the -

GLOXINIAN

The Journal for Gesneriad Growers

Vol. 53, No. 2

Second Quarter 2003



Sinningia sp. "Rio das Pedras"

American Gloxinia and Gesneriad Society, Inc.

A non-profit membership corporation chartered by the State of Missouri

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Gesneriad Hybridizers Association — CrossWords, 3 issues, \$8 (\$9 outside U.S.A.). Send to Vincent Parsons, 18300 SW Shaw St., Apt #7, Aloha, OR 97007-1357 <gesneriaceae@yahoo.com>.

Newsletter Editors — Newsviews, free to editors; \$6 subscription to others. Contact Leslie Milde, 373 Main St., P.O. Box 14, Fremont, NH 03044 <meribush@aol.com>

FRIENDS AT LARGE

Gesneriphiles Internet Discussion Group — To join, visit the website http://lists.ibiblio.org/mailman/listinfo/gesneriphiles/ where you will find instructions for joining the list.

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Chapters: Report changes of chapter presidents to the Chapters and Affiliates Chair and the Editor.

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Third Quarter	April 1
Fourth Quarter	July 1

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AGGS Home Page: www.aggs.org

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Color photo on page 8 sponsored by Maryjane Evans with THANKS to Jill Fischer Color photo on page 40 sponsored by Marlene Beam and Ben Paternoster

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Cover: *Sinningia* sp. "Rio das Pedras" seedlings grown by Mauro Peixoto in Brazil (photo by Mauro Peixoto)

President's Message

Susan Grose <sagrose@aol.com> 4201 West 99th St., Overland Park, KS 66207

Dear Gesneriad Enthusiasts,

I am sitting in my living room looking out my south-facing window onto a dry, bleak, and cold winter's outdoor landscape. The view, however, is pleasantly partially screened by gesneriads growing luxuriantly indoors—varieties of Columneas, Nematanthus, and Aeschynanthus hanging in the window, small Chiritas and Streptocarpus sitting on the windowsill ledge, and varieties of Episcias, larger Streptocarpus, compact Sinningias, Saintpaulias, and Kohlerias huddling together in plant trays on the low tables in front of the window. It is my winter solace seeing these plants enjoying the low winter sun as it shines onto and through their leaves and blossoms. I hope many of you grow gesneriads in the windows of your living areas. It is a way to introduce even casual visitors to your home to gesneriads.

Another source of pleasure for me is to hear gesneriad references in conversations in other horticultural contexts—especially from former non-gesneriad growers. Recently at a gardening planning meeting, one person began by saying how wonderfully a plant I had given her was doing. Then someone else said, "I can't grow those plants". Then a third person said, "They are not as difficult as you think; I had an Achimenes growing and flowering all summer on my office windowsill in the tiniest Solo cup!" (I had given Achimenes rhizomes away at a talk I gave last spring.) This gives me hope that slowly but surely more and more people are being introduced to and are growing a wider variety of gesneriads successfully. Further indication of this is increased sightings of more gesneriad family members in local garden centers and even large chain stores. Even though sometimes the plants are not labeled in these venues, people must be buying the plants, and hopefully they will try to find out more about what they are growing. I am trying to think of ways to get these vendors to better inform the public about the care of the gesneriads they offer for sale.

I look forward to the day when I say, "I grow gesneriads." and people say, "I know what those are; they're the neatest plants!" If every AGGS member converted two non-gesneriad growers, think of the possibilities.

I just finished reading all about the upcoming AGGS Convention in the First Quarter issue of The Gloxinian. If you haven't already planned to attend, please consider going to Sacramento, California in July 2003 for a unique gesneriad experience. Read more in this issue about the convention, including how to pack and travel with your plants. Then re-read the information in the First Quarter issue of The Gloxinian and register by the early-bird deadline of April 30th for early admission to the plant sale. Registration is also available online at the AGGS web site <www.aggs.org>. I can't say enough about the joys of attending an AGGS convention. Increasing one's knowledge of gesneriads, enjoying the company of other growers, and acquiring choice hybrids and rare species of gesneriads all in one place is the unique experience the convention offers.

I look forward to meeting you there!

Susan

Seed Fund

Bob and Carol Connelly <Bob_Connelly@email.msn.com> 2391 Phillips Drive, Auburn Hills, MI 48326-2450

It's getting close to that time of the year, again! The AGGS Convention in Sacramento is coming, and we plan to be there with the Seed Fund. We hope to meet more of our Seed Fund customers and donors, plus we'll have plenty of seed to sell. Please keep in mind that there will be about a two-week period around the convention where we will not be working on seed orders — so please be patient if you send orders around the end of June or the first week or two of July. Just a few odds and ends to mention in this issue:

We currently do not accept email credit card orders. We cannot guarantee the security of your credit card number in an email. We hope in the future to be able to accept seed orders through the AGGS secure website, but until then please only send credit card orders through post office mail.

Please note that seed list entries with a black dot next to the name indicate seeds that are in limited supply. This means that the number of seeds in a packet may be smaller than usual, and orders are limited to a single packet. Along with this, we are generally wary of sending multiple packets of the same seed as we don't feel this is fair to other members. If you order multiple packets of seed, please give us some idea of why you need the extra packets. If you are ordering many packets for a chapter project or something similar, please contact us ahead of time to check on availability. We may be able to suggest alternatives.

Some of the items on the additions and deletions list below may look familiar. We somehow neglected to carry forward some of the previous additions and deletions to the most recent full seed list so we are repeating them here and will carry them forward to the next full seed list.

We would like to thank the most recent contributors to the Seed Fund for their generosity: Clay Anderson, Marlene Beam, Ina Beaver, Allison Brigham, Karyn Cichocki, Jon Dixon, Maryjane Evans, John Farina, Leong Tuck Lock, Chris Leppard, Toshijiro Okuto, Mauro Peixoto, Carolyn Ripps, Vivian Scheans, Lee Stradley and Wallace Wells.

Seed Packets — \$1.50 each

Please

- Make checks payable to the AGGS Seed Fund in U.S. funds
- To pay by credit card, send your credit card number, expiration date, and signature, and indicate if the card is MasterCard or Visa (\$6.00 minimum)
- Provide a self-addressed, stamped envelope (non-U.S. orders may include International Postal Coupons or have the postage added to their credit card bill)
- · List alternate choices
- Include your membership number (first number on your mailing label)

ADDITIONS:

- Sinningia cochlearis (LM)
- Sinningia defoliata (D,H,LM) Sinningia douglasii (rose/purple) (D,MT)

Sinningia lineata GRF9920 (LM)

- *Sinningia sp.* "Rio das Pedras" MP 1094 (F,P)
- *Sinningia* 'Georgia Sunset' hybrid mix (F,P)
- *Sinningia speciosa* hybrids Jack Evans purple mix (F,R)

- Sinningia speciosa hybrids Jack Evans red mix (F,R)
 - Streptocarpus fasciatus/Krokodilpoort, E. Transvaal (R)
 - Streptocarpus johannis/Weza, S. Natal (R)
- *Streptocarpus polyanthus* subsp. *polyanthus*/Hammarsdale, Natal (R)
- denotes LIMITED quantities

DELETIONS:

Chirita sinensis 'Latifolia' Chirita Malaysian hybrid mix Columnea arguta Streptocarpus 'Ice Castle' × self Streptocarpus 'Spooky' × self



Congratulations to the Tennessee Chapter on celebrating their 45th anniversary as an AGGS Chapter in 2002

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New Slide Program: "Alpine and Cool-Growing Gesneriads"

Growing COOL gesneriads is an interest that some of us have pursued for many years. We do not force this "coolness" on them—some actually prefer it and grow that way in nature. From truly alpine to just plain cool, you will learn about them in the new AGGS slide program "Alpine and Cool-Growing Gesneriads".

Michael Riley

Thanks to Michael Riley and some other cool-growing friends who for many years have had an interest as well as experience in growing some of these lesser-known gesneriads, we now have a new program in the AGGS Slide Library. This exciting program will introduce you to the non-tropical gesneriads—those that grow on snow-covered mountains and in other cooler regions of the world. You will see some of these plants in their native habitats as well as how they are grown in gardens, in troughs, and in containers outside and inside the home. You will also be introduced to some of the hybrids and intergenerics that have been created with these plants as well as receive some hints on growing them yourselves. Michael has presented similar slide programs to several chapters of the North American Rock Garden Society so they could learn about these COOL gesneriads. Now you can learn more about them, too.

This program can be reserved by mail to Dee Stewart, 1 No Name Road, Stow MA 01775-1604 or email to <dee.stewart@110.net>. Since new programs are very popular, it is helpful if you provide as much lead time as possible, provide alternate dates, or alternate programs that would be acceptable. Please specify the address the program is to be mailed to and a contact phone number. Program rental of \$20 US payable to AGGS must be received before the program can be shipped.



×Ramberlea 'Inchgarth' hybridized, grown, and photographed by Maureen and Brian Wilson

Special Contributions

Fay Wagman, Corresponding Secretary

Frances Batcheller Endowment Fund — \$443

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Doris Carson

New England Chapter

Judith A. Fox, in memory of Stan Schwartz

Nancy Gilson

Paul Susi, in lieu of speakers fee from the Greater New York Chapter

Narges Berenji-Harley & R. David Harley

AV Club of Morris County, in memory of Laura Shannon

Delaware Gesneriad Society, in memory of Laura Shannon

Tennessee Gesneriad Society

Diane Abramson, Geno Lubatti, Carol Callaghan, in memory of Laura Shannon

ELVIN McDonald Research Endowment Fund — \$341

Delta Chapter

Michael Riley, in lieu of convention plant sales proceeds

Susan Gross

Marcia Belisle

Judith Ann Fox, in memory of Stan Schwartz

Maria Blewitt

Lois Buschke, in honor of Quentin C. Schlieder upon retirement

Dorla Paria

New England Chapter, in memory of Anthony Crisafulli

AVS of Springfield, PA, in memory of Laura Shannon

Michael Riley, in lieu of speakers fee from the Long Island Chapter

John Boggan, in lieu of convention flower show award

Fund for Progress/Color Photo Fund — \$614

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David Zaitlin

Brian Roth

Tampa Bay Chapter

Liu Ying-Hua

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Wallace Wells

Gussie Farrice, in lieu of speakers fee from the Greater NY Chapter

Maryjane Evans, with THANKS to Jill Fischer

Marlene Beam

AV Club of Morris County, in memory of Laura Shannon

Narges Berenji-Harley & R. David Harley

Ben Paternoster

Union County, NJ African Violet Society, in memory of Laura Shannon

Toronto Gesneriad Society, in lieu of speakers fee for Bob & Dee Stewart

SPECIAL CONTRIBUTIONS — \$1,392

Color Photo Fund: Jerry Trowbridge, in lieu of convention plant sales proceeds

Research Endowment Fund: Maryjane and John Evans, in lieu of convention expenses

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LIFE MEMBERSHIPS: Leslie Milde, Julie Mavity-Hudson, Judith Ann Fox, Stephen Maciejewski, Dale Martens, Carolyn Conlin-Lane Family, Lily Kao

American Gloxinia and Gesneriad Society, Inc.

47th Annual Convention — 2003 July 1 to July 6, Sacramento, California

Call for 2003 Annual Membership Meeting

The Annual Meeting of the members of the American Gloxinia and Gesneriad Society will be held on Friday, July 4, at 12:15 P.M. for the purpose of transacting business that may properly come before the meeting.

Call for 2003 Board of Directors Meeting

The Board of Directors meeting will be held on Tuesday, July 1, at 1:00 P.M., for the purpose of transacting business that may properly come before the meeting. A special Board meeting will be held on Friday, July 4, at 4:00 P.M. A meeting of the new Board will be held on Sunday, July 6, at 9:00 A.M.

