



Dear TOS Members,

Jul 2024 – Welcomed rain in the form of daily thunderstorms have been the hallmark of the latter part of the month, accompanied by a welcomed drop in temperature too. If you have orchids outside, they have been in orchid heaven! But, the first half of July was characterized by oppressive heat and humidity with lots of invisible cobwebs across woodland trails for me to walk into - I find nothing more irritating to my skin and in my hair than the sticky, gossamer strands of cobwebs during humid weather. And, to add to the torture, an occasional small spider ends up down my collar, crawling around trying to find its way out. But the spidery hazards of the woodland trails are worth it as you will see later.

Business-related Matters from Jul 15 TOS Board Meeting

1. Balance of the checking account as of Jul 14 was \$8,809.
2. The TOS 2024 budget remains on track.
3. The Board gave its approval for releasing the new version of the TOS website.
4. The online sale of Paul Feaver's notable orchid collection created lively interest and the plants sold very quickly. Total proceeds were \$3,097 (includes \$92 from one that was raffled). This amount will be divided equally between PF and TOS. A few plants remain and will be sold in the Fall.

5. Monthly Membership Report (Carole Saravitz, TOS Membership Chairperson)

Total Paid Members: 152+24 Partners

Last Month's Total Paid Members: 150 +23 Partners

New Members since 2023 Show: 88+14 Partners

3 in Apr

1 in May

6 in Jun (plus 1 partner)

2 in Jul (plus 1 partner)

In Reflection: Jul 8, TOS Monthly Meeting at JCRA



Several tubs of ice cream were polished off by members and guests as they milled around looking for interesting orchids to buy from TOS sellers. Besides orchids, there were a few other plants for sale, notably some beautiful specimens from a collection of different species of the insectivorous plant, *Pinguicula* (butterwort) being sold by TOS members, Hunter Buchanan (l) and Levon Lau (r) in above photo. They were also selling some nice miniature orchids. The pinguiculas were superbly potted in what appeared to be dessert-style glasses, but rather than eat them, I suggest placing a few amongst an orchid collection to help control small, pesky flying insects, or next to a fruit bowl in the house to control fruit flies! Seek out Hunter or Levon at a future meeting to learn more. You might even still be able to buy a plant.

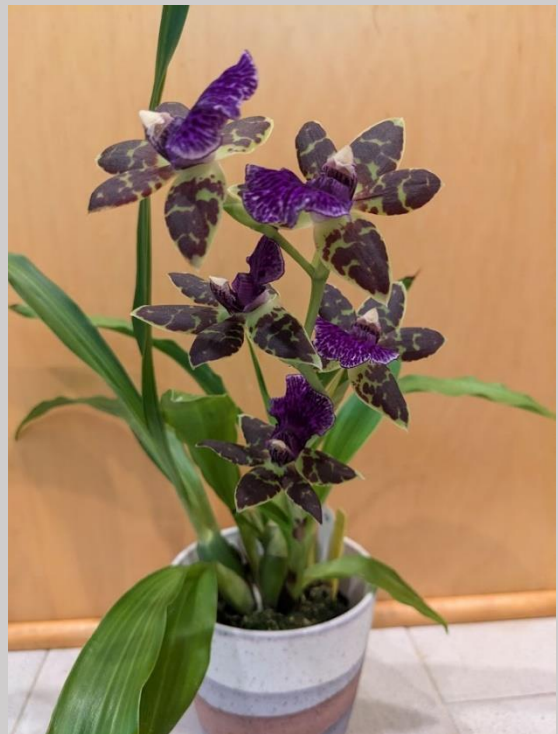
There was also a monstrous specimen of the tropical pitcher plant, *Nepenthes* sp, in a hanging basket. It truly was a fabulous specimen with 12-inch-long pitchers, a plant fit for the greenhouse of any botanical garden – the fearless buyer acquired a conversation piece for sure!

Thank you to members who brought in flowering orchids for all to see, and for us to vote on for 1st, 2nd and 3rd place TOS ribbons. The awarded plants shown below were photographed without their ribbons:



The very beautiful species, *Brassavola nodosa* 4N x sib 'Remar', in the left photo and owned by our Treasurer, Sidney Cox, took the 1st place blue TOS ribbon. To me, its sharply-defined foliage and flowers were exceptional, the white labellum against the pale lime-colored petals and sepals resembling symbols of purity.

For the uninformed, the 4N after the species' name indicates that this parent of the cross was tetraploid, rather than the normal diploid (presumably its sib 'Remar' must have been tetraploid too.) Tetraploid plants are often more robust than their diploid counterparts.



Two 2nd place red TOS ribbons were awarded as there was a tie in the voting. One went to a gorgeous pink form of *Dendrobium Ecuagenera Rainbow* (1 photo above) owned by Carole Saravitz. This dendrobium hybrid is an offspring of a cross - *Den. Gaëtan Minet* x *Den. cuthbertsonii* - made by the nursery Ecuagenera.

The other 2nd place TOS ribbon was awarded to *Zygopetalum* Advance Australia (r photo above) owned by our VP, Sunny Allen. A delightful, richly colored hybrid with a wonderful morning fragrance says Sunny.



The 3rd place yellow TOS ribbon went to a miniature specimen orchid, *Trisetella pantex*, owned by Carole Saravitz. CS is building a truly wonderful collection of miniatures. Their size makes them somewhat challenging orchids to photograph, though this photo (by CS) has a nice background misty quality about it as if it were taken in an Ecuadorean cloud forest, which happens to be the native home of this orchid! The diversity of form and color amongst miniature orchids is truly captivating. Plus, if one is short on space, a small-sized growth cabinet with lights and a misting system houses a lot of these little beauties.

