



JULY EVENT

Monthly Meeting: 8 p.m. Monday, July 13, 2020
From the comfort of your living room via Zoom!

Jim Cootes on Orchids Species of the Philippines

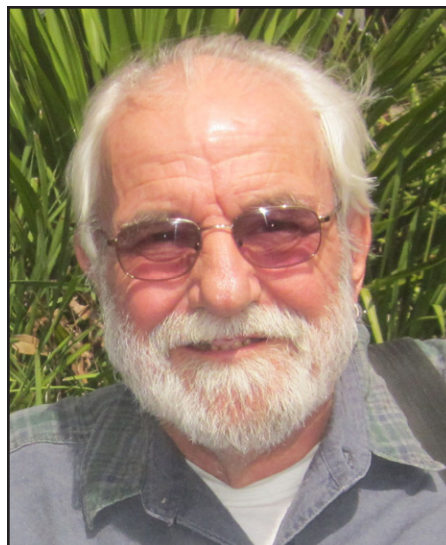
Details of the Zoom meeting will be emailed a few days before the meeting

An Introduction to the Orchid Species of the Philippines

Jim Cootes has studied the orchids of the Philippines since the early 1980s. He has described many new species from the Philippines, Vietnam and Indonesia, both with colleagues and by himself. Jim has written 3 books: *The Orchids of the Philippines* (2001), *Philippine Native Orchid Species* (2011), and *A Guide to the Dendrobium of the Philippines* (2015), and countless papers both scientific and of a more general nature, which have been published world-wide. Jim is now 70 years old but the work with Philippine

orchids continues to keep him busy. He is even privileged enough to have had a number of orchid species named in his honor. Jim lives on the outskirts of Sydney, Australia.

The talk will depict many orchid species native to the Philippines. There will be pictures of plants growing in the wild, and pictures showing the habitats where the orchids grow. Many of the orchids that will be shown may not have been seen previously.



An Unexpected Auction for the AtLOS

Longtime AtLOS member Nancy Newton has generously donated her orchid collection to the society:

David Glass, my husband, developed a love for orchids and their culture. Taking care of his collection gave him a great deal of pleasure all through the last years of his life. I have enjoyed the plants during the years since his death. However, I seem to now have too many competing interests to give them what they deserve.

David wanted me to donate the orchids to the Society, if I ever gave them up, so that is what I have done. David especially enjoyed the Atlanta Orchid Society and all of his friends there. I know his orchids will find good homes with the Society members and I thank you for taking and caring for them.

I hope to see you at future Society meetings.
Nancy

The auction was held on Saturday, 27 June, and the remaining plants and supplies were sold the following day. The auction brought in \$4020, the sale brought in another \$773, for a grand total of \$4793.

Many, many, thanks to Nancy for opening up her home and greenhouse to us, and sharing with us the plants she has lovingly cared for many years.



Danny, Jon and HB at the auction



Danny Lentz auctioning a huge *Myrmecophila humboldtii*, one of the many large specimens in Nancy's collection

Got plants and supplies that need a new home?
Come and swap them for stuff you need, **Sat. 18 July, 9:30-11 a.m.**
Atlantic Station parking deck

In this Issue...

- 3 Events Calendar
- Notes on *Zygos* by David Mellard
- 4 *Habenaria rhodocheila* by N. Rust
- 7 Mark Reinke notes on last month's flower display

ATLANTA ORCHID SOCIETY**Officers****President****[Helen \(HB\) Blythe-Hart](#)** 770-656-4054**Vice-President/Programs****[Danny Lentz](#)****Secretary****[Jody Gomez](#)****Treasurer****[Jon Crate](#)** 770-846-9541

270 17th Street NW, Unit 4501

Atlanta, GA 30363

Immediate Past President**[David Mellard](#)** 404-310-9899**Trustees****[Trac Nguyen](#)****[Maegan Brass](#)****[Atsushi Matsumoto](#)****[Carl Quattlebaum](#)****[Larry Kikkert](#)****[Véronique Perrot](#)****Volunteers****AOS Rep – [Barbara Barnett](#)****Greengrowers – [Danny Lentz](#)****Librarian –****MAOC Rep – [Doug Hartong](#)****Meeting Hospitality –****Membership – [Barbara Barnett](#) &****[Maegan Brass](#)****Education and Outreach – [Lynne Gollob](#)****Silent Auction – [Carson Barnes](#)****Monthly Ribbon Judging – [David Mellard](#)****Newsletter – [Véronique Perrot](#) &****[Mark Reinke](#)****Orchid Digest Rep – [David Mellard](#)****Show Chairs (2020) – [Danny Lentz](#) &****[Jody Gomez](#)****Website/Social Media – [Danny Lentz](#) &****[Jeremie Carroll](#)****The Atlanta Orchid Society Bulletin**

Volume 61: Number 7 – July 2020

Newsletter Editors: **[Véronique Perrot](#)** & **[Mark Reinke](#)**

The [Atlanta Orchid Society](#) is affiliated with the [American Orchid Society](#), the [Orchid Digest Corporation](#), the [Mid-America Orchid Congress](#), and the [Garden Club of Georgia](#).

Minutes of the June Meeting of the AtIOS

The June 8th, 2020 meeting of the Atlanta Orchid Society was preceded by a plant auction that was hosted by Danny Lentz and began at 7:30. The meeting was called to order by HB, President, at 8 p.m. Due to the Covid19 situation, the meeting was held via Zoom. Jon Crate announced he had received the bark the society ordered. David Mellard discussed

holding the July meeting via zoom. Danny Lentz introduced Tim Culbertson, who gave a presentation entitled *New Directions in Zygopetalums*. After the presentation, Tim fielded questions from members. Danny showed photos that members had sent in of their in-bloom plants. The meeting was then adjourned.

From my kitchen window:

Some people wake up refreshed and delight in the golden dawn of a new day, others are rewarded by a salmon purple sunset illuminating a windowsill orchid eden. I am the latter—I revel in seeing my glowing orchids lit up on my ledge before the changing sky.

Saturday I added a few more charges to my collection. Long time member Nancy Newton generously donated a collection of over 200 quality orchids and supplies to our Society, that were cultivated by her late husband, David Glass, and herself. It was his express wishes that the plants go to our Society in hopes that our members would ever care for the plants he once so loved. His memory lives on in our greenhouses, grow rooms and window ledges. Deepest gratitude to Nancy for her magnanimity to our Society during this time of uncertainty. The auction was a big success. A big thank you as ever to VP Danny Lentz for running the auction by Zoom and to Mark Reinke for sharing his invaluable orchid expertise. Appreciation as well to David Mellard who masterfully orchestrated the event and Jon Crate and Véronique Perrot for facilitating the nuts and bolts of the sale and providing light hearted entertainment.

Now that I'm bonding with my new babies, I'm taking the time to inspect, clean and repot them into the NZ bark recommended by Fred Clarke and Sam Tsui. Using the same growing medium, and grouping by water needs, allows for better culture. As much as I'm a sucker for lost causes, there comes a time to cull the snitches—the orchids that fail to thrive or never bloom, re-homing those that don't like the conditions I offer. **We're planning a plant swap in the next few weeks to share orchids and extra supplies that others might need. Watch for the announcement.**

My kitchen window orchid show brightens my mood when so much unrest is going on around. Reminds me to have gratitude that I have a community of extraordinary people who love these amazing flowers aaaalmost as much as I do. Ok I know—no one loves orchids more than David Mellard!!

