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AMERICAN ORCHID SOCIETY
at Fairchild Tropical Botanic Garden
10901 Old Cutler Road, Coral Gables, Florida 33156
Mailing address: PO Box 565477, Miami, Florida 33256
Tel 305-740-2010

Email theaos@aos.org Website www.aos.org Main Office Monday-Friday (by appointment only)

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Award issues and questions

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The Bulletin of the American Orchid Society

RON MCHATTON

Chief Education and Science Officer Editor, Orchids Magazine rmchatton@aos.org

DIRECTOR OF AWARDS AND SPECIAL PROJECTS

Laura Newton laura@aos.org

ADVERTISING

Knowledge Global 810 East 10th Street Lawrence, Kansas 66044 maria.preston-cargill@kwglobal.com

SUBSCRIPTIONS AND MISSING ISSUES

Membership Services Department Tel 305-740-2010 Fax 305-747-7154 membership@aos.org

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Angranthes Grandalena 'Big Bear's Ivory Star' FCC/AOS (Aeranthes grandiflora × Angraecum magdalenae), winner of the Fred Hillerman Award for the most outstanding angraecoid awarded in 2021; grower: Ryan Kowalczyk; photographer: Wes Newton. The plant received its award January 30, 2021 at the Florida West Coast Orchid Society show in Largo, Florida.

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PRONUNCIATION GUIDE

Pronunciation of orchid names can be daunting for the novice and experienced grower alike. Presented below is a simplified pronunciation guide specific to the names found in this issue of *Orchids* magazine. An attempt has been made to represent each syllable using easily recognized sounds or words separated by hyphens and not standard phonetic symbols. Check out the Orchidist's Glossary on our website at https://www.aos.org/orchids/orchidists-glossary.aspx.

aberrans (ab-AIR-anz) adductum (ad-DUK-tum) Aerides (ay-air-EE-deez) Aeridinae (ay-air-ih-DEE-nee) Aeridovanda (ay-air-id-oh-VAN-da) Aliceara (al-is-ARE-a) alopex (AL-oh-peks) Angraecoid (an-GRAY-koyd) Angraecum (an-GRAY-kum) Angranthes (ang-RAN-theez) Anguloa (an-gyew-LOH-ah) anitum (an-EE-tum) antenniphæra (an-ten-NIH-fer-a) atroviolaceum (at-roh-vye-oh-LAYsee-um) aurea (AW-ree-ah) Batemannia (bait-MAN-nee-a) bellina (bell-EE-na) Botrytis (bow-TRY-tiss) Brassavola (brah-SAH-vohl-la) Brassocattleya (brah-so-KAT-lee-a) Brevipedunculata (breh-vee-pee-dunkyew-LAY-ta) Broughtonia (brow-TONE-ee-a) brunonis (brew-NOH-niss) Bulbophyllum (bulb-oh-FILL-um) Caladenia (kal-a-DEEN-ee-a) Catasetinae (kat-a-SET-ih-nee) Catasetum (kat-a-SEE-tum) Cattleya (KAT-lee-a) caudatus (kaw-DAY-tus) Ceratocentron (ser-at-oh-SEN-tron) chocoensis (cho-ko-EN-sis) chrysotoxum (kry-soh-TOKS-um) claptonense (klap-tone-EN-see) Clowesia (KLOWZ-ee-ah) coccinea (kok-SIN-ee-ah) coelestis (see-LESS-tiss) cooperi (KOOP-er-eye) cuthbertsonii (kuth-bert-SONE-ee-eye) Cycnoches (SIK-noh-keez) Cymbidium (sim-BID-ee-um) Cypripedium (sip-rih-PEED-ee-um) Dendrobium (den-DROH-bee-um) desmondleeana (des-mond-lee-AY-na) disjuncta (dis-JUNK-ta) doucettei (do-SET-ee) dowiana (dow-ee-AY-na) Dracula (DRAK-yew-la) Dracuvallia (drak-yew-VAHL-ee-a) eburnea (ee-BURN-ee-a) Elythranthera (el-ith-RAN-ther-a) emarginata (ee-mar-jin-AY-ta) Epidendroideae (ep-ih-den-DROY-de-ee) Epidendrum (eh-pih-DEN-drum)

escifera (eh-SIF-er-a)

eucerca (yew-SER-ka) farrieanum (fair-ee-AY-num) fasselii (fas-SEL-ee-eye) Fowlieara (fow-lee-ARE-a) Fredclarkeara (fred-klark-ARE-a) Galeottia (gall-ee-OH-tee-ah) gigantea (jve-GAN-tee-ah) Glossodia (gloss-OH-dee-a) gorgona (GOR-goh-na) grande (GRAND-ee) Guarianthe (gwar-ee-AN-thee) quatemalensis (gwat-eh-mal-EN-sis) henryanum (hen-ree-AY-num) herzogii (her-ZOG-ee-eye) humboldtii (hum-BOLT-ee-eye) Hymenorchis (hye-men-ORE-kiss) Ida (EYE-da) Imschootiana (im-shoot-ee-AY-na) Incurvum (in-KUR-vum) Intermedia (in-ter-MEED-ee-a) javierii (ha-vee-AIR-ee-eye) Laelia (LAY-lee-a) Latouria (la-TOUR-ee-a) lawrenceae (law-RENS-ee) Lepanthes (leh-PAN-theez) leucochilum (loo-koh-KYE-lum) longifolium (lon-gee-FOLE-ee-um) Lycaste (lye-KAS-tee) Masdevallia (mas-deh-VAHL-ee-a) microphallica (mye-kroh-FAHL-ih-ka) Miltonia (mil-TONE-ee-a) Miltoniopsis (mil-tone-ee-OP-sis) Mormodes (more-MOH-deez) multiflora (mul-tee-FLORE-a) Myrmecocattleya (myr-meh-koh-KATlee-ah) Myrmecophila (myr-meh-KOF-ih-la) neogardneria (nee-oh-gard-NEER-ee-a) nobile (NOH-bih-lee) nodosa (noh-DOH-sa) Nottara (NOT-are-a) Odontoglossum (oh-don-toh-GLOSS-um) Oncidium (on-SID-ee-um) Oncostele (on-koh-STEE-lee) orchestris (ore-KESS-triss) oreibates (ore-ee-BAY-teez) ovale (oh-VAY-lee) ovalis (oh-VAY-liss) oxyphylla (oks-if-IH-la) Pabstia (PABST-ee-a) Paphiopedilum (paff-ee-oh-PED-ih-lum) Papilionanda (pap-ih-ee-oh-NAN-da)

percivaliana (per-sih-val-ee-AY-na)

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peridita (per-ih-DEE-ta)

phalaenopsis (fail-en-OP-sis)

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Selected Botanical Terms

The following terms may be useful when reading the *Lindleyana* article on new *Lepanthes species*, pages 294–299.

acuminate – tapered to a point acute – sharply pointed but not drawn out

apex – tip or top

bi - two

caudate – having a tail

ciliate – having very small hairs

clinandrum - bed of the anther

clavate - club-shaped

connate - fused to form a single part

coriaceous –leathery cucullate – hooded

ecaudate - not extended into a tail

elliptic – oval entire – unbroken

falcate – sickle-shaped

filiform – threadlike

glabrous – smooth

herbaceous – not woody

nerbaceous – not woody

holotype – type chosen by the author

infundibular – funnel-shaped

membranous – thin

mucro – a short, hard, abrupt apical point

obtuse - blunt or rounded

orbicular – circular

ostia - opening

ovate – egg-shaped with the narrow end up

papillate – surface covered in small, nipple-like projections

pedicel – a stem carrying a single flower

peduncle – the lower part of the inflorescence below the first bud

petiole – the stalk joining a leaf to a stem or pseudobulb

pubescent – covered in fine hairs

raceme – Type of inflorescence in which the main axis produces flow-

ers at intervals on short stalks

rachis – part of the inflorescence carrying flowers

scabrous – rough to the touch

sessile – directly attached; not stalked or clawed

or clawed

spiculate – having a small or short spike sub – somewhat less than as in subciru-

lar meaning not quite circular

terete – pencil-shaped

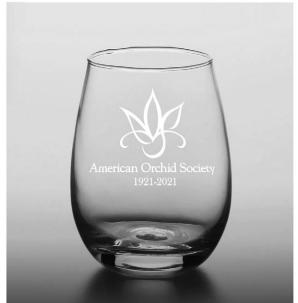
trichome - hairs or bristles

truncate - ending abruptly; as if cut off





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PRESIDENT'S MESSAGE

THIS MONTH I would like to continue my theme from last month and present the final five criteria that Dr. Denis Dutton uses to define "art" and Fred Clarke's interpretation of how those criteria can be applied to orchids to prove that indeed "orchids are art."

We started this conversation with criteria such as rules of form and composition, the ability to judge the item, and the creativity needed to create the item in question. We continue with the idea of "expressive individuality," meaning that individual style is expressed in the item. Think of all the different and varied children that can come from one hybrid seed capsule. Each is different and has its own individual "style." We usually only see those clones that end up awarded and mericloned and think that is it for the cross. But in reality, there may be hundreds or even thousands of individual children, each with different traits, that can come from one hybrid cross.

Next up is "emotional saturation." There is not a show that goes by for me or a visit to a large vendor that does not involve an "OMG" moment when I see something amazing in bloom. Have you ever laid your eyes on a *Paphiopedilum sanderianum* with ≥30-inch (≥76-cm) petals? How about a modern vanda hybrid with 7-inch (17.8 cm) dinner-plate flat flowers? Also, think of fragrance. Have you ever ridden in a car with a blooming *Bulbophyllum phalaenopsis* in the back seat? I guarantee that you will get emotional if you ever do!

The tenth test is "intellectual challenge" such that the item stretches the viewer beyond their ordinary limits. For this, consider the breeding to achieve completely black flowers such as Fredclarkeara After Dark 'SVO Black Pearl' FCC/AOS. Did you think that was even possible? Black-flower breeding is now being pursued and nearly achieved in Paphiopedilum leucochilum line breeding.

The eleventh criterion that Dr. Dutton uses to define art is, does the item have a place in "traditions and institutions?" There are lots of examples of this. In the United States, there has been a long tradition of the cattleya corsage orchid with an entire cut flower industry built to supply corsage flowers. It is now very common to see a single white phalaenopsis on the lapel of groomsmen at a wedding. The dendrobium orchid is the most used flower on the floats in the Rose Bowl Parade where the entire float must be covered in flowers or other plant-

based materials. In many native South American cultures, orchids are used in holiday celebrations.

The final test is "imaginative experience." Does the item stir your imagination? Of this, there can be no doubt. You would not be in this hobby if these flowers did not touch your soul.

Dr. Dutton concludes by saying that "any object that possessed every feature on the list would have to be a work of art." You and I (with Fred's help) have worked through all of the dozen criteria and found every one of them to be true for orchids.

Orchids are indeed living art; art that you can grow and display on your windowsill or kitchen table. And the more skills and knowledge you have as a grower and the larger variety of plants you can grow well, the better and more varied the artwork that you can display. Think of the traditional white or pink phalaenopsis as a nice Monet in your kitchen. A stately cattleya as a Greek statue on your dining room table. Would a paphiopedilum be an abstract Picasso?

I appreciate that you have indulged me in this little exploration for the past couple of months! Remember to go fertilize your Monets!

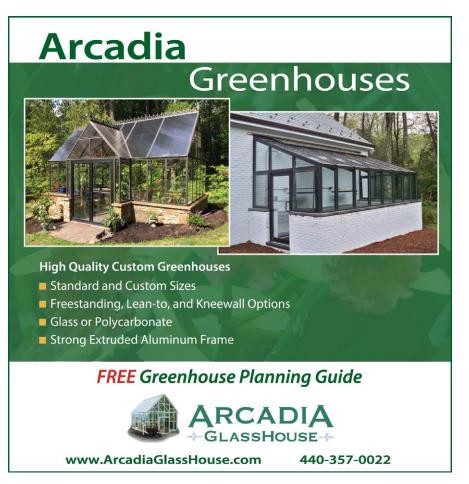
Finally, I would like to mention that



Jay Balchan with Cattleya Melody Fair.

our spring Annual Meeting of Members is right around the corner. It is going to be a fantastic event in San Diego with the show being held in beautiful Balboa Park. We have a special hotel rate for meeting attendees and there will be a great speaker lineup. Please see page 257 for more information. See you in San Diego!

— Jay Balchan (email jay@aos.org).



Judging Floriferousness Part 6:

Cultural Awards and Writing Descriptions

By Andrew Coghill-Behrends

CULTURAL AWARDS Floriferousness can account for up to 30 points out of 100 when scoring a plant for a cultural award. This amplifies the importance of judging equitably for floriferousness — and accurate description writing. Often, when scoring for culture, a cursory comparison of total flower counts begins the discussion but does not take into consideration all the other aspects of floriferousness.

Certainly, when judging truly single-flowered species and hybrids, the total number of flowers present is the lone standard for judging for floriferousness.

With other species and hybrids, however, more inflorescences per growth, more flowers per inflorescence, more growths in bloom and older growths reblooming can all be indications of superior culture. When assessing these plants, judges must turn to each aspect of floriferousness, evaluate whether each aspect is relevant to the judgment in progress and assign relative weights to each aspect so that a final determination can be made.

For there to be a way to make equitable comparisons to previously awarded clones of the same species or hybrid, however, it is crucial that we include any relevant information in our award descriptions.

WRITING DESCRIPTION You may have noticed that conspicuously absent from my previous analyses was the genus Dendrobium. The genus Dendrobium which some interpret to encompass multiple, if not dozens of, genera — is a problematic area for taxonomists and has not undergone a serious revision in over a century. It is equally problematic at the judging table as the thousands of component species have been loosely grouped into sections, though there is even considerable variation within the sections. As judges, we may be presented with a single-flowered *Dendrobium* cuthbertsonii, or a Dendrobium nobile hybrid with 1,000 flowers. For this reason, there can be little definitive guidance as to how to assess a plant at the judging table. Even the Judging Handbook makes this conclusion and directs us to use any number (four) of judging scales when it



comes to dendrobiums.

Interestingly, the Dendrobium scale is identical to the Odontoglossum scale, and it might have been fitting for judges to be directed there as opposed to another, dedicated Dendrobium scale. The guidance in the Handbook makes no specific reference to floriferousness, though the

[1] Dendrobium Stardust 'Stephen Tobiassen' CCE/AOS, 92 points; exhibitor: Steve and Karen Tobiassen; photograph by James Harris. Inset photograph by Karen Kilfeather: 'Nguyen Orange' HCC/ AOS grown by Nguyen Orchids.

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consideration should be that the plant is representative of the potential of the component species.

Regardless, I am going to use dendrobiums (specifically a few Latouria- and Nobile-type dendrobiums) as a vehicle to discuss description writing and the importance of including any relevant information regarding floriferousness. There are far too many descriptions that do not recognize the aspects of floriferousness beyond the standard "X flowers on Y inflorescences." Were they all from one pseudobulb or growth? If not, how many leads does the plant have or how many "flower-eligible" growths are in play? Dendrobiums from section Latouria should be able to bloom from older growths for several years, have several or more flowers per inflorescence, and might produce multiple inflorescences per growth.

Some award descriptions for Dendrobium Aussie's Chip (aberrans × atroviolaceum) are as follows:

'The One' CCM/AOS, 2018: "Three hundred nine flowers and 59 buds on 64 inflorescences on a large, well-grown specimen of a miniature hybrid..."

'Charlie' CCE/AOS, 2018: "Approximately 315 flowers and three buds on approximately 75 pendent inflorescences, symmetrically covering a pristine 45-cm plant..."

'Crystal Star' CCE/AOS, 2015: "Approximately 182 flowers and 46 buds on 42 inflorescences exquisitely displayed like a veritable cloud of flowers on a 35-cm diameter well-grown plant with immaculate foliage..."

'A-Doribil' CCE/AOS, 2013: "Two hundred nineteen full, nearly flat flowers and 146 buds on 73 inflorescences symmetrically covering an unblemished plant..."

'Kirusha' AM/AOS, CCM/AOS, 2010: "Fifty-three flowers and



seven buds on 11 inflorescences produced on a charming 22growth plant, 10 with flowers..."

These are just five of the 11 written descriptions for this hybrid. Many of them only address the size of the plant and not the number of pseudobulbs present. The last (with my emphasis added) is what I would consider being the most complete as relates to floriferousness, as it is the only one to reference the number of growths and — specifically — the number of growths in bloom; still, I find it to be lacking when we consider all the aspects of floriferousness that are relevant to Latouria dendrobiums.

The descriptions for another Latouria hybrid — Violet Yamaji (spectabile × Midnight) — show that this is not a phenomenon isolated to Aussie's Chip:

'Corrine's Lovely Gem' AM/AOS, 2021: "Sixteen impressive, stellate flowers and 24 buds on five inflorescences..."

'Nalo' CCE/AOS, 2019: "Two hundred seventy-seven flowers and 63 buds on 37 inflorescences, on an exceptionally grown plant..."

'Puanani' AM/AOS, 2018: "Fifteen full, star-shaped flowers on two ascending inflorescences..."

'Nalo' CCE/AOS, 2007: "Five hundred twelve flowers and 88 buds on 32 inflorescences on an exceptionally wellgrown plant..."

'Nalo' CCM/AOS,2002: "Approximately 280 flowers and 50 buds on a well-grown plant; two-thirds of the plant covered with flowers..."

The closest any of these descriptions get to describing the number of growths in bloom is the last one, which indicates the fraction of the plant in bloom, but not a single reference is made to the number of pseudobulbs on any of the plants — a practice that, while acceptable for a flower quality award, should never be acceptable for a cultural award. But also notice that a couple of the descriptions frontloaded the description with prominent attributes: "[s]ixteen impressive, stellate flowers..." and "[f]ifteen full, star-shaped flowers..." This is important and we should be pointing out at the beginning of the description the aspects of the plant that we weighed heavily when scoring the

The last hybrid that we will look to for examples of descriptions is *Dendrobium* Stardust (*unicum* × Ukon):

'Stephen Tobiassen' AM/AOS, CCE/AOS 2014: "Approximately 839 flowers and 17 buds on 245 inflorescences on a blemish-free, well-groomed plant..."

'Nguyen Orange' HCC/AOS, 1999: "Thirty-eight solid orange flowers and five buds presented on two canes of a well-grown and well-flowered plant..."

'Linda' CCM/AOS, 1998: "Four hundred eleven flowers and four buds on 16 inflorescences in a 16-cm clay pot with tree fern..."

'H&R' HCC/AOS, 1997: "One hundred eleven nicely presented flowers on 27 inflorescences; four canes with most mature cane having 61 flowers on 13 inflorescences..."

With 'Stephen Tobiassen' and 'Linda', we can calculate the number of flowers per inflorescence, but have no frame of reference for the number of growths in bloom. With 'Nguyen Orange', we have a foundation for calculating the number of blooms on each flowering cane, but

no reference point for the number of inflorescences that are produced by each cane. The description for the clone 'H&R', however, comes the closest to being a complete description.

When writing descriptions, we need to include any and all information and descriptors that would assist judging teams in the future to make an apples-to-apples comparison of the plant in front of them to the previously awarded clones

CONCLUSIONS With some exceptions, when we are judging a plant for flower quality, we are allotted 10 points for floriferousness. But it is imperative that we view floriferousness as a much larger consideration than just the number of flowers and number of inflorescences present.

We must take into account specific considerations. Intentional research must be undertaken by the judging team to determine what reasonably can be expected when it comes to not just the hybrid itself and its parentage, but also the ancestral species involved in a hybrid, including assessment of recent advances in line breeding of the species. We should also be careful to evaluate how the genetics of the component species interact to influence the floriferousness of their offspring.

Cultural awards present a special challengewhen it comes to floriferousness, as 30 points are allotted — even if the plant would have zero points allotted if it were to be scored for a flower quality award. If a Paphiopedilum henryanum or a Cattleya coccinea were to be judged, the 30 points would be determined solely by the number of flowers present (and perhaps slightly influenced by the size of the flowers).

Writing quality descriptions is the key to providing an accurate framework through which to compare apples to apples, as it were. Include any descriptive terminology that paints a more accurate picture of the plant in front of you and pay close attention to the many aspects of floriferousness that could be included and relevant to future judging efforts.

Finally, it is the role of the team captain — before the description is written — to evaluate the score sheets (and not just the final score) to determine if there were areas in which all the judges on the team scored a plant highly or in which all the judges scored low. High-scoring areas deserve a place at the beginning of the description, if practical. If not practical, they can be included in a commendation statement. Low-scoring attributes,





- [2] Dendrobium Aussie's Chip 'The One' CCM/AOS; exhibitor: Alexey Tretyakov.
- [3] *Dendrobium* Aussie's Chip 'Charlie' CCE/AOS; exhibitor: John Marcotte and Synea Tan.
- [4] Dendrobium Aussie's Chip 'Crystal Star' CCE/AOS; exhibitor: Crystal Star Orchids, Ellen and Eric Lee.
- [5] Dendrobium Aussie's Chip 'A-Doribil' CCE/AOS; exhibitor: Bill Thoms and Doris Dukes.
- [6] Dendrobium Aussie's Chip 'Kirusha' AM-CCM/AOS; exhibitor: Alexey Tretyakov.
- [7] Dendrobium Violet Yamaji 'Corrine's Lovely Gem' AM/AOS; exhibitor: Corrine Arnold.
- [8] Dendrobium Violet Yamaji 'Puanani' AM/AOS; exhibitor: Edwin A. Perez.

COGHILL-BEHRENDS







likewise, deserve mention in descriptions, such as "lack of floriferousness precluded a higher score."

Additional Reading

Allen-Ikeson, J. 2019. Judges Corner - Many Faces of Floriferousness. Orchids 88(10):730-731.

Bechtel, P.G. 1998. Judging Lycastes. Awards Quarterly

Coghill-Behrends, A. 2017. Of Angels and Tigers, Kings and Queens: Awards to Masdevallia veitchiana and Selected Hybrids, 2009-Present. Orchids 86(7):510-517.

Drozda, S. Date unknown. Judging Intergeneric Oncidiinae. AOS Judges' Forum, www.aos.org. Accessed July 26, 2021.

Etheridge, T. Date unknown. Judging Miltoniopsis. AOS Judges' Forum, www.aos.org. Accessed July 26, 2021.

Ferrusi, M. 2015. Judging Masdevallias. Orchids 84(4):216-219.

Grove, D.L. 1987. Flower Judging and Awards: Some Bothersome Issues. Awards Quarterly 18(1):29.

Grove, D.L. 1983. Strap-Leaf Vandas. Awards Quarterly 14(3):129.

Kalina, T. 1990. Judging Multifloral Paphiopedilums. Awards Quarterly 21(3):176-179.

Nash, N. 1998. Odonts - The Classic Orchids. Awards Quarterly 29(1). AOS Judges' Forum, www.aos.org. Accessed October 13, 2021.

Slaughter, S. J. 1992. Observations on Judging Lycastes and Other Single-Flowered Genera. Awards Quarterly 23(3):198-199.

Watson, A. 2021. Expectation of Judging Plants: A View. NZ Odontoglossum Alliance Growers Newsletter

Andrew Coghill Behrends (email mistercoghill@hotmail.com)

Editorial Note The elephant in the room continues to be that a high percentage of judges were trained when awards were published in the print Awards Quarterly magazine. These generations of judges were encouraged to be brief because there was limited space in a magazine that only published four times a year. Many judges still revert back to the way they were taught — and partly because the longer-term judges are often not the ones writing descriptions, given the need to give the next generation practice — but these same long-term judges are reading and critiquing descriptions. We all need to make sure descriptions reflect the full range of attributes of the inflorescence: branching, flowers and buds per inflorescences, percentage of growths bloom, additional immature inflorescences and the total number of flowers and buds.

