



Australian Native Orchid Society - Macarthur Group



JULY 2019

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President: Mr. W. Southwell (Ph. 46818589)

Postal Address:- 20 Colo Street,

Secretary: Mr. R. Morrison

COURIDJAH. 2171

Treasurer: Mrs. C. Asquith (Ph. 46259874)

Next Meeting: TUESDAY, 17th September, 2019

Life Members: Mr. J. Riley, M. T. Cooke, and W. & M. Southwell. (J. English)

Conservation Officer:

ANOS Macathur Group disclaims any responsibility for any losses which may be attributed to the use or misuse of any materials published in this newsletter

FITZPATRICK ROAD

BSB 062517 A/C 00909929

Mt. ANNAN.

Doors open 7.15pm, benching closes 7.55pm, meeting starts

8pm

Hi everybody.....

A short statement from me, the editor! (Wal being absent last meeting!)

We should now be able to get back to normal following issues over the venue of our meeting!

Noel Bates won both Popular and Judges Choice at our meeting and congratulations to him!

Our show of 28th September is rapidly approaching at Oran Park....get your plants ready..

A special congratulations to Ross for being nominated to life membership..

See you at our meeting!!

General Meeting – 20 August 2019 7.55pm

Minutes of Meeting

The Acting Chair – Greg St welcomed everyone to the August meeting and congratulated all finding the new hall. Greg highlighted Wally's apologies after recent surgery. Carol highlighted the issues involved for the change of venue and the difficulties with unlocking. (Altered by your editor to represent what Carol advised)

Attendance: As per the sign on book.

Apologies: Margaret and Wally Southwell, Terry Cooke, Kim Hines, Phil Griffiths, Neil Robertson, Dianne McDougal, Julia Bismire.

Acceptance of Previous Minutes: Moved: Don Roberts Seconded: Tony Asquith **Carried**

Business Arising: Nil

Correspondence: Various Newsletters and emails.

Business Arising from Correspondence: Nil

Treasurer's Report: Income - \$230/ Expenditure - \$325 - Balance - \$4077.31

moved: Carol Asquith Seconded: Gordon Bush **Carried**

General Business

- September Spring Show Schedule – Accepted –
Moved: Graeme Morrison Seconded: Tony Asquith **Carried**
- Chair: Presented ANOS Award – HCC Award to Ross Morrison re: 2018 Grand Champion
- Chair: Presented new Life Membership to Ross Morrison
- Tony Asquith spoke about the Campbelltown Orchid Society Show.
- Chair – Thanked Don Roberts for the donation of the nights raffle prizes.
- Sydney ANOS Shows – 31/8 Eden Gardens Nursery
- 14/9 Kellyville
- Secretary – requested guidance on flowering plants that would be available at our September Show – some concerns were expressed.
- Event permits for the September and October Shows at Oran Park have been approved and received.

2019 MANOS Shows
28 September – Spring Show
Oran Park Podium
26 October – Sarcophilus Show
Oran Park Podium

Guest Speaker

Michael Harrison was asked to speak as chief judge to provide a plant discussion about various benched plants.

- Dend. monophyllum – growth mechanism, media, native growth characteristics.
- Dendrobium beetles and preferred use of Mortein
- Dend. cacaetua – high altitude NQ species and the use of sphagnum moss as a growth media.
- Dend. aemulum – early spring / late winter flowering, use of tree fern mounds for roots
- Dend. Avrils Gold – outstanding colour / shape – judging criteria discussion.
- Sarc. falcatus – high altitude NQ variation – colour / shape + early flowerer
- Plecto tridentate – flowering time discussion.
- Sarc ‘Melba’ – primary cross – discussion on breeding background
- Sarc Confetti – primary cross – hill/cecillie – discussion on timing of breeding
- Bulbophyllum discussion – across benched species – shephardii/johnsonii
- Dock. teretifolia – various locations discussed – host decides root system

Raffles - Brian Birch x 2, Mary-Anne Warner, Chris Paterson, Jagath D, Ross Morrison