Orchids respond to a little kindness, unconditionally rewarding with beautiful blooms, new growths and green tipped roots... Observe them, learn about them, know that even the smallest of things responds to a little kindness... Orchids are color-blind after all. Shouldn't we be too?

EVENTS CALENDAR

July

11 – American Orchid Society monthly judging: CANCELLED

13 – Atlanta Orchid Society Monthly Meeting, via Zoom: Jim Cootes on Orchids from the Philippines

18 – Plant and Supplies Swap, 9:30-11, Atlantic Station parking deck. Details to come, and come wearing a mask!

August

8 – American Orchid Society monthly judging TBD

10 – Atlanta Orchid Society Monthly Meeting, via Zoom: Mark Reinke on Cymbidiums.

September

12 – American Orchid Society monthly judging.

14 – Atlanta Orchid Society Monthly Meeting, in person and on Zoom: Dave Sorokowsky of Paph Paradise, on Maudiae Paphiopedilums

October

10 – American Orchid Society monthly judging.

12 – Atlanta Orchid Society Monthly Meeting, via Zoom: Peter T. Lin on Compact Vandaceous Species and their Hybrids

November

9 – Atlanta Orchid Society Monthly Meeting: Tim Culbertson and Breeding with the Pescatorea Alliance and the Search for Blue.

14 – American Orchid Society monthly judging.

Culture Notes on Zygopetalums from the AtIOS

June 2020 Speaker Tim Culbertson

by David Mellard

Zygopetalums are the members of the subtribe Zygopetalinae (~40 genera, ~400 species), all from South America. Two main groups of species:

* plants with pseudobulbs, originally from mid-elevation, easy to grow (~like *Cymbidium*), readily hybridize between genera (e.g., *Zygopetalum*, *Zygosepalum*, *Otostylis*, *Pabstia*, *Neogardneria*)

* plants without pseudobulb, originally from cloud forest, require cooler temperatures and good water quality, challenging to grow.

► When growing zygopetalums, it's important to know the genus.

Some warm-growing species should be easy to grow in Atlanta and will tolerate being outdoors during Atlanta's warmer months: *Promenaea*, *Galleotia*, and *Batemannia* (Can't remember where these fit in the two groups described above. V.)

Growing conditions

Use a mix size that's proportional to the pot size. Standard mixes can be made using Orchiatra or NZ pine bark with perlite.

Zygos like medium light similar to plants in the Oncidium alliance.

Water during active growth, drier in winter

Leaf spotting often means the plant does not like something in its growing condition (e.g., water quality, frequency).

Breeding trends and buying plants

Species in the Zygopetalum alliance are available from Andy's Orchids in California.

Recent trends in breeding have focused on producing blues, miniaturizing plant size, and creating "pot-plant" styles. Hawaiian nurseries that offer zygos include:

Quintal Farms — quintalfarms.com

Hilo Orchid Farm — hiloorchidfarm.com

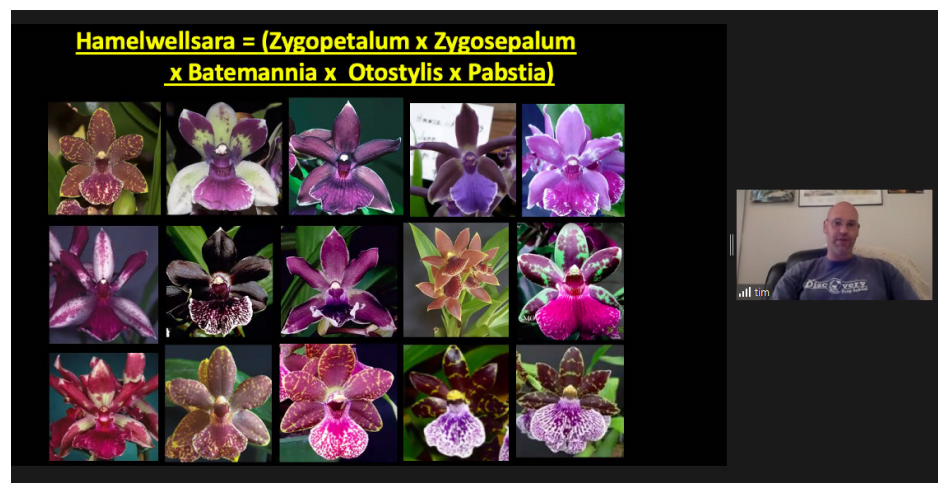
Kalapana Tropicals — kalapanatropicals.com

Australians are leading some breeding trends; focus is on mixing "tropical" with standard for increase cold tolerance (difficult to import because of the paperwork involved). Source: Stephen Monkhouse Orchids — [facebook.com/Stephen.monkhouse](https://www.facebook.com/Stephen.monkhouse).

In the continental US, focus is on breeding large outdoor types dominated by *Zygopetalum*. This type of breeding lacks diversity in color. Some smaller indoor types are being produced. The smaller breeding can have remarkably brilliant colors. Sources include:

Sunset Valley Orchids — sunsetvalleyorchids.com

Casa De Las Orquideas — orquideas.com



The *Habenaria rhodocheila* Complex

by Nicholas Rust

Plant taxonomy can invoke a wide range of emotions that span from confusion to frustration to satisfaction and everything in between. Some plants are easily identified, while others may differ by the most subtle things like flowering time, flower size, inflorescence structure, or even the fungi that associate with the roots. Due to the intricacy, some related species have been lumped into what is appropriately called a “complex.”

A complex consists of similar species that contain enough minor differences to blur the line between what is considered a species, subspecies, or even a variety or form. One example of a complex in orchids is the *Habenaria rhodocheila* complex. This complex consists of four

common species (*Hab. rhodocheila*, *Hab. xanthocheila*, *Hab. erichmichelii*, and *Hab. roebbelenii*), two less common species (*Hab. militaris* and *Hab. robinsonii*), and two species (*Hab. carnea* and *Hab. janellehayneiana*) that were identified as their own since the establishment of the complex. At a glance, these species may appear identical due to their similar floral shape that seems to differ only by color, but a closer look at the morphology of the entire plant provides several reasons to consider them all as unique species.

This article focuses on the four most common members of the complex. *Hab. militaris* and *Hab. robinsonii* are not included due to their near inexistence in culture and inadequacy of herbarium

specimens which makes it difficult to precisely define the individual characteristics of each flower. *Hab. carnea* and *Hab. janellehayneiana* are also not included since they were speciated.

Color and Flower Morphology

The most apparent difference between the four common species of the rhodocheila complex is their color, but this alone cannot stand to differentiate separate species. However, changes in floral color can define different varieties or forms of a single species. For example, *Hab. carnea* has dark, mottled foliage and light pink flowers while *Hab. carnea fma. nivosa* has bright green, mottled foliage with snow-white flowers. In the rhodocheila complex, each plant not only displays different colored flowers but also have unique morphological distinctions which further suggest that they may be distinct species.