Peter Shalit, Recording Secretary

Nominating Committee Report

The following members have agreed to have their names put in nomination as directors for a three-year term ending in 2006:

Susan Grose Overland Park, Kansas Suzie Larouche Toronto, Ontario, Canada

Ingrid Lindskog Umeå, Sweden
Julie Mavity-Hudson
Leslie Milde Fremont, New Hampshire
Elizabeth Varley Arden, Delaware

Harry Weber Arden, Delaware Loveland, Colorado

AGGS Nominating Committee:
Bill Price, Chair
Connie Leifeste
JoAnne Martinez

The AGGS Auction

The Frances Batcheller Endowment Fund has grown over the years because of your help. Donations of auction items and your bids on those items have helped grow the Fund every year. Once again we ask for your donations of gesneriad or otherwise horticulturally related items. We are especially interested in live plant material. If you cannot personally attend convention, you may mail your donations to Byron Borck, 1425 Ditty Ave., Santa Rosa, CA 95403 by June 30. When bringing (or sending) your donations to convention, please provide a list of the items you are contributing—this will help greatly when items are accepted for the auction. If you have any questions, or concerns, you may contact Paul Susi, 6 Upper Lane, Centerport, NY 11721 <captaur@optonline.net>.

Proposed AGGS Dues Increase

The AGGS Board of Directors has proposed that the amount of annual dues for Individual Membership be raised to \$25. Other classes of membership would be adjusted accordingly. In accordance with the AGGS Bylaws, this proposal will be brought before the membership at the Annual Meeting on Friday, 4 July 2003, in Sacramento, California, USA.

Peter Shalit, Recording Secretary

Application of Proposed AGGS Dues Increase

The AGGS Board of Directors approved the proposal of a dues increase to the membership based on a recommendation by myself as the Business Manager and consideration by a committee appointed to review said matter. The recommendation was made on the basis that dues were last raised 10 years ago and there is an increasing discrepancy between the higher costs of publishing The Gloxinian and the current membership dues. The additional dues burden of non-U.S. members was acknowledged due to fluctuations in currency valuations, but it was also recognized that there already exists a subsidy in mailing costs by U.S. members. The formula for application of a proposed dues increase is established in the AGGS Bylaws; and if approved by the membership, that formula would be applied to the classes of membership as follows:

Individual \$25 Three-year Individual \$70 Family \$26 Three-year Family \$73 Sustaining (minimum of) \$35 Research (minimum of) \$50 Life Membership \$375

It was suggested that the application of this proposed change might take some time to effect and therefore, although the change would take effect immediately on the approval of the membership, implementation might take as long as several months to change all relevant literature and enforce. The Membership Secretary will determine a schedule for application to renewals and new members. We do not wish this increase to present a hardship to anyone and would like to provide ample opportunity for current and new members to be fully apprised of the situation.

Michael Riley, Business Manager



Convention Dates to Remember

- April 30 Deadline for convention registration to enjoy early admission to opening plant sale (Thursday, July 3, at 9:30 p.m.)
- June 1 Convention registration deadline. After this date, registration for activities will be on a space-available basis and subject to a \$25 late fee.
- June 2 Hotel registration deadline to guarantee convention room rate.
- June 15 Deadline for Judging School registration. Be reminded that no registrations will be accepted at convention.
 - Deadline for artistic entry niche reservations, and for commercial and educational exhibit registrations.

Please note the correct contact information for Commercial and Educational reservations: Karen Willoughby, 13100 S. Highland, Selma, CA 93662 (559-896-0365) cpkatwillobee@hotmail.com>.

For registering online, visit the AGGS web site at www.aggs.org/convention.html

Convention Highlights

The Red Lion Hotel is our headquarters, close by the Arden Fair Mall, Sacramento's largest, with 65 stores.

Wednesday features meetings of various interest groups: Judges Training, Judges Interest Group, Chapter Presidents, Newsletter Editors, Future Conventions, and Internet Communications groups. The evening concludes with the Gesneriad Hybridizers meeting, always a treat for convention attendees.

The bus trip on Thursday is to Copia's gardens in wine country, with an herb farm stop en route home. Flower Show entries are next, and the opening of plant sales ends the evening.

Friday is flower show day, with judging in the morning and the awards banquet dinner.

Saturday evening's excursion is casual in style—a steam train ride and BBQ picnic for our convention conclusion.

Things to See and Do in Sacramento

Interested in touring before, after or during the "Capital Affair" convention? If you have a few extra days, you could take in San Francisco 85 miles away, or head to South Lake Tahoe, 99 miles away for both Sierra scenery and a turn at the slots. Yosemite is within reach, too, about a three-hour drive southeast.

The city itself has a rich heritage and many museums. Swiss immigrant John Sutter began settlement in 1839 with his fort at the meeting of the American and Sacramento Rivers. The Gold Rush a few years later caused the town to grow rapidly eastward. California became a state in 1850, and Sacramento the capital in 1854.

The waterfront area is now Old Sacramento, restored in the 1960's and a state historic park with 53 historic buildings. Along the public docks are excursion boats, the picturesque Delta King, and the River Otter taxi which goes upstream to two different restaurants and the River Cats baseball games. The Visitors Center provides maps for a walking tour, and tokens for an audio tour, which you insert at each stop along the route. Some of the city's best restaurants and museums are here in Old Town. The most popular museum is the California State Railway Museum. Gold Rush history is the focus of the Discovery Museum housed in a replicated 1800's Waterworks building. There is a Wells Fargo Museum, California Military Museum, and an old schoolhouse. Most of the historic buildings are privately owned and now house the usual gift, souvenir, sweet and coffee shops.

Walking east toward Capitol Park, you pass through Alkali Flats, an area of many interesting Victorian homes including the Leland Stanford mansion. Due to regular floods, many of these houses are elevated with a high flight of steps to the front porch. After levees were built to contain the river, the "delta basements" were turned into additional living space.

The imposing capitol building was completed in 1874 in the Classical Revival Style. Low relief panels on the east façade depict California flora and fauna. The surrounding Capitol Park is an arboretum with many magnificent exotic trees, all labeled with botanic names.

Sacramento also has a great zoo, located in Land Park. There is a nice rock garden near one entrance, entirely maintained by Carol, a gracious and friendly gardener who is a fount of horticultural knowledge on how and what to grow in Sacramento.

So come early or stay late, and most of all come to experience the "Capital Affair" convention.

Convention Speakers

Ron Parsons — "Miniature Jewels of the Plant World"

Ron is a member of many plant societies in the San Francisco Bay area, including AGGS. He is a professional plant photographer as well as a superb grower, specializing in miniature plants. His program will present an overview of some of the most fascinating small-growing plants he has grown or photographed: gesneriads, orchids, carnivorous and other tropical plants.

Bill Price — "Home Grown Gesneriads"

Bill is an excellent gesneriad grower in the Vancouver, BC Chapter. His program will explore gesneriad culture under the wide variety of growing conditions he has created in his home. The audience will learn his secrets for successful culture in conditions from greenhouse to windowsill.

Michael Kartuz — "My Forty Years of Gesneriad Growing"

The premier grower, hybridizer and commercial source of gesneriads since the early 1960's in Wilmington, Massachusetts to southern California today, Mike will present a program about his career, his plants, and the people he has known.



Horticulture Sweepstakes Award to Honor Jessie Crisafulli

Dee Stewart <dee.stewart@110.net>
1 No Name Road, Stow, MA 01775-1604

Jessie Crisafulli's contributions to AGGS and to the New England Chapter in particular were immeasurable. She held numerous offices, including the office of president, in both organizations. We remember Jessie best perhaps for the plants she grew and the sweepstakes awards that she won year after year. It seemed Jessie could grow anything to perfection. Every imaginable space in the home she shared with husband Tony held a plant. When show time came, Jessie would stay up until two or three in the morning carefully packing plants into boxes. Tony would then take the back seat out of their large car and somehow get all those boxes into the car.

In order to express our fond memories of Jessie, the members of the New England Chapter voted last spring to use the income from the sale of horticultural materials donated to the chapter by the Crisafulli family to sponsor the Award for Sweepstakes in Horticulture in memory of Jessie Crisafulli for all future AGGS Convention Flower Shows. In July 2002, the AGGS board graciously granted the New England Chapter's request to become the permanent sponsor of the Sweepstakes Award in Horticulture.

Traveling with Show Plants — Three Award-Winning Canadian Exhibitors Share Their Secrets

Carolyn Conlin-Lane, Toronto —

The 2003 convention is nearly upon us, and it is time to start thinking about how to get our entries to the showroom in top condition. Proper packing and care during transport is critical. I use a slightly different approach depending on whether I am flying or driving to a convention.

Flying: The key limitation is your carry-on box. I have always preferred to take only one large box as I find that it is easier to look after than two. Given the new FAA regulations that limit all passengers to one carry-on and one personal item, it may now be difficult to get on board with two boxes. In any case, I always consult with the airline to determine the permitted dimensions and prepare my box accordingly (e.g., Air Canada's dimensions for the standard carry-on are $23\text{cm} \times 40\text{cm} \times 55\text{cm}$). I like to start with a couple of computer paper boxes (legal size works best), as they are quite sturdy and have a cap-type lid. I cut one end off of both boxes and then join them together (using wide clear box tape) to extend the length to just under the maximum allowed, overlapping the cut ends by several inches. I do the same to the lids. In bold black felt pen on all sides of the box, I mark information concerning the contents. Next, tape is applied to the outside of the box to provide extra strength and moisture resistance. The boxes that I use are too tall, so I also have to cut them down to the allowed height limit.

The next step is to select the plants. I usually pick one or two plants that I really want to show, and build the inside of the box around their requirements. Since the selected plants must fit into the box, this frequently excludes a lot of potential entries that are too large in one dimension or another. Some plants will tolerate having their bloom stalks pulled down (I've been able to do this with some Chiritas) and others may allow you to strategically prop them up on a well-padded incline (that's how my *Raphiocarpus petelotii* made it to the 2000 Convention), but these are more risky approaches. It is best if you have made choices that do not "challenge" any of the dimensions of your box.

Starting with the largest plant, determine where in the box it needs to sit and mark this spot with a pen. Using a hot glue gun, apply glue to the bottom of an empty pot that is exactly the same size as the pot your plant is in, and glue the empty pot onto the marked spot. After a few minutes, you can place your plant into this pot (I usually put a piece of heavy plastic between the pots that is larger than the inside of the pot to facilitate the plant's later removal), and continue to determine the positions of the other plants. In addition to the one or two key entries, I usually bring some other small plants to show and to donate to the auctions—basically whatever looks good and fits into the available space in my box. Once I have glued down all of my sleeve pots, I remove everything and pack dry-cleaner's plastic around all of the glued pots. This both supports foliage and can be used to nestle additional tiny plants (i.e., auction donations and items requested by other growers). The plants themselves are not actually packed into the box until the evening before I fly (and I leave the lid off overnight).

On the day of travel, I simply cover the box and go, making sure that I have the necessary paperwork for U.S. customs. I also make sure that I am traveling with a small measuring tape so that I can prove compliance with the carry-on size limits without having to put my box into their testing device (to do this, the box would have to be placed on its side). While walking through the terminal, I carry the box in front of me with both hands (my personal carry on, my laptop bag, is on my back). I find I have to repeatedly, but politely, decline offers to help me with the box. On the aircraft, I prefer to place the box under the seat in front of me, as I find it gets less knocks and jars than in the overhead bin. (I'm short, so this might not work as well for a tall person!)

Driving: If you are driving to convention, you have a lot more flexibility in your choice of entries. Your only limitation is the size of your vehicle's cargo area.

For long distance drives, I have found that paper boxes work better than Styrofoam ones. (Styrofoam doesn't breathe, so beads of water form on the leaves of the plants.) I use boxes of all different sizes—the chief requirement being a cap-type lid. I find the legal-sized computer paper boxes to be especially useful. I have several that are "extra tall" (two boxes, one with the bottom removed, taped together) which work well for the mid- to large-sized blooming Chiritas.

If the trip to convention is to take several days, I find it helpful to take along a portable tabletop light fixture. This way you can give the plants that require more light an evening dose so that they won't start to etiolate. The rest of the plants can remain in the boxes (uncovered) overnight.

During the drive, it is important to keep the interior of your vehicle at a comfortable temperature. For the 2000 AGGS Convention (when we drove from Toronto to Kansas City), this meant constantly running our vehicle's air conditioner. Even short stops would have resulted in an unacceptably high interior temperature.

Once you reach the hotel, your plants should be unpacked as soon as possible and placed into a safe location until it is time to prepare them to be entered. If you have brought a portable light stand with you, you can set this up and place your plants under it.

The rest is grooming, grooming, grooming... but that would be another topic!

Robert Hall, Toronto —

The convention is coming up and the old dilemma returns: How to get as many of your plants to convention in their best possible shape and to be a contender for blue ribbons. The Solution:

Part 1: For the first six months of the year grow as many plants as you possibly can, seeing which plants you grow the best. The next six months concentrate on growing the plants that did the best for you.

