

The Atlanta Orchid Society Bulletin



Affiliated with the American Orchid Society, the Orchid Digest Corporation and the Mid-America Orchid Congress. 2001 Recipient of the American Orchid Society's Distinguished Affiliated Societies Service Award

Newsletter Editor: Danny Lentz

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September 2006

SEPTEMBER EVENTS

The Meeting:

8:00 Monday, September 11 at Atlanta Botanical Garden Lucinda Winn from J&L Orchids

Our September speaker will be Lucinda Winn from J&L Orchids in Easton, CT. She will offer a presentation on the culture of miniature species orchids. The three woman team of Cordelia Head, Marguerite Webb, and Lucinda Winn have been specializing in the miniature species for 26 years, and offer an amazing selection of many genera. They are offering a 15% discount (and of course no shipping charges!) on pre-orders, so be sure and visit their website at www.jlorchids.com. Please place pre-orders by Friday September 8.

Greengrowers: Saturday Sept. 30 at Peach State Orchids 920 Homer Rd., Woodstock, GA 30188

Time: 9:00 to 2:00. Bill will have special sale prices for Greengrowers. Come out and visit the largest orchid nursery in our area. Peach State has many thousands of orchids available from a large number of genera. You can get directions from the Peach State website at www.peachstateorchids.com/contact.htm, or call Bill at (770) 751-8770.



Danny Lentz

Condylago rodrigoi 'J&L', one of several weird and wonderful miniatures I saw when I visited J&L Orchids.

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THE ATLANTA ORCHID SOCIETY

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Member Spotlight



Margo Brinton and Eldon Park

Margo has grown orchids since the late 1970's, first, in Philadelphia, on pebble travs in the house and then in a lean-to greenhouse and since 1989, in Atlanta, in two different home greenhouses. Eldon was a serious conifer gardener in New Jersey who was "recruited" to growing orchids when he married Margo in 1993 and moved to Atlanta. Eldon and Margo now grow more than a 1000 orchids in a glass greenhouse that is 12' by 16', with a head house that is 12' by 8'. Based on experience gained from building two previous greenhouses, Margo designed the current one to grow a large number of plants in a relatively small space. The plants are grown on three levels, with water barriers and gutters on the top two bench levels to keep water from draining from those levels onto plants on levels below. Fluorescent light fixtures

containing Verilux bulbs supplement natural light on the two bottom levels. Ventilation is provided by a temperature-controlled, 16' roof vent, a ceiling fan that pushes air up, a temperature-controlled evaporative cooler, oscillating fans on three levels at one end of the greenhouse, and several small clip-on fans on the lowest level. The heater has an electric fan, but no electricity is required for the heater and thermostat to function.

Eldon is in charge of greenhouse maintenance and "weekly" watering of the greenhouse plants while Margo does the repotting (with potting mixes pre-prepared by Eldon) and the disease/pest control. Blooming plants are taken into the house to be enjoyed. Plants that need extra care or cooler temperatures are cared for by Margo in the kitchen or basement under lights. As the number of plants and the sizes of the mature plants have increased, the greenhouse has gotten over-crowded and an increasing number of plants are now living year round in the kitchen or basement. We are currently working on culling our plants to try to deal with this problem. We also want to create some space to be able to acquire a few new plants from time-to-time.

Margo is a Regent's Professor and Professor of Biology at Georgia State University. She teaches courses in genetics and virology at the graduate level and manages a large laboratory that conducts basic molecular research on West Nile virus. Many of the current lab studies focus on understanding how the products of variants of a particular cell gene change the outcome of this infection. Her lab previously identified this gene which determines whether an individual has a mild or a severe infection. Margo was the Orchid Advisor for the Southeastern Flower Show for 12 years and is on the board of the Center for Puppetry Arts. While in Philadelphia, Margo also managed to have a successful second career as an artist painting large watercolors of orchids. Unfortunately, her increased teaching and administrative duties at Georgia State University have not allowed time for much painting in Atlanta, but she hopes to get back to painting again in the future.