One can see the differences of the column (consisting of the stigmatic processes and the anther which is loosely linked together with the rostellum) in Figure 2, which reveals the first significant discrepancy amongst these species. For simplicity's sake, only the stigmatic processes and rostellum of each species are discussed here.

Many *Habenaria* organize their reproductive structures in very similar ways, but with slight differences which likely exist to increase the likelihood that their pollinator successfully pollinates the flower. *Hab. rhodocheila* has stigmatic processes that align nearly parallel with its anthers and stick straight forward or angled slightly outward, both with a mild curve near the tip. *Hab. roebbelenii*'s short, marginally recurved stigmatic processes are perpendicular to the anther, which is further enhanced by the moderate upward angle of the anther. *Hab. erichmichelii* has stigmatic processes that not only curve down about 45° but also stick outwards away from the flower. Lastly, *Hab. xanthocheila* has long stigmatic processes most similar to *Hab. rhodocheila* (straight forward), but the anthers are angled upwards, once again creating a nearly 45° angle between the



Figure 1: This picture shows the plants and flowers of each member of the *Habenaria rhodocheila* complex that will be discussed in this article. In the first square with *Hab. rhodocheila*, *Hab. xanthocheila* may stand as a size comparison between the two species. The coloration of the leaves on *Hab. roebbelenii* is due to mild sunscalding.



Figure 2: These close-up images show the main differences between each of the four common members of the rhodocheila complex. Vertical images show the same species while left-right shows different species. In the top images, the green arrows point to the stigmatic processes of each flower while the red arrows point to the anthers. In the bottom images, the black arrows point to the tip of the rostellum

stigmatic processes.

These small changes exist not only among the reproductive structures of each species but also among the hood and rostellum (bottom images of Figure 2). *Hab. rhodocheila* generally contains a smaller rostellum that does not fully cover the opening of the hood. Its rostellum also tends to have some variety, either forming a point or a rounded end. *Hab. roebbelenii* has a smaller hood that allows the rostellum to cover nearly the entire opening. *Hab. erichmichelii* has a larger hood, but a very small rostellum. *Hab. xanthocheila* also has a small hood and a larger rostellum which closes off the majority of the hood.

Several more floral traits differ between the species, but for brevity sake, they are only briefly mentioned. Overall, there are four main planes of interest regarding the organization of the flower: the lip, the stigmatic processes, the anther, and the rostellum. The angles created by each of these four planes (using each other and the pedicel as reference) are unique to each species. Likewise, the shape and size of the lips and hoods for each species also differ. In order to further confirm these floral relationships, many genetically unrelated plants should be analyzed to show the limited variability of the traits.



Figure 3: This picture shows the foliage of each species. *Hab. roebbelenii* is not included simply due to the absence of a mature plant in the author's collection.

The characteristics of the flowers become even more interesting when their hybrids are analyzed, which show clear signs of dominance of the individual traits of one species over another. However, a thorough analysis of these hybrids could be an entire article on its own.

Plant Size and Foliage

Often, the beautiful allure of a flower's vibrant color or magnificent form may cause one to overlook the foliage completely, but sometimes a plant can have leaves that are as equally unique and charming as the flowers. While none of these four *Habenaria* have necessarily exceptional foliage, they do have various features that make their leaves unique.

Tuber Structure

If flowers draw the majority of one's attention, and foliage draws the remainder, the underground energy storage devices that some plants use certainly wins the prize for the "most ignored aspect of a plant." Although mostly since people are not interested in a dirt-covered mass of plant tissue, the ability to meticulously observe a plant's subterranean tissue generally requires a personal specimen to work with and grow.

Habenaria store their excess energy in tubers, or specialized stem-tissue that resides underground. During the growing season, they use the sunlight to create excess glucose for energy not only to flower but to store as starch and produce more, larger tubers for the next growing season. This marks the exciting



Figure 4: Shows the structures of each species' tubers. A measuring tape (in cm) is provided for reference. The large tubers of *Hab. xanthocheila* exemplify the results of 1-3 plants growing together into a tangle.

time when one can dig the tubers up to see just how successfully the plant grew during its vegetative season. If someone is growing several species or hybrids of *Habenaria*, they may notice the immense variety in the shape and size of the tubers.

Despite only ever existing below the ground and out of sight, the tubers of each species in this article all have a unique structure. *Hab. rhodocheila* has medium-sized (~5-7 cm), straight, cylindrical tubers. *Hab. roebbelenii* has slightly smaller tubers that are often described as "duck foot tubers." They are called this due to their shape, which often starts as straight and cylindrical near the basal growth point of the plant, then branches outwards near the bottom of the tuber. *Hab. erichmichelii* has the largest tubers of the common complex (6-8 cm). They typically are straight and resemble a slightly flattened cylinder. *Hab. xanthocheila* has the most peculiar structure which takes the duck foot shape of *Hab. roebbelenii* and makes it even more dramatic. The tubers immediately branch out, forming a flat, dendrite-esque shape. As a result, the tubers often grow into a tangled, inseparable mass, which is seen in Figure 4.

Other Characteristics

Several more discrete differences occur among each of the four *Habenaria*. These traits were all combined into a single section due to their uniqueness to one of the four species, or due to the fea-

ture's simplicity.

Firstly, the plants display different fragrances. Specifically, *Hab. erichmichellii* has a strong, sweet fragrance during the day, yet the remaining three species emit no noticeable aroma at all. They each also have varying bloom times and dormancy periods. Again, *Hab. erichmichellii* is always the first to bloom among the species, flowering in late spring or early summer. The remainder of the plants tend to bloom in late summer or early-mid fall. While the dormancy periods aren't of significant notice, *Hab. xanthocheila* tends to emerge from dormancy later than the rest, but often flowers relatively quickly, falling into step with the other two fall-blooming members.

The geographical distribution of the complex's members varies, but there is currently very little concrete data to authenticate it. The complex exists in situ spread throughout Southeast Asia. *Hab. rhodocheila* grows from Thailand to southern China. Like *Hab. rhodocheila*, *Hab. roebbelenii* is distributed from Thailand to Laos. *Hab. erichmichellii* is the most widespread of the species, growing anywhere from northeast India to Vietnam. *Hab. xanthocheila* extends throughout Southeast Asia but mainly occurs in Malaysia.

Habenaria rhodocheila Varieties

The complexity of these species becomes even more convoluted when evaluating the natural color varieties of *Habenaria rhodocheila*. However, the varietal relationships are simplified once thoroughly analyzed for the traits covered in this article. The flowers of *Hab. rhodocheila* may be orange, scarlet, yellow-orange, or even yellow, yet the flower morphology, plant, tuber structure, and geographical location all remain the same across each variety, indicating that they are all merely color varieties of *Hab. rhodocheila*. Unfortunately, differently colored *Habenaria rhodocheila* are extremely difficult to find and often appear in cultivation as the result of mislabeling a hybrid.

