



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

(Established in 1947)

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February 2022 Volume 63 No. 2

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

Patrons - Pauline and Trevor Onslow

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Editor (Hon volunteer) Jim Brydie	Committee : Fred Gorginian (Sales Table)
Society mail to - PO box 1501 Lane Cove, NSW, 1595	web site (active link) : http://kuringgaiorchidsociety.org.au

Next Meeting : Mon 21st February

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

Covid Restrictions – PLEASE, attendees must be double vaccinated and have registered to attend. Your certificate will be checked. Please be considerate to those managing the process. Also, if you aren't feeling well on the night, please stay home. It may turn out to be nothing but think of your friends if it isn't.

***** All attendees must wear a mask!! We know it is uncomfortable but please comply. *****

Covid restrictions make things difficult, but we are able to have a full *orchid benching (no limit on benching numbers)*, the *sales table* will be operating for small quantities of pots etc, **plus sales of members plants**. There will be a *normal monthly raffle*, and the *library* will be operating. --- *Lets hope 2022 just keeps improving from here.*

The hall is open from 6.30pm. Please try and get there early to help set up tables and chairs. No benching before 7pm no matter what. PLEASE give the set up team time to get benching dividers and class cards in place. When benching, if you aren't sure where your orchids should go, ask for help from one of the committee at the front door check in or at the front table and they will guide you to an experienced member who can help.

The meeting commences at 8pm and starts with the usual meeting formalities, our AGM, and a discussion of our growing competition plants (in whatever order works on the night) all while the judges do their thing with all the delightful orchids we expect to see benched. Don't forget, no numbers limits on benching this month.

The Supper Break - Covid restrictions mean it is *impractical to allow sharing* of supper supplies, so *'supper' will be 'bring our own'* except for the hot water. No cups/mugs/tea/coffee/milk/sugar/stirrers will be provided. Nominated members will man the hot water urns to eliminate double handling. Please queue, and move away once you have been served. No food will be supplied but you may bring a nibble for yourself. Just no sharing please.

After the supper break – We will have one of our traditional members plant auctions. Single memberships may sell two lots in the auction, Family memberships may sell 3. A lot may be a single plant or a box of plants.

Auction Procedures – As per our last auction, you don't need to fill in a form. **Lina** will be managing *the booking-in process, issuing auction benching cards, and assigning auction 'lot numbers'*. She will be located at a table inside the hall where the sales table used to be.

If you are selling, 1. Go to Lina and get a benching card for each sales lot. Take the cards away and fill in the plant name, your name, and reserve price. Much the same as for benching an orchid. 2. Take the cards back to Lina where she will assign lot numbers to go on the cards. 3. Now place your auction plants on the auction bench with the card in front of each lot. These cards then will remain with the plant throughout the auction until it gets to the auctioneer.

Setting a price - If you want to set a *reserve price, in addition to it being written on the benching card* it would help the potential buyers when they are checking out which plants to buy, and help the auctioneers, if you **ALSO clearly and visibly label the plant with the reserve price. In past years we have used yellow tags, and/or yellow stickers.** It doesn't really matter what you use but make sure bidders and auctioneers know what you are asking for it.

Presentation – you know that in real estate they say the 3 key factors are location, location, and location. Well in selling plants it is appearance, appearance, and information. Clean **your** plant up and show it at its best. If it looks daggy, you will get half what it might be worth. If you know your plant, put a picture on it. Show the buyer what it is.

Clean and Free of Disease - The society will inspect plants when they are booked in and reserves the right to reject plants that it believes are suffering from pests or diseases, are not well established or otherwise not in good condition.

The Money - The society takes a 10% commission on all sales.

Buyers must pay with cash before they go home. Please bring your own supply of cash in appropriate note currency.

Sellers are paid the following month due to the workload on those running the paperwork during the auction.

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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)

President Dennys' Desk – Well we are still on track to have our AGM on the 21st of February. There will be some rules requiring registration since we are still limited to 48 people in the hall.

*The plan is to run the AGM, followed by a normal meeting which will incorporate a review of the plants in our drawn-out growing competition. So please bring your competition plants in. After these sessions we will have a tea break followed by a member's plant auction (more details in this bulletin) and then the raffle.

*The AGM meeting will start at the normal time of 8 pm but there will be no culture class. We will need folk there from 6.30 pm to help setup. We will not be running supper but will have the urns running so please bring your own hot beverage mugs as well as tea/coffee/sugar/milk makings for tea/coffee and your own munchies.

*Normal benching rules will apply (no limits), with **benching from 7 pm**. Benching cards will be dispensed, where necessary, by Chris Wilson. Please bring your own pen.

* We will be running the sales table WITH a member's plant sales service. However, please remember we will be closing sales after the supper break. The regular raffle will also be run.

