



Australian Native Orchid Society - Macarthur Group

JUNE 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, 16th JULY, 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 to All

A big thank you to Greg for his very good presentation on native orchids. The club is very lucky to have a member like Greg, who has such an extensive interest and knowledge in Australian flora.

Congratulations to Michael Harrison for plant of the night and popular choice, well done.

Annual General Meeting this month, elections for the office bearers will be held on the night and the committee is always looking for help in running the club.

Membership fees are now due.

Wally

General Meeting – 18 June 2019 7.55pm

Minutes of Meeting

The Chair – Wally welcomed everyone to the June meeting.

Attendance: As per the sign on book.

Apologies: Carol Asquith, Ian Lawson

Acceptance of Previous Minutes:

Moved: Terry Cooke

Seconded: Phil Griffiths

Carried

Business Arising: Nil

Correspondence: 18th Kempsey Speciosum Spectacular promotional material

Business Arising from Correspondence: Nil

Treasurer's Report: Income - \$230.50/ Expenditure - \$125.00 - Balance - \$3,879.81

Moved: Tony Asquith

Seconded: Don Roberts

Carried

General Business

- Tony Asquith gave a short presentation regarding the Fertilising Power Gun
- The President reminded all members, the July meeting would be the Annual General Meeting
- Sales Table was operational for the June Meeting.
- The draft 2019 Spring
- Show Schedule will be presented at the July Meeting

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

Guest Speaker

Greg Steenbeeke provided a wonderful talk on the ecology of orchids and what they means to civilisation.

Raffles - Mike Morris, Julia Bismere, Jagath Dheersekara, Robert Moon

JUNE Benching Results

Benching Results Class	Place	Plant Name	Owner
Dendrobium species	1	<i>Dendrobium tetragonum</i>	Mike Harrison
	2	<i>Dendrobium tetragonum</i>	Margaret and Wally Southwell
Dendrobium hybrid	1	Den. Hilda Poxon	Mike Harrison
	2	Den. Bellinger Valley	Mike Harrison
Bulbophyllum	1	<i>Bulbophyllum grandimesense</i>	Mike Harrison
	2	<i>Bulbophyllum shephardii</i>	Ross Morrison
Australian Species Other	1	<i>Cestichis reflexa</i>	Terry Cooke
Terrestrial Pterostylis Species	1	<i>Pterostylis concinna</i>	Mike Harrison
	2	<i>Pterostylis collina</i>	Terry Cooke
Terrestrial Hybrid	1	<i>Pterostylis x conoglossa</i>	Ross Morrison
	2	<i>Pterostylis x conoglossa</i>	Margaret and Wally Southwell
Terrestrial Species Other	1	<i>Acianthus saxatilis</i>	Phil Griffiths
	2	<i>Acianthus fornicatus</i>	Ross Morrison
Australasian Hybrid	1	Den. Wamberal	Margaret and Wally Southwell
	2	Den. Australian Ginger	Terry Cooke
Growing Competition	1		Ross Morrison
	2		Margaret Southwell
Novelty	1	Den. Supanburi Red x Big Ham	Mary-Anne Warner
Judge's Choice		<i>Bulbophyllum grandimesense</i>	Mike Harrison
Popular Choice		<i>Bulbophyllum grandimesense</i>	Mike Harrison

Further General Business

- Nil

Meeting Closed at 9.05 pm

This article is from Orchid Societies Council of Victoria's website... "Articles in Victoria Revisited-2008, and was published in three parts...

Please note that some of the Insecticides, etc, mentioned here, are no longer available.

COMMON ORCHID PESTS: SYMPTOMS, DESCRIPTIONS, CONDITIONS and TREATMENT. by John Krens

This summary is based on a variety of available sources (thank you all who unknowingly contributed) and covers the most common orchid pests, specifying for each how to recognize their presence (Symptoms), who or what is the cause (Description), under which circumstances they occur (Conditions) and how to handle the problem (Treatment). Pests covered in Part 1 are Snails & Slugs, Caterpillars & Weevils, Cockroaches & Crickets.

