



Australian Native Orchid Society - Macarthur Group



MAY 2020

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

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Secretary: Mr. R. Morrison

COURIDJAH. 2171

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

Next Meeting: Unknown Due Corana virus

Life Members: Mr. J. Riley, M. T. Cooke, and W. & M. Southwell, A. & C. Asquith. (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

Venue: BIRRAWA HALL

Should you wish to pay into our account for your fees

FITZPATRICK ROAD

BSB 062517 A/C 00909929

Mt. ANNAN.

Doors open 7.00pm, benching closes 7.55pm, meeting starts 8pm

Hi to All

Many thanks to Richard Dimon for his excellent presentation at the last video meeting. It was very well done.

The meetings by video have proved to be a great success, particularly with the amount of orchid photo entries for judging by Greg.

There was a wake held for Terry at Mt Annan Gardens which was attended by quite a few club members as attendance at the funeral was very limited. A sad time, but a celebration of Terry's life.

The future of our meetings at the hall are new starting to look very good, with society gradually getting back to normal, with the controls of the corona virus starting to bring a strong level of optimism.

Presentation at this months ZOOM video meeting will be by Jim Cootes.

**Good Growing,
Wally**

We were advised by council (late Thursday) that our meetings could resume. However there are quite rigid guidelines. (One of the condition....can't use the kitchen). Therefore, as announced by Secretary Ross, meeting as per last month on ZOOM. (See Ross' email below.)

Please be advised that our Annual General Meeting will be held next meeting, 21st July,2020.

Hi Everyone,

The June Macarthur ANOS Meeting will go ahead via the ZOOM Meeting platform link to connect in are provided below.

Join Zoom Meeting

<https://us02web.zoom.us/j/83658303806?pwd=M0dLMUxITzVMbUw4MXVCakdmTXI3Zz09>

Meeting ID: 836 5830 3806

Password: 763631

Wally, our President, will conduct our normal meeting business as well as:-

- **Presentation - Line Breeding in Dendrobium kingianum by Jim Cootes**
- **Virtual Orchid Benching - send (either text to mobile 0413314595 or as attachment in a reply email) two photos per entry (whole plant and one flower - a side view of terrestrial orchids is also needed) of each orchid you have out during mid May to mid June. Please include name of each plant. I'll arrange plants into our monthly sections and create a presentation to view on the night. Greg S has agreed to judge the photos. *A new technology challenge - remember - you may need to send multiple texts / emails due to the data size of the photos. Closing time / date of photos - 7pm Monday 15 June***

The virtual benching will only succeed if we all get behind it - visitor photos welcome.

Sections are : Dend. species, Denb. hybrids, Sarc. species, Sarc hybrids, Bulbophyllum, Rhizobium sp, Rhizobium hybrid, Australian Sp other, Australian hybrid other, Pterostylis sp, Terrestrial Evergreen sp, Caladenia sp, Diuris sp, Terrestrial hybrid, Terrestrial sp other, Australasian sp, Australasian hyb, Seedling, Growing Comp.

Ross Morrison – Secretary

MACARTHUR ANOS GROUP (est 1990)

IMPORTANT ANNOUNCEMENT---

UPDATED February 2020 RELEASE OF DOWNLOADABLE AUSTRALIAN ORCHID REGISTERED HYBRID LIST.

After several years of development, the RHS - based list of hybrids is now downloadable as a pdf from the ANOS website, and can be printed in an A4 or A5 booklet.

The list will be updated as new registrations come to hand. Please inform the webmaster of omissions or errors. Further cross-referencing and percentage composition lists are in development.

(It runs to 64 pages)

GOOD GROWING

GEORGE KNIGHT, AN EARLY VICTORIAN ORCHID GROWER by Greg Campbell, Gerald McCraith AM and Brian Milligan

Sir Frederick Sargood is believed to have assembled the first major collection of orchids in Australia at Ripponlea (his estate at Elsternwick, a Melbourne suburb) in 1883. His interest in orchids was sparked by a visit to England in 1880-1882, for not only did he return to Melbourne with a large collection of orchids but he also 'imported' two gardeners to care for them!