*A list of COVID plan procedures that we will need to follow will be provided in company with this bulletin. You will need to register your attendance BEFORE THE MEETING. On arrival, use the QR code available in the foyer and have your vaccination status checked before you enter the hall. You will be given a sticker to confirm checking. We will have hand sanitiser available.

* If you have received both vaccinations and would like to come, please advise me as soon as possible as to how many in your party via the KOS email address or SMS me on 0438877689 with "KOS Feb AGM yes and other attendees names". If you are not sure about using SMS then ring me on 0438877689.

*We will still have to commit to pandemic restrictions and the seating will need to be spaced accordingly with a few bubble seating-pairs here and there. We will need to limit the benching tables along the street wall, but we should be able to use the entry foyer space to buffer our efforts.

The rules are in place to reduce the personal COVID risk of members to the lowest level possible.

AGM Nominations - I am pleased to report that so far, we have nominations for the elected positions of President, Secretary and Treasurer. However, if other members would like to nominate alternatives please do so since democracy is an important attribute of our society. Those members who would like to participate as committee members should arrange their nomination in company with a proposer and seconder. If you are unsure of this process, then please do not hesitate to contact myself or Jenny Richardson for advice. After the appointment of the executive positions and already fully nominated committee members there will be a chance to nominate yourself from the floor.

Membership renewal – It is time to renew. You can pay online or obtain a form from Jessie Koh and pay in cash. We need to have members paid up by the end of March for formal reporting purposes.

Member's welfare – please remember, if you need to speak to someone immediately then you are most welcome to contact me at any time, 24/7 on 043 88 77 689.

1. Growing Competition – As I said last month, This has to be the strangest growing competition we have ever had. So much growing and no meetings to share the experience. Many will have flowered your plants already but the February meeting will be our first chance for a "benching" for ages. Please bring in your growing comp babies (or grown up babies?) and let's all have a look and compare notes. If yours has flowered already, perhaps bring us along a picture to show us what it looked like? No cheating though, it has to be a pic. of the benched plant.

2. AGM – A note from a past long term committee member - As Dennys explains above, it is important for members to participate in the running of our society. We have a strong committee at present and a well-run club, but it is a fact of life that lives change and people come and go. It is vital that new faces offer their services. It doesn't have to be a long term commitment. When you join the committee you get to know the other members more closely, and you become familiar with the basic processes of running our small organisation and become at the very least part of a wider pool that can step up when circumstances allow.

Let me assure you that it isn't a particularly onerous task. Time does need to be committed to regular meetings and the planning process that enables any club to know what it is doing next and how it will do it. Committee meetings are usually held once each month and run for a couple of hours, reviewing proposals put by members and organising the tasks associated with running each meeting and participating in other events such as the St Ives Fair etc.

But as well as that there are many benefits in getting to know some of the senior and most experienced people in our club. Being a part of our committee was one of the most educational and mind expanding experiences of my life.

If you need to talk to someone about how it works, why not call President Dennys or one of the committee to talk.

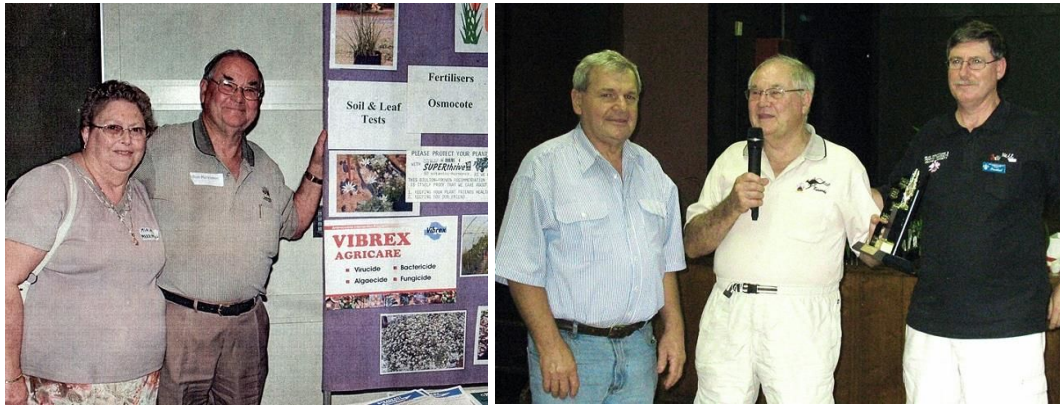
3. Membership Fees – **We need your membership payments by the end of March. Please pay as below.** Current fees are \$15 single, \$18 family. - You can pay in person at the front table at the next meeting, or by mailing in a

cheque, but if you use these methods, we want you to include a completed '*payment advice form*' to submit with the payment to Jessie Koh. It gives us a paper record & helps keep track of who has paid. A copy of the form will be sent out with this bulletin and forms will also be available at the meeting.