GENERAL COMMENT: Spread of Diseases. All sap-sucking and plant-eating pests bring the danger of spreading various diseases, in addition to the direct damage they do, making it even more important to control them. **Biological Control** of insect pests constitutes a subject by itself and is therefore ignored in the descriptions below. **Pressure Packs:** when using pressure packs to spray pests, remember to keep the nozzle at least 30 or 40 cm from the plant, to avoid frost damage from evaporative cooling or chemical burning from drops of fluid. **Safety Precautions:** when using poison sprays (especially systemic insecticides), make sure to follow the safety instructions (protective clothing, gas mask and gloves), and to spray in windless conditions. After applying toxic sprays, shower and put on fresh clothing.

SNAILS & SLUGS – Symptoms: Slime trails and damaged young growth (holes in pseudobulbs, flower spikes and buds). **Description:** Slugs and garlic snails attack mostly young root tips, often causing considerable damage before being noticed, while snails dine on visible young growth and flower buds. They can spread diseases. Nightly inspections can reveal the culprits (< 10% of slugs only) and continuous treatment is the only way of control.

Conditions: Slugs and snails like humid conditions; they prefer to hide in the mix or under cover and feel generally at home with orchids. **Treatment:** Liquid Metaldehyde is the only certain way of killing the inhabitants of the mix, while snail pellets can control the snails (in humid conditions pellets may become mouldy, with some danger of the mould spreading). Garlic snails and also slugs may also be controlled using "traps" (slices of apple or lemon on the mix) which can be turned over in the morning to remove the catch hiding under there. Beer in a can or jar is also suggested to trap/drown slugs.

WEEVILS & CATERPILLARS – Symptoms: Chunks eaten from leaves, buds and flowers (mainly flowers) without signs of snails or their trails. **Description:** Weevils burrow into the mix and come out at night (the time to spot them). Many of the caterpillars blend in and are difficult to spot. Both attack leaves and the weevil grubs can attack the root tips. **Conditions:** most active in warm weather. **Treatment:** Watering with a solution of insecticidal soap will kill the weevil grubs, while the caterpillars can be removed by hand or killed with an insecticide such as carbaryl.

COCKROACHES & CRICKETS – Symptoms: Damaged cattleya flowers, plants deteriorating. **Description:** Cockroaches and crickets feed at night and hide during day. They can seriously damage the root tips (although crickets less often) and cattleya flowers. A flashlight at night may reveal the cockroaches scurrying away. **Conditions:** Cockroaches like warm, dry conditions. Cold winters will help in their control. **Treatment:** Both insects can be controlled by trapping them with potato slices slightly hollowed at bottom (check traps in morning) or with commercially available poisoned bait, contact poisons like Roach & Ant Killer (Yates) sprayed on pots, benches and walls or by using pybuthrin powder or pyrethrum.

MEALY BUGS & SCALE INSECTS – Symptoms: Visible scale on the leaves or white powder left by the mealy bugs, as well as honeydew deposits and yellowing of affected areas, are the visible signs of these two pests. However, even after eradication and removal of scale, small pits will remain. **Description:** Both pests tend to hide under leaves and in leaf axils, while mealy bugs may also hide in the potting mix, thus making them hard to detect. Both have a protective coating that makes them difficult to kill. Prolonged infestation can affect plant vigour. Mealy Bugs and scale may also leave honey-like deposits that can initiate fungal infestations. **Conditions:** They like warm, mild conditions, although the mealy bugs don't like very hot weather. Spring and summer are the main periods of

infestation in the shade-house but they may be a problem in the hothouse all year around. **Treatment:** Spraying with a systemic insecticide (one that is absorbed by plant tissues) will generally kill these pests but spraying needs to be repeated two or three times at intervals of 10-14 days to ensure that the following generations are also killed. Scale may also be treated with eco oil (or white oil mixed with malathion or a systemic insecticide). The oil suffocates these pests; when mixed with toxic substances, it also kills by poisoning. Oil may damage the foliage of some orchids – always water plants before spraying them. Watering with insecticidal soap while dislodging scale manually (eg. with sharpened bamboo stake) is also recommended.

MITES, TWO-SPOTTED MITE & FALSE SPIDER MITE – Symptoms: The damage from spider mite can often be seen as a discolouration (silvering of the underside of the leaves) for the two-spotted mite and as pitted depressions for the false spider mites. Severe infestations can lead to malformed leaves and flowers. **Description:** Two-spotted mites (0.5 mm long), often known as spider mite or red spider mite, will spin a fine web, which helps to detect them. False spider mites are only half the size of the two-spotted mite (left in picture). Both type of mite pierce the plant with their proboscis and suck plant sap, opening the way for fungal infections. You can normally not see the mites and have to deduce their existence from the symptoms. **Conditions:** Mites like hot dry weather, and only become a problem under those conditions. They hide in cracks during winter. **Treatment:** Mites can be treated with miticides such as Kelthane and Omite (carefully follow the instructions on the packs of these products). Avoid using the same product all the time to minimise the development of resistance. They may also be sprayed with a systemic insecticide or watered with insecticidal soap solution. Increasing the relative humidity and spraying affected plants with oil can fix light infestations and terminate over-wintering populations.

