

MARCH 7: CNYOS WELCOMES DR. CLARK T. RILEY:

CYPRIPEDIUMS & SELENIPEDIUMS



It's March. And I cannot remember a winter when it felt so good to state that simple fact. I know Old Man Winter is far from done having his way with us—the truth is that March can be remarkably cruel, as it taunts us with promises of warmth, while denying spring's full embrace. A warm day here & there with occasional (albeit more frequent) glimpses of the sun are buffeted by late winter snows to torture those who long for the first daffodils to bloom. But we must wait...

While we wait, however, CNYOS has the pleasure of having Dr. Clark Riley as our guest this Sunday, March 7th, 2^{pm}, St. Augustine's Church, whose talk is entitled "*Cinderella's Slippers Found! The Cypripediums and Selenipediums.*" Just as the first spring bulbs are starting to awake deep beneath the snow, so are our wide variety of native orchids, most prominently the Cypripediums. Most of us are aware of the several common species that can be found without too much difficulty over the next few months, including *Cypripedium pubescens*, *parviflorum*, & *reginae*. And many of us are also aware of the commonly cultivated tropical cousins of these temperate species, including the Old World Paphiopedilums & the New World Phragmipediums. No doubt all of us have species & hybrids of both in our collections. But how many of us are aware of yet another tropical New World genus of slipper orchid, the Selenipediums? This rarely cultivated group is seldom discussed, mostly because they tend to be anywhere from 5 to 10 feet tall, which flowers only a few inches in diameter! Our speaker, Clark Riley of Baltimore, MD, has had an interest lady slippers for roughly 40 years, & is one of the few people in North America to successfully grow & bloom a Selenipedium. Clark's talk will be an illustrated introduction to the biology, history, & beauty of the hardy ladyslippers & their rare South American cousins. He will also have slipper orchids for sale. His bio is shown on page 3. **We will be taking our speaker out to lunch at Lock 24 in Baldwinsville—see page 2 for details.**

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**FEBRUARY ACTIVITIES: ANNUAL TRIP TO
BLOOMFIELD ORCHIDS & OPEN MEETING**

On Sunday February 1ST, CNYOS paid its annual visit to Joe Kunisch of Bloomfield Orchids. Those who went had a nice opportunity to wander through Joe's nice warm greenhouse to admire—and purchase—a wide variety of orchids. As usual, Joe & Norma provided a delicious lunch. Also as usual, CNYOS members and friends went home with their wallets a bit slimmer, but their arms full of new additions to their collections!

For our meeting on February 8TH, CNYOS invited the public to attending a meeting geared toward the beginning orchid grower. The meeting started out with an introductory video on growing orchids, hosted by Art Chadwick (see Chadwick's article on *Cattleya luteola* in this month's AOS Orchids magazine). Several CNYOS members, including Carolyn Pace, Cynthia Busic-Synder, Judi Witkin, and Jeff Stuart shared their hints on how best to grow orchids, with respect to all the basics—light, water, fertilizer, potting media, and air circulation. Plans for upcoming shows and other activities were also discussed.

**JOIN CNYOS FOR LUNCH WITH OUR
MARCH SPEAKER**

Prior to our meeting this Sunday, CNYOS will be taking our speaker out to lunch at the **Lock 24** in Baldwinsville. If you're interested in joining us, please call Jeff Stuart no later than Saturday March 5TH (471-1404) so he can make reservations. Those interested should meet at St. Augustine's at 11:30 Sunday morning, so we can car-pool to the restaurant. Hope you can join us!

Photo Credits: Cover art: *Selenipedium aequinoctiale* © Clark T. Riley (<http://www.cyps.us/selen/index.html>) with digital manipulation by Jeff Stuart. Page 3 photo of speaker © Clark T. Riley. *Phal. Maritea* (page 4) © Greg Allikas (The Orchid Photo Page, <http://www.orchidworks.com/>), with digital manipulation by Jeff Stuart.