- [9] Dendrobium Violet Yamaji 'Nalo' CCE/ AOS (2019); exhibitor: Walter Yamada.
- [10] Dendrobium Violet Yamaji 'Nalo' CCE/ AOS (2007); exhibitor: Walter Yamada.
- [11] Dendrobium Violet Yamaji 'Nalo' CCM/ AOS (2002); exhibitor: Calvin Kumano.

Slipper Orchids of the Tropical Americas

by Phillip Cribb and Christopher Purver

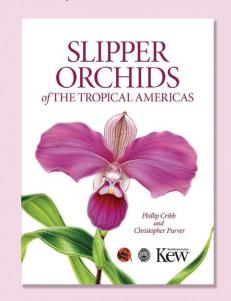
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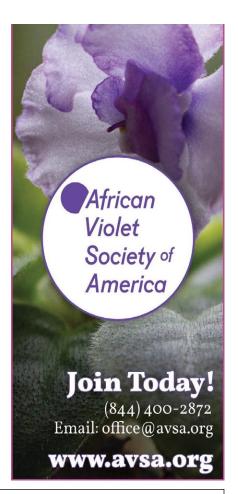
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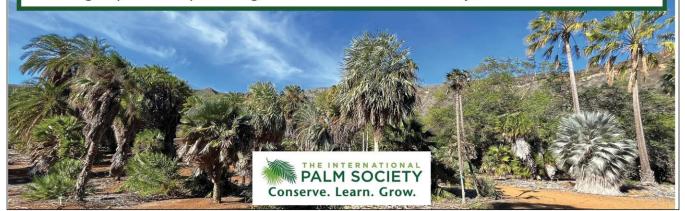


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FLOWER INITIATION



Rhyncholaelia Aristocrat

QUESTION

I placed *Rhyncholaelia* Aristocrat in a clay pot to make sure the roots dried out well. It looks healthy but has not bloomed. I grow in a warm location under grow-spectrum LED lights.

ANSWER

This hybrid of Rhyncholaelia digbyana and Rhyncholaelia glauca appears to be in really good shape. When you have a big well-grown plant like this one there can be a couple of reasons for the lack of flowering. First, the plant is getting good light as evidenced by the strong, upright growths but under LED lights, it is possible that the light spectrum provided by your fixtures does not provide the proper spectrum to induce flowering. You may want to read Kelly McCracken's five-part essay on LED lights. These all appear in volume 90 (2021), beginning with the July issue. In her series, Kelly discusses light intensity vs. light quality, timing, how much light you need, and their placement.

Timing may be an issue with this hybrid. Rhyncholaelia Aristocrat has a distinct flowering season beginning in late October or early November, peaking in March with the tail-end of the distribution stretching into April. This distribution suggests that changes in day length may play a critical role in flower induction and without it, plants cannot flower no matter how much light they get.

This situation is similar to winter-spring blooming phalaenopsis that are triggered by temperature differential and if grown constantly warm, produce great growth and no flowers. Daylength-dependent orchids can present problems for northern growers who must winter plants indoors, especially those in which flowering is induced by the cycle of gradually shortening days followed by a period during which the day length increases. It is often that trend reversal that signals flowering (the coming of spring). Plants grown out-of-doors naturally experience that cycle but when plants are brought inside in the fall, the abrupt change in day length at the wrong point in the plant's growth cycle can mean no flowers. You may want to try to mimic that by changing the length of time your lights are on. Start this process in the fall when you bring plants inside by setting the day length at something close to the natural day length at the time and then gradually shortening your day as December approaches. Once past the winter solstice, gradually keep the lights on longer into spring. This change in day length does not have to be dramatic, many orchid species adapted to live just on either side of the equator can be very sensitive, so you do not need a dramatic difference. As little as half an hour may be all it takes.

It is also possible the problem may be nutritional. High phosphorus (the second number in the fertilizer formula) levels can actually impede flowering. Consider using a low-phosphorus fertilizer formulation.

Lastly, make sure to provide adequate day-night temperature differential. Critical in phalaenopsis, it can also be a strong influence on other orchids, especially many species. A 5–10 F (2.8–5.6 C) day-night difference is important for good plant growth, but it can be even more important in flower induction — especially species and primary or primary-like hybrids.

LIGHT METERS

QUESTION

Are there accurate, inexpensive light meters? I grow under LED lights and would like to know what meter you recommend I buy. I use LED Christmas lights through the tops of my orchids to supplement daylight during lousy weather and I measure footcandles to see if they help. Should I measure footcandles or something else to





Top: Lux-footcandle light meter Bottom: PAR light meter

determine if they are effective? ANSWER

There are inexpensive meters for footcandles and lux and you can even get reasonable smartphone apps. The lenses of light meters are translucent to distribute the light entering the lens. In a smartphone, it is the camera lens. Because camera lenses are not translucent, you need to practice a bit to get reproducible results but they do work. Decent light meters for measurements in lux or footcandles can be had in the \$30 to \$50 range.

Light measurements in footcandles and lux are not reliable measures when using LED lights. For those, you will want to invest in a light meter that measures photosynthetically active radiation (PAR). These meters measure incident light in the wavelengths that plants need. They are more expensive, but important because it is possible to have relatively low footcandle readings and yet high PAR

These questions were part of one or more monthly webinar Q&As and compiled by Larry Sexton for inclusion here. Each month, a Q&A webinar is held during the first two weeks of the month. To view recorded Greenhouse Chats (Q&A webinars) or register for a future one, see https://www.aos.org/orchids/webinars.aspx. Send questions to greenhousechat@aos.org — Ron McHatton, AOS Chief Education and Science Officer.

readings with LED lights, depending on their spectral distribution.

Here again, I recommend reading Kelly McCracken's LED light articles. They may seem a bit technical but the information she offers is invaluable when growing under LED lights.

The third portion of your question deals with LED Christmas lights. You will need a PAR meter to get useful information regarding whether or not they provide any meaningful improvement, but I bet that their spectral distribution and actual light intensities are of little use to your plants.

STIMULATE NEW GROWTH



Rlc. Heart of Gold treated with Purely Organic fertilizer.

QUESTION

I have a few healthy cattleyas and related species and hybrids that bloom on a single lead. Is there any way to stimulate the growth of a second lead, thus getting two growing points?

ANSWER

Some cattleyas resist producing more than one new growth a year. They usually walk in a straight line across the pot producing a large mass to the back and not breaking new leads in this area. Other cattleyas routinely produce two new leads from each maturing lead, leading to great specimen plants. As a result, it can be difficult to initiate more than one new lead on plants that are not genetically programmed to do that.

That said, there are some things you can try. First, make sure that your plants get all the fertilizer they can use. Orchids will survive and even flower, on virtually nothing by using the food reserves stored in the older parts of the plants to feed growing leads. These plants tend to produce fewer leads and often will produce a new growth and simultaneously lose the oldest back growth resulting in a plant that remains the same size over long periods.

There are also plant supplements that may help to induce additional growth. I know some growers who swear by

SUPERthrive and I have heard good things about a product called Purely Organic fertilizer available from a private supplier in North Carolina. Sue Bottom featured this product in her "For the Novice" article in the May 2017 issue of *Orchids*. Those who use it report significant increases in root growth and new growth starts. It can be applied as a top dressing and watered in or can be placed in "tea bags" made from coffee filters placed on the top of the potting mix.

There is also a mechanical method used by some growers but such treatments mean the plants cannot be eligible for AOS cultural awards. This involves partially, but not completely, cutting through the plant's rhizome at intervals of three or four growths. Very often, a dormant eye behind the cut will start to grow, much like sprouting a backbulb division, creating new growing fronts along the rhizome.

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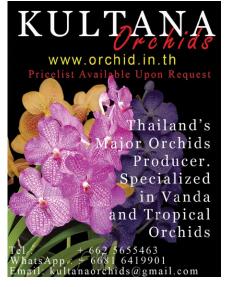
When	April 04, 2023 8:30 pm EDT Tuesday	April 12, 2023 8:30 pm EDT Wednesday	May 11, 2023 8:30 pm EDT Thursday	May 16, 2023 8:30 pm EDT Tuesday
Topic	Greenhouse Chat Orchid Q & A Send in your Photos and Questions by April 02	Heirloom Cattleyas Bringing the Past into the Present	Greenhouse Chat Orchid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

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April: The Month of Showers

By Thomas Mirenda

AS I WRITE this, in the month of February, I am trying to organize all my possessions and over 1,000 plants that were hastily relocated from my previous residence to a lovely new, but cozy, octagonal cottage. I love my new place but am challenged to find space for all my stuff in my charming but oddly shaped abode. In particular, the lack of square corners is particularly vexing. I cannot wait to start planting in my garden, but as is often the case in the vicinity of East Hawaii Island, we have been experiencing torrential rain for almost two weeks now! Do not get me wrong, I love the rain! It is the reason why so many plants thrive here but it is also a serious deterrent to getting outside and making progress on my plant reorganization and garden.

There is also the fear that plants not in their proper microclimate or left akimbo or out of the rain might be in trouble in other ways. For example, in this new place, I am not yet familiar with plant predators, parasites, and other interlopers such as slugs, snails, ants, coqui frogs and who knows what else! It is a minefield and without a break in the weather, it is possible some plants will be decimated before I am even aware of any new dangers. I really should not complain, as excellent water is probably the most important factor in growing orchids successfully; however, too much water can be problematic. Here in Hilo, I have transferred just about everything to mounts, baskets and net pots. When rain occurs so frequently and humidity is usually so high, air movement around orchid roots is crucial to prevent fungi and rapid breakdown of media. In much of the rest of the world where orchids are grown more in moisture-retentive pots, this might actually be less problematic. However, this is why April is also the prime month for repotting your collection.

SPRING HAS SPRUNG April is the month when a considerable amount of precipitation occurs in much of North America, even many of the more arid areas. Because cold weather retreats as spring progresses it is often a good strategy to move much of your collection outside sometime during this month. This is far more beneficial than you might think as it is also a chance to take advantage of delightfully cool nighttime temperatures that enhance orchid growth; I have long known that orchids relish a temperature differential of at least 10 F (5.6 C) or more to grow optimally. Because this is virtually guaranteed outside in April, why not take advantage of this natural mimicry of montane orchid conditions? A great many of your plants go into overdrive now. Especially as they reawaken and are fed and watered more regularly.

PUT UP AND POT UP Even while plants are sprouting new growths, it is more important to observe and respond to the spring flush of new roots that occurs on most of your orchids as daylengths get longer and temperatures rise. Most orchids will respond well to fresh, new media. One of many signs you should repot is the presence of weeds such as oxalis in your pots. This is a sure sign that your mix is breaking down. If you need other reasons, growths that have extended beyond the pot rim, especially if those growths produced flowers last year, are rife for either repotting to a larger size or division. Such divisions make fantastic gifts to new orchid growers you wish to encourage and make fine contributions to orchid sales booths or club raffle tables. Chances are your mother plant will branch and make even more new growths and flowers if you take divisions now. They are also more likely to establish if taken during active root growth than any other time of the year.

SHOWING UP Although many orchids such as phalaenopsis and cymbidiums are still in full bloom, it is often your last chance to show them off before they fade. When it is excessively rainy, there is likely to be the threat of fungal (usually Botrytis) spots on your flowers. Keeping such plants indoors in a dryer space can combat this problem on plants you want to exhibit. Keeping plants moist but avoiding wetting the blooms can be challenging but essential if you want your flowers to really shine. No one likes fungal spots marring your flowers. It is equally essential to present your plants at their best, removing any necrotic foliage and staking errant spikes for the best presentation. Do not send your "chids" to the shows looking like vagabonds!

NATIVE AND GARDEN ORCHIDS if you feel, after reading this, that you must chain yourself to the potting bench



Dracula simia 'Solar Place' AM/AOS; exhibitor: Tom Etheridge and Luanne Rolly

in April, I urge you to schedule a little time out in the wild and in your garden. The spring showers and warmer weather have affected your wildflowers and garden orchids too. Although it may be a bit early for many of them, now is the time to enjoy the emergence of many species and hybrids that will bloom in May and June. You want to protect any sprouts emerging now on bletillas and cypripediums from pests such as mollusks and rodents. Even children playing in the garden can damage these, so monitor judiciously for any threats. Visit areas where wild orchids may be emerging too. Contact members of the Native Orchid Conference or your local wildflower society to find out about habitats, I will bet there are wonderful native orchids very near where you live. Brave the showers to go and find some of them! I have found that the very best days, are the days when you get wet!

– Tom Mirenda has been working professionally with orchids for over three decades. He is currently an AOS trustee and is a past chair of the AOS Conservation Committee. He is an AOS accredited judge in the Hawaii Center (email: biophiliak@ gmail.com).



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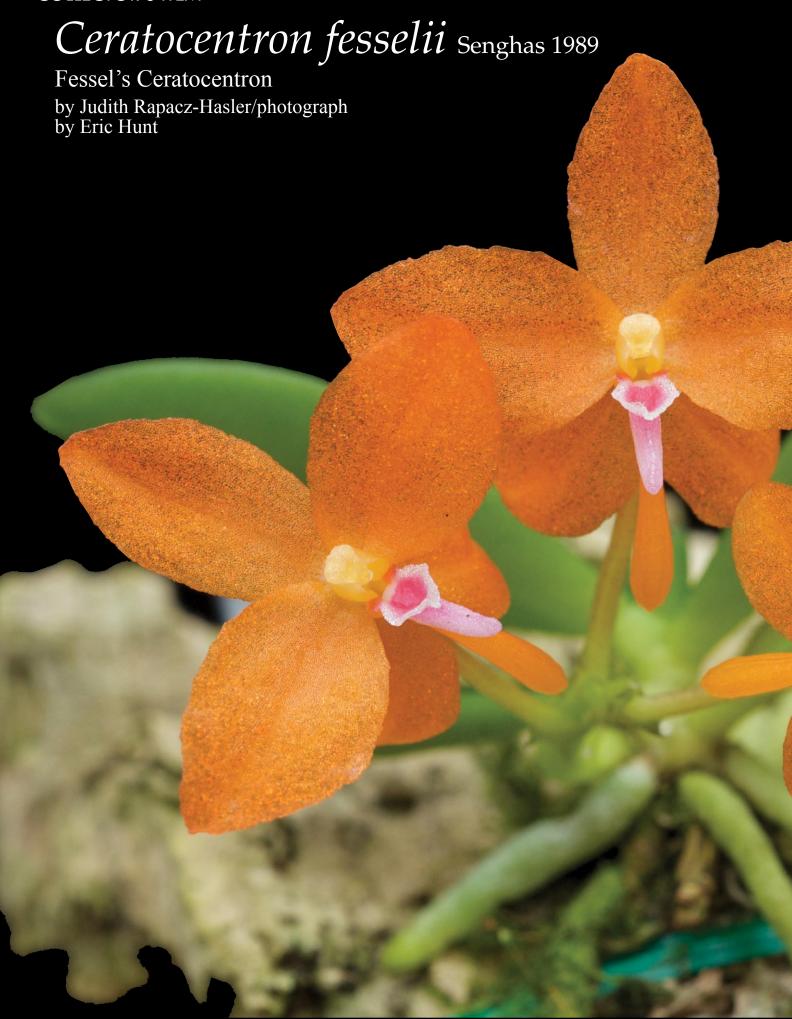
Show will be held at **Casa del Prado in Balboa Park**

A beautiful location for our Spring Members Meeting. Two days of fabulous Orchid Speakers, AOS Judging, Town Hall, Sunset Garden Reception, Live Auction, and More!

Registration is OPEN!

The Schedule and event details are available at **aos. org**





SUBFAMILY Epidendroideae

TRIBE Vandeae SUBTRIBE Aeridinae

COMMON NAME Fessel's Ceratocentron; in reference to H. Fessel, a 20th-century German taxonomist and botanist.

SYNONYMS Hymenorchis javierii (in Miniature Orchids McQueen and McQueen 1992); Tuberolabium calcaratum T. Hashim

Ceratocentron fesselii is a mini-miniature-sized species endemic to the Nueva Ecija mountain range on Luzon Island in the central Philippines. This species grows on tree trunks in lower montane forests at 3,300 to 3,900 feet (1,000–1,200 m) elevation as a cool-growing, monopodial epiphyte with three-to-five very leathery, dark-green, elliptic, obtuse leaves that are basically conduplicate and clasping the stem, which blooms on the axillary, erect 0.4 to 0.6 inch (1–1.5 cm) long inflorescence with three-to-five pendent flowers. Occasionally there is more than one inflorescence per leaf axil. This minute plant of vandaceous growth has flowers that sparkle as if constructed of tiny crystals; the sepals and petals equally crystal-like, are tangerine, the lip brilliant white with cranberry-red spots in the center.

Like many of these rather rare, exotic miniature species, Crtn. fesselii is critically endangered in its native habitat and is still being over-collected. Because the habitat of this species is in rather high humidity surroundings, the plant needs to be mounted on cork or tree fern and always kept moist by spraying daily. Ceratocentron fesselii needs a bit more shade than other vandaceous species.

There are many cultivars that have received awards such as Crtn. fesselii 'Memoria Kay Rinaman' HCC/AOS and Crtn. fesselii 'Jim Figura' CHM/AOS awarded by the AOS, Crtn. fesselii 'Sparkles' awarded in New Zealand and Crtn. fesselii 'Wössen' and Crtn. fesselii 'Widderchen' awarded in Germany.

CULTURE Ceratocentron fesselii likes bright light (1,850–2,800 footcandles [20,000–30,000 lux]). The direct summer sun must be shielded, and the ideal photoperiod is 12 hours. Temperatures afforded phalaenopsis are ideal with year-round day temperatures 73–79 F (24–27 C). Summer nights should be 64–66 F (18–19 C) and slightly cooler during the winter (61–63 F [16-17 C]), so this species likes it warm. Humidity in their natural habitat runs 85–90 percent; therefore, high humidity and strong air movement are recommended.

Ceratocentron fesselii grows best when mounted on rot-resistant wood such as oak, hickory, pecan, cedar, redwood or Douglas-fir bark. The plant will thrive on a mounted log, with a thin layer of sphagnum moss that guarantees a reserve of humidity. The roots should have time to establish themselves, becoming longer and a tad thicker with good ventilation. The secret to successful culture is to leave them alone.

During the period of growth in the summer, cultivated plants should get abundant water daily. In the winter, the amounts of water should be reduced; misting lightly once a day and abundantly every five days should be sufficient with adequate humidity. If the leaves start to show signs of wrinkling, the water should be increased. During active growth, the plants will benefit from weekly applications of a balanced fertilizer such as one of the MSU formulations. Fertilize every week using 1/4—1/4 the dose indicated on the fertilizer's label. During the winter months fertilization can be suspended. To avoid the accumulation of mineral deposits from fertilizers, plants should be leached with pure water every month or

two.

Rainfall in the natural habitat is moderate to heavy from spring to autumn. During the dry season (November to March), there is abundant dew and humidity present in the air, so their winter rest is not very pronounced.

References and Further Reading

McQueen, J. and B. McQueen. 1992. *Miniature Orchids*. Timber Press, Portland, Oregon. Travaldo's Blog. 2018. *Ceratocentron fesselii* Orchid Plant Care and Culture. https://travaldo.blogspot.com/2018/10/ceratocentron-fesselii-orchid-plant-care-and-culture.html. Accessed Decem-

Pfahl, J. 2022. Internet Orchid Species Photo Encyclopedia (IOSPE). http://www.orchidspecies.com/ceratfesseli.htm Accessed December 8, 2022

Judith Rapacz-Hasler is a member

of the AOS editorial board. She spends half the year on Florida's west coast and the remainder in Europe (email: jorapacz@wisc.edu).

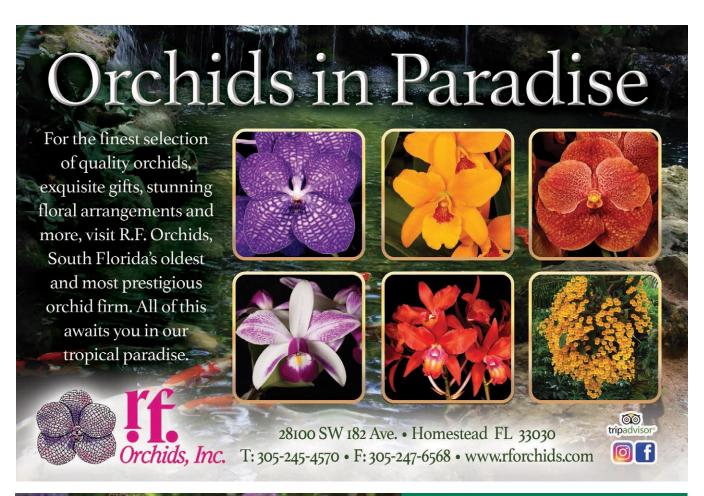


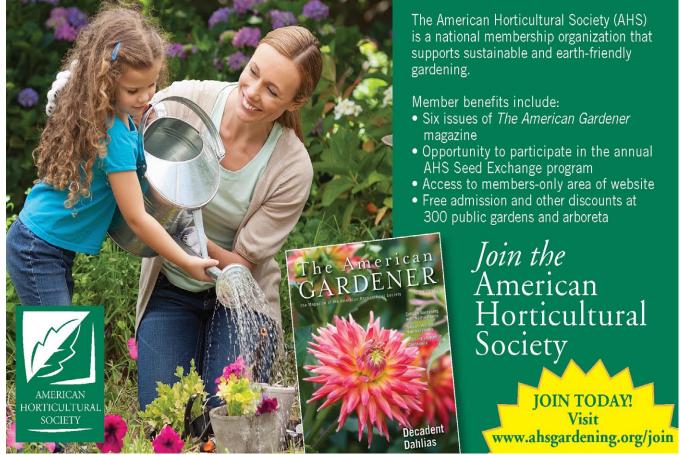
San Diego County Orchid Society Show and Sale • April 21-23, 2023

Spring is a glorious time to enjoy San Diego. Join us in Balboa Park at the historic Casa del Prado for our largest orchid event of the year. We are celebrating Earth Day with a fanciful tree of our own creation honoring the over 25,000 orchid species that grow in the wild on six continents in trees and on the ground. It features 40 epiphytes, both species and hybrids, and 15 terrestrials grown locally by society members. Admire their award-winning plants in person and shop from local and international growers on Friday, Saturday, and Sunday; admission is free.

Latest Event Details at sdorchids.com







GENUS OF THE MONTH

Elythranthera (Caladenia) Enameled To My Heart By Thomas Mirenda/photographs by Ron Parsons



TOP OF THE list among the many orchids on my observation wish list while camping in Southwestern Australia last year were these curious, and in my view, spectacular little orchids. I had seen the amazing jewel-like colors and glossy sheen they exhibit only in pictures and thought it would be fascinating to see them in person. On prior trips, I had only seen plants in bud and was frustrated to have been just a couple of days too early to see them for myself. The seasonality of orchid flowering in the wild is often a source of exasperation and disappointment for the orchid traveler. The incredible Thelymitra variegata (Queen of Sheba) which, I am told, bloomed lavishly this year in August, was sadly, already finished for the year when I arrived in early September. I believe that the desire to show and capture on film, these exceptionally beautiful and uniquely Australian orchids is one of the main reasons the IOCC is being planned for Perth in August of 2024.