APHIDS (GREENFLY) – including WOOLLY APHIDS – Symptoms: Aphids are easily visible, especially on young growths, and are often visited by ants. They may cause deformities and yellowing of new growth. **Description:** Under favourable conditions aphids can multiply very rapidly, causing stress to the plant by their sheer numbers. The aphids prefer to attack new shoots and flower buds. Affected flower buds will be disfigured, if they open at all. Aphids also leave honeydew deposits, which tend to become mouldy as well as attracting ants that help the aphids travel to different areas of the plant. Woolly aphids have a waxy covering that gives them a similar protection against sprays as mealy bugs. **Conditions:** Aphids tend to appear when the plant is developing new growth and can multiply very rapidly. **Treatment:** Aphids are generally easy to treat, with anything from a mixture of soapy water and methylated spirits or insecticidal soap (and a little brush) to surface spray insecticides. Heavy infestations might require the use of a systemic insecticide.

THRIPS – Symptoms: A silvery lustre on the leaves (surface of cells sucked empty) with dark spots (excrements). Frequently seen on flowers; they often infest terrestrial orchids. **Description:** Thrips are greyish or yellow to brown and about 1-2 mm long, with fringed wings. The females lay their eggs in the leaf tissue, which hatch within a few days. The larvae are very mobile and start feeding immediately, extending their range below the potting mix surface, where they also pupate (life cycle takes from 12 days at 30°C to 20 days at 20°C). Thrips are believed to be instrumental in the transfer of viruses. **Conditions:** Thrips don't like cold weather and favour a hot dry atmosphere. Only a small number normally survive the winter but their numbers can build up in hot dry winter weather. They live on all types of plants but seem to prefer terrestrial plants, so keep weeds in the area under control. **Treatment:** Thrips can be treated with a range of insecticidal sprays, such as methidathion (Supracide®), dimethoate (Rogor®), malathion (also used for treating head-lice) and imidacloprid (Condifor®), at intervals of 2-3 months.

WOOD LICE (SLATERS), MILLIPEDES & EARWIGS – Symptoms: Wood lice, millipedes and earwigs hide in the dark cool places, for example, under pots standing on the ground (lift pots to check). They forage at night, so a nightly trip with flashlight could reveal their presence. **Description:** Wood lice (often referred to as slaters) are small multi-segmented crustaceans that, when feeling threatened, roll themselves into a little ball. Millipedes have long, narrow-jointed, black bodies. Woodlice and millipedes eat decomposing vegetable matter, including decomposing pine bark, thus causing orchid mixes to clog up. They also eat root tips when there are no better alternatives. Millipedes and earwigs eat small insects like thrips, but also eat root tips (especially those of epiphytic orchids) and flowers. They hide in places such as bracts, at the base of pseudobulbs, and in and under pots. **Conditions:** These pests like cool damp environments, so orchid pots are excellent places to hide as well as to feed. **Treatment:** Watering the plants with an insecticidal soap or use of insecticidal powder is recommended as treatment. Woodlice can also be controlled by snail pellets (place them under a pot to

protect them from moisture), or by trapping them with potato slices (see cockroaches). Earwigs can also be trapped in balls of crumpled paper. Nightly flashlight expeditions and squashing works too! Keeping growing areas free of litter helps avoid these pests becoming a problem.

ANTS – Symptoms: Ants moving around on orchid plants, or trails of ants leaving or returning to orchid pots. **Description:** Ants don't eat orchids, but they can build nests in pots, seriously clogging up the orchid mix. They also move honeydew-creating sucking pests (such as aphids and mealy bugs) around, thus actively spreading pests. **Conditions:** Ants prefer dry cool places for their nests but spread their activities to any type of environment where they can find food. **Treatment:** Locate the nest and apply ant-bait, such as AntRid or AntSand, to exterminate the nest. If the nest is in a pot, you may need to re-pot that plant and clean the mix and treat it with a mix of pest oil and pyrethrum to stop re-colonisation. Watering with insecticidal soap or use of contact poisons like Roach & Ant Killer (Yates) sprayed on pots, benches and walls, helps to control ant infestations.

