



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

(Established in 1947)
A.B.N. 92 531 295 125

May 2018 Volume 59 No. 5
Annual Membership : \$12 single, \$15 family

Patron : Keith Irvine

web site : <http://kuringaiorchidsociety.org.au>

Committee

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Secretary : Bob Ellis 9987 4403
7 Meredith Avenue, Hornsby, 2077
Treasurer : Kevin Crocker 9484 7072
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C. Member : Graeme Mohr 9449 8127
C. Member : Chris Wilson 9477 5104

Membership Secretary: Angie Lyle 0418 963 164 mail subscriptions to 9 Kerela Ave, Wahroonga, 2076

Senior Vice President & Editor : Jim Brydie 9476 3383 - email = jimbrydie@bigpond.com

Next Meeting : Monday, 21st May, 2018

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

Our **Culture Class starts at 7.20pm**. This month **Trish Peterson** will talk about selecting a mount for orchids that grow best that way, and how to mount the orchid on it. You need to hear this, get a seat early.

The **main meeting commences at 8pm**. After the general meeting, the judging, and the tea break, our guest speaker will again be **Peter and Jane D'Olier** with **Orchids from the highlands of New Guinea – Part 2**. Boy, after last months part 1 of this PNG presentation we had to mop the floors from all the drool created by the open mouths. Their trip wasn't exactly a Waikiki holiday as far as destination goes, but it was amazing, and wow – the orchids.

Part 1 dealt almost completely with the highland areas and their orchids but Part 2 takes us to a different area – the Sepik River whose course is shown in blue and red near the top of the picture at the right. The Sepik is the longest river in the island of New Guinea. PNG is the eastern half, the western area forms the Indonesian province of Papua. (shown in green).

The Sepik drains into the ocean north of the island and for a short part flows through Papua. The area is quite different to the highlands so this talk will be a great follow up and Jane does a great job presenting it. Make sure you are there.

Our **supper volunteers for May** are **Herb Schock and Jessie Koh**. We thank you.



Best of Evening Species – Psychopsis papilio ‘Nikki’ - grown by Garrie and Lesley Bromley

The butterfly orchid. What an exotic flower, and one of a group of 5 closely related species from around Trinidad, Colombia, Venezuela, Ecuador, and Peru.

Papilio occurs in nature at lowish elevations of about 800-1200m, generally in tall dense forest. The pseudobulbs are almost round in outline but compressed, wrinkled, and tightly clustered. The solitary 15-22cm dull olive green leaf is mottled and blotched with purplish crimson, especially under the leaf.

The inflorescence is usually 60cm to 1 metre tall and prominently jointed. The lower half is round in profile but is somewhat flattened above. Flowers are usually about 12 to 15cm from tip to tip but can vary a lot in size and colour from clone to clone. They are produced singly, but several will appear successively over some months, each flower lasting quite well. The petals, and the dorsal sepal are all erect together giving the flower that distinctive butterfly antennae look. After flowering, the old flower spike must NOT be cut off. It stays green and will produce new flowers again year after year.



There are only 5 species in the genus Psychopsis, which is a fairly recent split off from Oncidium. Four of the species are very similar in plant and flower shape and are obviously very closely related (papilio, kramerianum, sanderae, and versteegiana). The differences between them are mainly in where they come from and in details of the lip. The 5th member of the group, Psychopsis limminghei, is significantly different. The genus relationship is obvious in the flowers but they are much smaller, don't have the "butterfly antennae" and it also has a different chromosome count.

Psychopsis are generally regarded as warm growers but in the milder parts of Sydney, at least papilio will grow cool if you are careful about watering in winter. In nature these orchids experience very low rainfall for about 4 or 5 months, centred on winter, but they still get some moisture from dew and clouds, so they must still be watered, just sparingly.

Thank you for sharing another gorgeous orchid with us Lesley and Garrie. 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. Changes to the Society's constitution – Adoption of a revised Constitution was proposed by President Kevin Crocker last meeting and adopted by a vote of members. It will now be submitted to the Dept of Fair Trading as required by the NSW Government.

