



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

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

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Committee : Chris Wilson (Library and Reference Sources)
Committee : Lee Payne (Sponsorship)
web site (active link) : <http://kuringgaiorchidsociety.org.au>

Next Meeting : Monday, 15th April, 2019

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

The hall is open from 6.30pm. Please try and get there early to help set up tables, chairs and lighting.

Benching is available shortly after 7pm but please be patient and **wait until tables and dividers are in place.**

The **Culture Class** this month starts at 7.20pm and this month **Chris Wilson** will talk about **Growing Rupicolous Laelias**. This fantastic group has recently been taxonomically reclassified, but that doesn't matter. Habitat wise they are a clearly identifiable group, especially because of the implications for their culture. And that is what Chris will talk about. This should be a beaut. Make sure you get in early for a front row seat.

The main meeting **commences at 8pm**. After the formalities of the general meeting, the judging, and the tea break, our main guest speaker will be our friend **Jody Cutajar** and his topic – **Laelias, Past and Present**. Jody has done some fabulous talks for us in recent years and we are sure to get a big roll up to see him this month. Don't miss out.

Our **supper volunteers** this month are **Evelyn Tse** and **Anne Byron**. We greatly appreciate your assistance ladies.

Best of the Evening Hybrid – Phalaenopsis 'unknown' - grown by Lisa Harris



Another of these very lovely Phalaenopsis that are sold commercially everywhere without names. This one shows how much progress the hybridists have made in breeding for a huge range of selected colours. It is one of the best, larger flowered 'greens' I have seen, but you can be sure it just another step along the road to even more intense colours.

Green is a very popular among orchid flowers these days, and the mauve lip creates a naturally pleasing combination. The same colour pairing has been created in many Cattleya hybrids and is very popular.

However, on behalf of all orchid growers who love named orchids, I refuse to apologise for trying for a name, and for some understanding of its breeding. So, after a quick search for similar coloured Phallies, I say that it looks a lot like Phal. Lime Light. Curiously, Lime Light was first

made way back in 1965 but I would imagine it and many other earlier hybrids have been remade many times since. I cant find pictures of the original cross, but the name suggests that at least one was green.

If we were to 'assume' it is 'Lime Light' though, then perhaps the green colour is a slight surprise.

The genetics of Lime Light is an equal 4 way share between 4 species. 3 pure white species (amabilis, aphrodite, and rimestadeana) and an unusual 4th species – fimbriata. The 3 white species were at one time or another all regarded as just amabilis, but the other is rarely even seen. It is an unusual looking Phally, in the same group as species like hieroglyphica, bastiani, pallens, leuddemanniana, pulchra, etc. I am not personally familiar with fimbriata, but to me it look like cross of a very pale heiroglyphica and a violacea alba (pics left and right). At least the latter is all green and would explain where the green comes from.

In most cultivars of fimbriata the background colour is basically white, but most have at least some pale green highlights. A few are even almost pale green, like the picture I have shown. It must surely have been the green for which it was used in Lime Light because its shape isn't much to get excited about.

But enough mind wandering. I hope it at least it gives a little introduction to what is behind some of these lovely orchids. And this is a really lovely one. Beautifully grown Lisa, and congratulations on best of the evening.

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

1. From President Dennys' Desk – (a) **Hearty Congratulations:** On behalf of all KOS members, I extend congratulations to Gloria Cushway who is now the President of the North Shore Orchid Society. We look forward to continued and collaborative efforts with NSOS and wish Gloria the very best of outcomes in her new role.

(b) **Supper Logistics:** The area around the supper table and urns, a safety issue, can get very crowded. Members are reminded that after you have acquired that choice sandwich or piece of cake and/or hot drink, please stand back so others can share in the supper, safely.

(c) **Key Absences:** During May and June, two of our committee members will be traveling separately overseas. The Committee, with the help of some active volunteers, help facilitate our meetings by setting up and then later packing up the hall. Set up starts at 6.30 pm. At our last meeting I called for extra assistance to help with these tasks during May and June. We received one offer to help which was wonderful. More offers would be gratefully appreciated.

(d) **Sales Table:** Pauline Onslow is stepping down as our key Sales Table person during our GM's. Pauline has been running the sales table in our meetings for some time and all that effort is so appreciated and we thank her so much for the effort she has put in over the years. Lee Payne has offered to takeover Pauline's role and which was thankfully endorsed by the KOS committee. Please thank Pauline and Lee when you see them next.

(e) **Native Orchid Register:** As well as the being the Librarian, Chris Wilson will now maintain the KOS Native Orchid Register. Chris is working up a procedure and will also have a supply of the new labels. The labels are free to KOS members and to ensure an adequate supply, we prefer to issue them to members who are exact about their needs.