August Benching Results Benching Results Class	Place	Plant Name	Owner
Dendrobium species	1	Dendrobium monophyllum	Mary-Anne Warner
	2	Dendrobium cacaetua	Michael Harrison
Dendrobium hybrid	1	Den. Avrils Gold	Don Roberts
	2	Den. Glenn Star	Michael Harrison
Sarcophilinae species	1	Sarcophilus falcatus	Michael Harrison
	2	Sarcophilus falcatus	Michael Harrison
Sarcophilinae hybrid	1	Sarcophilus Melba	Ian Lawson
	2	Sarcophilus Confetti	Ross Morrison
Bulbophyllum	1	Bulbophyllum johnsonii	Michael Harrison
	2	Bulbophyllum shephardii	Ross Morrison
Rhizobium species	1	Dockrillia teretifolia	Noel Bates
	2	Dockrillia teretifolia	Noel Bates
Rhizobium hybrid	1	Dockrillia Nutmeg	Ian Lawson
	2	Dockrillia striolata x fuliginosa	Ross Morrison
Terrestrial Pterostylis Species	1	Pterostylis curta	Terry Cooke
	2	Pterostylis concinna	Michael Harrison
Terrestrial Diuris Species	1	Diuris precox	Terry Cooke
	2	Diuris maculata	Terry Cooke
Terrestrial Hybrid	1	Pterostylis Nodding Grace	Terry Cooke
Terrestrial Species Other	1	Corybas dilatilis	Terry Cooke
Growing Competition	1		Ross Morrison
	2		Gordon Bush
Judge's Choice		Dockrillia teretifolia	Noel Bates
Popular Choice		Dockrillia teretifolia	Noel Bates

Further General Business

- Meeting Venue to be discussed

Guest Speaker: September – Michael Harrison

Meeting Closed at 9.15 pm

CULTIVATING THE GENUS *Pterostylis* by Rex Johnson

Commonly known as greenhoods, rusty hoods or maroon hoods, members of the genus *Pterostylis* seem to be the unlikeliest flowers to be called orchids, but orchids they are. There are more than 120 species in Australia, more than 60 of them in Victoria and 37 in Tasmania, although many are common to both states. A peculiar characteristic of *Pterostylis* is the fused lateral sepals that rise from the base of the flower before separating to form two tails above a dorsal sepal. Together they form a hood (botanically known as a galea) above the column and lateral sepals.

Depending upon the species, the genus *Pterostylis* can be found in nature from sea level to alpine areas and in all types of terrain and climates. Most species have only one flower per stem but some multi-flowered species have as many as 24. Although they are commonly known as greenhoods, the colour of the flowers may range from green to brown, some species having reddish brown or maroon flowers. Green is by far the most common colour, although it may vary from light to dark green, often with white or translucent stripes. Flower size may vary from quite small {e.g. *P. parviflora*) to relatively large {e.g. *P. baptistii*). All are terrestrial orchids that become deciduous each year, usually in summer.

Growing *pterostylis* species or hybrids is so easy that many growers don't consider it to be sufficiently challenging. However, there are so many greenhoods that one could make an extensive collection of this genus alone. Many books and orchid society bulletins provide recipes for special terrestrial orchid potting mixes but some growers have excellent results using general potting mixes from their local nursery. Greenhoods are unsuitable for indoor culture but grow happily outdoors under shade cloth, preferably with a wire netting cover to keep blackbirds from digging out the plants in their search for worms.

Greenhoods commence growth from a subterranean tuber, usually in late winter, in many cases producing a rosette of leaves from which the flower stem emerges. In some cases the flower stem emerges beside the leaf rosette, while in a few cases the rosette withers before the flower buds open. All species may be propagated from seed but many also develop extra tubers, and thus form large colonies. If undisturbed, ten or a dozen tubers in a six-inch pot may multiply to a crowded potful within a few years.

When grown outdoors the plants need little more water than provided by general rainfall, except in periods of drought. The plants should be kept quite dry during the dormant period. Fertiliser should be used sparingly and only when the leaf rosettes are developing.

The easiest species for the beginner to grow are *Pterostylis curta*, *P. nana* and *P. pedunculata*, while the most attractive, easily grown hybrids are *P. Cutie*, *P. Ingens* and *P. Jack Warcup*.

THE INFLUENCE OF *Dendrobium tetragonum* IN AUSTRALIAN NATIVE
DENDROBIUM HYBRIDISING by Issy Klein

Dendrobium tetragonum. There are four varieties of this Australian native species:

a. *Dendrobium tetragonum* var. *melaleucaphilum* occurs from central Queensland to the north coast of New South Wales. It grows in coastal areas, mostly on prickly paperbark trees. The sepals and tepals have red or brown markings.

b. *Dendrobium tetragonum* var. *tetragonum* occurs from the Fitzroy River in central eastern Queensland to the Illawarra district of New South Wales at altitudes ranging from sea level to about 1000 m. It grows on paperbark trees near or in swamps and is commonly known as the 'spider orchid' because of the shape of its flowers, or as the 'four-angled orchid' from the shape of its four-sided pseudobulbs. The flowers are smaller than those of *D. tetragonum* var. *melaleucaphilum* and variable in colour; some have beautiful brown, red or purple margins.

c. *Dendrobium tetragonum* var. *cacatua* is an eastern tropical variety that occurs at an altitude of about 700 m between the Fitzroy and Annan Rivers. The plant is similar to that of *D. tetragonum* var. *tetragonum*, but the flowers have no brown or red colour.

d. *Dendrobium tetragonum* var. *giganteum* is a tropical variety found from north of the Fitzroy River to Cape York Peninsula. The plant and flowers are similar to (but larger than) those of *D. tetragonum* var. *tetragonum*. There is also a variety with a pink or 'red' labellum.