As to the more diminutive, but still fantastically vivid enamel orchids, they have been the subject of some recent taxonomic revisions. Formerly classified as Elythranthera and Glossodia, DNA studies have found them to be a small branch within the larger genus, Caladenia. Indeed, the lumpers have been quite busy of late, and it is hard to keep up if you are not regularly receiving scientific literature. Authorities in Australia still refer to them as Elythranthera and I find them sufficiently distinctive to write about them here as an exceptional group of exciting plants. This group includes two species: Caladenia brunonis and Caladenia emarginata and their natural hybrid Caladenia × intermedia with the former a brilliant shade of purple, the second with vibrant pink to magenta blooms, and the latter with many intermediate and bicolor incarnations. The species are similar enough that hybrid swarms occur in many habitats, and I suspect that many I saw in the wild were such blended populations. They, like most Australian wildflowers, seem to thrive in sandy, nutrient-poor environments and are likely very dependent on mycorrhizal fungi.

For such colorful bloomers, they were paradoxically easily overlooked in the field. I would find myself entranced by so many other brightly colored flowers, especially blue, yellow, and red ones, blooming prolifically in the Australian spring that I often would not realize I was in the midst of a colony of these smaller, dark-hued flowers. They are smallish blooms, about 2 inches (5 cm) in length and on wispy,



- [1] Flowers of the two former *Elythranthera* species appear as if they are made out of enamel. *Caladenia* (*Elythranthera*) *brunonis* flowers are an intense shiny purple.
- [2] Caladenia (Elythranthera) emarginata flowers are white overlaid with bright shiny pink exhibiting variable amounts of the underlying white showing through.

wiry foot-long (30 cm) stems emerging from hairy basal leaves that are almost invisible until the flowers are open. Once discovered they are thrilling to behold. Oddly, the flowers which have the appearance of porcelain, are extremely delicate in substance and mar easily. The reverse of each flower has strong brown markings that do not show through the intense coloration on the front. These spots might prevent predation on tender buds before they open by mimicking parasites or blending with other foliage. Like many brightly colored flowers, they do not offer nectar or pollen rewards to their pollinators as no nectar appears to be present and pollen is generally not offered by orchids as rewards to insects as it would defeat its purpose. It is assumed that some sort of deception is at play with these species but, as yet, this is still conjecture until someone documents a pollination event! Maybe it will be you? There are still so many mysteries in the orchid world.

Strangely, or perhaps not so mysteriously, no one has yet offered these lovely plants to gardeners. This is no doubt due to the difficulty in germinating seeds of terrestrial orchids. While it is possible some Australian nurseries might offer plants for sale, the secrets of their successful cultivation remain unsolved. Like American terrestrial orchids, they might survive a season or two if dug and replanted in a garden, but unless their fungal symbionts are collected, banked and propagated, their long-term survival in cultivation is highly unlikely. I encourage research and experimentation with these species to better understand and unlock the secrets of their culture as well as their, no doubt, completely unique ecology.

— Tom Mirenda has been working professionally with orchids for over three decades. He is currently an AOS trustee and is a past chair of the AOS Conservation Committee. He is an AOS accredited judge in the Hawaii Center (email: biophiliak@amail.com).

Organizing Your Growing Area

Text by Sue Bottom/photographs by Terry Bottom

ORCHIDS COME IN all different pot sizes, with varying potting mixes, and different types of orchids have different light and watering requirements. So, how do you decide what to put where? After a repotting program, one of our members laughingly commented "I had a bit of a laugh when you talked about grouping the same sized pot and the same type of media together in groups. Apparently, you have not seen the average grower who has a multitude of different plants, different pot sizes, and different media all shoved into a small greenhouse. The mix of different sizes allows a grower to shove plants between other plants much like a mix of different sized rocks in a bag so that no air spaces exist." Steve's comment was on the mark. How should you go about deciding where to place orchids in your growing area?

LIGHT Light is a key concern for growing orchids in that it is the source of energy fueling plant growth. Too much light and your plants will be sunburned, and too little light and your plants will not flower. Vandaceous orchids, catasetinae, and Cattleya Alliance plants like the brightest light while phalaenopsis, jewel orchids and mottled leaf paphiopedilums prefer shady conditions, with most of the rest of the commonly cultivated orchids falling in between the two extremes. As a practical matter, all plants love morning sun and can take direct morning sun up until around 10:30 am. This makes an eastern exposure perfect for your shadier-loving plants. The sun intensity is too great for almost all orchids between about 11 am and 2 pm, so orchids must be protected from this direct light by growing under trees, a shade cloth-covered trellis or pergola, pool lanai or a roof eave. A southern exposure can work well for the bright light-loving orchids as long as you have protection from the midday sun. Western exposure to the late afternoon sun can also be suitable for many orchids. Feel the leaves during the brightest part of the day, if the leaves are hot the plant should be moved to a shadier spot or the area protected with shade cloth. Be aware of the changing sun angle through the year.

Many of the recommendations in orchid books talk about light intensity in footcandles and give general ranges





of light intensity for various genera. In my greenhouse where the bulk of the cattleyas are grown, there is a 50 percent shade cloth covering the outside yearround, with another 30 percent shade cloth added inside at the spring equinox and taken down at the autumnal equinox. Using an estimated 10 percent shade factor for the clear polypropylene greenhouse skin, this means that at noontime in the summertime when sunlight registers about 10,000 footcandles, the inside light level is a hypothetical 3,150 footcandles $(10,000 \times 0.9 \times 0.5 \times 0.7)$. In winter, the plants can take more intense sunlight because the temperatures are lower, while in summer additional shading is required to try to prevent plants from overheating.

Even with these hypothetical calculations, there are brighter and darker areas of the greenhouse, and you can use

- [1] Light loving cattleyas hanging high in the greenhouse and lower light orchids underneath on benches at Ruben in Orchids, 2009.
- [2] Keep all your mounted orchids together so you can easily water them once or twice a day.
- [3] These seedlings in 3½-inch (8.9 cm) pots are watered every day or two.

these microclimates to your advantage. The bench along the northern wall is used for seedlings that enjoy less light while the bench along the eastern wall has bifoliate cattleyas, Brassavola nodosa hybrids and encyclias that all enjoy brighter light. The area where the phals are grown along the western wall has a second 50 percent plus a third 30 percent shade cloth yearround, so they receive a calculated 1,575 footcandles (10,000 \times 0.1 \times 0.5 \times 0.5 \times

0.7), on the high end of recommended phalaenopsis light.

You can get light meters that measure visible light intensity (in footcandles) and photosynthetically active radiation (as Photosynthetic Photon Flux Density, measured in micromoles per second per square meter [µm/s/m²]). There are many references to guide you if you are technically minded, particularly if you want to grow indoors under lights. When you grow under lights, you are supplying a constant light intensity for the entire period the lights are on, unlike in my greenhouse where the light starts to increase from zero at dawn to a maximum at noon and then dropping again to zero at nightfall. The light levels recommended in footcandles in orchid books are really based on the maximum midday light level, which would be way too much light if a plant were exposed to that intensity for the entire day. Under-light growers usually try to supply one-quarter to onethird of the light levels recommended for those growing in natural sunlight.

WATERING You spend many hours watering your orchids over the course of the year. Choosing your potting mixes to match your watering habits and time availability is a key aspect of your orchid culture. If you tend to water frequently, you can use a coarse, freely draining mix with lots of drainage without fear of overwatering your plants. If your time is limited, you may choose a more water-retentive mix containing a higher percentage of sphagnum moss, peat moss or bark that holds moisture longer and thus requires more careful watering to ensure plants are not overwatered.

The coarse mix the Saint Augustine Orchid Society (SAOS) offers to its members is a mixture of about 30 percent clay pebbles, 30 percent coarse Perlite, 30 percent Orchiata bark and 10 percent charcoal. It is a freely draining mix that contains a small proportion of organic matter. It is intended for potting cattleyas and dendrobium orchids that like to dry out between waterings. It is freely draining enough to withstand extended periods of rainfall during tropical storms. Of course, if growing under cover or outside during the dry season, it does require watering several times a week. Whatever mix you finally select for your cattleyas, you should be able to water this group of your orchids all at the same time.

If you group plants with similar watering requirements together, it is easy to know when to water what. This gets very complicated when you bring home new



plants from a show, and one is potted in clay pebbles, another in sphagnum moss, and a third in bark. If you water all these with the same frequency, you will likely be overwatering the one in sphagnum moss and underwatering the one in clay pebbles. This is when you should follow repotting rule number one. When you bring home a new plant, once it is done blooming, watch for it to throw new roots and put it in your preferred potting mix.

POT SIZE Pot size is another consideration in how often to water your plants. Other things being equal, smaller pots will dry out more quickly than larger pots and must be watered more frequently. A 6-inch (15 cm) pot holds about 2.5 times as much mix as a 4-inch (10 cm) pot, and an 8-inch (20 cm) pot more than twice the mix as a 6-inch (15 cm) pot. Plastic pots do not breathe, so they hold more moisture with the evaporative surface limited to the top of the pot. For clay pots that breathe, the surface area of the pot helps determine how quickly the pot will dry out. As the size of the pot increases, the volume of the pot and the surface area increase, but the ratio of surface area to volume decreases so larger pots dry out relatively more slowly than smaller pots.

This is one reason why growers are often successful using sphagnum moss in small pots but fail when they try to use it in large pots. One way to overcome this problem is to add chunks of Styrofoam in with the sphagnum moss in larger pots. I grow phalaenopsis in high-quality sphagnum moss in clay pots. The smaller 3-to-4-inch (7.5–10 cm) pots have sphagnum moss with some Styrofoam in the bottom of the pot. With larger 6–8-inch (15–20 cm) pots, they are also grown in sphagnum moss but with liberal amounts of Styrofoam chunks added in

the bottom of the pot and intermixed with the sphagnum moss in the upper layer of the largest pots. By adjusting the ratio of potting and drainage materials in various size pots, the phalaenopsis can all be watered at the same time because the extra drainage material adds evaporative surface area in the larger pots.

There are many considerations in choosing a potting mix for your orchids. The longer you grow orchids, the more you will learn what works best for you in your growing area. Julia Child has a great cookbook, The Way to Cook. In it, she gives a master recipe for a dish and then follows that with several variations on the theme for different ways to modify the main recipe. If you are just learning about orchids, use something like the SAOS coarse mix for your cattleyas and dendrobiums, and the Pro-Mix/Perlite blend or long-fibered sphagnum moss for your phalaenopsis. Then you can start mixing and matching, tailoring your mixes to the different orchids you grow. Perhaps some chopped sphagnum in the coarse mix for your oncidiums or some sphagnum as a top dressing on media surfaces. Your best lesson learned will be when you repot your orchids and get to see firsthand how the roots fared in last season's mix. If they look mushy, add more drainage; if they look desiccated, use more water-retentive mixes; and if they look great, hallelujah!

— Sue Bottom started growing orchids in Houston in the mid–1990s after her husband Terry built her first greenhouse. They settled into St. Augustine, Florida, Sue with her orchids and Terry with his camera and are active in the St. Augustine Orchid Society, maintaining the Society's website and publishing its monthly newsletter. Sue is also a member of the AOS Editorial Board (email: sbottom15@gmail.com).



Chromotypogravure by Wesley Higgins and Peggy Alrich

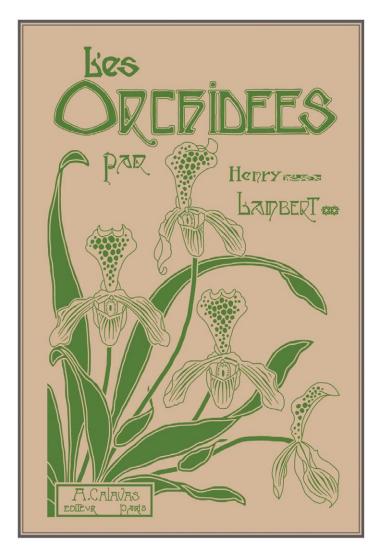
A nineteenth-century French style of color printing

THE PRODUCTION OF hand-colored botanical prints began in the 17th century and flourished in the 18th and into the mid-19th century when methods of color printing emerged. The application of color to black-and-white prints with delicate watercolor brushes was accomplished by skilled colorists. Hand coloring was extremely expensive, tripling or quadrupling the production cost of the work; many early botanicals were offered with or without colored prints. Books with color plates were exceedingly costly and therefore, were usually the provenance of the aristocracy and institutions.

As color printing techniques developed, some prints were colored by directly applying colors to the etched metal plate before it was run through the press. This method was referred to as the a la poupee process, a French description of the color dauber which looks like a small doll. The method favored by English printers would apply all the colors to the same engraved metal plate. The French would apply different colors to identical copper plates (as in a chromolithograph) printing them onto the paper sequentially one after another. Often colors were overprinted to get different tones or colors. Although chromolithography was less expensive than hand coloring, it was a difficult process that required skilled "chromistes," who knew the art of color mixing. Alignment of the paper on each separate press run also required great skill so that the final printed image did not appear blurred.

In the succession of printing methods that came into existence in this period, the halftone process can be considered a major contribution. The half-tone screen consists of two plates of glass ruled with very fine lines and placed in contact with each other in opposite directions, so that the two sets of lines are crossed at an angle of 90°, to form transparent squares. The objective was to convert the intermediate tones of an image into small lines or dots of stark black and white. The lines or dots, of varying widths or sizes, respectively, had to be small enough to blend together in the eye adequately, producing the illusion of various shades of gray.

Of particular significance in a largely forgotten cul-de-sac in the development



of modern commercial color printing, the chromotypogravure, was a form of early, photomechanical color printing, unique to France, that flourished briefly during the mid-1880s. The chromotypogravure technique of color printing used the dots of the half-tone screen to produce soft grainy color. Chromotypogravures were superseded by the far more mechanized procedures of photographic color separation and three-color process printing.

In this time period, of particular importance, are the examples of the early 20th century chromotypogravures, *Les orchidees et les plantes de serre/etudes par Henry Lambert*, compiled and issued by Paris bookseller, Armand Guerinet. The images, measuring 20 × 13 inches (51 × 33 cm), are printed in shades of green, pink,

red, orange, yellow, tan and white on a stippled light tan background; scientific names of the orchids in Latin are printed in brown below the drawing. Of the 20 chromotypogravure prints produced by Bertin et Cie, the first four plates (1–4) were printed by Draeger Frères (founded 1886). The remaining 16 plates, Plates 5–20 were printed by Paul Dupont, and issued by A. Calavas editeur, in Paris. Henry (Henri-Lucien) Lambert (1836–1909), was a little-known French painter and watercolorist born in Sevres, France.

References

Braude, N. 1974. New Light on Seurat's "Dot": Its Relation to Photo-Mechanical Color Printing in France in the 1880's. *The Art Bulletin*, 56(4):–589.

Burch, R.M. and W. Gamble. 1910. Colour Printing and Colour Printers. Baker & Taylor Co., New York.

Pl.14



Nº1. Oncidium-Incurvium Nº2. Oncidium-Tigrum

N.3. POLYPODIUM-AUREA

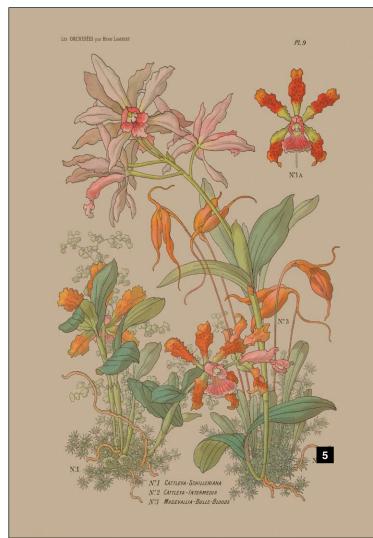


Lambert Les Orchidées

ANTIQUE PLATES

- [1] Phalaenopsis schilleriana as Phalœunopsis schilleriana var. Manille and Cattleya trianae.
- [2] Oncidium incurvum as Oncidium incurvium, Oncidium tigrinum as Oncidium tigrum and Polypodium aurea (nonorchid).
- [3] Aerides multiflora as Aerides species des Philippines, Rossioglossum grande as Odontoglossum grande and Phalaenopsis pulcherrima as Phælænopsis antenniphæra.
- [4] Rhynchostylis gigantea as Saccolabium giganteum and hybrid Phragmipedium humboldtii × Phragmipedium longifolium × Phragmipedium schlimii as Cypripedium × schrodere.
- [5] Cattleya schilleriana, Cattleya intermedia and Masdevallia coccinea (Rubicon) 'Bull's Blood' as Masdevallia Bull's Blood.





Why Are They So Special?

2021 American Orchid Society Special Annual Awards

THE ANSWER TO the question posed in the title is simple: the awards pictured here were considered the most outstanding in their respective categories among all AOS awards given in 2021 as determined by the Judging Committee and all the regional Judging Centers. Special commendation is due to our amazing photographers who captured the essence of each plant or exhibit. In writing this summary, I asked the exhibitors what makes this award so special, and have included some of their comments. I also wish to thank the AOS Board of Trustees and the various donors whose support made these awards possible.

The Ann and Phil Jesup Botanical **Trophy** is awarded to the grower of the most outstanding orchid species awarded during the previous calendar year. The Butterworth Prize is given to the grower of the orchid plant regarded as the most outstanding example of orchid culture. Both prestigious awards went to Krull-Smith Orchid Nursery for Renanthera imschootiana 'Crystelle' FCC/CCE/AOS on April 9 at the Apopka International Orchid Festival, Florida North-Central Judging Center; photographer: Brian Monk. The plant was huge and in pristine condition with over 2,000 flowers residing on its own rolling cart. It received 100 points, the maximum possible, for culture. I bet it has not been repotted in a while!

The Masatoshi Miyamoto Award is given to the grower of the most outstanding Cattleya Alliance: Cattleya percivaliana 'Dave Off' FCC/AOS awarded at Hawaii Center Monthly Judging, Big Island, November 13; exhibitors: Ben Oliveros and Orchid Eros; photographer: Glen Barfield. Ben said, "This is the result of breeding two outstanding plants with different desirable attributes and getting the best of both. I received two FCCs and an AM on the same night to this grex." Eight stunning flowers on four erect inflorescences are special indeed!

The W.W. Wilson Award is given to the grower of the most outstanding example of the Cypripedium Alliance:





Phragmipedium Stairway to Heaven 'Max' AM/CCE/AOS awarded in the Great Plains Center Monthly Judging on March 20; exhibitor: Max C. Thompson; photographer, Bryon K Rinke. Bryon commented, "When this plant started to throw out its inflorescences, we were hoping it would make it to judging. It had flowered the year before and was spectacular. The flowers all opened in time for judging and the arrangement was what all photographers hope for!" This plant is so special that it needs to be

- [1] Renanthera imschootiana 'Crystelle' FCC-CCE/AOS, winner of both the Ann and Phil Jesup Botanical Trophy for the most outstanding species and the Butterworth prize for the most outstanding example of orchid culture.
- [2] Cattleya percivaliana 'Dave Off' FCC/ AOS, winner of the Masatoshi Miyamoto Award for the most outstanding Cattleya AllianceS.





set on a pedestal!

The Herbert Hager Award is given to the grower of the most outstanding example of the genus Phalaenopsis: Phalaenopsis Phoenix Firefight 'Phoenix Ruby' FCC/AOS awarded on September 6, at Desert Valley Orchid Society, Outreach, Pacific South Judging Center; exhibitor: Wes Addison; photographer: Eric Goo. Wes commented, "I was able to celebrate this FCC with Eric Goo, the hybridizer (a 30-year plus friend) and the first FCC for one of his crosses. This is the second time in four years that one of Eric's crosses has garnered this special award and should be an inspiration for small hybridizers." Wes said he almost gave this plant away; that would not have been a good choice!

The Roy T. Fukumura Award is given to the grower of the orchid regarded as the most outstanding example of the genus Vanda and those genera in the subtribe Aeridinae, which hybridize with Vanda: Vanda Noppadol Delight 'Julia Elizabeth' AM/AOS awarded on September 25, at the Louisiana Center Monthly Judging; exhibitor: Eron Borne; photographer: Susan Hathorn. Eron answered my question, "The pattern of this flower is mesmerizing, and the color is electric pink! What makes it even more special is that it has always bloomed with two or three spikes, making for a striking and spectacular display!"

The James and Marie Riopelle



Award is given to the grower of the most outstanding example of Miltonia/ Miltoniopsis: Miltoniopsis Morris Chestnut 'H171' AM/AOS awarded March 20, at Great Plains Center Monthly Judging; exhibitor: Max C. Thompson; photographer: Bryon Rinke. Bryon commented, "Miltonias and miltoniopsis are difficult for us to grow in Kansas. We keep them near the wet wall and shaded. These flowers were a real showstopper at judging!" Indeed, the lip markings look like a real waterfall!

The Carlyle A. Luer Award is given to the grower of the most outstanding example of the Pleurothallid Alliance:

- [3] Phragmipedium Stairway to Heaven 'Max' CCE/AOS, winner of the W.W. Wilson Award for the most outstanding example of the Cypripedioideae.
- [4] Phalaenopsis Phoenix Firefight 'Phoenix Ruby' FCC/AOS, winner of the Herbert Hager Award for the most outstanding Phalaenopsis.
- [5] Vanda Noppadol Delight 'Julia Elizabeth' AM/AOS, winner of the Roy T. Fukumura Award for the most outstanding Vanda or other genera in the Aeridinae that hybridize with Vanda.





Lepanthes guatemalensis 'Silas' CHM/ AOS awarded on October 9 at the Illinois Orchid Society Show, Chicago Judging Center; exhibitor: Walter E. Crawford; photographer: Katie Payeur. Walter said, "I'm just an old guy who grows orchids in the Midwest. I started growing orchids in 1976. Shortly thereafter, I found Dr. Carlyle A. Luer's 'Green Books,' the Icones Pleurothallidinarium, and read as much as I could about these genera. I am fascinated by the beauty, form and color of Lepanthes and am humbled and honored to have a plant that qualified for this award." Walter can pack more orchids in a small space at shows than anyone I know!

The Benjamin Kodama Award is given to the grower of the most outstanding Dendrobium Alliance: Dendrobium chrysotoxum 'Julie Wert' AM/CCE/AOS awarded on April 28 at the Florida North-Central Judging Center; exhibitor: Cheryl Finke; photographer: Kay Clark. Cheryl said, "I bought the plant in 2010 for \$7, it seems to have the right climate, positioning in the pool cage, along with an automated watering system, repotted every few years, and always kept in a ceramic pot. When it is really, really cold, as in freezing here, I do bring the plant into the garage. Now I must use a dolly. It has always been a reliable bloomer. This is my first and only CCE award. Considering I don't really baby it, cool to get a national award!"

The Robert B. Dugger Odontoglossum Award recognizes the best of orchids with the former genus, *Odontoglossum*, in their background: *Oncostele* Eye Candy 'Penny Candy' AM/AOS was awarded





- [6] Miltoniopsis Morris Chestnut 'H171' AM/AOS, winner of the James and Marie Riopelle Award for the most outstanding Miltonia or Miltoniopsis.
- [7] Lepanthes guatemalensis 'Silas' CHM/ AOS, winner of the Carlyle A. Luer Award for the most outstanding example of the Pleurothallid Alliance.
- [8] Dendrobium chrysotoxum 'Julie Wert' AM-CCE/AOS, winner of the Benjamin Kodama Award for the most outstanding example of the Dendrobium Alliance.
- [9] Oncostele Eye Candy 'Penny Candy' AM/AOS, winner of the Robert B. Dugger Award for the best example in the former Odontoglossum and their hybrids.





October 22 at Hawaii Center Monthly Judging, Big Island; exhibitor: Okika Ltd.; photographer: Glen Barfield. "I made *Ons*. Eye Candy in the early 2000s and have been making hybrids for the pot plant industry since 1995. This hybrid was very fast growing and produced two plants, 'Penny Candy' and 'Pinkie', which I cloned. Both have received Awards of Merit. I'm delighted that this grex has received this attention," Aloha, Glen.