(f) **Sponsorship:** On behalf of KOS, Lee Payne has received generous donations of some fertiliser products from the companies, Manutec and Seasol. The Society thanks Manutec for their donation of Orchid Food Fertiliser and Orchid Bloom Booster as well as Seasol for their donation of sachets of Seasol and Powerfeed.

(g) **Charity Donation:** Each year, KOS donates to a worthwhile charity. This year Herb Schoch has been liaising with Ku-ring-gai Council on behalf of KOS to identify such a charity. Once a charity has been identified the donation recommended by the committee will be "put" to the following GM for approval.

(h) **Culture Classes:** If you have any ideas for a culture class or have participated in a good one at another society please inform Jenny Richardson.

2. Membership Fees – Did your bulletin fail to arrive this month? Maybe it was because you hadn't realised that you hadn't paid your annual dues? Better check with Jessie before or at the next meeting to make sure. You get so much value for so little. It's just a small thing to be deleted as a member, and such a pest if you have to rejoin.

3. Chinese Dinner Outing Friday 12th April – **BEFORE the next meeting.** We have about 26 starters so far, but if you just forgot to book, there is still time. The dinner is at **the Paradise Restaurant, 1A - 1B Myoora Rd, Terry Hills.** The restaurant is part of the Golf Paradise driving range complex there and there is plenty of parking at the site.

The society is subsidising the cost so members and partners attending pay a flat \$20 per head for dinner and dessert. A small quantity of soft drinks will be provided for each table to get the night started but after that, attendees will need to order and pay for drinks separately. The restaurant is licensed, but BYO for wine is allowed. These nights are great value and really good fun. Why not come and join us. Please arrive 6.30pm for a 7pm dinner.

As usual, we need to know if you can join us. Please contact Jessie at jessie_koh38@hotmail.com to advise.

4. Pauline and the Sales Table – I know our President has already mentioned this but I wanted to offer my own personal thank you. It will be hard to imagine the sales table without Pauline, but I guess all good things must eventually come to an end. A huge thank you Pauline. Every time the society needed something done, you were the first to raise your hand. We noticed, and we thank you. Have a break and enjoy the meetings from the seats.

Advance Diary Dates 2019

6 & 7 April (Sat/Sun) Collectors Plant Fair – held at Hawkesbury Race Club, Clarendon Rd (see internet)

Fri 12 April – Society Chinese dinner at Paradise Restaurant, 1A- 1B Myoora Rd, Terrey Hills. 6.30 for 7pm.

Sun 14 April - Manly Warringah OS, public orchid auction - Community Centre Fisher Rd North, Cromer

Sun 5 May – Home visit to Garrie and Lesley Bromley's. 43 Ferguson Street Forestville. Strictly 10am to 1pm.

Fri 17 to Sun 19 May – Orchids Out West Orchid Fair – displays and sales, Hawkesbury Race Club, Clarendon Rd

Best of the Evening Species – Paph parishii grown by *Jim Brydie*

This has now been BOE and written up just too many times. As it is my orchid, I am barring it from any more. If anyone missed the many past write ups and really wants to know about the orchid, our website has our bulletins for at least the past 3 years. Check out March 2018.

Paph. parishii is certainly a lovely orchid, and surprisingly hardy. Like most of the multi-flowered Paphs, it is a quite a slow grower, especially as a young plant. Or at least it is for me. But it is really worth gradually collecting some of these stately multi flowered beauties, particularly the hardier, cool growing types like *parishii*, the *chamberlainianum/glaucophyllum* group, and even *haynaldianum*. Buy small and be patient. Seedlings are a good way to acquire that latest hybrids or line bred species. Flowering size divisions are very expensive.



Best of the Evening Hybrid – *Catasetum Marge Soule* grown by Jessie Koh

Well done Jessie. A really beautiful exhibit. You are getting pretty good at this.

Catasetum Marge Soule is primary hybrid between two *Catasetum* species. That is, *Ctsm. fimbriatum* and *Ctsm. expansum*. *Fimbriatum* comes from the eastern side of the Andes in Bolivia, Venezuela, and Brazil, right down to Paraguay and Argentina. It comes from dry inland areas at low elevations (400-500 metres), mostly on palm tree trunks. It has a pendent inflorescence with up to 15 moderately sized, nicely displayed flowers, each about 4cm across. Like all *Catasetums*, its cultivars can vary dramatically in appearance, with some variants dominantly green, others dominantly gold. As you can see from the pictures below, *Marge Soule* closely follows the more golden types.

