotiak

Smithiantha (pronounced smith-ee-AN-tha) is sometimes called Temple Bells and originates from the tropical plateaus of Central and South America (mostly Mexico and Brazil). It was named after Mathilda Smith, a 19th century botanical illustrator.

This plant's foliage is large and velvety and can range in color from green to chocolaty brown to a mottled mix of both, depending on the variety. It generally grows up to 18 - 20" tall, although some hybrids are available now in much more compact sizes, making them more conducive to growing indoors under lights. Smithiantha's blossoms hang from tall spikes and come in a wide range of colors including white, yellow, orange, pink, red, and purple, and can be plain, striped or multicolored. It is sold as a tuber or rhizome, but can also be grown from seed or stem and leaf cuttings.

Derek's seedling cross of Smithiantha canarina x Smitiantha multiflor pictured beside its mother plant, the yellow Smithiantha canarina

I acquired the above pictured beauty last fall at our club raffle from Derek, who had grown it from seed produced from a cross of Smithiantha canarina x Smithiantha multiflora (yellow x white with a yellow striped throat). It is slightly scented when you smell the blossom directly.

I was entirely lucky to be successful at growing it. When I first brought it home, I put it in an Eastern window and watered it like my African Violets without knowing much about it. I was SO dis-appointed when it appeared to spiral downward and die. I kept watering it, hoping it would come back, but after a month and a half, I figured it really was dead, and put it in my garage to recycle the pot later. It just happens that my garage is heated to 40 degrees to keep my dahlia bulbs healthy over the winter. I totally lucked out, because these were the exact conditions that it needed to come back to life in the spring! I have since learned that this plant goes into a dormant period after it is done blooming!

Smithianthas like to be kept in soil and environments similar to African Violets – same lighting, well drained potting mix that is kept consistently moist, an environment that is a bit higher in humidity, and at temps around 65-70 degrees. After blooming in the late fall or winter, it dies

Above: Smithiantha "RF Nefertiti"
Middle: Smithiantha "Top Design"
Bottom: Smithiantha cinnabarina
Photos by Derek Johnson

back and goes into its dormant stage, when it likes to be keep drier and at cooler temps – one internet source says not more than 53 degrees. Although much detailed info is hard to find about this plant, one internet source declared that it is possibly hardy to 15 degrees. A stem that accidentally broke off at soil level rooted easily in Pro-Mix BX potting soil mixed with 50% perlite for me in spring, and followed through to produce 16 blooms in early November. The original plant produced 36 blooms, and multiplied to six stems.

Since my plant was obtained from Derek, and he is much more experienced at growing them, I reached out to him for more photos, tips, and growing advice to share with you.

From Derek: -- "Smithianthas like very bright light, even a bit of cool direct sun for a few hours. Keep them moist, only allowing to barely dry on the top in between watering. If they get even a bit too dry, they may take some damage to the leaves. Make sure to not keep them soggy either. Soil should be a standard Gesneriad mix with extra perlite for drainage. They like high humidity, at least 50%. Powdery mildew can be a serious disease for them, but lots of information on the web exists for treatment. For rhizome planting, I place them about an inch deep as soon as the rhizomes begins to sprout. Keep them moist from this point forward. Young plants are especially prone to damage from drying out.

In about six to eight months from planting, they should begin to bloom. After blooming, the plants will gradually begin to dry up. During this time, they are growing more rhizomes, and it's important to keep watering, though you want to allow it to get drier for longer periods of time in between watering.

Once the leaves are mostly dry, stop watering all together. You can dig up the rhizomes then, and store them in a small amount of barely damp soil. Emphasis on barely damp; if it has even a bit too much moisture, they will grow mold. They begin to sprout again anywhere from two weeks to six months depending on temperatures and other mysterious factors. They do what they want and sprout when they want, so it's good to consistently check them."

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A MESSAGE FROM OUR PRESIDENT

Merry Holidays!

For many of us, this is the time of the year when we slow down and spend time with family.

It's a time for baking, decorating, and making merry. Last year I was excited and nervous to host the Mt Hood Gesneriad Society group here at home. This year, the house is quiet, and I find myself organizing everything, caring for the many extra plants I've acquired, and I'm staying busy to pass the time.

I'm happy to report that both nurseries where I work are working hard to have plants ready for the 2021 gardening season. As always, we have that hope that all gardeners and growers have for the future. People are still buying plants, planning for great projects for the future, but times are tough. I cannot deny that.