Eldon retired from Educational Testing Service in 1994, where he was a Director of the Graduate Record Examinations Program. "In retirement." Eldon has been involved with the Southeastern Flower Show in a variety of positions and currently is a member of the Board of Trustees. With the Atlanta Symphony Orchestra, Eldon is the Vice Chairman of the Advisory Committee for the Talent Development Program. The purpose of this Program is to identify and support talented young African American and Latino students who wish to pursue careers as classical musicians.

Events Out and About

September

Saturday, 9/9 American Orchid Society monthly judging, Atlanta Judging Center, 2 pm, ABG basement workshop. If entering plants, please arrive before 1:30 pm to allow time for research and paperwork.

Monday, 9/11 Atlanta Orchid Society monthly meeting, ABG, Day Hall, 8 p.m. Lucinda Winn of J&L Orchids will speak on growing miniature species.

9/15-9/17 Orchid Society of Middle Tennessee Show, Nashville, TN

9/23-9/25 Alabama Orchid Society Show, Birmingham, AL

Saturday, 9/30. Greengrowers at Peach State Orchids.

October

Monday, 10/9 Atlanta Orchid Society monthly meeting, ABG, Day Hall, 8 p.m. Fred Clarke of Sunset Valley Orchids in Vista, CA will speak on breeding trends in Catasetinae.

Saturday, 10/14 American Orchid Society monthly judging, Atlanta Judging Center, 2 pm, ABG basement workshop.

10/21-10/22 Northeast Alabama Orchid Society Show, Anniston, AL

November

11/10-11/12 Atlanta and South Metro Orchid Societies Fall Show and Sale

Minutes of the August 14th Meeting

- The Atlanta Orchid Society Meeting was brought to order by Vice-President Mark Reinke. The minutes from the last meeting were approved as written. The Treasurer's July Report was given. Four visitors were welcomed. Welcome to Alice Smith, new member.
- The auction at Roy Harrow's home was a big success with \$1100 in sales and \$220 going to charity. \$188 goes to the AtlOS. A wonderful time was had by all.
- Next meeting, look for the sign up sheet for volunteers for our fall show (November 10-12).
- The Atlanta Botanical Garden needs volunteers in the orchid house to answer questions. Please call Mary deHaye, who is in charge of the volunteer program, if you are interested. Many of the questions are very basic.
- Our thanks to the orchid judges: AnnaLee Boyett, Alfonso Doucette, Roy Harrow, Linda Miller, James Van Horne, Jeff Whitfield and Jeff Wolf. Our thanks to those who donated plants to the raffle table: Margo Brinton/Eldon Park (7), Roy Harrow, Rob Rinn and others. Thanks to Peachstate Orchids and Margo & Eldon for our silent auction plants. Our thanks to those who provided refreshments: Marianne Gilmore, Terry Glover, Reba Herzfeld, Elaine Jacobson, Sandy Phillips and others.

The meeting was adjourned.

Respectfully Submitted, Sandy Phillips

Welcome to our New Member:

Alice Smith - Marietta, GA

Join the Atlanta Orchid Society

Membership in the Atlanta Orchid Society is \$30 for individuals or \$45 for households. Yearly membership runs January 1-December 31. Anyone joining in the third quarter will get a 50% discount on the current year's membership. Anyone joining in the fourth quarter will purchase a membership for the following year. You can join at one of our monthly meetings, or contact the society's Treasurer (see page 2) for a membership application.

For directions to the Atlanta Botanical Garden, please visit their web site at www.atlantabotanicalgarden.org or contact one of our society's officers listed on page 2.

Newsletter Submissions

To submit material for the newsletter, or to sign up for the email version of the newsletter, please contact Danny Lentz. The deadline for submissions is the 20^{th} of the previous month.