If you prefer, you can pay online by bank transfer to **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 your name. To confirm your payment, you could also email kuringgaiorchidsociety@gmail.com

Farewell to a good friend and teacher - Alan Merriman

(Jim Brydie)



LEFT - Alan & Miriam at a Flower Grower seminar

RIGHT - An Annual prize giving at BM&PDOS, Alan's favourite club

On the 11th December, 2021, our Sydney orchid community lost one of its most generous hearted and hard-working members. Alan was aged 83 when he died and despite declining health in the past couple of years he would still always begin a conversation with his famous catchphrase "Now what can I do to help you today my friend".

Like just about every orchid club in Sydney and also dozens more in country areas, and even interstate, our society (KOS) asked for Alan's help as a guest speaker many times over the years and he always agreed and he always came. He was a hugely knowledgeable grower in all aspects of orchid culture but his knowledge and expertise in pesticides, fungicides, fertilisers and other orchid culture chemicals was unmatched.

Miriam, his wife and partner in life, tells me that he began growing orchids in 1963 after his aunt left a plant on his doorstep and he had to find out what to do with it. It is a testament to his determination to learn and understand that Alan became one of the most experienced and knowledgeable orchid growers in Sydney. In the early days, Alan mostly grew Cymbidiums, Cattleyas, and Paphiopedilums, but like most of us he progressed to growing just about every orchid his environment would allow.

For over twenty years, Alan was head grower at Cecil Park Orchids in Sydney's outer western suburbs, which was the biggest export nursery in Australia at the time, and he maintained that position until the nursery was taken by the government as part of it's development of the M7 motorway project.

At the same time Alan was involved with the administration of a number of orchid clubs, and at different times was President of Parramatta society and also Blue Mountains and Penrith District society. Wherever he went, Alan always had a special interest in introducing new growers to the wonderful hobby of orchid growing and he did his best to make sure that new growers quickly learned the underlying basics of orchid culture. From 1988, he and Miriam even ran regular beginners classes at their home at Glenbrook in the Blue Mountains. Alan was the main teacher at those classes, but he also organised experienced growers and topic specialists from all over Sydney to join in as guest lecturers. His classes continued right up until the covid crisis eventually closed them down just a few years back.

Alan and Miriam's classes must have been responsible for many hundreds of orchid enthusiasts getting started with a sound background and I feel sure that many of them today are the backbone of many of our Sydney societies.

On a personal level, I was proud to be asked to help out at one session of Alan's famous classes. It was a wonderful experience seeing such enthusiastic new growers keen to soak up as much information and experience as could be supplied, and it was all achieved in such a family friendly environment.

I also frequently asked for Alans help to vet articles that I was preparing for Ku-Ring-gai society members. He was always happy to offer his help, and I was very thankful to benefit from his advice and expertise.

He was such a wonderful, generous hearted man who never expected a thank you. Many of us will miss him greatly but we can all at least celebrate him for what he did and for his great attitude to life. Farewell Alan my friend.



Dendrobium tapiniense

Yet another of my unexpected recent flowerings was this very nice Section Latourea *Dendrobium tapiniense* from Papua and New Guinea.

With the hope I am not getting predictably boring, Sect. Latourea is a group of about 50 species centred on PNG but there are also species in the Philippines and the Pacific Islands down to Samoa. They are usually epiphytes from rainforest areas where there is year round rainfall. Some are warm growers from lowland areas but many others come from highland areas. As a guideline, tropical orchids that grow above 1500m will generally grow cool in Sydney if you meet their other needs.



Dendrobium tapiniense is an epiphyte that grows in mountain forests in the region north of Port Moresby near Tapini. They are usually found above 1500 m in the spine of mountains running down the centre of PNG. The pseudobulbs on most seem to be only moderately tall at about 30 cm but theoretically the species can be twice that size.

I can't recall when I bought this one but I am sure it started as a seedling. I have grown quite a few Latourea types over the years but while their unusual flower form is certainly eye catching, and I appreciate them, they just aren't my thing these days. Anyway, I grew this one in the glasshouse at first, trying to get the baby up and running in the more moist glasshouse environment, but it didn't really need to be there and grew just as well when I put it in the shadehouse. About a year back I saw a bit of boisduval scale developing on it so I hung it out in the open, under the pergola over the glasshouse and sprayed it a couple of times (Confidor/Procide/White Oil) a few weeks apart.

Once cleaned up, I just never got around to taking it back inside and it put on the best growth I had ever seen before it then flowered. Just goes to show you, this one hardly needs mollycoddling.