Old Business

1. New members and guests were welcomed.
2. The minutes were read and accepted.
3. Newsletter Editor Jeff Stuart announced that the February Newsletter would be the last for those folks who have not renewed their membership. Please pay Carol Haskell.
4. Club Web Site: Jeff Stuart announced that the web site, <http://www.paphiopedilum.net> had overrun its allotted space. After discussion, a proposal to upgrade the site from 50 to 500 megabytes was approved.
5. Treasurer's Report: Holiday Shoppes profit: \$180. Silent Auction profit: \$569.
6. The annual trip to Bloomfield Orchids was held on February 1ST.
7. Rick Braue: The Herb & Plant Flower Festival is to be held at the Oneida County Cooperative Extension Building, out by the Oneida Airport, for one day on June 26TH, from 9^{AM} to 3^{PM}. This will be a good opportunity to publicize the club and sell plants. Rick will give a presentation about orchids and the club will provide a display. Sue Oseo and Mike Candella will assist. Flowering orchids will be needed for the display. Deb Coyle volunteered to take down the exhibit.

New Business

1. Home and Garden Show—there is the possibility that we may not be able to sell plants.
2. Society Shows—we need volunteers to set up and take down for the CNY Home and Garden Show, the GROS Show in Rochester, and STOS Show in Binghamton. The correct dates for the STOS show are April 22-25.
3. Miscellaneous Orders: Dolores Capella will be sending an order to Tropical Supplies, let her know if you want to join in. Charles Ufford will be sending in an order for Oak Hill, let him know if there is anything you also want from there. Jeff will be letting us know on our website about plants we can order for the Mounted Orchid Clinic.
4. The program was growing tips from dedicated members Jeff Stuart and Judi Witkin.

Respectfully Submitted,

Barbara Weller, CNYOS Secretary

- March 7** **Regular Meeting:** Dr. Clark T. Riley, "Cinderella's Slippers Found! The Cypripediums and Selenipediums"
- March 18-21** **CNY Home & Garden Show at the State Fair Grounds:** CNYOS participation tentative.
- March 25-28** **Genesee Region Orchid Society Show & Sale:** Location: RMSC Eisenhart Auditorium, 657 East Avenue, Rochester, NY.
- April 4** **Annual Mounted Orchid Clinic!**
- April 14-18** **Greater New York International Orchid Show,** Rockefeller Center, New York, NY. Contact: David Horak, 25 Parade I. #5K, Brooklyn, NY 11226; daveh4742@aol.com.
- April 22-25** **Southern Tier Orchid Society Show & Sale:** Oakdale Mall, Johnson City, New York
- May 2** **Annual Orchid Auction**
- June 6** **Annual Summer Picnic: Details to be announced.**

MARCH SPEAKER BIOGRAPHY: DR. CLARK T. RILEY

Clark Riley has been an active orchid grower since 1957. At the age of six, he got his first plant, a [probably collected] *Cypripedium pubescens* from a perennial nursery. The plant died a miserable death in a short time, but not before blooming and cementing a love of orchids. He has labored ever since to make amends by promoting the sound cultivation of Cyripedia. He grows a wide range of orchids, including several thousand terrestrials, hardy species, and all five genera of ladyslippers, often from seed. He was the producer for the book and CD of Proceeding of the North American Native Terrestrial Orchid Conference. He is a member of the Maryland Orchid Society, the American Orchid Society, and a frequent contributor to the Orchid List Digest. He can be reached at driley@aol.com or visit his web site at <http://cyps.us>.

Professionally, Dr. Riley has a Ph.D. in Chemistry from the University of Chicago, and is currently a Senior Field Engineer for Chesapeake Systems in Baltimore Md. Clark also runs his own business, Production Services, Inc., offering a variety of services from page formatting to web site design and maintenance.

Clark is shown at left admiring one his *Selenipedium aequinoctiale*, which appears to be between five and 6 feet tall in a 4 inch pot!

**Please note especially all names
and
abbreviations in boldface.**

Kindly read the show table list. If someone else brings a hybrid that you also own, update your own label and records, so we won't have to look up the same cross again.

Thank you.

