



THE MONTHLY BULLETIN OF THE KU-RING-GAI ORCHID SOCIETY INC.

(Established in 1947)

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17th February 2025

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Annual Membership : **\$15 single, \$18 family**

Patrons - Pauline and Trevor Onslow

President : not appointed

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Treasurer : Lina Huang (and Sales Table)

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Committee : Jessie Koh (Membership Secretary / Social Events)

Committee : Stuart Ruthven

Committee : Julie Iyengar

Committee : Adrian Zderic

Committee

Society email : kuringaiorchidsociety@gmail.com

facebook : www.facebook.com/p/Ku-Ring-Gai-Orchid-Society

Next Meeting : Mon 17th February 2025

Venue : *The West Lindfield Community Hall, corner of Bradfield Rd and Moore Avenue, West Lindfield.*

COVID and even common old influenza remain a problem. **Please, if you are feeling unwell - do not attend.**

YOU MUST SIGN IN – Our insurance requires that you **SIGN** the **ATTENDANCE SHEETS** at the **front door on arrival**.
Please do it.

The hall is open from 6.30pm to set up the hall (please help), benching can begin from 7 pm but no benching until all the class cards and dividers are in place. Give the set up team time to get everything organized.

Culture Class – Our culture classes are back on the agenda from this month and **David Floyd** has kindly agreed to present our first class for 2025 with **“Potting a Cattleya”**. Dave’s sessions are always very popular as they are full of practical observations and advice based on his many years of experience. Don’t miss this 2025 opener down front.

The sales table will be open as usual with growing supplies and hopefully some spare divisions of members plants for sale. Please respect the **“Sales Table Open / Sales Table Closed” signs** and give our sales table managers time to set up and get themselves ready before you start grabbing stock and offering money.

The Supper Break – Supper is **STILL not self-serve**. Members are assigned to serve the food for hygienic reasons. The supper helpers are also needed to get all the supper paraphernalia out of the cupboards and set up for your use and **I must say I was very disappointed** by the response to my appeal for volunteers at last month’s meeting.

There was only one family who offered to help. I will circulate the roster again this month. Please reconsider.

It seems we have many members who wish to enjoy the benefits of supper breaks but very few willing to participate in making it happen. Shame on you who **could** help to help but who don’t offer just one month.

Also – as I repeat each month – while the society provides supplies of tea, coffee, milk, sugar, and urn for the boiling water, **we do ask all members to bring in a contribution of cake, slice, or biscuits, etc for the supper table edibles**. **Please remember to bring something to add to the table spread.**

AND FINALLY – we no longer provide cups or mugs. Please remember to bring your own mug with you..

After the tea break, our Guest Speaker this month will be **Craig Scott-Harden** who will be presenting the tale of a trip to PNG by some well-known orchid friends. Craig is one of the most experienced and knowledgeable growers in Sydney and has done several other talks for us in the past. He is always very entertaining and very popular.

Some Gorgeous benchings from the January meeting. (all beautifully grown and flowered)

Den. Fire Wings
(magical colours)



Vanda Pachara Delight
‘Blue’ (and look at all
those clean green leaves)



BC Memoria Vida Lee ‘Limelight’
(gorgeous contrasts)

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Society News (if anyone has a news item, please phone Jim on 9476 3383, or email at jimbrydie@aussiebroadband.com.au)

Dennys' January meeting review – My expectation was that our January meeting would be lightly attended but I was pleasantly surprised. After we had our tables and benches set up, initially, it seemed we would not have many folks turn up. By the time the meeting had started 42 people had signed-in, including two visitors that signed up as members by the time the night ended. The number of plants benched for the meeting was a little less than expected for January with only 99 plants benched but that said, a good number of members (23) benched at least one plant which was great. We had some apologies noted for the evening, and I hope all those members are coping as best as able and look forward to catching up with you at our future meetings.

This was Jim's first night at chairing a meeting for quite a while and he did a great job even though I managed to make things unsmooth for him. Regardless, we all seemed to have a lot of fun as we overcame the small problems that emerged. It was a good meeting. At the following Wednesday night committee meeting, we had lots of discussions on the meeting *happenings* and some great decisions were made which will benefit members and make meeting operations easier.