Part 2 (A): Get a method of transporting your plants to convention. This could be as easy as buying a Tupperware container or building your own container. For the latter, contact your airline of choice and ask for the dimensions of the container that you are allowed as carry-on in the plane you will be taking. Note that some of the small commuter carriers allow smaller carry-on bags than the larger carriers. You then go to Business Depot or

some such store and obtain two boxes. The boxes that are used to ship the packages of copy paper are best. These boxes are typically smaller than the maximum allowable size for carry-on.

Using an Exacto knife, cut the end off one box and cut the second box to a size that will make you a joined box of the maximum dimensions allowed. Join these two boxes together using duct tape; and to strengthen the joint, put a bamboo stake used to stake plants in the garden along the outer edges of the box and tape the stakes in place with more duct tape. The neo-box should be quite sturdy. Cut the two box tops in similar fashion and tape and stake in the same way as with the base to make a new box top.

(B): With your container ready, you are now set to pack your plants. The day before you travel, line the box using a dry-cleaning bag. Open the bag to make a large plastic sheet and line the box to keep it dry. Place the largest plants you will take in the box.

Next place the medium-sized pots around and beside the large pots and wrap dry-cleaning plastic around these to prevent shifting of the plants during transportation. Finally, wedge the smaller pots in the remaining spaces. For the more adventurous, you can then place the smallest of the pots on the soil of the larger pots that have stemmed plants, e.g., a tall Kohleria, and insulate/wedge these pots in place with more plastic. It takes a bit of time to play with the placement of the pots until you are able to fit the most plants in. Hence it is better to do this the day before you travel. Leave the plants in situ with the top off for the rest of the day.

A couple hours before you fly, use torn pieces of dry-cleaning plastic to weave around the plants, placing the pieces in between leaves and flowers to prevent them from moving. Finally, put the lid on and tie it in place with twine to keep the lid on but so as to allow easy opening for the customs officers when they want to inspect the box.

This box will not turn over in the x-ray machine and will fit in the overhead bin or on the floor under the seat in front of you. The winning of blue ribbons is the hard part of this exercise—the part for which you have no control!

Bill Price, West Vancouver —

Having green grass all year round plus crocus and daffodils blooming in early February isn't all it's cracked up to be. Forgetting about the high rainfall, another downside is that 99.9% of plant shows happen in the East, which for us West-coast types, means at least a four-hour flight and having to be quite creative in bringing plants to show.

Over the years, from listening to the experiences of others and experimenting myself, I have developed some methods that seem to work quite well for me. Here is what I do to bring my plants to convention.

For the "one permitted carry-on", I have tried many sizes of plastic boxes but now use one made by Rubbermaid that measures $16" \times 11" \times 9"$ deep with translucent sides. In vain I tried to get information from the airlines regarding the "maximum" size box that could be accommodated in the overhead compartments. Not only is there quite a variation among planes, but the airlines themselves seem to want to discourage carrying anything on board so they don't particularly want to commit themselves when asked this question.

With the increased focus on security over the past year, I have also found that the translucent walls of the box (a suggestion of Dale Martens) seem to evoke much less of a suspicious response from security personnel. This particular sized box is the closest to "just squeezing through" the plastic security guard wall in front of the x-ray machine; and it fits all the overhead bins I have tried so far. Its straight sides and flat top and bottom help maximize the volume available in which to pack plants.

Prior to September 11, 2001, I was able to carry on a "single" box composed of two of these boxes strapped together with a Bungee cord. I haven't dared to try this stunt since then!

For packing material I have tried shredded paper, Styrofoam peanuts, etc., but now find that crumpled up dry-cleaning bags work very well as they are soft, mould to any shape, are reusable and they don't fly all over the place or stick to things! And for storage between trips, they can be crumpled up and squished into the tiniest of containers. A friendly local dry cleaner was willing to sell me a partial roll of new bags.

Now for the actual packing of show plants: First of all, I try to time my watering so that plants to be packed are slightly on the dry side. The foliage is less brittle then and will bend when necessary without breaking. Wrapping the base of the plant and pot surface with a dry-cleaning bag will also help keep the soil in the pot. Some plants, especially rosette forms, will fit easily into aluminum foil or plastic sleeves that can be obtained from florist shops. Plants in sleeves can then be packed more snugly together in the box, either upright or on their sides.

Once your plants are in the box, another important detail is to put the cover on just as you leave the house and to remove it again as soon as you arrive at your destination. This prevents the accumulation of excess humidity and condensation in the box with consequent damage to blossoms and foliage. (Be sure to write your name and address on the box and lid, too.)

And finally, a tip for bringing "trader" plants/cuttings to and from convention is to carry another plastic box inside a suitcase. While the smaller sizes fit easily, I have found that a box measuring $19" \times 14" \times 11"$ deep is about the maximum size that will fit into a standard suitcase. (The rim of the box had to be trimmed to facilitate its coming on and off.) Such a "suitcase" can be filled with cuttings or small plants to bring to the show and/or to carry your plant acquisitions home plus it can be checked with regular baggage without any problems.

Being desperate for space, I have even used this method to bring some tougher show plants to convention such as *Petrocosmea minor* and the stoloniferous species of *Chirita*. To reduce shifting around of the plants, I first glued an empty same-sized pot to the bottom of the box in which I placed the show plant before thoroughly packing around it with dry-cleaning bags.

So I hope those of you who must fly to conventions but have hesitated to bring show plants in the past will try to do so next time. Good luck!

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Coming Events

April 26 — Massachusetts — The annual combined plant societies sale will be held at the University of Massachusetts Eastern Extension Center, 240 Beaver St., Waltham. Saturday from 10:00 am to 3:00 pm. Free admission. Wheelchair accessible. Participating will be the Gloxinia and Gesneriad, Begonia, and African Violet Societies, N.E. Tropical Conservatory, Black Jungle Terrarium Supply, HortResources Gardeners, Contact Bob Clark <thecopse@vahoo.com> (978-738-6983).

May 3 — Vancouver, BC, Canada — Vancouver African Violet and Gesneriad Society 42nd annual judged show and sale at the VanDusen Botanical Gardens, 5251 Oak St. Saturday 1:00 to 4:00 pm. Contact Marilyn Allen <dmarilynallen@shaw.ca>.

May 7-10 — Ontario, Canada — 36th Annual AVSC Convention and Show "A Celebration of Violets", hosted by the Lakeshore African Violet Society, to be held at the Novotel Mississauga, 3670 Hurontario St., Mississauga. For detailed information or to register online, go to http://www.avsc.ca/conven-

tion_2003.htm> or contact Convention Chair Doris Brownlie (905-270-7667).

May 18 — New York — The Long Island Chapter annual show and plant sale at Clark Botanic Garden, 193 I. U. Willets Road, Albertson. Sunday 10:00 am to 4:00 pm. Contact Paul Susi (631-262-9193) <captaur@optonline.net>.

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Floral Morphology and Pollination Biology in Gesneriaceae

James F. Smith <jfsmith@boisestate.edu> Department of Biology, Boise State University 1910 University Drive, Boise, ID 83725

Changes in floral form have resulted in tremendous diversity of plant species. Flowers are the means by which plants reproduce sexually, luring pollen from other flowers to the ovules for fertilization and seed production. For plants with colorful and showy parts, the pollen vector is usually an animal. Many plants exploit a particular group of animals with a suite of characters known as a pollination syndrome. For example, hummingbird pollination syndromes are generally characterized by bright red-orange tubular corollas, a copious nectar supply, a lack of odor, and often blue pollen. In general, plants that are closely related tend to have similar pollination syndromes. For example, many Gesneriaceae are characterized by a hummingbird pollination syndrome. However, even within genera, one can find shifts to other pollination syndromes such as within the Sinningia/Vanhouttea/Paliavana group (Perret et al. 2003).

When a shift in pollinators occurs there is generally a corresponding shift in the pollination syndrome, and thus a shift in the floral morphology. Pollinator shifts have been hypothesized as the driving force for gender dimorphism in *Hebe* (Delph 1990), corolla spur size in *Aquilegia* (Hodges 1997), and the change in corolla morphology of *Saintpaulia* from within *Streptocarpus* (Möller and Cronk 1997; Smith et al. 1998) and *Ramonda* (Cronk and Möller 1997). In these latter examples, the shift has been from a specialist to a generalist pollination syndrome, presumably co-occurring with shifts in habitat.

Gesneriaceae have been a popular group of plants to speculate on pollination, probably because of the striking appearance of so many of the flowers in this group and the array of floral diversity. Many different pollination syndromes are known from Gesneriaceae such as birds, bats, and bees (Fig. 1). Wiehler (1983) estimated that 60% of the neotropical Gesneriaceae were pollinated by hummingbirds, 30% by euglossine bees seeking nectar, and the remaining10% a mixture of bats, butterflies, moths, euglossine bees collecting odors, bumblebees and mammals. As valuable as these numbers may be, unfortunately they are mostly based on supposition that plants with a particular floral morphology and pollination syndrome are indeed pollinated by that organism. Such correlations are proven to be true when field studies are conducted, but in the world of science, lack of hard empirical data means that you only have a good idea of what may be occurring and no positive statements on the evolution of the species can be made.

To truly correlate floral morphology to selection by a particular pollinator type, two criteria must be met. The first of these is that the pollinator for a species of plant must be determined independently from the floral morphology. No matter how much fun speculation may be in trying to determine a particular pollinator for any plant species, empirical data are needed. It is important to determine, often through numerous hours of tedious observation and some carefully controlled experiments, the most common and effective

Figure 1: Examples of pollination syndromes in Gesneriaceae: *Columnea raymondii*, humming-bird; *Capanea grandiflora*, bat; and *Nautilocalyx panamensis*, bee.





Columnea raymondii

Capanea grandiflora



Nautilocalyx panamensis with Trigona bee (photos from the collection of Hans Wiehler)

means of transporting pollen from one flower to another. Many animals may visit flowers, attracted by odor, color or nectar, but not all of these will actually transfer the pollen from one flower to another. If the animal is too small or of a shape that does not match the shape of the flower, pollen may never come in contact with the animal. Such animals are called visitors and are not counted as pollinators since they are not effective in transporting pollen. Only visitors that can transport pollen from the anthers of one flower and deposit them onto the stigma of another flower can be considered effective.

Studies of pollination biology usually begin with observation. The flowers of the species in question are measured carefully and the phenology, or timing when certain organs are mature and the flowers open, is recorded. With open flowers, a pollination biologist may then sit and watch the flowers for many hours recording all animals that are visitors. This can often take a long time and if nocturnal animals such as bats are suspected visitors, observations may be conducted for nearly 24 hours. Once a list of common visitors and their time of visiting the flowers has been established, the next step is to determine which visitors are effective pollinators.

There are occasions where observation alone can demonstrate that pollen is being transferred from one flower to another. The extremely accurate and detailed photographs of San Martin-Gajardo and Freitas (1999) are good examples. In many of their photographs, the pollen can be seen on the animal as it leaves one flower; and in other photographs, contact with the stigma on the same part of the animal can be seen. However, the majority of work demonstrating that a particular animal is an effective pollinator often involves exclusion experiments where barriers are set up around flowers to prevent animals of a particular size from reaching the flowers. If there is no pollen transfer with the exclusion barrier in place, but transfer when the barrier is absent, there is some evidence that the visitor is an effective pollinator. Often it is also important to demonstrate that the visitor is carrying pollen when it leaves the flower (capture and removal of pollen from the animal) and that it can deposit the pollen on the stigma of another flower (removing pollen samples or stigmas from flowers only visited by the pollinator in question).

The second important criterion in resolving whether floral morphology has changed as a result of pollinator selection is to have a solid evolutionary history of the species involved. This criterion may be less obvious than knowing the effective pollinator. To better understand why an evolutionary history of species is important, let's take an example where we have only six species in a genus. From field observation we know that four species are pollinated by hummingbirds, one by bats and one by butterflies. With no data on the evolutionary history of the species, we may be led to conclude that hummingbird pollination evolved once in the ancestor to the four hummingbird-pollinated species. An evolutionary history may reveal that the bat-pollinated species is a close relative to two of the hummingbird-pollinated species and that the butterfly pollinated species is more closely related to the other two species (Fig. 2). Our conclusion would change to two origins of hummingbird pollination rather than one. Only a good understanding of evolutionary history can reveal this.

