



# NHOS Newsletter

May 2023 [www.nhorchids.org](http://www.nhorchids.org)

*Affiliated with the American Orchid Society & Orchid Digest Corp.*



Please be sure to become a fan of [New Hampshire Orchid Society](https://www.facebook.com/newhampshireorchidsociety).

## President's Message

Several years ago, I had the opportunity to hear Dr. Faletra speak about the "Saving Endangered Species Research Program" he and his students were working on. I was amazed by the thoroughness of their research on the most effective way to propagate *Cypripediums* and their efforts in reintroducing them into the wild. I am sure you will enjoy their presentation as much as I did.

Last month we all, including me, dropped the ball when it came to providing lunch. Please bring a dish to share, especially as we may have hungry students in the audience. Thank you to Rudy Seitz and Bob Brockmann for making sandwiches.

I have printed out some of the information from the High Desert Orchids website on PAR values and have purchased some new lights. Hopefully now I will get more flowers. Kelly's presentation was much easier for me to follow than the write up in "Orchids" magazine last year.

At our Annual meeting in August, we will be electing new officers. Please think about the skills you have to offer the Board. I will speak more about this at the meeting.

Anita

## NHOS MEETING NOTICE

**Saturday May 13, 2023 @ Old Bedford Town Hall**

**Program 12:00-** Conservation of *Cypripedium* Species from Habitat to Horticulture  
(see page 14)

**Business Mtg.: 11:00**

**All plants must be on the show table by 11:00**

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## **UPCOMING EVENTS**

### **Monthly AOS Judging**

On the first Saturday @ Tower Hill  
contact Bob Winkley at [northeastjudgingcenter@gmail.com](mailto:northeastjudgingcenter@gmail.com) if you are interested in attending or having a plant judged.

**May 13, 2023- NHOS Monthly Mtg., Program, Dr. Peter Faletra and NH High School Students - Conservation of Cypripedium Species from Habitat to Horticulture**

**June 10, 2023- NHOS Monthly Mtg., Program, Tim Culbertson, Modern Sarcophilus Hybrids**

**July 8, 2023- NHOS Monthly Mtg., Fred Clarke of Sunset Valley Orchids. Program- "Becoming an 80 Percentile Grower"**

**Aug. 12, 2023- NHOS Annual Meeting, Town Hall BBQ and Auction**

**Sept. 9, 2023- NHOS Monthly Mtg., Edgar Stehli of Windswept in Time Orchids – Topic TBD**

**Oct. 14, 2023- NHOS Monthly Mtg., Program: Special Auction for Bob Cleveland**

**Nov. 11, 2023- NHOS Monthly Mtg., Mike Badia – Growing Paphs and Phrags in Your Home**

**Dec. 9, 2023- NHOS Monthly Mtg., Holiday Party**

### **World Orchid Conference, Taiwan**

**March 1-4, 2024**

**<https://www.woctrust.org/the-next-woc---23-woc-taiwan-2024>**

## **April Show Table Results (photographs courtesy of Susan Kiesel)**

Judges: Chuck Wingate, Nancy Chase, Bridget Fortin, David Sparks, Priscilla Shinella

**Hobbyist ©= cultural award**

**Phalaenopsis Alliance**

|   |              |
|---|--------------|
| 1 <sup>st</sup> : Phal. Mitiso Dragon 'Litohii'   | Sue Kisiel   |
| 2 <sup>nd</sup> : Phal. japonica (fmrly. Sedirea) | Anita Walker |
| 3 <sup>rd</sup> : Phal. No ID                     | Anita Walker |

**Paphiopedilum Alliance**

|   |                  |
|---|------------------|
| 1 <sup>st</sup> : Phrag. Elizabeth Castle       | Bridgette Fortin |
| 2 <sup>nd</sup> : Paph. delenatii alba 'lc3267' | Bridgette Fortin |

**Cattleya Alliance**

|  |                  |
|--|------------------|
| 1 <sup>st</sup> : Laelia Purpurata 'v. carnea' © | Bridgette Fortin |
| 2 <sup>nd</sup> : C. Myrtle Beach x Lc. Liptonii | Bridgette Fortin |
| 3 <sup>rd</sup> : C. schroederiae 'Valley Girl'  | Scott Shephard   |

**Dendrobium Alliance**

|   |                  |
|---|------------------|
| 1 <sup>st</sup> : Den. primulinum albense | Bridgette Fortin |
| 1 <sup>st</sup> : Den. bracteosum ©       | Scott Shephard   |
| 1 <sup>st</sup> : Den. hibiki ©           | Bridgette Fortin |