Cypripedium Alliance

<i>Phrag. besseae</i>	Stuart
<i>Phrag. Eric Young (longifolium x besseae)</i>	"
<i>Paph. charlesworthii</i>	"
<i>Paph. sukhakulii</i>	"
<i>Paph. Woodland Glade (Forest Vale x Shapely)</i>	"
<i>Paph. haynaldianum</i>	"
<i>Paph. Candor Good Henry (godefroyae x henryanum)</i>	Coleman

Cattleya Alliance

<i>B. nodosa</i>	Haskell
<i>Prosthechea garciana</i>	Coleman
<i>Bl. Yellow Bird (Richard Mueller x B. nodosa)</i>	"
<i>Oerstedella centradenia</i>	"
<i>Bnts. Donald Prince (S. brevipedunculata x B. nodosa)*</i>	Braue
<i>Bc. Maikai (B. nodosa x C. bowringiana)</i>	"
<i>B. Little Stars (nodosa x subulifolia)</i>	Bordoni
<i>Epi. Sun Valley x Orange Glow</i>	"
<i>B. Little Stars</i>	Coyle
<i>Epi. "Ballerina Tropical"‡</i>	Pace
<i>Bc. King Harold (Rl. digbyana x C. Harold)</i>	Stuart
<i>Lc. Gold Digger (Red Gold x C. Warpaint)</i>	Loveland

Vandaceous

<i>Phal. Taida Timothy (Timothy Christopher x venosa)</i>	Braue
<i>Phal. equestris (2 plants)</i>	Ufford
<i>Phal. pulcherrima</i>	"
<i>Phal. Baldan's Kaleidoscope (Hausermann's Candy x Daryl Lockhart)</i>	Coleman
<i>Haraëlla retrocalla</i>	"
<i>Phal. Timothy Christopher (Cassandra x amabilis)</i>	"
<i>Phal. Golden Peoker x Dtps. Brother White Windian</i>	Olney
<i>Phal. Long Pride Snow Golden Heart (Ming-Hsing Mount Snow x I-Hsin Hatsuyuki)§</i>	Bordoni
<i>Phal. Kaleidoscope (amboinensis x Red Wine)</i>	Tupper

Oncidium Alliance

<i>Ocdm. Susan Kaufman (Wera Stolze x Onc. flexuosum)</i>	Coleman
<i>Mps. vexillaria</i>	Stuart
<i>Rhynchostele (Rst.) cervantesii</i>	"
<i>Onc. Twinkle (ornithorhynchum x cheirophorum)</i>	Braue
<i>Onc. Twinkle</i>	Ditz
<i>Bllra. Marfitch (Mtssa. Charles M. Fitch x Oda. Fremar)</i>	Witkin

Dendrobium Alliance

<i>Den. Nora Tokunaga (atroviolaceum x rhodostictum)</i>	Coleman
<i>Den. lichenastrum</i>	Witkin

Pleurothallid Alliance

<i>Dda. zebrina</i>	Witkin
<i>Lths. manabina</i>	"
<i>Pls. ximenae</i>	"
<i>Rstp. xanthophthalma</i>	"
<i>Masd. Ted Khoe (welischii x constricta)</i>	Capella

Miscellaneous

Unknown	Weller
<i>Ddc. glumaceum</i>	Ditz
<i>Strs. sp.†</i>	"
<i>Med. bifolium</i>	Witkin
<i>Cym. Autumn King (Autumn Leaves x Imperial)</i>	Pace

*Oops. Just noticed that in the January list, this plant was reported in the Oncidium alliance, which it obviously is not. We apologize for the error.

‡This is not a registered cross. It is a commercial name from the Flower Council of Holland. Suggest you contact them to find the correct parentage: info.uk@flowercouncil.org.

§Contact me if this requires further explanation.

†There is no hybrid *Stenorrhynchos* except *Strs. Memoria Jim Kie*. What you may have is an unidentified species from the Virgin Islands.

Iris Cohen

Mark Your Calendars!