Part of my motivation for investigating pollination biology further in Gesneriaceae stems from some of my recent research on floral symmetry. Among the neotropical Gesneriaceae, bilaterally symmetric flowers with a

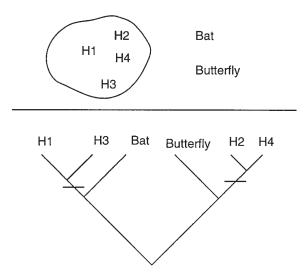


Figure 2: An example to show how knowing the relationships of species alters how many changes in pollination syndromes might be inferred. In the top nothing is known about relationships so we might infer that all species with a hummingbird pollination syndrome (H) are closely related as shown with the circle. In the bottom, we know more about the evolution of these species and can see that H1 and H3 are more closely related to the species with bat pollination syndrome and species H2 and H4 are more closely related to the species with butterfly pollination syndrome. Knowing these relationships, we are more likely to infer two changes to hummingbird pollination as indicated by the horizontal marks.

tubular corolla are predominant. Bilateral symmetry is sometimes best thought of as being able to divide the flower into two equal parts only one way. Humans are also bilaterally symmetric (from the outside!) in that there is one line that will give each half one eye, one ear, etc. Among Gesneriaceae there are shifts to radially, or nearly radially symmetric flowers. Radial symmetry is where there are many lines that can be drawn to create two equal parts. Think of a wheel—no matter how you divide it, the two halves will be identical. One genus with radially symmetric flowers is *Bellonia* (Fig. 3). Although traditional classification systems have placed *Bellonia* in tribe Gloxinieae, recent evidence from our lab indicates that this genus is really better placed within tribe Gesnerieae (Smith et al. 2003).

Several genes have been identified in close relatives of Gesneriaceae (*Antirrhinum*) that determine whether a flower is bilaterally or radially symmetric. One of these genes is *cycloidea* (Coen 1996), and the *cycloidea* gene in Gesneriaceae is known as *GCYC* (Möller et al. 1999, Citerne et al. 2000). An initial hypothesis was that flowers with bilaterally symmetric flowers would have a functional gene, and species with radially symmetric flowers may have non-functional or mutated copy of the gene. Thus the reason for the change in symmetry would have been a genetic switch rather than selection by a shift in pollinator types. *GCYC* has been sequenced for all genera of

Figure 3: Species under study in the Dominican Republic: Gesneria pedicellaris, G. viridiflora subsp. quisqueyana, Rhytidophyllum sp., and Bellonia spinosa. (Photos by Lisa Hahn)



Gesneria pedicellaris



Gesneria viridiflora ssp. quisqueyana



Rhytidophyllum sp.



Bellonia spinosa

tribe Gloxinieae and representatives of all tribes of neotropical Gesneriaceae. The short answer to all of this is that we did not detect any mutations at the DNA level that would explain the shift in floral symmetry from bilateral to radial. Similar results also were found among the Old World Gesneriaceae (Möller et al. 1999, Citerne et al. 2000). This implies that the shift to radial symmetry was still likely to be the result of selection by a shift to a different pollinator rather than a simple DNA mutation.

To address this issue, field studies on the pollination biology would be necessary. Although the floral morphology of *Bellonia* implies a buzz pollination syndrome (Wiehler 2002), field observations had not yet been conducted. Also, although we knew that the closest relatives to *Bellonia* were in tribe Gesnerieae, we had no idea which of the ~50 species or even which of the three genera were its closest relative. With the idea that we would eventually get a better understanding of the evolutionary history of all of the species, we decided to conduct field studies on five species exhibiting different floral syndromes among tribe Gesnerieae. Although we might not get the closest relatives to *Bellonia*, we limited the field work to the island of Hispaniola, where *Bellonia spinosa* is native with the idea that its closest relatives were more likely to be other species on the same island than from elsewhere.

The majority of species in *Rhytidophyllum* have broadly opened throats with a dark pink-brown coloration and a musky odor with flowers held far above the leaves (Fig. 3). These flowers fit a typical bat-pollination syndrome. In contrast, species of *Gesneria* have long tubular corollas with a narrow opening and no scent, typical of hummingbird-pollinated flowers (Fig. 3). There are species in each of these two genera that do not fit the typical form. These are *Rhytidophyllum berteroanum* which has a more typical hummingbird-pollination syndrome flower and *Gesneria viridiflora* subspecies *quisqueyana* (Fig. 3) which has a flower more reminiscent of bat pollination. Thus it appeared that not only was there a switch in pollinator type and floral form in *Bellonia*, but that there may have been two other shifts among the species in this tribe. However, don't forget that we do not know the evolutionary history of these species, and the species with flowers atypical for the genus may have been misplaced.

Unfortunately this is a story without a stunning conclusion (and I am not doing this to be trendy like Peter Jackson with the Lord of the Rings movies!). We are still far from having a good evolutionary history of all species in tribe Gesnerieae, but are beginning to make plans for this, probably as a collaborative effort among several labs. We also have only a minimal amount of field work conducted. A former graduate student, Lisa Hahn spent one month in the Dominican Republic looking for suitable field sites and some preliminary pollination observations on the species. Logistics prevented her from making the requisite nocturnal observations for bats; but she did observe hummingbirds visiting all species except *Bellonia* (remember visitors may not be effective pollinators) and did find numerous insect species, awaiting identification, visiting *Bellonia* flowers.

Beyond the evolutionary history studies, we still need a lot more field observations and some experiments to establish if the visitors are effective pollinators. Anyone with good Spanish skills interested in spending long hours in the field for a few months in the Dominican Republic? Give me a call!

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Alpine and Cool-Growing Gesneriads — Resource List

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There seems to be renewed interest in alpine and cool-growing gesneriads in the past few years. AGGS is introducing a new slide program, which will be available soon, and alpine gesneriads are popping up in many rock gardens throughout the world. If you have not heard a program on the above subject, you really must read THE GLOXINIAN, Vol. 44, No. 6, Nov/Dec 1994. You will find an article titled "Alpine Gesneriads" by Darrell Trout, as well as a number of other articles by other notable persons that thoroughly explore the subject of alpine and cool-growing gesneriads. These articles will be invaluable to your understanding of the subject plant material and their horticultural requirements.

Once you really decide that you NEED to grow these plants, locating a source of plant material and/or seed for cool growing gesneriads can be a task in itself. Now that you know how to grow these "unusual" members of the Gesneriad family, I hope the following information will assist in your search.

The most obvious source for seed is the AGGS Seed Fund —Bob and Carol Connelly <Bob_Connelly@msn.com> or 2391 Phillips Drive, Auburn Hills, MI 48326-2450. Of course you need to be a member of AGGS <www.aggs.org>, but I'm sure you already are. The Seed Fund lists seed in THE GLOXINIAN twice each year, the 1st and 3rd Quarter issues. The true alpine genera have an (A) after the name; some of the other cool growers you will have to search for. The AGGS Seed Fund once even offered seed of the elusive Jancaea heldreichii. Another source of seed for alpine gesneriads is the annual seed distribution of the North American Rock Garden Society <www.nargs.org>. Yes, you need to be a member to participate in this seed exchange, but the seed offered includes thousands of varieties of rock garden and other unusual plants, including several alpine gesneriads, the "apple" of every rock gardener's eye. This year's list included the well-known hybrid ×Jancaemonda vandedemii. Many varieties of Ramonda are available as well, and often some wild-collected seed resulting from society-sponsored trips to unusual habitats. The seed distribution usually takes place in January of each year.

There are a few commercial sources of seed for these plants, but one must keep an eye out for them and simply read each list to see what they offer. I recently read the list of wild-collected seeds offered by **Jojtech Holubec** of the Czech Republic to discover that he offers the difficult to find *Ramonda serbica* and a species from China, *Paraboea neuophylla*, which I have never seen available from any source. Growing the true alpines from seed is a test of patience because, although germination is fairly rapid, the plants may only be about 1/4 of an inch across after the first year. *Ramonda* will reportedly grow to blooming size in three years. Other cool-growing genera are easier from seed and have a faster rate of growth following germination.

For those of you who are too timid or impatient to grow from seed, there are a number of sources for growing plant material that is actually large enough to see with the naked eye. Mail-order nurseries are the best source and the internet is often the best place to find them. Even though the offerings from any single source are usually limited to a very few, collectively there are many different varieties available. **Siskiyou Rare Plant Nursery** <www.siskiyourareplantnursery.com> in Medford, OR was the source of my first alpine gesneriads about 25 years ago. They currently offer large and healthy plants of *Haberlea ferdinandi-coburgii* in their catalogue, both online and in print. **Heronswood Nursery** <www.heronswood.com> in Kingston, WA is an excellent source for some unusual cool-growers like *Asteranthera* and *Mitraria*. They have an online catalogue or telephone (360) 297-4172.

Wrightman Alpines Nursery in the Toronto area offers at least a half dozen alpine gesneriads in their mail order catalogue, including ×Jancaemonda vandedemii. They reportedly ship fine plants throughout Canada and the US, and their catalogue can be seen at <www.wrightmanalpines.com>. Also shipping quality plants to the US and Canada, Maria Galletti at Alpines Mont Echo in Sutton, Quebec (450-243-5354) offers four varieties of Ramondas. A beautiful Ramonda is featured on her Welcome Page at <alpinemtecho.com>.

Ben Paternoster directed me to **Bovees Nursery** in Portland, OR. This interesting nursery specializes in sub-tropical (*Vireya*) rhododendrons in their internet catalogue <www.bovees.com>; however if you contact them and request their "companion plant" catalogue, you will find it contains a lot of nice rock garden plants as well as *Haberlea rhodopensis*, *Ramonda myconi*, *Mitraria coccinea* and *Asteranthera ovata*. A tip in using the catalogues and listings of these nurseries is to NOT look for a listing of "houseplants". In the "real world" these plants are considered perennials, vines, shrubs or whatever other name might apply in the horticultural world at large.

There are hundreds of other specialty plant catalogues that may or may not contain gesneriads in any given year. One of the more interesting is Plant Delights Nursery in Raleigh, NC <www.plantdelights.com> (919) 772-4794. I had the pleasure of visiting this spectacular nursery last summer, and the owners make a concerted effort to collect and offer unusual, rare, horticulturally superior plant material to their customers. They boast hardiness facts and figures that boggle the mind sometimes and must be read with an eye to the fact that they are using the climate in North Carolina as a standard, although they claim quite severe winters. However, this year they offer not only many interesting Aroids (check out their Amorphophallus section!), but also Sinningia tubiflora and S. sellovii as being perfect for rock gardens in North Carolina. One of their newest offerings is Titanotrichum oldhamii which they claim has survived their zero degree (F) winters and blooms heavily in November. Actually, we know from reports in Washington, DC and Nashville, TN that many of these plants can survive cold climates in specific years and specific microclimates such as against the foundation of a house or other partially protected or heavily mulched habitat. Well, "Hip-Hip-Hooray" for their breaking away from the presumed idea that all members of the Gesneriad family are tropical plants that prefer the consistency of an indoor light garden or drippy rainforest.

Now the rest of us should follow suit and experiment with a new location for that cool-loving plant that never did well... wherever you had it. Take your gesneriads for a walk in the park. Try a Chirita in the office or take a Ramonda to lunch—you might just find happiness for everyone concerned.

Think Cool!



 $\begin{array}{c} \textit{Briggsia aurantiaca} \text{ (above) and } \textit{Corallodiscus lanuginosis} \text{ (below)} \\ \text{ (photos by Michael Riley)} \end{array}$



Gesneriad Study Trip to Brazil October 23 to November 3, 2003

Plans are being developed for the 2003 Study Trip to Brazil with Mauro Peixoto finalizing the itinerary and the arrangements there. This will be the third gesneriad study trip to Brazil guided by Mauro and will include a variety of gesneriad habitats—forests, roadsides, mountains, cliffs, streamsides, fields and beaches. Gesneriads to be seen will include many species of *Sinningia* and *Nematanthus*, as well as species of *Codonanthe, Vanhouttea, Paliavana, Besleria, Gloxinia*, and *Napeanthus*. This will be a comparatively easy study trip with beautiful scenery, a comfortable bus and pleasant hotels.