It now appears that George W. Knight, City Surveyor at Sandhurst (Bendigo), also accumulated a substantial orchid collection, beginning in 1884. Knight's copy of the fifth edition of B.S. Williams' *The Orchid-Grower's Manual*, published in 1877, has recently been found. Knight inscribed his name in the frontispiece of his copy and also noted in the margins the orchids that he had acquired and when they first flowered. Knight's notes indicate that he acquired his first orchids (seven species and two hybrids) during 1884, followed by at least a further 46 orchids the following year (other entries list only the date of flowering, not of purchase). A total of 89 orchids were marked altogether. Four of Knight's first orchids, acquired in 1884, were *Paphiopedilums*, then known as *Cypripediums*. Two (*Paphiopedilum concolor* and *P. niveum*) were species, while the other two were hybrids (*P. Dominionum* and *P. Harrisianum*). His *P. concolor* produced four flowers in 1888, while *P. niveum* had three, results that would delight most modern growers. He also purchased two *odontoglossums* (*Odontoglossum hallii* and *O. rossii*, now *Rhynchostele rossii*) in 1884 but there is no indication that either had flowered.

Knight grew four *Cattleya* species and must have been especially pleased with his plant of *Cattleya mossiae* 'albo-marginata', as (according to his note in the margin) its flowers measured 7.5 x 7 in. Considering Bendigo's hot summer weather, he did well to flower *Odontoglossum crispum* in 1888, when it displayed its "beautiful pure white blooms" during the entire month of August. Another orchid that deserved special mention was *Odontoglossum citrosimum* (now *Cuitlauzina pendula*), which in December 1888 produced flowers that were "lovely, large white, of great substance, (and) highly perfumed".

A note in the margin reveals that *Trichopilia suavis* produced twenty blossoms in late August 1888, while his *Sophranitis grandiflora* (now *S. coccinea*) also flowered in August the same year.

We know that George Knight purchased some of his orchids from William Bull's Establishment for New and Rare Plants of the King's Road, Chelsea (England). Bull's nursery was one of several great orchid nurseries of the era, two others being Sander's of St. Albans and Veitch's of Chelsea. Bull imported plants from Africa, India, Japan and North America, and commissioned Edward Shuttleworth and John Carden to collect for him in Colombia. He was one of the first sixty chosen by the RHS to receive the Victorian Medal of Honour commemorating Queen Victoria's jubilee in 1897.

A letter written by William Bull was found sandwiched in the pages of Knight's copy of *The Orchid-Grower's Manual*. Dated 28 October 1885, it reads (in part): "Your letter of the 15th August duly reached me and I have now forwarded by P & O "Carthage" a case containing the *Saccolabiums* as per enclosed invoice. I have sent two extra strong plants of *Cypripedium caudatum* and *C. caudatum roseum* and charged half price for them. I have also sent extra strong plants of the two others that failed." Three of the *saccolabiums* that Knight ordered are now known as *Ascocentrum ampullaceum*, *A. curvifolium* and *Rhyncostylis gigantea*, while *Cypripedium caudatum* is now called *Phragmipedium caudatum*. It's surprising that so few of Knight's purchases died in transit, which would have taken about two months, as calculated from the above dates.

George Knight was born in London in 1831. He qualified as an architect and practised as a civil engineer before coming to Australia with a younger brother in 1854. After arrival in Victoria he was appointed Government Engineer and supervised the construction of a railway line to Williamstown and the Sunbury section of the main railway line to Bendigo. Subsequently he established a vineyard at Sunbury but soon sold it and moved to Bendigo, where held the position of City Surveyor until retiring in 1886. During that period he established nurseries, vineyards and orchards on four different sites in and around Bendigo, trading as the Knight Brothers. The Rosenberg nursery at Back Creek was established on former gold diggings only after turning over the whole site to unearth the fertile soil and bury the clay and gravel that the miners had brought to the surface.