The Milton Carpenter Intergeneric Oncidinae Award is for the most outstanding example of intergeneric hybridizing within the Oncidiinae: Aliceara Sophia Liebman 'Rustic #1' AM/AOS awarded at Pacific South Monthly Judging on September 11; exhibitor: Howard Liebman, MD; photographer: Arnold Gum. Howard is a well-known "active grower and long-time hybridizer of odontoglossum and oncidium intergeneric hybrids." This cross comes from the lineage of Bratonia (Miltassia) Charles M. Fitch and its offspring Aliceara Marfitch, which he and Robert Dugger made at about the same time. Dugger registered it first. The color of this clone seems appropriate for Dr. Leibman, who as a physician specializes in blood diseases.

The Fred Hillerman Award is given to the grower of the orchid plant regarded as the most outstanding example of the Angraecoid Alliance: Angranthes Grandalena 'Big Bear's Ivory Star' FCC/AOS awarded January 30 at the Florida West Coast Orchid Society Show (Largo, Florida), Florida North-Central Judging Center; exhibitor: Ryan Kowalczyk; photographer: Wes Newton. This spectacular orchid is a rather uncommon cross between Aeranthes and Angraecum with only 28 hybrids registered. This grex





- [10] Aliceara Sophia Liebman 'Rustic #1' AM/AOS, winner of the Milton Carpenter Intergeneric Oncidiinae Award for the most outstanding example of intergeneric hybridizing in Oncidiinae.
- [11] Angranthes Grandalena 'Big Bear's Ivory Star' FCC/AOS, winner of the Fred Hillerman Award for the most outstanding example of the Angraecoid Alliance.
- [12] Cymbidium Jungle King 'Red Rooster' AM/AOS, winner of the Ernest Hetherington Award for the most outstanding Cymbidium.
- [13] Anguloa eburnea 'Lisse' AM/CCM/AOS, winner of the Benjamin C. Berliner Award for the most outstanding Lycaste, Ida, Anguloa species or hybrid.

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has 10 AOS awards. Ryan commented, "I am a hobby grower, and to have one of my plants recognized as being one of the best is an honor. To make this even more special to me is that this is the second year in a row, and the third time in my many years of growing, that I have been given this recognition ... I'm very humbled and appreciative." This should give other hobby growers encouragement and hope!

The Ernest Hetherington Award is given to the grower of the most outstanding example of the genus Cymbidium: Cymbidium Jungle King 'Red Rooster' AM/AOS awarded at West Palm Beach Center Monthly Judging on March 27; exhibitor: Everglades Orchids, photographer: Tom Kuligowski. Nineteen large, deep rose flowers on two upright inflorescences highlighted an amazing crimson and cream lip. I could see these flowers as corsages at prom; does anyone else remember those days?

The Benjamin C. Berliner Award is given to the grower of the most outstanding example of the genera Lycaste, Ida (Sudamerlycaste) or Anguloa: Anguloa eburnea 'Lisse' AM/CCM/AOS awarded August 21 at the Great Plains Center Monthly Judging; exhibitor: Douglas Needham; photographer: Bryon Rinke. "I got 'bit by the orchid bug' as a teenager," said Douglas, and "I was entranced with the elegance of Anguloa and made it one of my goals to grow. In retirement, I now have the glasshouse conditions to grow this spectacular genus." As an added benefit, the flowers have a lovely fragrance.

The Bill Thoms Award is given to the most outstanding example of the Bulbophyllinae: Bulbophyllum Tree Frog 'Crystelle' FCC/AOS awarded on August 6 at the International Phalaenopsis Alliance Symposium (Altamonte Springs, Florida); exhibitor: Krull-Smith; photographer: Ramon de los Santos. No, this is not a "moth" orchid, but it is big enough, at 3.1 inches (8 cm) horizontal spread. The four flowers show vibrant color and may not even smell bad!

The Frank Sr. and Elizabeth Jasen Award is for the most outstanding example of the Stanhopea Alliance: Stanhopea Assidensis 'Max & Bryon' AM/AOS awarded on August 21 at the Great Plains Center Monthly Judging; exhibitors: Max Thompson and Bryon Rinke; photographer: Bryon Rinke. Bryon mentioned, "This plant flowered for us for the first time in 2014 and is a shy bloomer. The plant has become quite large but ...







- [14] Bulbophyllum Tree Frog 'Crystelle' FCC/ AOS, winner of the Bill Thoms Award for the most outstanding Bulbophyllum.
- [15] Stanhopea Assidensis 'Max & Bryon' AM/AOS, winner of the Frank Sr. and Elizabeth Jasen Award for the most outstanding example of the Stanhopinae.
- [16] Dracula gorgona (Xanthina) 'Pride & Joy' FCC/AOS, winner of the Mario and Conni Ferrusi Award for the most outstanding Masdevallia, Dracula or Dracuvallia.

we keep it around anyway." Perseverance seems to have paid off!

The Mario and Conni Ferrusi Award is given to the grower of the most outstanding example of Masdevallia, Dracula or Dracuvallia: Dracula gorgona (Xanthina) 'Pride & Joy' FCC/AOS, August 27 at Hawaii Center Monthly Judging, Big Island; exhibitors: Ben Oliveros and Orchid Eros; photographer: Glen Barfield. "Xanthitic (yellow) Draculas are so alluring, rare, and hard to grow, that this award was a surprise. It is an amazing flower deserving of an FCC and beautifully photographed by Glen Barfield," said Ben.

The Fuchs Family Award is given to the most outstanding example of the genus Vanda (intergeneric hybrids are excluded from consideration): Vanda La Voyce Porter 'Crownfox' AM/AOS awarded March 21 at East Everglades Orchid Society, Outreach, West Palm Beach Judging Center; exhibitor: R.F. Orchids, Inc.; photographer: Tom Kuligowski. Robert Fuchs says this is one of his attempts to breed unusually colored vandas; this "hybrid is between a rich yellow with red spots and a deep raspberry. One parent, Vanda CrownFox Avocado Honey received an AQ and several AOS awards. We have incorporated this hybrid into our breeding program and produced some outstanding, unusual sunset shades."

The Walter Off Exhibit Award is given to an AOS Show Trophy Award (ST), Silver Certificate (SC), Gold Certificate (GC), or Educational Award (EC) that is recognized as the most outstanding example of these types of awards. American Orchid Society Show Trophy, Oklahoma Orchid Society Show 'Bewitched by Orchids' ST/GC/AOS, October 2, Great Plains Judging Center; exhibitors: Max Thompson and Bryon Rinke; photographer: Bryon K Rinke. This was a beautiful tabletop exhibit measuring 3 feet (91 cm) wide × 8 feet (244 cm) long × 5 feet (152 cm) tall, with 23 plants nicely spaced. "The exhibit was put together by Bryon Rinke. Max Thompson is the one that sits back and tells him to move the plants to the left or right, up or down, turn it one way or the other, and if the color flow is correct," relates Bryon. "We put the exhibit up in about one hour and it paid off!"

The Paul and Mary Storm Award is given to the grower of the orchid plant that is regarded as the most outstanding example of a hybrid with at least one former *Schomburgkia* species in its background (now *Myrmecophila* and part of *Laelia*): *Myrmecocattleya* Marissa's





Aurora 'Rockin Robin' AM/AOS on April 24 at the West Palm Beach Center Monthly Judging; exhibitor: Robin Lemke-Fasulo; photographer: Tom Kuligowski. Robin said, "I purchased the winning young orchid roughly five years ago and suspected it was worthy of entering for AOS judging when it first bloomed. Fortunately, the next time it bloomed was just prior to an AOS judging weekend. I was beyond thrilled when it won an AM, my first award ever, and now the recipient of this award, is beyond belief and a dream come true!"

- [17] Vanda LaVoyce Porter 'Crownfox' AM/AOS, winner of the Fuchs Family Award for the most outstanding example of Vanda (intergeneric hybrids are excluded).
- [18] Winner of the Walter Off Exhibit Award for the most outstanding Silver Certificate, Gold Certificate or Show Trophy display.

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The Martin Motes Orchid Breeder's Award is given to the breeder and exhibitor of the best Award of Quality (AQ) or Award of Distinction (AD). The goal is to encourage hybridizers and growers to exhibit their work and to make more hybrids: Cycnoches cooperi ('Orchid Eros' AM/AOS × 'Sebastian Ferrell') AQ/AOS presented October 9 at Hawaii Center Monthly Judging, Big Island; exhibitors: Ben Oliveros and Orchid Eros; photographer: Glen Barfield. Ben said, "This was my third generation of line breeding from a flask of cooperi ... they continued to garner awards with each generation, and this one was 'mission accomplished'— an FCC and the AQ. It gets no better than this for a breeder or exhibitor!"

The Renée and Marvin Gerber Award is given to the grower of the most outstanding hybrid with *Brassavola* as a parent: *Brassocattleya* Hamlyn's Magic 'Rowan's Return' AM/AOS awarded November 13 at Hawaii Center Monthly Judging, Big Island; exhibitors: Ben Oliveros and Orchid Eros; photographer: Glen Barfield. "I (Ben) did a remake of *Bc*. Hamlyn's Magic that created this cultivar. Many of the seedlings were well-shaped with good color, but this was by far the best. With flowers that change color as they age, it presented a spectrum of colors on multiple inflorescences."

The Merritt W. Huntington Award is given to the grower of the most outstanding flower to have been awarded a First Class Certificate (FCC) during the preceding calendar year: Bulbophyllum claptonense (Flavum) 'Crystelle' CHM/ FCC/AOS awarded on July 24 at the Florida North-Central Judging Center; exhibitor: Krull-Smith; photographer: Wes Newton. This species was originally classified as a taxonomic form of Bulbophylum lobbii. Bulbophyllum claptonense has a large, thickened, yelloworange callus in the middle of the lip, as does this plant, which is absent in Bulb. lobbii. The yellow form of this species is not a described taxonomic form. To separate it from the typically colored variants of the species, the word Flavum is added after the species name in parentheses and not italicized.

And thus, we come to the end of this year's awards. Special flowers, special exhibitors, special photographers, and fun comments. I hope this does indeed answer the question proposed in the title.

— Nile S. Dusdieker (email niledusdieker@gmail.com).







- [19] Myrmecocattleya Marissa's Aurora 'Rockin Robin' AM/AOS, winner of the Paul and Mary Storm Award for the most outstanding hybrid involving a former schomburgkia.
- [20] Winner of the Martin Motes Breeder's Award for the most outstanding Award of Quality or Award of Distinction; Cycnoches cooperi ('Orchid Eros' AM/AOS x 'Sebastian Ferrell') AQ/AOS.
- [21] Brassocattleya Hamlyn's Magic 'Rowan's Return' AM/AOS, winner of the Reneé and Marvin Gerber Award for the most outstanding hybrid of brassavolas.
- [22] Bulbophyllum claptonense (Flavum) 'Crystelle' CHM-FCC/AOS, winner of the Merritt W. Huntington Award for the most outstanding First Class Certificate.



Fast Forward to Normal



2022 BROUGHT US firmly into the New Normal. Gradually at first, then speedily at the end. Many orchid societies resumed regular meetings, and others adopted a combined video conference such as Zoom plus the in-person type of attendance or entirely by video conference. Orchid shows resumed or were in the planning stages for 2023. Regardless, at year's end, our orchid community shifted into something resembling normalcy.

Our orchids did not seem to be harmed; previous shutdown periods gave us more time to care for them than usual. Unsurprisingly, the number of orchids awarded in AOS judging also spiked (pun intended). This gave us a robust list of specimens to choose from in our review of the 2022 First Class Certificates.

The First Class Certificate (FCC) is the AOS's highest flower quality award. When judges evaluate a flower for form, they look for fullness, flatness and balance between the flower segments. Is the color clear, without breaks, with any markings distinct? The overall habit, floriferousness, size, substance and texture of the flower also contribute to a total score for the flower's quality. The average of the team's scores must be 89.5 points or higher on a scale of 100 to receive a First Class Certificate.

Ninety-eight FCC awards were granted in 2022, a robust increase of 33% over 2021. Although Florida growers dominate the list, awardees also represented most of the country and some international venues. All this year's top scorers have one thing in common: extraordinary traits in both blooms and breeding with many also receiving cultural and breeding commendations.

Slipper orchids dominated, with 22 FCCs. Paphiopedilums had 20 and phragmipediums two. This number is double the count for the previous year, reflecting the popularity of growing and showing slippers in judging centers opening across the country. Multifloral paphiopedilums as a group received 11, half the slipper total, and had the plants with the highest point scores.

Paphiopedilum Yasumasa Takahashi 'Crystelle' scored 96 points last April at the Apopka International Orchid Festival. This multifloral hybrid is Paphiopedilum (Harold Koopowitz × rothschildianum), essentially one-quarter Paphiopedilum malipoense with a three-quarter dose of rothschildianum. Despite the single-flowered malipoense parent, it had seven striking, chartreuse flowers with dark mahogany markings and two buds on a







- [1] Paphiopedilum Shen-Liu William Ani 'Frank Smith' FCC/AOS; exhibitor: Krull-Smith; photographer: Wes Newton
- [2] Paphiopedilum Yasumasa Takahashi 'Crystelle' FCC/AOS; exhibitor: Krull-Smith.
- [3] Cattleya tenebrosa 'Isabel Rosalia' FCC/ AOS; exhibitor: Ben Oliveros — Orchid Fros
- [4] Cattleya purpurata (Werkhauseri-Striata)'Stevie Ray Vaughan; exhibitor: BenOliveros Orchid Eros.





27.9-inch (71.0-cm) inflorescence. Even more impressive, this cultivar, exhibited by Krull-Smith, was elevated from a previous 92-point FCC in 2010, that had two flowers and two buds.

The second highest at 95 points is Paphiopedilum Shen-Liu William Ani 'Frank Smith'. Exhibited at the Tampa Bay Orchid Society last March by Krull-Smith, it has three species contributing to its breeding: Paph. rothschildianum for form and vigor, Paphiopedilum wilhelminae for dark color and compactness, and Paphiopedilum adductum var. anitum to add saturation to the color of the dorsal sepal and pouch.

Cattleya and its relatives had a strong showing with almost as many awards (21) as the slipper orchid group. Ben Oliveros of Orchid Eros, on the Big Island of Hawaii, had five, four of which were species: Cattleya tenebrosa 'Isabel Rosalia' 92 points, Cattleya Brazilian Midway 'Too Good Too' 91 points, Cattleya purpurata (Werkhauseri-Striata) 'Stevie Ray Vaughan', Cattleya dowiana var. aurea 'Gabriel Amaru' and Cattleya brevipedunculata 'Gabriel Amaru' — all with 90 points. For Cattleya brevipedunculata, it was the first FCC for this miniature, vibrant-red, cooltolerant species.

Two separate directions in phalaenopsis breeding each received multiple FCCs and an Award of Quality



(AQ) in 2022. An AQ is given to a cross presented with at least a dozen plants, at least one of which has been granted with a flower quality award within the group. Phalaenopsis Samera 'Elizabeth', 90 points, is a summer-blooming hybrid of Phalaenopsis bellina and violacea, famous for producing deep-lavender or indigo color in its progeny. Two additional awards, both 91 points, exhibited by Bredren Orchids and Phillip Hamilton,

- [5] Cattleya dowiana var. aurea 'Gabriel Amaru' FCC/AOS; exhibitor: Ben Oliveros - Orchid Eros.
- [6] Phalaenopsis Samera 'Elizabeth' FCC/AOS; Bredren Orchids — Phillip Hamilton.
- [7] Cattleya brevipedunculata 'Gabriel Amaru' FCC/AOS; exhibitor: Ben Oliveros - Orchid Eros.





were 'Xavier' and 'Bredren's Bonanza'.

Phalaenopsis Krull's Red Dragon 'Frank Smith', 91 points, exhibited by Krull-Smith, got its own multiple FCC/AQ awards. This grex uses the prolific parent Phalaenopsis Dragon Tree Eagle for round, substance-heavy flowers with saturated-red or orange colors. The cultivars 'Atticus' and 'Jordon Winter' also each received 92 points.

Fowlieara, Fredclarkara and Nottara are names for intergeneric hybrids created by combining three or more genera. Rather than create unpronounceable names from combinations of all parent genera, these manmade genera usually honor a hybridizer or other individuals in the orchid world. In 2022, we have three with FCCs.

Fowlieara is a genus named after Dr. Jack Fowlie, a paphiopedilum enthusiast and former editor of the Orchid Digest. Fowlieara Rhizome Cowgirl 'Rose of Cimmaron' contains Brassavola, Broughtonia, Cattleya, Guarianthe and Rhyncholaelia. This wonderful blend of orchid genetics produced nine, bright red-purple flowers, receiving 92 points and exhibited by Bill Nunez.

Fredclarkeara, named for grower and hybridizer Fred Clark of Sunset Valley Orchids, combines Catasetum, Clowesia, and Mormodes. It is one of the most highly awarded genera in the American Orchid Society. Fredclarkeara Doubtless 'Paul's Sweetheart' adds to that with 90 points.





Exhibitor Corinne Arnold brings it to us with 19 burgundy-stippled mauve flowers and 10 buds on two inflorescences.

Nottara Lucy's Sassafras 'Tightie Whitie' got 90 points for exhibitor Tony



- [8] *Phalaenopsis* Krull's Red Dragon 'Frank Smith' FCC/AOS; exhibitor: Krull-Smith.
- [9] *Phalaenopsis* Krull's Red Dragon 'Atticus' FCC/AOS; exhibitor: Krull-Smith.
- [10] Phalaenopsis Krull's Red Dragon 'Jordon Winter'; exhibitor: Krull-Smith.
- [11] Fowlieara Rhizome Cowgirl 'Rose of Cimmaron' FCC/AOS; exhibitor: Bill Nunez.
- [12] Fredclarkeara Doubtless 'Paul's Sweetheart' FCC/AOS; exhibitor: Corrine Arnold.

Casler and combines *Batemannia*, *Galeottia*, *Neogardneria*, *Pabstia* and *Zygopetalum* for a blend of seven species across five genera in its complex, Zygopetalum Alliance background. The

genus created a breeding direction for warm-growing zygopetalums and honors David Nott, whose daughter Lucy thought the hybrid's fragrance resembled root beer.

Plectrelminthus caudatus 'Missy's Splendid Stunner' got 90 points for 23 dark-olive flowers on two inflorescences at the September Alabama Orchid Society Show in Birmingham, Alabama. This species was at one time called Angraecum caudatum, with its familiar angraecoid spur and evening fragrance. Widespread in West Africa, it is a less commonly seen species with its first FCC. Carson Barnes, the exhibitor, also received a 92-point Certificate of Cultural Excellence. Certificates of Cultural Excellence are awarded to an exhibitor for a point score of 89.5–100 on the Cultural Award Scale.

Rhynchostylis coelestis has both the typical and coerulea varieties of this fragrant, floriferous species awarded in two separate AQ awards. 'Krull's Jordon Winter' received 94 points for its foxtail, pink form with 59 flowers and three buds on one 15-inch (39-cm) inflorescence. The coerulea form, 'Crystelle', 93 points, had 121 flowers on three inflorescences. Both were exhibited by Krull-Smith.

Aeridovanda Redland Gold 'Crownfox Hot Lips', 90 points, is a combination of a standard vanda, Vanda Nopporn Gold, with Aerides lawrenceae. The result for exhibitor R.F. Orchids is a floriferous arrangement of 19 bright yellow—green flowers with prominent spurs on one 20.4-inch (52-cm) inflorescence.

Another vandaceous hybrid crosses *Vanda* Kultana Ruby, a classic red, *sanderiana*-type vanda with *Papilionanda* Josephine Van Brero, a hybrid first made in 1936. *Papilionanda* Pamela Jakubowicz 'Lissabug', carried 12 lightly tessellated, coral flowers and one bud on a single inflorescence. This warm grower received 91 points for quality and a Certificate of Cultural Merit (CCM) of 87 points for exhibitor Melissa Garner at the Atlanta Orchid Society Show. Certificates of Cultural Merit awards are given to the exhibitor for cultural scores between 79.5 and 89.4 on the Cultural Award Scale.

Here we present our FCCs for 2022. Last year, I hoped that we could soon see and appreciate in person all the wonderful orchids in our community. I think that day has finally arrived!

— Carol Klonowski (email cklonowski@ aol.com).









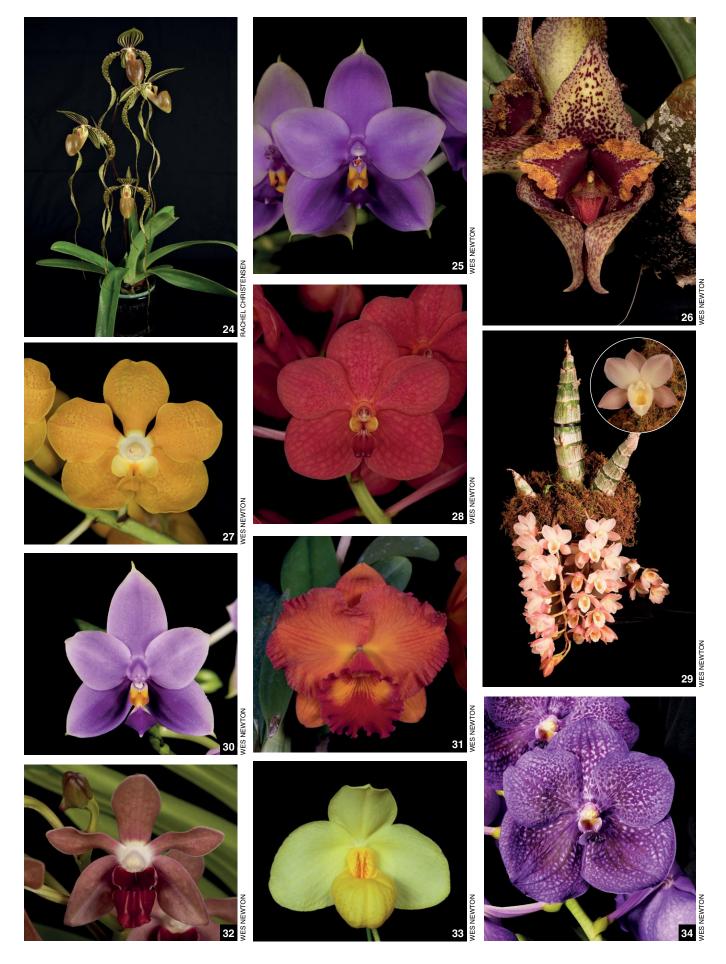


- [13] Nottara Lucy's Sassafras 'Tightie Whitie' FCC/AOS; exhibitor: Tony Casler.
- [14] Plectrelminthus caudatus 'Missy's Splendid Stunner' FCC/AOS; exhibitor: Carson Barnes.
- [15] Rhynchostylis coelestis 'Franklin Atticus' FCC/AOS; exhibitor: Krull-Smith.
- [16] Papilionanda Pamela Jakubowicz 'Lissabug' FCC/AOS; exhibitor: Melissa Garner.
- [17] Aeridovanda Redland Gold 'Crownfox Hot Lips' FCC/AOS; exhibitor: R.F. Orchids, Inc.