This 12-day trip will include gesneriad locales in the states of São Paulo and Rio de Janeiro, as well as a visit to the Peixoto family home and Mauro's greenhouse and plant collection. Another highlight will be a visit to the spectacular Iguaçu Falls on the border with Argentina. Based on 16 participants, the cost for this trip within Brazil is estimated at \$1,800 U.S. and will include bus transportation, our flight to the falls, meals, hotel rooms, and tour fees. The cost does NOT include airfare to/from Brazil. (Overnight round-trip flights from the New York area are currently priced around \$980.) Possible flight options will be suggested by the tour team, but trip participants will be responsible for purchasing their own airline tickets. For more information and a detailed itinerary, final trip payment details, and flight coordination assistance, contact the U.S. trip coordinator:

Gussie Farrice 121 Nelson Avenue Staten Island, NY 10308 (718-356-7763) <fgfarrice@aol.com>





Mauro Peixoto will guide the group to study gesneriads high in the mountains and low in the forests and along the coast of Brazil – Sinningia mauroana (left) and Sinningia speciosa (right)

Sinningia sp. "Rio das Pedras"

Mauro Peixoto <mpeixoto@uol.com.br> Rua Antonio De Almeida, 61, São Paulo, SP, Brazil 03257-070

This exciting new species was first introduced to me as a dried specimen in January 2001 while Alain Chautems, a group of botany researchers from Santa Ursula University, and I were visiting a Biological Reserve called Rio das Pedras near Mangaratiba in Rio de Janeiro State.

Theresa, the woman who showed us the material, asked if it was *Sinningia concinna*; but from my previous experience, I noticed immediately that it could be something new and asked to go to the location where it was found. She told me that the place was called *Toca da Aranha* (Spider's Cave) and that it would take at least three hours hiking uphill to get there.

I wanted to find it the next day, but the group had other plans. They had come to explore a mountain called Pico do Corisco (2400 feet high) on the opposite side of the reserve. Although frustrated, I had no choice but to follow them. We left the camp base early in the morning and arrived by dusk, completely exhausted. Part of the hike was along a very steep hillside, and going downhill was a series of rolling, sliding and hanging-on exercises grabbing on to any shrubs, tree trunks or loose roots available. Luckily enough, the place had not seen any rain for the four previous weeks. In spite of our efforts, the new plant wasn't located. I cannot say that the trip to the mountain was a waste of time because we found a new *Nematanthus* species, Codonanthe carnosa, Napeanthus primulifolius, Nematanthus brasiliensis, Sinningia douglasii and some other interesting plants from the Amaryllidaceae family. But my mind was focused on the new Sinningia species, and I didn't really get excited by the other discoveries. To worsen the situation, Alain sprained his ankle on our way back and was "out of combat" for the next day. The rest of us were worn out, too, so we decided to stay near the base and left finding the new plant for the next visit.

It took a year before I had the chance to get back there. In January 2002, Alain and I met the group again, and this time our goal was to find the plant on our first day and not risk repeating the frustration of the previous year.

January in Brazil, especially in Rio de Janeiro State, is typically very hot and rainy. As usual it had been raining, at least up until the night before we arrived at the reserve. Fortunately (or not) it was not raining when we started the uphill hike, but the high humidity and heat made us think that we were walking inside a giant sauna. On our way up, Theresa told us that she had come back in September of 2001 and found another population on the same trail, about half the distance to the original location. That was very good news because the oppressive heat and high humidity were making the trip twice as hard as compared to the trip the previous year.

Two hours later we finally reached the first location—a big granite rock shaded by tall trees where a small stream flowed just below it sending cool air to the little plants growing directly on the vertical wet rock. The blooming season was over, but we still found and took pictures of some late-flowering plants.

My day was made and I could have returned home completely happy; but the group insisted in going on to *Toca da Aranha*, the original destination. Again I had no choice but to follow them because there were so many mosquitoes that it would have been impossible just to sit and wait for them to



Sinningia sp. "Rio das Pedras" seedlings growing on the large granite boulder (photo by Alain Chautems)

come back. Two hours later we arrived at the place. The same environment was found there—vertical granite rocks and a stream providing naturally conditioned air to the plants.

I brought some little tubers back and planted them in live sphagnum moss. They responded very well to greenhouse culture, and three months later I was able to see the first flowers. It was amazing to see the plants differ from one another. The growth habit and the flowers are similar to *Sinningia pusilla*, but the leaves are quite a bit larger and the flower does not have any kind of spur. The leaf variegation is quite attractive and can range from some thin black veins to almost an entire black leaf. Even the flower markings and colors were remarkably different from one another. The plants set seed easily, and I was able to bring about 50 packets of seed to the 2002 Convention in New Jersey. Six months later at the time of writing this article, I have received feedback from several growers who obtained seed that many plants have already flowered... and soon we will have hybrids with this lovely new species.



Sinningia sp. "Rio das Pedras"



Sinningia pusilla



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Elvin McDonald Research Endowment Fund 2002 Awards

Dr. Laurence Skog, Committee Chair

AGGS established the Elvin McDonald Research Endowment Fund to encourage all types of research on Gesneriaceae, and hopes that members will send donations and support those activities that generate funds for research. Examples of the research that AGGS is encouraging can be seen in the two grants awarded in late 2002. The Fund honors Elvin McDonald, founder of AGGS, and is overseen by a committee* of active and retired scientists and gesneriad researchers who solicit and review proposals for possible funding.

The first of the 2002 awards went to Vincent Woo for his research proposal "Population Genetics of Taurepo (*Rhabdothamnus solandri*) and Implications for Conservation Management". Vincent (formerly in Toronto) is now studying at the Victoria University of Wellington, New Zealand for a Master's degree in Science, Ecology, and Biodiversity. He will be looking at various aspects of the New Zealand endemic gesneriad shrub *Rhabdothamnus* because little is known of the biology or ecology of the plants in the wild. They may be endangered because of loss of habitat and pollinators. Vincent will be looking at the diversity of the wild plants of the only species in the genus using DNA molecular techniques, with a view toward conservation management, which relies on genetic diversity. The funds awarded to Vincent Woo will go toward the cost of supplies, chemicals, and use of laboratory equipment for molecular research.

The second award in 2002 went to John R. Clark and Bruce Holst of the Marie Selby Botanical Gardens in Sarasota, Florida for their proposal "Gesneriad Research Foundation Herbarium: Curation and Incorporation in the Marie Selby Botanical



John R. Clark and Bruce Holst with the Gesneriad Research Foundation specimens at the Marie Selby Botanical Gardens herbarium

Gardens Herbarium". In the spring of 2002, Dr. Hans Wiehler, founder of the Gesneriad Research Foundation (GRF), donated the GRF herbarium to Selby Gardens. The donation included seven herbarium storage cabinets, a plant drier, and about 4,000 mostly unprocessed dried botanical specimens, as well as other materials associated with Dr. Wiehler's more than 35 years of research on Gesneriaceae, and from more than 20 GRF research expeditions. The GRF collection contained horticultural and scientifically valuable specimens including many unique and type specimens which provide the basis for more than 30 scientific names of gesneriads published by Dr. Wiehler and others. Before the collection could be incorporated into the larger Selby herbarium, it had to be brought up to accepted international standards for an herbarium, including organizing the collection, databasing the information, preparing labels for most of the specimens from the original field books from Dr. Wiehler, as well as sorting and naming the mostly unidentified specimens, and then finally mounting the specimens on archival paper for inserting into the Selby herbarium. Selby hired John Clark as an intern to oversee the project, but supervised by Bruce Holst, Selby's herbarium curator. The awarded funds will be used for obtaining archival supplies to process the specimens, postage, as well as salary support for Mr. Clark. Other donations to Selby Gardens also supported this project.

We hope to hear from the recipients of the awards in later issues of THE GLOXINIAN about their work.

*Members of the Elvin McDonald Research Endowment Fund Committee: Dr. Carl Clayberg, Dr. Nancy Dengler, Dr. Miriam Denham, Dr. Christian Feuillet, Mr. Elvin McDonald (honorary member), and Dr. Laurence Skog (Chair)



Any individuals or organizations wishing to further support the GRF/Selby herbarium project may send donations to Selby Gardens, Attn: Rita Aughey, 811 South Palm Ave., Sarasota, FL 34236-7726, and specify "Gesneriad Project". Donations to the AGGS Research Fund may be sent to Helen Bortvedt, AGGS Treasurer, P.O. Box 2584, Sequim, WA 98382-8870.



A group of variegated "Iced" Streptocarpus from Dale's first cross of S. 'Canterbury Surprise' × S. 'Winter Dreams'

Variegated Streptocarpus

Dale Martens <martens@wt.net> 2728 Masters Dr., League City, Texas 77573-4403

Variegation in Streps is so new that we are all learning together about them. I've been fascinated with them ever since Toshijiro Okuto brought Margaret Gurr's *Streptocarpus* 'Canterbury Surprise' to the Nashville convention. Let's talk about several factors with the variegated Streps:

Culture: Variegated Streps grow slower than green-leaf varieties. I've also learned it's best to cut back fertilizer to 1/8 teaspoon per gallon of water. I use a variety of fertilizers. If a Strep becomes too white, high nitrogen fertilizer seems to have little to no effect on making leaves greener. What seems to affect variegation is light intensity and heat. More light equals more variegation. Heat decreases variegation. This isn't surprising because that's what happens with variegated African violets.

Leaf Propagation: Toshijiro told me that the variegation would vary on the plantlets grown from leaves, and he was right. Sometimes a plantlet will be all white or all green. The rest will show a variety of variegation. I've propagated enough of these leaves to know that you need some white material at the edge of the cut leaf in order to get a variegated plant. If the leaf

section is all white, then an all-white plantlet is most likely to develop and eventually die when removed from the support of the mother leaf's root system. I strongly suggest you throw away any solid green ones. After all, we've seen that some variegated gesneriads such as *Episcia* 'Cleopatra' often produce green-leaf plants when grown from leaves. We'd never think of entering those in a show as *E*. 'Cleopatra'.

Hybridizing: Initially I thought variegation would be passed on to the seedlings from their variegated seed parent, just like African violets. This is not the case at all. When a variegated Strep is the seed parent and is crossed with a green-leaf Strep, all the seedlings have green leaves. Even when a variegated Strep is selfed, or crossed with another variegated Strep, not all the seedlings are variegated. Viability of seed from crosses using a variegated Strep is quite poor. Seedlings may not show variegation until their third or fourth leaf, so please be patient! Getting a variety of flower colors on variegated foliage has been a three-generation process, mostly because S. 'Canterbury Surprise' is a blue-lavender and that's a dominant color. When a variegated Strep is being used as a seed parent, the plant is stressed so much that it may turn green or a yellowish-green. Those leaves will never return to their normal color. After the pod is harvested, any new leaves produced by the plant will be variegated again.

The very first crosses of S. 'Canterbury Surprise' $\times S$. 'Winter Dream' have the alpha name 'Ice' or 'Iced'. I shared seed with people around the world as a learning experience for all. Sandy Morgan in Canada was the first to bloom a seedling, and its name is 'Ice Wine'.

Showing: At this time, most of the variegated Streps are not prolific bloomers. Once in a while there might be two flowers per stem, but that's not common. I've seen a heavily variegated *S.* 'Canterbury Surprise' entered in a show in the foliage class without flowers. It happened to be an especially mature and large plant that was well groomed with good form. I'm hoping in the future that someone will hybridize a variegated Strep with a beautiful rosette shape created by using *S. kentaniensis* as a parent. The future is wide open for hybridizing adventures to improve flower count and variety in blossom colors.