**Oncidium Alliance**

|   |              |
|---|--------------|
| 1 <sup>st</sup> : Onc. Heaven Scent 'Redolence' | Anita Walker |
|---|--------------|

**Cymbidium Alliance**

|                              |              |
|------------------------------|--------------|
| 1 <sup>st</sup> : Cym. No ID | Anita Walker |
|------------------------------|--------------|

**Miscellaneous Genera**

|                               |                  |
|-------------------------------|------------------|
| 1 <sup>st</sup> : B. nodosa © | Bridgette Fortin |
|-------------------------------|------------------|

**Advanced Growers**  
**(all cultural or “R” for rarity)**

None

**Expert Growers**  
**(all cultural or “R” for rarity)**

**Chuck Wingate**

Nageliella angustifolia  
Den. fimbriatum var. occulatum

**Lee Brockmann**

Lc. Rojo  
Epi. cilliare

**Ann Chepjian**

Schoenorchis micrantha

**David Sparks**

Guarianthe skinneri  
Paph. Venustum  
Jumellea densifoliata  
Dryadella simula

**Daryl Yerdon**

Bulb. nymphopolitunum 'Doggy Doo'

**Bulb. falcatum 'Standing Tall' AM/AOS**

**Sarcochilus Bunyip**

**Bob Cleveland**

**C. pabstii 'Cleveland's' AM/AOS**  
**C. intermedia 'Amethystina'**  
**C. coccinea**  
**Onc. croesus**  
**Den. unicum**  
**Leptotes bicolor 'Janet Marie' CCM/AOS**  
**C. intermedia 'Coerulea'**  
**C. lawrenciana**  
**Paph. HoChi Minh 'Bob' AM/AOS**

**Chuck & Sue Andersen**

**C. aurantiaca (spotted)**  
**Pleurothallis calceduris 'Red'**  
**Mediocalcar agathedaemonis**  
**Den. violaceum 'Twilight Blue'**  
**Dresslerella caesariata**





New Hampshire Orchid Society  
General Meeting Minutes  
April 8, 2023

The President called the meeting to order and welcomed members and guests.

- We need help setting up before and cleaning up after the meeting. Please don't leave the responsibility to only a few. All help is appreciated.
- Upcoming Programs:
  - April 2023 - Kelley McCracken – High Desert Orchids – Artificial Lighting
  - May 2023 – Dr. Peter Faletra and NH High School Students – Conservation of Cypripedium Species from Habitat to Horticulture
  - June 2023 – Tim Culbertson – Modern Sarcochilus Hybrids
  - July 2023 – Fred Clark – (TBD)
  - August 2023 – Annual meeting, picnic and Member Auction at Town Hall.
  - September 2023 – Edgar Stehli – Windswept in Time Orchids (TBD).
  - October 2023 – Special Auction for Bob Cleveland
  - November 2023 – Mike Badia – Growing Paphs. and Phrags. in your home
  - December 2023 – Christmas Party
  - If you have a particular topic that you would like to have as a future program, please notify Daryl Yerdon.
- Financials: We have a total of \$26,641.12 in the checking account; Fund Accounts: \$28,140.78 approximate; Society's net worth is \$54,781.90.
- We currently have 143 memberships; 207 members.
- Jean Stefanik reported update on new grant request received from Dr. Fanuel Kawaka, Jaramogi Oginga Odinga University of Science and Technology (JOUST) to help fund developing A Community Conservation Strategy for Tridactyle cruciformis, an endangered epiphytic Orchid in Mau Forest Complex, Kenya. Jean reported that in lieu of sending the required funds to Dr. Fanuel Kawaka directly JOUST has arranged for an outside firm (CBO) to manage the money transfer and will issue reports. There were revisions made to the proposed budget for this project for NHOS' portion which did not change the amount donated. It was noted that in addition to discovery of Tridactyle cruciformis, any orchids discovered that have been disturbed from their natural habitat will be collected and transported to arranged sites. Jean found similar projects of this type moving region to region. Information needed for the money transfer will be forwarded to Treasurer – Andrea Deachman. The NHOS LOGO was also provided for this project and will be displayed in any and all printed materials associated with this endeavor.
- President, with advice and consent of the Board of Directors, appoints Andrea Deachman as the 2024 Annual Show and Sale Chairperson.
- Meeting adjourned for Show Table and Program.

