Journal
of the

Native Orchid Society
of
South Australia Inc

Leptoceras menziesii

Print Post Approved
PP 543662/00018

Volume 33 N° 4
May 2009

NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

PO BOX 565 UNLEY SA 5061

www.nossa.org.au.

The Native Orchid Society of South Australia promotes the conservation of orchids through the preservation of natural habitat and through cultivation. Except with the documented official representation of the management committee, no person may represent the Society on any matter. All native orchids are protected in the wild; their collection without written Government permit is illegal.

Journal Cost $2. per issue. Family or Single Membership with subscription $20.00*
*Postal Mail full year $20.00. Email full year $15.00.
Pro-rata rates for third quarter $10.00 and last quarter $5.00
Students $10.00 per year. Juniors $5.00

Front cover from an original drawing by Jane Hutchinson. Used with her kind permission.

JOURNAL OF THE NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC.

MAY 2009 VOL. 33 NO 4

CONTENTS THIS JOURNAL

The Native Orchid Society of South Australia meets every 4th Tuesday of the months February -November

NEXT MEETING 26 MAY 2009

Tuesday, 26 May, St Matthew's Hall, Bridge Street, Kensington. Meeting starts at 8:00 pm. Doors to the hall will be open from 7:15 p.m. to allow Members access to the Library and the trading table.
The speaker for the meeting is Andrew Moriarty on 'My Hill'.

DIARY DATES

Sat 6th June	*Dipodium bryophilum* annual visit: meet Mt Billy centre gate at 10 am
Sat 13th June	Belair N. Park 9:30a.m. Weeding
Sat 27th June	Winter orchids: Myponga at 10am. *Anzybas, Acianthus, Diplodium*
19th -20th September	Spring Show
Sunday 29th November	Annual BBQ

NEXT COMMITTEE MEETING

Thurs, 28th May at the home of Bodo Jensen**.** Meeting commences at 7:30 p.m.

APRIL MEETING

Plants Benched
Epiphyte Species: *Dendrobium bigibbum* var. *compactum* (several plants)*; Bulbophyllum weinthalii* subsp. *striatum.*
Epiphyte Hybrids: *Dendrobium* Jonathons Glory x (Aussie Angel x Kingrose).
Terrestrial Species: *Diplodium revolutum; Diplodium robusta; Eriochilus cucullatus* (two plants)*; Pterostylis truncata*.
Terrestrial Hybrids: *Pterostylis* Trunkfish.

Judging Results

Open division species	**Grower**
1st *Dendrobium bigibbum* var. *compactum*	Bodo Jensen
2nd *Dendrobium bigibbum* var. *compactum*	Bodo Jensen
3rd *Dendrobium bigibbum* var. *compactum*	Bodo Jensen
Second division Epiphyte species	
Bulbophyllum weinthalii subsp. *striatum*	Kris Kopicki
Open division hybrids	
1st *Dendrobium* Jonathons Glory x (Aussie Angel x Kingrose)	R Job & E Viskic
No 2nd or 3rd	
Open division Terrestrial species	
1st *Eriochilus cucullatus*	Les Nesbitt
2nd *Diplodium revolutum*	Les Nesbitt
3rd *Pterostylis truncata*	Les Burgess
Second division Terrestrial species	
1st *Diplodium robusta*	Jan Adams
Open division Terrestrial Hybrid	
Pterostylis Trunkfish	Les Burgess
No 2nd or 3rd	

Popular vote results

Open division Epiphyte species	
Dendrobium bigibbum var. *compactum*	Bodo Jensen
Second division Epiphyte species	
Bulbophyllum weinthalii subsp. *striatum*	Kris Kopicki
Open division hybrid	
Dendrobium Jonathons Glory x (Aussie Angel x Kingrose)	R Job & E Viskic
Open Division Terrestrial species	
Eriochilus cucullatus	Les Nesbitt
Second division Terrestrial species	
Diplodium robusta	Jan Adams
Open division Terrestrial Hybrid	
Pterostylis Trunkfish	Les Burgess
Plant of the night	
Pterostylis Trunkfish	Les Burgess