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Gesneriad Register

Judy Becker, Registrar <jbecker@mohawk.net> 432 Undermountain Rd., Salisbury, CT 06068-1102

The following registrations should be added to the Registered Gesneriads List found in Appendix C of the 1990 Gesneriad Register:

		_	
01799	Streptocarpus 'Joshi'	S. 'Violet Lace' × unknown	J. M. Ellis
02800	Streptocarpus 'Northwest Passage'	S. 98I-5 \times S. 'Blue Beard'	G. Gessert
02801	Streptocarpus 'Redon'	S. 98A-6 \times S. 'Blue Beard'	G. Gessert
02802	×Achimenantha 'Golden Jubilee'	×Achimenantha 'Inferno' × self	D. Martens
02803	×Achimenantha 'Texas Blue Bayou'	×Achimenantha 'Aries'	
	·	× (Smithiantha 'Duet'	
		\times Smithiantha canarina)	D. Martens
02804	×Achimenantha 'Texas	×Achimenantha 'Aries'	
	Spotted Leopard'	× (Smithiantha 'Duet'	
		\times Smithiantha canarina)	D. Martens
02805	Sinningia 'Playful Porpoise'	S. 'California Gold'	
		× S. 'Guardian Angel'	D. Martens
02806	Smithiantha 'Big Dots Rule'	S. 'Duet' \times S. 'Sassy Redhead'	D. Martens
02807	Smithiantha 'Texas Freckles'	S. 'Duet' \times S. 'Sassy Redhead'	D. Martens
02808	Streptocarpus 'Canterbury Surprise'	x-rayed S. rexii seed	M. Gurr
02809	Streptocarpus 'Iced Amethyst	S. 'Canterbury Surprise'	
	Showoff'	× S. 'Winter Dreams'	Morgan/Martens
02810	Streptocarpus 'Iced Pink Flamingo'	S. 'Canterbury Surprise'	
		× S. 'Winter Dreams'	Morgan/Martens
02811	Streptocarpus 'Ice Wine'	S. 'Canterbury Surprise'	
		× S. 'Winter Dreams'	Morgan/Martens

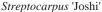
Streptocarpus 'Joshi', 2001, IR01799, James Ellis, UK. (S. 'Violet Lace' \times unknown). Seed planted Oct. 1999, first flowered Mar. 2000. Fertile but reproducible only vegetatively. Rosette. Leaves mid green, 18 cm long \times 8 cm wide, lanceolate with serrate margin and acuminate tip. Calyx split. 5-6 flowers per peduncle. Corolla salverform, 3 cm long \times 5 cm wide, purple heavily netted with lines extending into white throat.

Streptocarpus 'Northwest Passage', 2002, IR02800, George Gessert, OR. (S. 98I-5 \times S. 'Blue Beard'). Cross made 4/27/00, planted 7/28/00 and first flowered 4/17/01. Fertile but reproducible only vegetatively. Rosette. Leaves medium green, up to 11.5" long \times 2.75" wide, linear with slightly undulate margin, acute tip and cuneate base. Calyx split. Up to 8 flowers per peduncle. Corolla salverform, 2.25" wide, white with dark blue-purple lines over a light purple wash around the throat. Available from the hybridizer.

Streptocarpus 'Redon', 2002, IR02801, George Gessert, OR. (S. 98A-6 \times S. 'Blue Beard'). Cross made 11/4/99, planted 1/5/00 and first flowered 9/22/00. Fertile but reproducible only vegetatively. Rosette. Leaves medium green, up to 7" long \times 2" wide, oblong with slightly undulate margins, rounded tip and cuneate base. Calyx split. Corolla salverform, 2" wide, blue purple with black-purple blaze on lower three petals. Though similar to pollen parent, the flowers are larger, darker blue and have a more clearly striped throat. Available from hybridizer.

×Achimenantha 'Golden Jubilee', 2002, IR02802, Dale Martens, TX. (×Achimenantha 'Inferno' × self). Cross made Mar. 1999, planted May 1999 and first flowered May 8, 2001. Reproducible only vegetatively.







Streptocarpus 'Northwest Passage'

Rhizomatous plant, if not pinched can be 20 cm tall. Leaves hairy, dark green with reddish reverse, 4.3 cm long \times 2.5 cm wide, ovate with serrate margin and cuneate base. Calyx split, green with reddish tips, 5 mm long. Pedicel 1.5 cm long. Corolla salverform, 5 cm long \times 4.5 cm wide, pink with hint of salmon, yellow throat with magenta marking over it. Best New Hybrid 2001 AGGS Convention Flower Show.

×Achimenantha 'Texas Blue Bayou', 2002, IR02803, Dale Martens, TX. [×Achimenantha 'Aries' × (Smithiantha 'Duet' × Smithiantha canarina)]. Cross made Aug. 2000, planted Nov. 2000 and first flowered Apr. 2001. Reproducible only vegetatively. Rhizomatous, erect, 18 cm tall if not pinched. Leaves hairy, dark green with deep red back (RHS183C), 5.2 cm long × 4.3 cm wide, ovate with serrate margin, acute tip and cuneate base. Calyx reddish, 7.5 mm long. Pedicel 1 cm long. Corolla salverform, 7.0 cm long × 5.3 cm wide, with wavy edges, tube is reddish RHS 63A, limb lavender blue. Published 2001, Crosswords, Vol. 25 (3) color insert.

×Achimenantha 'Texas Spotted Leopard', 2002, IR02804, Dale Martens, TX. [×Achimenantha 'Aries' × (Smithiantha 'Duet' × Smithiantha canarina)]. Cross made Aug. 2000, planted Nov. 2000 and first flowered Apr. 2001. Reproducible only vegetatively. Rhizomatous, erect, 28 cm tall if not pinched. Leaves hairy, dark green with reddish back, 5.5 cm long × 3.2 cm wide, ovate with serrate margin, acute tip and cuneate base. Calyx split, 7 mm long, dark green with reddish back. Pedicel 1.4 cm long. Corolla salverform, 4.5 cm long × 5.3 cm wide, blue-violet (RHS 87C) with spots and lines that are in patches of light color (RHS 87A). Foliage is extremely mildly carnation scented.

Sinningia 'Playful Porpoise', 2002, IR02805, Dale Martens, TX. (S. 'California Gold' \times S. 'Guardian Angel'). Cross made July 2000, planted Oct. 2000 and first bloomed Apr. 2001. Reproducible only vegetatively. Rosette, tuberous. Leaves apple green with slightly reddish veins, $10 \text{ cm long} \times 9 \text{ cm}$ wide with 5 cm petiole, ovate with crenate margin, acute tip and cordate base. Pedicel 5 cm long. Corolla double (hose-in-hose shape, salverform, $7.2 \text{ cm long} \times 4.3 \text{ cm}$ wide, lower petals white with pale lavender stripes and dots, upper petals pale lavender, yellow deep inside tube. Blue ribbon in Educational Display 2001 AGGS Convention Flower Show.



Sinningia 'Playful Porpoise'



Smithiantha 'Texas Freckles'



×Achimenantha 'Texas Blue Bayou'



Streptocarpus 'Canterbury Surprise'

Smithiantha 'Big Dots Rule', 2002, IR02806, Dale Martens, TX. (S. 'Duet' $\times S$. 'Sassy Redhead'). Cross made Nov. 1999, planted Feb. 2000 and first flowered Sept. 2000. Reproducible only vegetatively. Rhizomatous, erect to 35 cm tall if not pinched. Leaves dark red-green, densely covered with red hairs, 15 cm long \times 10 cm wide, with 5 cm petiole, ovate with serrate margin, acute tip and cordate base. Calyx split, red-green, 6 mm long, pedicel 3.8 cm long. Corolla salverform, 4.5 cm long \times 2.5 cm wide, outer tube is white or pale magenta, face of tube white with huge magenta dots.

Smithiantha 'Texas Freckles', 2002, IR02807, Dale Martens, TX. (S. 'Duet' $\times S$. 'Sassy Redhead'). Cross made Nov. 1999, planted Feb. 2000 and first flowered Oct. 2000. Reproducible only vegetatively. Rhizomatous, erect to 41 cm tall. Leaves dark reddish green densely covered with reddish hairs, 16.5 cm long \times 10 cm wide, 5 cm petiole, ovate with serrate margin and acute tip. Calyx split, red-green, 6 mm long. Pedicel 3.8 cm long. Corolla salverform, 4.4 cm long \times 2.5 cm wide, wine-red tube, face with white areas with distinctive, extra large wine-red polka dots.

Streptocarpus 'Canterbury Surprise', 2002, IR02808, Margaret Gurr, New Zealand. (x-rayed *S. rexii* seed). About 1997. Fertile but reproducible only vegetatively. Rosette. Leaves bullate, dark green and white, 18 cm long × 7 cm wide, linear with serrate margin, acute tip and cuneate base. Calyx split, green, 1 cm long. Pedicel 4 cm long with 1 or 2 flowers. Corolla salver-

form, 6.2 cm long, 5 cm in diameter, lavender blue with slightly frilly edge, throat with wide black purple markings on three lower petals. First published 2001 in *Crosswords*, Vol. 25 (1) p. 9. Blue ribbon 2001 AGGS Convention.

Streptocarpus 'Iced Amethyst Showoff', 2002, IR02809, Sandra Morgan, Canada, and Dale Martens, TX. (S. 'Canterbury Surprise' $\times S$. 'Winter Dreams'). Cross made Aug. 2000, planted Oct. 2000 and first flowered Mar. 2001. Reproducible only vegetatively. Rosette. Leaves bullate, green and white, 22 cm long \times 8 cm wide, linear with crenate margin, acute tip and cuneate base. Calyx split, green, 3 mm long, pedicel 14 cm long with 2 flowers. Corolla salverform, 8 cm long \times 8.5 cm wide, reddish lavender (RHS 82B) with multiple darker lines extending from white throat onto three lower petals.

Streptocarpus 'Iced Pink Flamingo', 2002, IR02810, Sandra Morgan, Canada, and Dale Martens, TX. (S. 'Canterbury Surprise' × S. 'Winter Dreams'). Cross made Aug. 2000, planted Oct. 2000 and first flowered Mar. 2001. Reproducible only vegetatively. Rosette. Leaves bullate, green and white, 20 cm long × 7 cm wide, linear with crenate margin, acute tip and cuneate base. Calyx split, green with dark tips, 3 mm long. Pedicel 11 cm long with 1 or 2 flowers. Corolla salverform, 8 cm long × 8.5 cm wide, slightly darker bright pink than RHS 74A, with darker lines on lower three petals. May show two-toned color when mature. Received blue ribbon at AVSA 2002 Convention.

Streptocarpus 'Ice Wine', 2002, IR02811, Sandra Morgan, Canada, and Dale Martens, TX. (S. 'Canterbury Surprise' \times S. 'Winter Dreams'). Cross made Aug. 2000, planted Oct. 2000 and first flowered Feb. 2001. Reproducible only vegetatively. Rosette. Leaves bullate, green and white, 22 cm long \times 7 cm wide, linear with crenate margin, acute tip and cuneate base. Calyx split, green with purple tips, 1 cm long. Pedicel 12 cm long with 1 or 2 flowers. Corolla salverform, 7.5 cm long \times 6 cm wide, red-lavender (RHS 78) sometimes streaked with RHS 78C, white throat with dark lines on lower three lobes. First published 2001, *Crosswords*, Vol. 25 (3), color insert.



Streptocarpus 'Iced Pink Flamingo'



Streptocarpus 'Ice Wine'

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Gesneriads Outside in the Pacific Northwest

Arleen Dewell <arleendewell@shaw.ca> 311-2366 Wall St., Vancouver, B.C. V5L 4Y1 Canada

I'm crazy about Streptocarpus. My memory of a beautifully grown *Streptocarpus* 'Maassen's White' exhibited at an African violet show more than 18 years ago marked the beginning of my journey into this incredible world of gesneriads. Trouble is, I live in a small apartment where growing space is at a premium. Temperatures are often very warm, with little or no variation between day and night values. The best relative humidity on a good day, without jumping through endless hoops to acquire it, is barely 50%. Predictably, I struggled a bit growing my first Streptocarpus under these conditions. With experience, I discovered that they would do reasonably well wicked on the lower, cooler shelves of my light stands. Then summer arrived. As the temperature inside the apartment soared into the 90's, you can imagine how rapidly those graceful, arching Strep leaves collapsed into a tangled, bedraggled mess. What to do? Giving up on Streps completely was simply not in my vocabulary.

Attached to my apartment is a spacious, south-facing balcony with a 5' overhang above. Nevertheless, I worried that even after acclimation, I would still be exposing my precious Streps to more sun than they could handle if I left them outside all summer. The first few years I lived here, I learned that shade lovers like hostas, fuchsias or impatiens did poorly on my balcony, largely because of its southern exposure. What chance then would my Streptocarpus have? But all gesneriads grow outside somewhere in the world, I reasoned. Surely Nature would have equipped them to deal with any number of extremes? Holding that thought, I began to carefully observe the interplay of light and shade on the balcony from dawn until dusk. To my surprise, I discovered that while it did receive a lot of sun from sunrise to mid-afternoon, there also existed shadows cast by the balcony railings and the overhang. Areas of dappled shade begin to appear by mid to late morning, lengthening to full shade by 4:00 p.m. I also noticed that the landscaping around the building, most notably a maple tree to the east of my property, had grown substantially over the years and now provided even more leafy shade during the early morning hours. Maybe there was hope for the Streps outside, after all.