Respectfully submitted: Susan Usseglio, Secretary







## AOS News



# Webinars - Coming Attractions!

**REGISTRATION IS EASY** <https://www.aos.org/orchids/webinars.aspx>  
 Cannot make it on the scheduled date and time? No need to worry.  
 Register now and view on your time schedule.  
 Send Your Greenhouse Chat Questions and Photos to: [greenhousechat@aos.org](mailto:greenhousechat@aos.org)  
 Greenhouse Chat webinars are recorded and indexed by topic for future viewing.

|                  |   |   |   |  |
|------------------|---|---|---|--|
| <b>When</b>      | <b>April 04, 2023</b><br>8:30 pm EDT<br>Tuesday   | <b>April 12, 2023</b><br>8:30 pm EDT<br>Wednesday   | <b>May 11, 2023</b><br>8:30 pm EDT<br>Thursday  | <b>May 16, 2023</b><br>8:30 pm EDT<br>Tuesday                                  |
| <b>Topic</b>     | <b>Greenhouse Chat<br/>Orchid Q &amp; A</b><br><i>Send in your Photos<br/>and Questions<br/>by April 02</i> | <b>Heirloom<br/>Cattleyas</b><br><i>Bringing the Past<br/>into the Present</i>              | <b>Greenhouse Chat<br/>Orchid Q &amp; A</b><br><i>Send in your Photos<br/>and Questions<br/>by May 09</i> | <b>He Came from<br/>the Land<br/>Down-Under</b><br>Orchids<br>Australia        |
| <b>Presenter</b> | <b>Ron McHatton</b><br>Chief Education<br>and Science Officer   | <b>David Toyoshima</b><br>Longtime AOS mem-<br>ber, former chair of<br>AOS Public Relations | <b>Ron McHatton</b><br>Chief Education<br>and Science Officer   | <b>Tom Mirenda</b><br>AOS Orchids<br>Monthly Columnist,<br>Professional Grower |

Check Out the Timeless Collection of Recorded Webinars on the AOS Website



Webinar announcements are posted to Facebook, Instagram  
and in the AOS Corner of your Affiliated Society's newsletter.