MAIL TO: Danny Lentz

1045 Wordsworth Dr. Roswell, GA 30075

EMAIL: <u>DBLGONGORA@BELLSOUTH.NET</u>

Advertising

Advertising is now being accepted for our newsletter. The size and number of ads may be limited at the discretion of the editor. Advertising Rates per issue are: ½ page \$10, ½ page \$20.

Member Announcements

- Former AtlOS member Frances Longley passed away on August 12. The interment service was held at Ebenezer United Methodist Church Cemetery in Fayetteville, Ga. Those desiring may make contributions to the Alzheimer's Association or the American Heart Association.
- Bennett Herzfeld has a new position as V.P. for Investments at Carter, Terry & Company Inc. His new contact information at work is 404-364-2086, BHerzfeld@carterterry.com

If you have any news you would like to share with the society please send me a short announcement. -danny

Report from the June 3 IPA Meeting

Here are some of the highlights from the last IPA meeting at Lines Orchids in Signal Mountain, TN:

- John Lines received the prestigious AOS President's Award from AOS President Art Moore.
- Dr. David Mellard gave us an excellent program (and handout) on water quality and fertilizers.
- Peter Lin showed us the world of Phal. gigantea and its hybrids with is superb collection of colorful slides and excellent information.
- The barbeque restaurant (Waycrazies) was as good as ever!
- We had 36 in attendance.

Our summer meeting next year will be on June 2, 2007 at Lines Orchids. Our midwinter meeting will be at Peach State Orchids in February with the exact date to be announced. Stay tuned.

If you have a speaker to recommend, please email me your suggestion.

-Tom Harper, IPA SE Region Representative



IPA meeting attendees listen intently to their speaker.

Attending society events like auctions and our Greengrowers outings is a great way to spend more time with your fellow orchid addicts. These events give you more time to talk in a less structured environment than the monthly meetings. When events like International Phalaenopsis Alliance meetings and orchid shows occur in nearby cities there are often several AtlOS members going, so if you see something coming up soon on the calendar you may want to ask around at the monthly meeting and see who else is going. Carpooling to these events is a great way to get to know your fellow society members (and save some gas too!)



Some of our members enjoying lunch at the June auction.

Report on Roy Harrow's Auction

The members' auction at my place had about 35 people there and while we sold between 60 and 75 plants, we gave away about 75 non-orchids after it was all over. It opened at 10 and started at 11, all had left by 4 P.M. The food was delicious and abundant. As it was quite hot, several bid with their feet in the pool. The total sold was over \$1100 of which our society's percentage came to \$188.60. Some of the commission money also went to the Huntsville society and the Atlanta Botanical Gardens. There was something for everyone with prices from \$1 to \$80. -Roy Harrow



Reba looks pretty serious when she's taking in the money at our auctions.



Al Pickrel of Al's Orchid Greenhouse in Leesburg, VA (www.orchidexchange.com) flowered these plants from the grex Phal. (Harford's Jewel 'Carney Red', AM/AOS x Venusberg 'CopperClad'). The cross was made by Mark Rose at Breckinridge Orchids. Al said that each of these plants has a different fragrance, and that several others he flowered were similar to the forms at 12:00 and 3:00 in the picture. This is a great example of the variation you can expect in some hybrids.

JOIN THE AMERICAN ORCHID SOCIETY

For \$60.00/year, you reap the following benefits:

- 12 issues of *Orchids*, the Society's monthly full color magazine chock full of insightful articles and tempting ads for plants and supplies.
- 10% off on purchases from the Society's Bookstore and Orchid Emporium. Reduced or free admission to participating botanical gardens.

For a limited time, if you join for two years (\$108) you will also get a \$30 gift certificate (good on an order of \$100 or more) at any one of 13 commercial growers who advertise in *Orchids*. **JOIN TODAY**. For information, contact Evan Dessasau (404-241-4819)

Please visit our web site at http://www.atlantaorchidsocietv.org

The Atlanta Orchid Society web site contains recent newsletters and articles, cultural information for growing orchids in Atlanta, as well as a calendar of events and information about our annual shows.