*Our Annual Fall Show & Sale is
scheduled for **OCTOBER 1-3**
in Shoppingtown Mall, DeWitt.*

Featured will be
Lots of Displays, Judging by the
American Orchid Society, Tons of
Orchids, & Vendors!



CLUB REMINDERS

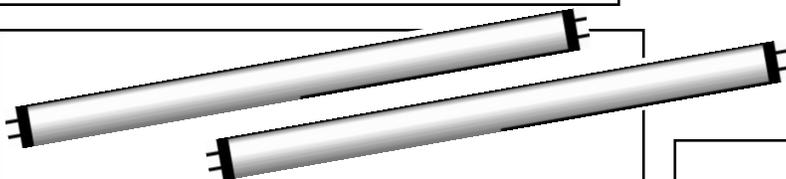
Orchid-Growing Supplies are now available, including fir bark, sphagnum, sponge rock, charcoal, and 40W fluorescent tubes. Call Dianne Bordoni for details on pricing and availability (446-3836).

The **CNYOS Club Library** is now located at St. Augustine's church. Make arrangements with Val Introne (682-8595) if you want to borrow an item from the Library.

DON'T FORGET TO BRING YOUR BLOOMING ORCHIDS FOR THE MONTHLY SHOW TABLE!!!



Phalaenopsis bellina (violacea), photograph by Vagisha Sharma, with digital enhancement by J. Stuart.



Fluorescent light bulbs are now available! A new order of Phillips Ultralume fluorescent tubes will be available for purchase at the next meeting. Price is \$7.50 each.

REFRESHMENT SCHEDULE

WINTER-SPRING, 2004

March
April
May

Valerie Introne & Cliff Rossler
Monica Kot & Donna Coleman
David Ditz & Pat Cotter

STOS NEWS: NEWS FROM THE SOUTHERN TIER ORCHID SOCIETY

Postponed from last month: The March meeting (3/21) will be presented by Richard Jost of Jungle Paradise in Benton PA. His subject is "Growing Plants that Compliment Orchids."

Monthly meetings begin at 2:00^{PM} in the Vestal Public Library. For directions, etc. call STOS president Kenneth Lattimore at 570-553-2753 or e-mail him at <klatt@epix.net>.

GROS NEWS: NEWS FROM THE GENESEE REGION ORCHID SOCIETY

Our own Joe Kunisch, proprietor of Bloomfield Orchids and a well-respected authority on the both the culture and breeding of Paphiopedilums and Phragmipediums will speak on "The Quest for Perfect Culture for Paphs" at our March meeting. Joe is a frequent exhibitor and vendor at orchid shows in the Northeast; his long list of AOS awards attests to Joe's success in the slipper orchid world. His current focus in on fine-tuning orchid culture through an ongoing analysis of orchid fertilizers and growing practices. We will be taking Joe and Norma to the Outback Steakhouse at 1180 Jefferson Road at 5:00 p.m. on March 8. If you'd like to join us, please call Kathy Kluge at 254-9067 by that afternoon for reservations.

Taken with permission from *The Orchid Collection*, Newsletter of the Genesee Region Orchid Society, Vol. 26, No. 6, Feb. 2004, Phil Matt, Newsletter Editor (716) 288-7025.

AMESIELLA MONTICOLA & ODONTOGLOSSUM NOBILE

Again I look for inspiration for this column to my own collection, and it just so happens that two favorites are in bloom this bleak time of year.

Amsiella monticola is a very close cousin to the more familiar *Amsiella philippinensis*, but there are fundamental differences that not only separate it as a species, but make it equally appealing to grow. *Amsiella* as a genus was separated from *Angraecum* in 1977. One look at the white flower and that long spur is all one needs to understand the confusion. The plants that are now recognized as the species *monticola* were originally thought to be an albinistic form of *philippinensis*. However, in 1998, Jim Cootes & David Banks described the subtle differences, and based their separation from *philippinensis* on 8 key factors that included (among others) a longer nectary (spur), larger flowers, higher elevation, pure white flowers, and an evening fragrance. For those of you who may have had difficulty with *philippinensis*, *monticola* grows a bit cooler due to its higher elevation habitat (intermediate to cool). It is a good candidate for growing under lights, and enjoys frequent waterings (good clean water is always a plus).