My *tapiniense* is still a bit of a baby just yet but this first flowering produced 11 flowers on the spike which is pretty good although I am sure it will improve. *Tapiniense* is a rather nice species actually. Not too outlandish in the flower dept. Tolerates Sydney's winters quite well, and is quite tough. The spike is also nice and upright and the flowers don't 'nod' like some of the other Latoureas, and they last for up to 3 months.

Just to show you how spectacular and even outlandish some of the other Latoureas are, here are a few examples.



convolutum

atroviolaceum

tapiniense

engae

alexandrae

finisterrae

Humour

3rd Dose vaccination concerns!!!!

A friend of mine had his 3rd booster dose of the vaccine at the vaccination center yesterday and on the way home he began to notice he had blurred vision. When he got home, he called the vaccination center for advice about seeing a doctor, or perhaps being hospitalized.

He was told NOT to go to a doctor or a hospital, but just return to the vaccination center immediately.

His glasses could be picked up at the reception desk.

National Diets and Health

It is statistically proven that the Japanese eat very little fat and suffer fewer heart attacks than the English.

However, the Mexicans eat a lot of fat and also suffer fewer heart attacks than the English.

The Chinese drink very little red wine, and suffer fewer heart attacks than the English.

The Italians drink a lot of red wine, and suffer fewer heart attacks than the English.

The Germans drink a lot of beers and eat lots of sausages and fats, and suffer fewer heart attacks than the English.

CONCLUSION : Eat and drink what you like. It is speaking English that kills you.

Patience is Finally Rewarded – One of the green Coelogynes

When you first start growing orchids there are always one or two that really catch your eye, and that you think “one day I will be able to grow that amazing thing”. Of course, you don’t really know what you are talking about, even if it is only in your head, but that doesn’t matter. As you learn more and more over the years, that one you thought was amazing is still part of the orchid mystique that drives you on learning more and more, succeeding and failing.

I still remember probably the first big orchid display I ever saw was in the old Hornsby Westfield more than 40 years ago. In those days, Hornsby Westfield was less than half the size it is now. It’s competitor to come, “Northgate” hadn’t even been built yet and it must have been the O.S. of NSW who put on one of those multi-society orchid shows at Hornsby. I dropped in on a Thursday night shopping night on my way home and was blown away. A deep coloured hardcane Dendrobium was the first that grabbed my eye and once I actually joined a society and learned a bit, I did try to grow one of those for a while until I gave them up. But I am afraid I am swaying from my subject.

One of my other early desires were these strange green and black flowered orchids called Coelogynes. Not just any Coelogyne though. The one I thought I wanted was Coelogyne pandurata but to this day I have never owned one or tried to grow one. However, pandurata has a very similar close cousin called Coel. mayeriana, and about 20 years ago one of those came up for sale a Species society auction. I bought that one.

Coelogyne is a complicated genus. It comprises about 200 species, centred in SE Asia but spreading widely to as far as the Pacific islands and Fiji. Because they occupy a wide range of habitats, the cultural needs of any one species can be biased toward any of the 4 common climes – Hot/warm/cool/ or cold. To understand how to grow a species or hybrid you may fancy, it is very important to understand the habitat from which it, or it’s parent species, come.

Warm, moist growers are not likely to require an annual rest period, while those from colder areas, or areas with distinct wet/dry seasons very likely will.

Both Coelogyne pandurata and mayeriana come from similar conditions. They are lowland, warm, moist orchids that are epiphytes but can also both be found sometimes growing in leaf litter on the ground. These are warm glasshouse orchids that want to grow pretty much all year round if you can keep the moisture, humidity, food, and warmth there for them. I find these needs hard to supply but I did manage to grow myeriana reasonably well in my glasshouse. The problem for me was that the cursed thing would never flower.

A couple of weeks ago I was walking past a corner of the glasshouse, and noticed “GREEN FLOWERS”. I knew from where it was that it had to be the mayeriana so I went into the glasshouse and wheedled it out of its location amongst goodness knows what else, and there it was. Much bigger than I remembered and despite my neglect in recent times the damn thing had flowered. It had two spikes of 6 flowers each, arching upward, and two more spikes just starting. The flowers on the developed spikes were mostly all open but must have started opening from the bottom because those flowers eventually aged and fell first. It seems they only last a few weeks.

I don’t grow it anywhere near to its potential, but it grows. It presently has about 30 pseudobulbs, 5 growing leads, and those 4 spikes at various stages. At first I tried it just in a terracotta pot in a bark mix but this species is something of a climber and it was soon out over the edge and up so I repotted. I cut off a front division and sold it at the next available auction. I tied the rest on a tall tree-fern mount and sat the plant and the mount on a shallow layer of bark in a large squat terracotta pot. I spread the old pot roots over the bark. - It grew ok and has had a few freshen up repots over the years but it didn’t ever flower. Not even once. I gave up hope but moved it to sit in a brighter corner of the glasshouse and let it sit there and grow. I ignored it. The last repot date on the back of the label says Nov 2012.

