



Speaker for November Meeting

Sarah Hurdel -- "Orchids Under Lights"

Sarah will take us on a tour of her growing space and show how she grows her collection of over 600 orchids in her basement. Highlights include: the art of finding room for one more, watering, flood prevention and best of all - proof that most orchids can be grown with a cheap and simple setup.

Sarah is a grower, exhibitor, and accredited AOS Judge. She has received AOS award recognition for culture, flower quality, and exhibit design.



Sara Hurdel and Habenaria medusa 'Owen'

Her presentations combine her love of orchids, photography, and illustration with experienced advice and a sense of humor. She also has a Facebook Blog Page - Something About Orchids - [facebook.com/askmeaboutmyplants](https://www.facebook.com/askmeaboutmyplants).

Sarah also sells Habenaria clones, see article below about Habenarias and how to order one. I am sure Sarah will answer any questions about these beautiful orchids.



Don't confuse Habenaria orchids with Habanero hot peppers!

Member Info

EXECUTIVE BOARD

President

Carol Bayles

Vice President

Gail Gunsalus

Treasurer

Jane Trey

Secretary

Ben Cabot

AOS Representative

Bernice Magee

Members-At-Large

Sharon Voorhees

Jean Mint

Colin Dimon

Newsletter Editor

Carol Bayles

Contributions, including pictures to the STOS newsletter from members are welcomed! Send to the editor at cjb4@cornell.edu

Web Master Carol Bayles

Social Media Rich Thomas

Librarian Paula Palmer

Show Chair Carol Bayles

Program Coordinator Jean Mint

Auction Committee Pete O'Connell

Web Site:

<http://www.southerntierorchids.org>

Facebook:

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

Email address:

STOSorchids@gmail.com

President's Message

Hello Fellow Orchid Lovers,

Maybe the November meeting will be the last meeting via Zoom. Though it might depend on the weather in Jan and Feb. We are planning to have our regular dish-to-pass Holiday Party this year, along with a free plant for all members.

At the meeting last September Luis gave us a quick lesson in orchid propagation, but some people were unable to follow his explanation. Orchid propagation is a complex topic to cover in 5 minutes, so for this newsletter I wrote up a longer description of how this all works, with help from Pete O'Connell. I am not the orchid expert that Luis is, but I studied Horticulture in college, so I know about plants. I hope this article helps you understand how your orchid came to be.

I am pleased to display so many blooming orchids in the newsletter this month. Take some time to admire the beautiful pictures.

Hope to see more of you at our Zoom meeting on November 21 at 2pm. We have a great speaker lined up, thanks to Jean Mint our new Program Coordinator. The meeting link will be sent via email to members.

--Carol Bayles

Fall Auction a Success

We had 85 items in our auction and all of them sold!

Proceeds: \$1,277 (Sales of \$1,210 plus donations of \$67).

Expenses: \$371.63 (Setup \$50, plants \$297.25, PayPal fees \$24.38)

Profit: \$905.37

Many thanks to our members who generously donated orchids:

Pete O'Connell, John Zygmunt, and Jane Trey.

And a big THANK YOU to all of you who bought orchids. I hope they bring you years of enjoyment. If you have any questions about care, please ask at the meeting, someone can give you expert advice.

We were a bit disappointed that Turtle Pond Orchids sent only Oncidiums and many that were the same or similar. However, many orchid growers scaled back during the pandemic and their inventory is somewhat limited for now.



Event Calendar

STOS Calendar

All meetings will be via Zoom until the threat of Covid-19 has passed. The link will be emailed to members within 1-2 weeks of the meeting. Meetings are 2-4pm.

November 21	General Meeting, Speaker Sarah Hurdel, "Orchids Under Lights"
December 19	Holiday Party
January 16, 2022	May be in person meeting, Speaker TBA
April 23-24, 2022	Orchid Show (tentative)

Zoom link will be emailed about one week before the meeting. Feel free to share it with family, friends or other interested folks but please do not share on open social media platforms.