There is a lot of uncertainty yet for 2021 and I'm the most cynical optimist you will ever meet. Our club has held together, and I think that we'll be meeting together again soon. I hope by the end of 2021 we'll be established again in a new home, and before then, if things go well enough, we can meet again outdoors during the warmer months. Thank you all for your involvement and know that I'm thinking about you and am hoping you and your families are safe and well.

Our regularly scheduled meeting for December has been cancelled. I am honestly exhausted. If you don't hear from me again until next month, please, have a Happy Hanukkah, Warm Winter Solstice, Festive Festivus, Merry Christmas, Grand New Year, and a quiet Epiphany. Just reading this list makes me tired.

Ann Amato

OUR NEXT MEETING

Date: Saturday, January 9th, 2021

Location: All of us at our own homes connecting through ZOOM on our computers!

Time: 11:30 am - 2pm

Current members will be sent the Zoom invitation with the link in a separate email. It is very easy…just click on the link and it will take you to the meeting room. No need to even be registered with ZOOM. If you're not a current member of our club, but would like to join in our ZOOM meetings, please send a request to mthoodgesneriadsociety@gmail.com and an invitation with a link will be sent to you too.

Show and Tell plants are fun to share and you can certainly show them off during the meeting, but if you'd like to send photos to make it easier for us to see them on the screen, photos can be sent to Ann in advance and she will make a file of photos for the meeting. Send photos to ficurinia@gmail.com if you're interested in this.

We will be voting to approve club officers during the January meeting.
Here is our slate of officers for the board for 2021:

President: Ann Amato
Vice President: Jaimi Konrad
Secretary: Hal Shrauger
Treasurer: Patti McCarthy

If you cannot be at the meeting, please send your yea or nay so that we can have a quorum to mthoodgesneriadsociety@gmail.com.

The presentation at this meeting will be on Streptocarpus. Joan and Jaimi will be putting their heads together to share some tips on growing and propagating.

News

Volunteers Needed!

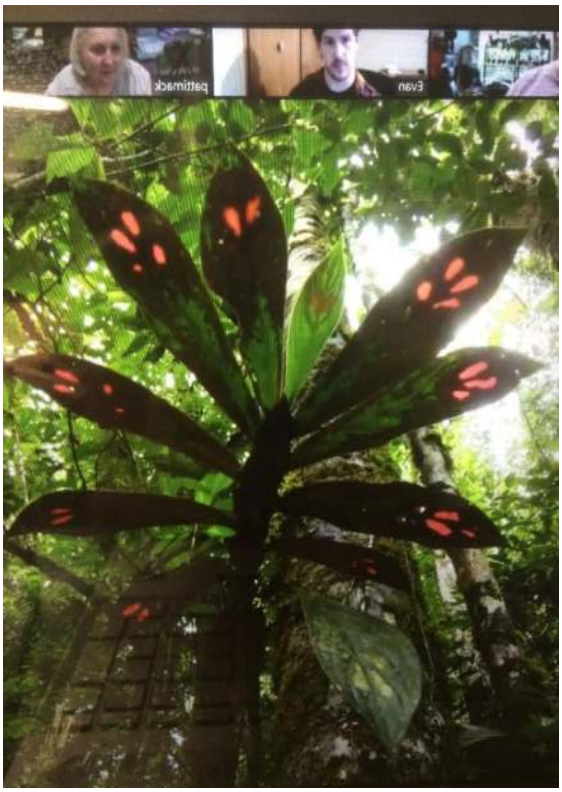
- Please send in plant pics for our newsletters, especially if you can't make it to meetings. We miss hearing from you.
- We need someone to volunteer to take notes at meetings if our Secretary is unavailable. Ann has been doing it and it's difficult to run a meeting and take notes at the same time.
- We need people to create presentations to share in the months ahead. Zoom will likely remain our meeting room of choice so we have a few more slots open for people to share their experiences or expertise with the rest of us.
- We'd like to have one volunteer to look for pertinent content once per month for the newsletter. Just one small piece on something related to our beloved hobby.

To volunteer for any of the above, talk to Ann, or shoot her an email at:
mthoodgesneriadsociety@gmail.com

Summary of the last meeting

Notes from the November 12 Meeting:

In Attendance on Zoom: Dick, Jaimi, Joan, Chris, Evan, Ann, Derek, Patti, and Pieter. Because we were on Zoom, a friend of Ann's, Billye Timbes from South Carolina, was able to join us!



We did a Show and Tell, which worked out quite well. (There are some wonderful advantages to having meetings on Zoom!) Ann, Chris, Jaimi, Derek and Joan all shared plants they have been growing.