Plant commentary on terrestrials given by Les Burgess & on epiphytes by Noel Oliver

APRIL SPEAKER

Graham Zerbe treated us to an interesting talk and electronic slide show of Orchids displayed at shows during 2008. These included both Terrestrial and Epiphytic orchids, species and hybrids. The NOSSA Spring Show was not left out. Many slides of stunning orchids demonstrated not only the diverse range of forms but also subtle colour variations that can occur under the one name. I am sure a talk on this theme could be given annually and still keep the audience enthused.

FOR YOUR INFORMATION - NOSSA NEWS

N.O.S.S.A. FIELD TRIPS

Field trips in June

Sat 6 June: PLEASE note alteration of date. *Dipodium bryophilum* annual visit. Meet at the centre gate of Mt Billy CP at 10:00am. Bring a picnic lunch. The recent rains should mean lots of orchids in flower. Anyone wanting details of how to find the gate please contact Cathy Houston, ph: 83567356

Weeding activity

Sat 13 June Belair N. Park 9:30a.m. Meet at the information centre. If later than 9:30 proceed to Long Gully as far as the old tank site & make your way up the hill. (For entry through the gate please mention you are attending T.P.A.G. weeding). A weeding activity for improvement of habitat for the threatened orchid *Pterostylis cucullata*. Many people make it a half day activity.

Enquiries: Cathy Houston, ph: 83567356

June 27th: meet Myponga shops at 10am. We will be looking for greenhoods, mossie orchids and helmet orchids. Be prepared for walking in the wet. Lunch in the local bakery.

Enquiries: Contact Bob Bates

The Next NOSSA judges meeting will be **Saturday 27 June** at 18 Cambridge St Vale Park at 9.30am.

There will be no meeting in early June or early July because of clashes with other orchid winter shows.

ARTICLES/ITEMS FOR THE NEXT JOURNAL

Closing date is Friday 5th June

Terrestrial Culture for June

Les Nesbitt

What wonderful rain in late April and early May. My hills block received 160mm. It was a very sudden transition from warm and very dry to cool and damp. The orchids responded by popping up in pots and in the bush within a week or so. This month will see the local *Diplodium*'s (cauline greenhoods) flowering. Expect to see *Diplodium robustum* and maybe some others. *Acianthus pusillus* should be in bloom. Most species should be up by the middle of the month with *Corybas* showing at the end of June. Buds will be showing on the winter flowering greenhoods and their hybrids.

Water pots if there is no rain. Should we get too much rain, leaf rot may appear. Move infected pots under cover and keep the leaves dry. This should stop the rot spreading. Stand pots in a saucer of water when they need watering. Keep pulling out those weed seedlings before they get too large. This task will ease off from now on. Slugs and snails are on the move and very hungry. Go out at every night with a torch until you cannot find any. I have had to lay rat bait again this autumn. It smells as though a rat has died in my shed. Other pests to look out for are scratching blackbirds and cats. Wire netting over the pots is effective. Grubs can also be munching away, often at night. Check labels for legibility and rewrite the faded ones before the name is lost. Leaves are now large enough to check for virus.

Pull out and destroy any leaves that are crippled or blotchy. Sap-sucking insects such as thrip and aphis can spread virus to healthy plants quickly. The trouble is the infection may not be apparent until the next growing season. Growers need to have hygienic habits as well. Sterilise cutting instruments before using on another plant. I have 4 pairs of secateurs and soak them in sterilising solution after use. Wash hands often. Bacterial and fungal infections may appear. Sprays do not seem to be effective on terrestrial orchids. The best control is to isolate infected pots from healthy ones and cut off or burn out with a hot wire the infected portion of the leaf. Rain splash can spread these infections so a covered area is required. Frosts occur frequently this month and are more severe if it is dry. Our local terrestrials can stand -2°C. Some buds may go mushy after several frosts.

