SOUTHERN ONTARIO ORCHID SOCIETY NEWS

Summer 2017, Volume 52, Issue 7 - Meeting since 1965

Next Meeting Sunday, August 6, Orchidfest, Floral Hall of the Toronto Botanical Garden.

This is a special all day summer event to which we invite all of our orchid friends. The program is as follows:

- ★ 10 am to 12 noon American Orchid Society Judging. Bring your plants for judging and watch the judges at work. Plant registration 9:30 to 10 am.
- 🖈 12 noon Pot luck lunch. Bring your favourite dish to share. Andrea Niessen Plant sales
- ★ 1 pm to 4 pm, Andrea Niessen will do two talks, one on Columbian orchid habitats and another on Miniature orchids.

Please note: NO Member and Vendor sales, NO Member plant table review, and NO Raffle

Orchid Collection Dispersal. Peter Micha, long time orchid grower and member of SOOS is moving and must disperse a 500 plus plant orchid collection of Cattleyas, Cymbidiums, Oncidiums and their hybrids, Paphiopedilums, Phragmipediums and others. Plants are available by appointment (Phone 905-770-1200) at his home 106 Hillsview Drive (West of BayviewAvenue), Richmond Hill, Ontario.

President's Remarks Welcome Orchid

<u>Lovers</u>. We are well into a summer filled with heat, sun and mostly rain and flying by all too quickly. Take care of your plants outside in case they get sunburned or drowned.

OrchidFest is fast approaching (August 6th) along with our summer pot luck. The potluck begins at noon. Please bring your favourite dish to share. Come early to watch the judging that is taking place and see what the judges go through when judging a plant. If you have a plant that you feel is in top form, bring it early and have it judged. I know we have many terrific growers. Our presenter for OrchidFest will be Andrea Niessen from Columbia. She grows a great variety of orchids. Remember it is summer and the parking lot fills so come early. As this is a special event plant sales are reserved for our speaker only and there will be no members plant table,

The growers tour has been arranged for September 9th & 10th. Marion Curry was kind enough to approach various growers and arrange for us to visit their growing areas. We have been very lucky to have a number who will be open both days. There are some that are open only on one of those days, so please be aware of their times. The growers list is in the newsletter and tells you who, when and where.

Programming:

August 6th Andrea Niessen
September 3rd Inge and Peter Poot, Stanhopeas
October 1st Marilyn Light Topic: Secrets of our Wild Orchids

November 5th To be announced December 3rd Annual auction and pot luck

Be prepared for the fall shows that begin in September with the Central Ontario Orchid Society show in Cambridge on September 23 and 24.. Think about grooming your plants when you bring them in for the

winter. The time will come up all too quickly. In the meantime, enjoy the summer weather

Happy Orchiding, Laura Liebgott

Questions or comments: Please contact me at:

lliebgott@rogers.com or 905 883 5290

Plant of the Month for June, 2017

Erika Lorincz brought in a beautifully flowered *Specklinia* (*Pleurothallis*) *grobyi* that she had originally gotten as a division of one of John Kafka's collected plants. It was mounted on a plaque and was grown in a windowsill. Erika made the plant part of a mini display by arranging it in a basket with a *Leptotes bicolor* and a *Trichocentrum tigrinum* 'Andrew's First Communion' CCM/AOS. Very effective! Congratulations!



Coming Events 2017 August

- 6, **Orchidfest** Floral Hall, Toronto Judging centre judging 10 am and afternoon talks by Andrea Niessen
- 19, Monthly Montreal AOS judging, Jardin botanique de Montreal

September

- 2, TJC Monthly AOS Judging at TBG.
- 3, SOOS meeting, Toronto Botanical Garden, sales12 noon, program 1 pm, Floral Hall
- 16, Monthly Montreal AOS judging, Jardin botanique de Montreal
- 23-24, Central Ontario Orchid Society Show, Hespeler Recreation Center, Cambridge, Ontario.
- 30, Central NY Orchid Society Show, Syracuse, NY.

October

- 1, SOOS meeting, Toronto Botanical Garden, sales
 12 noon, program 1 pm, Floral Hall
- 7, TJC Monthly AOS Judging Toronto Botanical Garden
- 14- 15, Eastern Canada Orchid Society Show + TAJC Monthly Judging, Montreal 21-22 Windsor OS Show, Windsor, Ontario.

November

- 4, TJC Monthly AOS Judging Toronto Botanical Garden
- 5, SOOS meeting, Toronto Botanical Garden, sales 12 noon, program 1 pm, Floral Hall.