2. Photo Competition – Our **June Meeting** will feature our annual **Photographic / digital picture Competition** – There will still be a standard guest speaker on orchids but there will be no culture class. The Photo Comp will be a feature of the night and will be staged in the culture class room. **Members are encouraged to participate.** You don't have to be Leonardo da Vinci. Just print out your best orchid picture and get in touch with Graeme to make an entry.

Rules of the Competition:

1. Participants must be members of the society & should advise Graeme Mohr (phone 94498127 or preferably email mohr48@optusnet.com.au) **prior to the June meeting, and preferably days before**, that they wish to enter and the number of entries. You don't have to tell us what the entries are but there is a limit of 3 entries per membership.
2. **Pictures must be an original picture taken by the member. Maximum size** is an A4 sheet. (30x 20cm).
3. The name of the exhibitor is to be placed on the back of the exhibit.
4. **Exhibits need to be handed to Graeme by 7.15pm** on the showing night (**Mon 18/06/18**). We need your entries in by then so that we can get them all mounted and to get viewing and voting started. If we receive entries late (and we decide to accept them) it would be on the basis that the exhibitor accepts that voting may have already begun.
5. Exhibits will be allocated a unique number by Graeme. The number will then be placed on the exhibit on hanging.
6. Entries will be located in the culture class room. The competition replaces the culture class on the night.
7. **Each exhibit is required to feature an orchid as the main subject**, and be presented suitable for displaying. Exhibits are not to have been awarded a prize previously at the Kuringai Orchid Society or the St Ives Orchid Fair. Wherever possible, the Society competition rules will mirror the St Ives Orchid Fair Art Section rules.

Judging: As last year, placings will be based on a popular vote system by club members present on the night. Each member may vote, and the entry that attracts the most votes wins. Members who vote must convey their choice to Graeme before the end of the tea break. Results will be announced on the night, after the main invited speaker's presentation. 1st prize is a \$15 sales table voucher, 2nd prize a \$10 sales table voucher, 3rd prize a \$5 sales table voucher.

3. Social Dinner in July – Once again, the **venue is the Eastern City Chinese Restaurant, at 7 Hillcrest Road Pennant Hills**. The date is **Fri 13th July**. We will meet at the restaurant at **6.30pm for dinner at 7pm**.

This fixed banquet dinner will be a great opportunity for members to get to know one another just a little better and enjoy a laugh outside the structure of our monthly general meetings. We are hoping for at least 25 to 30 attendees.

Check your schedule and make a space so you can come and join us. Naturally, members partners are most welcome to join us. The cost will be \$20 per head with the Society subsidising any difference. Any member who would like to invite a visitor who might enjoy our Society, please contact Angie.

We haven't settled on an exact banquet menu but who cares, you always love the mystery of all those wonderful Chinese food dishes don't you? The committee are selecting the dishes to be included and we are conscious that a surprising number of attendees don't eat seafood, so seafood dishes (if any) will be minimalised. The banquet will include a small entree, a selection of mains dishes with fried rice or boiled rice, and a dessert.

Regarding drinks, there will be a small volume of softdrinks supplied to each table at the start of the evening but any alcoholic drinks or further softdrinks are to be arranged and paid for by each person. The restaurant is fully licensed and can supply all drinks but they also allow BYO wine with a small per person corkage charge to cover glasses.

There is plenty of parking right at the restaurant. There is Hillcrest Rd itself but there are also two big public car parks. One more or less across the road, and the other behind the restaurant. However, if you prefer to use public transport, Hillcrest Rd is right near Pennant Hills railway station.

If you would like to come, please see Angie at the next meeting to book, or email Angie at anglyle@hotmail.com

We need bookings committed to Angie by the end of June as we need to advise the restaurant of the numbers.

4. A Facebook site for the Society? – Kevin asked members for help in establishing a Facebook page for the Society. Jane D'Olier and Angie Lyle volunteered to see what they might be able to do on a cooperative team of two basis

5. No formal bark order being proposed, but.... – Kevin advised that while the society is not presently planning a new bark order, Ann Byron was prepared to record members order requirements and the society is prepared to implement an order if members requests eventually tally to a full pallet load of 40 bags. In case you weren't aware, the supplier will not ship other than by the full pallet load. Prices would be similar to last time.