Do you have something important to say to the Healthy Waters project about water quality in Adelaide and the Mt Lofty Ranges region?

Healthy Waters is a new project focussing on water quality and the need to protect it for the well-being of our health, environment, economy and way of life.

The project involves local communities, industry and government working together to look at the quality of water in rivers and creeks, wetlands, groundwater in underground aquifers and marine waters across the Adelaide and Mount Lofty Ranges region, from the Barossa Valley to the tip of the Fleurieu Peninsula.

www.healthywaters.com.au Consider sending us your views direct by completing one of our feedback forms. You can download a form and post it to us, or complete the form online and email it.

Natural Habitat, Propagation Techniques and Culture of Australian Native Orchids[1]

Les B. Burgess

Natural Habitat

- There are some 1300 taxa of Australian Orchids, of which some 1060 are terrestrials
- They grow mainly along coastal areas from upper Queensland down through New South Wales, Victoria, South Australia and about one third of the way up the Western Australian Coast.
- The *rufa* group of *Pterostylis* frequent the more arid areas often round granite outcrops
- Terrestrial Orchids are amazingly tough and this last year there has been the appearance of some orchids not seen for up to 50 years
- Terrestrial orchids grow in a variety of places from in under shrubbery to out in the more open areas
- They do not like competing for their habitat
- The main threat to their survival is man through land clearing resulting in destruction of prime habitat- Roadways & Housing Developers
- Mother Nature:- Fires, floods and erosions

Propagation

- Within various states there is significant work being carried out on the propagation of native orchids.
- The two methods are asymbiotic and symbiotic culture in laboratories
- Hobby growers are supporting tuber banks
- Likewise these growers are now growing-on some stock for Government Departments
- Another often practiced method is tuber removal. In this case the new tuber is removed, the plant is replanted and kept growing thus tricking the plant into thinking something has eaten the new tuber.
- The new tuber is placed adjacent to the side of the pot in which the plant is repotted.
- This is practiced on *Diuris*, *Eriochilus* and some *Pterostylis*

Culture

- Tonight we shall look at the care and culture of the more commonly grown terrestrials.
- *Pterostylis*
- *Cyrtostylis*
- *Diuris*
- *Leptoceras*
- *Caladenia*
- When growing terrestrial orchids in the bush-house we must try to simulate natural habitat.
- Therefore knowledge of where a plant grows in nature is most helpful.
- Try to establish (perhaps recognise) micro climates within your orchid house.

Potting Mixes

- Let me begin by saying there are many potting mix recipes.
- Not all of these can be used in South Australia and you will generally change the recipe to suit your own conditions.
- What works for me may not suit your culture
- My potting mix consists mainly of coarse white propagating sand with some additional additives.

- These are cheap commercial potting mix.
- Blood & Bone
- Native plant fertilizer
- Dolomite Lime
- Clay
- To prevent potting mix loss from the pot cut a piece of old shade cloth or fibre glass flyscreen to roughly the diameter of the top of the pot.
- Place this in the bottom of the pot covering the drainage holes

My Potting Mix for Terrestrials
2 litres of Coarse washed propagating sand
2 litres of "cheap" potting mix sieved to take out the heavy (coarse) pieces
Handful of blood and bone

For *Diuris*
2 litres of "cheap" potting mix sieved to take out the heavy (coarse) pieces
1 litre of coarse washed propagating sand
1 litre of red drift sand or similar
Handful of blood and bone

Tipping out a pot to find tubers
- Pots should have died down
- Have dried out for at least two weeks
- Shake pots out over a sieve and bowl or tray
- Gently fracture the soil by slightly rotating the pot allowing the tubers to roll down the sides of the loose soil
- Pick out the tubers and grade
- Place large tubers in holding pot in preparation for show pots
- Small tubers can be placed in mother pots or spares for tuber bank sales