All *Catasetums* have separate male & female flowers. The two different sex flowers look nothing like one another, as you can see from the picture at the right.

Similar to the bird kingdom, in *Catasetum* it is the males that are the flashy, show off types where appearance plays a strong role in sexual reproduction. I wonder how we humans ended up with the opposite sexual characteristics?

Expansum comes from the other side of the Sth. American continent, in Ecuador, but it also comes from dry inland areas at relatively low elevations (below 650 m). It has an arching to pendent inflorescence, slightly shorter than *fimbriatum* (to 30cm?) but has about the same number of similarly sized flowers. Again, there is substantial differences in appearance between the male flowers of various cultivars. In this case however, *expansum* is essentially a flatter, more rounded shape flower, something more like *Ctsm. pileatum*. There are many colour forms. Some are red, some green, and many with different combinations of red/yellow/green/ white. Unusually for *Catasetum*, it often has both male and female flowers on the same inflorescence.

Now go back and look again at *Marge Soule*. Doesn't it look like a better shaped golden/green form of *fimbriatum*? No doubt just the improvement Mr Soule was looking for when he made and registered the cross back in 1985. I don't know whether Jessie's plant came from that first cross. The chances are that it didn't because the first clone awarded (in 1987) was 'Eloy' which is a deeply red spotted green flower. It seems certain that the cross has been remade a number of times, likely using different cultivars of the parents and aiming for different outcomes.

Catasetums are a strange group of orchids. In addition to the male/female flower thing, they mostly all come from geographic areas with distinct seasonal rainfall. *Expansum* is a perfect example because (based on southern hemisphere seasons) it gets between just 1mm and 5mm average rainfall each month from May through December, then in January it gets 40mm, Feb - 100mm, March - 70mm, April - 25mm. As you can see it has 4 months of reasonable rainfall and practically nothing the other 8 months. Of course that isn't the full story because I am sure there is plenty of mist and dew at times. Still, the pattern fits the culture advice always given for *Catasetum*, and that is, once they drop their leaves at the end of the growing season, you must put the plants aside and not water them at all. Take them into the house if you like and stick them in your computer room, that's what I do. When Fred Clarke from the USA visited Australia and gave up many wonderful talks, he often told the story of one of his customers who put her *Catasetum* on the floor behind the piano because she thought it was dead, and then forgot about it. She was spring cleaning the following year when she found it shooting quite healthily and happily just where she left it.

The point is that although you might give them a little spray of water from a squirter bottle during their rest, to stop them desiccating too excessively, there is no point trying to grow it when it doesn't want to grow. Once it shoots, wait a little until the shoot gets to say 10cm tall and the roots begin to burst into action at its base, then grow the thing like crazy. It grows a new pseudobulb and new set of leaves very fast, then flowers off that new growth, all in the same season, then drops the leaves and goes dormant again. How efficient is that?

The 'dormant during winter pattern' provides a handy help to we growers in Sydney where it is much colder in winter than in their natural habitat, because they aren't doing anything much when the cold would kill them if they did.

Now unfortunately, not every *Catasetum* comes such a clearly wet/dry seasonal climate as *expansum*. *Fimbriatum* for example, comes from a much more steadily moist environment. It has a low month of 20mm of rain in August, steadily rising month by month to a high of 150mm in January, then declining gradually back down to Aug. A warm grower from a reasonably moist environment, means a less distinct start stop pattern and for that you need protection in the colder months while it still active. What a pest, why can't they all be the same – oh well such is life. At least I have an excuse for not growing *fimbriatum*, *pileatum*, and a few others very well.



Unfortunately for me perhaps, expansum and pileatum are two of the most attractive, best shaped, and best coloured Catsetums. It goes without saying as well, that hybrids from these warmer, more active types, are also potentially trickier to grow. It may be that they are not fully dormant in winter, or they may just have an extended growth season. If you try one, watch its growth pattern carefully the first few seasons and make no assumptions until you understand it. These are amazingly intricate and beautiful flowers – well worth a try, but start with a short season one first.

Congratulations Jessie. A well deserved best of the evening.

Edema Blisters on Orchid Leaves - by Sue Bottom

(published by the courtesy of Sue, and the St Augustine Orchid Society, Florida USA – not to be republished without permission)

When I first noticed those corky blisters on the leaves of my orchids, I thought it was some kind of aberrant scale. I tried scratching them off and even tried excising them with an exacto knife, though of course it wasn't scale at all. The culprit was edema, also known as oedema. Edema is swelling caused by excess fluids.

The blisters are always raised, as in this bifoliate cattleya that just developed edema. Sunken spots would be suggestive of a bacterial infection causing a collapse of the cells. Sometimes edema is mistaken for scale, though scale can easily be rubbed off with alcohol and a Q tip.