8-12, 22nd World Orchid Conference, Guayaquil, Ecuador

18, TJC business meeting and TAJC Monthly Judging, Jardin botanique de Montreal.

December

- 2, TJC Monthly AOS Judging at TBG.
- 3, SOOS meeting, Toronto Botanical Garden, sales 12 noon, program 1 pm, Floral Hall
- 9, TAJC Monthly Judging, Jardin botanique de Montreal.

AOS Judging Results

Toronto Judging Centre, June 3, 2017.

Phalaenopsis Arakaki 'Spring Fairy' AM/AOS 83 points, David Bryan.

Rodrumnia Apple Hollow HCC/AOS 78 points, Jeanne Kaeding.

Oncidium Tropic Breeze CCM/AOS 87 points Wilson

Cryptocentrum peruvianum CBR/AOS Leslie Ee.

Toronto Judging Centre, July 8, 2017.

No Awards

The next judging will be held Sunday, August 6 at SOOS Orchidfest at the Toronto Botanical Gardens at 10 am. AOS Judging is a service of the American Orchid Society and is open to all! Bring us your flowering orchids,

Birth and Legend of *Phalaenopsis* violacea variety Indigo, Dr Leslie

Ee, transcribed by Inge Poot



Phalaenopsis violacea 'Monster' AM/AOS (4.9 x 6.6 cm)



Phalaenopsis violacea, typical form, Photo: Art Vogel, OW x3.3

The history of the species *Phal. violacea* is in disarray, because at first *Phalaenopsis bellina* was included in the *Phal.violacea* species concept and *bellina* was not given its own species status until Dr Eric Christenson separated it from *violacea* in 1995.



Phalaenopsis violacea was described by H. Witte in 1861 after being discovered in Sumatra by Teijsman in 1859. Teijsman sent it to Leiden, Netherlands where Witte first flowered it and described it. The species is found in Borneo, Sumatra, and peninsular Malaya. It usually grows on shady trees near lowland rivers, sometimes with Phal. sumatrana.

It likes to grow in shady, hot conditions, that is nights of 75 to 85F. In its native habitat it experiences summer days of 87-90F (31-32C) on average and nights of 72-73F (22-23C) and a diurnal range of 15-17F (8-9C).

Phalaenopsis bellina likes about the same conditions, but is even more cold sensitive and should be kept above 68F (20C) at night. It can take more light than Phalaenopsis violacea as it is found near the top of trees and as a result is more drought tolerant.

Phalaenopsis bellina is found in Malaya and Sarawak in Borneo. Sweet (1980) reported that Phalaenopsis bellina f. murtoniana was originally collected near Changkat in southern Perak state. Griesbach (1998), however, indicates that Phalaenopsis bellina and its forms are found on Borneo while Phalaenopsis violacea occurs in Malaya, which reflects the thinking on the distribution of these plants that was generally accepted for many years. Recent work, however, shows that these orchids occur in both regions, with those from Borneo reported as originating in lowland forests while plants found on the Malay Peninsula have been reported as occurring below 650 ft. (200 m). -- Source: Charles Baker

It is interesting to note that Borneo is not only the place of our speaker's birth, but also of *Paphiopedilum rothschildianum* from North-western Borneo and *Paphiopedilum sanderianum* from North-eastern Borneo! Leslie measures up to his exalted neighbors!

The two species have different scents:

Phal. violacea smells like spicy sweet anise, while bellina smalls like fruit loops.

Phalaenopsis violacea has a number of horticultural varieties such as "dark", alba, coerulea, murtawai(with longer spiles on the sepal and petal tips) and of course indigo.

The type form of *Phalaenopsis violacea* has the violet colour only in the upper epidermal cells. The Sumatranan variety is a natural tetraploid and has colour distributed throughout all layers.

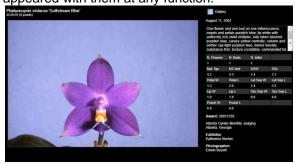
The man responsible for line breeding for a blue *Phalaenopsis violacea* was H. P. Norton. He lives with his wife Katherine in Monk's Corner, South Carolina on a lake and is 96 years old now. He retired from a boating supply company in 1976 and bought an orchid and the rest is history! He bred such **yellow** crosses as Phal

Golden Bells(1988), Orchidview Gold and King's Ransom, Caitlin(white with red lip) and red crosses such as Katie Morris, Abed-Nego and Lonnie Morris. He won many AOS and IPA awards.

He also bred Phragmipediums, espescially reds from *Phragmipedium besseae*, but never got any awards on that type of breeding.

In 1980, a Malaysan by the name of Michael Ovi met HP and HP gave him a flask of yellow Phals. In return, Michael sent him 25 *violacea* and 25 *bellina* seedlings.