At this point I would like to recount the story of the discovery of the 'red lip' form of *D. tetragonum* var. *giganteum* as told to me by Sid Bachelor, who line-bred it to produce some most desirable cultivars. He told me that a school teacher, Mr. Bas Borger, who taught at a single-teacher school in a little town called Kookaburra, found the red lip form on the Carrai Plateau west of Kempsey. These orchids found their way to Noel Jupp, who crossed one called 'Kennedy's variety' with another called 'Barker's variety'.

Sid Bachelor bought six of these seedlings from Noel and managed to get two of them to breed. Some of the progeny had pink lips, so he tested them in his hybridising program and also used them for line breeding. One plant, *D. tetragonum* 'Yondi #1', turned out to be prepotent for the red labellum, producing a high percentage of red-lip hybrids. Furthermore the more he line-bred the more intense the red colour became. In the course of this discussion the red-lipped form of *D. tetragonum* will crop up time and again.

Some of the hybrids produced from *D. tetragonum* are: ***D. speciosum* X *D. tetragonum* = *D. Hilda Poxon***. The most successful hybrids are those made with *D. tetragonum* var. *giganteum*, using either that with the normal labellum or that with the red lip. The flowers are large and star-shaped; some are plain yellow but the segments of others have beautiful dark red-brown markings. In the better cultivars each spike has up to twenty beautifully presented flowers. A large plant in full flower makes a spectacular display. A big plus for this grex is that the pseudobulbs may each flower twice a year for three or more consecutive years. *D. Hilda Poxon* is a noteworthy parent of hybrids such as *D. Pauline Rankin*, *D. Mem. Bill Jefferies* and *D. Essie Banks*.

D. falcorostrum* X *D. tetragonum* = *D. Star of Gold. I don't think any Australian native dendrobium collection is complete without at least one plant of *D. Star of Gold*, which has beautiful large star-shaped, golden yellow flowers with red markings and a pleasant fragrance. The spikes may be either upright or attractively pendulous. *D. Star of Gold* 'Bathurst' owned by Sid Bachelor is a very good parent. He has crossed it with many other species and hybrids and the results are eagerly awaited. I have crossed it with *D. Colonial Surprise* to make *D. David's Surprise*, a large deep mauve hybrid with good show potential.

D. kingianum* X *D. tetragonum* = *D. Ellen. In every collection and wherever there is a display of Australian native orchids there are bound to be several clones of this beautiful free-flowering hybrid. The flowers have the characteristic *D. tetragonum* shape. In the better

hybrids five or more flowers are well displayed on upright spikes above the foliage. Each pseudobulb will flower for several years. A well grown plant will be covered with a profusion of flowers and will often be in contention for Best on Show.

The combination of *D. kingianum* with the red-lip form of *D. tetragonum* var. *giganteum* has been very successful, giving such well known hybrids as *D. Ellen* 'Boobyella', *D. Ellen* 'Lenna' and *D. Ellen* 'Deloraine'. All these cultivars have in turn become excellent parents. When line-bred with each other they have produced excellent cultivars of *D. Ellen* with large red labellums and lovely mauve to magenta markings on the other segments. I find those with distinct magenta markings on the segments most attractive. Some of the most notable hybrids produced using *D. Ellen* as a parent are *D. Dot Sheen*, *D. Sofala*, *D. Warrambool*, *D. Lorikeet* and *D. Pinterry*.

D. Ellen X D. tetragonum = D. Aussie Ira. This hybrid has a 'double dose' of *D. tetragonum* and it therefore has a low flower count. Nevertheless it is a notable parent. A good clone of *D. Aussie Ira* is an essential tool in every hybridiser's gene pool. Some of the progeny of *D. Aussie Ira* have become good parents in their own right. Examples include: *D. Aussie Ira* X *D. falcorostrum* (= *D. Aussie Bonanza*), *D. Aussie Ira* X *D. speciosum* (= *D. Aussie Starlight*), *D. Aussie Ira* X *D. Aussie Angel* (= *D. Colonial Surprise*) and *D. Aussie Ira* X *D. Sunglow* (= *D. Jesmond Dazzler*).