Odontoglossum nobile is a floriferous cousin to the more well-known *Odontoglossum crispum*. It is also, perhaps, a bit easier to grow due to its greater tolerance of warmer temperatures. Of course, “warmer” is a relative term, and all Odonts like it on the cool side. *Odontoglossum nobile* has white flowers measuring on average 2” in diameter. The well formed flowers are full in shape, flat, and produced on a branched inflorescence that can have floral counts of several dozen. My own plant has produced in the past over 70 flowers total on two inflorescences from the same pseudobulb. The flowers are white with the occasional red spot (no more than two or three per flower). It will often take up to 8 months for the inflorescence to mature and form buds! Like many Odonts, *nobile* will grow well under bright light, cool temperatures, and ample air circulation. It appreciates frequent watering with rain, RO, or DI water, and low fertilization levels. Fortunately for us, it is not terribly difficult in Central New York to grow on the cool side for a good part of the year. The elegant simplicity of the flowers makes *Odontoglossum nobile* one of the most appealing of all orchids in the *Oncidium* alliance.



Reference: Photos and text © Jeff Stuart 2004. General reference, *Amsiella monticola*, A New Species of Orchidaceae from the Philippines by Jim Cootes & David P. Banks, The Australian Orchid Council Inc. website, <http://www.orchidsaustralia.com/Amesiellamonticola.htm>. No reproduction without permission.

Cypripediums for House and Garden

By Clark T. Riley

with editing by Jeff Stuart

Over the last 50 years, we have learned how to cultivate and propagate orchids of the genus *Cypripedium*. Today, these beautiful plants are increasingly available, both as species and as hybrids. I have several examples that are grown in my home and garden in Baltimore, Maryland, USA. We are located on the boundary of USDA plant hardiness zones 6 and 7.

Cypripedium pubescens was the first orchid species I attempted in 1957. The poor plant—undoubtedly collected—perished in a hot west window of our family's apartment, but not before blooming and permanently hooking me on the orchid-growing hobby. The species has since proven most adaptable to cultivation. Beginning with three growths in 1986, my plants have multiplied to over fifty. Nearly 30% of plants carry two blossoms.

Cypripedium japonicum has proven well suited to the Baltimore climate. It blooms reliably. The clone I have has not multiplied yet, probably because I am setting seed on it, but has grown in size and vigor each year. However, I continue to read that *Cypripedium japonicum* is difficult to grow. Master propagator Bill Steele of Spangle Creek Labs in Minnesota reports *japonicum's* poor performance in



CYPRIPEDIUM JAPONICUM 'Sweet Lips'

his northern-tier gardens. Three gardens in more temperate locations report considerable success: I can personally vouch for are my own, those at the National Arboretum in Washington, DC, and an stunningly beautiful colony in Japan. These were overwhelmingly successful.

About half of my plants are hybrids. Many are quite lovely, inheriting the best of both parents. *Cypripedium Aki* inherits the vigor and heat tolerance of the *pubescens* parent and the color of *macranthos*. Note that *macranthos* appears to wipe out the yellow color in its hybrids in much the same way as *Paphiopedilum delenatii*.

In the sunny beds outdoors, I have *pubescens*, *parviflorum*, *makesin*, *kentuckiense*, *japonicum*, *henryi*, *tibeticum*, Rascal, Ulla Silkens, and Philippe. I would have expected *tibeticum* to resent our Baltimore summers, but it and the one *tibeticum* hybrid seem to take them in stride.

After over 40 years of observation, I am increasingly convinced of the wisdom of classifying *pubescens* as



CYPRIPEDIUM PUBESCENS 'VIGOROUS'



CYPRIPEDIUM AKI 'Hot Summers' (*PUBESCENS* X *MACRANTHOS*)

a separate species as the RHS has done. Its behavior is distinct and consistent both as a species and in its hybrids.

