Australian Native Orchid Society - Macarthur Group

JANUARY 2023

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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: 17th JANUARY, 2023**

Life Members: W. & M. Southwell, A. & C. Asquith & R. Morrison, M. Yabsley.

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

Venue: BIRRAWA HALL **Should you wish to pay into our account for your fees**

FITZPATRICK ROA **BSB 062517 A/C 00909929**

Mt. ANNAN. **Doors open 7.00pm, benching closes 7.55pm, meeting starts 8pm**

Hi to All

Another year gone....Welcome to 2023 for a happy and healthy new year.

2022 ended at our Christmas gathering evening last month where I think all those who attended had a great night. Trophies were presented to our successful members.t

Please keep in mind that our JANUARY MEETING IS OUR tuber night. So clean up any tubers you might have and bring them along to the meeting.

Our first show this year is our first show, our Autumn Show, to be held on 13th May.

Wally.

At our last meeting 2023 Draft Schedules distributed and comments / edits sought for the February meeting. 2023 Draft Calendar Dates distributed

- **2023 Show Dates**

Autumn Show 13 Ma,2023
Spring Show 9 September, 2023
Late Spring Show 21 October, 202

- **2023 Meeting Dates**

17 January	21 February	21 March
18 April	16 May	20 June
18 July	15 August	19 September
17 October	21 November	19 December

Just a short newsletter this month. Obviously, no minutes to publish. I hope everybody has had a terrific Christmas and will have a happy and healthy 2023!! Please don't forget our tuber night.

GOOD GROWING.

Australian Native Terrestrial Orchids

From Bribie Island Orchid Society Website

While orchids represent 10 percent of the earth's flowering plants, by contrast with some countries, Australia is not rich in orchids. There are about 660 species of native orchids presently named and these are distributed in some 107 genera. This represents about 4 per cent of our flora. Despite these numbers more than 70 per cent of Australian orchids are unique and are not found anywhere else in the world. Three quarters of the Australian orchids grow as terrestrials, the remainder is epiphytes.

There is an incredible variety of flower colour with some species opting for dull greens and browns and others advertising in brilliant hues, some in striking and flamboyant combinations. Perfumes (if present) may be deliciously fragrant, spicy, overpowering, or even blatantly obnoxious. (Liparis reflexa, Bulbophyllum beccadi, Bulbophyllum fletcherianum). Australian orchids are diverse and embrace some interesting variations. In the terrestrials the flowers range in size from about 2 millimetres across in Microtis atrata to about 10 centimeters across in Caladenia patersonli. Some of the flowers resemble gnats, mosquitoes, wasps, bees, spiders, birds and helmets. Some orchids are highly coloured and may mimic other plants.

Floral diversity is also exhibited in the Australian epiphytes. Flowers range in size from 1 millimetre across Oberonia titania to about 7 centimetres across in Phalaenopsis amabilis var. papuana. Pale or dull colours predominate with colourful exceptions being Den. bigibbum (mauve-purple) Den. nindli (blue) Den. speciosum var. grandiflorum (yellow) Rhinerrhiza divitiflora (orange). The flowers of some species may open for but a few hours (Rhinerrhiza divitiflora) where as others may lasts for many weeks (Den. discolor). Perfumes may be pleasant, spicy, overpowering, fruity, unusual or unpleasant. (Den atroviolaceum)
Over 70 per cent of orchids in Australia are terrestrial growers. The largest flowered orchid in Australia is Phaius tankervillae (a local) and is a member of the "Northern Element" of the migrant orchids from Asia. Other "immigrants" being Calanthe triplcata, and Geodorum densiflorum. The "Southern Element" or true indigenous orchids of Australia have "travelled" up from the southern states and includes 83 Prasophyllum species (the Leak Orchid), 73 Caladenia species (the Spider Orchid), 58 Pterostylis species (the Greenhoods), 35 Thelymitra species (the Sun Orchid), 25 Diuris species (the Donkey Orchid) 12 Corybas species (the Helmet Orchids), 10 Microtis species (the Midge Orchids), all of which have local representatives.

Phaius
Much admired, not only for their beautiful flowers carried on tall, upright spikes, but for the leaves themselves which are also very showy, Phaius may be grown quite well in Cymbidium mix. They definitely require a fair amount of heat. Two species are principally grown here.

Phaius tankervilleae This is a native to Australia and South-East Asia, and is often known as the "nuns" orchid. There are usually 10 to 15 flowers to a spike and they are white on the back, and reddish brown inside. The labellum has a yellow throat and crimson sides.

Phaius australis A very popular and beautiful species. The flowers, which are borne on tall erect spikes, are white, marked with red. The rare Phaius australis var. bernaysii is a pure canary yellow.

CULTURE IN GENERAL
As there are three distinct groups, it is best to divide culture similarly.

GROUP 1 The northern "immigrant" type, such as Phaius, Calanthe, Spathoglottis, Malaxis species. Most are evergreen with pseudobulbs, fleshy leaves and typical orchid roots; they grow in bush house conditions.