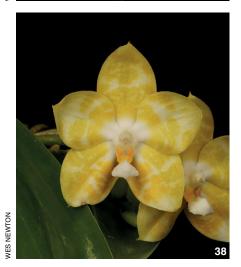


- [18] Cattleya intermedia (Orlata) 'Memoria Pete Otway' FCC/AOS; exhibitor: Beth Lamb.
- [19] Phalaenopsis Krull's Pretty in Pink 'Crystelle' FCC/AOS; exhibitor: Krull-Smith.
- [20] Dendrobium Jamaica Lass 'Bredren' FCC/AOS; Bredren Orchids and Phillip Hamilton
- [21] *Paphiopedilum* Florida Angel 'Crystelle' FCC/AOS; exhibitor: Krull-Smith.
- [22] Vanda Frank Smith 'Crystelle' FCC/ AOS; exhibitor: Krull-Smith.
- [23] Paphiopedilum rothschildianum 'James C. Arnold' FCC/AOS; exhibitor: James Arnold.



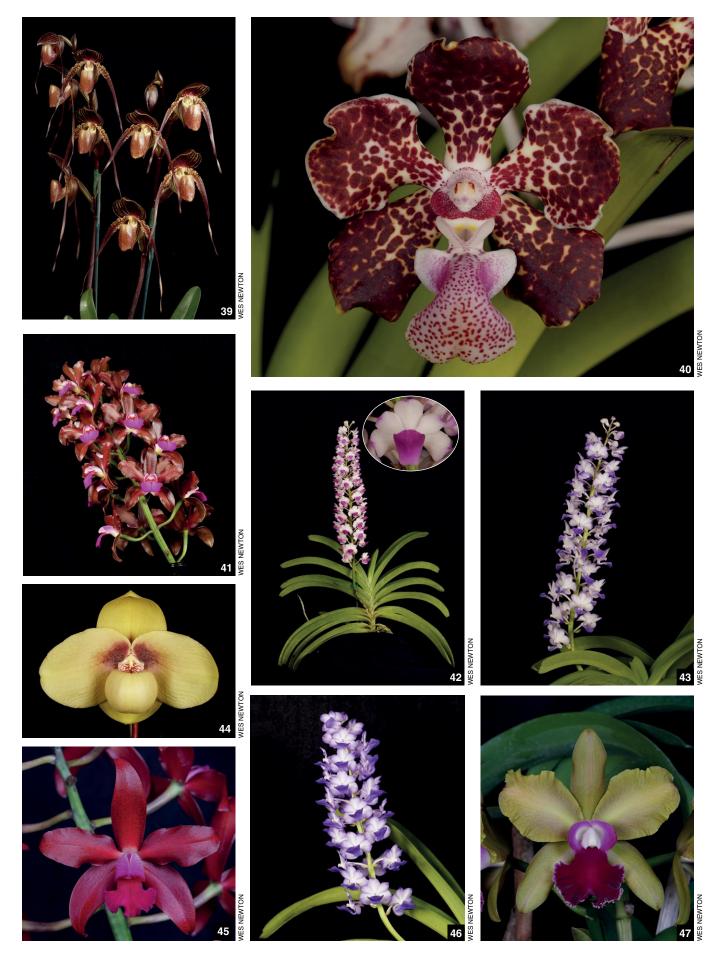








- [24] Paphiopedilum Booth's Sand Lady 'WingDreams' FCC/AOS; exhibitor: Julio and Eileen Hector.
- [25] *Phalaenopsis* Samera 'Bredren's Bonanza' FCC/AOS; exhibitor: Bredren Orchids and Phillip Hamilton.
- [26] Bulbophyllum macrobulbum 'Jim Krull' FCC/AOS; exhibitor: Krull-Smith.
- [27] Vanda Xena 'Garrett's Golden Surprise' FCC/AOS; exhibitor: Sharon and David Garrett.
- [28] Vanda David Foster 'Garrett's Blazing Star' FCC/AOS; exhibitor: Sharon and David Garrett.
- [29] Clowesetum Melana's Daughter 'Corrine's Obsession' FCC/AOS; exhibitor: Corrine Arnold
- [30] *Phalaenopsis* Samera 'Xavier' FCC/AOS; exhibitor: Bredren Orchids and Phillip Hamilton.
- [31] Rhyncholaeliocattleya Golden Life 'Big Bear's Orange Crush' FCC/AOS; exhibitor: Ryan Kowalczyk.
- [32] Papilionanda Naoki Kawamura 'Frank Smith' FCC/AOS; exhibitor: Naoki Kawamura.
- [33] Paphiopedilum Franz Glanz 'Crystelle' FCC/AOS; exhibitor: Krull-Smith.
- [34] Vanda Atticus 'Crystelle' FCC/AOS; exhibitor: Krull-Smith.
- [35] Bulbophyllum romyi 'Crystelle' FCC/AOS; exhibitor: Krull-Smith.
- [36] Paphiopedilum Athena 'Crystelle' FCC/AOS; exhibitor: Krull-Smith.
- [37] Paphiopedilum delenatii f. vinicolor 'Crystelle' FCC/AOS; exhibitor: Krull-Smith.
- [38] Phalaenopsis Yaphon Love Song 'Crystelle' FCC/AOS; exhibitor: Krull-Smith.











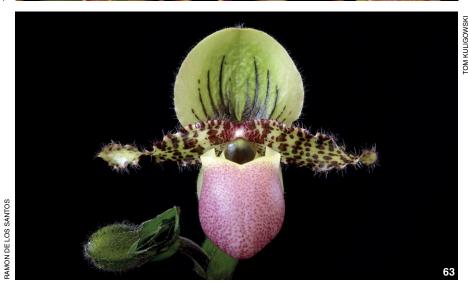
- [39] Paphiopedilum Johanna Burkhardt 'Memoria Ariel Crews' FCC/AOS; exhibitor: James Arnold.
- [40] Vanda lombokensis 'Naoki' FCC/AOS; exhibitor: Naoki Kawamura.
- [41] Cattleya Mrs. Mahler 'Crystelle' FCC/AOS; exhibitor: Krull-Smith.
- [42] Rhynchostylis coelestis 'Krull's Jordon Winter' FCC/AOS; exhibitor: Krull-Smith.
- [43] Rhynchostylis coelestis var. coerulea 'Krull's Blue Lady' FCC/AOS; exhibitor: Krull-Smith.
- [44] Paphiopedilum hangianum 'Crystelle' FCC/AOS; exhibitor: Krull-Smith.
- [45] Cattleya Florence Lin 'Crystelle' FCC/ AOS; exhibitor: Krull-Smith.
- [46] Rhynchostylis coelestis var. coerulea 'Crystelle' FCC/AOS; exhibitor: Krull-Smith.
- [47] Rhyncholaeliocattleya Graf's Rochelera 'Big Bear's Bronze Goddess' FCC/AOS; exhibitor: Ryan Kowalczyk.
- [48] *Rhynchostylis coelestis* 'Krull's Viola' FCC/AOS; exhibitor: Krull-Smith.
- [49] Bulbophyllum ericssonii 'Crystelle' FCC/ AOS; exhibitor: Krull-Smith.
- [50] Miltoniopsis vexillaria 'Alma del Bosque' FCC/AOS; exhibitor: Daniel Piedrahita-Thiriez.
- [51] Vanda Jim Krull 'Krull's Masterpiece' FCC/AOS; exhibitor: Krull-Smith.









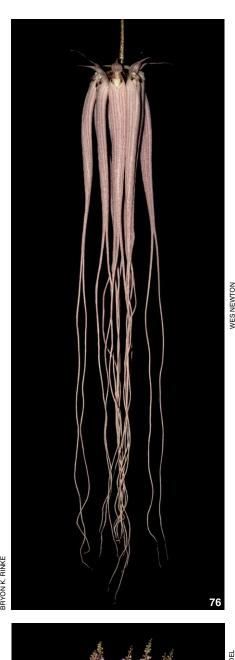


- [52] Myrmecocattleya Erin Courtney's Suncoast 'So Orchids' FCC/AOS; exhibitor: So Orchids.
- [53] Guarechea Black Comet 'Octopus' FCC/AOS; exhibitor: Alexandra Kontos.
- [54] Vanda Ruchiroj 'Dreamcatcher' FCC/ AOS; exhibitor: R.F. Orchids, Inc.
- [55] Cattleya trianae 'Pink Hippos' FCC/ AOS; exhibitor: Orquifollajes.
- [56] Phragmipedium schlimii var. manzurii 'Gloria Maria' FCC/AOS; exhibitor: Gloria Arriola.
- [57] Paphiopedilum philippinense 'Hector' FCC/AOS; exhibitor: Ramon de los Santos.
- [58] Stanhopea tigrina var. nigroviolacea 'Black Widow' FCC/AOS; exhibitor: Patricia Recio Villegas.
- [59] *Prosthechea prismatocarpa* 'Cami' FCC/AOS; exhibitor: Karina Arango.
- [60] Dendrobium lasianthera 'Frank Smith' FCC/AOS; exhibitor: Krull- Smith.
- [61] Vanda Christine Morales 'Crownfox'
 FCC/AOS; exhibitor: R.F. Orchids, Inc.
- [62] Cattleya violacea (Flamea) 'Crownfox' FCC/AOS; exhibitor: R.F. Orchids, Inc.
- [63] *Paphiopedilum victoria-regina* 'Betty' FCC/AOS; exhibitor: Dawn Dawson.
- [64] Catasetum Diana's Dotts 'Yosemite Sam' FCC/AOS; exhibitor: Robert Hydzik.
- [65] Vanda Tere Camacho 'Crownfox' FCC/ AOS; exhibitor: R.F. Orchids, Inc.

















- [66] Paphiopedilum Crystelle 'Nike' FCC/ AOS; exhibitor: Ernie Barham.
- [67] Cattleya Mr Bojangles 'Crystelle' FCC/ AOS; exhibitor: Krull-Smith.
- [68] Paphiopedilum Dollgoldi 'Golden Crane' FCC/AOS; exhibitor: Jayson Western.
- [69] Phalaenopsis bellina 'Lady Stella' FCC/ AOS; exhibitor: Melida Demorizi.
- [70] Catasetum Memoria Dorothy Wells 'Jim and Melana' FCC/AOS; exhibitor: Melana and Jim Davison.
- [71] Cattleya Brazilian Midway 'Too Good Too' FCC/AOS; exhibitor: Ben Oliveros and Orchid Eros.
- [72] Rhyncholaeliocattleya Maui Dots 'Chocolate Spots' FCC/AOS; exhibitor: Michael Blietz.
- [73] Bulbophyllum Walnut Valley Jersey 'Timbucktoo' FCC/AOS; exhibitor: Sarah Pratt.
- [74] Vanda tessellata 'Lucia Motes' FCC/ AOS; exhibitor: Motes Orchids, Inc.
- [75] Phragmipedium Mama Hanh Thi Nguyen 'Wacousta' FCC/AOS; exhibitor: Dorothy Potter Barnett.
- [76] Bulbophyllum longissimum 'Bryon' FCC/ AOS; exhibitor: Bryon K. Rinke.
- [77] Bulbophyllum Manchind 'Crystelle' FCC/ AOS; exhibitor: Krull-Smith.
- [78] Vanda coerulea 'Okika' FCC/AOS; exhibitor: Okika Ltd., Glen Barfield.
- [79] Paphiopedilum delenatii f. albinum 'MS' FCC/AOS; exhibitor: Michael Summers.
- [80] Rhynchostylis coelestis 'Caleb's Gift' FCC/AOS; exhibitor: Robin Collins.
- [81] Prosthechea citrina 'Monster' FCC/ AOS; exhibitor: Ramon de los Santos.







- [83] Guarianthe skinneri 'Gerson Villalobos Fontana' FCC/AOS; exhibitor: Gerson Villalobos.
- [84] Guarianthe skinneri 'Ornamentales Ledezma' FCC/AOS; exhibitor: Magdalena Ledezma.
- [85] Guarianthe skinneri 'El Chirripo' FCC/AOS. Exhibitor: Carlos Solis; Photographer: Jorge Enrique Cespedes. Puerto Rico Judging
- [86] Rhyncholaeliocattleya Spotted Cheetah 'Erick' FCC/AOS; exhibitor: Erick Arce.
- [87] Rhyncholaeliocattleya Nilsa Santiago 'Jeffery Paul Davis' FCC/AOS; exhibitor: Konnor Jenson.
- [88] Phalaenopsis bellina 'Kingfisher's Finest' FCC/AOS; exhibitor: Pat van Adrichem.
- [89] Paphiopedilum Crouching Tiger 'Julio David' FCC/AOS; exhibitor: Julio David Rios.
- [90] Paphiopedilum charlesworthii f. sandowiae (album) 'Immaculate' FCC/AOS; exhibitor: Dr. Leslie Ee, ND.
- [91] Phragmipedium Greta Twee 'Windy Hill's Champion' FCC/AOS; exhibitor: Marilyn
- [92] Paphiopedilum Harold Koopowitz 'Atticus' FCC/AOS; exhibitor: Krull-Smith.
- [93] Dendrobium Haleahi Streamers 'Machiavelli' FCC/AOS; exhibitor: René E. Garcia.
- [94] Cattleya Peckaviensis 'Jordon Winter' FCC/AOS; exhibitor: Jordon Winter.
- [95] Cattleya Measuresiana 'Crystelle' FCC/AOS; exhibitor: Krull-Smith.
- [96] Paphiopedilum Dire Wolf 'Hillsview' FCC/AOS; exhibitor: Hillsview Gardens.
- [97] Encyclia cordigera 'Bravo Orchids' FCC/AOS; exhibitor: William Tse.
- [98] Cattleya warneri var. semialba 'Glenda' FCC/AOS; exhibitor: Erick Arce.











New Records of Lepanthes Sw. from Ecuador

Part 1: Three New Species

BY ALFONSO DOUCETTE, HUGO MEDINA, AND JOSÉ PORTILLA/ PHOTOGRAPHS AND ILLUSTRATIONS BY ALFONSO DOUCETTE UNLESS OTHERWISE CREDITED

ABSTRACT Three new species of *Lepanthes* are described from Ecuador: *Lepanthes desmondleeana*, *Lepanthes doucettei*, and *Lepanthes pupuliniana*. The new species are compared with the species that are most similar morphologically in the diagnosis and illustrations and photos are provided. Wild material used for the research presented here was gathered under Rescate, conservación, reproducción y manejo ex situ de la flora del Ecuador," authorization No. 004-2016-IC-FLO-DNB/MA del Ministerio del Ambiente and used in accordance with La Codificación a la ley Forestal y de Conservación de Área Naturales y Vida Silvestre, authorized for Ecuagenera Cia. Ltda.

KEY WORDS cool growing orchids, discovered at Ecuagenera, Ecuadorian orchids, miniature orchids, Andean orchids

INTRODUCTION The genus Lepanthes Sw. was first recognized in 1799 based on a species previously attributed to Epidendrum L., Epidendrum ovale Sw. now recognized as Lepanthes ovalis (Sw.) Fawc. & Rendle. Since 1799 over 1,400 names have been published representing about 1,100 accepted species from tropical parts of Central and South America and the Caribbean where they are mainly found growing as epiphytes (POWO 2023). Vegetatively Lepanthes species are easily recognized by their distinctive stem sheaths termed "lepanthiform sheaths," that are "tubular, ribbed sheaths with more or less dilated ostia, with ribs and rimmed margins of the ostia more or less ciliate or scabrous" (Luer 2012). The species are highly variable in their flower morphology, but most are united morphologically by the flowers produced on racemes with lobed petals that are wider than they are long, a bilobed lip often provided with a small fingerlike appendix at the apex, and a column with a dorsal anther.

Despite the distinctive vegetative and floral morphology of the genus, the species are challenging to identify given the large number of described species and the potentiality of discovering a disjunct population resulting in the superfluous renaming of a new species (i.e., Thoerle & Pfahl 2014). This combined with the rarity and inaccessibility of some of the literature siloed in the libraries of a small number of institutions has resulted in a backlog of undescribed species in the collection at Ecuagenera. Here we begin a multipart effort to identify the unidentified *Lepanthes* species at Ecuagenera and



provide additional information on already described species where relevant as we work through the specimens.

Our approach to tackling the identifications of these species was based off of the keys to the *Lepanthes* of Ecuador (Luer 1996), Colombia (Luer 2012), and Bolivia (Luer 2010), a checklist of the species of Peru (Ocupa-Horna et al. 2023), all supplemented by a review of all names published after 1996 in a list generated through IPNI (2023). In each case, a review of all illustrations in each monograph was undertaken to avoid any potential errors in identification resulting from either the incorrect interpretation of the key or aberrations in the morphology of the specimens at hand.

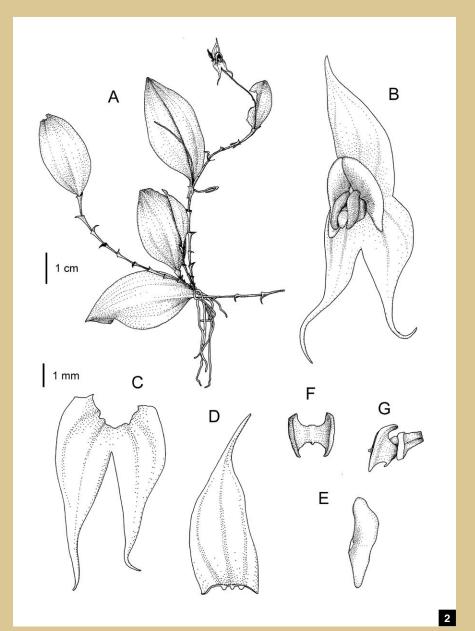
TAXONOMY

Lepanthes desmondleeana A.Doucette, H.Medina, & J.Portilla *sp. nov.*

TYPE ECUADOR. Azuay: Guarumales, road to Sopladora Repress, ca. 1800 m, the wild plant collected by Hugo Medina, January 2017 [0271]. The holotype Flowered in cultivation at Ecuagenera, Gualaceo, 6 June 2022, A. Doucette & H. Medina 002 (holotype: HA). Figs. 1–2.

DIAGNOSIS The new species is most similar to the Colombian *Lepanthes prolifera* Foldats but can be distinguished by the leaf shape (ovate vs. elliptical), leaf margins (weakly undulate vs. entire), the sepal apices (long-accuminate vs. shortaccuminate), petal shape (triangular vs. suboblong), and the degree of lip pubescence (glabrous with sparse pubescence vs. minutely pubescent).

DESCRIPTION Plants semi-erect, herbaceous epiphytes under 15 cm tall; roots whitish, with a green tip, filiform, occasionally produced along the stem at major nodes between prolific shoots, 0.7 mm in diameter; stems terete, erect to semi-erect, prolific, 14.4-65.3 long, 0.4-0.6 mm in diameter, enveloped by 6-11, papery, infundibular sheaths, microscopically pubescent, 1.6-10.4 mm long, 0.8-3.9 wide; leaf spreading, coriaceous, ovate, acute, sessile, margins weakly undulate, 17.2-38.7 mm long, 9.0-17.3 mm wide; inflorescence a congested, successively flowered raceme, held away from the leaf, producing up to five flowers in a slow succession, peduncle terete, 18.3-25.8 long, 0.4 mm in diameter, enveloped by membranous, ovate, acute, truncate bracts, 0.9-1.8 mm long, 0.3-0.6 mm wide, the rachis terete, 1.9 long mm, 0.3 mm in diameter, **pedicel** terete 2.1 mm long, 0.3 mm in diameter; ovary terete, 0.8 mm long, 0.5 mm in diameter, fruit not seen; flowers without a detectable



- [1] Lepanthes desmondleeana flower detail. Photograph by Hugo Medina.
- [2] Illustration of Lepanthes desmondleeana based on the material used to prepare the holotype. A. Plant habit drawn to 1 cm scale. Figs B–G drawn to 1 mm scale. B. Flower. C. Lateral sepals. D. Dorsal sepal. E. Petal. F. Lip, upper surface, expanded. G. Lip in profile attached to the column and ovary with petals and sepals removed.

odor, resupinate, **dorsal sepal** yellow suffused with reddish-brown toward the base, gradually contracted into a tail, three—veined, 7.3 mm long, 2.3 mm wide, the lateral sepals similar in color to the dorsal sepal, free for most of their length, connate at the base to the dorsal sepal and each other, narrowly ovate, long-accuminate, two-veined, 7.2 mm long, 2.0 mm wide, **petals** yellow-orange, suffused with reddish brown toward the base, the upper lobe transversely oblong, the lower lobe triangular, subacute, 0.8 mm long, 3.8 mm wide, **lip** pinkish ruby in color, mostly

glabrous with sparse pubescence along the apex of the lower lobe, bilobed, each lobe enveloping the column and meeting on either side to form a flattened shieldlike structure, the face of each lobe oblong, the base fused to the column foot, when expanded 0.6 mm long, 2.0 mm wide, column pinkish coral, semiterete, the apex dilated, 1.3 mm long, 0.5 mm wide, the dorsal anther cap red, shallowly cucullate, housing two narrowly clavate pollinia.

EPONYMY The new name is formed using the given name Desmond and surname Lee, combined with the honorific

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suffix -ana, to honor Mr. Desmond Lee, Minister for National Development of Singapore.

DISTRIBUTION Lepanthes desmondleeana is only known from the Azuay province of Ecuador where it is found growing as an epiphyte around 1,800 m.

PHENOLOGY In cultivation the plants have been observed flowering freely throughout the year.

DISCUSSION In key "Inflorescence congested, as long as or longer than the leaf with the peduncle elongate" in "Lepanthes of Ecuador" (Luer 1996) points to a couplet including Lepanthes alopex Luer & Hirtz and Lepanthes zygion Luer, but the new species can be distinguished from both by the prolific habit, weakly undulate leaf margins (vs. entire), and the long-accuminate lateral sepals. In "Key VI" in "Lepanthes of Colombia" (Luer 2012) the species keys out to a couplet including Lepanthes prolifera and Lepanthes oreibates Luer & R.Escobar. The new species appears morphologically most similar to Lths. prolifera but can be distinguished both vegetatively and florally. The diagnosis above provides a detailed breakdown of the differences. Two of the same traits provided by Luer (2012) that distinguish Lths. prolifera from Lths. oreibates can be used to distinguish the new species from Lths. oreibates as well: elliptical leaf reaching 6 cm in length (vs. ovate leaf less than 4 cm in length) and a clinandrum protruding beyond the blades of the lip (vs. clinandrum not protruding beyond the blades of the lip). In the key to the Lepanthes species of Bolivia (Luer) the new species keys out to Lepanthes herzogii Luer from which it can be distinguished by the ovate, acute leaves (vs. broadly elliptical, obtuse), narrowly diverging sepal apices (vs. widely diverging), entire sepals (vs. spiculate), the long-accuminate sepals (vs. caudate), and a clinandrum protruding beyond the blades of the lip (vs. clinandrum not protruding beyond the blades of the lip).

The new species appears to have been previously misidentified as *Lepanthes scalaris* Luer, which is an Ecuadorian species reported from ca. 3,300 m that also displays prolific shoots. The new species can be distinguished from *Lths. scalaris* by the ovate leaves (vs. elliptical) and long-accuminate sepals (vs. shortly-accuminate).

A review of the species in the checklist of the *Lepanthes* species of Peru (Ocupa-Horna et al. 2023) and *Lepanthes* published after 1996 (IPNI 2023) failed to yield a



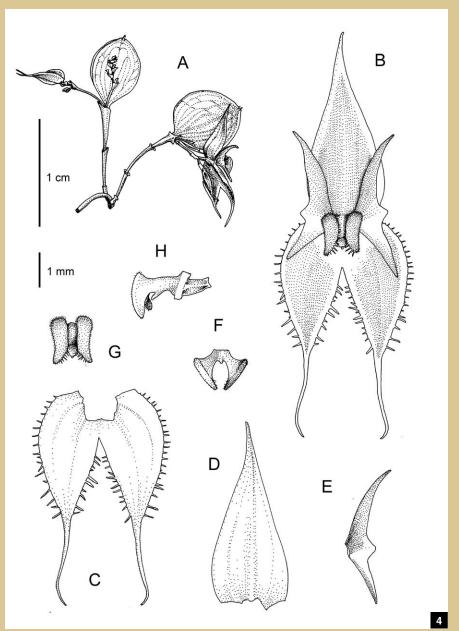
match.