6. An additional Club Host – Lina Huang has accepted the role as a new member of our Club Host team to join our other host team members Dora Law and Chris Wilson. Our Hosts role is to help visitors and new members to understand our club, find their way, and to introduce them to club members. Welcome aboard Lina and thank you.

Food addicts - two junkies accidentally snorted curry powder instead of cocaine. ..one's in a korma.. The other's got a dodgy tikka!

Advance Diary Dates 2018

Fri18 to Sun 20 May – Orchids Out West Orchid Fair – displays and sales, Hawkesbury Race Club, Clarendon Rd
Sat 23, Sun 24 June- the famous Mingara Orchid Fair/Show, Mingara Club, Mingara Drive, Tumbi Umbi.
Wed18 - Sun22 July - Australian AOC conference and show – Windsor (aocc2018.orchidsocietynsw.com.au)
Fri17 to Sun19 Aug - St Ives Orchid Fair - St Ives Showground – “the Biggest one of all”
Thur27- Sun30 Sept - the proposed combined Berowra and Kuringai Orchid society’s show at Hornsby Westfield.

Best of the Evening Hybrid – Dendrobium Kuranda Classic ‘Violet’ - grown by *Garrie & Lesley Bromley*



As this lovely orchid has been written up a number of times in recent years, this is just an abbreviated repeat.

This is one of those Den bigibbum type special hybrids we call ‘pansy types’. They are the ones where the three petals (including the lip) all have the same shape and form.

Very early in the evolution of orchids, it was one petal (in all orchids) that became modified to a special pollination assisting shape and became what we now call “the lip”. This new mutation takes the lip half way back toward normal petal shape but also modifies other two petals part way forward to becoming a lip. An interesting but freak mutation that makes a very attractive flower.

Mutations of the petals or lip are not widespread in orchids but it is known a number of times and has often been exploited by man to create unusual hybrids that have been very popular in a number of different genera. Among ornamentally grown orchids, the most common mutation away from the standard pattern is what is generally referred to as a “peloric form” which is usually where the two lateral petals exhibit characteristics like the mutation that made the lip. See the Cattleya example at the right.

RLC Island Charm



The normal orchid flower is what is called zygomorphic. That is, there only way the flower can be equally divided into two or more parts, and that is with a straight line from top to bottom, through the middle of the dorsal sepal and the lip, thus making two mirrored halves.

Actinomorphic (or peloric) flowers on the other hand, should be able to be divided into three or more equal segments. Den Kuranda Classic ‘Violet’ is a good example of a Actinomorphic form. (3 parts, lines through centre of petals)

Kuranda Classic was registered in 1989 by the famous Coleman’s Orchids near Kuranda on the Atherton tablelands Qld. Colemans developed the very first of the ‘Pansy’ Dendrobiums. They originally owned the D’Bush nursery but from 1989 began to list all registrations under the Colman name. As Kuranda Classic was registered only one year after the very first pansy Dendrobium (Den D’Bush Pansy), I suspect that the breeders had flowered the pansy types much earlier and knew exactly what they had. By the time they registered D’Bush Pansy and Kuranda Classic only a year later, other pansy Dendrobiums were already coming through their breeding program.

Kuranda Classic is not bred from directly from D’Bush Pansy but they share a common parent in D’Bush Classic. I can’t find any pictures of D’Bush Classic, but if it isn’t peloric itself, it obviously carries the recessive gene for expressing this trait. In 1988 and 1989, Colemans or D’Bush registered **D’Bush Pansy**, **Classic Gem**, **Connie**, **Hot Flush**, and **Kuranda Classic**. We know that at least the 3 in bold were pansy types, and the clone of Connie used as a parent in Kuranda Classic, must also be at least a carrier of the required recessive gene.