The figure below shows *Cypripedium* seedlings



CYPRIPEDIUM SEEDLINGS APPROACHING BLOOMING SIZE.

approaching blooming size out of the home refrigerator. The older seedlings have prospered through 3 winters in the refrigerator and 3 Baltimore summers outdoors, including periods of over a week with temperatures above 100° F. The first blooms generally occur three years out of flask.

I find the following are growing well in Baltimore from seedlings (referring to the figure to the left below): Hank Small (upper-left in bloom), *calceolus parviflorum*, *Ventricosum*, Rascal, Chauncey, Michael, *Andrewsii* (lower-right in bloom), Philippe, *macranthos* (from Dahlnegorsk), and *calceolus x tibeticum*. Note that *Andrewsii* is the name given to the remake of the wild *Cypripedium x andrewsii* registered with the Royal Horticultural Society.

Cypripediums: Take-Apart

So why the ladyslipper? How do its flowers work? The ladyslipper flower is specifically optimized to facilitate cross pollination of the orchid plants, ensuring genetic diversity. Let's take an insect-eye's tour of the ladyslipper flower.

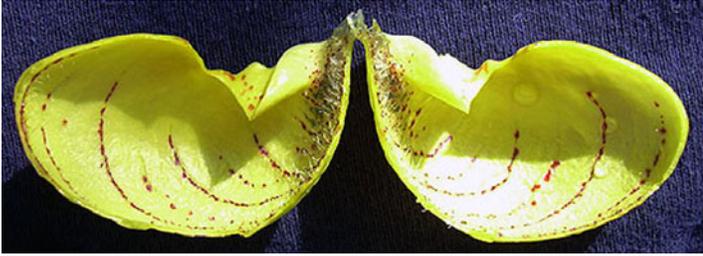
The top, outer area of most *Cypripedium* flowers, including *Cypripedium pubescens*, provide an easy landing area for inquisitive insects.

With just a bit of exploring, the insect will find itself trapped on the inside of the blossom where the incurved margins of the opening prevent escape through the main pouch opening.

Every element of design directs the insect to the tiny back exit of the flower.



LANDING PAD AND INTERIOR MARKINGS
OF
CYPRIPEDIUM PUBESCENS.



POUCH MARKINGS, HAIRS, AND WINDOWS IN *CYPRIPEDIUM PUBESCENS* 'VIGROUS'

Inside the pouch, an insect will be lured toward the rear exit by rows of guide dots or lines, a hairy "ladder," and translucent exit windows. The insect must squeeze between the "foot" or stigmatic surface of the ladyslipper and subsequently past the sticky pollen masses. If the insect has a pollen mass on its back, the pollen will be scraped off onto the stigma. The insect should pick up a new pollen mass as it pushes out the exit.

The pouches of all ladyslipper species are a constant compromise of size and shape. Too big and the insect will escape, too small and the insect will not be trapped. Each species of *Cypripedium*, *Paphiopedilum*, *Phragmipedium*, *Selenipedium*, and *Mexipedium* has its own pollinator or set of pollinators who must be satisfied in order for the ladyslipper species to survive.

Cypripediums can be very fast growing. The pictures above (right) illustrate how quickly they can expand



BOTTOM OF THE POUCH OF *CYPRIPEDIUM PUBESCENS* 'VIGROUS'

in the Springtime, going from dormant to blooming in less than a month. *Cypripediums* are also very fast (for ladyslippers) growing from seed to flower. I have had several hybrids bloom three years out of flask. I'm certain that some of the better growers should be able report two-year flask-to-flower records.



CYPRIPEDIUM PUBESCENS 'VIGROUS' CLUMP IN EARLY APRIL IN BALTIMORE, MARYLAND, USA. THESE PHOTOS WERE TAKEN ONE WEEK APART—NOT TO RELATIVE SCALE.