While taxonomy may not seem like an essential part of growing plants to some people, it is crucial when it comes to cultivation and hybridization. The main problem with having a poorly understood group such as the rhodocheila complex is the genetic pollution of a species that results from confusion or ignorance of taxonomy. For example, *Hab. rhodocheila* (arguably the most frequently cultivated member of the complex) is not quite as common as people think. The vast majority of "Habenaria rhodocheila" sold are hybrids. This may not immediately seem significant, but it leads to an expanding

mass confusion of "what really is *Habenaria rhodocheila*" and an inability to get *Hab. rhodocheila* that is true to its species. This problem is already occurring as many people grow, sell, and hybridize other plants and incorrectly label them as "*Hab. rhodocheila*."

This problem grows more momentous when considering hybrids. Countless unnamed hybrids have been created between *Hab. rhodocheila*, other species, and even pre-existing grex that are all sold as "*Hab. rhodocheila*." Once again, this facilitates the spread of misunderstanding that surrounds these species. Likewise, several hybrids have been created and even officially named under the surveillance of the Royal Horticultural Society that may not be true to their phylogeny, even further spreading the plague of uncertainty. Unfortunately, this problem is only going to increase unless proper taxonomy is meticulously defined for this complex and made public by a notable organization. Until this happens, the taxonomic nightmare regarding the *Habenaria rhodocheila* complex will undoubtedly continue.

I would like to thank Marni Turkel who kindly provided up-close pictures of *Habenaria roebbelenii* for use in this article.

Here is what Danny wrote in the April 2020 newsletter:

In 2016 we distributed seedlings of *Cattleya Tropical Song* x sib (*C. Tropical Glow* x *C. Mari's Song*) as a challenge plant. The challenge was to get more than four flowers on the plant. Roy Harrow is the first person to actually submit a photo of one of the plants in flower. (I had a bud starting on one of my plants but it blasted when I sprayed the plant for mealy bugs.) Since this has been going a bit more slowly than we thought, I'm going to amend the rules. If no one has met the challenge by our June 2021 meeting, then Roy will win as the first person to actually show us a flower on one of the darn things.

-danny

Danny is inching forward toward the four-flower goal post with two flowers on one of his challenge plants



Atlanta Orchid Society Monthly Flowers Display June 2020

Notes by Mark Reinke; Photos by various members of the AtIOS

Once again there was no ribbon judging this month, but the members submitted some really fantastic photos of their plants in bloom. I will touch on a number of them, trying to make sure each person that took the time to send in the photos gets a mention, while highlighting some of the more interesting or outstanding plants.

I'll use our usual entry categories to group the plants together for discussion.



C. purpurata (Mark Reinke's)

Cattleya Alliance

Once again, we had some nice species represented this month. Carson Barnes, Roy Harraow and Mark Reinke all showed us various color forms of *Cattleya purpurata*, a robust and well-known Brazilian species, that blooms in May and June in the northern hemisphere. In the wild it grows in a narrow strip of land near the coast from around São Paulo all the way down to near Porto Alegre in the southernmost state of Brazil, Rio Grande do Sul. This southern end of the range is 27 degrees south latitude or about the equivalent of Cape Canaveral, FL, in the northern hemisphere. This species is therefore very temperature tolerant, and prefers to *not* have a distinct dry winter rest. Mark's plant is at least 20 years old, and with 60 open



C. schofeldiana



C. loddigesii 'Blue Sky' AM/AOS

blooms shows you why collectors in Brazil fill their yards with this beautiful orchid. The downside is that, as with many summer blooming large *Cattleya* species, the flowers tend to last only about two weeks. Carson submitted a photo of his *Cattleya schofeldiana*, a very infrequently seen bifoliate species from the state of Espirito Santo, Brazil, which is along the Atlantic coast just north of Rio de Janeiro. This species has few but rather large flowers on tall slender plants. The petals are olive green with few to many purple spots and the narrow isthmus lip is white streaked with purple. In the wild, it often grows in close proximity to both *Cattleya schilleriana* and *Cattleya velutina* on trees in cliffs above rivers, with both *C. harrisoniana* and *C. warneri* growing not far away, but down below closer to the edges of the rivers, making this part of Brazil a hotbed for *Cattleya* species. Carson also showed us his beautiful *C. loddigesii* 'Blue Sky' AM/AOS, which may, based on the flower form and bloom season, actually be *C. harrisoniana* as the two were once lumped together as a single species. David Mellard showed us his *Brassavola*



B. cucullata

cucullata in flower. This unique species from Mexico and Central America has large flowers with long drooping segments that can be produced sequentially from the same growths over the summer months. It can be found in the wild growing off the underside of horizontal limbs hanging out in the humid air over rivers, and also in deep humid canyons.

Two primary hybrids of note include Barbara Barnett's *Cattleya Landate*, which is *C. aclandiae* x *guttata*, and Jon Crate and Firelli's photo labeled *Brassacattleya Tigrinodosa* (*B. nodosa* x *C. tigrina*). This latter name is a recent registra-



C. Landate



Brassocattleya Tigrinodosa (Jon & Firelli's)



Brassocattleya Tigrinodosa (Roy Harrow's)

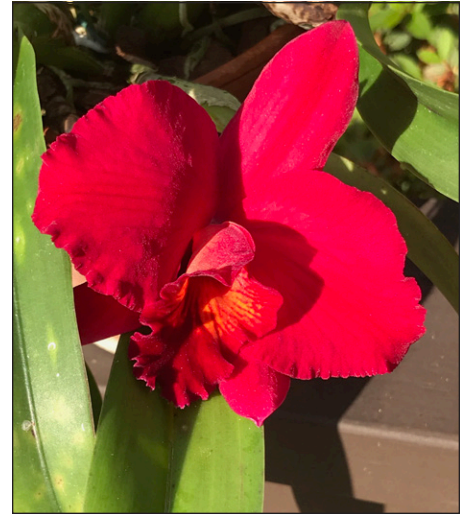
tion made by Jon for a cross that in the past would have gone under a different name. For many decades *C. tigrina* was known as *C. guttata* var. *leopoldii*. The combination of *B. nodosa* and *C. guttata* is registered already as *Bc. Nodata*, making a registration of the variety under a different name impossible. Then it was separated out as *C. leopoldii*, which was then researched to have been described as *C. tigrina* six years earlier (1848) so that name took precedent for the species. Oddly, the RHS register says the cross was registered on December 5th, 2020. This may explain why it isn't in my most recent update of Orchidwiz. Roy Harrow submitted a photo of a different plant of the same cross (labeled as *C. leopoldii* x *B. nodosa*). I'm pretty sure this came from a batch we did at Marble Branch Farms using what was known at the time as *C. leopoldii* var. *alba*. In this iteration, the petals do not show any spotting, but some of them had superbly vivid lips. Sadly we



Myrmecatavola Tiger Lily

let all the good ones go to other owners!

Darrell Demerritt also showed off a nice example of *Myrmecatavola Tiger Lily*. This cross between *Bc. Richard Mueller* and *Myrmecophila tibicinis* has gone through four name changes as various species in its family tree were reassigned since its introduction in 1998. Whatever you call it, the flowers are wonderful and freely produced during the year. We have a large specimen from that original batch that without even checking, I can tell you it is in flower and be right 99% of the time any day of the year. We tried to remake this hybrid and our batch turned



C. Circle of Life 'Red Alert'

out very different and sadly, not as good.