D. tetragonum X D. bigibbum = D. Pee Wee. *D. bigibbum* comes from the far north and is considered a 'hot' grower as are also *D. discolor* and some others. *D. Pee Wee* is arguably the most successful parent of the 'hot/cold' Australian dendrobiums and it has been the conduit for the introduction of the highly desirable features of *D. bigibbum* into these hybrids. *D. bigibbum* imparts its beautiful solid purple colour, wide labellum and well filled-in segments to its hybrids. The influence of the *D. bigibbum* genes remain dominant for several generations.

When hybridised with cool-growing species and hybrids, the progeny can be grown in a covered bush-house in Melbourne without any heat. However it is then important to keep the plants rather dry during Winter. Some typical hybrids are: *D. Pee Wee* X *D. speciosum* (= *D. Elegant Heart*), *D. Pee Wee* X *D. Star of Gold* (= *D. Elegant Sunset*), *D. Pee Wee* X *D. Hilda Poxon* (= *D. Brolga*) and *D. Pee Wee* X *D. fleckeri* (= *D. Tegan's Delight*).

Conclusion. There is still much work to be done with *Dendrobium tetragonum*, particularly with the 'red lip' form. It is so attractive that one is tempted to use it often in hybridising. However, it is genetically dominant for the red lip and this dominance is often passed on to its hybrids. It is amazing how much we are attracted to the colour red – it seems to make an immediate impact, so that we overlook the softer colours. If caution is not exercised, it's likely that white, yellow and marked labellums will become rare.

HOW I GROW AUSTRALIAN DENDROBIUMS (AND DOCKRILLIAS) by Brian Milligan

Over the last twenty years I have accumulated a large number of Australian native dendrobium species and their hybrids. Most are grown in open-sided shade houses that are either permanently fitted with fibre-glass roofs or have clear plastic sheeting fitted temporarily during winter and spring. This article describes those dendrobiums that I have found to grow and flower best under these conditions.

Virtually all native dendrobiums are prone to frost damage and therefore it is necessary to provide some form of protection during winter. A solid roof constructed with either fibre-glass or polycarbonate sheets is preferable at this time but its presence at other times means that one has to water throughout the year, whether rain has fallen or not. Another disadvantage of a permanent roof is that it traps hot air during summer, and as a consequence the plants suffer from hotter conditions than they would otherwise experience in a shade house simply covered with shade cloth.

A temporary cover fitted during winter and early spring protects the plants and buds from frost during winter and prevents the flowers being damaged by heavy rain in spring. When removed after the flowering season is over the plants experience a cooler environment and better ventilation than they would receive in a house with permanent roofing. The only disadvantage is the hassle of fitting and later removing the plastic sheeting each year. Long-lasting Solarweave® sheeting fitted with belt eyelets simplifies this task – one of my covers is still in good condition after ten years' use (admittedly it's stored indoors during summer, the season when most deterioration would otherwise occur).

Most of my native dendrobiums are grown in pots that are either suspended from the roof or hung from vertical wire mesh fitted to the end walls. In this way the plants receive maximum light and ventilation, both of which are essential for good culture. Nearly all are grown in squat pots and are planted in a mix of pine bark and river stones (4:1). The size of the bark and stones depends on the size of the plants – seedlings are grown in 5 mm bark with similarly sized stones, and transferred to 5-10 mm material after a couple of years. I sieve out the smaller material from the 5-10 mm bark to provide larger bark for large plants. Not all plants are grown in pots. Some dendrobiums, particularly those now known as dockrillias, are grown on mounts, either of tree fern or natural cork.

During summer I water the dendrobiums every second day, although in very hot weather I water daily, preferably in the evening. Weak liquid fertiliser (usually Campbell's A®) is applied every week or two; it's important not to use a nitrogen-rich fertiliser because such fertilisers promote the development of keikis at the expense of flowers, particularly in the case of *Dendrobium kingianum* and some of its hybrids. The plants need less water in spring and autumn and the frequency of watering and fertilising should be reduced accordingly. The plants are watered weekly in winter but not fertilised at this time.