Selenipedium Observations

I have been fascinated by this obscure genus of ladyslippers for nearly 40 years. I am please to report some observations based on a plant acquired as a seedling and grown to bloom in Baltimore, Maryland. I say observations because I cannot claim to be an expert. I always find irritating those writers who offer advice based on speculation. I hope that I am able to clearly differentiate between observations and speculations in this text. I ardently seek word from others who have grown members of this genus. At this time (November 2003), I am concentrating on propagating this specimen. I will be glad to make specific observation and documentation for the botanically inclined, but no further dissection at this point. I have no propagations available. If I am successful in propagating the species, seedlings will be offered first to responsible parties who can further propagate the species, then to other interested growers.

Selenipedium aequinoctiale Garay Flora Ecuador no. 9: 13, fig. 4B. 1978

I was introduced to this particular species in a talk given by Stig Dalstrom at the Paph Forum in Washington, D.C. in February 2001. He presented a slide from his collection of this plant in blossom—a single bright flower at the end of a stem which had



SELENIPEDIUM AEQUINOCTIALE Garay

hosted easily 15 or more flowers over the course of time. Mr. Dalstrom had me contact EcuGenera, a nursery in Ecuador. From EcuGenera, I obtained four seedlings in early 2002.

The good people at EcuGenera reported that they grew this ladyslipper in a mixture of sand and tree fern and that it was a warm-growing species. Following their advice, I planted one in such a mixture in an AirCone pot with enough Sphagnum in the bottom to prevent the sand from flowing out of the pot. Another plant was potted in a mix of sand, tree fern, and Sphagnum. A third was planted in a mix of sand and sterilized soil and perlite used successfully for the *Cypripediums* featured elsewhere on this site. The fourth plant was badly delayed in transit and arrived in rather poor condition. It was potted in the sand-tree fern mix.

All plants were watered with rain water only as has been successful for the *Cypripediums*. Within a month, the delayed plant had perished. Within a few months, the plant grown in the soil mix sickened and

died. The two in the sand and tree fern mixed grew, with the one in sand and tree fern only growing vigorously. This is too small a sample to claim any absolute answers, but the mix of sand and tree fern, watered with rainwater was satisfactory for at least one plant.

My *Selenipedium aequinoctiale* is grown indoors under fluorescent lights in a basement with winter temperatures around 60°F and summer temperatures around 85°F.



THE AUTHOR'S GROWING AREA, FEATURING THE SELENIPEDIUM

References: <http://www.cyps.us/>
<http://www.cyps.us/selen/index.html>
<http://www.cyps.us/takeappart.html>

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BY CLARK T. RILEY

As is the case with epiphytic orchids, a relatively few hardy terrestrial genera hold disproportionate potential for horticultural usefulness. Along with *Cypripedium* and *Calopogon*, some of the greatest potential lies in the genus *Bletilla*. This small genus is represented in cultivation by only three species and their varieties, *Bletillas striata*, *formosana*, and *ochracea*. Of these three, *Ble. striata* and *Ble. ochracea* are vigorous and hardy, at least to USDA zone five. *Bletilla striata* is found in at least 4 varieties, the type variety of bright magenta purple, the white variety *alba*, a smaller variety with white sepals and petals sporting a pink or pink-tinged lip, and a variety with white variegations in the leaves. The purple and white varieties have long been available in the horticultural trade and can often be found for sale in retail garden centers. This "commoner" presentation may, in part, be responsible for the otherwise surprising lack of interest displayed by the orchid community. The species *ochracea* possesses bright mustard yellow flowers and has recently been introduced into cultivation from western China through the efforts of the National Arboretum and a network of dedicated fanciers. *Bletilla ochracea* has proven equally hardy to *Ble. striata* and hybridizes readily with it.