In comparing pandurata and mayeriana, you can see from the pictures above, that they are quite similar. Don’t focus of the difference in green colour. I feel sure that is a just a reflection of the skill of the photographer. The magnificent pandurata picture belongs to Tom Bellinger and the mayeriana picture is my iphone picture of my mayeriana. Now, look at the lip on the pandurata. Look at the amazing ruffles and at the VERY distinct separation between the upper and lower segments in the lip. The name ‘pandurata’ means fiddle



shaped, meaning narrow in the middle and shaped like the stringed instrument 'the fiddle'.

Now also look at the bunches of green/white nodules ('papilliae', from the latin word for nipple) growing up from the lower part of the lip on the black parts. Those papilliae are also one of the designators for the difference between pandurata and mayeriana. The other main difference is not to be seen in the flowers because it is the shape of the pseudobulbs. Both have quite tall pseudobulbs which taper toward the top but those of pandurata are quite flattened in cross section while those of mayeriana are round.

Other than all that, both have lovely 7cm or larger flowers in that magnificent green and black.

Any Other Cousins? Well yes, but many are not going to be the kinds of orchids you will readily find. Pandurata and mayeriana are both in a group of Coelogyne known as section Verrucosae. As verrucose means 'warty' I presume the descriptor relates to the distinct warty papillae on the lip although those are much more pronounced on some than others. There are other defining features as well of course.



The 10 species of section Verrucosae presently listed in the internet orchid photo encyclopedia are Coelogyne : asperata, fonstenebrarum, marthae, mayerianum, pandurata, papillosa, peltastes, verrucosa, and zurowetzii, although there have been others on and off the list as evaluations continue.

Apart from my two subject species, the only others I have seen 'out and about' are Coel. asperata and Coel. verrucosa but there must be others that at least specialist growers grow.

Whatever your fancy, the genus Coelogyne is a strange and varied bunch of orchids. Some will grow just about anywhere. In Sydney's mild temperate conditions, orchids like Coel. cristata, Coel. flaccida and the hybrid between those two (Unchained Melody) can make magnificent specimens growing under trees in your backyard and with very little maintenance. Coel. tomentosa is more a shadehouse plant but again a lovely, easily grown shadehouse orchid.

There are many, many more but some require just a little more specialist attention depending on your prevailing climate conditions. I was very impressed in our last Virtual Benching, by the lovely green Coel. salvanerianiana flowered by Peter & Jane D'Olier. It is a species that was only discovered about 10 years ago in the wild – how cool is that? It comes from Mindanao in the Philippines at elevations up to only 700 m so I presume that is another warm moist grower. Coel. rochussenii is another stunner but this one has multiple 45 cm pendent spikes of 40 or more gorgeous lemon scented cream flowers. This is another Philippine species but although it occurs up to 1500 m elev. and therefore might be expected to tolerate somewhat lower temperatures, I have found that my locale at Hornsby gets a touch too cold for it.



Coel. rochussenii (IOSPE)

So Coelogyne is a genus really worth exploring but you need to explore with some advance research. If you find one you think you would really like, make sure it can tolerate where you intend to grow it, and know in advance whether it is a warm moist all year round grower, or would prefer something different.

For some of these more moist growers, perhaps one of those shallow water well hanging pots might serve well?

Anti vax logic conference cruise



The good the bad & the slimy/ugly. Part 1 - No free pass for the baddies by Jenny Richardson

I love Mother Nature in all her beauty and wonder but also in her weird and wonderful. I don't mind *most* creepy crawlies & have even been known to assign 'pet' status to orb-weaver spiders - providing they don't spin their webs across my regular paths through the garden. I'm sure any of you born in Australia know the feeling of walking into on orb-weaver's web – it's one of the strongest & stickiest there is and horrible to get off but although the spiders are quite substantial they are not aggressive, nor are they toxic to humans.

However, there are exceptions to every rule, and for me Dendrobium beetles are one bug for which I just can't



conjure an affinity. Granted, the beetles themselves are quite attractive with their bright orange to yellow colour with distinctive black patterning. To some extent they look similar to one of our good bugs, the ladybird beetle, but more on that later.