In 1982 they started to flower and HP used the best two to do a sibbing. He continued this for 8 generations and then sold one of his resulting flasks to Susan and Todd Miller for \$75. They complained to HP that one was indigo and they did not like it! A total of four indogos resulted from that generation. In 2001 Ken Avant flowered another indigo from HP's flasks and gave HP pollen from it. With this HP was able to flower his own first indigo in 2004 'Golfstream Blue' JC/AOS –after 21 years of line breeding! It created a sensation and from then on people just grabbed his seedlings as soon as he appeared with them at any function!



AOS started to award them and lovely clones started to be awarded such as 'Blue Boy', 'Hilltop's Sapphire',' Hilltop's Royal Blue', 'Mademoiselle Bleu' and 'Krull-Smith'. They had about 5cm natural spread and had the typical *violacea* fragrance.

Looking at the about 150 *violacea*s awarded to date 18 were indigos. But it turns out about 80 of the 150 were actually *bellina*s and so the 18 were a good percentage of the 60 remaining true *violaceas*.

The lovely 'Monster' AM/AOS (see beginning of article) clone was almost killed when the owner Ramon Santos moved to a cooler location. But by putting a heating pad under the pot he saved the plant. It had a natural spread of 4.9 x 6.0cm. Impressive! Cooler nights slow the rate of growth and allow more colour to accumulate in the cells, resulting in darker flowers. But don't overdo it!

In fullness of flowers indigoes are a bit less filled in, but some Indonesan growers and some Taiwan breeders are getting quite full flowers. HP's 'Hilltop's Royal Blue' is 4.4 X 4.2 cm in natural spread, but it has relatively very wide segments.

In size indigos are about 11.5% smaller than normal *violacea*s, but the breeders are working on size! 'Hilltop Sapphire' is a respectable 5.0 X 5.0cm and 'Monster' is almost as wide and even longer. 'Bredren's Wow' measures 4.5 x 4.8 is not bad either. It is very flat and a good medium blue with an attractive white halo around the column.



Uniqueness of Indigos:

Pros:

- Deep saturated Indigo colour
- Substance thick and hard
- Texture satiny or velvety with a sparkling iridescence
- Strong, spicy cinnamon fragrance

Cons:

- Low flower count
- Slow growing
- Warm temperature requirement
- They are from magenta lines, so magenta progeny may appear

The first indigo appeared in the F8 (eight generation) of line breeding. Three generations later get more indigos. Crossing 2 indigos from those gives 25% indigos (F1). Repeating with 2 from F1 we get 80% indigo (F2). Repeating again with two indigos of the F2 we get 100% indigo in F3.

It took 35 years and 15 generations to get mostly indigos!

Indigos are not found in the wild.

The coerulean gene C works by suppressing the anthocyanin producing genes A and B.

The coerulean gene C was a single recessive mutation and has to be present in both copies of the chromosome bearing it to be expressed. It is a latent gene in the magenta line of *violaceas*.

In violacea variety coerulea there is a low ratio of anthocyanins to the other pigments. It is not epigenetically controlled (that is by attachments to the chromosome or to the histamines - the chromosome is rolled around balls of histamines- that deactivate or activate genes), but colour follows pigment concentration dynamics and cell pH. (Are your eyes bugging out yet????)

To combat sterility in hybrids it is best to use the tetraploid form of the species.

Present line breeders of indigo phalaenopsis include in the USA Krull-Smith, Rob Sheppard, Orchids Ltd., Hilltop. In Taiwan there are a few breeders too and their plants can be spotted by their more rectangular shape.

There is a fly in the ointment: the contoversy over the "too-good-to-be-true" *violaceas*. The accusation is that these wonders have *bellina* in them. But if that were so, with all the many generations of line breeding, the odd

almost pure *bellina* would be bound to appear in the progeny. But this has not happened.

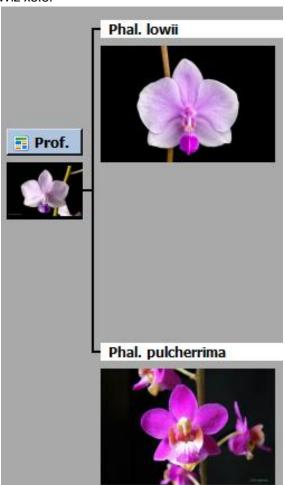
Future of indigos:



Phalaenopsis lowii 'Highjack' HCC/AOS, OWx3.3

 Using the faintly blue Phalaenopsis lowii var coerulea could provide a new direction and hybrid vigour. Phalaenopsis pulcherrima should increase flower count. Crossing the two gives Phalaenopsis Siam Treasure. It is a remarkably uniform cross and thus got an Award of Quality.