Bletilla striata and its varieties and *Bletilla ochracea* are very amenable to cultivation. Both do well in bright light in normal quality soil, planted three to four inches deep. In the author's garden in Baltimore, Maryland, USA, in USDA zone 6.5, both species multiply rapidly growing in full sun. They are mulched with two to three inches of pine straw in the Winter to prevent early emergence in the Spring as the growing tips are susceptible to unsightly frost damage. Neither species is fertilized, nor has any fungicide or insecticide ever been used on either species. Under these conditions, the leaves of *Ble. ochracea* are slightly thinner than *Ble. striata* and the plants are slightly smaller. Other than these minor differences, the plants are very similar in their presentation. *Bletilla ochracea* blooms about three weeks later than *Ble. striata*, though there is plenty of overlap in their two

month blooming periods. The racemes of both species yield three to ten flowers and, in good years, many of the racemes will be branched. The hybrid between the two species is intermediate in all respects and is very attractive, combining the bright rose color of the *Ble. striata* with a graceful presentation and bright yellow disk in the lip from *Ble. ochracea*. A bundle of *Bletillas* is lovely and long lasting. One feature which portends a bright future for the genus is the ease with which the *Bletilla* racemes can be pulled from the plant, eliminating the need for cutting utensils with their attendant risk of virus transmission.

Bletillas grow rapidly by division under good conditions. Most of the commercial *Bletilla striata* was surely obtained by propagation of a few clones. In addition, they grow with abandon from seed, utilizing any of the popular media or even on dampened Sphagnum moss, though the latter gives a much lower yield. Given good growing conditions, it is not uncommon to bloom seedlings two to three years from pollination. The prospect of rapid generation turnover and resulting selective breeding is very exciting. The author has second generation U.S. bred clones in the garden already under less than optimal seedling care. Other growers in the network are reporting light pink variants among seed-grown *Bletilla striata*. Attention can now focus on larger flower size and a more upward facing presentation. *Bletilla* is known to hybridize successfully with *Arundina graminifolia* (unregistered) and attempts are being made to cross it with the taxonomically related genus *Calanthe*, thus far with no reported success. The introduction of other species of *Bletilla* would be desirable.

Registered hybrids:

- Bletilla striata* x *formosana* = Yokohama (N. Suzuki 1956)
- Bletilla formosana* x *ochracea* = Coritani (R. Evenden 1994)
- Bletilla striata* x *ochracea* = Brigantes (R. G. & A. Evenden 1994)

At Right: A variety of *Bletilla* species, including *Bletilla striata*, *Ble. striata* f. *alba*, *Ble. ochracea*, *Ble. Brigantes*

Editor's note. I have often considered ordering these as they are commonly available through mail order catalogs. In Central New York these species would be considered marginally hardy, although the combination of snow cover and a protected spot might prove successful. Growing in pots moved into a refrigerator or cold garage might also work. JAS

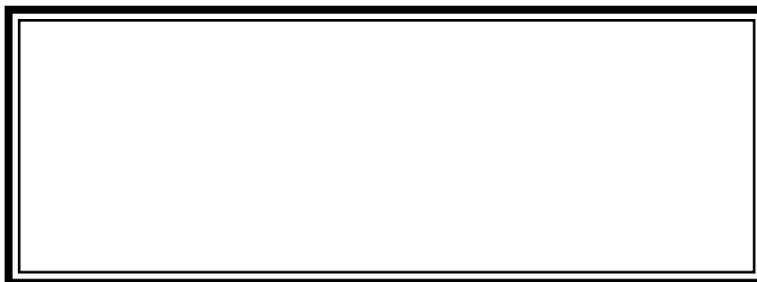
References:

- <http://www.orchidmall.com/reading.htm>
- <http://drriley.mypcr.com/bletilla/>

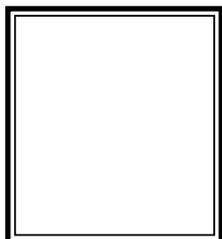
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March 7: Special Guest Speaker Clark Riley
"Cinderella's Slipper Found! The Cypripedium & Selenipedium"



Next Meetings: Sundays, March 7, 2PM



THE CENTRAL NEW YORK ORCHID SOCIETY
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The Central New York Orchid Society meets at St. Augustine's Church, 7333 O'Brien Rd, Baldwinsville, at 2:00^{PM} on the first Sunday of each month from September through June. Yearly dues are \$15.00 per individual, or \$17.00 family. Dues should be paid to the CNYOS Treasurer, Carol Haskell.

THE ORCHID ENTHUSIAST

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