As we were wrappings things up after the meeting and about to head home, a few of us could hear the pitiful cries of a tiny, stray kitten in the flower bed outside of the McSwain building. And, try though we did to catch it, the scared little kitty proved swift of foot and would disappear into the darkness and cover of the shrubs every time we approached it. However, we received great news from JCRA staff the following morning that the kitten had been caught and was being adopted by a TOS member (a mystery member at this point), and it was to be named either Orchid or Orcho, depending on its gender. A tale (or tail 😊) with a perfect end. It should become our mascot.



If you missed the live piano recital, “Clare Liu in Concert with the Orchidaceae”, by 14-yr-old Clare in which each of the preludes she played was paired romantically with an orchid or orchid display, there is an opportunity to view and listen to it on YouTube.

This was a TOS experimental concert, courtesy of Pei-Fen, Phil and the Liu family. Enjoy!



<https://www.youtube.com/watch?v=s7uXvuo2tNc>



Upcoming: Aug 12 at 7.30 p.m., TOS Monthly Meeting at JCRA

Bridget Uzar of Carter & Holmes Orchids in Florida will be speaking about Tropical Slipper Orchids. If you do not have any paphs or phrags in your collection you might enjoy coming to hear about growing them. And, she will be selling plants! Both genera do well in a greenhouse or on a window sill. The paphs and phrags with their heavily modified third petal so exquisitely shaped like a slipper-like pouch in the name of pollination, never fail to fascinate me.

Question: Should I cut off those roots?

This is a very common question relating to roots that have grown outside the confines of the pot. The short answer is NO! But, let us delve a little deeper to answer this question, especially for those members new to growing and/or repotting orchids like phalaenopsis for the first time.



About 70% of all orchids are epiphytes, i.e. they grow not in soil but high up in the tree canopy anchored to a tree trunk or branch by a tangle of roots, many of which dangle in the air. These roots are typically a whitish-gray color and have greenish-purplish growing tips (orchids in active growth display these tips beautifully - left photo). Besides attaching the plant to its host, the primary function of these roots is to absorb and retain moisture from the air, plus any nutrients that become dissolved in rainwater as it trickles down the host tree. The secondary function is to

distribute the water and nutrients throughout the plant. What follows is Phil's very simplified description of an orchid root's anatomy from the perspective of water uptake, orchid growth, and repotting.

1. The very center of the root, called the stele, is composed of vascular bundles that are effectively conduits for conducting water and dissolved nutrients to the growing parts of the orchid. The stele is readily apparent when repotting an orchid because it remains as a brown, thin, wiry strand when an old root has long rotted and disappeared. You can trim off these wiry strands when repotting.
2. Surrounding the stele is a region called the cortex. This zone is composed of living cells and one of its vital functions involves the lateral movement of water and nutrients. The cells of the cortex may possess chloroplasts, and it is the presence of the latter (and sometimes algae colonizing the root's epidermis) that cause whitish-gray epiphytic roots to turn a greenish-gray color when they are watered.
3. The zone of outermost cells surrounding the cortex is known as the velamen (velamen radicum to be botanically correct) and in its dry state it is a whitish-gray color. Velamen cells are genetically-programmed to die once they have been formed by the root's growing tip; they become like a sponge, making them an ideal sink for quickly absorbing and retaining moisture from the air. The wet-dry cycle that the velamen undergoes is critical for providing both water and air to maintain

healthy epiphytic roots. Consequently, old decomposing medium around orchid roots is a death sentence because it remains far too soggy for far too long, depriving the roots of air!

An orchid root is surprisingly pliable when wet, but not the root tip! The latter is tender and fragile, and being the powerhouse of root cell division and differentiation, you do not want to damage it when repotting. Roots with damaged root tips rarely regenerate new growing tips and even if they do, the process takes considerable time and the growth of the orchid is severely impacted.

So, to conclude, the epiphytic roots of orchids wandering outside a pot are just doing their natural thing. They are telling you they do not like being smothered or contained by medium. You can certainly gently ease them into a new pot when repotting if you wish to smarten up the plant's appearance – be careful of those root tips though – but, be warned as your orchid grows, its new roots eventually will be wanting to make their escape from the potting medium, especially as it begins to decompose! One last point as to why a clay pot makes an ideal potting container: epiphytic roots love growing tightly around the outside of it because it provides an environment that puts them in direct contact with water vapor as it evaporates through the porous pot and they are in direct contact with air without being smothered by compost.

Members' Feature

Back to those woodland cobwebs on the morning walk – aargh! Two native orchids have been flowering this past month.



The first is *Goodyeara pubescens*, the Downy Rattlesnake plantain. Its white, upright inflorescences stand proudly above rosettes of dark green leaves which are patterned beautifully with a



network of white venation.

The second, is *Tipularia discolor*, the Crane-fly orchid. It is a rather inconspicuous orchid



because no leaves are present at this time of year and its slender, dainty inflorescence blends in readily against the woodland leaf litter. But once you have spotted one or two and know what to look for, you will see they are fairly common here in the SE, especially after heavy rainfalls at this time of year. Just carefully scan the leaf litter a yard or two either side of a woodland trail. I turn the exercise into a personal challenge of seeing how many I can spot on a morning walk – I guarantee you too will derive pleasure from spotting the immature flower spikes (c and r photos below) and full flower spikes, which

when caught in morning sunlight resemble little swarms of gnats. In the autumn and throughout winter, the single leaf of the Crane-fly orchid is clearly identifiable because it is ovoid in shape, somewhat pleated, and is dark green uppermost with a distinct purple underside.



Another reminder for this section of the Newsletter, I need dem photos and stories..... come on y'all, it's your society! Wishing everyone a great August.

Phil Brindle, TOS President

<http://TriangleOrchidSociety.org>

<https://www.facebook.com/TriangleOrchidSociety/>