JOIN THE ORCHID DIGEST CORPORATION

Don't let the name fool you, the Orchid Digest is a non-profit membership-based organization dedicated to orchids. Designed to appeal to the midrange to advanced grower nothing beats the *Orchid Digest*. For just \$32/year you get 4 issues of full-color, in-depth articles about orchids. The magazine is large format and the fourth issue of the year is always an extraspecial issue devoted to a single genus. For membership application forms contact Fred Missbach (404-237-1694)

Second Quarter Ribbon Judging Results

After a slow start in the first quarter, Mark and Gary almost doubled the next highest total in the second quarter. Thanks to everyone who brings plants for our monthly show table.

Nama	A 10.11	May	lum	O4= 2
Name	Apr			Qtr 2
Collier / Reinke	31	12	25	68
Whitfield	5	11	19	35
Rinn	17		16	33
Lentz / Morgan	6	15	6	27
Brinton / Park		18		18
Hallberg	12	5		17
Gilmore		13		13
Grzesik		5	5	10
Wolf	1		9	10
Jacobson	3	5		8
Kiss		8		8
Mellard / Marino		7		7
Emerson	6			6
Frye	5			5
Chandler			4	4
Doucette	1	3		4
Hartong			4	4
Quattlebaum	3	1		4
Smith, Geni	3	1		4
Harrow		3		3
Kessler		2	1	3
Phillips		3		3 3 3
Glass, David	•	1	•	1

AUGUST 2006 EXHIBITION TABLE AWARDS with notes by Mark Reinke

Class I – Cattleya Alliance

Blue – *Laelia fournieri* – **Collier/Reinke**: This tiny 'rock dwelling' orchid comes from the state of Minas Gerais in southeastern Brazil, inland from the cities of Rio de Janeiro and Sao Paulo. It grows mainly in cracks and depressions of exposed iron rich rocks with little protection from the sun, but where a little debris has accumulated to provide shade and moisture to the roots and rhizomes. The plants are under 3 inches in total height with tightly clustered pseudobulbs bearing a stiffly upright leaf, frequently tinged in red from exposure to bright sunlight. The small, delicate, star shaped flowers borne 2 to 3 to the stem are white with a pale yellow lip and a diamond dust texture that sparkles in the sunlight. Although often still



Laelia fournieri

referred to as a white form of the lavender flowered *Laelia lucasiana*, the fact that it is less than half the size and grows in stable populations without any lavender flowers mixed in, points to their correct status as a species. These rupiculous Laelias will adapt very well to intermediate conditions, provided they receive a minimum daily temperature spread of 20 degrees Fahrenheit year round, bright light, and constant air circulation. We have good success with them in plastic pots, using aliflor (expanded clay pellets) as a medium, allowing them to dry well at the surface, yet retain a bit of moisture deeper in the pot. There are 7 registered orchid hybrids which have used *Laelia fournieri* as one parent.

Red - Blc. Yuan Nan Mini - Collier/Reinke White - Lc. Waccamaw - Mellard/Marino

Class II - Cymbidium Alliance

Blue – Grammatophyllum scriptum forma citrinum – Collier/Reinke: Of the dozen or so species known from this genus, Grammatophyllum scriptum is the most manageable in size, becoming only 'very large' as opposed to gigantic! It, like all the species, hail from SE Asia and the neighboring Pacific islands of Indonesia, Papua New Guinea and the Philippines. It likes bright light, warm temperatures, year round watering, and plenty of fertilizer during the growing season. The inflorescence arises from the base of a mature pseudobulb in summer and can carry approximately 100 campanulate, waxy flowers that last a long time. A well grown mature plant can produce many spikes at once. The typical color form of this species shows chestnut brown markings over a chartreuse green background, as exemplified by our red ribbon winner this month. In the 'citrinum' variety, the brown markings are entirely absent. If you wish to achieve a cultural award with this species, expect to produce a specimen with a minimum of 1500 flowers!

