

Massachusetts Orchid Society



February: Tim Culbertson

Topic: State of the Art Lycaste Breeding

Although I teach middle school kids for a living, one of my passions has always been plants. I began growing orchids as an offshoot from working at Longwood Gardens in Philadelphia just after college. From the very beginning it was all about Paphs, particularly awarded and select clones of historic importance, of which my collection numbers nearly 1000.

While I love finding old, rare stepping stones in paph breeding, I also do a little hybridizing of my own, and growing up my own babies is a blast. I am a probationary judge with the American Orchid Society, and have served in various capacities with the Santa Clara Valley Orchid Society.

I love meeting other people who like orchids too, and doing so often finds me traveling to shows, vendors, and peoples' greenhouses to see the latest and greatest in new hybrids and to get the best orchid gossip. I like to be involved in plants as much as possible: in addition to Longwood, I've worked at the Smithsonian Institution tending to their orchids, and for years for the United States National Arboretum, collecting rare plants and documenting cultivated species and hybrids for their herbarium.

I'll be sharing a presentation on modern Lycaste breeding – what you can expect to see on vendor's tables and how that will affect how you grow and show them.

Miniature Orchids for Northern Homes

The phrase 'small is beautiful' has special meaning for the lover of miniature orchids for they have a charm that can quickly become an obsession. An added advantage is that they occupy so little valuable growing space and for the orchid enthusiast whose collection keeps growing in numbers, this is a major consideration. However, miniature orchids have many other interesting features to fascinate the plant lover. Many are beautiful foliage plants. Some have a branching growth habit not found in the larger pseudopodial orchids and can soon cover a slab with a network of leaves and flowers. The exotically spotted, overlapping leaves of *Oncidium limminghei* cling tightly to its mount. *Isabella virginalis* has a chain of tiny bulbs covered with an unusual golden net of

fibres that complement the lavender flowers that is unlike any other plant. Many of the *Pleurothallis* group form graceful clusters of leaves with sprays of flowers which, though not showy, are in perfect proportion. *Nageliella purpurea* has silvery-stippled leaves with a purplish overcast which rival any of the popular foliage plants. Its bright magenta flowers are an added bonus.

Roots are an interesting feature of many miniature orchids and unlike terrestrial plants are clearly visible. The roots of *Aerangis curnowiana* are warty; those of *Ornithocephalis iridifolius* are covered with tiny white hairs. *Maxillaria juergensis* has corrugated roots and the young roots of *Pleurothallis tribuloides* are colored bright orange. (continued on page 6)

Upcoming Events

February 10-12 –
NHOS Annual Show
See page 5

February 14 –
MOS Monthly Meeting
Speaker: Tim Culbertson

February 14 –
Lecture: Orchids of Cape Cod
See page 5

February 25-26 –
Amherst OS Annual Show
See page 5

March 13 –
MOS Monthly Meeting
Speaker: Ron Burch
Topic: Cypripediums
www.gardensatposthill.com
(pre-orders welcome)



Promenaea stapeliodes
Photo: Betsy Thorsteinson

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Shot table
photography by
Sasha Varsanofieva.

Mediocalcar
versteegii

Membership

If you haven't paid your 2011-2012 annual dues or would like to get a head start on 2012-2013 membership,

Please send your dues to:

Susan Flier
27 Colchester Street
Brookline, MA 02446

Save the Date

Saturday, September 8, 2012

IPA Focus on Phals Day

Bedford NH

More details to come

Orchids' Beauty Shown in Smithsonian Magazine

By Larry C. Kerpelman

The February 2012 issue of Smithsonian magazine contains an article on the 20th World Orchid Conference that was held recently in Singapore. Its description of the flurry of activity and logistics that went into setting up exhibits for the show reminded me of what we go through in setting up our show – although writ much larger.

The article provided an overview of what orchids are, how they are bred, their judging, and the mystery and

appeal these flowers hold for humans (as well as their non-human pollinators). But what set the article apart were, in my opinion, spectacular photos of a variety of orchid that were on display at the World Orchid Conference. If you don't subscribe to the magazine, you can still see the article and a gallery of 25 or these photos, taken by JG Bryce, at Smithsonian's on-line site:

<http://www.smithsonianmag.com/science-nature/The-Orchid-Olympics.html>



An occasional column answering questions and providing orchid growing information. Some of this information is derived from the AOS member site and some from fellow MOS members. I've been growing orchids for about eight years, still a beginner, and this is a good way to learn and share. To keep the column lively and timely, please contribute your questions and comments to: joan@massorchid.org

Ask Joan

Q: Can you comment on the following orchid fertilizers?