Regional Orchid Events

November 13-14 Niagara Frontier Orchid Society's "Orchids Under the Dome," Buffalo & Erie Co. Botanical Gardens, 2655 South Park Ave, Buffalo, NY; Contact: Donna Lipowicz, 716-479-7698, ladysliper@roadrunner.com

2022

February 4-6, Susquehanna Orchid Society's "For the Love of Orchids," Milton and Catherine Hershey Conservatory at Hershey Gardens, 170 Hotel Road, Hershey, PA; Contact: Lorna Deibert, 717-825-7827; lornadeibert@aol.com

March 26-2 The Central Pennsylvania Orchid Society's 55th Annual Orchid Show, Penn State University, Ag Arena, University Park, PA; Contact: Wade Hollenback, 570-837-9157; wadeh@ptd.net

Membership Dues

for 2022 can be paid via cash or check at the holiday party or via PayPal on our website (\$20). New members can fill out the form on the website and are welcome to come to our holiday party.

New Jersey Corn Maze Honors AOS Centennial



Family Fun at the Maze Fun Park in Chester, NJ. Also stop by the gardens to enjoy their extensive collection of orchids. Maze is open daily through November 7, 2021. The gardens are open all year. See StonyHillFarms.com for more information. (only 2 ¼ hrs from Binghamton)

Meeting Minutes

Southern Tier Orchid Society - Minutes of Sunday OCTOBER 17, 2021

Called to order by President Carol Bayles 2:10 PM 16 people in attendance.

- Approved minutes of the September meeting as printed in the newsletter.
 - Treasure report Jane Trey –gave a financial report. **Noted that the \$20 dues for 2022 are payable by the end of December.**
 - Income 2 people paid dues \$20 each.
 - Expenses;
 - \$50.00 to set up the online auction.
 - \$297.00 purchase plants for the auction being held starting today.
 - AOS Rep Bernice – Promoted distribution of the club’s ORCHID magazines she received. Let her know if you want one sent to you. Bernice sited some very interesting articles. One of the current experts began his love of orchids at 10 years old. The November 9th AOS webinar about the Huntington Botanical Gardens. <https://www.huntington.org/gardens> <-- 130 acres feature 16 stunning themed gardens. Henry Edwards Huntington was born on Feb. 27, 1850, in Oneonta, New York.
 - **For every new member that joins the National AOS, it extends our club’s membership one month.**
 - The new dates for the Covid delayed 100th anniversary celebration is April 6th thru 9th 2022.
-
- Our current STOS membership (people that paid in 2020) is 44.
 - A poll of interest to attend an in person Holiday party received many positive responses. Possibility for consideration.
 - Jean has several ideas for speakers for the November 21st zoom meeting. The prime speaker has 4 pre-planned talks available. Possible in person meeting and a zoom presentation.

New business:

- Elections of 2022 officers. A slate was proposed for the election. The following officers were re-elected.
 - President ~ Carol Bayles
 - Vice President ~ Gail Gunsalus
 - Treasurer ~ Jane Trey
 - Secretary ~ Ben Cabot
 - AOS Representative ~ Bernice Magee
 - Board Members at Large:
 - Sharon Voorhees
 - Jean Mint {taking on program chair also}
 - Colin Dimon (new)
- We may have an AOS judged show at Roberson Museum on the third week in April 22, 23, and 24. Carol is willing to chair.

Show table from members. Members participated in a recorded Zoom.

Pete did an explanation of how to participate in the auction, followed by showing and describing items available for the auction. Zoom meeting ended 4:02 pm

Submitted by Ben Cabot Secretary.

Habenarias

Habenarias have been promoted as being among the most difficult orchids to grow. Yet if one pays particular attention to their general needs, they are actually one of the easiest. The most important key to their culture is watering. Asian species of *Habenaria* go through a definite monsoon-type growing season. They are developed from corms that go totally dormant in the parched soil of their native habitat, so parched that the soil is rock-hard and cracked. In the early spring, the rains soften the soil and spark the *Habenaria* into new growth. The plants are now kept in a constant state of wetness, growing at amazing rates until midsummer. At the point when the rosettes of leaves seem to be slowing down, this is the time to watch for emerging flower spikes from the center of the rosette. The plant should still be kept continuously moist until the last flower has fallen off. At this point, the plant must still be watered, but allowed to dry slightly between waterings. This is done because the plant is now producing new corms for next year's growth under the soil.

Now comes the hard part. When the foliage starts to become spotted and looks as if it is dying, stop watering the plant. Give no water at all. We put our awarded plants on top of an electrical service panel where it is guaranteed they will not receive any water, even accidentally. Repot in dry mix at this time. Then around February to March, take a look every week and see if anything is poking up through the top of the soil. If it is, water it. If not, put it back.