GROUP 2 The main genera and the easiest to grow are: (A) Pterostylis, Acianthus, Corybas species that usually grow in moist, humid leaf litter. (B) Diuris, Calandenia, Calochilus, Thelymitra and Prasophyllum

species which grow in drier, sandy type soils with higher light, best grown under cover with protection from winds and rain.

GROUP 3 The semi or Holo saprophytic (saprophytic means an organism using non-living organic matter for nutriment). This group contains some of the most unusual orchids in the world. In general saprophytic plants lack the green chlorophyll cells that manufacture the plants sugars and starches. To overcome this, the group depends wholly on a symbiotic relationship with a soil fungus. At least two types of fungus have been recorded. The Hymenomycete type with clamp like connections to the root, and Rhizoctonia type, in which the fungal hypae (the underground body of the fungus) intrude into the cells through a break in the outside of the root, or through passage cells in the roots outside layer of cells. On entering the root the fungus coils itself into a tight spiral of hypae within the root cells. (hypae = thread like parts making up the fungus)

Within the root structure are three different types of cells. One is called the fungal host cell, where the fungus invades the plant; cell two is the digesting cell and the third a storage cell layer, stores the starches acquired from the digestion of the fungal hypae. When the fungus enters the root of the plant, it infects the first cell layer and grows rapidly. The plant then intervenes and digests the fungus within the second series of cells, storing the resultant products in the third layer of cells for the plants later use.
Plants which grow in most states of Australia are Gastrodia sesamoides - Potato orchid, Dipodium punctatum -Hyacinth orchid, Cryptanthemis slateri - Eastern underground orchid, Rhizanthella gardneri - Western underground orchid. The Great Climbing Orchid, Galeola foliata grows up to I 2m high, and the Gaeola cassythoides is a smaller plant growing up to 6m high.

PESTS As with other orchid species pests can be a real problem in growing native orchids. In fact some pests are attracted to native plants before attacking any other species of orchid. Snails, slugs, mealy bug, scale, fungi, aphid, grub, grasshopper, rot, and man are the most common problems to name a few. Control as for any other orchid species.

The Aboriginal tribes used native orchids such as, Spiranthes, Caladenia, Glossodia, Diuris Microtis, Prasophyllum, Thelymita, Edochilus, Acianthus, Dipodium, Lyperanthus, Geodorum, and epiphytes such as Cym. madidum, Cym. canaliculatum, and Speciosum as a source of food. They also chewed various orchids as medicines for coughs, colds, and dysentery.

FERTILIZERS Epiphytic orchids respond to the regular application of fertilizers by producing strong healthy growth. Fertilizers are best applied during spring and early summer while the plants have a long growing period ahead of them. Late applications of fertilizers may delay dormancy and interfere with flowering. Organic fertilizers are excellent for orchids because they release their nutrients in a slow, gentle manner over a period of time. Blood and bone and hoof and horn are fairly commonly used to promote orchid growth. Liquid fertilizers are an excellent means of promoting healthy growth. Applied at less than the recommended strength means you can apply more frequently, which helps in producing much better growth.

SLAB CULTURE Many epiphytic orchids grow well on a slab or a section of a tree branch, and relish the extra air movement and rapid drying which occurs after watering. Plants grown on slabs are easily moved and can be moved about until a suitable position is found. Orchids grown on slabs require fairly high humidity and bright light. Orchids with a creeping habit or pendulous stems grow best on a slab,(not paper bark) where as those with crowded, erect pseudobulbs are much better accommodated in a pot.

FERTILIZERS FOR GROUND ORCHIDS We have seen that most terrestrial orchids rely heavily on a mycorrhizal fungus for their survival. This relationship can be readily upset by the excessive use of fertilizers and hence any fertilizing of terrestrial orchids must be carried out with care. A small quantity of blood and bone (10 grams per 9 litres of mix) added to the mix would be beneficial. One or two applications of quarter strength fertilizers can also be of benefit to some species.

MULCHING Mulching the soil surface with a thin layer of fine leaves has the advantage of reducing moisture fluctuations in the upper layer of soil and inhibiting the germination of weed. It also reduces soil splash when watering, resulting in less leaf rot. The best mulching material is chopped she-oak needles, but the fine sieved leaves from under tea trees can also be satisfactory. The mulch should be applied when repotting so that the new shoots grow up through it.

POLLINATION NATIVE ORCHIDS Dendrobium smilliae is the only Australian orchid that is known to be bird pollinated. The flowers lack fragrance are often pendant and contain nectar. The bird is Bush Canary or Yellow Honeyeater.
Beetles are frequent visitors to the flowers of large species of Prasophyllum, Microtis parviflora, Microtis unifolia, and Peristeranthus hillii.
Calanthe tripilcata are sort after by moths, Habenaria triplonema like to be pollinated by Hawk moths, Bulbophyllum weinthalii attracts blowflies, Microtis parviflora are also visited by small black ants, Rhizanthella gardneri are pollinated by termites.
Phaius, Catochilus, Caladenia, Thelymitra, Geodorum, Spiranthes Acianthus eria, Chiloglottis are self pollinated.

Please note that this article is on the Bribie website and the original article includes a few photographs of orchids mentioned in this article.. I just hope that I haven't published this before!!!

Happy New Year to everybody!!!!!