



Gleanings

a monthly newsletter from The Gesneriad Society, Inc.

(articles and photos selected from Chapter newsletters, our journal GESNERIADS, and original sources)

Volume 2, Number 2

February 2011



Welcome to the latest issue of **Gleanings!** This issue includes photos of Nancy Kast's growing area, Jeremy Keene on *Diastema* and *Monopyle*, Dale Martens on seeds, and a new Coming Events page.

Hope you enjoy **Gleanings!**

Mel Grice, Editor



Chirita 'Dreamtime' — photos courtesy of Kyoko Imai

Chirita 'Dreamtime' is a John Boggan hybrid of *Chirita* sp. 'New York' and *Chirita flavimaculata*. It puts out flower spikes about 2 feet (60. cm) tall bearing clusters of flowers. Although all of the flowers do not open simultaneously, there may be some 20 open at a time per spike. Al Pickrel (Leesburg, Virginia, USA) grew this plant. It was just a small pup when Kyoko Imai determined it would not grow well for her and asked Al to care for it. The photograph was taken at Al's Orchid Greenhouse (www.orchidexchange.com). Kenneth Moore, one of the new Petal Tones editors for National Capital Area Chapter, was lucky enough to visit this huge plant and received a cutting to root for himself!



A Visit to Nancy Kast's home in San Antonio, Florida, USA



Nancy's husband, Jerry, installed a drip irrigation system for her hanging baskets.

Florida temperatures require air conditioning that removes a great deal of moisture from the air. Plastic sheets are draped over light stands to provide more humidity for the plants. Small fans placed around the room circulate air.

No space is wasted as you can see.







Primulina tabacum



This room used to be a bathroom.

Photos by
Mel Grice



Gasteranthus tenellus

Diastema and Monopyle

Jeremy Keene <jeremy496@mac.com>
Athens, Ohio, USA

Jeremy Keene received \$4,500 from **The Nellie D. Sleeth Scholarship Endowment Fund (NDSSEF)** to continue his work on Gesneriaceae. Mr. Keene is currently undertaking research for his Ph.D. degree at Ohio University in Athens, Ohio. Jeremy's thesis topic is a revision of *Diastema* and *Monopyle*. The following is taken from a poster he presented at the 2010 World Gesneriad Research Conference in Sarasota, Florida, USA.

Diastema and *Monopyle* are two closely related genera within the tribe Gloxinieae. They are both terrestrial understory herbs distributed from Mexico southward through northern South America. The two genera combined comprise approximately 40 species currently, but this number will increase as my study progresses. Several species of each genus are only known from the original collections or privately cultivated specimens. While these genera are of horticultural value their habitat, biogeography, and speciation processes have not been studied extensively. The two genera are morphologically diverse and will require thorough examination to properly define the different species. *Diastema* is distinguished by having a nectary with five fingerlike projections, a bi-lobed stigma, and flowers usually white with purple spotting.

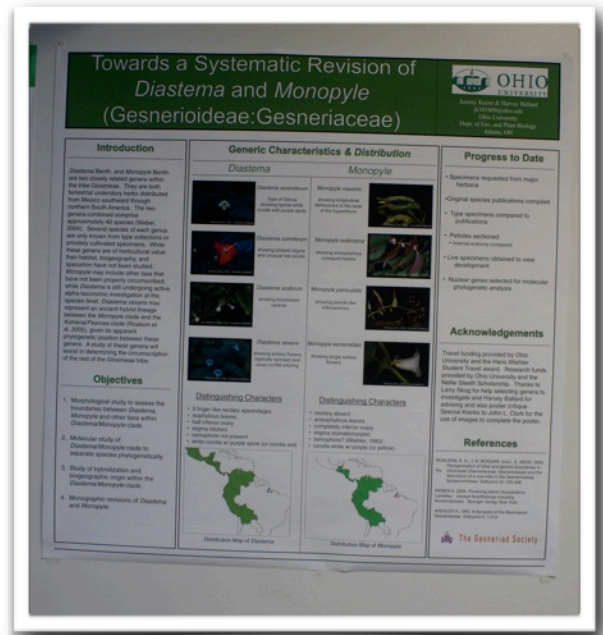


Photo below showing typical floral colors
Diastema vexans USBRG 2002-153
photo courtesy of Dr. John L. Clark, UNA