The plant doctor's session was a bit light on with the number of plants submitted but Jim managed to find some benched plants that offered opportunities for improvement. Certainly, the session that Dora and I attended as plant-doctors-in-training, under the guidance of Trevor, was very interesting with lots of great questions. I was advised that the other session run by Garrie and Christine with some great assistance by Fred was also good fun and full of knowledge.

Prior to supper, Anthony came up with a novel idea to serve supper without serving tongs, which I forgot to bring to the meeting. Regardless of the difficulty, supper was good, and I thank all for being careful during the serving of the food. It is important to be careful since COVID is still out there. Jim will be calling for more help with supper as the months roll by and please note that the help needed is not gender specific.

Orchid News - On January 10th, the Australian Network for Plant Conservation (ANPC) [published a small article](#) briefly describing CSIRO research on two new *Adelopetalum* species conducted on Lord Howe and Norfolk Islands. The CSIRO research is also described in a [small blog post](#). The links to the articles are also below:
<https://www.anpc.asn.au/news/new-orchid-species-described-through-anpc-supported-research/>
<https://www.csiro.au/en/news/All/Articles/2025/January/new-norfolk-island-orchid>

More Society News

1. Welcome to our new Members – As Dennys mentioned above, two of our visitors last month subsequently joined as members so a big welcome to the club to Tim Dabbs, and Stephanie Bashford. I hope you make many new friends among club members and if you are new to growing orchids we look forward to introducing you to the world of these amazingly different plants.

2. Social Dinner

For more than twenty years, except for a period during that awful covid pandemic, the Ku-Ring-Gai orchid society has arranged annual social dinners to offer members a chance to get to know one another in a less regimented, less busy environment than at our monthly meetings. Realistically, we all know friendships aren't made overnight or at one dinner but part of establishing names to faces and finding common interest is in providing the opportunities for connections to be made.

Social dinners and the old 'home visits' we used to arrange to members collections, are vital parts of that. The home visits have been difficult in recent times because of covid, and also because some of our older, more experienced growers are, frankly, getting past hosting home visits.

But negatives aside, we are continuing our tradition of social dinners.

Our dinner this year will be in March at the Silk Chinese Restaurant, St Ives Shopping Village Shop 101 facing car park (there is plenty of underground and above ground parking at the Shopping Village)

All reasoning aside, this looks like a great dinner with friends at a budget price.

(a) the Date is Friday March 28, at 6.30 pm

(b) Our Shared Menu is : Kung Pao King Prawns, Crispy Chicken Shantung style, Pork Spare Ribs with Honey Pepper sauce, Beef Eye Fillet with Wasabi sauce, Stir fried green beans with minced pork, Braised Tofu with broccoli, steam rice, and tea. (we are dropping the starters this year for budget reasons)

(c) The dinner is for Ku-Ring-Gai orchid society members and their partners only. The cost to the restaurant is \$45 per attendee, but attendees will only pay \$30 as the club is subsidising \$15 per head. You pay for all drinks.

(e) Drinks: all drinks are via bar service, paid as you order, or bring your own (wine) with a corkage fee of \$4.50 per glass. *Drinks and corkage must be paid separately by attendees on the night as the cost is incurred.*

There can be "no exceptions or variations" to the deal for anyone - As the restaurant can only cater for a maximum 30 in a group, we are booking for 30. The first 30 to book get to participate. Please request a booking to Jessie (jessie_koh38@hotmail.com) or Lina (lina.h.h@hotmail.com).

One little negative side of the deal – Because this is a group booking and we book in advance, the restaurant is depending on our 30 members attending and will be charging and serving for 30, whether 30 turn up or not.

(f) PAYMENTS - The restaurant has to make a living like all of the rest of us. Therefore we need members payments in advance and there will be no refunds. We have to pay so you have to pay. Members' bookings are finalised only upon payment of their \$30 per head. Please pay at the next meeting on February 17. Payments may be made to Jessie or Lina. There will be **no** dinner payments on the night of the dinner.