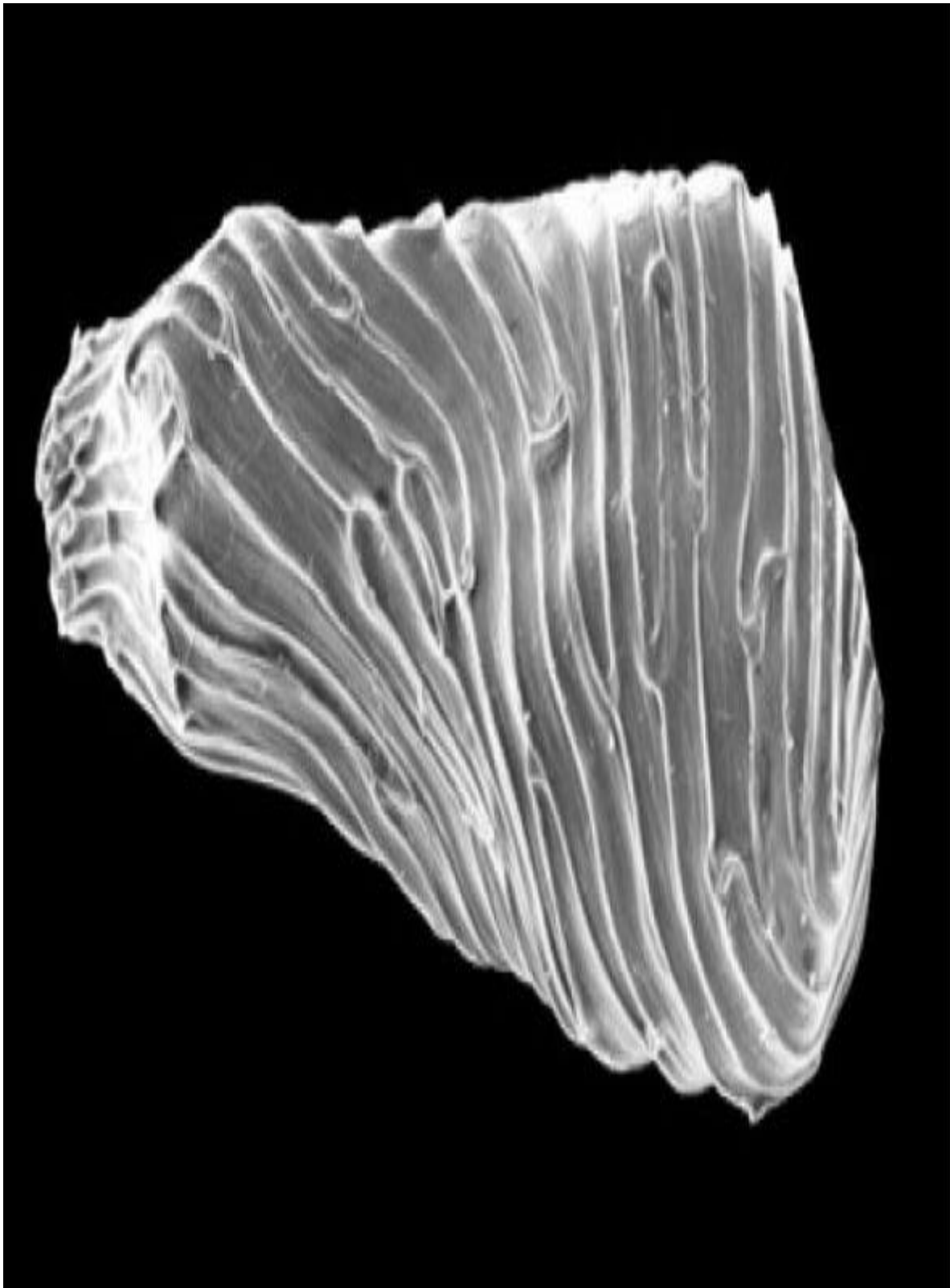
Use the  
WEBINAR  
Display  
Filter

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## Tiny Orchid Seeds Possess Understated Beauty and, Occasionally, Tools Enterprising seeds secure preferred real estate by deploying coiled threads

• By [Jennifer Frazer](#)

(Re-printed from *Scientific American*, June 2018)

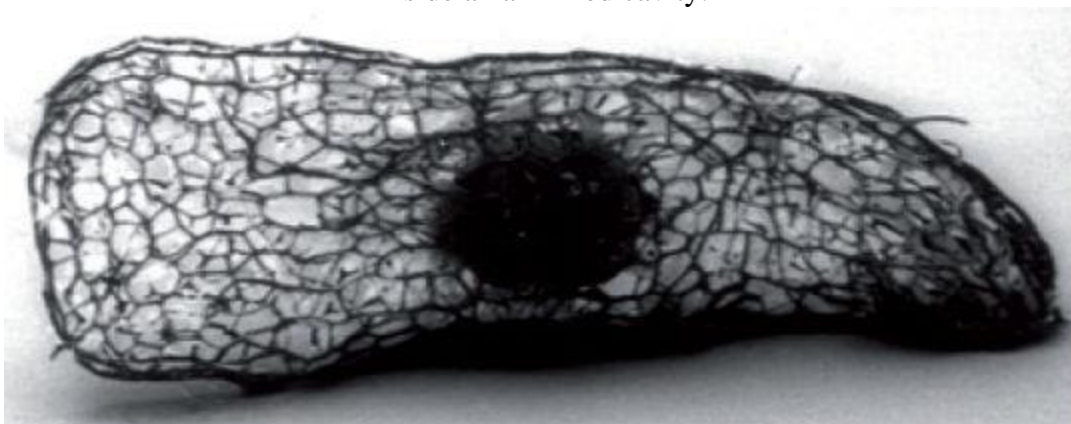


Credit: [Barthlott et al. 2014](#)

Lots of people get worked up about orchids, the apogee, or something near it, of floral extravagance. They are plants whose flowers are so potent they can [produce lust bordering on obsession](#). Their seeds, on the other hand, produce disdain. “Dust seeds,” botanists and fanciers alike scoff. Rarely has anyone bothered to take a closer look.



