

Journal of the

Native Orchid Society of South Australia Inc



The lymitra

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.

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JOURNAL OF THE NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC.

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The Native Orchid Society of South Australia meets every $\mathbf{4}^{\text{th}}$ Tuesday of the months February -November

NEXT MEETING 22 JULY 2008

Tuesday, 22 July, St Matthew's Hall, Bridge Street, Kensington. Meeting starts at 8:00 p.m. Doors to the hall will be open from 7:15 p.m. to allow Members access to the Library and trading table. The speaker for the meeting will be Noel Oliver on *Dendrobium* and *Sarcochilus*.

DIARY DATES

August 2nd and 3rd South East 'Linguella Special' (see June journal for details)

Mon 4 - Tues 5 Aug Nangwarry NFR survey

Saturday August 9th Scott Creek - Winter Orchids (see June journal for details)

20-21 September NOSSA SPRING SHOW

October meeting Annual auction 30 November Xmas BBQ

NEXT COMMITTEE MEETING

Wed, 30th July at the home of John Bartram. Meeting commences at 7:30 p.m.

JUNE MEETING

PLANTS BENCHED

Epiphyte species: Dendrobium lithacola

Epiphyte hybrids: *Dendrobium* Anne's Rainbow Surprise (2 plants); *Den.* Avrils Gold; *Den.* Elegant Heart x Aussie Ira; *Den.* Graham Hewitt; *Den.* Hilda Poxon; *Den.* Jesmond Dazzler; *Den.* Jesmond Treasure x Jesmond Gold; *Den.* Karina x *kingianum*; *Den.* Pauline Rankin; *Den.* Regal Gilliston; *Den.* Wasyl; *Den.* Warrior; *Sarcochilus* Bessie.

Terrestrial species: Acianthus pusillus (5 plants); Corybas diemenicus; Diplodium robustum (2

plants); Linguella nana; Taurantha concinna; Urochilus sanguineus

Terrestrial hybrids: Taurantha (Pterostylis) x conoglossa.

Judging Results Grower

Epiphyte species Open Division

Dendrobium lithacola Bodo Jensen

No 2nd or 3rd

No epiphyte species in 2nd div Epiphyte hybrid Open Division

 $1^{\rm st}$ Dendrobium Warrior Malcolm Guy $2^{\rm nd}$ Dendrobium Pauline Rankin J & G Burford $3^{\rm rd}$ Dendrobium Jesmond Dazzler Malcolm Guy

Epiphyte hybrid 2nd div

 1^{st} Dendrobium Wasyl Bill Dear 2^{nd} Dendrobium Graham Hewitt Ray Haese 3rd Dendrobium Regal Gilliston Ray Haese

Terrestrial species Open Division

 1^{st} Acianthus pusillus Malcolm Guy 2^{nd} Taurantha concinna Malcolm Guy 3^{rd} Diplodium robustum Les Nesbitt

Terrestrial species Second Division

1st Corybas dilatatus
2nd Pterostylis pusillus
3rd Taurantha concinna

Janet Adams
Robert Lawrence
Janet Adams

Terrestrial hybrids open division

1st Taurantha x conoglossa Malcolm Guy

No 2nd or 3rd

No 2nd division terrestrial hybrids

Popular vote results

Epiphyte species Open Division

Dendrobium lithacola Bodo Jensen

Epiphyte hybrid Open Division

Dendrobium Hilda Poxon Les Nesbitt

Epiphyte hybrid 2nd div

Den Graham Hewitt Ray Haese

Terrestrial species Open Division

Acianthus pusillus Malcolm Guy

Terrestrial species Second Division

Corybas dilatatus Janet Adams

Terrestrial hybrid open division

Taurantha x conoglossa Malcolm Guy

Plant of the night

Dendrobium Warrior Malcolm Guy

Plant commentary on Epiphytes given by Noel Oliver & on Terrestrials by Les Burgess.