An occasional misting by the middle of April can spark the plant if no signs of growth are present. Habenarias purchased as bare-root corms should not be planted until April, as the damp soil mixes will start growth and alter their growth cycle unfavorably. The preferred mixes are any of the soilless blends, such as ProMix HP. — *Joe Palermo, AOS*

Group Order

We are arranging a group order of Sarah's Habenarias. A list was sent to members via email along with this newsletter. If you are interested in ordering, please send an email to

STOSorchids@gmail.com

Items are limited and Sarah will tell us what is still available at her talk.

Orchid Propagation

--Carol Bayles and Pete O'Connell

Introduction

How an orchid is propagated depends on the growth habit of the orchid as well as the goals of the propagator. A grower might want plants identical to his/her best plants or may want to create new, even better plants. Here are the different methods that are generally used and the types of plants they produce.

Divisions

Many orchids, such as Cattleyas, Dendrobiums, Oncidiums, etc are sympodial, growing new stalks (called pseudobulbs) from the base of the previous pseudobulb. These types of orchids can be divided into several plants, and some can be sold or given to friends. This is a common way to propagate many garden plants and house plants.



A Cattleya growth ready to be divided off



Tolumnia that can be divided into two plants

The divisions are all **exactly** the same as the original (they are clones) and if the original plant had an AOS Quality award, such as HCC, AM, or FCC, (which are a part of its official name), this follows the divisions. Cultural Awards, for how well the plant was grown, such as a CHM for species or a CCM or CCE for hybrids, can still be awarded to excellently grown plants. These plants cannot be submitted for the same AOS awards but can be entered for Cultural Awards and on rare occasions, if considerably superior, can be considered for a higher Quality Award. All plants can receive ribbon awards at a show.

Other orchids, such as Phalaenopsis and Vandas, are monopodial, and in most cases, they do not grow new stalks or points where they can be divided. Older Phals and some Vandas do form basal shoots or basal keikis that can be divided off. If you have an award-winning monopodial plant, it may be unique, but not necessarily.

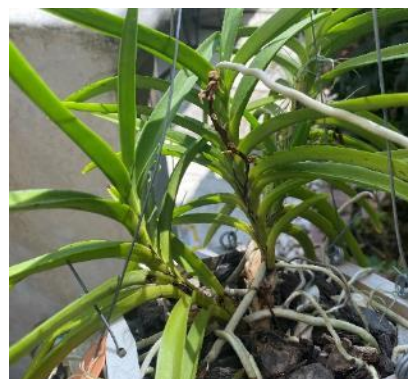
Orchid Propagation



Basal Keiki on Phalaenopsis that could be divided off



Keiki on Phalaenopsis spike can also be divided off



Vanda type that can be basally divided

Cuttings

A stem section may be cut off a mother plant and grown into a new plant. This is very true of vining orchids, such as vanilla, but many vandas grow very tall with roots along the stems. These top growths with roots can be cut from the plant and grown. The mother plant will simply send out a new growth from a residual bud along the stem. This must be done in a clean environment and some orchids do not grow from such cuttings. Like divisions, the new plants are identical to the mother plant.



Vanilla that can be grown from stem cuttings



Vanda that can be grown from a stem cutting below the top roots

Keikis

A keiki is a small plantlet that may develop on a flower stem or at the nodes of pseudobulbs. In rare cases, some plants put out root keikis as well. Basal Keikis are covered in "Divisions" above. Some orchids, such as Phalaenopsis and Dendrobiums, form keikis spontaneously. Others can be induced to form keikis with a hormone treatment (sold as keiki paste). Once a Keiki develops strong roots and a few leaves, it can be removed from the plant and potted. Like a division, the keiki is a clone of its parent.

Orchid Propagation

Seeds

The other common way to propagate orchids is through seeds. Breeders choose the parents for various characteristics and apply pollen from one to the stigma of the other (or vice versa) to cross them. The seeds are collected and sent to a lab. Orchid seeds are very small and do not have stored nutrients like most plant seeds. In nature they require a relationship with a particular fungus to help them grow.

Labs grow them with special nutrients under sterile conditions in 'flasks' which may be the glass Erlenmeyer flasks that all chemistry students know or today may be clear, wide mouth plastic containers like you use at the olive bar at Wegmans. Once the seedlings, which could be in the thousands of plants in one flask, put out a few roots and leaves, they are transferred or "replated" into new flasks to spread them out and they are grown until they are large enough to survive outside the flask. Then they are sent back to the grower who plants them out. There is likely about 30 plants per replate flask. From the flask they normally go into "compots" (community pots) as they survive better when grown in a group of about 15-20 plants. When they are established plants, they may be sold.