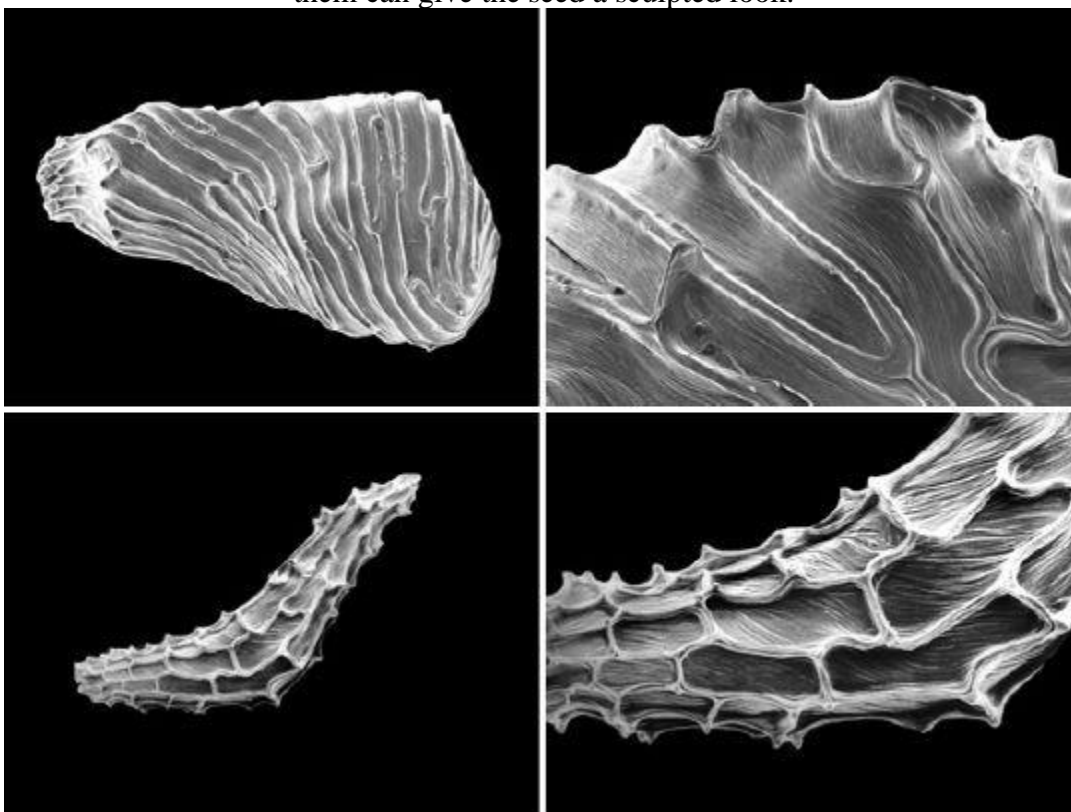
Over the last four decades, a team of German scientists finally did. Four years ago they published the first-ever [monograph](#) of orchid seeds, [which documents their understated beauty and sometimes surprising complexity](#) with thousands of scanning electron micrographs. Their findings demonstrate that orchid seeds are not as wholly uninteresting as their size suggests. Even the simplest and smallest have a beautiful textured balloon-like coat that hides the miniscule embryo inside an air-filled cavity:



Special scanning electron microscope technique reveals the air-filled interior and simple embryo.

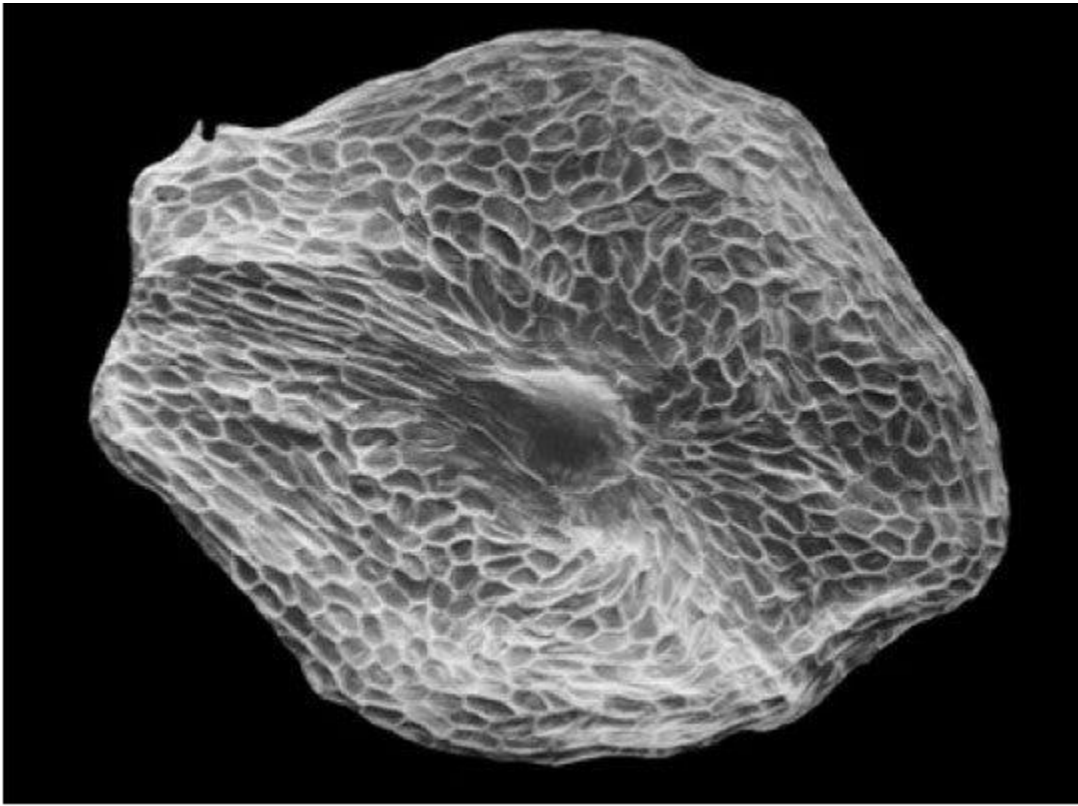
Credit: [Barthlott et al. 2014](#)