CODLIN MOTH – Symptoms: Little brown caterpillar droppings or (if the pest is not discovered in time) collapse of flower spikes. **Description:** A small brown moth that lays its eggs on new growth and flower spikes. The small white/yellowish caterpillars that emerge from the eggs burrow into the new growths and flower spikes, causing them to rot and collapse. Until that time, the only outward signs are the small brown droppings of the caterpillars. Cymbidiums and native dendrobiums seem to be most affected. **Conditions:** This pest originates in fruit orchards and is a substantial problem in areas such as Melbourne's Eastern suburbs (former orchards) during the warmer months. **Treatment:** Regular spraying during warmer months (October till May) with carbaryl and a systemic insecticide (like Rogor® or Lebaycide®).

DENDROBIUM BEETLE (ORCHID BEETLE) – Symptoms: Little orange eggs, holes with waxy extrusion deposits, dying leaves, larvae and beetles scurrying around at night. **Description:** The orange

beetle (about 10 mm long with black spots) feeds on orchids, with a preference for Australian dendrobiums. The larva is a slimy orange caterpillar that feeds on green tissue but also tunnels into new growths, causing them to die. **Conditions:** Dendrobium beetles are a serious problem from the northern Australia down to Sydney. Lower winter temperatures make them less of a problem in Melbourne. However, care needs to be taken not to import them into the hothouse with plants brought from infected areas. **Treatment:** Difficult to control. Squashing on sight and regular spraying with carbaryl when beetles are active. Eggs can also easily be removed by hand (when noticed).

WHITEFLY – Symptoms: Tiny white flies accumulating on young foliage, especially on underside of leaves, or on flowers. **Description:** White fly suck sap from plants, thus weakening them and possibly spreading diseases. **Conditions:** White fly can become abundant under mild weather conditions. **Treatment:** spray with malathion.

RATS & MICE – Symptoms: Sudden disappearance of floral segments of cymbidiums and/or greenhoods (mice), pots overturned and roots eaten or canes chewed through at base (rats). **Description:** Rats and mice tend to hide during the day and forage during the night. They are interested in everything edible. Under optimum conditions they can multiply explosively. **Conditions:** With cats being kept indoors during the night, rats and mice have become more mobile. **Treatment:** Use of poisoned bait (eg. Ratsak®, Ratsak Oneshot® – put inside an open container to reduce likelihood of unintended victims) will solve the problem, although this might take some time.

POSSUMS – Symptoms: Flowers being eaten. **Description:** Possums are nocturnal and dine mostly on vegetable matter. They like lemon (skin only) and oranges (inside only). **Conditions:** If no other preferred food sources available, possums may turn to orchids for food. **Treatment:** Have a preferred food source available. Lemon and orange trees with fruit all year around seem to prevent possums from becoming a problem.

TRAVELS AND ADVENTURES OF AN ORCHID HUNTER by Albert Millican with comments by Brian Milligan

No, he's not an ancestor of mine, despite the similarity in our surnames. Albert Millican spent several years collecting orchids in Colombia during the 1880s and wrote a book of the above title describing his exploits in 1891. The following excerpts are taken from a review written by Wm. Glikbarg and published in the Orchid Digest, 1983, 47, 184.

One of Millican's Colombian destinations was La Mesa de los Santos, where earlier collectors had found *Cattleya mendelii* growing in profusion. He was disappointed at first: "On the ledges of the precipices, where the eagle and the condor make their home, the lovely *Cattleya mendelii* has grown in profusion since the memory of man. But when the first plant-hunter arrived, even these dizzy heights offered no obstacle to his determination to plunder. Natives were let down by means of ropes, and the plants were hauled up in thousands. When I visited the place, all I could see of its former beauty and wealth of plants was an occasional straggling bulb hung as if in mid-air on some point only accessible to the eagles."

Eventually Millican met with success in the eastern Andes near Curiti. "The most magnificent sight for even the most stoical observer are the immense clumps of *Cattleya mendelii*, each new bulb bearing four or five of its gorgeous rose-coloured flowers, many of them growing in full sun or with very little shade.... Some of the plants ... must have taken many years to develop, for I have taken plants from the trees with five hundred bulbs, and as many as one hundred spikes of flowers".