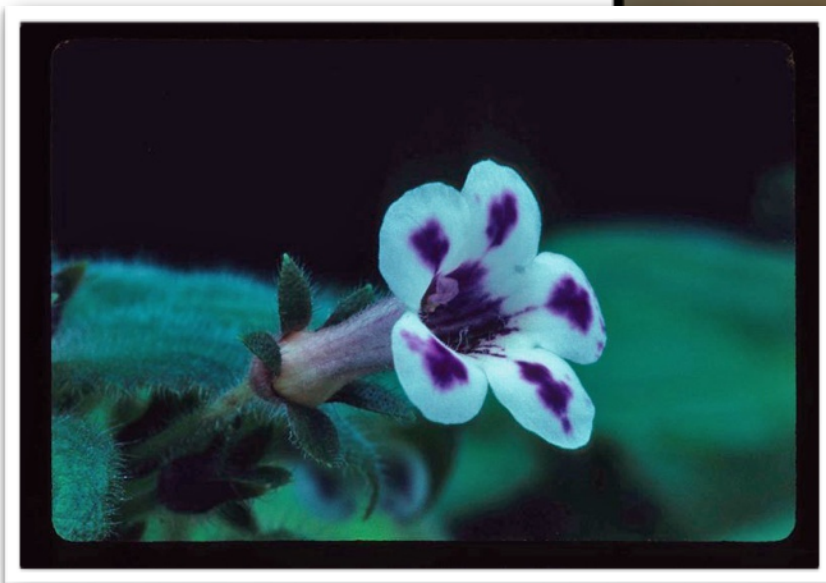


photo courtesy of Jeremy Keene, OU

Monopyle typically does not have a nectary or a lobed stigma and has opposite leaves of two different sizes (anisophyllous). A study of these genera will assist in determining the placement of the rest of the taxa within the Gloxinieae tribe.



Monopyle sodiroana
photos courtesy of Dr. John L. Clark, UNA

Objectives of Study –

1. Morphological study to assess the boundaries between *Diastema*, *Monopyle* and other taxa.
2. Molecular study of *Diastema* and *Monopyle* to delimit the taxa.
3. Study of biogeographic origin within *Diastema* and *Monopyle*.
4. Monographic revisions of *Diastema* and *Monopyle*.



Monopyle paniculata
Shows anisophyllous leaves and branched inflorescence



photos courtesy of Dr. John L. Clark, UNA

Progress to Date

Currently approximately 2,000 specimens (including multiple types of *Diastema* and *Monopyle*) are on loan from Missouri Botanical Garden (MO), Field Museum (F), New York Botanical Garden (NY), Leiden (L), Marie Selby Botanic Gardens (SEL), The Smithsonian (US), and Kew (K). Other herbarium requests have been submitted and should be received soon. A database using BRAHMS has been created to input all specimen label data. Specimens on loan have been separated based on locality and morphological characters (leaf shape, flower, and calyx). Floral dissections are

being made to view diagnostic characters of the flower (nectary structure and stigma shape). All of the original species descriptions have been compiled for use in comparing specimens. Seeds and plants have been received from The Gesneriad Society, Inc. and other institutions to grow fresh material in the Ohio University greenhouses. These materials will be used to examine internal anatomy. Dried specimens of a new species of *Monopyle* have been sent by Dr. John L. Clark (University of Alabama) to describe and add to future studies.

The Annual Appeal

The Gesneriad Society's Annual Appeal needs your help. A donation to the Elvin McDonald Research Endowment Fund will help fund the type of research you are reading about in this issue of **CLEANINGS**. A donation to the Nellie D. Sleeth Scholarship Endowment Fund will help a deserving student continue his or her studies involving gesneriads. Go to <http://www.gesneriadsociety.org/Donate/donatespecial.htm> to learn more.

Back to Basics: Seeds

Dale Martens <dalemartens@mchsi.com>
Sherrard, Illinois, USA

Gesneriad seeds vary quite a bit in size and shape. Some rhizomatous gesneriads such as *Eucodonia*s have seeds as fine as dust. Even the largest gesneriad seeds (probably *Codonanthes*) are still quite tiny. Therefore, when you work with seeds you need to watch the direction and force of your breathing and stay away from furnace or air conditioning ducts. Seriously!

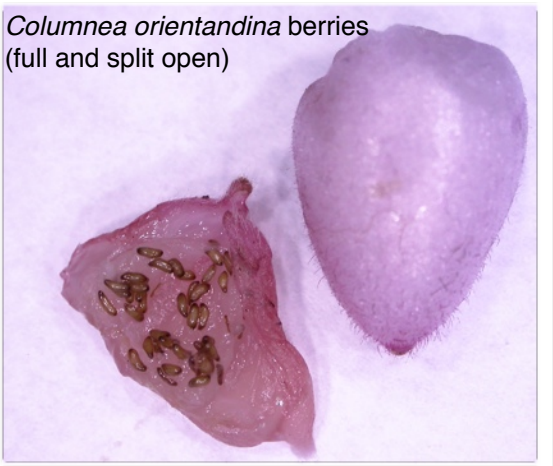
If your plant has a dry capsule (like a *Sinningia* or *Streptocarpus*), wait until the capsule has fully dried and turned brown before removing it from the plant. Take a 4"×4" piece (or larger if you are processing several capsules) of white or light-colored paper and fold it in half. Write the name of the plant on the paper. Now split open the ripe seedpod over the paper and the seeds will fall into the folded area. I use a straight pin or toothpick to scrape inside the pod. You can remove the chaff by just barely wetting the tip of a toothpick and touching the non-seed material to lift it away from the seeds.