We discussed a vote for officers, but it was decided we delay the vote until the next meeting and let everyone know who was running via this newsletter ahead of time.

Patti presented the Treasurer's Report and let us know she still has some cork available for mounting plants. Cost would be under $8 for each piece. If anyone is interested in some, please contact her at plantasia@mccarthyhouse.com . She also has fabric for matting available for sale, and can send a picture so that you can see it before purchasing it.

Ann presented an interesting webinar on different kinds of Columnea.

Above: Ann and Oliver share her Begonia reniformis 'Santa Teresa' with the group in Show and Tell time.

Below: Ann's presentation on Columnea included beautiful shots of a number of different Columnea. This is a screen shot of our Zoom room with Columnea dimidiata, from the cloud forest, Valle del Cauca, Columbia (photo by David Haelterman.)

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Upcoming Events

January 9: (Saturday): Regular Monthly Meeting via Zoom: 11:30-2:00
Annual Election/Business Mtg. & TBA
Socializing 11:30-noon. Business from noon to 1:00
Joan's presentation on Streptocarpus begins at 1:00

February 13: (Saturday): Regular Monthly Meeting via Zoom: 11:30-2:00
(Evan will give a presentation on Primulina)

March 13: (Saturday): Regular Monthly Meeting via Zoom: 11:30-2:00

April 10: (Saturday): Regular Monthly Meeting via Zoom: 11:30-2:00

April 17 & 18: Hortlandia: The Hardy Plant Society of Oregon's Plant & Garden Art Sale

Dealing with Pests

Article by Joan Sirotiak

I have always had an interest in houseplants, but it was not until I retired that I have had the time to make them an official hobby. I joined a couple plant clubs and joyfully started collecting what my husband would classify as WAY too many plants! The relatively small number of houseplants I had successfully grown in the past did nothing to prepare me for the gritty reality of the possible contagion of pests and diseases when you bring plants into your collection from other sources -- even from professional nurseries!

I was so naïve at the start of my new adventure, it wasn't even on my radar to be informed about what pests were out there, how to identify a problem, or how to set up protocols to more safely add new plants. Unfortunately, I have learned the hard way that there isn't an easy one-time chemical solution to every pest problem, and that a 30-day quarantine (even a 90-day quarantine) can be entirely ineffective for some pests! I have decided to share my experiences each month in this column so that I might help raise your awareness, provide solutions that work, and hopefully help you avoid problems altogether!

Soil mealybug under magnification

Soil Mealybugs

This first article covers Pritchard's Mealybug. There are two kinds of mealybugs - those that live on and eat foliage, which are more easily seen, and those that live in the soil and feed on roots. Although there are many kinds of mealybugs that attack different species of plants, Pritchard's is a soil mealybug that commonly attacks the roots of African Violets, streptocarpus and other houseplants.

This menace from below slipped into my collection when I bought a lovely streptocarpus at a plant sale. It looked very healthy, but I still put it into quarantine for 3 months. After, I put it with my other streps on a mat wicking tray. It looked fantastic, and was blooming regularly. When it suddenly wilted, I assumed that it had something to do with the fact that its soil had dried out a bit too much when I was a little late watering one time, damaging the roots. I did not remove it from the other steps, as I immediately should have done, but crossed my fingers and hoped that it would come back, since there were two small leaves left at the crown. Little did I know that if I had acted right away, I could have perhaps stopped an enemy that was planning the take-over of a significant part of my collection!

Identification

Plants exhibit a few initial symptoms that may clue you in to the presence of mealies. The leaves might yellow or suddenly wilt, or the plant may grow abnormally slow or fail to flower.

One can ultimately confirm an infestation of soil mealies, however, by pulling a plant out of its pot and examining its roots and soil. The mealies look like miniature grains of rice. Although you can easily see them with your naked eye, some sort of magnification can be very helpful in light infestations. Mealies are sometimes hard to differentiate from perlite, but if you squeeze a suspect between your fingers, it is easy to tell them apart. Perlite is hard, and mealies are soft and squishy. By sight, perlite is irregular in shape, mealies are perfectly oval.

Pulling a plant out of its pot can easily reveal an infestation of mealies that you had no idea was there. Note that you can see the tell-tell white fluff that accompanies the eggs.

Another tell-tell sign is the presence of little cottony masses of fluff which are deposited along with the eggs in the soil, on the roots, and on the insides of the pot. If you water by wicking, you will often see adults in the reservoir water or on the mats, or there will be an oily white film floating on the water, or both. I water by wicking most of my plants, so I first noticed them on the mats under the my streps.