We prefer payment in cash to avoid credit card surcharges. However, if a member cannot pay at the February meeting, payment may be made by bank transfer to the same bank details set out for membership payment in the item below this one. **HOWEVER** would those paying dinner fees by bank transfer **please indicate 'Dinner (and your full name)' as your reference** to help us keep track of transactions against bookings. If you want confirmation you can email Lina

The deadline for bank transfer payments is March 14. Anyone who asks for a booking (by email) but who hasn't paid by then will need to come off the booking list but please stay in touch with Jessie or Lina. If late payment is an oversight please talk to us. We want you to come.

Please join us and meet some fellow members. Remember, it also means no cooking and no washing up that night

3. Annual membership fees – Just a reminder. Membership fees are due now and if not paid by 31 March your name will come off the mailing and email lists. Please pay your membership fees.

Jessie will be at the meeting and can take your payment if you want to do it that way, but you can also pay by bank transfer. That is:

Westpac Bank, BSB No 032 188, account name - Ku-ring-gai Orchid Society Inc. and account number 103568.

If you use this method, **please** use **your full name as the payment description** or your **phone number** if your financial institution does not allow you to enter a name. If you wish, you can email to the address below : kuringgaiorchidsociety@gmail.com to confirm your payment.

Best of the evening Novice: Stanhopea graveolens - grown by Robin Stewart



The taxonomists tell us there are 67 species of Stanhopea today but the way the classification system is going, I wouldn't bet on that being the number in the future.

Stanhopeas have been marvelous orchids for gardeners and orchid growers for a long time. The nature of their growth makes them perfect for a basket hanging under trees in the backyard although some species are little more fragile than others and may need some winter protection.

Graveolens comes from Mexico, Guatemala and Honduras in forests up to 2700 meters elevation which makes it one of the cooler growing types.

I was asked by one member at the last meeting if I could identify the Stanhopea species that they were benching and I had to admit that separating Stanhopeas was beyond me. Even each species can vary dramatically in colour and appearance and I have never got on top of Stanhopea identification. There are also a large number of natural hybrids that are mislabeled among grower collections as well as a huge number of man-made hybrids where the label has long ago washed off, broken or fallen out. The task of identification is impossible. When faced with an unlabeled flowering plant in front of me, about the best I can tell you is 'yes, it's a Stanhopea'. You must label it 'unknown' until some guru identifies it for you.

In Barney Greer's little book 'The astonishing Stanhopeas' he explains that most of the separation of one species from another is based on the size, shape, and proportions of the 3 segments of the lip. The top portion (the bulky perfumed part where it joins to the flower) is called the hypochile, the next segment is called the mesochile (a short middle section that carries the horns), and end part is the epichile which is usually shield shaped or heart shaped.

The various shapes and proportions of these and the way they form a whole is a key distinguisher between species.

At the meeting I suggested "unknown yellow species" for the plant I was asked about so you can see how much I know. As a grower though, we know that they are relatively short lived flowers but make a huge impression while they are with us. Beautiful orchids that should be in every growers collection.

Congratulations Robin. The unknown one wasn't your plant and I do believe yours is graveolens. Well done.



Chemistry teacher – "What is Barium?" --- -- Student - "It's what you do after you 'killem'."

Best of The Evening – Hybrid: *Clowesetum Jumbo Apollo* - grown by Garrie & Lesley Bromley



What a delightfully complex looking orchid.

Clowesetum is one of those mixed genus man-made orchids that requires a bit of explaining, but I just love the lime green base colour, the little colour highlights, and the delicate frilly fringes around the lip. A really pretty flower.

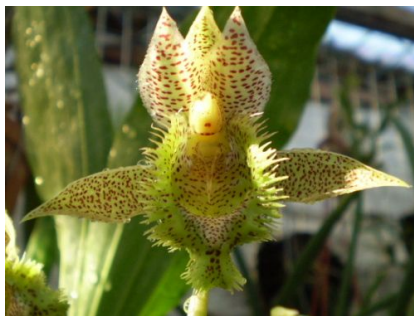
This hybrid only has two species parents. *Catasetum fimbriatum*, which probably provides a lot of the frills, and *Clowesia russelliana* which gives us the lovely green.