- "Garrett Juice" as fertilizer
- Coffee grounds as fertilizer
- Mycorrhizae products like Actinovate to improve growth

A: All the products you mention are organic. I looked up Garrett Juice and found a product created by Howard Garrett, the Dirt Doctor. He is a landscape architect who has devoted himself to organic gardening. His website focuses on agriculture in general, trees, maintenance of parks and golf courses, fruit orchards or methods of composting. There is little mention of orchids or other pot plants.

The Garrett Juice that he has developed is a foliar feeding product made up of compost tea, molasses, apple cider vinegar and liquid seaweed. These nutrients undoubtedly include of the components of traditional orchid fertilizers: N: nitrogen for vegetative growth, especially in the spring, P: phosphorus for root growth, and especially for bloom, and flowering, and K: potassium for root growth and hardiness. But what ratios of each element are present? Vinegar would lower the pH which might contribute to better

blooming. Seaweed and fish emulsion are popular organic fertilizers. I don't know what to make of the molasses ingredient. Whatever the mix, the correct concentration of NPK is necessary so that you don't get all leaves, and no flowers, or all keikis.

Concerning the mycorrhizal product, Actinovate, I have similar questions. I think it might react in some way with the bark medium, and perhaps disintegrate the bark more quickly.

Coffee grounds are a good source of nitrogen, but create an acidic environment which may burn the roots.

Growers experiment with many different things in hope of producing wondrous orchids. One amusing list I found included any or all of the following: urea free fertilizer, beer, Epsom salts, sugar seaweed extract, vodka, horse manure tea, fish tank debris, tortoise manure, birth control pills, prenatal vitamins. He says his plants are thriving. So my advice to you is to experiment and report the results.

MOS members, please help the questioner: write me with your thoughts about organic fertilizers.

Orchid Trivia: The Western Underground Orchid



I was discovered in the spring of 1928 in the wheatbelt of Western Australia. Jack Trott had bent to investigate an odd crack that had appeared in his garden's soil, and had noticed a sweet smell that arose from the ground. Scraping away the soil, he soon uncovered a tiny white flower, about half an inch across, growing underground. What he had found was an entirely new type of orchid. The discovery generated such excitement that a wax model was toured around the British Isles.

I am a white leafless plant made up of a fleshy underground tuber and produce a flower head consisting of around 150 tightly packed, tiny flowers. Unlike any other orchid in Australia, I remain completely underground for my whole life. Not being able to obtain the sun's energy, I instead feed on the broom honeymyrtle, a shrub. It is linked to it by a mycorrhizal fungus.

I am a myco-heterotroph as I rely completely on

the broom honeymyrtle and fungus for my nutrients and carbon dioxide. Having received this from the fungus I am then able to convert the water, nutrients and carbon dioxide into the energy needed for growth and maintenance.

I reproduce vegetatively - I can produce three daughter plants. I also undergo sexual reproduction, and underground insects such as termites and gnats are known to pollinate my flowers, attracted by my fragrance. The pollinated flower will then take six months to mature. In all studied flowers these were not dispersed and eventually decayed, thus releasing their seeds. It may be, however, that native marsupials are important dispersal agents, but substantial findings are hard to come by as only 19 mature specimens of the orchid are known to currently exist in the wild and only 300 specimens have been collected to date.

What am I?

Find out at the bottom of page 4.

Original text from Wikipedia.