Lepanthes doucettei H.Medina & J.Portilla *sp. nov.*

TYPE ECUADOR. Azuay: Guarumales, road to Sopladora Repress, ca. 2000 m. The wild plant collected by Hugo Medina, January 2017 [0272]. Flowered in cultivation at Ecuagenera, Gualaceo, 6 June 2022, A.Doucette & H.Medina 002 (holotype: HA). Figs. 3–4.

DIAGNOSIS The new species is most similar to *Lepanthes disjuncta* Luer & Hirtz but can be distinguished by shorter stems (6.1–8.1 mm vs. 15.0–33.0 mm long); orbicular, obtuse leaves (vs. ovate, subacute); caudate dorsal sepal (vs. ecaudate); acuminate petal apices (vs. subacute), and the lip with broader lobes

DESCRIPTION Plants erect. herbaceous epiphytes 1.2-1.6 cm tall; roots whitish, with a green tip, filiform, 0.4 mm in diameter; stems terete, erect, 6.1-8.1 mm long, 0.3 mm in diameter, enveloped by 3-4, papery, trumpet-shaped sheaths with trichomes along the margin of the ostium, 0.6-2.9 mm long, 0.4-1.4 wide; leaf spreading, coriaceous, orbicular, obtuse, apiculate, the rounded base abruptly contracted into a short petiole, 6.7-7.8 mm long, 4.6-6.3 wide; inflorescence a congested, successively flowered raceme, held away from the stem, producing up to four flowers in a slow succession, peduncle terete, 2.3-3.4 mm long, 0.2-0.3 mm in diameter, enveloped by membranous, ovate, acute, truncate bracts, 0.6-0.9 mm long, 0.2-0.4 wide, the rachis terete, 0.2-0.5 mm long, 0.1-0.3 mm in diameter, pedicel terete 1.1-1.2 mm long, 0.4 mm in diameter; ovary terete, 0.7 mm long, 0.4 mm in diameter, fruit not seen; flowers without a detectable odor, resupinate, dorsal sepal dark magenta with yellow margins, narrowly triangular, acuminate, margins spiculate, three-veined, 5.0 mm long, 1.9 wide, lateral sepals crimson with cream margins and base, connate at the base to the dorsal sepal and connate to one another for less than half their length, contracted into yellow tails, narrowly ovate, two-veined, 5.2 mm long, 1.4 mm wide, petals microscopically papillate, transversely bilobed, the upper lobe dark magenta, weakly falcate, acute, the lower lobe yellow with crimson along the lower margin, triangular, acuminate, with a minute triangular extension at the apex, 3.6 mm long, 0.8 mm wide, lip crimson, microscopically pubescent, bilobed, each lobe enveloping the column and meeting on either side to form a flattened shieldlike structure, the face of



[3] Lepanthes doucettei flower detail.

[4] Illustration of Lepanthes doucettei based on the material used to prepare the holotype. A. Plant habit drawn to 1 cm scale. Figs B–H drawn to 1 mm scale. B. Flower. C. Lateral sepals. D. Dorsal sepal. E. Petal. F. Lip, upper surface, expanded. G. Lip blades in natural position flanking the column. H. Lip in profile attached to the column and ovary with petals and sepals removed.

each lobe subreniform, the base fused to the column foot, when expanded 1.1 mm long, 1.2 mm wide, **column** red, semiterete, weakly arcuate, 1.2 mm long, 0.3 mm wide, the dorsal anther cap reddish-orange, shallowly cucullate, housing two narrowly clavate pollinia.

EPONYMY The new name is formed using the surname of Alfonso Doucette, a passionate student of the Pleurothallidinae, for his assistance in this *Lepanthes* identification project.

DISTRIBUTION Lepanthes doucettei is known only from the type locality in the Azuay province of Ecuador where it is found growing as an epiphyte around 2,000 m.

PHENOLOGY In cultivation the plants have been observed flowering freely throughout the year.

DISCUSSION In Key "Inflorescence short, congested; plant small" to the *Lepanthes* of Ecuador (Luer 1996) the species keys out to *Lths. disjuncta* and

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appears similar in many regards but can be distinguished by the smaller plant size and the floral morphology (see diagnosis for detailed comparison). The new species is quite distinctive and the Lepanthes of Colombia (Luer 2012) and the Lepanthes of Bolivia (Luer 2010) did not yield any close matches. In Luer (2012) the new species keyed out to a couplet in Key V containing Lepanthes chocoensis Luer & Thoerle and Lepanthes eucerca Luer & Thoerle. In Luer (2010) the new species keyed out to line 18' but could immediately be excluded from the three possible options left by the orbicular, obtuse leaves: Lepanthes oxyphylla Luer & R.Vásquez, Lepanthes orchestris Luer & R.Vásquez, and Lepanthes serriola Luer & R.Vásquez.

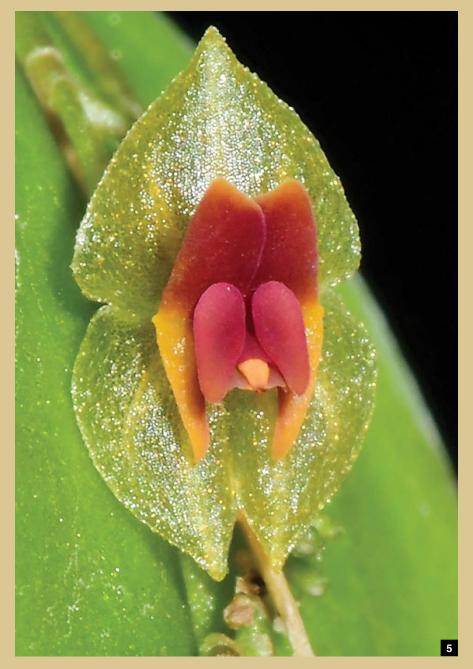
A review of the species in the checklist of the *Lepanthes* species of Peru (Ocupa-Horna et al. 2023) and *Lepanthes* published after 1996 (IPNI 2023) failed to yield a match.

Lepanthes pupuliniana A.Doucette, H.Medina, & J.Portilla *sp. nov.*

TYPE ECUADOR. Zamora-Chinchipe, road from El Zarza to El Condor mountain range, ca. 1800 m. The wild plant collected by Ivan Portilla, November 2016 [0078]. The holotype gathered from material that flowered in cultivation at Ecuagenera, Gualaceo, 6 June 2022, *A.Doucette* & *H.Medina 001* (holotype: HA). Figs. 5–6.

DIAGNOSIS The new species is similar to *Lepanthes peridita* Luer & Hirtz but can be distinguished by the sepals, which in *Lths. peridita* are connate for a proportionately shorter length (vs. greater relative length), the petals, which in *Lths. peridita* are yellow with a red border (vs. no red border), wider (3.8 vs. 2.5 mm), weakly cleft towards the center (vs. with a small mucro), the lip, that in *Lths. peridita* is microscopically pubescent (vs. glabrous) with an acute apex (vs. obtuse).

DESCRIPTION Plants erect, herbaceous epiphytes 6.0-11.0 cm tall; roots whitish, with a green-yellow tip, filiform, 0.5–1.3 mm in diameter; stems terete, erect, 54.7-92.1 mm long, 0.3-0.4 mm in diameter, enveloped by 10-12, papery, trumpet-shaped sheaths lacking well-developed trichomes along the margin of the ostium, 1.4-7.4 mm long, 0.3-1.3 mm wide; leaf spreading, coriaceous, ovate, acute, apiculate, the rounded base abruptly contracted into a short petiole, 12.8–18.5 mm long, 6.6–9.2 mm wide; inflorescence a congested, successively flowered raceme, held on the upper surface of the leaf, producing up to 35 flowers in a slow succession, peduncle terete, 4.0-15.9 mm long, 0.2 mm in diameter, enveloped



by membranous, ovate, acute, truncate bracts, 0.5-0.9 mm long, 0.3 mm wide, rachis terete, 0.3-1.6 mm long, 0.2 mm in diameter, **pedicel** terete 0.7–1.9 long, 0.2 mm in diameter; ovary terete, 0.6 mm long, 0.4 mm in diameter, fruit not seen; flowers without a detectable odor, resupinate, dorsal sepal translucent yellow suffused with purple toward the base, transversely ovate, obtuse, margins entire, three-veined, 2.4 mm long, 2.6 mm wide, lateral sepals also translucent yellow not suffused with purple, connate partially to the dorsal sepal and connate to one another for more than half their length, oblique-ovate, two-veined, 1.7 mm long, 1.7 mm wide, petals dark red suffused with yellow-orange, transversely bilobed, the upper lobe ovate with the apex rounded, the lower lobe triangular, acute, with a minute mucro at the center, 0.7 mm long, 2.5 mm wide, **lip** lighter red than the petals, bilobed, each lobe enveloping the column and meeting on either side to form a flattened shieldlike structure, the face of each lobe oval, the base fused to the column foot, when expanded 0.6 mm long, 1.2 mm wide, **column** dark red becoming lighter red toward the apex, terete, 1.0 mm long, 0.3 mm wide, the dorsal anther cap light yellow-orange, shallowly cucullate, housing two narrowly clavate pollinia.

ETYMOLOGY The new name is formed using the surname of Franco Pupulin, combined with the honorific suffix -ana, to honor Franco for his contributions

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to research on the orchid flora of Ecuador and for his mentorship to countless students of the Orchidaceae.

DISTRIBUTION Lepanthes pupuliniana is only known from the type locality in the Zamora-Chinchipe province of Ecuador where it is found growing as an epiphyte around 1,800 m.

PHENOLOGY In cultivation the plants have been observed flowering freely throughout the year.

DISCUSSION In Key "Inflorescence short, congested; plant medium-sized 10-20 cm tall excluding inflorescence" of the Lepanthes of Ecuador (Luer 1996) the species keys out to a couplet containing Lepanthes wageneri Rchb.f. and Lths. perdita Luer & Hirtz. The new species appears superficially similar to Lths. peridita in Luer (1996) but can be distinguished by the floral morphology (see diagnosis above for detail). From Lths. wageneri, the species is easily distinguished by the petal morphology, which in Lths. wageneri is described by Luer (1996) as having "the upper lobe ovate-triangular to oblong, obtuse, sometimes acute, the lower lobe usually similar," compared to the dissimilar lobes of the new species which in the upper lobe are obtuse and in the lower lobe are acute.

In Key VI to *Lepanthes* of Colombia, "Inflorescence congested; plants medium in size, ramicauls [stems] 5–10 cm long" (Luer 2012), the new species keys out to *Lepanthes escifera* Luer & R.Escobar, but the new species can be distinguished vegetatively by the acute (vs. longacuminate) leaves, the sepals with an entire (vs. cellular-ciliate) margin, and petals whose upper portions of the lobes are obtuse (vs. angular-truncate).

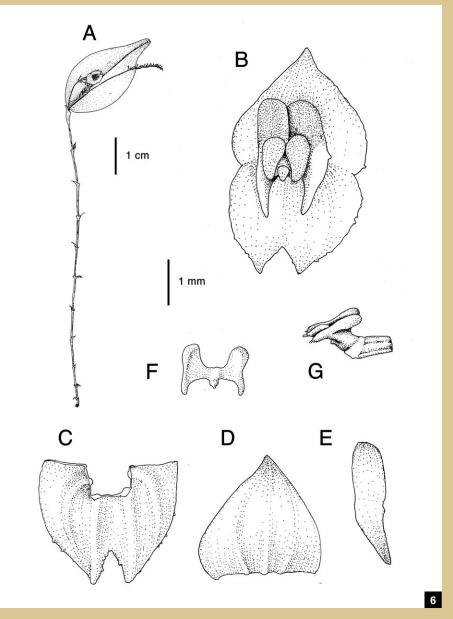
In Key 3 to *Lepanthes* of Bolivia (Luer 2010) the species keys out to *Lepanthes microphallica* Luer, which can be distinguished by the inflorescences held under (vs. on top of) the leaf, the lateral sepals that are freer for a greater relative proportion of their length, the entire petals (vs. with a small mucro), and the lip with an appendix bearing a terminal gland (vs. absent).

A review of the species in the checklist to the *Lepanthes* species of Peru (Ocupa-Horna et al. 2023) and *Lepanthes* published after 1996 (IPNI 2023) failed to yield a match.

REFERENCES

IPNI. *The International Plant Names Index*. http://www.ipni.org. Accessed January 28, 2023.

Luer, C.A. 1996. Icones Pleurothallidinarum XIV: Systematics of *Draconanthes*, *Lepanthes* subgenus Marsipanthes and Lepanthes of Ecuador. Monographs in Systematic Botany from the Missouri Botanical



- [5] Lepanthes pupuliniana flower detail. Photograph by Hugo Medina
- [6] Illustration of Lepanthes pupuliniana based on the material cultivated at Ecuagenera. A. Plant habit drawn to 1 cm scale. Figs B–G drawn to 1 mm scale. B. Flower. C. Lateral sepals. D. Dorsal sepal. E. Petal. F. Lip, upper surface, expanded. G. Lip in profile attached to the column and ovary with petals and sepals removed.

Garden 61:1-255

Luer, C.A. 2010. Icones Pleurothallidinarum XXXI: Lepanthes of Bolivia. Systematics of Octomeria species north and west of Brazil. Monographs in Systematic Botany from the Missouri Botanical Garden 120:1–154.

Luer, C.A. 2012. Icones Pleurothallidinarum XXXII: Lepanthes of Colombia (Orchidaceae). Monographs in Systematic Botany from the Missouri Botanical Garden 123:1–297

Ocupa-Horna, L., Thoerle, L., Shuiteman, A., and Martel, C. 2023. A Revised Checklist of *Lepanthes* (Orchidaceae) from Peru, Including New Country Records. *Brittonia* 20:1–21.

POWO. Plants of the World Online. http://www.plantsoft-heworldonline.org/. Accessed January 28, 2023.

Thoerle, L. and J. Pfahl. 2014. Lepanthes thoerleae is a Synonym of L. yunckeri (Orchidaceae, Pleurothallidinae). The Internet Orchid Species Photo Encyclopedia Nomenclature Notes 3(9):1. — Alfonso Doucette, PhD, received a doctorate in botany from the University of Wisconsin–Madison and completed a bachelor of plant sciences at Cornell University (email: adoucette@wisc.edu). Hugo Medina is a research assistant and has described numerous new Ecuadorian orchid species (email: producciongye@ecuagenera.com). José (Pepe) Portilla is the CEO, founder and President of Ecuagenera CIA Ltda. (email: pepe@ecuagenera.com).









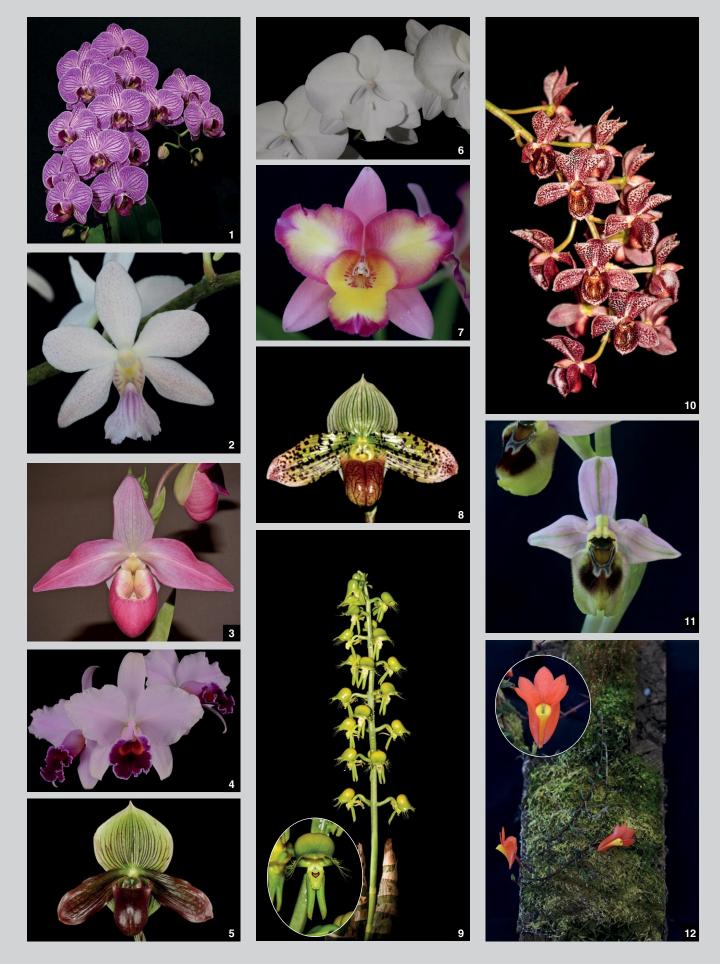






- [1] Rodrumnia Walnut Valley Cherry 'M & B Speckles' AM/AOS (Mill Hollow x Cherry Hollow) 83 pts. Exhibitor: Max Thompson and Bryon Rinke; Photographer: Bryon Rinke. Great Plains Judging
- [2] Paphiopedilum Magically Fred 'Slipper Zone Happy Hazy' AM/AOS (President Fred x Magically Wood) 80 pts. Exhibitor: Lehua Orchids; Photographer: Glen Barfield. Hawaii Judging
- Barfield. Hawaii Judging

 [3] Cattleya aclandiae 'Thaleia' AM/AOS 87
 pts. Exhibitor: Ben Oliveros and Orchid
 Eros; Photographer: Glen Barfield.
 Hawaii Judging
- [4] Phalaenopsis Momilani Snow Prince 'Travis' AM/AOS (Sirius x Hsinying Glaxy) 81 pts. Exhibitor: Calvin Kumano; Photographer: Roy Andrade. Hawaii Judging
- [5] Dendrobium Regina Beauty 'Black Velvet' HCC/AOS (Lady Concert x Black Cat) 77 pts. Exhibitor: Jan Takamiya; Photographer: Jan Takamiya. Hawaii Judging
- [6] Cattleya amethystoglossa '50th' AM/AOS 83 pts. Exhibitor: Ben Oliveros and Orchid Eros; Photographer: Glen Barfield. Hawaii Judging
- [7] Phalaenopsis Princess Kaiulani 'Royal' AM/AOS (violacea x amboinensis) 85 pts. Exhibitor: Exotic Orchids of Maui, Inc.; Photographer: Michael Blietz. Hawaii Judging
 [8] Oncidium Space Noez 'Okika' AM/AOS
- (sphacelatum x noezlianum) 84 pts. Exhibitor: Okika Ltd. Glen Barfield; Photographer: Glen Barfield. Hawaii Judging
- [9] Cattleytonia Ernest Davidson 'Blazing Sunset' HCC/AOS (Quest's Millennium x Cattleya Aloha Case) 79 pts. Exhibitor: Bryan Lee; Photographer: Roy Andrade. Hawaii Judging
 [10] Dendrobium Micro Chip 'Bouquet' AM/
- AOS (atroviolaceum x aberrans) 83 pts. Exhibitor: Exotic Orchids of Maui, Inc.; Photographer: Michael Blietz. Hawaii Judging
- [11] Phalaenopsis Momilani Pride 'Lynne' AM/AOS (Hsinying Fantasy x Momilani Girl) 82 pts. Exhibitor: Calvin Kumano; Photographer: Roy Andrade. Hawaii Judging
- [12] Epidendrum coriifolium 'Makawao Delight' AM/AOS 81 pts. Exhibitor: Andrew Okada; Photographer: Michael Blietz. Hawaii Judging
- [13] Oeoniella polystachys 'Aloha Aina' AM/AOS 82 pts. Exhibitor: Aloha Aina Orchids; Photographer: Michael Blietz. Hawaii Judging
- [14] Dendrobium Royal Chip 'Makawao Royal Spots #3' AM/AOS (Micro Chip x Roy Tokunaga) 84 pts. Exhibitor: Andrew Okada; Photographer: Michael Blietz. Hawaii Judging
- [15] Prosthechea crassilabia 'Makawao Mint Chocolate Chip' AM/AOS 83 pts. Exhibitor: Andrew Okada; Photographer: Michael Blietz. Hawaii Judging
- [16] Paphiopedilum Egret's Presence
 'Slipper Zone Mellow Yellow' AM/AOS
 (Egret's Green x Egret's Jewel) 84 pts.
 Exhibitor: Lehua Orchids; Photographer:
 Glen Barfield. Hawaii Judging
- [17] Phalaenopsis Momilani Green Mist 'Travis' HCC/AOS (Heliodor x Taisuco Green Apple) 76 pts. Exhibitor: Calvin Kumano; Photographer: Roy Andrade. Hawaii Judging









- [1] Phalaenopsis Momilani Princess 'Lauren' HCC/AOS (Alice's Beth x Minho Princess) 79 pts. Exhibitor: Calvin Kumano; Photographer: Roy Andrade. Hawaii Judging
- [2] Holconopsis Newberry Jasmine 'Catspaw' HCC/AOS (Phalaenopsis japonica x Holcoglossum amesianum) 78 pts. Exhibitor: Craig and Diana Plahn; Photographer: Matthew Nutt. Mid-America Judging
- [3] Phragmipedium Greta Twee 'Windy Hill's Kooikerhondje' AM/AOS (Don Wimber x schlimii) 83 pts. Exhibitor: Marilyn LeDoux; Photographer: Melissa Garner. Mid-America Judging
- [4] Cattleya Sheila 'J&D' AM/AOS (percivaliana x pumila) 86 pts. Exhibitor: David and Joan Rosenfeld; Photographer: Bayard Saraduke. Mid-Atlantic Judging
- [5] Paphiopedilum Hawaiian Peacock 'Susan's Visit' HCC/AOS (Hawaiian Illusion x Petula's Peacock) 77 pts. Exhibitor: David and Joan Rosenfeld; Photographer: Bayard Saraduke. Mid-Atlantic Judging
- [6] Phalaenopsis I-Hsin Pure Snow 'Lauren' JC/AOS (Sogo Yukidian x I-Hsin Dream Bubble) 0 pts. Exhibitor: Calvin Kumano; Photographer: Roy Andrade. Hawaii Judging
- [7] Rhyncatlaelia Ada Henriquez 'Catspaw' AM/AOS (Cattleya Angel Eyes x Picotee Fire) 83 pts. Exhibitor: Craig and Diana Plahn; Photographer: Matthew Nutt. Mid-America Judging
- [8] Paphiopedilum Delightfully Venus 'Painter' HCC/AOS (Magical Venus x Venus Knight) 76 pts. Exhibitor: Amy Colville; Photographer: Julius Klehm. Houston Judging
- [9] Catasetum discolor 'Rare Earth Orchids' CHM/AOS 82 pts. Exhibitor: Steve Moffitt; Photographer: Julius Klehm. Houston Judging
- [10] Clowesetum Sofia Margolis 'Rare Earth Orchids' HCC/AOS (Clowesia Rebecca Northen x Catasetum cirrhaeoides) 76 pts. Exhibitor: Steve Moffitt; Photographer: Julius Klehm. Houston Judging
- [11] Ophrys tenthredinifera 'Goldilocks' CBR/AOS. Exhibitor: Doug and Beth Martin; Photographer: Matthew Nutt. Mid-America Judging
- [12] Dendrobium vannouhuysii 'Forest's Cindy Hill' CHM/AOS 84 pts. Exhibitor: Randy Bayer; Photographer: Matthew Nutt. Mid-America Judging
- [13] Coelogyne uncata 'Shan's Star Shower' CCE/AOS 94 pts. Exhibitor: Waldor Orchids, Inc.; Photographer: Bayard Saraduke. Mid-Atlantic Judging
- [14] Coelogyne schultesii 'Irene' CBR/ AOS. Exhibitor: Al and Irene Messina; Photographer: Bayard Saraduke. Mid-Atlantic Judging
- [15] Fredclarkeara Frank Smith 'Catspaw' HCC/AOS (Mormodia Painted Desert x Catasetum John C. Burchett) 76 pts. Exhibitor: Craig and Diana Plahn; Photographer: Melissa Garner. Mid-America Judging