Both these species are in the same family, the *Catasetinae*, but as you can tell from the names they are in different genera. There are 176 separate species and a bunch of naturally occurring hybrids in *Catasetum* but the most memorable feature of the whole genus is



that they almost always have single sex flowers. It is not the plant that is either male or female but when it flowers, the inflorescence usually only carries either male or female flowers and it's certainly not hard to tell which is which. When the explorers were poring over new territories finding new species, there are many occasions when they described and published the males and females as separate species. As an example, I have provided pictures of several different male *Catasetum fimbriatum* and one female *fimbriatum*. Most of the species females look much the same but as we find in some bird species, it is the males who are the flashy ones .

Catasetum are found from Mexico, down through Central America and all the way south to Argentina



Cism. fimbriatum "Penha"
Foto e cultivo: Dulce Pereira Primo
24/01/10



Clowesia however is a different kettle of fish (I wonder where that expression comes from?). There are only 7 *Clowesia* species, but they are also spread wide geographically. They occur from Mexico all the way down to Venezuela and all the *Clowesia* have standard flowers with both male and female parts.

Clowesia russelliana is mostly found in southern Mexico and parts of Central America.

Some experts say its range extends to Venezuela, others dispute the claim but wherever it comes from the flowers are a real delight. The inflorescence is pendent. Some start up and then go down, others flower straight over the edge of the pot like the picture at the right. The close up of a single flower shows where *Jumbo Apollo* gets its green from.

So now we need to look at *Jumbo Apollo*. The hybrid was made by a Taiwan nursery called Jumbo Orchids in 2001. It has been awarded 3 times so far, all in Taiwan, but from those awards I can at least tell you the flower width is about 7 cm and it can carry at least 20 flowers to the inflorescence.



From my point of view though, *Catasetinae* are tricky little sods to grow. Both *Jumbo*'s parents are relatively lowland orchids so they would be warmer growers. In addition most *Catasetum* have a distinct deciduous period where they drop their leaves and go to sleep. In other words they have a dormant period where the growers that succeed with them tell us you can take the pot out of your growing house and sit it on the floor behind the lounge chair (or the piano is some versions of the tale) AND FORGET ABOUT THEM until late winter or spring when you should see new growths starting. While they are behind the lounge so to speak, don't water them at all. While they are dormant the pot of dead looking plant is a rather unattractive looking thing that you certainly won't want staring you in the face every day. You have to keep telling yourself that that ugly thing is worth it because you know what a stunning display you will get when it flowers. And I have to say that most flowerings of *Catasetum* sure are eye catchers.

Congratulations Garrie and Lesley. *Jumbo Apollo* was gorgeous. Thanks for sharing it with us.

Best of the Evening Species – *Cattleya leopoldii* ‘5V052’ - grown by *Garrie and Lesley Bromley*



What delightful head of flowers. If you were told that *Cattleya* flowers with rather narrow brownish petals and sepals could look this attractive, you probably wouldn't believe it.

Catt leopoldii, or perhaps more correctly these days – *Catt tigrina*, is one of a group of multi flowered *Cattleya* species where the beauty is in the display of the whole inflorescence rather than just any one flower. The flowers in the perfect inflorescence should be evenly spaced, not pushing against each other or displacing each other but forming a full ball. And that is what Garrie and Lesley's orchid shows us.

The official description says its pseudobulbs are generally 45 to 50 cm tall but can get to 120 cm. The pseudobulbs usually have 2 leaves but can have 3. The flower head on a well-flower plant averages 10 or so flowers but I can see award records of the really best ones that carry 15 to 20 flowers in a head, and with the inflorescence (including flower stems) anything from 15 to 30 cm tall above the top of the pseudobulb.

The first valid name that this species was given was *Cattleya tigrina* in 1846 but since then it has been given many names. After being called *tigrina*, it was for a long time regarded as just a variant form of *Cattleya guttata* and therefore has at least a half dozen special varietal names within *guttata*. The next step was its recognition as a separate species to *guttata* and it was given the name *Catt. leopoldii* in honour of King Leopold of Belgium (1790 -1869).