William Knight was a Fellow of the Royal Horticultural Society of Victoria and served as a Justice of the Peace and Magistrate in Bendigo for fifty years. He died in 1923, aged 93.

Acknowledgements.

We thank Mr. Darren Wright of Bendigo for lending the authors Knight's copy of the fifth edition of *The Orchid-Grower's Manual*, and Mrs. Helen Mainka of the Bendigo Historical Society for her research.

From Orchid Societies Council of Victoria 's Website, "Articles From Orchids in Victoria Revisited,2008.

Although there are almost 50 species in the genus *Cymbidium*, only three are native to Australia - *Cymbidium canaliculatum*, *C. madidum* and *C. suave*. These three species occur only in Australia. I have made an extensive study of these species where they grow in nature in New South Wales and southern

Queensland and have discovered surprising differences in their cultural likes and dislikes, particularly the pH of the decayed material surrounding their roots. These results provide useful clues as to how we can better grow these three Aussies in cultivation.

I have examined plants of *C. canaliculatum* between my home town of Dungog (NSW) and Roma in Queensland, a habitat range of 1400 Km. Daily temperatures in its various habitats range from -12 degrees C to +50 degrees C. Plants were found on a variety of hosts - eucalypts, native pines and native oaks - both living trees and stumps or fallen logs. Of the total plants surveyed, 60 were found on living trees and 85 on stumps or fallen logs. Ten were found on live native pines while thirty grew on fallen pine logs. pH tests were made around the root systems of each plant, both near the surface and well down around the lower root system. The pH near the surface differed markedly from lower down, as shown by the following values:

Host	pH (near surface)	pH (lower down)
Live pines	6	9
Pine logs on ground	6.5	9
Other live trees	7	9.5
Other stumps & logs	7.5	9.5

The pH measured near the roots of seedlings (average leaf length 150-250 mm) growing on live native pines was only 4.5 but measurements taken on older plants ranged from pH 7 to 9. It seems therefore that the root system of *Cymbidium canaliculatum* prefers alkaline conditions, preferably about pH 9, and may modify its environment to suit. I recommend spraying cultivated plants with lime spray (1 gm per L) four times each year. This species grows vigorously in spring and summer and benefits from fertiliser applications during this period. In nature the root system hardly ever becomes dry, as the channel-like leaves channel any moisture provided by rain, dew or frost to the base of the plant. Decayed leaf matter provides the main source of nutriment.

Cymbidium suave plants were studied in nature between the Hunter River (near Newcastle, NSW) and the Brisbane River (near Ipswich, Queensland), a range of 1000 Km. Some plants were found near sea level (25 m), others at elevations up to 700 m. Hosts included blue gum, spotted gum, grey gum, water gum, red gum, brush box, blackbutt, stringy bark, ironbark, tallow wood, native pine and oak. Again, pH measurements were made just under the leaf mould at the base of the plant and also much further down in the rotted heartwood (mudgut).

Number Host	pH (near surface)	pH (in mudgut)
195 dead stumps	4-5	4
65 dead wood logs	4.5	4
15 live trees	4.5	4
8 on rocks/bark	5	4
5 sick plants in stumps	5	6

Obviously, the root system of this species prefers acidic conditions. The study covered 288 plants in all, 250 of them carrying seed capsules (it was late September). The best plants had a 25 mm layer of good leaf mould from decaying leaves, twigs and bark around their bases. Decayed material (mudgut) taken from the centre of host stumps have pH 3.5- 4, and I recommend the use of this material to achieve a Satisfactory pH range when cultivating *Cymbidium suave*. Other materials suitable for adjusting the pH of the potting mix include Phostrogen Acid Plant Food (a new product with pH 4.5), pineapple juice (pH 4.5) and coffee grounds (pH 4.5). Never apply lime to this species, as it hates alkaline conditions.

Only eight plants of *Cymbidium madidum* were Studied, all of them living on trees, logs and stumps in the Coffs Harbour area (mid-north coast of NSW). Material surrounding their roots had pH 6- 6.5. KR
From ANOS Warringah Group Inc. newsletter of September 2019 (Website)