A beautiful orchid, a fascinating piece of history, and another exquisitely grown Bromley orchid. Thank you guys.

Best of the Evening Novice – Cattleya Lulu x Deception Drop grown by *Lina Huang*

Aren’t the variations among orchid forms and colours just amazing? The breeders don’t always aim for the biggest and roundest, and I say three cheers. Reds, oranges, pinks, spots, splashes, exotic shapes, something for every taste.

This hybrid has not yet been registered. One parent (Lulu) was registered in 1990 as Penny Kuroda x Brabantiae. It is a complex multi-generation mix involving 6 different species although two (loddigesii and guttata) predominate.

The other parent (Deception Drop) was registered quite recently in 2013, as Penny Kuroda x Chocolate Drop. It is also a many generation complex hybrid but as you can see, Penny Kuroda is a direct parent in both Lulu and Deception Drop. The difference is that in Deception Drop we see the introduction of Cattleyanthe Chocolate Drop which usually generates many flowered rich orange red hybrids but we don’t see much evidence of that here. Perhaps those genes are hidden away waiting to come out in the next generation.



All of Lulu, Deception Drop, and Lina’s hybrid, show strong influence from the spotty Cattleya guttata which shows

just how dominant its genes are. However, whatever the breeding may mean or not mean, why don't we just say that this is a really cute and colourful orchid and I am sure we would all love to grow and flower it.

Congratulation Lina. It was really well grown as usual. You seem to have a lovely feel for orchid growing.

Growing Phalaenopsis as a houseplant – Jim Brydie

A newer grower recently asked me what they should do with a supermarket Phalaenopsis they had been given. Well in fact, these can be fantastic houseplants after a you understand a few key issues and deal with them.

There have already been a number of very nice articles published on growing Phallies in the home. All I have read are quite valid and sound but reflect the particular writers practices and beliefs, and as I too have a set of biases and practices, I thought it was time that I added my personal version of advice as well.

So, what are these “**Key Issues**” I mentioned earlier? Well *the 1st is that Phalaenopsis orchids are, tropical, warm growing orchids.* You **CAN NOT** GROW THEM IN THE SHADEHOUSE OR HANGING OUTSIDE all year – unless you happen to live in the tropics. In temperate climates like Sydney, you must grow them in a heated glasshouse OR inside the home. The temperature in your home might not be as warm as a heated glasshouse, but you do heat your home for yourself in winter and Phallies will tolerate the inside house temperature quite well. The things that help are that house temperature only declines gradually at night and the plants avoid the potential temperature shock they would be subject to from sharper changes outside. In addition, inside conditions are dry. There will be no overnight condensation on the leaves and this can be a serious source of rot through air born infections.

The 2nd key issue is that **supermarkets here have taken to marketing these flowering beauties packed in small, decorative, glazed ceramic, or plastic non draining pots.** The plant is often jammed into one of these shiny pots in just a little sphagnum moss to keep it moist. The problem for an orchid grower is that these pots have no drainage hole. The pot does a great job of protecting the furniture underneath it, but the plant is being treated like a bunch of cut flowers or perhaps a hydroponic specimen. With sufficient expertise you might keep them going for a while like this but you are really much better advised to take them out of that pot altogether and repot immediately. Decorative non-draining pots can be very useful when temporarily displaying flowering orchids, but please don't grow the plants sitting in them.



The 3rd key issue is in the way Phalaenopsis flowering is triggered by temperature variation. In nature, this invariably occurs with the natural, gradual change of seasons, so flowering is usually once a year at around the same time. You probably don't want to know exact details but if you are interested, there is a wonderful 4 part article series that was published in the American Orchid Society magazine and can be seen on the internet. Part 3 is the one, at : http://www.aos.org/AOS/media/Content-Images/PDFs/GrowingtheBestPhalsPart_3.pdf (*see reference below)

The essence is that it is cooler days and nights that trigger flowering. Tests show that the 'low' trigger temp is only about 25°C over several days. This may sound high but then their preferred temperatures range is 25°C to 35°C. They will tolerate much wider conditions however, provided they aren't subjected to sharp changes or extremes. I have heard stories about Phallies grown in a constantly climate controlled home that refused to re-flower but it must have been a very warm home. Flowering can be easily triggered by a short spell in a less controlled room.