The damage done by Dendrobium beetles far belies their size (~12mm). The scientific name is *Stethopachys formosa*, and they are part of family Chrysomelidae, which is one of the largest beetle families with over 37,000 described species, possibly up to 60,000 if estimates of undescribed species are included. Australia has ~3000 species, of which over 250 can be found in Sydney. refer [Encyclopedia of Entomology,
australian.museum/learn/animals/insects/orchid-beetle/](http://australian.museum/learn/animals/insects/orchid-beetle/)

Research from 1994 documented Dendrobium beetles in NSW, QLD & around Darwin in NT. At that time beetles were reported on a total of 27 species and 67 varieties of orchid. (Gough, Bartraeau & Montgomery, 1994 *Australian Entomologist*, **21** (4) July pgs 49-54). In 2018 Wayne Turville from the Australian Orchid Nursery said that they don't see Dendrobium beetles in the Mornington Peninsula (75km south east of Melbourne) but noted that they seemed to start around Lakes Entrance in far East Victoria, so the rotters seem to be migrating further south over time, perhaps during milder winters.

It used to blow me away that my brother could accurately identify some little spec flying through the air some distance away as 'such & such' a beetle. However since becoming interested in orchids, and unfortunately via much practice, I can now identify a Dendrobium beetle in flight and have even caught the occasional one mid-air with a good swipe. With the cooler lead into summer this year I thought they were not going to be so bad but the onset of hot days we had several weeks ago was enough to trigger them hatching, and it has turned into a bad season. I have been squishing multiple beetles every day since the heat set in. NOT HAPPY JAN!

There are four stages in their life cycle: beetle – egg – larva – pupa, and back to beetle. Most of you who have been growing orchids in Sydney for a while will be all too familiar with the beetles – as shown by the action photo to the left, this is how the trouble starts.



When you are trying to study them and you see some on your orchid, it takes quite a degree of self-control not to go into eradication mode immediately. Instead you race into the house, grab your camera & hope the little devils have not moved onto another of your tender plants before you return having lost your chance to prevent the ongoing banquet of your prized collection.

Personally, I have never seen their eggs but they are apparently little yellow cylinders, laid in a line with mucus joining them. Harold McQueen's (Goodna, QLD) photo to the right, was taken from lepidoptera.butterflyhouse.com.au/none/formosa.html. After about 10 days tiny larvae will hatch from the eggs. Each larva will eat until it reaches up to about 15mm long, then builds itself a little waxy spaghetti cocoon to protect it from dehydration whilst it pupates. In season, depending on the weather, the adult beetle will emerge in about two to three weeks. The life cycle lasts for a couple of months. <http://www.orchids-world.com/general/denbeetle.html>



I had seen the larvae before but not examined them in any detail as they had always grossed me out. Little grotesque, slimy blobs, that can turn your new growths, flowers & buds into gelatinous goo. But for the first time ever last month I got a good close up view through my camera lens. Oh my goodness – it was obvious how they can decimate your precious new growths in no time at all! Like most larvae and caterpillars their purpose in life is to eat & then eat some more, to grow & store enough energy for the final stage of their metamorphosis. Boy are they relentless.

I watched their little heads move in continuous curves, mandibles slicing through the fleshy outer layer of the tender new leaves of my Dendrobium leaving only the coarser veins intact, creating the characteristic 'skeleton' pattern of damage as shown in the photos below. Adult beetles cause the same telltale damage. I could actually see the moisture being squished out of the leaf tissue as the larvae powered through my delicate new growths. They don't pause, it's incessant, I don't know how the things breathe they certainly don't seem to have to stop eating to do it.



Larvae in action

top larva with gloop removed

leaf damage

camouflaged larvae on Epi's

beetle bore holes

When my brother sent me a few of his photos (eg the one above of the Epidendrum) I noticed that the larvae feasting on the orange Epidendrums had bright red orange gloop (technical term) on the back of the larvae, compared to the dark green gloop on those devouring my Dendrobium leaves. I can't say I've ever paused to register the colour before as the whole slimy blob thing is overwhelming however, when you see them side by side it appears that they take on the colour of what they are eating at least it seems that way from a highly unscientific sample size of two.

I searched the internet but could not find anywhere an explanation of the gloop. It must serve a purpose but I don't know what. I was curious when watching down the camera lens & decided to see if it was attached. I gently pushed at it & it came away very easily (see top larva in 2nd photo above) so it appears to be an external layer of something not an intrinsic part of their body. I was fascinated by what was revealed. Two distinct, creamy coloured sides of the body separated by a wavy edged, transparent gap down the middle. The two sides of the larva were moving continuously in a mesmerizing, undulating motion. Maybe it's part of the digestion process, maybe it's how they breathe, I don't know but it was quite amazing to watch.

I suspect the gloop might be faeces. Perhaps it prevents dehydration or perhaps, like the orange/black of the beetle it is a warning to or protection from other critters because it just looks so unappealing. Perhaps it smells really bad?

I have to admit, the intriguing anatomy & movement of their little pulsating bodies almost made me want to let them continue their journey to beetle ... *almost but not quite*.