The parents and one progeny are shown from Orchid Wiz x3.3:





Phalaenopsis Siam's Treasure 'Myra' HCC/AOS (lowii x pulcherrima),

Photo: Richard Noel, OW x3.3

- Ron Sheppard did a lot of breeding with other Phal species. His flowers are still small and need further breeding.
- Phalaenopsis Kenneth Schubert forma coerulea is another promising breeding parent.
- But a really surprising result : Use indigos to produce <u>reds</u> in one generation!!!

For instance cross an indigo *violacea* to Phal Princess Kaiulani :



Phalaenopsis Princess Kaiulani 'Chin Yo' AM/AOS, Photo: Judith Higham



Phalaenopsis Princess Violet 'Houston' HCC/AOS

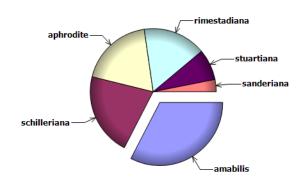
Photo: Charlotte Randolph, O+ on-line

Phalaenopsis Princess Violet (Princess Kaiulani X *violacea*) will give some brownish reds and some red and blue clones as well as reds. Saves 9 generations of breeding to get to some reds!

Penang Girl x violacea indigo gives reds

 Future Phal. Samares and indigo Phal. violacea have not bloomed yet. It could be a stepping stone to long sprays of large blue flowers

Phalaenopsis Samares



Species percentages do not equal a specimen's actual genetic code.

- A most promising cross for future breeding are the progeny of indigo violaceas bred with bellina coerulea, because these progeny were all blue.
- A bluish Mok Choi Yew (gigantea X violacea) was created by crossing the gigantea with an indigo violacea. No offspring have been released yet.
- Phalaenopsis YangYang New Star is a tetrapsis
 x speciosa hybrid and crossed with violacea
 gives the cross Phal. YangYang Blueberry.

Using the indigo *violaceae* gives a dark purple mini. Check Orchid Wiz for the image. One image on the net was of a clone with both purple and blue colours:



Phal. YangYang Blueberry

- a dark magenta pink P. Waltraud was created with (Lippewunder x violacea indigo); not all pink parents did this
- The star shaped red bellina rubra in the picture likely contains indigo genes to create that red red colour



Phal. bellina var. vinicolor 'Fernbrook' Photo: Orchid Forum

 Phal.Equalacea is (equestris var cyanochilus x violacea indigo) and was bred by Rob Sheppard.
 Crossed back to violacea indigo, we get Phal.Louise Burns, a deeper blue multifloral. Both have long sprays of branching indigo flowers.



Phalaenopsis Louise Burns

Photo: Orchid Vault

Some white Phals do not suppress colour and can be used to increase size and fullness. For example Phal. Snow Twinkle (aphrodite x tetraspis alba) doesn't suppress colour of the other parent (part of Rob Sheppard's work)

(Transcribers note: Wow, who would have thought that those dye-injected temporary blue phals that seasoned phal growers shudder to see will, in the forseeable future be replaced by the real thing and have a good chance of being really beautiful!)

Culture of Phalaenopsis violacea indigo:

- Grow in Phalaenopsis cubes
- Best in New Zealand Sphagnum moss
- Moist, not wet
- Warm nights, best at 16-18C
- Days 25-28C
- Low to medium light
- 14-16 hours of light per day
- Feed weakly, weekly, flush regularely
- Repot annually
- Sensitive to cold nights
- Slow growers: 4-5 years to reach flowering size of 12-14 cm leafspan
- Don't cut sprays they may rebloom
- Watch for crown rot
- Summer blooming and very fragrant
- Look for vigour in subsequent generations
- www.orchidweb.com from Orchids Limited.

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TOUR OF ORCHID GROWERS September 9th—10th, 2017

Name	<u>Address</u>	Contact	Growing situation	Date & time open
Allan Gardens	19 Horticultural Ave. Toronto M5A 2P2	Lynda Satchell	Greenhouse	BOTH days 10am — 5pm
Heinz Ernstberger	336 Osiris Drive Richmond Hill Ont., L4C 2P7	Heinz 905 884-4361	Greenhouse	BOTH days 10am — 3pm
Peter and Inge Poot	330 Wagg Rd. Goodwood, Ont. L0C 1A0	905 640-5643	Greenhouse Lights Windowsill Veranda	BOTH days 10am — 4pm
Eric Lee Crystal Star Orchids	20815 2 nd Concession East Gwillimbury L9N 0G9	Eric Lee 905 478 8398	Greenhouse	Saturday ONLY 10am—5pm
Alla Linetsky	104 Allingham Gdns Toronto Ont M3H 1Y2	Alla 416 567-5529	Windowsill Living walls	Saturday ONLY 10am—4pm
Synea Tan	28 Torrens Ave. Toronto, Ont., M4K 2H8	Synea 416 421-7805	Windows Lights Outdoors	Sunday ONLY 10am—3pm
John Vermeer	820 Parkland Ave. Mississauga L5H 3G8	John 905 823-2516	Outdoors	Sunday ONLY 10am—3pm