When commercial nurseries produce 'crops' of phalaenopsis for sale through large chain outlets, they want huge numbers of the exact same clones all in nearly identical flowering all at the same time. They have the culture and flower timing of these orchids down to a real art form. In huge glasshouses about aircraft hanger size, they grow baby plants up to flowering size and hold them off flowering until exactly when they want them to flower. Perhaps some floral chain in Europe will phone and asks for 5000 pink Phallies for sale to coincide with Mothers day or some other date opportunity. The nursery triggers the spikes at exactly the right time by curtaining off the particular area and dropping the temperature. They ship the flowering plants off right on schedule. The picture here gives an idea of what a batch looks like getting close to shipping time.



Culture : So now you know what is being aimed at and what you are trying to do, how do you grow these orchids? Well you sure can't do it like the commercial nurseries, so lets get practical for home growing.

1. The medium, in general – There is no perfect answer as to what medium you should use. What will work for you depends greatly on your growing environment and whatever watering practices have become entrenched in your style. You might not believe that you have an entrenched watering practice in your growing thinking, but most growers do. No matter what advice a grower receives and thinks they have adopted, what they actually do is tainted by a deeper fundamental belief about what a plant needs. In other words, your understanding of “only water just before the mix really gets dry” – could be quite different to my idea. You will water more than I do or perhaps less. Thus, what medium works for me, may not be the best medium for you. The following is just my story of what I do for Phallies.

I use a bark based mix for most small or non flowering size Phallies for when I grow them in the glasshouse full time. For larger Phallies, when they get up to flowering size, I repot into sphagnum moss and styrene foam and pack it very

tight. When they finally show a spike starting, I take the plants into the house to flower them and for us to enjoy the flowers. There are various reasons for flowering them inside the house but a big factor is that if I leave them in the glasshouse while the spike is developing, the spike is sometimes attacked by snails, slugs, or other bugs, which seem to seek them out and to love them. Pests also get at the flowers and new leaves that way too. Also, my glasshouse is a tad dark and the spikes develop best in the better light of our dining room table.

For Phallies in the glasshouse, the bark medium works better for me because I can't water at different rates for different plants in the glasshouse. I have hundreds of different orchid types in there and everything gets watered at the same rate at the same time. It is a little too much for some, a little too little for others. You just always seek a balance that all can at least tolerate. Plants potted in sphag have to be repotted more frequently because the watering there is a bit too heavy for sphag and it 'goes off' more quickly than in the house. Phallies on the kitchen table are watered with a cheap squirter spray bottle. There, we just water to suit the Phallies and the weather, and the sphag lasts longer.

Are you wondering by now just what "Sphag" is and how to use it? Experienced growers may wish to skip ahead here because this next bit is pretty much a repeat of an article I did in Feb 2016.

Sphagnum and the secret of fluffing it up - Sphagnum (with the ph pronounced as f) is a genus of moss. There are about 200 species of Sphagnum moss found throughout the world. They grow in bogs, which are more or less shallow lakes or depressions which have a layer of the living sphagnum moss and other wet plants growing over the surface. The wet decaying mush of material underneath eventually becomes what is called peat moss over thousands of years.

I have been using Sphagnum moss as a medium for many years but in the early days I was able to buy live 'sphag' which is supplied in a clear plastic bag, is wet but not dripping, and contains a mix of the green live moss and the slightly yellowish brown moss from just underneath. Live sphagnum is nearly impossible to buy anymore. If you can get it at all today it is hugely expensive.