However, as the more recent taxonomists go through the process of cleaning up orchid names it was decided that *Catt leopoldii* is the same species as originally designated *Catt tigrina* and so the name has to revert to the oldest valid name – the latest name is therefore *Cattleya tigrina* but given the fickleness of taxonomic naming, if Garrie and Lesley choose to still call their orchid 'leopoldii' then I am not going to argue.

Orchidwiz gives the following for HABITAT: Brazil. Plants are found in swamps very near the coast from near Rio de Janeiro southward to near Paran gua (about half way from Rio to Uruguay). The habitat originally extended southward through the states of Rio de Janeiro, S o Paulo, Paran , Santa Catarina, and Rio Grande do Sol to almost the Uruguay border. However, modern Brazilian writers report that the southern part of the habitat has been destroyed and plants are no longer found there. *Cattleya tigrina* usually grows in the tops of trees in dense swampy forests below 350 ft. (100 m). *Cattleya guttata* Lindley is found in the same area but spreads further inland and grows to somewhat higher elevations.

I would interpret all that as around 99% humidity year round, minimum temperature never below about 20 C, max never much above 30 C. In actuality Charles Baker gives the humidity in its habitat as 75-85% year round but I think that's close enough to make my point. This orchid grows in tops of tall trees (= high light) and requires warm temps and high humidity. Growing conditions that are very difficult for the average grower to reproduce.

This is a gorgeous looking orchid but don't try it before you are a master of, at least, all other *Cattleyas*.

But Garrie and Lesley specialise in the impossible so at least we get to see delights like their *Catt tigrina*. Congratulations Messrs Bromley. Outstanding as usual. Please keep 'em coming.

Humour

I accidentally
swallowed some
Scrabble tiles and now
I'm experiencing
constant vowel
movements. The next
trip to the bathroom
could spell disaster.

Some call it multi-tasking, I
call it doing something else
while I try to remember what
I was doing in the first place

It's been a bit of a
strange day!
First I found a hat
full of money.
Then I was
chased by an
angry man with a
guitar...

"It's important to establish a good vocabulary. If I had known the difference between the words "antidote" and "anecdote," one of my best friends would still be alive."

What is Introgression?

Jim Brydie with much quoted from **Carl Withner's "The Cattleyas"**

While researching various article over the years I have run across this expression but I have never seen it explained so well as by Carl Withner in a specific article in the first volume of his series of books explaining the "Cattleyas and their Relatives" – ie in "Volume 1 The Cattleyas"

Wikipedia tells us that : Introgression, also known as introgressive hybridization, in genetics is the transfer of genetic material from one species into the gene pool of another by the repeated backcrossing of an interspecific hybrid with one of its parent species. Introgression is a long-term process, even when artificial; it may take many hybrid generations before significant backcrossing occurs. This process is distinct from most forms of gene flow in that it occurs between two populations of different species, rather than two populations of the same species.

Introgression is generally put forward as a potential additional factor, or even alternative, to Darwin's theory of evolution, or to be more exact, the evolutionary theory expressed in Darwin's "*On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*".

In Withner's book "The Cattleyas" his article on introgression looks specifically into some documented cases involving Cattleya species and introgression creating known natural hybrids between the two species but also the swarms of more complex mixed breed hybrids arising the from natural backcrossings and criss-crossings that occur among the mix of species and hybrids. The term used to describe such a complex hybrid swarm is a "syngameon".

I am unable to reproduce the whole of Withner's article, and I haven't found it online so that I might give you a link to read it online. However, his book (Volume 1 of Cattleyas and their Relatives) is available in our society library and likely also in the personal libraries of many members where it might be borrowed.

However, I am going to offer you some selected paragraphs of the work that explain some of the already mentioned well known examples. The indented paragraphs below are copied from Mr. Withners book, except for the notes in square brackets and blue print where I have added explanations of some of the terminology. The pictures are also my additions.