Red - Grammotophyllum scriptum 'Grasshopper' - Rinn

Class III - Dendrobium Alliance

Blue - Den. Blue Foxtail - Brinton/Park

Red - Den. Christmas Chime 'Asuka' AM/AOS - Rinn

Class IV - Epidendrum Alliance

Blue - *Encyclia alata* – **Collier/Reinke :** The species name for *Encyclia alata* is derived from the wing-like side lobes of the lip, which are a prominent feature of the flowers. The sepals and petals can range from almost green to deep maroon purple, while the lip color and markings are beautiful and less variable from plant to plant, showing a light yellow background highlighted by well delineated purple



Grammatophyllum scriptum forma citrinum



Den. Blue Foxtail

lines and a much brighter yellow front edge on the front lobe. In the very best forms, this front lobe of the lip is held fairly flat, showing off these intricacies to best advantage. These long lasting flowers are carried on tall panicles (a spike with branches) in summer and bear a sweet fragrance which carries far from the plant in midday heat. The plants are fairly large, preferring warm temperatures, bright light and a very open mix, basket or mount. Their natural range is from SE Mexico, to Costa Rica, along both coasts at lower elevations.

Red - Encyclia Patricia Sander - Collier/Reinke



Encyclia alata



Miltonia Honolulu 'Warne's Best'



Paph. Iantha Stage



Doritis pulcherrima var. champornensis fma. alba

Class V – Oncidium Alliance

Blue - Miltonia Honolulu 'Warne's Best' HCC/AOS - Mellard/Marino: The history of this cross is an example of what is called 'line breeding'. Here, the family tree started with Miltonia spectabilis being crossed to Miltonia flavescens on one side, and with Miltonia clowesii on the other. The primary hybrids that resulted where in turn each crossed with Milt. spectabilis once again. Then one plant from each of these pairings was crossed with the other, resulting in Miltonia Honolulu. In line breeding, the genes of a particular orchid are reintroduced through successive generations toward a desirable outcome. In this case, we have an orchid with the beauty of Milt. spectabilis, but with 4 or 5 flowers to the spike as opposed to only one, and with some additional hybrid vigor as well. It is interesting to note that this immaculate plant had more flowers than the previous cultural award for this clone, but several flowers were deformed, causing the AOS judges to not award the plant. David Mellard says he has learned that this deformation is a result of the emulsifier in Ortho's Lawn & Garden insecticide, which was used on the plant earlier in the spring. It is important to realize that some pest care products, even when used correctly, can cause unintended consequences on your orchids!

Red – Miltonia Bert Field 'Leash' AM/AOS - Phillips White – Miltonia Rick Hood - Whitfield

Class VI – Cypripedium Alliance

Blue – Paph. Iantha Stage – Missbach : This hybrid is a great combination of both parents, usually exhibiting the striking color pattern of *Paph. sukhakulii* an the majestic size and horizontal stance of *Paph. rothschildianum*. Since being introduced in 1973, it consistently grabs the attention of AOS judges, who have bestowed at least 54 flower quality awards on it as well as the Award of Quality. Well grown examples can bear up to three 8 inch flowers to a single stem, held one over the other in the style of *Paph. rothschildianum*. Capable of flowering in moderately low light, and preferring moderate temperatures and well controlled humidity, this hybrid is a great candidate for culture indoors under lights.

Red - Paph. Lynleigh Koopowitz - Rinn White - Paphiopedilum superbiens - Lentz/Morgan

Class VII – Phalaenopsis Alliance

Blue –. Doritis pulcherrima v. champornensis (alba form) – Rinn: Our blue ribbon winner this month in Class VII displays a double mutation from the typical form of the species. It is a peloric, meaning that the two petals have a color pattern and shape which strongly mimics the lip, and it is an alba, containing no purple pigments in the flowers. By the early 1990's hybridization between various clones of Doritis pulcherrima had stabilized the peloric features, so that offspring consistently displayed this pattern. This led to an Award of Distinction, several Judges Certificates, an Award of Quality, and finally 11 flower quality awards for plants exhibiting this flower form. The four most recent awards all went to the white peloric form. This species requires stronger light that typical Phalaenopsis to flower well, otherwise culture is the same.