Although they are siblings, each of these seedlings is totally unique, as genetic mixing varies for each seed. Even if you put the pollen on the stigma of the same flower (selfing) you do not necessarily get the same flower (though it is likely to be very similar). You can never be sure what a seedling flower will look like, which is exciting to some hobbyists, but could be disappointing in the long run. It usually takes 3-7 years to flower from seed but can take up to 15 years for some species. These seedlings do not have a name, they are just known by their parent's names. If you have a seedling that produces a spectacular flower, you can register and name the cross, or if awarded, name it and either divide it (eventually) or if you are a breeder, Mericlone it (see below) or use it as a parent for another cross. If the flower is both spectacular and different from all others of its type, you can submit it for a possible award. Because they are unique, all seedlings are eligible for AOS awards and if awarded, the award name follows this plant.



Laelia species in replate flask. Note date sown, date replated. Media contains charcoal. These are October 2021 photos. Seeds to harvest 8 months

Orchid Propagation



Phal species in replate flask. About 15 plants of various sizes



Similar flask now in compost.



Compot planted out

Mericlones

The problem is getting more clones of spectacular plants. Divisions, if even possible, only produce a few plants at a time. Same with keikis. Eventually, someone figured out how to propagate orchids from meristems. The meristem is the growing point of a plant and is located deep in the growing tip (leaf or pseudobulb) before the tip is even visible to us. The meristem is a small group of cells, probably in the hundreds (these cells are very small, a few microns at most) and each of these cells has the capacity to become an entire plant (sort of like stem cells in mammals). These cells are cut out of the plant and cultured under sterile conditions with a particular hormone/nutrient regime. Each cell divides many times into a small mass, which is divided, and then each begins to produce roots and shoots. Many horticultural plants are propagated by mericloning, but each plant has its own requirements and meristem culture is difficult until the process has been worked out. Not all orchids can be grown from meristems yet.

The important point is that each new plant is **identical** to the parent (a clone or “mericlone”). If the parent is an award-winning plant (which it likely is, otherwise why bother?) all the meristem-cultured plants will retain that award in their name. These plants cannot be entered for a future AOS award (although again, they may receive ribbon awards at your local show).

Meristem culture is also used to eliminate viruses from orchids with some success.

Species vs Hybrids

While not about propagation per se, I thought this topic might be useful to include. An orchid species is one that grew in nature (probably not that actual plant) and does not have any ancestry that can be traced back. Hybrids are crosses of species or of other hybrids, they will have a family tree that may be quite long.

Intergeneric hybrids are crosses between different genera of orchids, hence Brassocattleya (Brassavola x Cattleya), Odontonia (Odontoglossum x Miltonia) and even three genera, Brassolaeliocattleya (Brassavola x Laelia x Cattleya). Hybrids with three or four genera in their background can also end with -ara. The genus name is derived from the originator's name (or choice of name) with an -ara suffix, Potinara (Brassavola x Laelia x Cattleya x Sophronitis) or Vuylstekeara (Miltonia x Odontoglossum x Cochlioda).

AOS Award Descriptions

AOS awards (another related topic)

Flower quality awards

The AOS grants three levels of awards for flower quality based on a 100 point scale.

- Highly Commended Certificate (HCC/AOS) - 75 to 79 points
- Award of Merit (AM/AOS) - 80 to 89 points
- First Class Certificate (FCC/AOS) - 90 to 100 points

Other awards for plants

- Judges Commendation (JC) - possessing distinctive characteristics but cannot be scored customarily
- Award of Distinction (AD) - for a worthy new direction in breeding
- Award of Quality (AQ) - one in a group of at least twelve that are an improvement over former type
- Certificate of Botanical Recognition (CBR) - a rare and unusual species with educational value (must pass taxonomic verification)
- Certificate of Horticultural Merit (CHM) - possessing characteristics that contribute to the horticulture of orchids

Awards for exhibitors

- Certificate of Cultural Merit (CCM) - robust well flowered specimen in care of exhibitor for at least 12 months prior, score of 80 to 89 points
- Certificate of Cultural Excellence (CCE) - robust well flowered specimen in care of exhibitor for at least 12 months prior, score of 90 to 100 points

Ribbon Awards

These are unofficial awards (blue, red, or white ribbons) given to orchids at shows that are fine examples of their types. This award is never part of the orchid name. But it is nice to get one at a show.