Sinningia dry capsule, split open, and seed

If your plant has a berry (like a *Columnea*), watch for it to ripen and change color and maybe turn a bit opaque. The berry is ripe when it will easily separate from its base after gently rocking it back and forth. (If there is resistance, the berry is not yet ripe and you should check it again in a few days.) Pick the ripe berry and squish out all the pulp and seeds from the outer skin onto a sheet of white paper that has been folded in half creating a crease down the center. Write the name of the plant on the paper. Discard the outer casing of the berry and spread the seeds and pulp out in a thin layer using your index finger. (The pulp may be watery or thick

Columnea orientandina berries
(full and split open)



depending on the variety.) Let that spread-out mixture dry on the paper for a day or two. Again using your index finger, very gently rub the seeds on the paper and they will release from the dried pulp. Folding the paper at the pre-formed crease will allow the seeds to gather there for transfer into seed storage packets.

There's a complication for capsules on some gesneriads like *Nautilocalyx pemphidius* or *Diastema latiflorum* if grown in high humidity. I found when those ripe capsules split open, often the seeds quickly sprout inside the capsule before one can harvest them. In that case, it's best to lift the tiny seedlings out of the capsule, and place them in high humidity, perhaps in the same container with the mother plant. You'll have to share plants rather than seeds.

If your plant has a fleshy capsule (like an *Episcia* or *Nematanthus*), and there are many different shapes and types of these, the way to remove the seeds may vary but basically is similar to one of the methods described above. The fleshy capsule can be like a dry capsule but the seeds may be somewhat sticky and/or be surrounded by a small quantity of pulp, in which case you would remove the almost-dry seeds and spread them out on a paper to dry completely. The fruit may also be a fleshy berry-like capsule that looks like a berry but has a suture line (or several) or may be a display fruit that splits open and exposes its seeds like some *Drymonias* and *Nematanthus*. Again, the seeds may easily be picked out or scraped off the interior walls of the fruit and then spread out on a paper to dry completely.

Decide what percentage of the seeds you'll set aside to sow and/or donate to The Gesneriad Society Seed Fund. I store seeds on tissue paper, either the type for hair perms, or I cut up gift tissue paper into about 2"x3" rectangles. The tissue paper is folded in half, then folded in from the sides and down from the top so that seeds will not escape when I put the packet into a small envelope with the genus and species name or the names of the hybrid's parents (seed parent's name first) and the date of harvesting. To store seeds, I purchase wax-paper-type glassine envelopes either on the Internet or from a local stamp collecting club that purchases in bulk. I sort the envelopes by genera so it's easy to find what I'd like to sow. I store the envelopes in a plastic container with a snap lid and put the container in the refrigerator. Next time we'll discuss sowing the seeds as some of you may not have sown your mixed seeds that came with your new membership.



Diastema latiflorum plantlets
sprouting in the seed pod

This article appeared originally in GESNERIADS Vol. 60, No. 4, Fourth Quarter 2010, Jeanne Katzenstein, editor. Read other interesting articles like this about gesneriads by becoming a member of The Gesneriad Society and receiving our quarterly 56-page journal.

Coming Events

February 19 — Arizona — Desert Sun African Violet & Gesneriad Society of Phoenix show and sale "Mardi Gras" at Valley Garden Center, 1809 North 15th Ave. (1 block north of McDowell Road.), Phoenix. Saturday: sale 9 a.m. to 4 p.m.; show 11 a.m. to 4 p.m. Contact Ann Stoetzer <anncie@cox.net>.

March 12 & 13 — Colorado — Rocky Mountain African Violet Council and Gloxinia Gesneriad Growers judged spring show and sale, Tagawa Garden Center, 7711 S. Parker Road, Centennial, CO 80016. Friday 10 a.m. to 4 p.m.; Saturday 11 a.m. to 4 p.m. Contacts Nelly Levine <NLevine@msn.com> or Ann Watterson <cah2oson@msn.com>.