Red – Phal. Buddha's Treasure x *Dtps. pulcherrima* – Mellard/Marino White – Phal. Golden Peoker x Phal. Tinny White – Mellard/Marino

Class VIII – Vanda Alliance

Blue - V. Erika Cizek Dann - Hansen

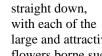
Vanda Erika Cizek Dann was registered by Motes Orchids in 2003 and has already received 4 flower quality awards from the AOS. While eight species can be found on its family tree, three dominate in the appearance of the flowers: V. tessellata, V. coerulea, and Euanthe (syn. Vanda) sanderiana. As a general rule Vandas require greenhouse conditions to grow and flower well in our climate. They do best in open baskets containing little if any growing media, and need year round warmth, bright light, excellent humidity, regular feeding and daily watering. If you have a greenhouse with good vertical clearance, they can be hung high above other plants, or preferably, the aisles where they get the best air movement and light and not interfere with the growing space beneath.

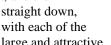
Red - Menziesara How Xin Yi 'Orange Blossom' - Phillips White - Trichoglottis phillipinensis - Van Horne

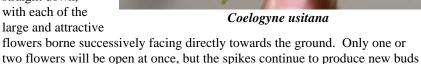
Class IX - Miscellaneous

Blue – **Bulbophyllum maximum** – **Whitfield**: The species name is a reference to the plant size and not the flowers of this bizarre orchid species. Widely distributed throughout tropical Africa, and somewhat variable in overall look, it is the long flattened inflorescence known as a rachis, rather then the intricate, but tiny (1/4" at best) flowers that grabs our attention. In some forms, the rachis is purple in overall color, and flattened to about ³/₄" of an inch at the widest part, while in others this flowering apparatus is yellow, and up to about 1.5 inches in width. It grows well in moderately bright light, high humidity, and its rambling habit is best contained in a basket or on a large mount. A period of rest in winter, where water is withheld to the point that pseudobulbs become slightly shriveled, is recommend to produce the best flowering.

Blue - Coelogyne usitana - Missbach: This uniquely beautiful orchid is named after the collector who found it on its native habit of Mindanao Island in the Philippines in 2001. As is typical for coelogyne, the inflorescence is produced from the base of a pseudobulb. But in this species, it arches up, out, and then







over a very long period of time, and about 20 may be produced in total on each inflorescence. It is not common in cultivation, so you will have to hunt for a source of a plant to purchase.

White – Habenaria rhodocheila - Gilmore



Bulbophyllum maximum



Vanda Erika Cizek Dann



Bulbophyllum maximum

Do you have any ideas for newsletter articles? Any questions you would like answered? Information you'd like to share with the rest of our members? Suggestions for the Collector's Item column? Let me know. I always need ideas and content for the newsletter. -Danny

RECENT ACTIVITIES OF THE ATLANTA JUDGING CENTER

The following awards were granted at the July session of the AOS Atlanta Judging Center. They are provisional awards pending official publication in the *Awards Quarterly*. Certificates of Horticultural Merit and Certificates of Botanical Recognition are also provisional pending identification by an AOS certified taxonomist prior to publication of the award.



Dendrobium lawesii 'Sweetbay' AM 84 pts.

Natural Spread: 2.4-cm H x 2.4-cm V
One hundred fifty-six pendent flowers clustered on 19
inflorescences; sepals and petals red-orange on exterior, dark
red basally, mandarin orange on the face with fine red stripes;
lip lavender-pink, ridged white ending in white fimbriations;
column and anther white; substance soft; texture glistening.
Exhibitor: Peter & Gail Furniss



Encyclia alata 'Early Bird' AM/AOS, 82 pts.