Photo: <http://www.sciencedaily.com/releases/2011/02/110208101337.htm>



The Western Underground Orchid

January Show Table Results

14 Plants Awarded

Judges: Joan Blackett, Brian Leib, Brandt Moran,
Bob Richter

Scribe: Linda Abrams

Plant	Owner
Mediocalcar versteegii	Brandt Moran
Ceratocentron fessellii	Sasha Varsanofieva
Laelia anceps	Brandt Moran
Dendrobium delicatum	Lois Steele
Slc. Circle of Life 'Trail Blazer'	Brandt Moran
Masdevallia princeps	Joe Rajunas
Rhynchostylis gigantea 'Spots'	Bob Richter
Angraecum sesquipedale	Bob Richter
Amesiella monticola	Ralph & Chieko Collins
Epc. Yucatan 'Rochella'	Linda Abrams
Dockrilla rigeda	Ralph & Chieko Collins
Bc. Maikai 'Mayumi'	Ralph & Chieko Collins
Cymbidium Pepita 'York'	George Baltoumas
Paph. Primulinum var album	Joel Shelkrot

In an effort to get our meetings started by 7:30, we kindly request that show table plants be ready for judging by **7:15pm.**

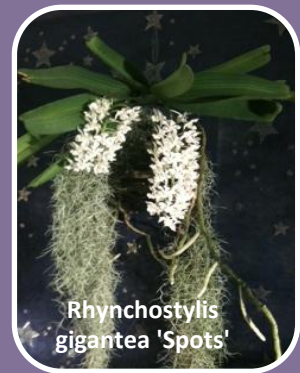


Masdevallia princeps

Orchid Trivia Answer:
Rhizanthella gardneri



Angraecum
sesquipedale



Rhynchostylis
gigantea 'Spots'



Slc. Circle of Life
'Trail Blazer'



Ceratocentron
fessellii



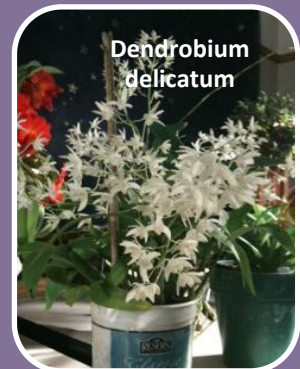
Epc. Yucatan
'Rochella'



Laelia anceps



Amesiella
monticola



Dendrobium
delicatum



Paph. Primulinum
var. album



Cymbidium
Pepita 'York'

The Friends of the Cape Cod Museum of Natural History Presents

"Orchids of Cape Cod"

Hosted by Rich Eldred

Tuesday, February 14, 2012 at 1:30pm

**Cape Cod Museum of Natural History
869 Route 6A, Brewster, MA 02631**

508-896-3867 ex 133 / www.ccmnh.org

Learn about the orchids on Cape Cod, their meticulous pollination methods and the threats to their fragile habitats.

You don't have to own a humid greenhouse to see orchids in bloom on Cape Cod. While all wildflower lovers are familiar with the beautiful Pink Lady's Slipper orchid there are actually more than 25 wild orchids that can be found on Cape and the Islands of Nantucket and Martha's Vineyard. However with the exception of the lady's slipper all are rare and mostly confined to specialized habitats.

Mr. Eldred is a reporter for the Cape Codder where he covers environmental issues and the town of Brewster, he is also currently President of the Botanical Club of Cape Cod and the Islands and a member of the New England Botanical Club. He has a degree in Botany from the University of New Hampshire and a master's in Plant Science from the University of Western Ontario.

Contact: Gayle Kenerson 508-385-2192 or gck1@comcast.net
Admission: friends of CCMNH – free / guests – \$3

Amherst Orchid Society Annual Show

SATURDAY, FEB 25, 2012

9 AM TO 5 PM

SUNDAY, FEB 26, 2012

10 AM TO 4PM

**SMITH VOCATIONAL HIGH SCHOOL
NORTHAMPTON, MA**

[www.larchhillorchids.com/
amherst_orchid_society.html](http://www.larchhillorchids.com/amherst_orchid_society.html)

other contact info: marc d gray 802-348-7896
or bulbophyllum@myfairpoint.net

Smith Vocational high School is located at 80
Locust
Street (Route 9) next to the Cooley Dickson
Hospital.

Admission: \$3.00 (Children under 12 Free)



**New Hampshire Orchid Society
21st Annual Orchid Show "Parade of
Orchids"**

February 10: 1 pm to 5 pm &
7:30 pm - 9:30 pm

February 11: 9 am to 5 pm

February 12: 9 am to 4 pm

Radisson Hotel, 11 Tara Blvd., Nashua, NH

More information: www.nhorchids.org

Miniature Orchids for Northern Homes

Gloria Keleher
Betsy
Thorsteinson

Reproduced, with permission, from "Miniature Orchids for Canadian Homes" published in the January 2012 Canadian Orchid Congress newsletter.