The sphagnum presently available is harvested from certain bogs in various parts of the world. Harvest is usually government controlled so that the bog can still continually regenerate, a process that in some cases can take between 8 to 30 years. Most growers now buy dried compressed sphagnum moss which is sold in various pack sizes. I buy a 'bale' (shown here) which weighs 3kg, is 80 litres of compressed moss, and makes 240 litres of moss when wet,



dampened, and fluffed up. On Garrie Bromley's suggestion, I bought one of those big see through plastic boxes with a clip on lid (at the Reject Shop) that is a perfect fit to store the dried bale. It fits under the benches in the shadehouse and keeps the bale dry, while over a period of time like a year or more, I harvest small quantities from it to use as I need it. I have a smaller see through box I keep in my potting area, to hold a quantity of dampened, fluffed up sphag ready to use, and here is where we get down to the secret. -- **How do you wet compressed dried sphag?**

I had never asked anyone how to do it. It seemed rather obvious to me – put it in a bucket, fill it with water until it is saturated, drain it off, and then squeeze out the moss to remove the excess water. This was my process for years but the resulting moist sphag wasn't anywhere near as good as the live stuff. At first I thought that it was because the sphag I was buying just wasn't as good a quality, but it was the only stuff available so I studiously picked out and discarded the worst bits and put up with it. Very time consuming and less than satisfying.

More recently I wondered if there was something wrong with the way I was using it. About a year previous I had been reading a Japanese website about growing *Sophronis coccinea* in sphag moss and was surprised that the grower said to dampen an amount of dried sphagnum but whatever you do, don't soak it and wring it out. Aha I thought to myself. I knew this was an important clue. But how else do you dampen desiccated sphag than in a bucket? It is as dry as it can be when it comes in the bale AND it doesn't seem to wet very easily – or so I thought. I didn't follow it up.

And then there was a visit to Royale Orchids in 2015. During the visit, Kevin Hipkins was showing a few of us a deflasking method using sphag. His sphag looked so fresh and fluffy and the perfect amount of moisture. I asked how on earth he got the sphag like that and he told me that it was dried sphag and that he prepared it a day in advance. I could hardly believe it. He said he sort of fluffed it up dry, dampening it with just small quantities of water, bit by bit, fluffing and mixing the dampening sphag all the time to allow the moisture to spread. I listened carefully. Could this small change in the way you do it make that much difference? But the proof was in front of me in Kevin's hands.

When I got home I tried it and it worked. When you first start dampening the dry sphag it looks like the small amount of water you are adding is hardly doing anything but sphag seems to have an amazing ability to absorb and spread the moisture among a volume of itself. As you fluff and mix, separating the stands, the moisture spreads, and as you keep adding small amounts of water, the whole volume you are mixing becomes uniformly damp and fluffed up. Magic.

I don't know what squeezing water out of sphag does to it but it seems to damage it in some way. I no longer do it.

Potting Phals in Sphag - When I make up sphag to use as a potting material, I take the fluffed up damp sphag and add about 15 to 20% additional volume of crumbled up soft styrene foam (see previous article on foam types). The combination is my "sphag mix". The foam spreads the sphag, adds air, and doesn't break down as the sphag does.

So how do you use it? For all intents and purposes, sphagnum moss is like a kitchen sponge. There is a lot of air space among the solid bits and it can absorb an awful lot of water. When you squeeze a sponge you close up the air spaces that were holding the water and water runs out. Conversely, a compressed sponge can't absorb nearly as much water. That is why when I pot with this stuff I pack it into the pot as hard as is practicable. It stays damp between waterings this way, but is never as wet and soggy as a wet kitchen sink sponge. Too wet is no good.

The actual potting and growing process – First, Phallies have very coarse, fat, brittle roots, like most Vandaceous orchids. When you repot, and if you only have a few, it is worth soaking the plant roots in a basin of water for an hour before you start, to make the roots more pliable and maneuverable.

I like to use well drained squat pots to pot the Phals in as it makes a stable platform for the flowering plant and uses less mix. Choose **as small a diameter squat pot as is practicable** to arrange the roots in. It will depend to some extent on how big a root system the plant has. Roots that were previously growing out in the air will not adapt to being buried in the mix so don't push them in. When you pot, let those roots stay in the air, they will find sphag if they want to.