June Speaker

Bob Bates gave a presentation on his trip with Diedre in May through central NSW and Queensland to Townsville. Places visited included Carnarvon Gorge with its ferns and palm trees and the rainforest environments of Eungela and Wallaman Falls. While it is well known that many southern inhabitants travel to the warmth of northern Australia for the winter it seems going early for the abundance of orchids is an excellent idea and we saw photos of many species of *Diuris*, greenhoods, *Caladenia* and other terrestrial orchids as well as epiphytes to attest to this.

FOR YOUR INFORMATION - NOSSA NEWS

NOSSA Field Trips

N.O.S.S.A. has accepted an offer to survey the Nangwarry Native Forest Reserve roadsides. It will involve three trips to the South East and as many members who can attend will be appreciated. Accommodation will be at a converted woolshed which is run in the style of back packing accommodation. Costs are \$10 per head per night; own sleeping needs and food will be necessary. There will be some money for assistance with transport costs, so it will be essential to keep good records.

We are also assisting Department for Environment & Heritage with surveys of swamps in the South East

Below is a calendar of dates.

For further information and expressions of interest please contact Cathy Houston on 83567356 or Bob Bates on 83429247.

August		
Sat 2 - Sun 3	NOSSA field trip - South East	
Mon 4 - Tues 5	ForestrySA - Nangwarry NFR survey: accommodated at Whiskas Woolshed	
Sat 9	NOSSA field trip - Scott Creek	
Thurs 14 - Fri 15	NOSSA field trip to Yorke Peninsula	
Sat 16 - Sun 17	Yorke Peninsula (YP) post fire survey	
Sat 23 - Sun 24	Halbury threatened orchids - assessment of numbers	
Wed 27 - Sat 30	YP threatened orchids - monitoring & surveying	
September		
Sat 6 - Sun 7	YP post fire survey	
Thurs 11 - Mon 15	Alligator Gorge followed by YP threatened orchids	
Sat 20 - Tues 23	ForestrySA - Nangwarry NFR survey: accommodated at Whiskas Woolshed	
Wed 24 - Fri 26	DEH - searching SE swamps: accommodation can be at Whiskas Woolshed	
Sat 27 - Mon 29	NOSSA field trip - South East	

Plant of the month: Next meeting please bring along your plants of *Linguella nana* (*Pterostylis nana*) and *Dendrobium* Annes Rainbow Surprise.

Last Months Plants of the night: There were two exhibits of the species *Diplodium robustum* (*Pterostylis robusta*). One was the normal Adelaide Hill's form with large green and white striped flowers on rather short stems. There were 3 or 4 prominent pointed leaves up the flower stem and no rosette. The other exhibit had reddish-brown & white striped flowers. This form is thought to have originated from the Barossa goldfields.

Both forms are rather shy flowering with many more non-flowering rosettes than flowering plants. They are easy to grow in a sandy potting mix and they increase by 2-3 times annually. Select the largest tubers for a show pot at repotting time in summer to maximise the chance of more flowers.

Only one plant of *Den*. Hilda Poxon made it onto the bench in June. This plant had 2 spikes out and one still in bud. The large pale yellow spidery flowers were attractively arranged. The plant was growing in

pine bark in a small pot that was placed inside a larger container packed with gravel to prevent the top heavy *Den*. from falling over. *Den*. Hilda Poxon is a rewarding plant to grow for its early season reliable flowering. It does well in an Adelaide shadehouse. It resents being divided and can sulk for years after and not make new growths. It is best grown into a specimen plant. Due to its popularity, the cross has been remade many times. Look out for seedlings as growers are reluctant to part with their plants.

Next Judges Meeting - Saturday 2nd August 9:30am at Les Nesbitts

Flowering in the Grid

Les Nesbitt

A total of 9 *Diplodium robustum* plants flowered in the grid in June. They stand out amongst the native grasses once the flowers have opened.

There has been enough rain in the hills (300mm, Jan to Jun) to produce large healthy leaves on the native orchids. An excellent flowering year is expected if the rains continue through winter-spring. The rest of the State has been much drier with below average rainfall.

NEW MEMBERS: NOSSA & Committee wish to welcome new members Lindsay Ames; Cath Dickson; RW & T Hepper and M & P Hockey.