Later, in searching for *Odontoglossum crispum* and finding many former habitats denuded, he found an area near Maripi where other collectors had not preceded him. "In those immense forests, where a few acres of clearing is considered a great benefit, and where clearings made, if not attended to, become forests again in three years, cutting down a few thousand trees is no serious injury; so I provided my natives with axes and started them out on the work of cutting down all the trees containing valuable orchids..... They soon became adept at plant collecting, and would bring several hundreds of plants each night, with occasionally a few *Odontoglossum odoratum* and *O. corodinei* mixed amongst them. After about two months' work we had secured about 10,000 plants, cutting down to obtain these some 4000 trees, moving our camp as the plants became exhausted in the vicinity".

I fancy that Millican was deluding himself in his belief that the areas that he cleared would regenerate in only a few years. Apparently there is so little topsoil in many Central and South American mountain habitats that areas once cleared soon lose their topsoil to erosion and never recover. But he was no different to any of the other collectors of that era in their disregard for the environment. Thankfully, the wholesale collection of orchids from the wild is today mainly a memory of the past. Many desirable orchid species have now been line-bred for several generations, so that seedlings purchased in flask are far more likely to have flowers superior to those of any bush-collected species.

Again an article from the same website...I hope it generates some interest

Dendrobium tapiniense and OTHER DENDROBIUMS of SECTION LATOURIA by Paul Carver

Dendrobium tapiniense, a native of Papua New Guinea, is one of about fifty dendrobiums in Section Latouria, which is centred mainly in PNG, although a few species occur in the Philippines, Java, Fiji and Samoa. Other members of Section Latouria that I grow with some success are *D. aberrans*, *D. alexandrae*, *D. atrovioleum*, *D. eximium*, *D. forbesii*, *D. macrophyllum*, *D. normanbyense*, *D. rhodostictum*, *D. polysema* and *D. punamense*. I also grow *D. convolutum*, *D. engae*, *D. finisterrae*, *D. johnsoniae*, *D. otaguroanum*, *D. shiraishii* and *D. spectabile* but with less success.

I grow all these dendrobiums in a heated house that is maintained at a minimum temperature of 12°C in winter, and a maximum of 30°C in summer. The relative humidity is kept between 70% and 80%, even on hot days, using two second-hand evaporative coolers. The air from these is further humidified with fine misters placed in front of their air outlets. Both coolers and their misters are coupled to a thermostat set so that they commence operation when the temperature reaches 28°C. An automatic overhead misting system also operates for sixty seconds at 10 am, noon, 2 pm and 3 pm. On really warm or hot days, I wet the scoria floor thoroughly if the relative humidity drops below 65%.

Phil Spence has explained to me that the roots of dendrobium species in Section Latouria do not like to remain wet for any length of time, and that some of the roots at the crown need to be exposed to the air. Obviously the potting mix that I was using retained too much moisture, so I now use a mix containing three parts of 10 mm orchid bark and one part of 10 mm quartz or similar stone. I no longer use perlite or charcoal in the mix. I also use the smallest possible squat pot that will accommodate the roots.

As to watering, I prefer to hand mist unless the pots appear to be dry, in which case they all receive a thorough watering. I know when my orchids are drying out if pots with a sphagnum-perlite mix feel dry on the surface. Also, by experience, the weight of a potted plant will indicate how much water is present.

Many dendrobiums in Section Latouria need high light, so I suspend my pots of *D. tapiniense* near the roof. However, high light is not necessary for all Latouria Section dendrobiums, as I had a great flowering of *D. forbesii* this season (five racemes, each bearing ten flowers), even though its pot had been placed on the bench at the southern, shady end of my intermediate house.

I use liquid fertiliser (Peters plus Calcium) at a concentration of no more than 400 mg per litre about once every fortnight. This concentration also suits other genera that I grow in sphagnum moss, rather than in a bark-based mix.

My plants of *D. tapiniense* suffered from serious fungal attack last year, the leaves becoming mottled with yellow and green striations and black necrosis. I sprayed with Alliette®, and although the unsightly leaves still remain, the new growths are clear of infection. Of course, these plants may take one to two years before they resume flowering. Once sufficient new, unblemished leaves have developed, I will cut off the unsightly ones.

GOOD GROWING