The cells that construct the seed coat are so truly tiny that you can see (and count!) them. The ridges between them can give the seed a sculpted look.



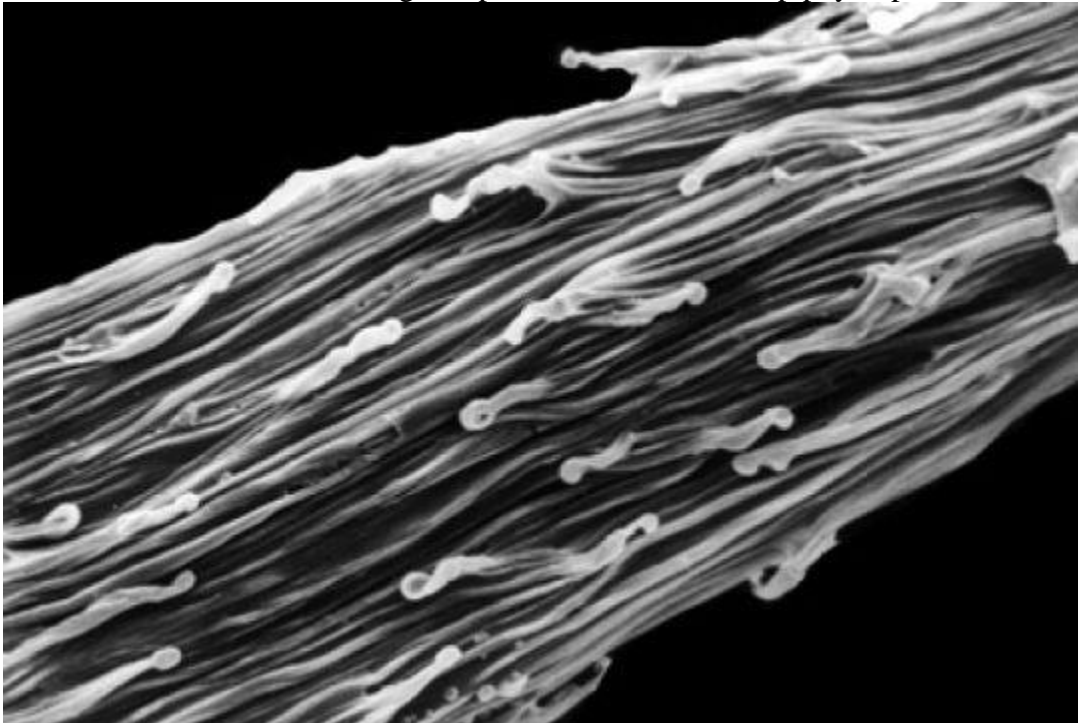
Credit: [Barthlott et al. 2014](#)

An orchid named [Vanilla](#) is the source of vanilla extract and vanilla "beans". The seeds of *Vanilla* and its kin have a flattened blade to help them sail away on the wind, like the wing of a maple seed.