The first involves a situation in Guatemala – "One of the most obvious example is the natural hybrid population called Cattleya guatemalensis, a complex between Cattleya skinneri and Cattleya aurantiaca

[Note from JB – both of these species have since been moved from genus Cattleya to a close sister genus called Guarianthe but as I am quoting Carl Withners article I will continue to use genus names from his article].



Catt skinneri



Catt aurantiaca



Catt guatemalensis 'Silvia de Palmieri'

Note : the species above come in a variety of colour and shape forms. The pictures used here were chosen to illustrate common forms.

For comparison I have included two other colour varieties of guatemalensis below

It (ie the complex) is easy to analyze because of the distinct colours and flower shapes of the parents. The skinneri has purple flowers and the aurantiaca orange, so the intermediate guatemalensis hybrids are a salmon or peach toned lavender. If such hybrids backcross to skinneri they become more lavender, if they backcross to the aurantiaca side they become more orange, and may eventually produce red, yellow, or even white forms as the inter-breeding continues. **(right – 2 other cultivars of guatemalensis)**

These crosses have all been reproduced in cultivation, largely to obtain greater quantities of the rarer colours that may be found in nature.

Since the petals of the flowers of aurantiaca project forward to a marked degree, while the flowers of skinneri are more or less flat, this characteristic gives us another quality in addition to colour as a hallmark of the degree of hybridisation. Lip shape and veining are also significant. As will be discussed later, some of the colour variants from the hybrid swarm (or syngameon) have been described as separate species but this analysis clearly demonstrates that they now do not deserve such status. A clonal name is sufficient.



The other clear example of introgression involves 3 species, 2 Cattleyas and a Laelia *[JB note – now all Cattleya]* on Santa Catarina island off the south coast of Brazil. Although Andersons ideas about introgression

(Edgar Anderson and Leslie Hubricht 1938) originally derived from situations involving pairs of species, the Santa Catarina story readily extends to complexes involving 3. LC elegans was discovered in 1847. Boyle described the plant as : - “plentiful in its native habitat beyond all other species. home was a small island where it clung to the rocks. Every plant within reach has long since been cleared away; those remaining dwell in perilous places on the cliffs” . Tatum, a later collector wrote in 1930 “LC Elegans is still very plentiful ... of course all the plants are not Elegans but there are also L. purpurata, and Cattleya intermedia, and Cattleya leopoldii [3 distinct species]. As they all grow associated with one another, 3 distinct natural hybrids are produced, viz. Catt. intricata (intermedia x leopoldii), LaelioCattleya elegans (purpurata x leopoldii), and LC schilleriana (purpurata x intermedia) [JB: the latter hybrid is not to be confused with the valid species Catt schilleriana which looks completely different. The hybrid mentioned is now officially called Catt. Schilleriana grex.] – Lenz and Wimber discussed these observations in their chapter on hybridization and inheritance in *The Orchids. A scientific Study*, edited by the current author [JB: ie Withner]



Cattleya purpurata 'Iguassu'



Catt intermedia



-- (above) 4 different examples of Catt. x elegans (leopoldii x purpurata) --



the real Catt schilleriana sp.



--- (above) 3 cultivars of Catt. Schilleriana grex hybrids (purpurata x intermedia) ---

Plants in this complex show, in the so called purpurata population, intermedia characteristics in petal form, lip lobing, or colour patterning. There is, in fact, evidence of hybridity in each of the parental populations. The lavender hybrids were identified as elegans types when they had intermedia petal and sepal patterns, but when they had a “labiate” type of petal form they were identified as a variety of L. purpurata instead of elegans.

The white forms, especially those with labiate cattleya form, were called schilleriana. Few schilleriana were found but indeed the least common of all were the combinations between the bifoliate cattleyas which produced [the hybrid] C. x intricata. Intricata was also the least desirable horticulturally speaking, and the form least distinct and therefore most difficult to distinguish from its parents. It is not surprising that fewer of them were mentioned or described.



Catt. x intricata (intermedia x leopoldii)



Variant forms and populations of certain orchid species have long been recognised – in some species hardly any two plants are alike. For example, it is difficult to find two Cattleya mossiae flowers which are truly similar. At the extreme they can have such distinctive lip veining patterns that they would seem to be separate taxa.