Repotting
- Having placed the shade cloth or flywire in the bottom of the pot fill it to within 25mm (1 inch) of the top
- Place the large tubers in a circular layout to cover the top area of the pot
- Fill to the brim and firm down
- Cover with Casuarina needles

Watering
- After repotting I dampen the pots during summer every second day except WHEN IT RAINS.
- During winter let nature take it's own course
- In March, April wait for the leaves to appear

Fertilizing
- I DO NOT fertilize although I believe this may be undertaken in some states
- The Blood and Bone in the potting mix is sufficient for a year
- Over fertilization can cause deformities.
- Other symptoms in leaf patterns can result from heavy fertilizer in commercial potting mixes

Housing
- Some *Pterostylis* need extra shade for best results.
- Others need to be protected from winds

Tips for flowering
- For *Leptoceras* place some large tubers in a container with Banana skins for approximately two weeks. Do NOT put the tubers on the skins

[1] Notes taken from a talk given by Les Burgess at the NOSSA Meeting on 24th February 2009.

Eriochilus special field trip to Victor Harbor on Anzac Day **R. Bates**

This trip was almost cancelled due to drought, yet on the day we were treated to many orchids as well as rain and gales as the 'drought' broke.

Our first stop at Tugwell Road yielded about a hundred of our quarry as single white flowers and developing capsules, the latter often red striped.
The stems and dark, ridged leaves were covered with short bristles showing this to be *Eriochilus* sp 'Hills'.
Growing with them were many midge orchids *Corunastylis* aff. *rufa,* mostly finished and well pollinated by the tiny flowers which were still active. That's right two undescribed orchid species at the first stop.
On our way to the second site at Parsons Beach a thunderstorm with torrential rain almost forced the drivers to stop their cars.

Parsons Beach yielded the same species as before but we managed to add some fresh, rain-washed flowers of fringed hares *Leporella fimbriata* most with two flowers. There were also many leaves of *Pyrorchis, Acianthus and Urochilus,* the latter with fat flower buds. At both sites the *Thelymitra l*eaves were appearing at the base of last seasons dried stems.

Our guides Barbie and Ken invited us to their home for hot tea and soup and showed us some great images of *Corunastylis ciliata, Speculantha and Eriochilus* spp; one from granite outcrops had beautiful crystalline hairs on the leaf and stem and may represent an unknown rock outcrop taxon.

Within two days either side of our trip the total rain for parts of the Adelaide Hills exceeded 150mm, many places receiving more in the four days than they had for the previous six months! It never trains but it pours. We may have a great orchid season in 2009.

The above photo of *Pheladenia*'s is not related to the article above. I am sure we will get a story about them in the future

Scanning your photo collection

David Hirst

Photographs or slides of your orchids will change over time. They may fade or change colour. They become scratched and accumulate fine specks of dust. Scanning them to an electronic (digital) image is only the first step to preserving them. Once scanned a faded image can be brought back to life though it may not be as good as the original was initially. Software programs are capable of finding a white area of your faded photo and then using this as a reference point to bring back the colours vividly. Photos, particularly slides, which have changed colour are more difficult to rejuvenate and while the software program will make some changes it is often necessary to make further manual adjustments to the colour & hues to give a satisfactory result. Scratches and dust can be removed on some images (usually only on slides or film) with some scanners and their software. This can also be done with programs such as Adobe Photoshop.

Storing digital images on the computer or disk is a good way to safe-keep your photos as back-up copies which can then be distributed to friends or family for safe-keeping so that in the tragic event of your house burning down your photos & memories are still intact. Give some thought to file & folder naming for ease of retrieval.