- [1] Cymbidium Pat Rowland 'Kyleidoscope' HCC/AOS (Dorothy Rowe x Ruby Eyes) 76 pts. Exhibitor: Kyle Saunders; Photographer: Bayard Saraduke. Mid-Atlantic Judging
- [2] Paphiopedilum rothschildianum 'Gene Tobia' CCM/AOS 84 pts. Exhibitor: Cesario Gene Tobia; Photographer: Bayard Saraduke. Mid-Atlantic Judging
- [3] Stelis morganii 'Wade's Orchids' CCM/ AOS 85 pts. Exhibitor: Wade Hollenbach; Photographer: Julie Rotramel. National Capital Judging
- [4] Aganisia cyanea 'Maravilha' HČC/AOS 77 pts. Exhibitor: Stefan Neher; Photographer: Bryan Ramsay. National Capital Judging
- [5] Phragmipedium Willow Spring Creek 'Alpine Meadows' HCC/AOS (Saint Ouen x xcolombianum) 79 pts. Exhibitor: William Goldner, PhD; Photographer: Bryan Ramsay. National Capital Judging
- [6] Laeliocattleya Hsin Buu Lady 'Y. T.' CCM/AOS (Laelia anceps x Cattleya Wendy's Valentine) 87 pts. Exhibitor: Kim Feddersen; Photographer: Bayard Saraduke. Mid-Atlantic Judging
- [7] Phragmipedium Driftless 'Bohemian Valley Creek' AM/AOS (Augres x schlimii var. manzurii) 80 pts. Exhibitor: Woodstream Orchids; Photographer: Bryan Ramsay. National Capital Judging
- [8] Rhyncholaeliocattleya Memoria Jim Diehl 'Members CPOS' HCC/AOS (Temple Bells x Cattleya percivaliana) 76 pts. Exhibitor: Joseph J. Francis; Photographer: Bryan Ramsay. National Capital Judging
- [9] Phragmipedium Don Wimber 'Spring Coulee Creek' AM/AOS (Eric Young x besseae) 84 pts. Exhibitor: Woodstream Orchids; Photographer: Bryan Ramsay. National Capital Judging
- [10] Cattleya coccinea 'J & L' AM/AOS 84 pts. Exhibitor: J & L Orchids; Photographer: Bryan Ramsay. National Capital Judging
- [11] Cymbidium Minuet 'David Sanders 4N' CCM-AM/AOS (insigne x floribundum var. pumilum) 87-80 pts. Exhibitor: John Sonnier: British Embassy Washington; Photographer: Bryan Ramsay. National Capital Judging
- [12] Phragmipedium Little Deschutes 'Lover's Pool' AM/AOS (Lynn Evans-Goldner x Bullseye) 83 pts. Exhibitor: Woodstream Orchids; Photographer: Bryan Ramsay. National Capital Judging
- [13] Phragmipedium besseae f. flavum 'D'Oro' AM/AOS 83 pts. Exhibitor: Jason Gebbia; Photographer: Bryan Ramsay. National Capital Judging
- [14] Bulbophyllum purpureorhachis 'United States Botanic Garden' CCE/AOS 92 pts. Exhibitor: US Botanic Garden; Photographer: Bryan Ramsay. National Capital Judging
- [15] Ophrys lutea 'Deirdre' AM/AOS 82 pts. Exhibitor: Dee and Bill Elbert; Photographer: Bryan Ramsay. National Capital Judging
- [16] Ophrys tenthredinifera 'Deirdre' CHM/ AOS 82 pts. Exhibitor: Dee and Bill Elbert; Photographer: Bryan Ramsay. National Capital Judging















[1] Galeopetalum Arlene Amour 'Conching' AM/AOS (Giant x Zygopetalum Artur Elle) 82 pts. Exhibitor: J & L Orchids; Photographer: Bryan Ramsay. National Capital Judging

Rhyncattleanthe Memoria Geri Male Lindamien' AM/AOS (Rhyncholaeliocattleya Golden Circle x Love Sound) 82 pts. Exhibitor: Michael Moran; Photographer: Bryan Ramsay. National Capital Judging

Dendrobium Cheryl's Glory 'Forever' HCC/AOS (Colonial Surprise x kingianum) 75 pts. Exhibitor: Amy and Ken Jacobsen; Photographer: Chaunie

Langland. Pacific Central Judging

Zelenkocidium Kukoo 'Georgia's Gift'

HCC/AOS (Zelenkoa onusta x Oncidium cheirophorum) 78 pts. Exhibitor: Ginna Plude; Photographer: Maurice Garvey.

Northeast Judging

Paphiopedilum Massachusetts Hot Mix 'Dark Side of the Moon' HCC/AOS (Saiun x Massachusetts Merlot) 78 pts. Exhibitor: Sergey and Elena Skoropad; Photographer: Maurice Garvey. Northeast Judging

[6] Stenorrhynchos speciosum 'Wylie Steiner' CCM/AOS 82 pts. Exhibitor: Steven Steiner; Photographer: Maurice

Garvey. Northeast Judging

Cymbidium Exeter Carnelian 'Samaria Skye' HCC/AOS (goeringii x Voodoo) 77 pts. Exhibitor: Sylvia Darr; Photographer: Chaunie Langland. Pacific Central Judging

Schoenorchis gemmata 'Yunor's Gift' CCM/AOS 87 pts. Exhibitor: Diane Bond; Photographer: Chaunie Langland. Pacific

Central Judging

[9] Cymbidium Spider Dance 'Samaria Sky AD/AOS (erythraeum x Tapestry). Exhibitor: Sylvia Darr; Hybridizer: Santa Barba-ra Orchid Estate Photographer: Chaunie Langland. Pacific Central Judging

[10] Phalaenopsis Rothschildiana 'Shiawassee' AM/AOS (amabilis x schilleriana) 84 pts. Exhibitor: James Heilig; Photographer: Chaunie Langland. Pacific Central

[11] Paphiopedilum Space Invaders 'Barolo' HCC/AOS (Space Shuttle x Memoria Sabrina Mark) 78 pts. Exhibitor: Dave Sorokowsky; Photographer: Ken Jacobsen. Pacific Central Judging [12] Paphiopedium Magically Fred 'Claire'

HCC/AOS (President Fred x Magically Wood) 78 pts. Exhibitor: Dawn Dawson; Photographer: Ken Jacobsen. Pacific

Central Judging

[13] Cattleya Love Knot 'Blue Moon' AM/AOS (sincorana x walkeriana) 82 pts. Exhibitor: Sunset Valley Orchids; Photographer: Ken Jacobsen. Pacific Central Judging

[14] Dendrobium cuthbertsonii 'White Orb' AM/AOS 80 pts. Exhibitor: Golden Gate Orchids; Photographer: Ken Jacobsen.

Pacific Central Judging

[15] Cattlianthe Tutankamen 'Goodstuff' AM/AOS (Chocolate Drop x *Cattleya* Mae Hawkins) 80 pts. Exhibitor: Tom Pickford; Photographer: Ken Jacobsen. Pacific Central Judging
[16] Masdevallia MacInnes' Golden Heart

'Yellow Gold' AM/AOS (Falcata x Grand Sun) 84 pts. Exhibitor: John J. Leathers; Photographer: Ken Jacobsen. Pacific Central Judging

[17] Lepanthes escobariana 'Vera Lee' AM/ AOS 80 pts. Exhibitor: John J. Leathers; Photographer: Ken Jacobsen. Pacific

Central Judging









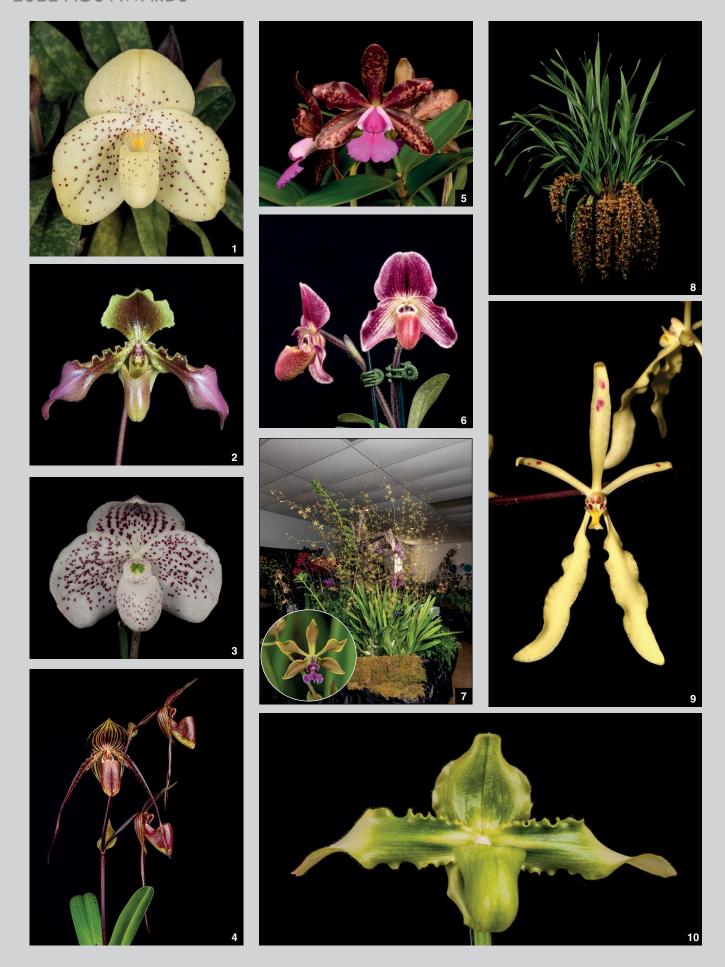








- [1] Cymbidium Sylvia Darr 'Woodside' CCM-AM/AOS (Pinata Magic x erythraeum) 85-84 pts. Exhibitor: Pierre Pujol; Photographer: Ken Jacobsen. Pacific Central Judging
- [2] Masdevallia fasciata 'Ligia' AM/AOS 84 pts. Exhibitor: John J. Leathers; Photographer: Ken Jacobsen. Pacific Central Judging
- [3] Dendrobium Specio-kingianum 'Snowfall' CCM/AOS (kingianum x speciosum) 86 pts. Exhibitor: Lynne Murrell; Photographer: Ken Jacobsen. Pacific Central Judging
- [4] Cymbidium tortisepalum 'Jian Yang Die' JC/AOS. Exhibitor: Jack Zhu; Photographer: Brandon Tam. Pacific South Judging
- [5] Dracula vampira 'Vera Lee' HCC/AOS 77 pts. Exhibitor: John J. Leathers; Photographer: Ken Jacobsen. Pacific Central Judging
- [6] Cymbidium goeringii (Ju Hua Ban, Chrysanthemum form) 'Hua Kai Fu Gui' JC/AOS. Exhibitor: Jack Zhu; Photographer: Brandon Tam. Pacific South Judging
- [7] Masdevallia dalessandroi 'Malli' AM/AOS 80 pts. Exhibitor: John J. Leathers; Photographer: Ken Jacobsen. Pacific Central Judging
- [8] Paphiopedilum Olympic Moon 'Fennario' HCC/AOS (Warm Valley x Olympic Halo) 78 pts. Exhibitor: Hillsview Gardens; Photographer: Ross Leach. Pacific Northwest Judging
- [9] Paphiopedilum Luna Hijinks 'Plum Blush' HCC/AOS (Luna Magic x Luna Shadow) 79 pts. Exhibitor: Tom Walker; Photographer: Ross Leach. Pacific Northwest Judging
- [10] Paphiopedilum Fanaticum 'Sharon' CCM/AOS (malipoense x micranthum) 82 pts. Exhibitor: Hillsview Gardens; Photographer: Ross Leach. Pacific Northwest Judging
- [11] Paphiopedilum Luther Pass 'Stellar' HCC/AOS (Winston Churchill x Spotglen) 77 pts. Exhibitor: Hillsview Gardens; Photographer: Ross Leach. Pacific Northwest Judging
- [12] Rhyncholaeliocattleya Virginia's Delight 'Diamond Orchids' AM/AOS (Cattleya Virginia Dickey x Ruby Delight) 81 pts. Exhibitor: Peter T. Lin; Photographer: Arthur Pinkers. Pacific South Judging
- [13] Psychilis macconnelliae 'Machiavelli' AM/AOS 84 pts. Exhibitor: René E. Garcia; Photographer: Julio D. Rios. Puerto Rico Judging
- [14] Phalaenopsis Sogo Moimi 'Sweetheart' HCC/AOS (stuartiana x Sogo Pride) 78 pts. Exhibitor: Jeff and Nicole Young; Photographer: Arthur Pinkers. Pacific South Judging
- [15] Laeliocattleya Humbertii 'Machiavelli' HCC/AOS (Cattleya aclandiae x Laelia superbiens) 79 pts. Exhibitor: René E. Garcia; Photographer: Julio D. Rios. Puerto Rico Judging
- [16] Vandachostylis Yen HKN Ng 'Edwin's Touch of Grape' AM/AOS (Vanda lamellata x Vinita) 83 pts. Exhibitor: Edwin A. Perez; Photographer: Edwin A. Perez. Puerto Rico Judging
- [17] Trichopilia suavis 'Geneva's Pink Polka Dots' CCM/AOS 83 pts. Exhibitor: Doug Overstreet; Photographer: Arthur Pinkers. Pacific South Judging

















[1] Paphiopedilum wenshanense 'Fajen's Orchids Too' AM/AOS 83 pts. Exhibitor: Fajen's Orchids; Photographer: Wes Newton. Florida North-Central Judging

[2] Paphiopedilum hirsutissimum 'Fajen's D'Artagnan' AM/AOS 84 pts. Exhibitor: Fajen's Orchids; Photographer: Wes Newton. Florida North-Central Judging

Paphiopedilum Nathaniel's Spectra
'Fajen's Feisty Fifth' AM/AOS (thaianum x godefroyae) 84 pts. Exhibitor: Fajen's Orchids; Photographer: Wes Newton. Florida North-Central Judging

[4] Paphiopedilum Hilo Black Eagle 'Springwater' AM/AOS (Johanna Burkhardt x rothschildianum) 85 pts. Exhibitor: Springwater Orchids and Thanh Nguyen; Photographer: H. A. Russell III. Florida

North-Central Judging
Cattleya Lacey Michelle Matherne 'So
Orchids' AM/AOS (aclandiae x tigrina)
84 pts. Exhibitor: So Orchids; Photographer: Beth Lamb. Florida North-Central

Judging

Paphiopedilum Fajen's Fair Wench 'Eden Butler' HCC/AOS (fairrieanum x wenshanense) 78 pts. Exhibitor: James Arnold; Photographer: H. A. Russell III. Florida

North-Central Judging Encyclia replicata 'Crystelle' CCE/AOS 91 pts. Exhibitor: Krull-Smith; Photographer: H. A. Russell III. Florida North Central Judging

Cymbidium Geno's Gem 'Emerald Fire' CCM/AOS (Mad Hatter x Kalimpong) CCM/AOS (Mad Hatter x Kalimpong)
83 pts. Exhibitor: Christina Roadruck;
Photographer: H. A. Russell III. Florida
North-Central Judging
[9] Renanthera citrina 'Bredren' HCC/AOS
77 pts. Exhibitor: Bredren Orchids and
Phillip Hamilton; Photographer: Beth

Lamb. Florida North-Central Judging

[10] Paphiopedilum hirsutissimum f. alboviride 'Fajen's Fourth' HCC/AOS 77 pts. Exhibitor: Fajen's Orchids; Photographer: H. A. Russell III. Florida North-Central

[11] Paphiopedilum Krull's Eileen Hector 'Yellow Bird' AM/AOS (Jan Ragan x Shin-Yi's Pride) 83 pts. Exhibitor: Krull-Smith; Photographer: Wes Newton. Florida North-Central Judging

[12] Paphiopedilum Memoria Renette L. Gatny 'Jean-Luc's Sunrise' AM/AOS (Oriental Jewel x Oriental Spring) 82 pts. Exhibitor: Marcus Norvell and Vivian Gibby; Photographer: Beth Lamb. Florida North-Central Judging

[13] Broughtonia sanguinea 'Hazel Cardozo' AM/AOS 86 pts. Exhibitor: Bredren Orchids and Phillip Hamilton; Photographer: Beth Lamb. Florida North-Central

Judging

[14] Paphiopedilum Mystically Contrasting 'Rocking K Ranch' AM/AOS (Mystically Wood x Macabre Contrasts) 81 pts. Exhibitor: Karen Wilson; Photographer: Wes Newton. Florida North-Central Judging

[15] Broughtonia Leona 'Bredren' AM/AOS (sanguinea x ortgiesiana) 80 pts. Exhibitor: Bredren Orchids and Phillip Hamilton; Photographer: Beth Lamb. Florida North-

Central Judging

[16] Epiarthron Kevin Mark Ragbir 'Odom's Orchids' HCC/AOS (Caularthron bicornutum x Epidendrum stamfordianum) 77 pts. Exhibitor: Odom's Orchids; Photographer: Wes Newton. Florida North-Central Judging

[17] Paphiopedilum hirsutissimum f. alboviride 'Eden Butler' AM/AOS 81 pts. Exhibitor: James Arnold; Photographer: H. A. Russell III. Florida North-Čentral

Judging





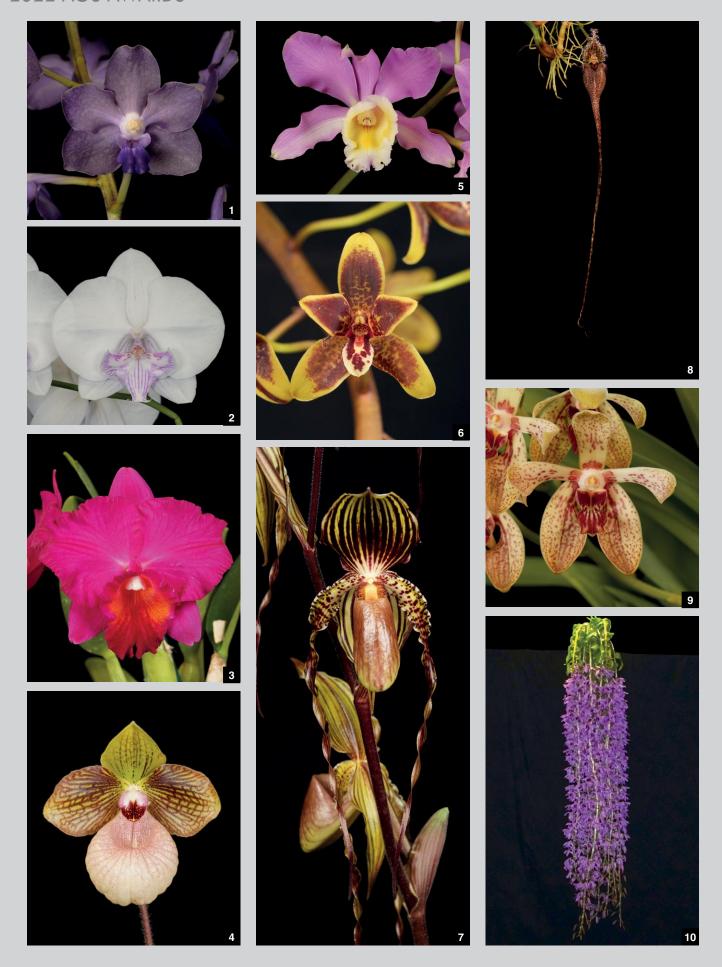








- Ludisia discolor 'Abby's Dream' CCE/ AOS 92 pts. Exhibitor: Gunther Lobisch; Photographer: Wes Newton. Florida North-Central Judging
- [2] Phalaenopsis mannii Apopka' AM/AOS 81 pts. Exhibitor: Krull-Smith; Photographer: Wes Newton. Florida North-Central Judging
- [3] Bulbophyllum romyi 'Crystelle' CCE/AOS92 pts. Exhibitor: Krull-Smith; Photographer: Wes Newton. Florida North-Central Judging
- [4] Rhyncattleanthe Rubescent Fire 'Paris' AM/AOS (Cattlianthe Spring Fires x Rhyncholaeliocattleya Rubescence) 81 pts. Exhibitor: Lindsey Paris; Photographer: Wes Newton. Florida North-Central Judging
- [5] Catyclia Anne Anderson 'Bill's Weed' AM/AOS (Susan Naomi x Cattleya Leona Bloom) 83 pts. Exhibitor: Bill Nunez; Photographer: Wes Newton. Florida North-Central Judging
- [6] Paphiopedilum Dick Wagner 'Fajen's Orchids' AM/AOS (bellatulum x Fanaticum) 82 pts. Exhibitor: Fajen's Orchids; Photographer: Wes Newton. Florida North-Central Judging
- [7] Phalaenopsis Krull's Red Dragon 'Tampa Rubies' AM/AOS (Ken Avant x Dragon Tree Eagle) 85 pts. Exhibitor: Krull-Smith; Photographer: Wes Newton. Florida North-Central Judging
- [8] Vanda tricolor var. suavis (Albescens) 'Crystelle' AM/AOS 87 pts. Exhibitor: Krull-Smith; Photographer: Wes Newton. Florida North-Central Judging
- [9] Paphiopedilum Fajen's Fair Wench 'Rockbend Ruby' AM/AOS (fairrieanum x wenshanense) 80 pts. Exhibitor: Fajen's Orchids; Photographer: Wes Newton. Florida North-Central Judging
- [10] Phalaenopsis Krull's Red Dragon 'Cheryle Daniel' AM/AOS (Ken Avant x Dragon Tree Eagle) 85 pts. Exhibitor: Krull-Smith; Photographer: Wes Newton. Florida North-Central Judging
- [11] Vanda Motes Adorbs 'Jordon Winter' CCM-AM/AOS (ampullacea x christensoniana) 85-80 pts. Exhibitor: Krull-Smith; Photographer: Wes Newton. Florida North-Central Judging
- [12] Paphiopedilum hirsutissimum f. alboviride 'Fajen's Hat Trick' AM/AOS 80 pts. Exhibitor: Fajen's Orchids; Photographer: Wes Newton. Florida North-Central Judging
- [13] Paphiopedilum Hsinying Anita 'Fajen's Orchids Too' AM/AOS (Lady Isobel x anitum) 80 pts. Exhibitor: Fajen's Orchids; Photographer: Wes Newton. Florida North-Central Judging
- [14] Cymbidium Mad Blanche 'Hatfield's' AM/AOS (Blanche Ames x madidum) 81 pts. Exhibitor: Krull-Smith; Photographer: Wes Newton. Florida North-Central Judging
- [15] Phalaenopsis Senne Mandy 'Julien Baruch' AM/AOS (Little One x japonica) 80 pts. Exhibitor: Krull-Smith; Photographer: Wes Newton. Florida North-Central Judging
- [16] Paphiopedilum delenatii 'Big Bear's Pink Surprise' AM/AOS 84 pts. Exhibitor: Ryan Kowalczyk; Photographer: Wes Newton. Florida North-Central Judging