(continued from page 1)

In general, miniatures need closer attention than the larger orchid species. Mistakes in culture are not as easily forgiven. A constantly soggy compost can result in quick death, and for this reason, many miniatures are best grown on mounts. This method most closely duplicates their growth in nature and the roots are easily observed. Vigorous roots are a sign of plant health and in miniatures they are usually the first indicators of trouble. Some suitable mounts are tree fern slabs, cork bark, oak branches, driftwood, and redwood bark. Cork bark may be difficult to find but we have been successful with cork wall panels, available from a building supply dealer. For plants that need extra moisture a pad of osmunda or sphagnum can be placed under the roots. Nylon fishing line is effective and inconspicuous for tying. It is important to tie newly mounted plants firmly to their support.

Plants that require high humidity, newly imported plants, and seedlings are often happier in a terrarium. This can be an aquarium of a convenient size, with a layer of gravel, perlite, or lava rock on the bottom to absorb moisture and thus raise the humidity. It will also lift potted plants out of water that accumulates. Mounted specimens can be hung from the sides of the tank. Driftwood is decorative and supplies additional support. A terrarium can be placed in a growing area under lights or in a special spot on display.

Because mounted miniatures have to be sprayed daily, it is convenient to group them together in one growing area. Hardware cloth or pegboard, set at an angle under the fluorescent fixture, forms an effective support for the mounts. If a plant is in serious trouble we have found that placing it in a small pot of fresh sphagnum and enclosing the whole with a plastic bag may save the plant.

The following are some of our favorite small orchids. All have been grown and bloomed by us, either under fluorescent lights or in a window, without benefit of a greenhouse atmosphere. Not all are of equally easy culture. These orchids are tropical plants and there is a critical period of adjustment to environmental conditions which cannot be exactly duplicated in a Northern home. Even plants obtained from the greenhouses of commercial growers in the semi-tropical areas of the United States must make a considerable adjustment. It is proof of the toughness of orchids in general that so many survive in our artificial growing conditions. We recommend obtaining seed-grown plants of miniature orchids whenever possible, even in the flask stage. They experience less trauma when adjusting than jungle-collected plants. Besides, you will have the satisfaction of knowing you are not contributing to the extinction of the species in its natural habitat if you experience an occasional failure.

Aerangis rhodosticta, from Central Africa, is one of the loveliest of miniature orchids. The plant with its shiny green close-set leaves is attractive

even when not in bloom. The inflorescence is somewhat pendulous, the flowers about 2 cm across and in two rows on the same plane.



The color is white or ivory with the bright orange-red column forming a beautiful contrast. The flowers last about a month. Our plants are laboratory grown and the largest bloomed in less than a year out of the flask. Pot-grown seedlings have not been as successful as mounted specimens. Cork bark or oak twigs padded with fresh sphagnum seem to be the preferred mounts. Warm temperatures, low light and good humidity are required.



Amesiella (Angraecum) philippinensis is another monopodial orchid, native to the Philippines as the name implies. The flower spike produces up to four pure white spurred blossoms with a yellow center, large in relation to the plant. Warm temperatures and bright light are necessary, and a humidity higher than can be achieved in the home. We had some difficulty getting the flowers to open fully until the plant was moved to a terrarium. It is worth the extra effort to provide the necessary environment as it is a lovely orchid.



Ascocentrum miniatum is an Asian species, with a dark green fan of leaves, contrasting with the showy, brilliantly colored spikes of closely clustered orange flowers. They are spurred and are centered with a purple-lipped column. This is a plant for a south window as it requires bright light to bloom well. Alternatively it can be placed close to the tubes in a fluorescent light garden and given warm temperatures.

Barkeria skinneri is native to Mexico and Guatemala. The rich rose-lavender flowers are up to 4 cm. across and borne in a spike at the apex of the reed-like pseudobulbs. It likes plenty of water, warmth, and light during active growth and a cool dry rest in winter. While this species is

Miniature Orchids for Northern Homes

Gloria Keleher

Betsy Thorsteinson

(continued from page 6)



somewhat taller than a true miniature, its growth and flowering habit is strictly upright and its bulbs so close together that it can be accommodated in a small pot. It is highly recommended for its ease of culture, brilliant color and long-lasting flowers.