Resolving to test my observations the following year, I purchased seed of *Streptocarpus cyaneus* (lilac form) and the unifoliate species *S. haygarthii* from the AGGS Seed Fund. Early the next spring I had plenty of sturdy plantlets, most of which were given away to fellow club members as part of an education programme on Streps. Seven plants of *S. cyaneus* and three of *S. haygarthii* were retained to become part of my outside growing experiment. As the weather warmed up, I hardened the plants off over a two-week period from May to early June. Then another dilemma presented itself. What type of soil mix would be suitable for my test subjects? Should I put my homemade soilless 1-1-1 mix that I use for all my inside-grown gesneriads into the patio planters? Could the Streps maybe adapt to the store-bought patio container mix which consisted primarily of garden soil and peat with a little added perlite? I decided to add some extra handfuls of perlite to the commercial mix and transplanted the Streps into their new homes outside.

The seven plants of *S. cyaneus* were divided up and planted into three different planters, all of which drained well. The three little plants of *S. haygarthii* resided together in a fourth well-draining container. All of the Streps were placed at the edge of the balcony close to the railings to take advantage of the dappled shade cast by them. I fertilized the Streps as I did my outdoor annuals with one tablespoon per gallon of 10-60-10 fertilizer every week during July and August.

Before long, the Streps signalled that they were loving their new outdoor home. New leaves rapidly appeared and seemed to be greener and rougher in texture. Bud set followed and about five weeks after transplant, all of the plants of *S. cyaneus* began to bloom. My worries about their being overcome by too much heat and sun out on the balcony proved to be unfounded! I remember observing with interest the apparent differences in the flowers of each individual plant. Corolla colour ranged from the palest pink through blue-mauves to the deepest purple. Yellow throat markings were very prominent in some individuals, to almost non-existent in others. The reddish/purple stripes on the inside of the tube extending down the limb varied from as few as two or three on some plants to as many as seven stripes per flower.

By mid July, I was delighted to see the first flower stalks coming up on the unifoliate leaves of *S. haygarthii* and soon had lots of tiny white to pale blue flowers on long peduncles to show off. I highly recommend *S. haygarthii* as an ice-breaker if you're looking for a way to get friends and acquaintances interested in growing gesneriads! That single red-reverse leaf holding all those bloom stalks is a real conversation piece. In an interesting twist of fate, some of the seed collected from my grown-in-the-Pacific-Northwest *S. haygarthii* found its way back to South Africa with friends who were visiting from there.

Why would Streps fare so much better growing on my balcony than they did inside on the plant stand? I reasoned that cooling breezes, greater variation between day and night temperatures and differences in day length all contributed to their well being. *S. haygarthii*, being unifoliate and monocarpic, eventually set many characteristically twisted seed pods and then died back. I decided to continue my experiment with *S. cyaneus*. Could the plants survive the winter outside, to bloom again the following spring? It was fun watching abcission lines appear on all the leaves as day lengths shortened and cooler temperatures heralded winter's arrival. That was something I never saw happen on my indoor-grown Streps! I lost all of the plants of *S. cyaneus* that year, but not before learning an important lesson. Here in the Northwest we rarely get prolonged hard winter freezes. It is the chilling, drenching rain that hassles dormant Streps more than cool temperatures ever could.

I tried the hybrids, S. 'Venus' and S. 'Achilles' on the balcony the next year. They were fully acclimated and planted out by early June. The hybrid Streps also did well in their balcony home, and with the coming of fall began to show the abcission lines that signalled the end of the growing season. This time I was careful to shelter the containers from our endless winter rain by bringing them closer to the building where they would be protected by the deep overhang. I watered the plants sparingly, if at all, from November to February. The Streps reduced themselves to small nubs of dormant tissue that looked nothing at all like the lush, beautiful plants I had admired during the summer months! In late November that year, we had freezing temperatures down to -5°C to -7°C that persisted for about a week and a half. Like a

worried mother hen, I wrapped the containers holding my precious Streps in burlap, old sheets and anything else I could find that might help them ride out the freezing nights. In retrospect, my decision to keep the potting medium on the dry side turned out to be the right one. If the containers had been heavily watered prior to that freeze, the roots almost certainly would have turned to mush.

The third year into my experiment, I was overjoyed to see those tiny nubs of greyish-green tissue come to life and grow with the lengthening spring days. That summer, those hybrid Streps looked completely different compared to what I had grown inside under lights the year before. The bloom count was tremendous, and the plants appeared to be stockier with more robust, coarser-looking leaves. What a difference surviving a Pacific Northwest winter outside had made! If growing Streptocarpus outside was such a success, would other gesneriad genera benefit from an outdoor holiday? Stay tuned for fun with Achimenes outside!



Streptocarpus 'Venus' thriving on Arleen's balcony

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American Gloxinia & Gesneriad Society, Inc.

Financial Statement — January 1, 2002 to December 31, 2002

• /	02 to December 31, 2	002
GENERAL FUND — Combined Receipts, Checking a	and Savings	
Membership		24,517
Promotions		2,801
Ads in THE GLOXINIAN	1,508	
Education & Slide Programs Sales of Literature & Supplies, incl Postage		465 2,459
Seed Fund Sales		6,377
Judging Publications & Supplies		870
Donations — Fund for Progress		7,094
Donations — Color Photo Sponsorships	1,430	
Miscellaneous Receipts		2,391
Total — Combined Balances (Checking \$23,463 / Savings \$26,449)		\$49,912
GENERAL FUND Charling Assount Paginning Palance December	21 2001	10 720
Checking Account — Beginning Balance, December Add from Combined Balances Above	21 31, 2001	18,728 23,463
Other Revenue, Misc.		603
Misc. – Held for Expenses		27,736
Misc. – Held for Convention Expenses		43,576
Misc. – Held for Grants (2)		4,600
` '		
Total Receipts — Checking		\$118,706
DISBURSEMENTS		
Publication of The GLOXINIAN		(35,905)
Other Publications		(1,290)
Membership Processing		(1,347)
Promotions		(2,164)
Operating Expenses	(2.100)	(55,721)
Chair Expenses	(2,188)	
Stipends Liability Insurance	(3,400)	
Convention Advances & Expenses	(2,608) (44,852)	
Miscellaneous Remits	(2,673)	
Grants Disbursed	(2,073)	(4,600)
GF Fund to Research		(5,000)
Total Disbursements		(106,027)
Total on Hand, Checking — December 31, 2002		\$12,679
GENERAL FUND — Savings		
Beginning Balance – December 31, 2001		26,292
From Combined Balances		26,449
Interest		326
Convention Receipts, Gross		51,603
Miscellaneous Total Passints		180
Total Receipts Less Credit Card Fees	(1,490)	104,850
Less Credit Card Refunds and Supplies	(129)	
Less Convention Refunds	(905)	
Miscellaneous	(703)	
Transfer for Convention Expenses	(42,906)	
Transfer to Checking for Remits	(27,736)	
Bank Fee, Supplies	(117)	
Total Disbursements	()	(73,283)
Savings Balance, December 31, 2002	\$31,567	
Savings Buildice, December 31, 2002		φυ1,υ07