March 19 & 20 — Illinois — Northern Illinois Gesneriad Society Show and Sale "Gesneriads and Antiques — Plants For All Ages" at the Chicago Botanic Garden, 1000 Lake Cook Road, Glencoe (847-835-5440). Saturday 12 to 4:30 p.m.; Sunday 10 a.m. to 4:30 p.m. Contact Susan Bradford <asusan.bradford@abbott.com>.

March 19 & 20 — Washington — Puget Sound Gesneriad Society judged show and sale at Swansons Nursery, Seattle. Saturday 12 to 6 p.m.; Sunday 9 a.m. to 4 p.m. Contact Rohm Gustafson <lightgarden@clearwire.net> (206-255-3136).

March 26 — Ontario, Canada — Toronto Gesneriad Society annual show and sale "Gesneriads Love Classic TV", in the upstairs studios at the Toronto Botanical Garden, 777 Lawrence Avenue, East, Toronto. Saturday 9 a.m. to 5 p.m. Admission \$2; parking free. Contact Doris Brownlie (905-270-6770) <jtbrownlie@idirect.com>.

April 2 & 3 — California — Capital City African Violet Society judged show and sale, Sacramento Garden & Arts Center, 3330 McKinley Blvd., Sacramento, CA 95816. Saturday 1 to 4 p.m.; Sunday 11 a.m. to 3 p.m. Free admission and parking. Contact Lynn Lombard <lynn_lombard@att.net>.

April 2 & 3 — New Jersey — African Violet Club of Morris County show and sale "Violets Do Arts & Crafts" at Frelinghuysen Arboretum, 53 E. Hanover Avenue, Morristown, NJ. Saturday 1:30 to 4:30 p.m.; Sunday 11 a.m. to 3 p.m. Contact Karyn Cichocki <kdc05@ptd.net>.

April 2 & 3 — New York — Gesneriad-dicts of Western New York show and sale "Elemental Gesneriads" at Perinton Square Mall, Fairport, New York. Saturday 12 to 6 p.m.; Sunday 11 a.m. to 4 p.m. Contact Laura Buckner <lbuckner@brockport.edu>.

Convention 2011

The Gesneriad Society's
55th Annual Convention
Loews Philadelphia Hotel
1200 Market Street
Philadelphia, PA, USA
July 5-9, 2011
Hosted by the Liberty Bell Chapter





From the editor —

I just returned from the Gesneriad Society Board Retreat in Atlanta. Look for photos in the next issue.

See more Coming Events on the Society's website www.gesneriadsociety.org. Please continue sending photos and articles. If you have suggestions, comments, or items for possible inclusion in future issues, please feel free to contact me at editor.gleanings@gesneriadsociety.org.

Mel

Consultants Peter Shalit
Jeanne Katzenstein

Internet Julie Mavity-Hudson
Communications Paul Susi

Newsletter Mel Grice
Editor 2019 Crosswind Ct.
Englewood, OH
45322 USA

editor.gleanings@gesneriadsociety.org

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The Gesneriad Society, Inc. is a tax-exempt organization with an IRS section 501 (c)(3) status for donations. You can make your donations online at www.gesneriadsociety.org. You may also send your donation (check payable to The Gesneriad Society) to:

Paul Susi, Development Chairperson
117-01 Park Lane South, Apt. C1A, Kew Gardens, NY 11418
For additional information, contact: [<development@gesneriadsociety.org>](mailto:development@gesneriadsociety.org).

Membership and Changes of Address

The Gesneriad Society Membership Secretary, Bob Clark,
1122 East Pike Street, PMB 637, Seattle, WA 98122-3916 USA

Changes of Address — Send changes of address to the Membership Secretary [<membership@gesneriadsociety.org>](mailto:membership@gesneriadsociety.org) 90 days prior to moving to avoid missing an issue. The Society is not responsible for replacing issues missed because of late notification of address changes. Back issues may be ordered from The Gesneriad Society Publications.

Renewals — Send dues to the Membership Secretary. A Renewal Notice is sent two months prior to the expiration date of your membership. (The expiration date is printed on your mailing label/membership card on the back cover of GESNERIADS.) Please remit your dues prior to the expiration date to avoid missing an issue as we are not responsible for replacing issues missed because of late payment of dues. Back issues may be ordered from Publications.

Application for Membership — *The Gesneriad Society, Inc.*

WELCOME – membership in our international society includes quarterly issues of *GESNERIADS – The Journal for Gesneriad Growers*, a copy of *How to Know and Grow Gesneriads*, a packet of gesneriad seeds and a wealth of information about our Chapters, Flower Shows, Publications, Research, Slide Programs and Seed Fund. Membership begins upon receipt of dues.

New Member Date _____

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I wish to make an additional tax-deductible contribution of \$ _____

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Frances Batcheller Endowment Fund Convention Speakers Fund Gesneriad Research Center Fund

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