Most people new to scanning do not make their images large enough to ensure there is sufficient quality (pixels) to allow for enhancement or manipulation of the photo. Most people are familiar with the term ‘dpi’ or dots per square inch (ppi = pixels per inch). The term ‘dpi’ is relevant to the printer more than the image as the digital image is measured in pixels. If we have an image of 1024 x 768 pixels that is the size it will appear on any screen that is of that size or larger at 100%. When we scan an image at a dpi setting of 96 then scan the same image at 300 dpi we will get a much larger image than the first. We have not crammed more dots per inch into the photo, instead we have increased the number of pixels hence the larger size. When we print the photo the 300 dpi image will be noticeably better than the 96 dpi image. Why? If we are telling the printer to put the dots closer together we will have a much higher resolution print. The photo pages in the PDF version of the NOSSA journal are saved at 150 dpi. At a lower resolution the pixels become more apparent when the image size is increased on the computer screen. This also happens if we scan at a low dpi then enlarge the image as the image will not appear as nice as the original.

An image at 300 dpi contains much more information (pixels) than an image of 96 dpi. When the photo is resized or made smaller pixels are thrown away by the software program as we are unable to squeeze all the pixels into a smaller package and consequently information is lost. Upsizing the photo later will not regain those lost pixels and if you try it will simply look awful. The same principal applies to printing. If we have an image of 300 dpi and wish to print it at 96 dpi the printer software will look for pixels to throw away. Conversely if we wish to print a 96 dpi image at the 300 dpi setting the printer may attempt to insert dots according to values of existing neighbouring dots. To do this on the computer is called interpolation where the computer program will insert pixels based on adjacent existing pixels.

Your scanner may be capable of scanning at 1200 dpi or higher but is there any advantage in producing such a large image? (1200 dpi or 2400 dpi is used to enlarge

film with a dedicated film scanner) To start with you will fill your hard drive very quickly as larger images mean more megabytes. Secondly most printers cannot handle that number of dots per inch and furthermore the image you see on the computer will not be any different unless you zoom in. Unless you want to print poster sized prints (with specialized printers) there is no advantage in all that additional information (pixels). Large images are only an advantage if you wish to repair a small section of the image pixel by pixel with a program such as Adobe Photoshop. However line drawings are best scanned at 600 dpi.

There are usually three settings for mode. Colour ("Millions of Colors") scans three colour samples per pixel, one each for Red, Green and Blue (RGB), the combination of which is the one resulting colour from the 16.7 million colour choices possible with 24 bit colour. Grayscale, 256 shades of Gray - for scanning photos, pencil drawings, and thirdly, Line-art – with only 2 colours, Black and White and also used for text. Use grayscale for black and white photos do not use the Black and White mode. Another setting that is rarely used at home is 'Halftones' a mode for images that appear in magazines and news sheets.