GENERAL FUND		
Checking Account		12,679
Savings Account		31,567
Mutual Funds:		17,397
Safeco Intermediate Term Treas 8,645 Safeco Intermediate Term Muni 8,752		
Total – General Fund – December 31, 2002		\$61.642
· · · · · · · · · · · · · · · · · · ·		\$61,643
ELVIN McDONALD RESEARCH ENDOWMENT FUND		15 450
Balance – December 31, 2001 Donations		15,450
Transfer from General Fund		1,704 5,000
Interest – Savings		23
Interest — CD #1 @ 5.09% APY, Key Bank		626
Interest — CD #2 @ 3.50% APY, Wa Fed plus Key prior CD		128
Less Research Grant, Vincent Woo		(2,000)
Less Research Grant, Selby Botanical Gardens		(2,600)
Savings Balance	4,109	
Balance, Cert of Deposit #1 Balance, Cert of Deposit #2	11,888 2,334	
Ending Balance, December 31, 2002	2,334	\$18,331
INTERNATIONAL GESNERIAD REGISTER FUND		\$10,551
Balance – December 31, 2001		13,785
Sale of Registers		377
Savings Interest		55
Interest on CD @ 4.00% APY, Wa Fed		334
Less Register Printing (2001)		(603)
Savings Balance	5,268	
Balance on Certificate of Deposit	8,680	412.040
Ending Balance December 31, 2002	13,948	\$13,948
FRANCES BATCHELLER ENDOWMENT FUND	13,948	
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001	13,948	\$13,948 154,110
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value – Mutual Funds as of December 31, 2002	13,948	154,110
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value – Mutual Funds as of December 31, 2002 Fidelity – Asset Manager @13.80	,	154,110 (3,745)
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value – Mutual Funds as of December 31, 2002	,	154,110
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value – Mutual Funds as of December 31, 2002 Fidelity – Asset Manager @13.80 Safeco – Intermed Term Treas. @10.95% & Muni @11.10	,	154,110 (3,745) 2,992
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value – Mutual Funds as of December 31, 2002 Fidelity – Asset Manager @13.80 Safeco – Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions	,	154,110 (3,745) 2,992 2,925 718 4,054
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value – Mutual Funds as of December 31, 2002 Fidelity – Asset Manager @13.80 Safeco – Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions Interest Earned to December 31, 2002:	0%	154,110 (3,745) 2,992 2,925 718
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value – Mutual Funds as of December 31, 2002 Fidelity – Asset Manager @13.80 Safeco – Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions Interest Earned to December 31, 2002: Savings	92	154,110 (3,745) 2,992 2,925 718 4,054
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value – Mutual Funds as of December 31, 2002 Fidelity – Asset Manager @13.80 Safeco – Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions Interest Earned to December 31, 2002: Savings Key Bank USA, Cert of Deposit, #1 @ 5.75 % APY	92 2,357	154,110 (3,745) 2,992 2,925 718 4,054
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value – Mutual Funds as of December 31, 2002 Fidelity – Asset Manager @13.80 Safeco – Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions Interest Earned to December 31, 2002: Savings Key Bank USA, Cert of Deposit, #1 @ 5.75 % APY Wa Fed, Certificate of Deposit #2 @ 2.75 % APY	92 2,357 253	154,110 (3,745) 2,992 2,925 718 4,054
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value – Mutual Funds as of December 31, 2002 Fidelity – Asset Manager @13.80 Safeco – Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions Interest Earned to December 31, 2002: Savings Key Bank USA, Cert of Deposit, #1 @ 5.75 % APY Wa Fed, Certificate of Deposit #2 @ 2.75 % APY Wa Fed, Certificate of Deposit #3 @ 5.00 % APY	92 2,357 253 852	154,110 (3,745) 2,992 2,925 718 4,054
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value – Mutual Funds as of December 31, 2002 Fidelity – Asset Manager @13.80 Safeco – Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions Interest Earned to December 31, 2002: Savings Key Bank USA, Cert of Deposit, #1 @ 5.75 % APY Wa Fed, Certificate of Deposit #2 @ 2.75 % APY	92 2,357 253	154,110 (3,745) 2,992 2,925 718 4,054
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value – Mutual Funds as of December 31, 2002 Fidelity – Asset Manager @13.80 Safeco – Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions Interest Earned to December 31, 2002: Savings Key Bank USA, Cert of Deposit, #1 @ 5.75 % APY Wa Fed, Certificate of Deposit #2 @ 2.75 % APY Wa Fed, Certificate of Deposit #3 @ 5.00 % APY Wa Fed, Certificate of Deposit #4 @ 5.00 % APY	92 2,357 253 852	154,110 (3,745) 2,992 2,925 718 4,054
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value — Mutual Funds as of December 31, 2002 Fidelity — Asset Manager @13.80 Safeco — Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions Interest Earned to December 31, 2002: Savings Key Bank USA, Cert of Deposit, #1 @ 5.75 % APY Wa Fed, Certificate of Deposit #2 @ 2.75 % APY Wa Fed, Certificate of Deposit #3 @ 5.00 % APY Wa Fed, Certificate of Deposit #4 @ 5.00 % APY Balances, December 31, 2002 Savings Certificate #1	92 2,357 253 852 506 14,120 42,549	154,110 (3,745) 2,992 2,925 718 4,054
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value — Mutual Funds as of December 31, 2002 Fidelity — Asset Manager @13.80 Safeco — Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions Interest Earned to December 31, 2002: Savings Key Bank USA, Cert of Deposit, #1 @ 5.75 % APY Wa Fed, Certificate of Deposit #2 @ 2.75 % APY Wa Fed, Certificate of Deposit #3 @ 5.00 % APY Wa Fed, Certificate of Deposit #4 @ 5.00 % APY Balances, December 31, 2002 Savings Certificate #1 Certificate #2	92 2,357 253 852 506 14,120 42,549 4,627	154,110 (3,745) 2,992 2,925 718 4,054
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value – Mutual Funds as of December 31, 2002 Fidelity – Asset Manager @13.80 Safeco – Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions Interest Earned to December 31, 2002: Savings Key Bank USA, Cert of Deposit, #1 @ 5.75 % APY Wa Fed, Certificate of Deposit #2 @ 2.75 % APY Wa Fed, Certificate of Deposit #3 @ 5.00 % APY Wa Fed, Certificate of Deposit #4 @ 5.00 % APY Balances, December 31, 2002 Savings Certificate #1 Certificate #1 Certificate #3	92 2,357 253 852 506 14,120 42,549 4,627 17,707	154,110 (3,745) 2,992 2,925 718 4,054
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value – Mutual Funds as of December 31, 2002 Fidelity – Asset Manager @13.80 Safeco – Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions Interest Earned to December 31, 2002: Savings Key Bank USA, Cert of Deposit, #1 @ 5.75 % APY Wa Fed, Certificate of Deposit #2 @ 2.75 % APY Wa Fed, Certificate of Deposit #3 @ 5.00 % APY Wa Fed, Certificate of Deposit #4 @ 5.00 % APY Balances, December 31, 2002 Savings Certificate #1 Certificate #1 Certificate #3 Certificate #4	92 2,357 253 852 506 14,120 42,549 4,627 17,707 10,634	154,110 (3,745) 2,992 2,925 718 4,054
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value – Mutual Funds as of December 31, 2002 Fidelity – Asset Manager @13.80 Safeco – Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions Interest Earned to December 31, 2002: Savings Key Bank USA, Cert of Deposit, #1 @ 5.75 % APY Wa Fed, Certificate of Deposit #2 @ 2.75 % APY Wa Fed, Certificate of Deposit #3 @ 5.00 % APY Wa Fed, Certificate of Deposit #4 @ 5.00 % APY Balances, December 31, 2002 Savings Certificate #1 Certificate #1 Certificate #3 Certificate #4 Fidelity MF	92 2,357 253 852 506 14,120 42,549 4,627 17,707 10,634 42,748	154,110 (3,745) 2,992 2,925 718 4,054
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value – Mutual Funds as of December 31, 2002 Fidelity – Asset Manager @13.80 Safeco – Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions Interest Earned to December 31, 2002: Savings Key Bank USA, Cert of Deposit, #1 @ 5.75 % APY Wa Fed, Certificate of Deposit #2 @ 2.75 % APY Wa Fed, Certificate of Deposit #3 @ 5.00 % APY Wa Fed, Certificate of Deposit #4 @ 5.00 % APY Balances, December 31, 2002 Savings Certificate #1 Certificate #1 Certificate #3 Certificate #4	92 2,357 253 852 506 14,120 42,549 4,627 17,707 10,634	154,110 (3,745) 2,992 2,925 718 4,054
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value – Mutual Funds as of December 31, 2002 Fidelity – Asset Manager @13.80 Safeco – Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions Interest Earned to December 31, 2002: Savings Key Bank USA, Cert of Deposit, #1 @ 5.75 % APY Wa Fed, Certificate of Deposit #2 @ 2.75 % APY Wa Fed, Certificate of Deposit #3 @ 5.00 % APY Wa Fed, Certificate of Deposit #4 @ 5.00 % APY Balances, December 31, 2002 Savings Certificate #1 Certificate #2 Certificate #3 Certificate #4 Fidelity MF Safeco MF	92 2,357 253 852 506 14,120 42,549 4,627 17,707 10,634 42,748 32,729	154,110 (3,745) 2,992 2,925 718 4,054
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value — Mutual Funds as of December 31, 2002 Fidelity — Asset Manager @13.80 Safeco — Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions Interest Earned to December 31, 2002: Savings Key Bank USA, Cert of Deposit, #1 @ 5.75 % APY Wa Fed, Certificate of Deposit #2 @ 2.75 % APY Wa Fed, Certificate of Deposit #3 @ 5.00 % APY Wa Fed, Certificate of Deposit #4 @ 5.00 % APY Balances, December 31, 2002 Savings Certificate #1 Certificate #2 Certificate #3 Certificate #4 Fidelity MF Safeco MF I.T. Treas. 23,039	92 2,357 253 852 506 14,120 42,549 4,627 17,707 10,634 42,748	154,110 (3,745) 2,992 2,925 718 4,054 4,060
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value — Mutual Funds as of December 31, 2002 Fidelity — Asset Manager @13.80 Safeco — Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions Interest Earned to December 31, 2002: Savings Key Bank USA, Cert of Deposit, #1 @ 5.75 % APY Wa Fed, Certificate of Deposit #2 @ 2.75 % APY Wa Fed, Certificate of Deposit #4 @ 5.00 % APY Wa Fed, Certificate of Deposit #4 @ 5.00 % APY Balances, December 31, 2002 Savings Certificate #1 Certificate #1 Certificate #2 Certificate #3 Certificate #4 Fidelity MF Safeco MF I.T. Treas. 23,039 I.T. Muni 9,690 Totals Combined Balances, Frances Batcheller Endowment Fund	92 2,357 253 852 506 14,120 42,549 4,627 17,707 10,634 42,748 32,729	154,110 (3,745) 2,992 2,925 718 4,054 4,060
FRANCES BATCHELLER ENDOWMENT FUND Balances — Combined, December 31, 2001 Change in Value — Mutual Funds as of December 31, 2002 Fidelity — Asset Manager @13.80 Safeco — Intermed Term Treas. @10.95% & Muni @11.10 Life Memberships Donations Convention Auctions Interest Earned to December 31, 2002: Savings Key Bank USA, Cert of Deposit, #1 @ 5.75 % APY Wa Fed, Certificate of Deposit #2 @ 2.75 % APY Wa Fed, Certificate of Deposit #3 @ 5.00 % APY Wa Fed, Certificate of Deposit #4 @ 5.00 % APY Balances, December 31, 2002 Savings Certificate #1 Certificate #2 Certificate #3 Certificate #4 Fidelity MF Safeco MF I.T. Treas. 23,039 I.T. Muni 9,690 Totals	92 2,357 253 852 506 14,120 42,549 4,627 17,707 10,634 42,748 32,729	154,110 (3,745) 2,992 2,925 718 4,054 4,060

We Remember ...

Ray Becker of Salisbury, Connecticut was the father of Judy Becker, AGGS Registrar. He was a tireless, all-around, behind-the-scenes stalwart of Lauray of Salisbury Greenhouses. Long after most people retire, Ray Becker was still actively working at what he loved—the care of the family greenhouses and plants. He was almost 91 years old.

Doris Cormier of Santa Ana, California was an early and energetic charter member of both the San Francisco and Peninsula Chapters and served them as treasurer. She was unfailingly kind, generous with plant material, and enthusiastic about growing. Jon Dixon received from her a small plant of a hybrid of *Sinningia leucotricha* that differed enough for him to name it for her. Because of its spotted flowers, *Sinningia* 'Doris Cormier' has been a favorite of northern California growers.

Tony Crisafulli of Belchertown, Massachusetts was the other half of the Jessie and Tony Crisafulli union, active in the New England Chapter and AGGS—in recognition of their contributions, both received Awards of Appreciation in 1989. For many years, Tony served as Chairman of Protocol at conventions. Jessie's many Sweepstakes Awards would not have been possible unless Tony removed the back seat of their car and drove to conventions, whatever the distance. He was noted for his photography, especially of Jessie's plants, as well as for the home-baked food he always contributed to the hospitality table and pot-luck events. Tony faithfully drove two hours each way to attend New England Chapter meetings bringing Jessie with her plants, the food and his camera to every meeting.

Earl Deroche, from Gramercy, Louisiana, served on the AGGS Board for 15 years beginning with service as a Director and Insurance Chair in 1981 and continuing as Insurance Chair until 1996. He was an active member of the Bayou Chapter that hosted two unforgettable AGGS Conventions. All conventioneers were treated to a visit to his home to enjoy the gesneriads growing in his indoor waterfall, greenhouse and immaculate light garden which was pictured on the cover of The Gloxinian in May/June 1995. He received an Award of Appreciation from AGGS in 1991. Many more recent conventiongoers will remember Earl as one of the most energetic and enthusiastic auctioneers for the Frances Batcheller Endowment Fund live auctions.

Irwin Rosenblum of Lenox, Massachusetts was one of the earliest members to join AGGS in the early 1950's. He served on the AGGS Board of Directors in the 1960's as a Director, Convention Chair, Membership Promotion Chair, and Chapter Liaison Chair. He served another term as Director in the late 1970's. In addition to writing many articles for THE GLOXINIAN, he served as Editor from 1969 to 1971. He loved gesneriads so much that after 30 years as a chemical engineer and consultant to the pharmaceutical industry, he went back to graduate school in 1969 to study botany, especially focusing on the genus *Streptocarpus*. He wrote a paper on Streptocarpus development and the influence of hormones on stem formation, even in unifoliates. He was a founding member and president of the Greater New York Chapter in the 1950's and later a founder and president of the Berkshire Chapter in the mid-1980's. Irwin was a Life Member of AGGS.

Laura Shannon of Philadelphia, Pennsylvania had a passion for knowledge and plants. She was a certified AGGS Master Judge and regularly attended conventions. Laura also wrote many articles for *Appraisal*, the newsletter for gesneriad judges, and always provided knowledgeable but gentle commentary when she judged. Laura will be especially remembered for a handout she prepared for a judging workshop on writing comments on score sheets for artistic arrangements. Many will also remember her as a gentle and patient teacher at AGGS judging schools. She was a person who freely shared her knowledge of gesneriads with new members of AGGS as well as the local plant societies to which she belonged. She was a long-time president of the Liberty Bell Chapter of AGGS.

Compiled by Susan Grose with added special memories from Mary Bozoian, Jon Dixon, Alan LaVergne, Ben Paternoster, and Bob & Dee Stewart



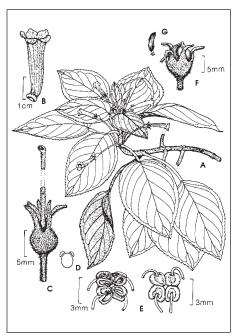
In Memoriam

Sydney Cooper Aurora, Ontario, Canada Jo Hawley New York, New York Noel Williams Whitney, Texas

David Tyler Port Angeles, Washington

"The Illustrated Digest of Neotropical Gesneriaceae"

A new book of botanical illustrations of gesneriads has recently been published by the Friends of the GRF. Over a twenty-year period, more than 200 plates were sponsored by individuals and organizations in support of this project.



I.D. Plate 200 Sinningia mauroana Chautems

Brazil

First Publication: Gesneriana 1:9, 14, Fig. 3. 1995

> Illustrator: Maya Mossaz

Sponsor: Edwina Varner, Fairview, NC

The **I.D.** contains full-page illustrations of 220 species of Gesneriads, most of which were collected, then researched and grown at the GRF greenhouse. It also includes an introduction, classification table, and brief summary of the 54 Gesneriad genera of the New World. The design is similar to that of the GRF publication *Gesneriana*. A limited number of copies have been printed and are now available by mail order.

The cost per copy is only \$25 which includes book-rate mailing in the U.S. (This low, not-for-profit amount covers only actual costs for printing, expenses and shipping.) For mailing to Canada, please include an additional \$4; for mailing overseas, please include an additional \$10. Checks (in U.S. funds) should be made out to Friends of the GRF and sent to:

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