Many thanks to Pete O'Connell who provided the photos as well as valuable edits and additions

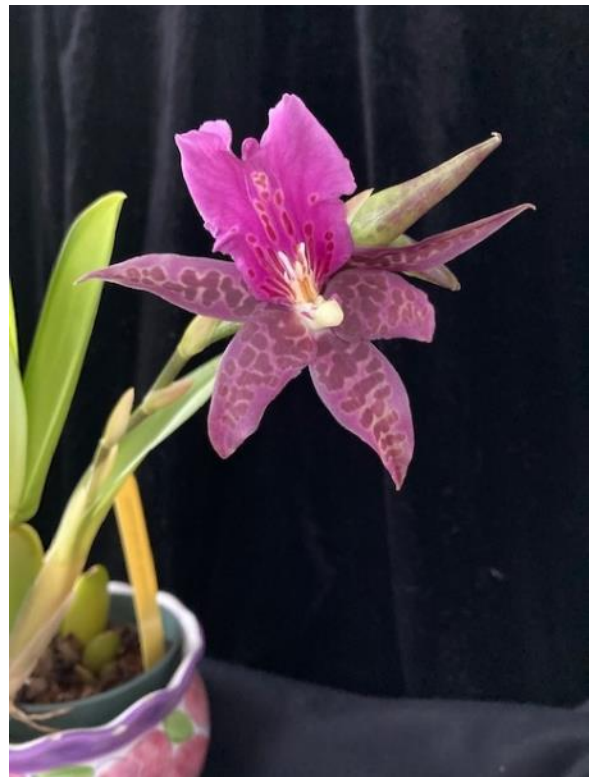


Ribbons!

Show Table – Jane Trey’s Best



Laeliocattleya (Lc) Big Time 'NN'



Miltassia Dark Star 'Orchidworks'



Dendrobium Classic Gem 'BFC'



Rhyncholaeliocattleya Hsinying Sunbeam 'Juliets'

Show Table – Laurel Schaefer



Oncidium Twinkle 'Fragrant Fantasy' second spike started. Spikes take forever to bloom



Miltassia Dark Star 'Orchidworks'.



Catasetum 'Frisly Doris'



Dendrobium Salaya 'Stripe' with 4 spikes

Anne Quain from Fall '21 auction



Burr Fran's Jewels has a soft fragrance



Onc. Heaven Scent Rainbow is fragrant



Oncidium Sweet Sugar



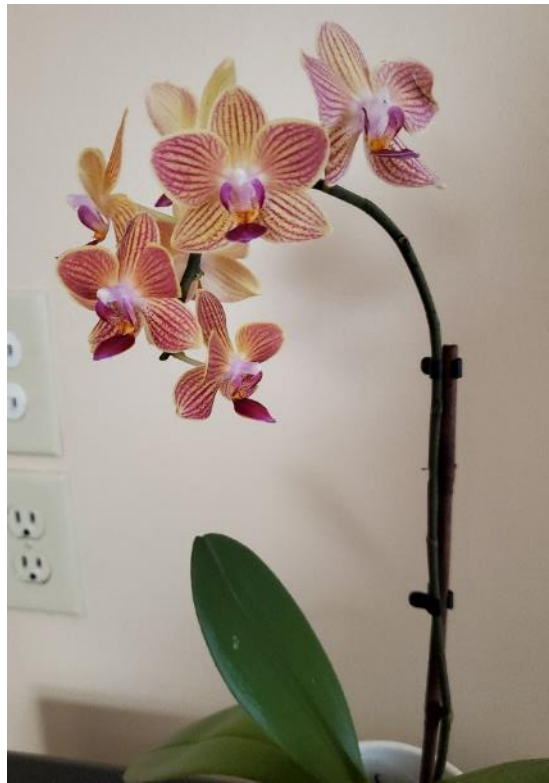
Mtdm. Hawaiian Sunset has beautiful fragrance

More from Anne Quain



Brassacathron Aka's Aloha 'Dream Dust'

This is Brassacathron Aka's Aloha 'Dream Dust' which was from the Fall 2020 Auction. This is the first time I have bloomed it and has 3 blooms. It was not doing well when I got it but after hearing one of our speakers say that she has grown languishing Cattleas in water, I have been growing this for the past year using no medium and just water and it is thriving!



Phal No id.



Phal. NoID but very pretty

Show Table



Oncidium Wild Bobcat –
Jessica Bebel



Phalaenopsis (No ID), new spike
- Jessica Bebel



Same No ID Phal with leaves
growing on side spike.