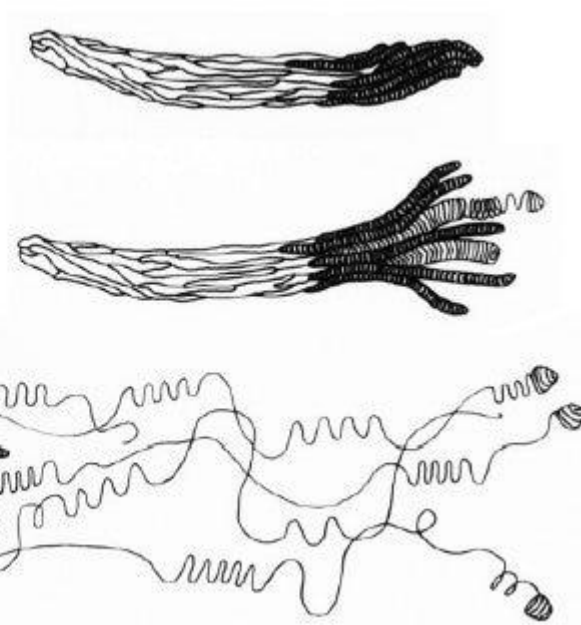
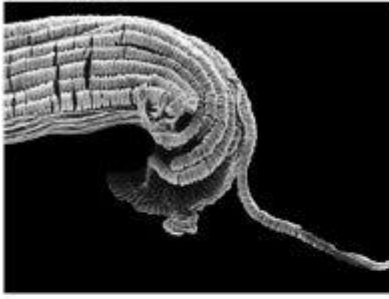


Seed of *Epistephium parviflorum*, a *Vanilla* relative. Credit: Barthlott et al. 2014  
 Something like this thing is what you're eating any time you eat vanilla bean ice cream. These are the tiny black specks.

Another species, *Microcoelia obovata*, produces seeds covered in tiny hooks. Their object is to secure a home on the bark of new twig, the preferred home of the epiphytic plants.



Seed coat of *Microcoelia obovata*. Credit: [Barthlott et al. 2014](#)  
 But the orchid *Chiloschista lunifera* has taken this tactic right up to 11.



*Chiloschista lunifera*.

Credit: [Barthlott et al. 2014](#)

The seed coat cells on one end of the seed possess helical wall thickenings. When wetted, they unspool in a tangle that performs the same job as the hooks on *Microcoelia*.

*Chiloschista* is interesting for another reason. Although its seeds are elaborate, the plant itself has opted to forgo that most basic of plant organs: the leaf. It's a bundle of green stem-like aerial roots that miraculously sprouts yellow flowers.





This orchid brought to you by Snidely Whiplash. Credit: [Naoki Takebayashi Flickr \(CC-BY-SA 2.0\)](#)

So why *are* orchid seeds so miniscule? Answering that question requires a short tour of the plants' unconventional reproductive system.

Orchids are renowned for their extravagantly sculpted, pigmented, and perfumed flowers (although I love orchids, frippery is the word that comes to mind) and keen interest in alternative plant lifestyles (like giving up leaves and living in trees).

One of those alternatives is a reproductive system referred to “lottery pollination”. The grand prize in the lottery is a packet called a [pollinium](#). The pollinium is the plant equivalent of the animal [spermatophore](#) – a big package of sperm, or in orchids’ case, pollen (and since pollen makes sperm, it’s a fine distinction in my mind.)



Pollinium indicated by arrow. Contents indicated by, er, conveniently convergent shape.

Credit: [Esculapio Wikimedia \(CC BY-SA 3.0\)](#)

When a pollinator visits an orchid flower, the pollinium has evolved to detach and stick to them, with often comical results.



Credit: [Gideon Pisanty Wikimedia \(CC-BY-S.A. 3.0\)](#)

If all goes according to plan, that pollinator will visit another orchid of the same species. The pollinium will stick to this flower's strategically-placed [stigma](#). And then all the pollen stuffed inside the pollinium will fertilize all the thousands of awaiting eggs inside a new orchid fruit. You win big, or you win nothing.

As a result of this system, some orchids are going to waiting a long time for fertilization to happen, and consequently, their unfertilized flowers are some of the longest-lasting in the business. They can stay fresh-looking for a month or more, one reason they are so prized as houseplants.

In some ways, an orchid is like a salmon: it makes scores of offspring and doesn't invest much in any of them. The result is tiny seeds. Most are less than a millimeter across and some are as tiny as the largest fungal spores – just 100 micrometers across.

What's inside is spartan too. A seed is a plant [embryo](#) supplied with a food care package called [endosperm](#) to help the embryo get started. In plants like wheat and corn, the endosperm persists in the mature seed and is the source of white flour. (Whole wheat flour also includes the high-fiber seed coat, or bran, and the nutritious plant embryo, or germ).