In orchids, this swelling is caused by improper watering, when the roots absorb more water than can be transpired by the leaves. Typically this happens during the cooler months in late winter and early spring especially during extended periods of cool, cloudy weather. If you water on a gray day when the plant is not actively growing or you water late in the day on a day when the night time temperatures turn cool, edema blisters may form. The excess water absorbed by the orchid causes a swelling of plant cells that produces a blister on the leaf.

Proper watering is the key to preventing edema blisters from forming. During the warm growing season when plants are in active growth and the nighttime temperatures are warm, you can water your plants with wild abandon. You can water in the morning, the afternoon or at night. In fact, when the humidity is very low, many orchid growers find it difficult to properly hydrate their orchids because they dry out so quickly.



The edema on this cattleya leaf shows the blistering effect from the swollen plant cells.



In severe cases, the raised blisters can coalesce as on these cattleya leaves. Though they are unsightly, the blisters do not spread or otherwise damage the plant.

Some selectively water in the evenings after the sun has set so their plants will stay wet overnight and soak up water. Fertilizer shouldn't be applied in the evening hours. Darkness, plus water plus nutrients is a formula for fungal and bacterial growth. Most orchids grow in a nutrient poor environment so even though the plants may be wet at night from heavy dews and rains, there is insufficient food to fuel rots and the like in nature. If you decide a night time watering regime is right for you, water at dusk and then apply your fertilizer in the early morning.

My go-to advisor Courtney Hackney recommends night time watering during periods of low humidity and warm night time temperatures and notes some of the additional benefits from this approach. Your plants will be well

hydrated so you won't have to worry about fertilizer toxicity. The roots will be ready to take up fertilizer as their surface condition has changed from hard and stiff to soft and pliable. If you live in an area with hard water, salts that accumulate on the medium, pots and roots will become soluble overnight, allowing them to be flushed out the next morning while fertilizing. Once night time temperatures drop below the 65 to 70°F range, you should resume the more conventional morning watering regime.



This phalaenopsis leaf recently developed edema. There are translucent blisters with green tissue underneath while others have a corky appearing section in the middle (the blue spotting and circles etc. - is the residual from a copper fungicide spray).



The raised blisters are clearly displayed on this phalaenopsis leaf. Some of the edema is translucent while some has taken on a corky appearance. (image sent to www.staugorchidsociety.org for diagnosis).



Edema can also be expressed on the flower segments, as on this cattleya. In fact, edema can form on upper or lower leaf surfaces, stems, petals or sepals.

Watering during the cooler months is quite different than during the main growing season. Many orchids go through a winter resting period and some an outright dormancy. The orchid's need for water and fertilizer is at a minimum. Frequency of watering will be perhaps a quarter or a half of your summertime watering frequency. Water early in the morning, finishing before noon or so. Don't water on gray or rainy days even if it is your 'scheduled' watering day.

Orchid growers spend a lot of time worrying about different pests and diseases that might be afflicting their orchids. I have come to believe that there are more physiological and cultural issues that cause problems with your orchids than those caused by pests and diseases. If you access to the AOS Guide on Orchid Pests and Diseases, read or reread Tom Sheehan's discussion on physiological disorders caused by improper watering, light,



Close up

nutrition, potting faults, etc. His comments are as true today as the day they were written.

Additional Reading:

- Physiological Disorders of Orchids: Oedema, Cating, R.A., Palmateer, A.J., Stiles, C.M., Harmon, P.F. and Davison, D.A., University of Florida, IFAS Extension, Plant Pathology Department, PP244, Revised April 2014 (<http://edis.ifas.ufl.edu/pp164>)
- Physiological Disorders of Orchids, Sheehan, Thomas J., PhD, *Orchid Pests and Diseases*, 2002 Revised Edition

Starting Out With Orchids – Part 3 – Where to next? by Jim Brydie

When I started out writing this series, there were a number of fundamental orchid growing principles that I wanted to emphasise to new growers. From all my own trials and errors (more errors than trials), I hoped to help newer growers minimise the impatience and frustration that we all inevitably experience when we start out. I have tried to adhere to that objective but I am afraid there hasn't been any major plan to the topic sequence.

I mention this because I am now skipping forward a little, with Part 3 aimed at growers who have now made it through a couple of years or orchid growing and could use some guidance on their next project/direction. I am assuming that these growers read part 1 and 2 and were convinced by my arguments that for the first couple of years they should restrict the number and range of orchids they try to grow, and that at least for the time being, they should steer clear of the warm growers that really need a heated glasshouse. You have probably cheated these principles a little and have

bought a few impulse fancies, but don't worry about that, it means you are normal – we all do it. You also by now have a proper little shadehouse or equivalent, or at least have firm plans to get one.