If you want to see the larvae in action check this out <https://youtu.be/oT75e1WpuUU>. Be afraid, be very afraid, they can chew the life out of all parts of your orchids, stems, leaves, buds & flowers. As the name suggests they do seem to have an affinity for Dendrobiums but I have seen them on Cymbidiums, Epidendrums, Stanhopeas, Cattleyas and as mentioned before, almost 30 years ago, they had been reported on 67 varieties of orchid. My (unsubstantiated) theory is that they attack whatever appeals to their taste buds/smells the best to them or is a colour they like that has active, tender new buds/flowers, growths or leaves at whatever time the weather is warm enough to trigger the beetle's emergence (or whatever was in that phase when the beetle laid her eggs). The last photo above shows typical beetle burrowing holes (for laying eggs) in a Dendrobium cane.

Pupating - If you've seen a pupa case you would not forget it. They look like a blob of twisted, polystyrene mini-spaghetti ~2cm long. The four photos below are from my brother. The first shows a vase full of cymbidium spikes I had given my sister-in-law. They appeared clean but must have harbored some stage of the beetles which over time, turned the pristine flowers to mush. The second photo shows that one larva somehow managed to reach the corner of the ceiling before making its cocoon – perhaps knocked off when my brother chucked the ruined flowers and with no normal host it made do with the ceiling. Quite a feat for something that size to travel that far! You can see the hole in the bottom where the beetle emerged. Pupa cases are often made at the base of a pseudobulb but they can also be found in the leaf axil (the space between the leaf & the stem from which it grows). As the remaining two photos show the larvae are pragmatic & will form their cocoon wherever is convenient at the appropriate time.



Looking pretty before the damage



In the corner of ceiling



cocoon in flower



cocoon on spike stems

The final photo from my brother as below shows a couple of cocoons he broke open. It must have been very soon after they started to pupate as you can still identify the head of the larvae but you can tell they have started to transform from the moist gloop covered larvae form in their journey to become beetles.



So what can you do about them? Prevention – a perfectly sealed orchid house & never accidentally introducing a plant harboring eggs or larva - not so easy. I'm not much for chemicals so I will give you the manual version which may provide a modicum of satisfaction. The beetles travel in pairs, so if you see one its mate won't be far away, cup one hand underneath & just touch the plant near the beetle with the other. As a protective technique, the beetle will retract its legs & fall into your hand 'playing dead'. You can then put them on a hard surface & take your revenge by squishing them, but be quick as they will try to fly very soon after being released. If you can't stomach the manual squash method, use a container of water with a bit of oil & place

underneath to catch them. When I'm doing it, if I miss one & can't find it I give a light spray around ~20cm away from the plant with Mortein NaturGard spray (the one in the green can) & you will hopefully get the one you missed or at least give him a headache. If it's a stinking hot day, maybe skip the spray method so as not to risk burning your leaves, just keep watch for a while & it will re-emerge to continue its meal. Search 'Dendrobium beetle' on the [Australian Orchid Nursery](#) site if you prefer chemical options.

Some damage to the leaves won't kill the plant (it will just reduce the capacity for photosynthesis) so you can leave them as is or trim the damage away to make the plant look more presentable. Beetles often burrow into the stems to lay their eggs & that's not good. The larvae hatch & chew the new growth from the inside turning it to mush. If you have an issue with dendrobium beetles & you notice otherwise undamaged leaves on new growths starting to wilt & bend over that is a potential sign that you may have eggs that have hatched in the stalk. Feel the new growths & if they feel gooey/soft then go a clear 1cm down from any damaged tissue & cut the tops off. If you have/had eggs in the stalks the change in consistency/firmness of the stalk will be obvious to the touch.

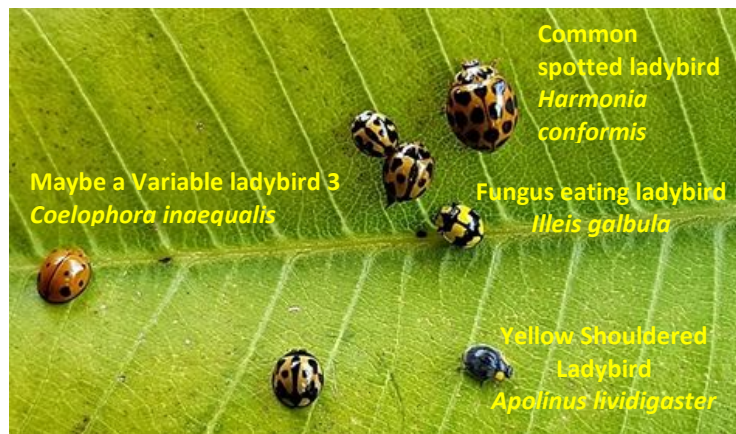
I know they are only doing what comes naturally but forgive me, this is one critter that does not get a free pass to go on its way through my garden, *not if I see it first!*

Although the colouring & black markings can be sort of similar, the more traditional 'beetle' shape of the Dendrobium beetle is nothing like the half sphere shape of ladybird beetles. So don't be fooled, take a breath before you spray or go killing everything orange/yellow & black. Most ladybirds are friendlies whereas Dendrobium beetles NEVER are. Which leads me to ask the question, have you ever seen a ladybird without spots? No? Read on.