How it is Done Reg Shooter

Australian native orchids do not have to be large and flashy to be attractive. One such plant caught my eye at the recent meeting. The unlikely pairing of *Dendrobium kingianum* with *Den*. Karina is a case in point. Just a small plant in a small pot carrying one raceme of about twelve 10mm wide creamy pink flowers arranged neatly along the spike. The parentage of *Den*. Karina is *Den*. *kingianum* x *monophyllum*. *Den*. *monophyllum* has the common name of the Lily of the Valley orchid due to the similarity to that plant. The influence of this small species is quite evident in this hybrid having flowers that tend to hang down rather than standing up and 'looking at you' it is best viewed by holding the pot up above eye level where the symmetry can be appreciated. Both the species in the parentage are cool growers and in South Australia can be easily grown & flowered in a shade house of 50% shade cover with ample watering in the warmer months, an occasional feed of weak Australian native orchid fertiliser & dryer conditions during the warmer summer months.

A very different orchid was *Den.* Anne's Rainbow Surprise. It is a fourth generation hybrid being 50% *Den. speciosum* with infusions of *Den. kingianum*, *tetragonum* & *biggibum*. With these parents a much larger hybrid is produced, again because of the number of species in its background there is a great variation in the different clones. There were two plants benched at the meeting, one had fairly large deep purple flowers with white extremities to the petals & sepals, the other had smaller flowers with light purple flowers very little white markings. *Den.* Anne's Rainbow Surprise is a very floriferous & easy to flower hybrid. It tends to flower at any time of the year with the occasional raceme appearing but the full on flower display is mid winter into spring. It is easy to flower given good air movement, plenty of water in the summer months, dryer in the winter & a free draining growing medium. During the summer it appreciates 50% shade then when the flower buds appear bring under a solid clear roof to protect the flowers from rain damage (should we get any!!).

There was a good showing of plants at the meeting and it was pleasing to see several nice plants in the 2nd division.

ARTICLES/ITEMS FOR THE NEXT JOURNAL

Closing date is Friday 8th August

By now anything that will flower for the spring show will be showing its spikes. If not it won't flower! So, why has it not flowered. I look at my collection and I have asked that question to a hundred plants. There are many reasons. We had a horrific summer that lasted weeks longer than normal. Thank god February did not live up to its reputation, it saved that for March. Many plants were burnt and the flowering nodes damaged. Reduced watering did not help and it is possible that Adelaide water this year was saltier than normal. The weather pattern would indicate that the rest of this winter too will be drier, again. I hope I am wrong but those all important rain bands originating from the tropics once again have not come our way.

Many of my plants are also small, the result of some serious culling in order to get better and better plants. Maybe the focus of perfection has dimmed the necessity of keeping those larger plants that flower well but don't cut it on the show bench. I remember the shade house once full of natives smelling so strong I could only bear it for a short time yet the displays were awesome. It is time to return to those days. There will be few trading table plants this year from my collection.

It is now time to take stock of the maintenance that is almost due. I count pots and take note of the bark, charcoal and diatomite that I need for this season. Plants not potted on or re potted on the last two years will be changed. I start with the potting on now as it does not disturb the plants too much and leave any dividing until after flowering season. A drive to one of my fishing spots gave me a look at my favourite little strip of terrestrials and there were thousands. A good year. Lets hope so. It also yielded me several buckets full of rotting eucalypt hardwood. It is just the perfect ingredient for my *Cymbidium .suave* and *Cym. canaliculatum*. I might even try it as an additive to a few of the other natives. After all, it is natural.

I have noticed many of the mounted plants showing new roots, especially the terete group and as such believe they are receptive to water and fertiliser. Feeding is fortnightly and at half strength. Many of these are in spike, especially *Dockrillia teretifolia*, the bridal veil orchid and as a specimen plant one of the best you will see.

Sarcochilus are improving daily but alas those plants exposed to the heat from earlier are doing their best to recover let alone flower. I may sacrifice some spikes in order to let the plants recover fully. Watering should be aimed to keep plants just moist as they do not tolerate wet feet. Wrinkling leaves are a first sign that root loss is almost total and by this time can almost be too late to save the plant. Watch out for slugs and snails getting into the flower spikes and treat accordingly. Feed the same as the natives this time of year. If your plants were severely damaged last year you may have to look at altering your microclimate this summer. If you don't then they will most likely suffer the same fate or maybe worse this year. I will move my plants from the east side that receives the morning sun but also the north easterly wind to the more protected west side where the paphs and lycastes survived with barely a burn. It has to be a better option than where they were this year.