Larry Kikkert showed off his *Cattleya Circle of Life 'Red Alert'* with a full, flat flower that lives up to that clonal name. *C. Circle of Life* is a famous cross done by the late Frank Fordyce that combines the fussy *C. coccinea* with a large flowered lavender cattleya to achieve spectacular results, with many, many awarded plants resulting. It has also become the parent of many more brilliantly colored hybrids such as Dan Williamson's *Cattleya Dorcas Brogdon*, done by Rolf Wilhelm of Woodland Orchids and named after a wonderful lady from the Greensboro area that has a knack for growing some of the most impeccably healthy orchids I have ever seen! Whenever the Triad Orchid Society would put up their display at the South Carolina show, you could easily pick out her plants by the multitudes of flowers and amazing amount of healthy roots they possessed.



Orchid Digest

When you're serious about orchids.

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 mid-range to advanced grower, nothing beats the Orchid Digest. For just \$39/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 extra-special edition devoted to a single genus. For membership application forms contact David Mellard (404-237-1694) or visit www.orchiddigest.com to join online.



C. Dorcas Brogdon



Cym. Valley Freestyle 'Heavenly Scent'

Cymbidium Alliance

Summer is typically *not* the bloom season for the large standard Cymbidium hybrids, but Mark Reinke showed us two plants of one variety that is an exception, called *Cymbidium* Valley Freestyle 'Heavenly Scent.' It may be difficult to tell from the photo, but these are bowl sized flowers on meter tall stems, which are also unusual in that they are fragrant with a smell similar to *Den. unicum* often described as "tangerine scented candles." There is not much in the genealogy of this orchid that explains its summer blooming habit or the fragrance. It does have a bit of the summer blooming *Cym. ensifolium* in it, but only as a great-great grandparent, with the rest of the family tree more than 90% the winter blooming species that typically make up the standard hybrids. I will just have to rack this one up to the sometimes unexpected quirks of genetics. I have about half oadozen of these and they always bloom in summer. Anybody want one?



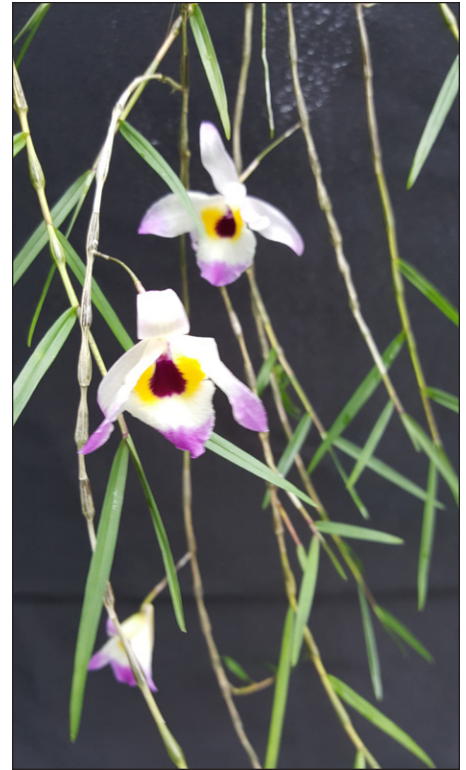
Den. devonianum

Dendrobium Alliance

Once again we had some really outstanding Dendrobiums exhibited. In the Section Dendrobium, with deciduous species, Vihn Nguyen sent in a photo of an absolutely outstanding *Dendrobium devonianum*. Mark Reinke had a photo of a younger plant of this one also, just blooming for the second time, and a photo of *Den. cristallinum*, which was donated by Vihn to the society auction a couple of years ago and is finally coming into its own. These species represent some of the last of this deciduous group to bloom in spring. By then, their growths for the next season are well underway already.



Den. cristallinum



Den. falconeri

Den. devonianum is considered a difficult species to grow, requiring a cool dry rest to flower properly. But in the batch of seedling plugs we got a few years ago, some of the smallest ones were kept under lights and watered regularly all winter and they still flowered at the same time as the plants given the rest and normal daylight. I think the main reason it is not easy to grow is that it resents hot summer weather and also needs copious watering during that season to keep the thin, pendent canes growing rapidly. Vinh also showed off *Den. falconeri*, which is even more rarely seen than the previous two, and grows long, thin, pendent, branching canes that become a tangle of growth with time. In person, these flowers carry much more presence, and many consider them the most beautiful of all Dendrobiums.

There were several representatives of the Pedolinum Section (gradually deciduous) and the star was a very notable example of *Den. Usitae* shown by Darrell Demerritt. If the color in person is close to that of the photo, then it is the most exceptional flower I have ever seen for this natural hybrid between *Den. bullenianum* and *Den. goldschmidtianum*. This batch was from a selected plant called 'Red Coral' that was selfed in Taiwan a

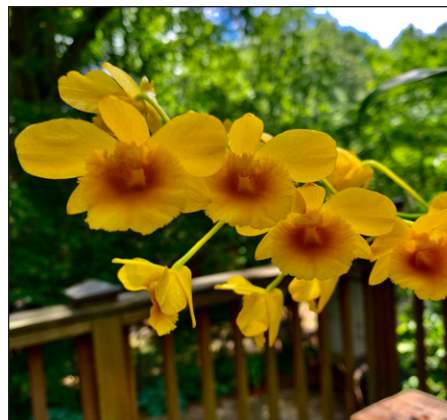
*Den. usitae*

few years back. But even that plant was not so intensely red in bloom. This orchid tends to sprawl and take a while before many flowers start to show up on the older, bare canes, but with patience it will become impressive. Darrell, if that plant ever makes a keiki, just name your price! Bailey Santwire sent in a photo of a red flowered form of *Den. lawesii*, a strongly pendent species from eastern New Guinea and neighboring islands. It comes in a wide range of colors including several bicolor forms, and the tubular, bird pollinated flowers can last several months, being produced at random times on older, leafless canes. Vinh showed off his *Dendrobium cymboglossum*, an unusual species from Borneo that produces dan-

*Den. lawesii* red form*Den. cymboglossum*

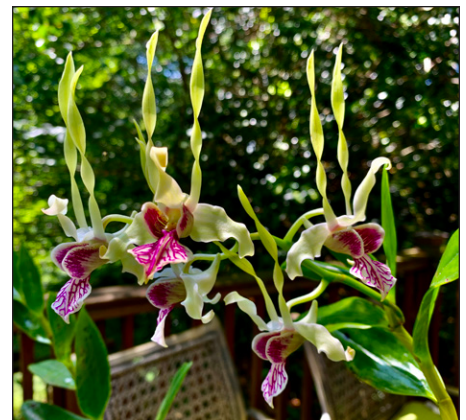
gling clusters of yellow flowers, often with small purple markings, from the upper portions of leafless canes. The plant can sprawl a bit, but an older one with multiple inflorescences is a real attention grabber.