Natural Spread: 4.0-cm H x 4.2-cm V Thirty-one flowers and one bud on two upright, branched inflorescences; flowers light chartreuse heavily overlaid rich chocolate brown on distal three-fourths; lip cream-colored, canary yellow with fine maroon stripes marginally; substance firm; texture matte.

Exhibitor: Patrick Hawley

Recent Blooms at the Atlanta Botanical Garden, August 2006



Epidendrum moronense



Pleurothallis tarantula

Photos © Danny Lentz

Growing *Pterostylis curta*, An Australian Terrestrial Orchid by David Mellard

Pterostylis curta is the easiest Australian orchid to grow and once mastered can be considered weedy. It took me about 5 years to learn how to grow them prolifically so I thought I would share my experiences with you. Years ago, I received a handful of various Australian terrestrial tubers from one of the Australian native orchid societies - when it was easier for them to export their extra tubers. Most tags ended up in the 'dead orchid society' jar except for Pt curta, which limped along for several years. Finally, I changed to a peat-based mix, watered and fertilized the plants regularly during their growth period, and the plants responded in kind by growing profusely, flowering well, and producing many extra tubers.

When I was researching culture for *Pterostylis* and the other Australian genera, I found several mixes, one suggested by Helen Richards et al., the authors of Cultivation of Australian Native Orchids and two others suggested by Kingsley Dixon and Nesbitts Orchids, both well-known growers in Australia. Their recipes are shown below:

Helen Richards

2 parts coarse sand

1 part rich loam

1 part buzzer chips

1 part leaf mould

1 tsp blood/bone meal per 2 gallons of

1 tsp dolomite per 2 gallons of mix

Kingsley Dixon

2 parts friable loam (humus)

2 parts coarse sand

1 part peat moss

1 tsp blood/bone meal per 1.2 gallons of mix

Nesbitts Orchids

45% loam

50% sand

5% organic matter

As you can see, the mixes are somewhat similar. I never felt, though, that I could accurately make up the suggested mixes because finding certain ingredients in the states was difficult. Initially, I used



Pterostylis curta



Sprouting tubers.



Tubers in David's current mix. After arranging them in the pot the tubers should be covered with another inch or two of potting mix.

Home Depot play sand but found that this sand is too fine and did not allow free drainage. I also found it difficult to find loam. Go to a garden center in Atlanta and ask for loam and you get a blank stare or you are lead to a bag of composted bark. Composted bark is not loam. Technically, loam is the top 2 or 3 inches of grass covered dirt that is removed and mixed thoroughly. After talking to a friend in England, where the concept of loam was invented, we decided that the closest that I could come to finding loam in America was to dig the top few inches of soil from beneath mature hardwoods. This soil is built up over decades from leaf fall, is crumbly when wet, and very fine when dry. Buzzer chips (the shavings from a wood working shop) were also somewhat difficult to find. Helen Richards suggests not using fresh buzzer chips because of phytotoxins in the wood so this added another level of difficulty.

Those first years, I used Helen Richards' mix as best I could but with poor results. Within the last 2 years, I started using Fafard 3B, a peat-based mix, and culture improved immensely. I tried several recipes:

1 part forest loam2 parts perlite2 parts Dekalb compost1 part peat moss0.25 parts clay

To 6 gallons of mix, I added 3 tsp blood/bone meal and 3 tsp dolomite.

The other mix I tried consisted of:

4 parts Fafard 3B 3 parts perlite 0.5 parts oyster shells 3 tsp dolomite

I had better success with these mixes. The *Pt curta* plants grew well along with several other *Pterostylis* species and a few other Australian terrestrial orchid genera (*Diuris, Microtis*). I was still not successful with some genera (*Thelymitra*). One thing I noticed last year was that the pH remained too high, sometimes going over 7 so I'm still not

humidity in the greenhouse kept the

When I repotted all the tubers from last

year this August, I ended up with about

200 Pt curta tubers so I have some very

others were obviously still dormant. All

large group plantings this year. The

growth point on some of the dormant tubers was beginning to elongate while

were repotted and watering has been

frequently on pots where the growth

Adding granny grit to the top of mix

will give stability to the top portion of

point has emerged and leaves unfurled.

started on all pots, although more

tubers from dehydrating.

satisfied with the mix.