Native cyms are growing well. The *canaliculatum*'s are all in full winter sun and the spike count looks good as well. They have had no water for two months now and will stay dry for another two. *Cym. maddidum* has good new growth and the next month or so should start showing this years spikes. *Cym. suave* is growing in plain bark mix and sand and is just

hanging in there, hence the rotting heartwood from the reservoir. These are a challenge plant that I wish to take on and grow well. If I can reach the superb culture grown by John Gay and the late Don Wells then I have achieved what I have set as my goal for this species.

They key to those plants in spike now is to keep them under cover. If you have to water them water the pot and not the plant. This will keep fungal problems at bay. Maintain the best light you can. Keep up a high potash level and add some calcium to the feeding programme as well. The light and fertiliser will help develop stronger steams to support the flowers. Complex breeding has developed some clones with large and heavy flowers. It's a pity they don't try and breed strong stems so the next best thing we can do is to try and help them along. Flowers hanging there head down can only be seen if you lie on the floor and look up at the plants. We know what you are doing but the public may think we are a bit strange. Noted that this habit of flower presentation (not the grower) is also a natural occurrence in some species.

Next month is August and with it the start of the main flowering season. We will spend some time on the all important presentation required to show our plants at their very best. I am sorry if these articles appear based on "my place" but it is here that I undertake my own observations as well as those I experience on the many walks I do both here and interstate. I would more than welcome any other input of any description for the benefit of all.

Australian Spiranthes

R. Bates

Spiranthes is a cosmopolitan genus of perennial, terrestrial orchids: that is they grow on the ground and have leaves which are present all year round. They are generally known as Spiral ladies' tresses, an odd common name if there ever was one.

Until about twenty years ago there was thought to be only one Australian species which was supposedly the same as plants from eastern Asia and hence was called *Spiranthes sinensis*, which translated means 'Chinese spiral flower'.

Fortunately the accepted name was changed to *Spiranthes sinensis* ssp. *australis* and eventually *Spiranthes australis* ie Southern or Australian Spiranthes.

During a trip to the eastern states in the 1980's it became obvious to me that their little woodland species with its tiny bright flowers was not the same taxon as our South Australian swamp plants but we remained conservative and continued to call them all *S. australis*. At about the same time on NOSSA field trips we discovered a new self pollinating white flowered species in peat bogs of the Mount Lofty Ranges and this one was illustrated in the pink book *Orchids of South Australia* in 1990.

This year, 2008, and it has been a long wait, David Jones in the June *Orchadian* noted that true *Spiranthes australis* is indeed the small woodland form from the eastern states and that our South Australian plants would need a new name. Consequentially he named and described the outcrossing large pink flowered swamp species from the mountains as *Spiranthes alticola* or Mountain Spiranthes if you like.

So we have a new name for our pink flowered South Australian plants: *S. alticola* DL Jones. Our *Spiranthes* 'selfing white' is still awaiting a name, and as for our South-east swamp plants we don't know whether they are *S. alticola* or not since they grow on the coastal plain.

The Orchids South Australia CD has pictures of all three Australian Spiranthes.

An almost identical plant to *liparis reflexa* but has more numerous smaller flowers on the raceme. Oval pseudo bulbs are green and smooth. Found in S.E. Queensland and N.E. N.S.W. with the type plant coming from the Nightcap Ranges. Both *Liparis reflexa* and *Liparis swensonii* are very closely related.

Off the Bench David Hirst

While photographing the plants benched at the May Meeting I could see little difference between the two *Liparis* species, *L. reflexa* and *L. swenssonii*. However reading Len Fields notes, reproduced above, I only became confused as those notes only indicated to me that the plants benched may have been labelled incorrectly as it was the plant of *L. reflexa* that had more numerous flowers.

Photographs I took were included with the June electronic journal for those receiving this. Perhaps one of our members/readers can put me right on the subject. Also species of *Liparis* have now been moved to the genus *Cestichis* (see David L. Jones, 2006).