We had just two representatives of the Callista Section this month. The late flowering *Den. chrysotoxum* was shown off by Dan Williamson. It is compact, considered not too difficult to grow and certainly one of the last to flower in this group. Dan's plant is the type form of the species with solid yellow flowers with a deeper throat. I have *variety suavissimum*, which adds a dark spot in the throat for great contrast. Like many other *Dendrobium* species, this one needs to get a good clump of older growth before it puts on a show like Dan's plant. Véronique had a rather late flowering, but showy example of *Den. lindleyi*. This species seems especially stimulated by temperature

*Den. chrysotoxum**Den. lindleyi*

and light to set flowers, so the individual growing conditions can make a big difference in when this occurs. In my greenhouse it is usually March. If your plant stays inside above 60F year round expect lots of growth and no flowers!

Moving on to the *Spatulata* section, Dan Williamson also showed off a stunning *Den. stratiotes*. This species is undoubtedly the queen of the "Antelope" types with flowers that can be four inches or more from tip to tip and last up to four months. Perhaps the only reason it isn't seen more often is that with time the growths can reach 6 feet in height! If you have room you can dream of growing one that is award quality, with one hundred or more of these huge flowers on a plant that could qualify as a shrub. This species likes good light and year round watering along with perfect drainage. My plant seems to tolerate 50's in winter just fine even though that would be lower than the record cold for its habitat in Western New Guinea, the Moluccas and Sulawesi.

*Den. stratiotes*

*Enc. tampensis*

Epidendrum/Encyclia Alliance

This month there were more photos submitted for this group as a large number of species are summer blooming. Bailey Santwire has a nice specimen of *Encyclia tampensis* in bloom. This Florida native species is the only *Encyclia* endemic to the US mainland and grows from the southern tip of the state all the way to Putnam County (Palatka) just below Jacksonville, where the record low is 12F. Nonetheless, your results will be better if you can avoid freezing weather. I have seen this tough species blooming in full sun on dead Live Oaks. The flowers are long lasting and plants will grow into stunning specimens with time. There are 10 AOS awards given to plants with more than 500 open flowers. Doug Hartong submitted a photo of *Encyclia fowliei*, a species only described in 1990 that comes from a small area of the state of Bahia in Brazil, growing in the lower Atlantic rainforest. It is definitely not as easy to cultivate as the previous species,

*Enc. fowliei**Enc. alata*

preferring year round warmth and watering to flourish. The plant itself is medium sized and flushed with purple pigmentation. Once mature, if well grown, there can be several dozen unusual, tessellated flowers on a branched inflorescence. This year, my plant, which has bloomed for several years, made a nice new growth that failed to spike. It could be a result of the extreme amount of cloudiness this past winter, or the amount of chilly days where my greenhouse didn't get sun to warm up. This coming winter I might put it under lights.

Véronique showed us two nice species, the fragrant *Encyclia alata* from Mexico and Central America, and *Encyclia profusa* from Colombia. The former can get large, with tall branching spikes of 75 or more long-lasting flowers with greenish to dark bronze segments and a white skirt lip edged yellow and striped purple.

*Enc. profusa**Epi. porpax*

The latter is more compact, but can cram 100 flowers on a single branched spike. They are typically pale green with a white lip lightly brushed in purple as in this example. This one prefers warm to hot conditions and always seems to decline for me in my greenhouse.

Marion Finley showed us a great close up view of the small, creeping species *Epidendrum porpax*. This is a rather out of season bloom as the peak flowering season for this species from Central and northern South America is in the late fall. Although borne singly, a specimen plant can easily have dozens of these bug-like flowers, but don't expect your plant to be considered for a cultural award unless they number north of 250. A Certificate of Cultural Excellence is going to require at least 1200!

Carson Barnes showed us the very unusual *Epidendrum parkinsonianum*. This species from middle to fairly high elevations in the mountains of Mexico and Central America is strongly pendent growing and can produce a plant up to six feet long over time, though the stems produce nearly all their roots at the base of the plant. The flowers can be six inches across and are long lasting. Usually you can only purchase this species as a

*Epidendrum parkinsonianum*

*Prosthechea cochleata*

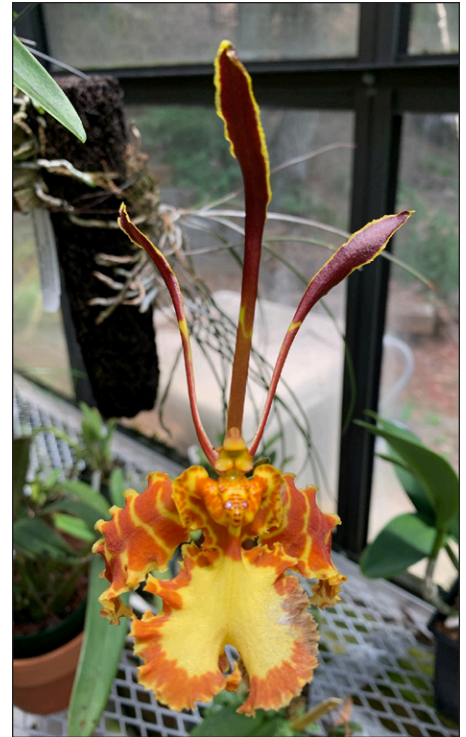
young plant, and it is not particularly fast growing. But if you care for it well enough, you can end up with a specimen with 50 or more blooms at once. Peak flowering will vary from April to July depending on your growing conditions.

Carson also submitted a photo of *Prosthechea cochleata*, the best known species of a group of plants that used to be classed as *Encyclia* and many are still labeled as such. They typically have softer leaves and laterally compressed, softer pseudobulbs than *Encyclia* and do not need as high of light to flower. This species with its spidery nonresupinate flowers that open in succession over a long period has a large natural range all around the fringes of the Caribbean basin, including South Florida. A large plant can be in flower most of the year.

*Trichopilia suavis**Brassia Rex*

Oncidium Alliance

This is the time of year when there are many *Brassia* species and hybrids in bloom. Danny and Diane showed off two great examples. *Brassia Rex* is a primary hybrid registered originally by the prolific amateur breeder W. Goodale Moir in 1964. The sprays of numerous six inch flowers neatly arranged in two rows can be spectacular, and there are numerous awards for this cross. Danny and Diane's other submission in this group, *Bratonia Leopard Glo*, is a creation of Rolf Wilhelm of Woodland Orchids in Charlotte, NC (now retired). The addition of *Miltonia* to the mix adds color that *Brassia* is often lacking, and while it reduces the

*Bratonia Leopard Glo**Psychopsis Kalihi 'Big'*

flower count, the plants can typically bloom twice per year and are very vigorous growers.

Barbara Barnett showed off her *Psychopsis Kalihi 'Big'* which she noted had a Bronze Medal from the Japan Orchid Growers Association. It also has an Award of Merit from the American Orchid Society. This primary hybrid can produce exceptionally large flowers, up to 6 inches from tip to tip, borne one at a time off a wiry, persistent inflorescence. The form on this one is excellent!

Doug Hartong showed off a rather later flowering *Trichopilia suavis*, a species whose flowers are not what you think of when talking about the Oncidium Alliance, but the plant habit is clearly from this group. Peak flowering is typically in March for most growers, but has been recorded in any month except September. This orchid comes from mossy woods in Costa Rica, Panamá and Colombia and is absolutely wonderful and fragrant in flower. The climate data would suggest that this orchid resents heat, yet Carter & Holmes in the hot middle part of South Carolina grows it very well. So far, I have failed for some reason, but looking at this photo I think I need to try again!