[JB: the term taxon (plural taxa) refers to a group or population of an organism seen by taxonomists to form a unit. The term is often used to refer to a species as identifiably different to other species but, for example, can also refer to a subspecies – that is a group of members within a species than can be identified as a separate unit within other members of the species but not sufficient to be a new species]

If you have travelled to Brazil you may know that there are more than 100 clones [JB ‘varieties’ ?] of Cattleya intermedia, all presumably different and recognisable. There are also so many clones of Laelia purpurata, in fact more than 200, that entire shows in southern Brazil may be devoted to clones of this single species. Geneticists

tell us that mutation of genes is the major source of variation in species but in the plant kingdom, at least, Introgression offers a possibly better alternate explanation.

The hybridization and repeated crossings of hybrid individuals back with the parental types or with each other may take place many times over many generations. It is not a single event as is executed by the hybridizer in a greenhouse. The gene flow may be primarily in one direction, toward one of the parental types, so such forms may become the most common. Or there may be a continuous spectrum of forms ranging between those of the parental species so that it is difficult to tell where one parent species stops, the hybrids begin, and then where the hybrid stops and the other parent begins.”

Back to Jim –

How fascinating. I am immediately brought to wonder about all those amazingly different ‘varieties’ that we particularly see in *Cattleya purpurata*. Could some of them be intergrade hybrids with just a little bit of *Cattleya intermedia*, *tigrina*, or some other species in their genetic background. I am guessing we will never find out in my lifetime as it is going to take DNA examination of thousands of cultivars of just that one species just to see what we can see. And even then, what could we decide about such DNA information.

If there are intergrade hybrids that end up to be 99% *purpurata* and 1% *intermedia* (or other) could we trust that information to decide that the ‘hybrid’ is no longer a *purpurata*? How could we be sure that the non *purpurata* DNA component wasn't just a mutation or some other natural variant. Is the distinction between one species and another that exact DNA-wise and where would the line be drawn? I don't think I will change any of my labels in the near future but I must say I am suspicious.

And finally, if introgression is recognised as a factor in the establishment of a populations to be recognised as a new species, wouldn't we actually expect to find remnants of DNA from contributing (and still existing) parent species? And if so, why isn't that so already? No answers I am afraid, just questions, but interesting isn't it.

More Benchings



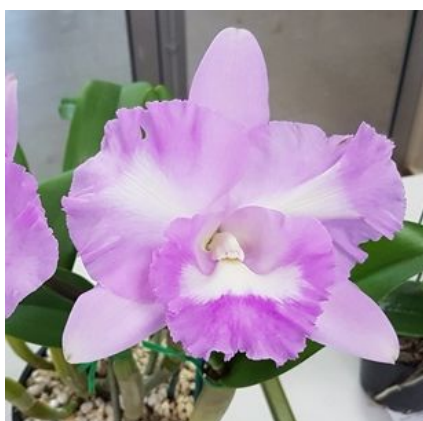
Stanhopea nigroviolacea



two *Phalaenopsis* seedlings made and raised by Adrian



***Phalaenopsis* hybrid (couldn't read label)**



BC Island Charm 'Yoshie'



Potinara Hoku Gem 'Freckles'

I am amazed these days at the wonderful advancements we are seeing among *Phalaenopsis* hybrids. In the early days the focus was on big flat white flowers, and attempts to get more flowers on spikes, and for them to be bigger, rounder, and flatter. To get big pink flowers they introduced the small flowered *Doritis* (now *Phal*) *pulcherrima* but it has taken an awful long time since then to effectively use some of the more highly coloured and patterned smaller species. It has been unfortunate that some of the better ‘smalls’ were sequential flowerers which doesn't appeal to flower lovers but hard work is going on in solving those problems and look at what we had just last month. The beautiful gold and red spotted one at the bottom left, a big white with spots that Lina benched (no picture), and the sister two seedlings from Adrian above. I look forward to more among all the other lovelies we see each month.