This year, I have changed the mix again, eliminating the dolomite, adding some topsoil from the garden to moderate pH by increasing the cation exchange capacity, and adding Turface to increase drainage. Here's what the mix looks like:

2 parts garden soil or forest loam 2 parts Turface 2 parts Sunshine mix (or Fafard 3B) 1 part perlite

As you can see, I'm still very much in the experimentation phase of finding

what I think is a mix that works for my conditions. Pt curta will probably do just fine in Sunshine or Fafard, but since these are mostly peat, they hold lots of moisture, which might be a problem for some Australian terrestrial orchids, particularly as they are going dormant in the spring and wanting to be very dry. Straight Sunshine or

Fafard would make it difficult to do the occasional light watering during dormancy that prevents the tubers from dehydrating, hence the need for some other ingredients to increase drainage.

Turface, which is available at Home Depot, is a completely inorganic product, larger than play sand but smaller than pebbles, probably about the size of BB's. It makes for good drainage and along with perlite helps to aerate the soil. I will know by spring if this mix works.

When preparing the pot for the tuber, it's a good idea to add a small screen at the bottom to cover the holes. While the tuber should be placed

about ½ to 1 inch below the surface, as it grows and produces offset tubers, they will begin growing out of the bottom of the pot if not stopped by a screen. Pt curta tubers do well singly in pots or as a mass planting of tubers in a pot, which gives a dramatic effect in the spring when they bloom.

Pt curta and most of the other Australian terrestrial orchids begin growth in the fall and at the writing of this article in August are just emerging from their summer dormancy. I noticed that pots kept in the greenhouse during the summer (and not watered) had nice, smooth tubers with no indication of dehydration. However, a pot kept in the house over the summer (and not watered) contained tubers that were very shriveled. They looked like Joan Rivers without a face lift. In hind sight, I should have watered this indoor pot very lightly over the summer. Pots in the greenhouse, however, did not need watering as the high



New growth sprouting from screen in the bottom of the pot helps to prevent this.

drainage hole. Putting a piece of

Pt curta prefers bright light but seems to adjust to almost any light conditions. Plants begin growing in August,

breaking through the layer of granny grit and the leaves

now rest on a dry surface rather than wet mix.

the mix while watering. Granny grit is available from feed

and seed stores. The emerging growth point has no trouble

grow through the winter and flower in the spring, usually from February to March just in time for the Southeastern Flower Show. Plants appreciate regular fertilizer and seem to do well being fertilized at every watering with 100 ppm nitrogen. I prefer a nitrate based fertilizer because Atlanta water has low buffering capacity, and therefore, use the Michigan State Reverse Osmosis Fertilizer. I use ½ teaspoon of MSU RO fertilizer per gallon water to get 100 ppm nitrogen. Because the MSU RO fertilizer does not have sulfur and is still relatively low in magnesium at 29 ppm when diluted to 100 ppm nitrogen, I supplement once a month with a separate

When well-grown the plants can multiply rapidly in a few years.

watering of just Epsom salt at 2 1/4 teaspoon per gallon. This dilution rate yields 200 ppm sulfur and 150 ppm magnesium. Do not mix Epsom salt with any fertilizer because the sulfur will precipitate out some of the nutrients in the fertilizer. The Epsom salt comes from a drug store and the MSU RO fertilizer can be purchased from Hill Top Orchids (765-795-6016).

While my plants grow in a greenhouse with 70 to 100% humidity and bright light in the fall and spring, and lower light levels in the winter, my impression is that the plants will do very well under lights indoors or placed in a well light room.

I'm looking forward to seeing how the plants do this year along with some of the other Pterostylis and Australian terrestrial orchids that have made it so far. Look for an update next year.



*Maxillaria notylioglossa*Plant grown by the Atlanta Botanical Garden