*Paph. philippinense*

Slipper Alliance

As usual, there were some outstanding things to see in this category. Danny and Diane showed us an absolutely stunning *Paph. philippinense* with five well presented flowers, while Carson gave us the album form of the same species with three open flowers and one more bud coming. As the name implies this orchid comes from The Philippines, and is described

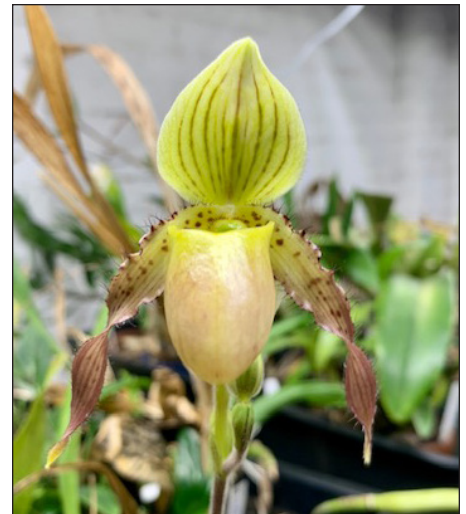
*Paph. philippinense alba*

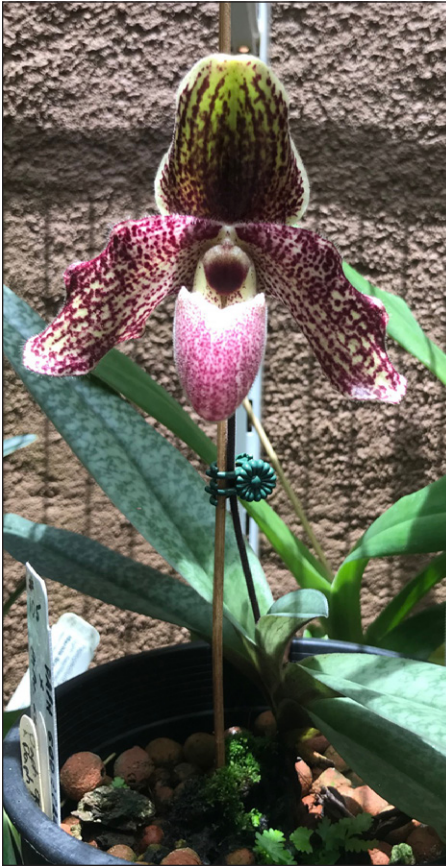
as growing in leafy debris on limestone cliffs, often in rather exposed situations. Therefore, it needs brighter light than is typical for the genus, and more hours of it, to flower well. For a multiflora type, it is somewhat compact, and the tightly twisted petals and good color contrast has made it a favorite parent in breeding programs. Darrell Demeritt's photos of his *Paph. Temptation* with six open flow-

*Paph. Temptation*

ers is an example of this species crossed to *Paph. kolopakingii*. Danny and Diane also showed us a beautiful multiflora with large flowers on a compact plant he entered as *Paph. Lady Isabel x Wilhelminae*, which, it should be noted, was registered in 2013 as *Paph. Memoria Miguel Medina*. When this plant gets a little larger, with more flowers, it would be a good contender to be considered for an award.

There were a couple of interesting examples of breeding using the sequential flowering species. Both HB's *Paph.*

*Paph. Memoria Miguel Medina**Paph. Herbert Bernhart**Paph. Prime Child*



Paph. Roger Sander

Herbert Bernhart and Karl Harden's *Paph. Prime Child* are crosses between sequential and multifloral species, while Larry Kikkert submitted a cross between the single flowered *Paph. godefroyae* and the sequential *Paph. glaucophyllum*. Larry should take note that this is a remake of a cross named *Paph. Roger Sander* and registered way back in 1914 by the famous Sanders Orchids of St. Albans, England.



Paph. exul clone Exhalted One



Phrag. warscewiczianum, or humboldtii?

Carson showed us a single flowered species I had never seen before, *Paph. exul*, which comes from the coast of Thailand near Phuket and areas south of there, and is often growing in full sun in the wild. Despite being infrequently grown as a species, its genes are hiding in multitudes of "Bulldog" Paphs, through a cross made by Sanders in 1900 called *Paph. Earl of Tankerville*, which has more than 5,000 registered crosses descended from it. You can see how the unusually large synsepal and the bold spotting on the dorsal sepal have transferred through the generations to the large and showy complex hybrids making a comeback in recent years.

There were just two *Phragmipedium* entries this month, but both were very nice things. Carson Barnes showed us an absolutely spectacular plant he has labeled *Phragmipedium warscewiczianum*, formerly *Phrag. wallisii*. However, Orchidwiz tells me that *Phrag. warscewiczianum* (try to type that one quick!) is equivalent to *Phrag. humboldtii* and the description of the flowers exactly fits Carson's photo. They list *Phrag. wallisii* as a separate species. Still the photos of



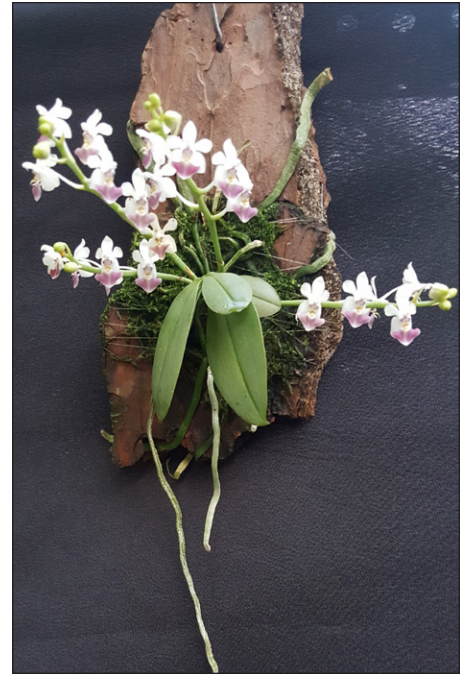
Phrag. Don Wimber

the flowers are very hard to tell apart, so I leave it to Carson to explain how to sort out all this confusion. It seems that he is growing his plant in a metal strainer, so I'd love to hear more about that method of cultivation as well!