Talk on Molecular Systematics of Caladenia species Rosalie Lawrence

Each year the South Australian Division of the Australian Plant Society (APS) offers the Kollosche Award to support a relevant Honours project. In 2007 it was awarded to Fran MacGillivray at the University of Adelaide. Her topic was "Molecular Systematics of *Caladenia* (Orchidaceae)". The APS invited NOSSA members to attend a talk she gave on 26 June.

Fran prefaced her talk by saying she was unfamiliar with orchids prior to doing her Honours; her work being in the laboratory, not in the field.

Fran's work considered two new proposed genera, *Arachnorchis* and *Petalochilus*, as well as species retained in the genus *Caladenia*. She pointed out that these new names are accepted in the Eastern States, the old name is only used in Western Australia, and South Australia uses a combination of these approaches. Her aim was to determine the "family tree" of the genus *Caladenia* as it was used and to see if the new classification was supported by the molecular or genetic structure.

She introduced her talk with the three fold objective of her Honours which could be summarised as determining a molecular family tree for *Caladenia* in light of the different classifications around the country and developing a 'bar code marker' whereby plants could be identified by pollinia or leaves only. This type of study had not been done previously. She presented background information on *Caladenia* – naming and diversity, the various views of how they should be divided and so named.

As a subject "Molecular Systematics" can sound daunting but she gave a clear basic explanation of DNA strands and testing techniques so as to help us, the listeners understand her findings with their various charts. Listening to the findings I found I was anticipating her family tree and though she was unwilling to commit herself to the details, as nearly every species examined had variations, I think that the divisions of *Caladenia* into *Arachnorchis*, *Petalochilus* and *Caladenia* as suggested by Jones in NSW is on the right track. Whilst many of the species did fall into nice neat divisions, such as *P. carnea*, there were some anomalies such as *A. colorata* and *A. cardiochila* which popped up in more than one of the groups described.

Her work on 'bar code markers' is being used in a current project on orchids at the University of Adelaide. This led into the most interesting aspect of the talk which was the possibility of developing a handheld device whereby it would enable one, by taking a snippet of an orchid leaf, obtain an identification of the species in the field. This could be useful during vegetation surveys when flowers are not present.

It will be interesting to find out about the results of Fran's current PhD studies on hybridization of orchids.

Sarcochilus Fitzgeraldi

Here's a word for you, Robert D. FitzGerald:
I met your grandfather living under a stone,
Changed to a small green orchid; where the knobbled
Dripping red cliff-face towered and the creek fell down
Through bracken and wattle, rock-fall and wilderness
To the chasm where the lyrebird sang; yes, there he stood,
Safe on the very brink of bushfire and flood
Sarcochilus fitzgeraldi, no less!

Who would have thought a man could shrink so small? Deputy Surveyor once of New South Wales, Now all he surveys on the edge of that wild rock-fall, In his sandstone crevice where even the sunlight pales, Is a trickle of the creek, one yard of shadowy sand Under his golden roof; small space enough For the tall man striding the mountains, urgent with love For all those rocky miles could put in his hand.

Yet what's the size of the spirit, and what's its shape? Here in the spring, forever eager and young While still that lyrebird breaks the eternal sleep Of the depths below with sweet and radiant song, Note upon note in one long crystal shower, And faint tongue-orchids wake in their cover of moss, He shall be still what most he loved and was: Deep under rock, Sarcochilus in flower.

Wherefore these words, FitzGerald. It was high time, After these twenty years, to write acknowledging Your company in our craft and struggle of rhyme Where we, like the strider of mountains, have gone foraging By cliff and creek for the flower among the stones, That shower of delight the lyrebird sings so readily; So now I salute you both, all his green family, In this small tuft of leaves, your grandfather once.

It is like his own hand rising through the rock With cool green fingers flourishing there most secretly To startle the traveller with a dead man's look And move in his mind with images of eternity. And may you, too, and so may I be seen, In a hundred years when we have fallen in our turn Down the abyss where the lyrebird sings in the fern, Green as Sarcochilus, orchid of the ravine.