Australian native dendrobiums are prone to attack by several insect pests. Aphids are particularly fond of the new growths and flower buds. It's important to spray for these pests as soon as they are detected, not only to minimise the immediate physical damage they cause, but also to reduce the likelihood of them transferring virus from one plant to another. Orthene® is an effective aphicide but it's not sold at normal outlets, being available only in 1 Kg packets from large suppliers. Another common pest is the leaf-roller caterpillar, which sows the new leaves into a protective cylinder, thereby sheltering from pesticide dusts and contact sprays. One of the worst pests is scale. When present on the foliage, these insects are easy to control with summer oil but when they secrete themselves in the grooves on the older canes they seem much more resistant. However, I find that the insecticide Malascale® will eradicate them, particularly if the treatment is repeated and the heaviest infestations are physically scraped off the worst spots.

By far the most commonly grown Australian native orchid is *Dendrobium kingianum*, although many plants in older collections are bush-collected plants with small pink flowers on weak, pendulous racemes. Today, many line-bred *D. kingianum* seedlings that are likely to bear strong, upright racemes of much larger, more colourful flowers are available. Colours range from all white through white with purple lips (sometimes referred to as variety *Silcockii*), white with pink stripes to all shades of pink up to purplish red. Some cultivars carry two or even three racemes per cane, and up to ten flowers per raceme, making spectacular specimen plants at maturity. *D. kingianum* seems to be more prone to frost than many other dendrobiums, so grow it in a 'cosy' spot in your shade house, not on the perimeter. Also, it's prone to develop keikis instead of flowers if fertilised with nitrogen-rich fertilisers (or with heavy applications of potassium-rich fertilisers).

Another of my favourites is *D. falcorostrum*, a species that definitely enjoys winter cold (it sometimes experiences snow in its native habitat in the mountains of NSW). Its glistening white, perfumed flowers are a delight in the shade house but not indoors, where its perfume soon becomes overpowering.

Dendrobium speciosum, in its six different varieties, occasionally provides a marvellous spectacle at spring shows, but I hesitate to recommend it to new growers in Victoria. Seedlings bred from selected cultivars are likely to provide the most rewarding plants but if you intend to follow this route, start young, because they will probably take ten years before they bloom! And then within a few years the plants in flower will be too large to remove from your shade house, let alone get into your car to take to a show! Add to these difficulties the widely held view that *D. speciosum* flowers well in Melbourne only every third year (when we receive above-average hours of sunlight), and you can see why I'm reluctant to recommend it, even though I admit to growing a few seedlings myself.

In preference to growing *D. speciosum*, I would suggest that new growers acquire some of its hybrids, for example *D. Delicatum* (*D. speciosum* x *D. kingianum*) or *D. Andrew Persson* (*D. speciosum* x *D. falcorostrum*). These hybrids flower reliably each year on much younger, smaller plants, although eventually they, too, can develop into massive specimens.

Another well-known species is *D. tetragonum* but I don't find it easy to grow and would therefore recommend in preference some of its hybrids, such as *D. Hilda Poxon* (*D. tetragonum* x *D. speciosum*) or *D. Star of Gold* (*D. tetragonum* x *D. falcorostrum*). Both hybrids produce large yellowish flowers, generally two or three times each year (a trait inherited from the first named parent).

Every collection should include a few representatives of those dendrobiums now known as dockrillias. Many of these have pendulous cylindrical 'leaves' supported on a wiry rhizome. Examples include *Dockrillia teretifolia*, *D. schoenina* and *D. mortii*, which grow well for me on tree fern mounts. The first two grow well when hung up high but the third does better under the cooler, shadier conditions that prevail lower down in my shade house. *D. striolatum* may be grown either in a pot or on a mount. Eventually it develops into a large 'mat' that produces an impressive display of flowers in spring.

Last but by no means least are the so-called hot/cold, warm/cool or Tropicool™ dendrobiums, most of which are bred by crossing the cooler-growing species of section *Dendrocoryne* with *Dendrobium bigibbum*, the warmth-loving species commonly referred to as the Cooktown Orchid. Primary hybrids bred from *D. bigibbum* need winter warmth in Melbourne but seedlings bred from these primary hybrids are quite amenable to cultivation in a cosy shade house.

Two hybrids which have done well for me on the show bench are *D. Anne's Rainbow Surprise* (*D. Colonial Surprise* x *D. speciosum*) and *D. Jonathan's Glory* (*D. Colonial Surprise* x *D. Kingrose*), both bred by Issy Klein and named after his grandchildren; each of these hybrids has *D. bigibbum* as a great-grandparent. The strong, upright racemes, large flower size and deep purple colour of this species are traits that seem to be inherited by its hybrids

through multiple generations. Every collection of Australian native orchids should include a selection of these popular eye-catching hot/cold dendrobium hybrids.

GOOD GROWING