Danny and Diane showed us a very lovely and sizeable *Phrag. Don Wimber*, which seems to possibly have the flavum form of *Phrag. besseae* in it given the more delicate color with a distinct yellow undertone.

amazonsmile

You can help out the Atlanta Orchid Society simply by shopping at Amazon through their Amazon Smile program. To do this simply go to smile.amazon.com every time you want to shop at Amazon. When you go to checkout for the first time, you will be asked to designate your charity. If you type Atlanta Orchid Society in the search bar, we are the only result that comes up. Select that one. You can change the charity at any time, by following the directions on the About page. All of the details of the Amazon Smile program can be found on the Amazon site at: smile.amazon.com/gp/chpf/about/

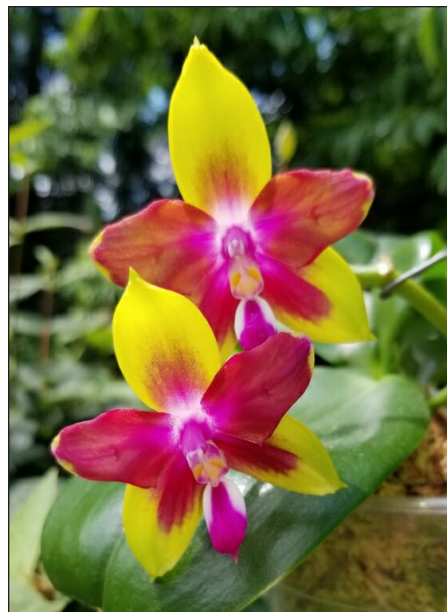
*Phal. violacea**Phal. tertapsis**Phal. parishii**Phal. Vicki's Little Nonsense**Phal. tetraspis x Crimson Cherub*

Phalaenopsis Alliance

As we move into summer, we arrive at the bloom season for some of the smaller flowered *Phalaenopsis* species and hybrids made from them. Terry Glover showed us a wonderful collection out of this group, almost too many to fully describe. He submitted a photo of a *Phal. violacea* that had an interesting tone on tone tiger pattern on the segments, along with a host of hybrids that descend from this species. Terry needs to do some tag updates on a couple of these that are now registered hybrids. The beautiful, almost iridescent flower of *Phal. Vicki's Little Nonsense* (Jo Vernan x *violacea*—registered in 2015) and the cute chartreuse and purple blooms of *Phal. Zheng Min Phoenix* (*javanica* x Buena Jewel) x LD's Bear Queen) also registered in 2015. Terry also showed off his plant of the quirky

*Phal. Zheng Min Phoenix*

Phal. tetraspis whose persistent inflorescences produce white flowers that can be randomly colored with reddish markings or not, as speckles, splotches or over entire segments, making each opening bud a surprise. While this odd color patterning did not carry through in Terry's plant of *Phal. tetraspis x Crimson Cherub*, it is an example of a superbly grown plant that has been cared for long enough to produce nearly a dozen of those persistent inflorescences and showing the impact possible with these hybrids that have few flowers per spike.

*Phal. KS Happy Eagle*

Doug Hartong showed us a really eye popping color pattern in *Phal. KS Happy Eagle*, which mixes *Phal. violacea* with other species over and over again in a six generation long breeding cycle to produce this glowing color combination.

And finally, Vinh submitted a photo of a beautifully flowered *Phal. parishii* with at least 20 open blooms and additional buds. This is a small species from humid locations in NE India, Burma and Thailand, where it frequently grows on mossy branches hanging over streams. It prefers dappled light, needs copious watering in summer, then less water, but with rather frequent misting to simulate the native environment, so is not for anyone who plans to water only once per week!



Vanda tricolor var. suavis 'Bali Best Girl'
AM/AOS

Vandaceous Alliance

For me, the star of the vandaceous offerings again this month was Carson Barnes' *Vanda tricolor var. suavis* 'Bali Best Girl,' AM/AOS which shows off a spectacular pattern on flowers larger than any other awarded example I could find. Java and Bali are the two islands in Indonesia where this species occurs naturally, often in trees along the borders of tea plantations. May is the peak bloom month for it, but there are records of some flowerings in every month of the year. It will tolerate both warm and intermediate conditions but needs very bright light to flower well.

Barbara Barnett showed us a pretty *Vanda testacea*, with typical coloring for this near miniature species, despite the species name meaning "The Brick Red Vanda." This widespread species is one that is adaptable to cooler temperatures in winter, sometimes even enduring light freezes in its natural range. Darrell Demerritt sent in a photo of his *Vandachostylis* Viboon Velvet 'Perfection,' with



Vanda testacea



Vandachostylis Viboon Velvet Perfection

white flowers tipped in violet blue. I have an old plant of this orchid and it blooms off and on all year long, starting as a small plant, but in time it will grow large. Mine is 6 feet tall with roots just as long!

You don't frequently see hybrids in the genus *Aerangis*, but Vinh Nguyen showed off a beautifully flowered example of *Aerangis* Elro, a primary hybrid between two species from Madagascar. The fragrant, white flowers with long nectar spurs neatly arranged in two ranks on a pendent inflorescence are pristinely beautiful. This cross has a number of AOS awards and one time AtLOS member Ben Oliveros, who now lives in Mt. View, Hawaii, received a 92 point CCE in June,



Aerangis Elro

2017 on a plant with six spikes holding a total of 187 open flowers and 2 buds. On some plants, the nectar spur can be 6 inches long and have a faint salmon pink color.



American Orchid Society
Education. Conservation. Research.

JOIN THE AMERICAN ORCHID SOCIETY

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 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 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*.

**Membership now includes access to OrchidPro,
the database that replaces OrchidsPlus**

JOIN TODAY

Single Membership, 1 year - \$79, 2 years - \$153

Student membership, 1 year - \$54, 2 years - \$103

JOIN OR RENEW ONLINE AT www.aos.org



Bulb. annamense

Miscellaneous

Among the entries in this section were two interesting *Bulbophyllum*. Mark Reinke had a very nicely flowered *Bulb. annamense*, which he got years ago as a small division from former member Greg Smith. It has taken it a decade or more to finally put on this kind of a show, with more than a dozen inflorescences coming in quick succession over a month's time. It is very impressive in flower, but they last only about a week. It apparently comes from Vietnam, but very little is written about it. Nicholas Rust showed off *Bulbophyllum lobbii* (syn. *polystictum*). There is a complex of many once separate species, now lumped together as one, with variably colored flowers that are large, upright and come up from the rhizome between the pseudobulbs. They don't have a strong odor and can cover an older, well grown plant in the bloom season that favors the summer months.

Both Nicholas and Doug Hartong showed us plants of a cute terrestrial spe-



Bulbo. lobbii



Ponerorchis graminifolia

cies from Japan, *Ponerorchis graminifolia*. Nicholas photographed a single flower at close range while Doug is showing us two different plants in flower in the same pot. I don't know if either of them kept their plants outside in the winter, but in its natural range plants grow in places that can get well below freezing in winter. It has been suggested as a rock garden plant in places like Great Britain, but probably would need to be protected from too much rainfall during winter in our climate. The distribution of color and pattern seems to be unique to each individual plant.

Roy Harrow showed off his plant of *Dienea orphrydis* a terrestrial species from Asia that has gone by more than 30 different names over the years. I have a plant from Carter & Holmes labeled *Malaxis latifolia*, which may be the most common name seen in commerce, but the accepted name is as Roy has it. The tiny, but numerous flowers, if seen under good magnification, are clearly orchids even if the plant doesn't seem like one



Dienea orphrydis

from a casual distance. If find it nearly impossible to kill this plant. Mine is basically ignored, but blooms every year after a leafless winter rest.

Finally, the star of this section for me was David Mellard's *Acanthophippium mantinianum*, a terrestrial species from the Philippines with an absolutely outrageous, in your face, look when in flower, plus name I had to "cut and paste" from Orchidwiz to get the spelling right. To me, it looks more like some improbable parody of an orchid created in plastic for "permanent" arrangements than something real! While uncommon in collections and sparse in orchid literature, this is an orchid that I immediately want when I see it. Imagine stumbling across a colony of these in bloom on the forest floor for the first time!



Acanthophippium mantinianum,