Douglas Stewart

Provided by Ken Wilson

Arachnorchis integra look-alikes in South Australia





CH, A. septuosa, unfringed

KB, A. tensa, unfringed

Bob Bates

For many years the presence of a colony of un-fringed green comb spider orchids on Mt Granite in the Gawler Ranges was interpreted as a possible undescribed *Arachnorchis* species related to *A. integra* from WA.

In 2008 I was sent images of three different un-fringed spider orchids from different parts of SA and the conclusion had to be made that the presence or absence of a single gene could change any plant of green combed spider orchid to the un-fringed form.

The specimens were 'freaks'.

Obviously *Arachnorchis integra* and related taxa from WA are species derived from one of these freaks. None of the South Australian forms have developed large pure breeding populations and for this reason the Mount Granite colony can not be considered anything but an *Arachnorchis septuosa* freak.

Kempsey Speciosum Spectacular and Australian Orchid Species & Hybrid Show 2008

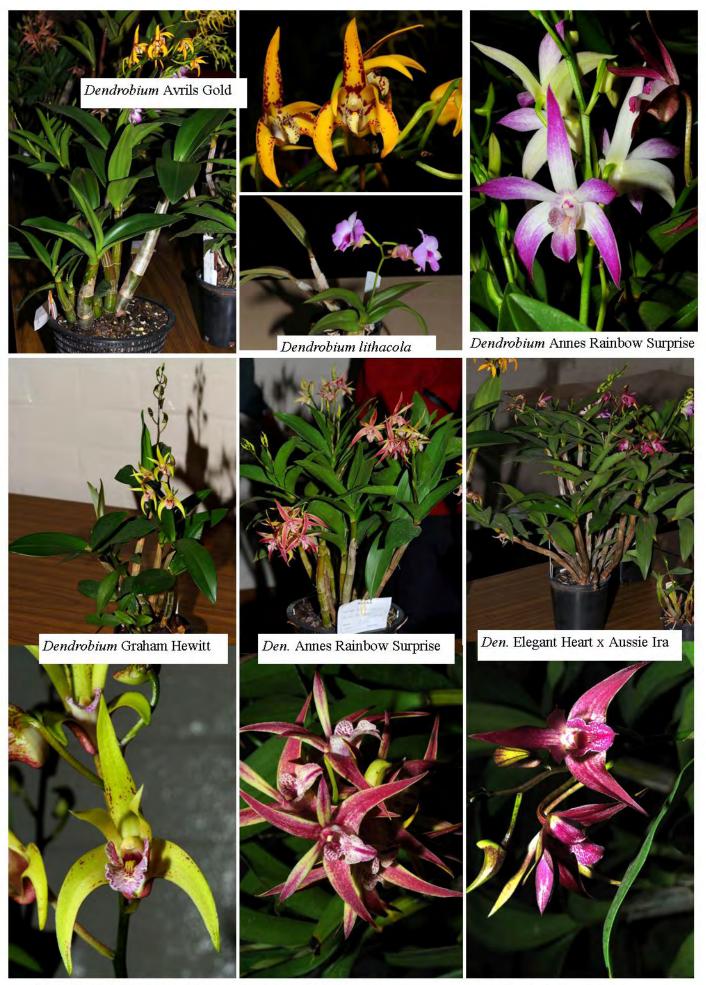
September 6th to 8th 57 Spooners Ave, Greenhills via Kempsey

A few copies of the programme will be available at the next meeting for any one interested