Cirrhopetalum and **Bulbophyllum** are two closely allied genera of orchids, often grouped together. The combination has about 2000 species, growing in the New and Old World, in a wide range of habitats. From this huge complex of plants there are many that are worth growing, including lots of miniatures. **C. ornatissimum**, from India, is a very easy one to grow and bloom, and the flowers are intriguing. They are quite large, about 10 cm, with the lateral sepals drawn out to form a long purple-striped tail. The lip is mobile, rocking with the faintest breeze, and is bright purple.



The petals and the dorsal sepal have delicate purple fringes at their tips that give the flower a frivolous aspect. The spikes appear at various times throughout the year, emerging from the base of the 2.5 cm pseudobulbs. The pseudobulbs are spaced along wandering rhizomes and therefore the plant should be mounted. It does well in intermediate conditions, although it could be cooler in winter. **B. gutturalatum** is larger than **C. ornatissimum**, about 10 cm high, but the pseudobulbs are spaced closer together so the plant has less tendency to sprawl. Its flowers are very pretty, growing in a fan or wheel arrangement and held up on long stems.



The sepals and petals are yellow with magenta spotting and the lateral sepals are folded into two short tails. These flowers, coming in the winter, are not long lasting but they are freely produced. This is a very easy plant to grow and flower. It prefers cool conditions, moderate light, and a moist compost of tightly packed osmunda. It can be grown in bark but seems to thrive in osmunda.

Capanemia uliginosa is a pretty little plant from Brazil. It has stiff leaves atop tightly packed pseudobulbs, and forms a compact plant standing only 4-6 cm tall. Every spring the bulbs produce dense, long lasting sprays of fragrant white flowers, making a truly delightful show.



Its culture is undemanding. Mount it on tree fern with a cushion of moss and give it moist, intermediate to warm growing conditions.



Dryadella edwallii is a real gem. It comes from Brazil and is allied to the *Masdevallias*, its former name. Its leaves, 4 or 5 cm long, form a tight cluster that is easily accommodated in a thumb pot. The triangular, long lasting flowers appear in profusion in the spring, peeking up from between the leaves and forming a delightful bouquet. The sepals are pale yellow, the top one barred and the bottom two spotted with wine. The tiny lip is wine colored. *Dryadellas* should be grown in a cool shady location, preferably in clay pots full of tightly packed osmunda. They must be kept constantly moist. There are other *Dryadellas* that are similar, such as *D. simulata* and *D. zebrina*. They are all equally attractive.



One of the charms of **Epigeneium (Dendrobium) nakaharai**, from Formosa, is its free-blooming habit. The plant forms a branching chain of 2-3 cm angled pseudobulbs, each with a 3 cm leathery dark green leaf. It grows quickly and each pseudobulb produces from its apex a large (2.5 cm) waxy yellow flower, with a very shiny reddish brown lip. When that flower fades, another can appear from the same bulb, and that trait combined with the constant branching growth, assures lots of flowers. It is grown best on a tree fern slab in intermediate to cool temperatures and in medium light. This is one of those plants that is rarely troubled by disease and demands no extra attention in culture.

(To be continued in March 2012 MOS newsletter)

Upcoming Events

Date & Time	Event	Location
Fri-Sat, February 10 - 12	New Hampshire Orchid Society Annual Show & Sale	More info: www.nhorchids.org
Tue, February 14, 7:30pm	Monthly MOS Meeting	Arlington Senior Center 27 Maple St, Arlington, MA
Sat & Sun, February 25 & 26	Amherst Orchid Society Annual Show & Sale	More info: www.larchhillorchids.com/amherst_orchid_society.html
Sat, March 3, 10:30am	Monthly Regional AOS Judging	Tower Hill Botanic Garden 11 French Drive, Boylston, MA
Tue, March 13, 7:30pm	Monthly MOS Meeting www.GardensAtpostHill.com	Arlington Senior Center 27 Maple St, Arlington, MA
Sat, April 7, 10:30am	Monthly Regional AOS Judging	Tower Hill Botanic Garden 11 French Drive, Boylston, MA
Tue, April 17 , 7:30pm (third Tuesday)	Monthly MOS Meeting – www.AndysOrchids.com	Arlington Senior Center 27 Maple St, Arlington, MA



**Massachusetts
Orchid Society**