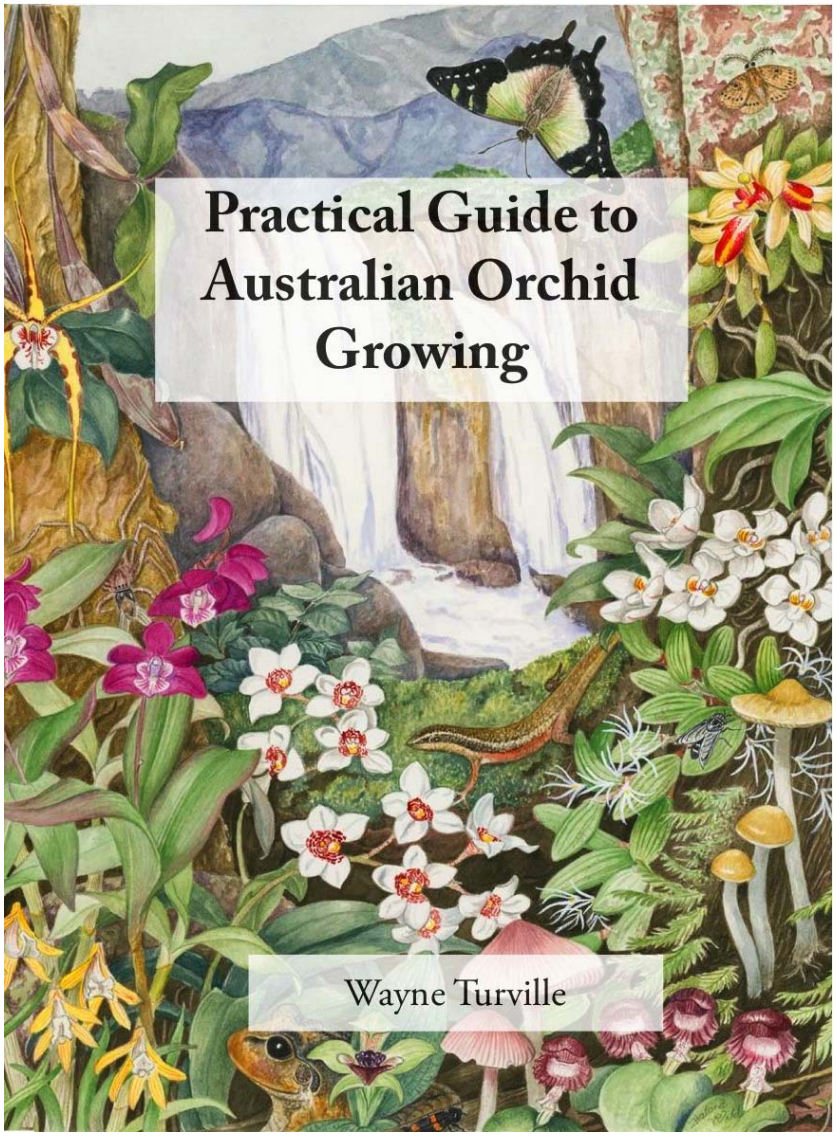
I tend to scan images to produce an image size (in pixels) that will be slightly larger than my monitor size. This is visually most pleasing and keeps the file size to optimal levels. The downside of that is that monitors are gradually being made larger and my image will end up not filling the screen when I update. When scanning I can either set the dpi which then determines the image size or I can set the image (pixel) size and let the dpi work itself out. In the latter case I usually set the size of the image to be scanned at around 1500 x 1000 pixels but the dpi rating would still be over 300.

Once scanned the next thing is saving the image in a TIFF or JPEG file format. With your best photos I would recommend saving as TIFF first then making a JPEG copy. The TIFF file is more stable when changes are made and acts as a 'negative' to be stored away. Save it at the highest setting. The JPEG is more easily damaged and can lose a lot of quality when enhancing or manipulating it but it is a smaller file and more suitable for emailing when it can be re-sampled at a lower quality setting to reduce file size, and for slide shows or for general viewing.

With a Power Point Presentation projecting images from a computer screen, today's LCD/DLP projectors could be rated either 800 x 600 pixels or 1024 x 768 pixels size. This means they project a computer screen of that size. What you do is simply prepare a good image of that size, which views properly on your screen without re-sampling. An image larger than your screen is able to show will obviously not make it better. Provide sufficient pixels to show it on the screen at the size you want to see, so it won't be re-sampled very much, especially not to be upsized. Create images containing only big bold detail, because tiny details in the original will not show up at the back of the room. Equally text should be large enough to be read easily from the back of the room.

Keep in mind that if have scanned your images at a larger than necessary size they can be down-sized and still look great but if your scans are too small they will have to be scanned again if you want larger and better quality images later. Larger images also provide more information for the printer to create a higher resolution photograph for your album.