So where is your level of growing experience? I expect that you have been coming to orchid club meetings for 2 or 3 years. You understand a fair bit of 'orchid-speak', not all of it but enough to get by. You are growing most of your orchids pretty well. You understand the principles and apply them soundly, but you have now seen and experienced enough to know just how much more there is to learn.

On your own initiative you have already begun to experiment with some of the variables like different mixes, more shade/less shade etc. **So what is next?** Is there one area on which you should focus your next learning?

Well naturally, you need to keep learning, but if you are enjoying the process so far that will happen anyway. Should your target be to try and win one of those monthly or annual competitions run by the orchid club? Well no, not really. By all means try to grow your best and delight in every win or award you get, but club competitions are designed to encourage members to grow orchids, to exhibit them, to participate, to share experiences. They are not a serious contest between growers. **The contest that really counts is the one you wage against your self** as you learn and grow. There is no greater pleasure in orchid growing than figuring out for yourself what needed doing and seeing an orchid start to really improve after you fixed the problem. Being able to figure out how to grow, or flower something that has been challenging you, that is the skill and knowledge you should seek.

So, that next focus area? Should you focus on mastering potting mediums or perhaps fertilisers or some other specific area? Well there is no perfect answer to that question and the answer depends on the asker.

What I am going to suggest, is that a good way to move forward is to now focus your attention on whichever **orchid, or type of orchid** presently captures your imagination. Knowledge is much more quickly and easily absorbed on a subject in which you are particularly interested, than on something you learn because you know you need to learn. Interest gives you the drive to learn and to keep you trying to succeed.

Select one type of orchid, or even one species that you would love to grow or to grow better. Learn all about it that you can. **Read everything you can find about it.** Try to understand where it comes from, what the weather and the seasons are like there, what are its ideal needs, what are its key requirements. What do others say about growing it, what suggestions come up that are new to you. So long as you don't pick something too 'way out', like an orchid that only grows on one mountain peak in Patagonia, then you should be able to adapt some plan of action to improve your current growing practices. If you come up with contradictory information, which can happen, discuss it with a more experienced grower. Methodically plan the changes you will make.

But - please don't make masses of changes all at the same time. Too many simultaneous changes of variables will provide results that are impossible to interpret. One change may well counteract or mask another. Whatever success or failure you experience will be for nothing because you can't interpret cause and effect.

What's that you ask? Where do I find all this information? Well first, there are books - you know, those old fashioned paper things. But there is also a vast array of information on the internet that only needs a dab hand at google to find it. One of the best is the free **"Internet Orchid Photo Encyclopedia"** (<http://orchidspecies.com/>). However, the tool I use most these days is "Orchidwiz", a software product that you have to pay for but which I find great value for money. This massive database and photo library incorporates an amazing body of knowledge that was once published in a book, and that is the orchid data base of Charles and Margaret Baker which includes where many species are found and details of those habitats and the seasons found there. Habitat information only applies to species of course. The natural habitat of a hybrid is some nursery somewhere, but every hybrid has been developed from species and that is why I give you the genetic background for hybrids in this bulletin. Much can be inferred from the breeding background of a hybrid. Orchidwiz also contains the official Royal Horticultural Society hybrid registry.

Adopting a one type strategy doesn't mean you have to stick with that focus type until you understand it perfectly. It is only common sense that your interest will periodically drift to new subjects. Just try not to jump all over the place and switch from one type to another too frequently. Keep the breadth of your interests under some control, and before you switch to something new – honestly rate yourself on whatever you have learned on your focus type.

In the longer term, breath of interest is positive. Every new kind of orchid you research and try to learn about teaches you more and more about the principles and differences of all orchids, and solidifies the base from which you can grow and adapt with later interests. Even orchid types at which you try and fail will teach you something.

When I first started, Dendrobiums were the 'thing' I threw myself into. It was ages before I realised the collection I had accumulated were a very mixed bag of many different types of Dendrobium and what the implications of that were. At first I just thought Dendrobiums were Dendrobiums like Cattleyas were Cattleyas. But eventually, I started to see that some were as different as chalk and cheese. It turns out that Dendrobium is subdivided into about 40 groups (Sections) of species, each Section having its own common characteristics and evolutionary background. They also often have commonalities in habitat and climate, and demand different cultural treatment.

Don't drive yourself too hard while going through all this. Enjoy the process. Use the resources and knowledge in your local orchid club. The more knowledge you grow, the more two sided your work with your mentors will become.