Part 2 The Good - Have you seen a Ladybird without spots? by Jenny Richardson

This is not specifically about orchids but rather a special little garden companion, the ladybird. Whether your passion is totally focused on orchids, or if you are also an avid gardener, Mother Nature provides an array of non-chemical means to help control the nasties in our garden & the ladybird is one such helper. Ladybird beetles belong to family Coccinellidae. Worldwide there are nearly 6,000 species of ladybirds. Whilst there are a few species you don't want in your garden, most of Australia's 500 species of ladybird are beneficial. Both the larvae & adult of beneficial ladybirds feed on aphids, scale, insects & mites - so what orchid lover would not like to see these little cuties frequenting our gardens!

So what piqued my interest in ladybirds? Way back at the onset of the whole coronavirus pandemic, after not being



as being from the internet, the rest are from my brother. I am no expert – just an interested observer, so I have used Mr Google to try to identify the different types.*

My brother and I didn't find any intact eggs but the photo to the right, from the *FieldGuide shows the small, yellow, oval eggs of the common spotted ladybird, on the

allowed to visit anyone for weeks due to the initial lockdown, I was really happy to be able to visit my brother for the first time in what felt like forever, once the restrictions were lifted. My brother has several crepe myrtles in his back garden which were suffering from a bit of an aphid infestation & we spent the afternoon chatting & exploring the life cycle of the ladybirds that had come to feast. As shown in the left photo, a variety of ladybirds were enjoying the aphid smorgasbord during the afternoon.

Apart from photos noted



underside of a leaf of an infested plant – dinner (green aphids) would be ready & waiting when the larvae hatch.



When I first went to sit down in the gazebo, my brother asked me to make sure I didn't sit on any of the ladybird larvae – I looked down & they were everywhere! Different types are shown in the photo to the left.

I don't recall specifically seeing these larvae before, if I have, I did not realise what they were. Considering the beautiful form they take as adults, the larvae are really quite intimidating looking little critters. Photo above to the right from the [*FieldGuide](#) shows a larvae eliminating pesky aphids. (For a great action shot follow this link <https://tekdeeps.com/the-ladybug-larva-an-aphid-eater/>)



So we had an array of larvae & adults & went searching for the penultimate stage, the pupae. My brother knew where to look, & before long he found a strip of bark (photo to the right) that was providing protection for a selection of different pupae.

Then, for the first time in my life, I saw a plain yellow ladybird – no spots!

I had never seen a ladybird without spots before so I was intrigued. My brother collected little spotless & put him carefully in a container. A few hours later he was spotless no more! A live show - no technology required. Mother nature in action – fascinating! What a transformation, ugly duckling to cute little ladybird - beauty & the beast in one.



Whilst most Aussie ladybirds are beneficial, there are some that are phytophagous i.e. both larvae and adults feed on plants & you don't want these! The 28/26 spotted ladybirds can be up to 1cm in length, light orange & as the highly imaginative name suggests, have 26-28 spots – *if they will sit still long enough for you to count*. It may be easier to identify them based on whether or not they are decimating the leaves of your plants leaving them with a rather sad looking, shredded, peek-a-boo effect. The colouring on the 28's (bad

guys) is similar to the common spotted ladybird (good guy) but the spots on 28 are smaller & the elytra (hard cover over wings) is much less shiny. Another you don't want is the leaf-eating ladybird, it has four large orange-red and four yellow square spots on a dark brown body. The preferred food of phytophagous ladybirds is from the cabbage, potato & bean families but their favourite plant is the black nightshade, so if you can, remove this weed from your garden & you will reduce a reason for them to visit. *The four photos below are from the* [*FieldGuide](#)



However, if you see one like the last photo above – lucky you, it's known as the [*Mealybug Destroyer](#) *Cryptolaemus montrouzieri*, these have been exported to many countries as an effective biocontrol agent.

If you want to attract ladybirds to your garden, plant herbs like coriander, fennel & dill & brightly coloured flowers such as zinnia, sunflower, calendulas & marigolds.

**Ref:* http://www.brisbaneinsects.com/brisbane_ladybirds/LadybirdFieldGuide.html