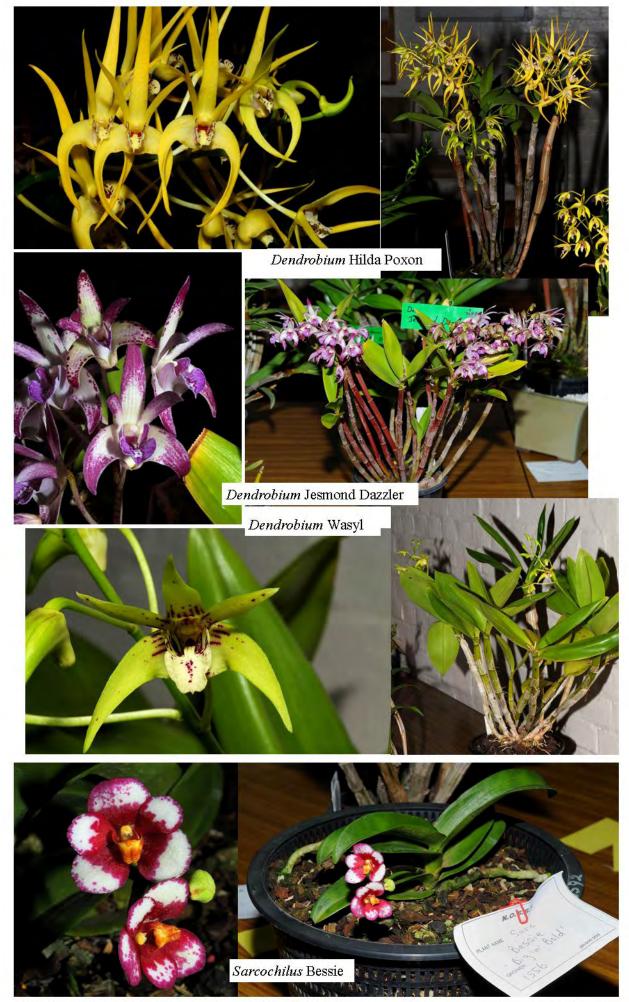
PLANTS BENCHED NOSSA MEETING JUNE 2008—1

PHOTOS: David Hirst



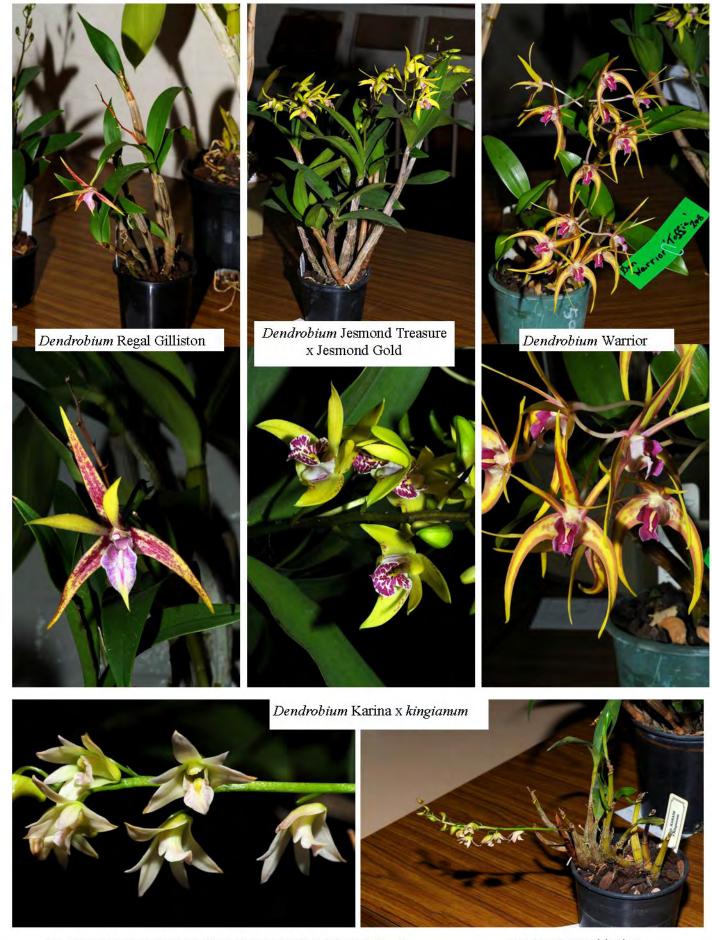
PLANTS BENCHED NOSSA MEETING JUNE 2008—2

PHOTOS: David Hirst (Some photos have been rotated to fit)



PLANTS BENCHED NOSSA MEETING JUNE 2008—3

PHOTOS: David Hirst



PLANTS BENCHED NOSSA MEETING JUNE 2008—4

PHOTOS: David Hirst (Some photos have been rotated to fit)