Zygonia Sweet Jade 'Sweet Cheyenne'
Samuel Reichler



Phalaenopsis Zheng Min Sapphire (Mituo Sun x Yuanshan
Girl 'Huey Ru') - seed grown from Big Leaf Orchids
- Samuel Reichler

Show Table - Jean Mint

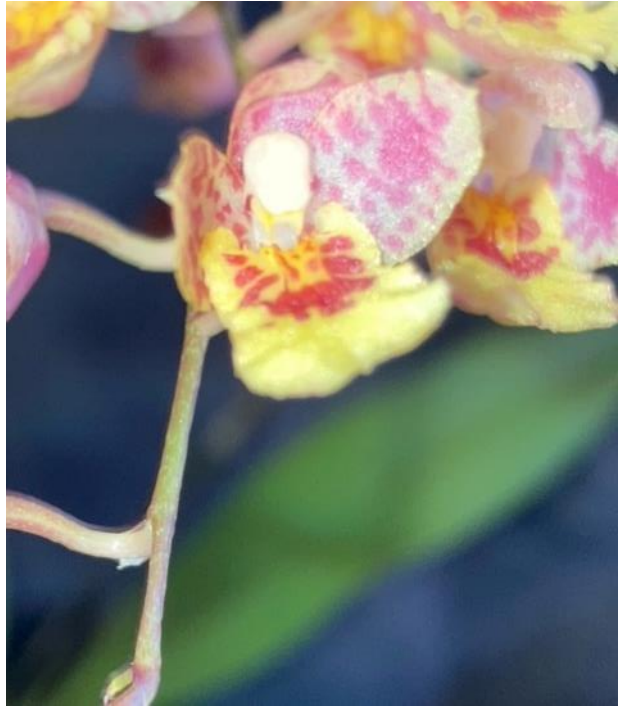


Den. Regal Gillieston x Den. Warrior Jordan Sue
Close up



Stenocoryne aureofulva x sib close-up

Show Table - Jean Mint



Howeara Lava Burst



Dendrobium leonis

Show Table - Jean Mint



Brassolaelia Petite Stars
(Bl. Richard Mueller x L. rubescens)



Wegmans Mini Special

November 2021



Cattleya cernua

Just finishing up. Was out for October Newsletter.
Note the developing seed pods from a selfing 2 weeks ago.



Vnds Prapin

(*Vanda Proalor* x *Doritis pulcherrima*
v. *champorensis*) Blooms 4-5 times /yr

Pete O'Connell – Outside at Key West



Cattleya max v coerulea This plant had never bloomed. The growths are about 1/3 as large as the other 3 from this cross.



Neostylus Lou Sneary x Christensonia vietnamica
Citrus Fragrance..Blooms 3-4 times /yr



Ethel's Paradise 'In Kalapana' from Auction 2017

Pete O'Connell – Outside at Key West



Jairak Flyer Crosses
Starting their bloom cycle



A VIRTUAL DISPLAY OF FLOWERING PLANTS AT OUR HOME November 2021

SPECIES AND INTERGENERIC:



Stelis superbiens



Stenoglottis longifolia



Brassidium Nittany Gold 'Dr. John' AM/AOS
(*Brassia verrucosa* x *Onc. ghiesbreghtianum*)

Luis Matienzo

COMPLEX PAPHIOPEDILUMS:



Paph. In-Charm Topaz 'Matienzo'
(*Paph. In-Charm 'Lisa'* x *Paph. In-Charm 'Davela'*)



Paph. Charlie's White
(*Paph. Dottie McDowell* x *Paph. St. Owens Bay*)



Paph. Paula Matienzo 'Matienzo'
(*Paph. Hampshire Gem* x *Paph. Hellas*)

SPECIES AND HYBRID PHRAGMIPEDIUMS:



Phrag. schlimii var. *manzuri*



Phrag. besseae 'Matienzo'



Phrag. Pink Panther
(*Phrag. schlimii* x *Phrag. Fischeri*)



Phrag. Grande 'Royal Bearing' AM/AOS
(*Phrag. caudatum* x *Phrag. longifolium*)

SPECIES AND HYBRID PHRAGMIPEDIUMS:



Phrag. Inca Embers
(*Phrag. Andean Fire* x *Phrag. longifolium*)



Phrag. Scarlet O'Hara'
(*Phrag. besseae* x *Phrag. Jason Fischer*)