Please note that this will be a self-directed tour.
You decide which growers you wish to visit, and when. You can use Google, MapQuest, your GPS or an old-fashioned map book to get you there. **Please** respect the conditions, i.e Dates, and hours the growers have indicated that they would be available.

Jun 4 2017 Show Table Ribbons

Class	First	Second	Third
Class 1 Cattleya Alliance	C. Canhamiana 'Azure Sky' AM/AOS David Bryan Epi Jairak Filter 'Yellow' Bea Paterson	(Rhyncholaeliocattleya (Pot.) Duh's Wisdom 'Green Star' Synea Tan C. Haudate (?Laudator) Rosanna Li	Lc. Kazuko Takamatsu 'SetoBlue' BM/JOGA John Vermeer Epc. Siam Jade 'Key Lime' HCC/AOS John Vermeer Rhyncholaeliocattleya (Blc.) Yen Corona 'Green Genie' AM/AOS John Verneer C.Intermedia-Gigas (intermedia x gigas var. Sanderiana) John Barnes
Class 2 Paphiopedilium	Paph Fumi's Delight 'Synea' AM/AOS Synea Tan	Paph Carolyn Butcher – Mutant Stan Luke Paph Black Diamond Synea Tan	Cyp. Qubesense (?) Stan Luke Phrag Paul Eugene Conroy, Rosanna Li Paph Pinocchio Bea Paterson
Class 3 Phalaenopis and Vanda Alliance	Phal Arakaki Spring Fairy 'Cad Orchid' AM/AOS David Bryan	Phal Sara Gold Synea Tan	Vascostylis Velvet 'Crown-fox' HCC/AOS Synea Tan Phal Sogo Relex '1661' Joe DiCiommo
Class 4 Oncidium and related	Onc. phymatochilum Peter and Sherry Decyk	Papillro (?Psychopsis papilio) Bea Paterson Onc. Lamunes Woc(Lorraine's Fourteenth WOC?) Bea Paterson Tolumnia hybrid Bea Paterson	
Class 6 Dendrobium		Den. capituliflorum Pater and Sherry Decyk Den. aggregatum Bea Paterson	Den.SOOS Celebrates 50 Bea Paterson
Class 7 All Others	Bulb. claptonense Peter and Sherry Decyk		
Class 8 Specimen Plants			
Class 9 Baskets and Displays	Specklinia (Pleurothallis) grobyi 'Andrew's First Communion' CCM/AOS Erika Lorincz Mini basket	Paph basket Stan Luke	

Web site: <u>www.soos.ca</u>; Member of the Canadian Orchid Congress; Affiliated with the American Orchid Society, the Orchid Digest and the International Phalaenopsis Alliance.

Membership: Annual Dues \$30 per calendar year (January 1 to December 31). Surcharge \$15 for newsletter by postal serviceMembership secretary: Liz Mc Alpine, 189 Soudan Avenue, Toronto, ON M4S 1V5, phone 416-487-7832, renew or join on line at soos.ca/members.

Executive: President, Laura Liebgott, 905-883-5290; Vice-President and Treasurer, John Vermeer, 905-823-2516; Secretary, Sue Loftus 905-839-8281;

Other Positions of Responsibility: Program, Ann Antanaitis; Plant Doctor, Doug Kennedy; Meeting Set up, Yvonne Schreiber; Vendor and Sales table coordinator, Diane Ryley; Library, Liz Mc Alpine; Web Master, Max Wilson; Newsletter, Peter and Inge Poot; Annual Show, Peter Poot; Refreshments, Joe O'Regan. Conservation Committee, Tom Shields; Show table, Synea Tan, Cultural snapshots, Alexsi Antanaitis, Directors at large: Marion Curry, Lynda Satchwell and Kevin Hushagen.

Honorary Life Members: Terry Kennedy, Doug Kennedy, Inge Poot, Peter Poot, Joe O'Regan, Diane Ryley, Wayne Hingston.

Annual Show: February 10-11, 2018.