Here is my way – after this I bet I get a bunch of experienced growers come and tell me I've got it all wrong but what the heck, it works for me. I first put a 1 to 2cm pad of the sphag mix in the bottom of the pot. Then I try, as best I can, to arrange the old pot roots into the pot so I can hold the base of the plant about level with the rim of the pot. I hold it there with one hand while I work sphag mix in and around the roots as best I can, adding more and more and pressing it down as firmly as I can without smashing the old roots to death. Luckily, sphag is a pretty soft weapon with which to squash anything, but at the same time, loose sphag holds just too much water, so keep pressing it in firmly.

My freshly potted Phal is now placed on our dining room table among other Phals in spike and flower. I sit them on circular, shallow plastic trays (36cm diameter) which generally hold 3 or 4 plants. Less if they are big plants. I put a one to 2cm layer of damp sphag on the tray, under the pots, to soak up any water over-run and to provide humidity.

The dining room is on the north side of the house. It faces the winter sun but there is a wide open verandah roof adjoining the house on that side as well. The room is very bright but the verandah roof prevents any direct sun coming onto the table. There are vertical blinds for further protection on hot days. The plants stay here until its flowers are finished, when I usually then take them back to the glasshouse, to be replaced by other plants coming up in spike.

Watering – It is something of a cliché to keep saying that you only water orchids when they need it, but really, that is the aim. You aim for the sphag to go from wet (as wet as compressed sphag gets wet), to just barely damp. Whatever you do, **don't let the sphag dry out completely**. It is much harder to wet right through again if gets too dry. You run the thin line again. Don't water any more frequently than you have to, but don't let the sphag go dry.

The last part of this that needs to be said is that watering is much more finely applied with a squirter bottle than running the pot under a kitchen tap. It is tempting and perhaps a tad quicker to use the tap, but please use the squirter. It applies the water more slowly, letting it soak in, and you will much more accurately judge 'watered or not'.

Fertilising - This is as simple as having a second squirter bottle mixed with dilute soluble fertiliser. We use Peter's Finisher and use it at about 1/3 to 1/2 strength. You can apply it roughly every second time you need to water the orchids. One time straight water, one time dilute fertiliser. It doesn't matter if you just use water a few times and no fertiliser. But don't do it the other way around and fertilise all the time. Be patient – don't try to force grow them.

Look to the Light side – I don't mean this in a Star Wars "the Force" way. The issue is that Phalaenopsis flower spikes are highly light sensitive and will grow toward the brightest light. Once you have set them up on the table, take care that if you move the plants or the trays around, to be sure that you put them back as soon as possible in the same light orientation. Failure to do so will result in the spikes doing direction changes from half way up or wherever they were when you moved them. It looks awful.

Staking - Phal spikes always need staking. In my situation, the spikes usually develop growing up and out at about 45 degrees. For appearance purposes, they look much better trained more or less vertical for at least the bottom 60 to 80 percent of the spike. Don't try and pull back a spike after it is already developed too far at 45 degrees. It will likely break. Also, even when you are gradually training the spike and developing it upright, be aware that in the mornings when a spike has been relatively cool overnight, the spikes are particularly brittle. I have certainly snapped a few in my time so I can attest to the truth of that fact. When the spike gets up high enough I usually allow the top 20-30% or so to develop horizontally to the light, so the flowers display beautifully toward the viewer.

Please Note Again: *Our mature Phals are nearly all potted in sphag as above but that is because it works for us and the way we grow them. I am not telling you to immediately change all your Phals to sphag mixes. The majority of growers use bark mixes perfectly successfully, and some use peat and perlite even better. There are no doubt other mixes too.*

Each mix has different characteristics and you need to water and fertilise in a pattern that best suits your mix and conditions. Plants in bark require an occasional application of lime or dolomite to offset increasing acidity. Plants in sphag need to be repotted more frequently. Each has its positives and negatives. Choose what works for you.

References : Growing the Best Phalaenopsis Part 3: Temperature and Light Requirements, Height, Insect and Disease Control by Roberto Lopez, Erik Runkle, PhD, Yin-Tung Wang, PhD, Matthew Blanchard and Tony Hsu.