#### ADVERTISEMENT

Orchid seeds almost always lack endosperm. No sack lunch for you, kiddo. Instead, the seeds must find [a special fungus](#) with which to partner and germinate, and it is this fungus that supplies a baby orchid with startup food.

In addition, the mother plant boots the seeds out of the nest when the embryos inside are still only a few cells big. In other seeds, the embryos are usually so well developed you can see a tiny version of an adult plant in there, as anyone who's ever looked inside a peanut has noticed. Orchid embryos are microscopic blobs.

As a result, an orchid seed is stripped down like a broke poker player. There's an embryo. There's a seed coat. And that's about it. But that doesn't mean they aren't interesting, beautiful -- or helpless. They have what they need to get the job done.

#### Reference

Barthlott W., Große-Veldmann B. & Korotkova N. 2014: [Orchid seed diversity: A scanning electron microscopy survey](#). – Berlin: Botanic Garden and Botanical Museum Berlin-Dahlem. – Englera 32. – ISBN 978-3-921800-92-8.

## May Program Information

### Monthly Meeting - Conservation of *Cypripedium* Species from Habitat to Horticulture

We are excited to have Dr. Peter Faletra return with two New Hampshire high school students to talk to us about the research they are doing to save the slipper orchids from extinction.

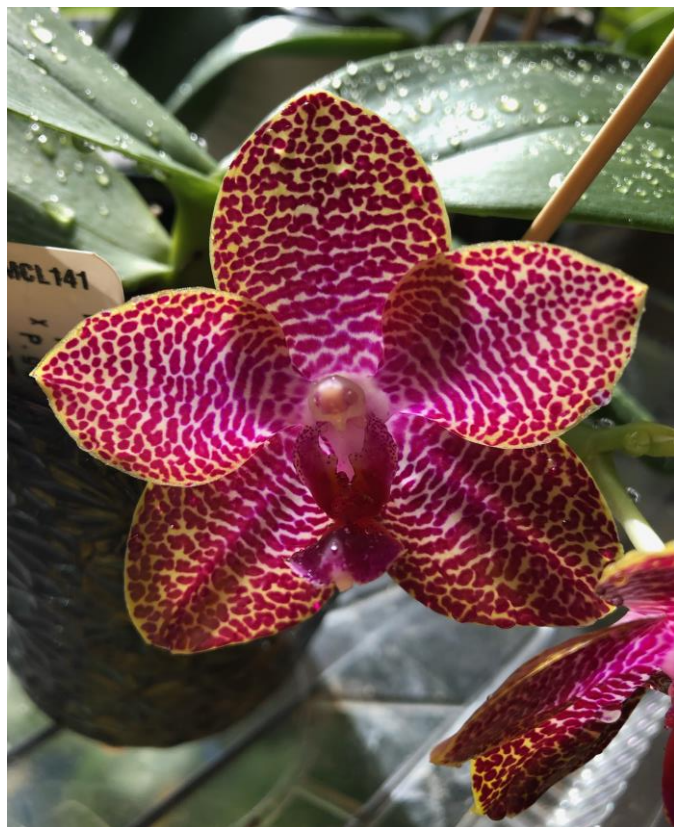
The subject will be on the genetic diversity in populations of *Cyp. reginae*, *Cyp. parviflorum*, and *Cyp. arietinum*. Thru their research they expect to have some progress on the full genetic sequencing of *Cyp. reginae* that will be substantial advancement for the conservation of all territorial slippers since it will be the first reference genome for the 50 or so *Cypripedium* species.

You can read more about the research being done by local high school students on their website at [www.goorchids.org](http://www.goorchids.org)

***“We expect our speakers this month to have a flat of cypripedium seedlings. Those in attendance have the opportunity to be the lucky member who can bring these native orchids home for your garden”***

Please have your plants on the show table by 11 a.m.

Lunch is potluck so please consider bringing a dish to share.





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Eastern Maine Orchid Society

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Ocean State Orchid Society

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Northeast Judging Center at Tower Hill

Botanic Garden, Boylston, MA

[www.Towerhillbg.org](http://www.Towerhillbg.org)

508-869-6111

Orchid Conservation Coalition

[www.orchidconservationcoalition.org](http://www.orchidconservationcoalition.org)

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### Submission of Articles

Deadline for submission of articles is  
10 days before the monthly meeting.  
Send to:

[newsletter@nhorchids.org](mailto:newsletter@nhorchids.org)

If your address changes, you must  
notify the Membership Chairperson so  
you can continue to receive any notices  
and newsletters.

Send all address changes to:

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