I immediately called the person I purchased the infected strep from, and she confirmed that she had had mealy problems, but had treated them with a systemic, and thought they were gone. I don't especially blame her for my problem. It turns out that mealies are so difficult to get rid of, veteran hobbyists most often recommend taking leaf starts from your collection to start anew (after cleaning with rubbing alcohol to destroy any eggs) and immediately discarding all infected plants.

I learned an important lesson from my experience. The often recommended 30-day or even 90-day quarantine periods are simply not long enough to safeguard against some pests. I had quarantined my strep for 3 months before adding it to my collection, but the plant didn't wilt, nor the mealies come to my attention, until over an additional month later. Perhaps the chemical wasn't applied correctly, or didn't reach a particular pocket of soil. If just a few mealies somehow escaped the treatment, they would live on to multiply until numbers were sufficient to be noticeable again. As a side note, I have since also discovered that when a systemic has been used

on a plant, sometimes it only suppresses a particular pest rather than kills it off, so once the chemical is no longer effective, the pests are free to multiply again. Read product labels, which can clue you in to these exceptions.

The most surprising thing about my mealybug experience was how the infestation spread throughout my collection. A dark wood table that I had one plant setting on clearly showed that mealies can crawl a fair distance, as I easily saw the white mealies on the table top at least a foot and a half away from their initial home. You would expect them to infest nearby plants. But the pattern of infection wasn't easily explainable, as the streps were on the bottom of one shelving unit, but plants on the top shelves of other units became infested, while plants in between never got them.

Watch wicking mats for the appearance of mealies. Unfortunately, you have a heavy infestation once they appear like this. They seem to explode to large numbers almost overnight.

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One of my plant friends swears that she is convinced from her experiences that fungus gnats carry the young or eggs to other pots. I couldn't find anything online to confirm this, but the point is, somehow, they can travel to places that you wouldn't imagine. You can't just check adjacent plants, but you must be vigilant over all your plants, and getting immediate control of an infestation is paramount to mitigating how many of your plants will be affected.

Treatment

If you do research online, you will find many opinions about how to deal with soil mealies. I joined some Facebook groups and searched through their posts, did Google searches, and talked to local nurseries and hydroponic shops. Since there was a lot of conflicting information, I chose to experiment with four options, and treat my problem like a science experiment to find what would work for sure. Following are the things I tried, and what outcome resulted.

Method 1: Remove <u>all</u> soil from the roots and wash roots/plant with soapy water. After I gently removed most of the soil with my fingers and a toothbrush, I squirted very soapy water (I used about 5 - 6 drops of Dawn or Ivory per quart of water) from a spray bottle to wash <u>every</u> bit of soil off. I did this over a great big kettle, then boiled this contaminated water to completely kill everything before I threw it away outside. (Be aware that you can get infestations outside too. Some annuals purchased at a well-known nursery last summer spread soil mealies into my outside flower garden! Now I examine the roots of every plant I acquire.)

I also washed the leaves with soapy water. After rinsing thoroughly with clear tepid water, I replanted in new clean pots in a soil and perlite mix that had been disinfected and cooled. In a few postings on Facebook, people suspected that some of their purchased soil and perlite contained mealybug eggs or other pests. They recommended pasteurizing the soil by putting it in the microwave on high for 5 minutes. Be aware that this will kill off any beneficial mycorrhizae that may have been added to benefit your plants in some mixes. Because I was experimenting, I wanted to control this factor. This would be unnecessary if you trust your soil source.

The cleaned and repotted plants were then covered with a dome or Ziplock bag to maintain higher humidity while they were regrowing roots. **Result:** VERY time consuming, but every plant I did this to was "cured". You have to be really careful not to include too much moisture in the soil, especially in the Ziplock bags. I lost several plants to rot after a few weeks. I think I should have opened the bags after the first week for better results, and/or used much less water to wet the soil. Plants that I did not successfully remove all soil from became reinfected later. Fortunately, I stuck a bright red marker tab in these, moved them all together in one isolated tray and kept an eagle eye on them, so I caught them early when the mealies came back.

It is more difficult to identify soil mealies when their rate of infestation is low, but you can often see the white cottony fluff that accompanies their eggs by moving the soil around a bit and looking closely at the roots.