- [1] Vandachostylis Orchidkraft's Sapphira 'Matt Mates' AM/AOS (Sasicha x Vanda tessellata) 83 pts. Exhibitor: Krull-Smith; Photographer: Wes Newton. Florida North-Central Judging
- [2] Phalaenopsis Laura Newton 'Sweet Girl' AM/AOS (Krull's Butterfly x amabilis) 83 pts. Exhibitor: Krull-Smith; Photographer: Wes Newton. Florida North-Central Judging
- [3] Rhyncholaeliocattleya Tak-Fu Hung 'Big Bear's Full Circle' AM/AOS (Jersey Summer x Cattleya Pat Thrall) 82 pts. Exhibitor: Ryan Kowalczyk; Photographer: Wes Newton. Florida North-Central Judging
- [4] Paphiopedilum Fanaticum 'Fajen's Orchids' AM/AOS (malipoense x micranthum) 86 pts. Exhibitor: Fajen's Orchids; Photographer: Wes Newton. Florida North-Central Judging
- [5] Myrmecocattleya Cupid's Arrow 'Kristyn's Accent' HCC/AOS (Cattleya loddigesii x Myrmecophila brysiana) 79 pts. Exhibitor: Accent Orchids; Photographer: Wes Newton. Florida North-Central Judging
- [6] Cymbidium Helen Bannerman 'Florida Orchid House' AM/AOS (canaliculatum x madidum) 82 pts. Exhibitor: Florida Orchid House; Photographer: Wes Newton. Florida North-Central Judging
- [7] Paphiopedilum Wössner Susanitum 'Fajen's Orchids' AM/AOS (Susan Booth x adductum var. anitum) 83 pts. Exhibitor: Fajen's Orchids; Photographer: Wes Newton. Florida North-Central Judging
- [8] Bulbophyllum romyi 'Krull's Shocker' AM/AOS 87 pts. Exhibitor: Krull-Smith; Photographer: Wes Newton. Florida North-Central Judging
- [9] Vanda Motes Lemon Tart 'Limited Edition' AM/AOS (cristata x Miami Snowdrop) 83 pts. Exhibitor: Naoki Kawamura; Photographer: Wes Newton. Florida North-Central Judging
- [10] Dendrobium anosmum 'Florida Orchid House' CCM/AOS 82 pts. Exhibitor: Florida Orchid House; Photographer: Nick Nickerson. West Palm Beach Judging
- [11] Vanda Memoria Louis Hatos 'Memoria Tracie Marie Day' AM/AOS (John De Biase x tessellata) 83 pts. Exhibitor: Naoki Kawamura; Photographer: Wes Newton. Florida North-Central Judging
- [12] Cymbidium Alcor 'Florida Orchid House' HCC/AOS (simulans x canaliculatum) 79 pts. Exhibitor: Florida Orchid House; Photographer: Nick Nickerson. West Palm Beach Judging
- [13] Rhyncholaeliocattleya Burdekin Wonder 'Lakeland' AM/AOS (Donna Kimura x Sylvia Fry) 88 pts. Exhibitor: Jim Roberts Florida SunCoast Orchids; Photographer: Tom Kuligowski. West Palm Beach Judging
- [14] Phragmipedium Sorcerer's Apprentice 'Fernwood' CCM/AOS (Iongifolium x sargentianum) 84 pts. Exhibitor: Dave Moody; Photographer: Nick Nickerson. West Palm Beach Judging
- [15] Paphiopedilum Krull's Prometheus 'Nike' AM/AOS (Jan Ragan x rothschildianum) 88 pts. Exhibitor: Ernie Barham; Photographer: Tom Kuligowski. West Palm Beach Judging
- [16] Sacoila lanceolata 'Fajen's Orchids' AM/ AOS 81 pts. Exhibitor: Fajen's Orchids; Photographer: Wes Newton. Florida North-Central Judging

APRIL

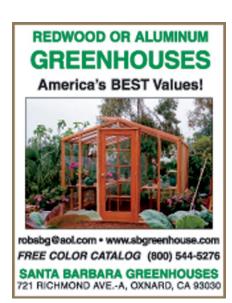
- *1-Northeastern Wisconsin Orchid Society Spring Mini Show, Bubolz Nature Preserve, 4815 N Lynndale Dr, Appleton, WI; Contact: Nancy Baehnman, 920-475-3537; baehnmennh@new.rr.com
- 1-2-Les Orchidophiles de Quebec's "Orchidofolie 2023," Le Montmartre, 1669 Chemin Saint-Louis, Quebec, QC, G1S 1G9, Canada; Contact: Marjolaine Plante; mplante62@hotmail.com
- 1-2-Port St. Lucie Orchid Society's "Hoot Loves Orchids," Port St. Lucie Polish American Club, 343 NW Prima Vista Blvd, Port St. Lucie, FL; Contact: Andrea Heitfeld; tazzette55@gmail.com
- 1-2—Cherry City Orchid Society's "Orchids - A Cascade of Color!" Keizer Lions Club, 4100 Cherry Ave NE, Keizer, OR; Contact: Janeil Payne, 503-931-3441; janeilp@ hotmail.com
- 1-2-Michigan Orchid Society Spring Show, Local 98 Plumbers Union, 555 Horace Brown Dr, Madison Hts, MI; Contact: Bill Overton, 239-673-8294; big923cattleya@yahoo.com
- 1-2-Western North Carolina Orchid Society's "Asheville Orchid Festival," NC Arboretum, 100 Fredrick Law Olmsted Way, Asheville, NC; Contact: Mike Mims, 828-329–2126; michaelmims@gmail.com
- 1-2—Desert Valley Orchid Society Show, Berridge Nursery, 4647 E Camelback Rd, Phoenix, AZ; Contact: Bev Tall, 602-463-7352; bevtall@gmail.com
- 1-2-Spokane Orchid Society Show and Sale, Spokane Community College Student Lair, 1810 N Greene St, Spokane, WA; Contact: Jim Pearce, 509-299-5152; sosorchidsociety@gmail.com
- 1-2-Sonoma County Orchid Society's "Orchids for Everyone," Santa Rosa Veteran's Building, 1351 Maple Avenue, Santa Rosa, CA; Contact: Karen Wofford; kwofford@sonic.net
- 1-2-Utah Orchid Society's "Orchid Eggstravaganza," Red Butte Garden, 300 Wakara Way, Salt Lake City, UT; Contact: Shawn Quealy, 801-831-7359; shquealy@ comcast.net
- 1-2—Deep South Orchid Society's "35th Savannah Orchid Show," Coastal Georgia Botanical Gardens, 2 Canebrake Rd, Savannah, GA; Contact: Jenni Brodie, 812–614–2531; tuckerbrodie@msn.com
- 8-9-Flamingo Gardens Orchid Society Orchid Show, Flamingo Gardens, 3750 S Flamingo Rd, Davie, FL; Contact: Jan Amador, 954-347-2738; jbamador@ bellsouth.net
- 14-16-South Carolina Orchid Society Show, Garden Clubs of Greater Columbia, 1605 Park Circle, Columbia, SC; Contact: Clay Owens, 803-727-4957; jester0711@ aol.com
- 14-16—Asociacion Orquideologica

- de Cartago "Exposicion Nacional de Orquideas Cartago 2023," Centro Comercial Paseo Metropoli, La Lima, Entrada a Cartago, Cartago, 30104, Costa Rica; Contact: Carlos Granados, 506-8379-1513; cagranados48@gmail.com
- 15—*The Apopka International Spring Orchid Festival seminar "Into to AOS Beyond Growing Orchids," NOCIA Community Center, 4253 Ponkan Rd, Apopka, FL; Contact: Eileen Hector, 813-368-7353; fnc.webconnect@verizon.net
- 15-16—Treasure Valley Orchid Society Show and Sale, Hilton Garden Inn, 7699 W Spectrum, Boise, ID; Contact: Carolyn Watts, 208-841-0264; Daintree@earthlink.net
- 15-16-Tulsa Orchid Society's "Orchids Wild and Wonderful," Tulsa Garden Center, 2435 S Peoria Ave. Tulsa, OK: Contact: Soundra Schacher, 918-299-6466; Schacher1@cox.net
- 15-16—Acadian Orchid Society's "Orchids - Spice of Life," Ira Nelson Horticulture Center, 2206 Johnston Street, Lafayette, LA; Contact: Bobby Gianelloni, 337-349-8512; bgmachinery@gmail.com
- 21-23—San Diego County Orchid Society's "Orchids of the Earth," Casa del Prado, Balboa Park, 1650 El Prado, San Diego, CA; Contact: Deborah Halliday, 858-756-3578; debhallid@gmail.com
- 22-23—West Shore Orchid Society Spring Show, Strongsville Recreation Center, 18100 Royalton Road, Strongsville, OH; Contact: Chester Kieliszek, 330–467–3731; kieliszekc@aol.com
- 22-23-Southern Tier Orchid Society's "Orchids at the Museum." Roberson Museum and Science Center, 30 Front St, Binghamton, NY; Contact: Carol Bayles, 607-275-9090; cjb4@cornell.edu
- 22-23-Vero Beach Orchid Society Annual Show "Golden Age of Orchids," Riverside Park, 3001 Riverside Park Drive, Vero Beach, FL; Contact: Paul Price, 772-410-7206; vbosnewsletter@hotmail.com
- 22–23—Vancouver Orchid Society Annual Show and Sale, VanDusen Botanical Garden, Floral Hall, 5251 Oak St, Vancouver, BC, V6M 4H1, Canada; Contact: Evelyn Nash, 1-778-968-1646; ewnash@live.ca 22-23—Oregon Orchid Society Show and Sale, Oaks Park Dance Pavilion, 7805 SE Oaks Park Way, Portland, OR; Contact: Greg Stanley, 626-818-2806; gregstanley78@ gmail.com
- 22-23—Central Indiana Orchid Society Spring Show, Garfield Park Conservatory, 2505 Conservatory Drive, Indianapolis, IN; Contact: Foster Flint, 317-601-2649; flintlowell@hotmail.com
- 29-30-Ottawa Orchid Society's "Orchidophilia 2023," Algonquin College, 1385 Woodroffe Avenue, Ottawa, ON, K2G 1V8, Canada; Contact: Janet Johns, 613-253–1996; janet.johns@sympatico.ca

29-30—Sacramento Orchid Society's "Orchids: Big & Small," Wyndham Hotel, 5321 Date Ave, Sacramento, CA; Contact: Richard Zamarriapa, 916-899-9769; richzamar@comcast.net

MAY

- 5-7—New Mexico Orchid Guild's "River of Orchids," Albuquerque Garden Center, 10120 Lomas Blvd NE, Albuquerque, NM; Contact: Keith Mead, 505-379-6786; orchidsinabq@gmail.com
- 5-7-Platinum Coast Orchid Society's "Orchid Fantasy," Kiwanis Island Park Gymnasium, 951 Kiwanis Island Park Rd, Merritt Island, FL; Contact: Jodi Kittleson, 608-575-6005; jodik8323@gmail.com
- 6-7-Oklahoma Orchid Society's "Orchid Kicks on Route 66," Will Rogers Gardens Exhibition Center, 3400 NW 36th Street, Oklahoma City, OK; Contact: Jana Butcher, 405-209-7657; oos showchair@ okorchidsociety.org
- 9—*Deep Cut Orchid Society Outreach Judging, Monmouth Reform Temple, 332 Hance Ave, Tinton Falls, NJ; Contact: Bill Bodei, 201-213-5308; wbodei@gmail.
- 13-14—Volusia County Orchid Society's "Orchids Around the World," Volusia County Fairground, Hester Building, 3150 E New York Ave, Deland, FL; Contact: Denise Christensen, 386-873-4300; denise@ denisechristensen.net
- 19-21—Memphis Orchid Society Show and Sale, Memphis Botanic Garden, 750 Cherry Rd, Memphis, TN; Contact: Mark Mills, 901-428-2890; swamprad@gmail.
- 19-21-Redland International Orchid Festival, Redland Fruit and Spice Park, 24801 SW 187th Ave, Homestead, FL; Contact: Martin Motes, 305-282-7520; martinmotes@gmail.com





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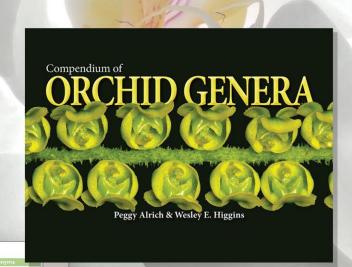
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Presenting

The Compendium of Orchid Genera by Peggy Alrich and Wesley Higgins



Angraecum ...

Vay Be Afrique, 1398, 19 (1804).

Pipelaredurder: Vanica Angusciaes

EPIPOLOGY: From the Latinized form of the Malayan word (Aquyris or Aqugoris or Aqugoris or Aqueon of the epiphysis condisk than recentled. Arried and Vanish in thebs. The named toppraction originated with George Eberhard Bumphan (1628–1702), who could refrom the word Aquyec, a name or the ligen by the Malayans to parasitical pipelardar's jaints, the meaning of which has not been discovered, from registeral Asamphet (1638–176) we learn that Aquageits of Anguights is also the

More than bro-hundred twenty-one, very small to very large monopodial epiphytes, a few lithophytes or rare terrestrish have a vider range of distribution in humid.

In the control of the

leady throughout with leady to leathery, channelled, unequally billored, usually distributed service. The cent to everal, a first to be go, sillarly to usually distributed service. The cent to everal, a first to be go, sillarly to shade of white, may so gene with epuls and petals free, usually speading. The flowers are noted for their garden of sidely variege lengths: from quite long to short. The flowers have a thick, almost leathery cutture, are expected partial period and not extracollarly totaries, are expected units of period period, and not extracollarly storate, are expected units of period period, and not extracollarly storate, are expected units of period period and not speech and the leg is large than the other segment. The shell of both more or less recicled the column, and it has a certail called. The flowers have a very shelt, robotics column with deeply divided bodes.

Pollinia 2, waxy, each attached to its own narrow or elliptic viscidium. Collurer Growing conditions and habitat options vary widely from species to produce the control of the control of the collection of the control of the collection of the co



Distriction Superburn Distriction Confedence (Ordanies Augmentum (1884)

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Resharted to 2 (20 (1892)

BORMETA Cordemoy

Ren Gein, But, 1144 St. III-011 (1899).

Erronçone în appreciation of Eugène Marie Gaston Bonnier (1833French botanis-cător of Reure Geirinia de Rotunique and publishe
Condemny's notes on the orchids of Réumino.

True Srens. None designated

Now recognized as belonging to the greus Angenerum, Bonniera un

considered to include two epiphyses found in mid to upper elevation, bushy montaine rain forests of Reunion.

Boryangraecum (Schlechter) Szlachetko, Mytnik & Grochocka Biodivers, Res. Conservation, 29: 12 (2013). A

And Anderson, Base, Conservations, 29: 12 (2013). States Viscous (1779; Reliable Proceds
are consistent and author of the special tools for large conservations are consistent and states of the special tools for large conservations.

The Process Engrangement promitties checkedory Sudacharla, Naprial, & Gordocka Now recognization and benefits of the conservations. Representations were a promitties conserved as belonging to the general Angelong and process of the state completely for additional conditions and an extraction of the state completely for additional conditions and formation.

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NEW HYBRID GENERA

THE FOLLOWING NOTHOGENERA are published to meet the requirements of validation to facilitate orchid hybrid registration.

 \times Chennevilleara [Cvl.] J.M.H.Shaw nothogenus nov. = Brassavola R.Br. \times Encyclia Hook. \times Guarianthe Dressler & Higgins \times Rhyncholaelia Schltr., named for Doug Chenneville, Florida, USA.

***Cleisoglossum** [Csgm.] Mingzhong Huang nothogenus nov. = Cleisostoma Blume * Holcoglossum Schltr.

Galenaria** [Gar.] A.Cassano & A.D.Blind nothogenus nov. = Bifrenaria Lindl. ** Galeandra Lindl.

***Horichcycnis** [Hcy.] W.Jansen nothogenus nov. = Horichia Jenny * Polycycnis Rchb. f., named in honour of Clarence Horich.

×Kailaara [Kla.] J.M.H.Shaw nothogenus nov. = Aganisia Lindl. × Pescatoria Rchb.f. × Zygopetalum Hook. × Zygosepalum Rchb.f., named for Kaila Quintal of Quintal Farms, Hawaii.

 \times Rodrenkoa [Rnk.] J.M.H.Shaw nothogenus nov. = Rodriguezia Ruiz & Pavon \times Zelenkoa M.Chase & N.Williams.

***Shirleymonkhouseara** [Syh.] S.Monkhouse ex Scott Barrie nothogenus nov. = Aganisia Lindl. *Batemannia Lindl. *Neogardneria Schltr. ex Garay *Otostylis Schltr. *Pabstia Garay *Zygopetalum Hook. *Zygosepalum Rchb.f., named for Shirley Monkhouse, Australia.

***Weekiatara** [Wkt.] K.L.Whang nothogenus nov. = Papilionanthe Schltr. * Renanthera Lour. * Rhynchostylis Blume * Vanda Jones ex R.Br., named for Dr Tan Wee Kiat, orchid taxonomist, breeder and advisor to National Parks Board & Gardens by the Bay, Singapore.

xXylaste [Xys.] J.M.H.Shaw nothogenus nov. = Lycaste Lindl. x Xylobium Lindl.

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You Have to Love Orchids by Roy M. Close

A student judge at the Chicago Center

IT IS A frigid March morning in the Twin Cities: -5 F (-20 C) with a biting wind — no weather, surely, for taking three prized orchids on a 400-mile (644 km) road trip. But that is exactly what Jim Vlasic is doing. From his home in suburban Minneapolis, he is setting out on his regular monthly excursion to the Windy City for a meeting of the AOS Chicago Judging Center.

To those who have never dreamed of winning an AOS award, 400 miles might seem like a long trek for the privilege of sitting in on a two-hour orchid-judging session. But Vlasic would be the first to say it is a highlight of his month. It is another small step in his quest to become an accredited AOS judge.

VOLUNTEERS WHO SERVE AOS judges are volunteers who serve the Society, its members, and the public as agents of a system almost as old as the AOS itself. The practice of giving awards to outstanding plants dates from the very first AOS National Orchid Show in 1924, only three years after the Society's founding. Recorded awards, designed to ensure permanent recognition of exceptional plants, were first issued in 1932.

Those early precedents ultimately led to a network that now consists of 27 AOS judging centers in the United States and Canada, each with a roster of certified judges who meet monthly to look at plants submitted by orchid growers hoping to earn AOS awards.

A MAJOR COMMITMENT To be an accredited AOS judge is to make a major commitment of time and resources. Judges are required to participate in at least eight AOS-sanctioned judging events a year. Of these, a minimum of four must be monthly judging sessions; the others can be AOS judging at orchid shows, conferences, or other AOS-sanctioned events. Judges must also take at least 12 hours of continuing education annually. For all this, they receive no compensation — not even reimbursement for travel expenses. "You have to love orchids," says Vlasic. "That's the bottom line."

What drives them to do it? Many, Vlasic among them, are keen to sharpen their own skills as growers and hybridizers. "I'm on a mission to learn more about orchids," he says, "and the best way to learn is by mastering the skills you need to be a judge."

JOINING THE PROGRAM Vlasic became an AOS student judge in 2020. Like everyone who enters the program, he submitted a written application describing his experience with orchids and sat for an interview with a committee of certified judges at the Chicago Judging Center. He also passed a color perception test, an AOS requirement.

Student judges must regularly attend meetings at their judging centers and participate in plant judging sessions, though their scores are not counted in the final score. They are also expected to attend as many other judging events as possible. It is the most important aspect of their orchid education, says Chicago Judging Center Chair Nile Dusdieker: "You've got to look at plants." In the Chicago center, they must also submit six research papers on assigned topics — each center has its own specific requirements for talks, papers or homework.

After three years, student judges become eligible for promotion to the associate level, at which point their scores begin to count in the final award score. Associate judges serve at least three more years before they can be fully accredited as AOS judges.

THE CHICAGO CENTER The Chicago Judging Center meets at the Chicago Botanic Garden, 20 miles (32 km) north of downtown Chicago, on the second Saturday of every month. For today's session, 17 people have gathered: 10 accredited judges, two student judges, two clerks, and three guests. Dusdieker, a longtime AOS judge from Iowa, forms three teams of three or four judges apiece. Each student judge and each guest are assigned to a team as well.

Thirteen orchids, including Vlasic's three, have been submitted for today's session. "We've judged as many as 45 and as few as two," notes Lois Jenssen Cinert, a past chair of the judging center. "It's whatever's blooming."

Over the next 90 minutes, the teams quietly go about their business. A clerk brings an orchid to a team's table. Each judge scores nominated plants independently, using AOS' 100-point scale to rate flower



Paphiopedilum Tawan 'Katie' AM/AOS (thaianum × fairrieanum) grown by James Vlasic.

form, color, size, and other plant qualities for most types of awards. The two student judges, Vlasic and Kay Perry, also rate each plant that comes to their table. Although their scores will not be counted, they must be prepared to defend their conclusions - and it is customary for the student judges to be asked to speak first. If they have missed anything, their teams will let them know.

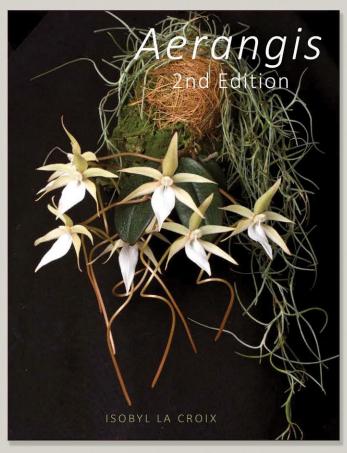
A COMMON LANGUAGE It is a curiously exhilarating experience. Although no two judges think exactly alike, they all know a great orchid when they see one and being a judge gives them regular opportunities to see some of the best. They understand perfectly what judge Cheryl Erins means when she exclaims, "I tell you, that dorsal sepal just knocks my socks off!" That is because they have all had their socks knocked off many times. It is one of the benefits of being an AOS judge.

By 2:30 pm, it is all over. Vlasic is thrilled because one of his plants, Paphiopedilum Tawan, has received an AOS Award of Merit with a score of 87 points. With the certificate comes the right to name the cultivar; Vlasic chooses 'Katie', in honor of his daughter.

But more than that, he has taken another step on the path to becoming an AOS judge. He is that much closer to his goal.

 Roy M. Close, a retired journalist, is a member of AOS and the Orchid Society of Minnesota (email roy@roymclose.com).

AERANGIS 2nd Edition



Author: Isobyl Ia Croix ISBN: 979-8-9859580-0-3

Pages: 228 Images: 270

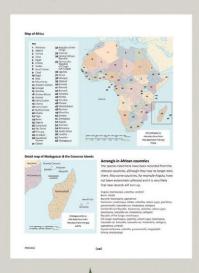
Page size: 7.5×10 inches (190 \times 255 mm)

Cover format: Hardcover

The genus Aerangis is the focus of this spectacular book by Isobyl la Croix who spent many years studying African orchids in their native habitat.

It features detailed descriptions of the 59 species, accounts of the terrain, climate and habitats in which they live, and cultivation advice. These orchids, which grow on branches and rocks in the forests of Africa and Madagascar, have long nectar-filled spurs that release a delicate scent at night attracting hawk moths. This feature, along with their often disproportionately large flowers, make them rewarding to grow and, given the right conditions, they will flower year after year.

Many are threatened in their native habitat and home cultivation makes an important contribution to their long-term welfare. Beautiful photographs of the plants and essential botanical information make this a unique reference that will delight orchid lovers.



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