New Book: A Practical Guide to Growing Australian Orchids



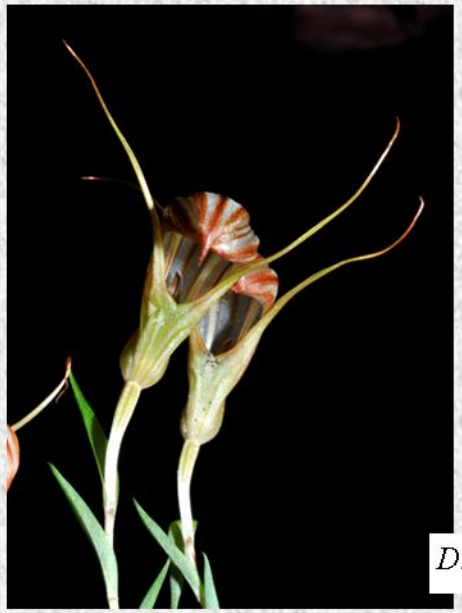
A new book has just been released and is available through **Wayne Turville's** web site www.australianorchids.com.au

"Release of our long anticipated book "A Practical Guide to Growing Australian Orchids". Copies will be available for only $12. The book is being delivered from the printers on Wednesday, so it really will be hot off the press!
Another matter is our all new website which has been redesigned and improved, and has been active for the last week or so. It is better looking and far less cluttered than the previous site, so we hope you enjoy browsing it. The shopping cart section has yet to be fully loaded with products, and it will have over 1000 items to choose from. More items for 2009 will be loaded soon.

www.australianorchids.com.au

Dendrobium Jonathon's Glory x (Aussie Angel x Kingrose)

Dendrobium bigibbum var. *compactum*

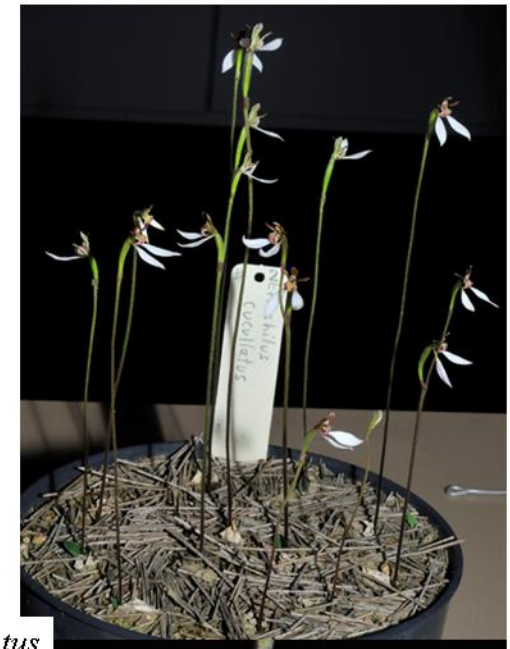


Diplodium truncatum

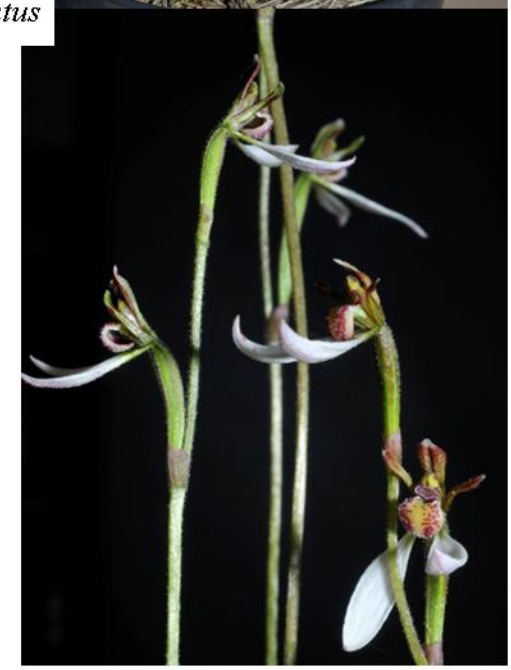
Diplodium revolutum

Pterostylis Trunkfish

PLANTS BENCHED NOSSA MEETING APRIL 2009 — photos by David Hirst



Eriochilus cucullatus



Bulbophyllum weinthalii ssp. *striatum*

PLANTS BENCHED NOSSA MEETING APRIL 2009 — photos by David Hirst