Method 2: Hot water treatment. This was recommended on several state university websites. Immerse the whole pot and soil in a bowl of 120-degree water for 10 to 15 minutes, making sure that the water always remains at 120 degrees. This is supposed to kill mealies and eggs. One site recommended putting the entire plant under the hot water. All survived just having the soil held under the hot water, but some of the plants that I fully immersed died. **Result:** Either way produced some success, and some failure. I was unable to figure out why it worked for some and not others. In two instances, it took 4 months for the mealies to come back to a level where I noticed them. In one instance, they returned in two weeks. One site claimed you must insert a thermometer into the root ball to ensure that the temp maintains 120 degrees there, which I did not do. So, perhaps I didn't achieve 120 degrees throughout the root ball sometimes. In my opinion, it's thumbs down for being reliable every time.

M**ethod 3: Spraying plant and saturating soil with Pure Crop One.** This is a nano technology product that was developed to kill a variety of pests for the marijuana industry and is completely non-toxic. I got it at The Green Future hydroponics store in Wilsonville. It effectively kills the mealies, but does not kill the eggs because it does not contain alcohol, so the company recommends that you keep saturating the soil and spraying the plant every two to three days until you are sure you have killed everything that hatches. Since it is completely nontoxic, it requires no protective gear, and you can safely spray this in your home. There is no smell, nor any residue.
Result: I had too many plants to do this faithfully. It definitely killed the mealies though, and could possibly be used in combination with another method. A side benefit is that it kills mites, aphids, thrips, white flies, leaf hoppers and their larvae, Botrytis, Fusarium Wilt, and Downy and Powdery mildew. It is around $40 for a concentrate that mixes with water to make 16 gals.

Method 4: Applying Marathon 1% Imidacloprid granules onto the soil of infected plants and watering it in. Websites suggest sprinkling ¼ teaspoon on the soil of a 4" pot and carefully watering it in in without leaching it back out of the soil for at least 10 days. The downside is that

long-term health risks are unknown, and using this chemical requires certain safe handling protocols (i.e., you need to wear gloves when you come into contact with the soil, etc. – be sure to read the instructions). But I have friends who recommend only this and I have read on Facebook plant groups that this is the only tool we have to seriously beat a soil mealybug problem if a great number of plants are involved. Imidacloprid is systemic after being taken up into the plant, and produces a residual effect that keeps working for about 12 weeks. It also kills white flies, aphids, and gnat larvae (not adult gnats) as well as leaf (but not blossom) thrips.

Since I seem to have collected quite a number of plants, and other methods were either too time-consuming or unreliable, I have recently resorted to trying this on my reinfected plants. It took carefully watering it in twice, and 2 weeks before mealies quit leaving the streps (which I could see on my dark table top). But I have not seen them for two months now. I am waiting to see if mealies come back after 12 weeks if I don't add more Marathon. I will keep you updated when I determine if it is a permanent fix or not. I do suspect that it might not be, since the woman I got my infected strep from had probably used Marathon, and mealies showed up 4 months later. (However, she may not have used it correctly, etc., so I'm doing my own experiment.)

A white oily film often appears on top of the water in the wicking reservoir. It is advantageous to use glass containers for individual wicking, because you can spot a soil mealie infestation more quickly, and they are a little bit more isolated from your other plants. Although the adults are present here, sometimes the film appears without them.

Marathon 1% usually comes in 5 lb. containers for around $75. The manufacturer says that it is good for only up to 3 years after opening. Some plant clubs buy one big container and share it so that it is used up before it becomes ineffective. Some people prefer to buy Bonide Systemic Houseplant Insect Control, a product that contains .225% imidacloprid, (about 1/5th the amount of the same active ingredient) because it comes in much smaller amounts. Theoretically, one must use 5 times as much, or 1 ¼ teaspoon per 4" pot.

Conclusion

Soil mealies are incredibly hard to completely eradicate. Because of time constraints, and the number of plants I have, I currently favor Method 4 using Marathon. Only time will tell for sure if it works for me long-term. If it doesn't, I will most likely resort to washing all the soil off the roots of a few of my very favorite plants (Method 1) and then heeding the advice of the seasoned hobbyists - I will take leaf starts to begin anew and discard everything else.

Most important, after all my efforts and frustration, I must finally conclude that prevention is worth much more than pursuing a cure! It is critical to develop a strict protocol for safely bringing new plants into our collections.

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Photo Gallery

Photos of Gesneriads by our members

Top left: An unnamed chance seedling Sinningia at Cistus Nursery originally from the San Francisco Botanical Garden.

Top right: Ann's recent purchase obtained as Streptocarpus difficile.

Bottom right: Most of Ann's Sinningia collection in the Seed Studio this winter.

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Please let us know if you have any announcements or information you'd like to share with the group, or if you have any questions. Contact us at: mthoodgesneriadsociety@gmail.com

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