



The New Zealand Orchid Society Inc.

President: Greg Barnes (Ph: 0274530024) **Secretary:** Email: secretarynzos@yahoo.co.nz

Editor: Noel Townsley (ntownsley@xtra.co.nz) Ph: 09 8354652, or 0212664522

Website: www.nzorchidsociety.nz

NZOS NEWSLETTER

February 2024

In this issue:

Next meeting

Notes from the President

Report from our last meeting

Notices

Report on garden visit to Thames

Kiri turns 80

News from the Interweb

Important Dates

This Month's Orchid:



Pholidota (Pho.) *chinensis*

This is a plant that you will often find for sale on the trading table, as it seems to grow well in our cool conditions in NZ. As the Latinized name '*chinensis*' suggests, it means The Chinese Pholidota.

At one time it was considered to be part of the Coelogyne group.

Although it is found in the southern provinces of China, orchids aren't limited by lines drawn on a map, and it can also be found growing in Vietnam, Myanmar, and Hong Kong. The plant usually grows on damp rocks near streams in shady as well as open places.

The individual flowers are not very large, but they are produced on pendulous spikes, and if you can grow the plant into a large specimen, they can produce a lovely display.

A small growing plant well worth seeking out and adding to your collection.

NEXT MEETING:

WHEN?	Wednesday, 20 March 2024
WHERE?	<u>Meeting location:</u> Mt Albert Senior Citizens Hall, 3B Wairere Ave, Mt Albert (Next to our old haunt, the Mt Albert War Memorial Hall)
TIME?	7.30pm
WHAT?	Guest Speaker – Nicholas Rust on Jewel Orchids



Jewel orchids are probably best described as a grouping of orchids that have striking markings on their leaves, so the grouping is based around that, and not because they happen to belong to a particular genus.

They are primarily grown for their interesting and sometimes striking leaves, and not the flowers, which, although sometimes interesting, are generally not very big. For this reason, hybrids that have been done have been with the emphasis on creating new leaf markings, not on new flowers.



Thanks to our access to the AOS's extensive collection of webinars, we are able to bring you US specialist grower Nicholas Rust, who has an extensive knowledge of these orchids, has created a number of hybrids, and will give you all the information you need to grow the various types of orchids that make up this group.

Notes from the President

The club has been bustling with activity since the start of the new year. We kicked things off with the Orchid Fair, a significant event held at Western Springs in January. This was followed by a day trip to Thames to visit Allan Benson & Robert Gass, an enlightening online webinar presented by Eric Sauer on Phragmipedium, a crucial judges meeting, and our regular club meeting. Each of these activities plays a vital role in our club's mission, and we're grateful for your participation.

Orchid Fair.

Despite a few other events competing for attention, our Orchid Fair was a unique experience. While the number of visitors was slightly lower than anticipated, we still managed to showcase a diverse array of orchids. This was largely thanks to the contributions of our dedicated members who brought in their own flowers. Your efforts truly made the event special.

Day Trip to Thames

We had an enjoyable trip to Thames. Please see the write-up about the day elsewhere in the Newsletter.

Online Webinar

Eric Sauer from River Valley Orchids gave a high-quality presentation titled Phragmipedium Species and a Few of Their Hybrids. After a few technical issues, we managed to get things underway. The recordings are available should you wish to view the webinar, and the links expire on 26/03/2024

Part 1:

https://us02web.zoom.us/rec/share/MrgTq0B7z3KuF4xMKLG16aGH2gRJeVMiSBZtcOA-y-KU7ncyl6Ju8SsJtw6eu-s.8qs_1pikhqgqowdhu

Passcode: NZOS2024!

Part 2:

https://us02web.zoom.us/rec/share/KqNJss2hL4huxRilbHHyCitifBmAgkMJzmq6-sf4bl3q34rSWikPXETGqc1eaGSS.UAZhH4GQ6wgOab_8?startTime=1708741109000

Passcode: NZOS2024!

New Judging Registrar

following the retirement of Terry Austin as registrar as he pursues some extensive travel in the coming months, Leigh Leaity has been appointed the new Judging Registrar and will be supported by her husband, Mike. Both bring years of experience with orchid growing and judging.

They have rekindled the 'judging school'. Anyone who would like to learn how to judge orchids is welcome to join. Please read this page for an overview of the NZOS Judging System:

<https://www.nzorchidsociety.nz/judging/>

I would also like to thank Terry Austin for his effort to keep the NZOS Judging going during his time as Registrar.

For this coming month's meeting, we are presenting a video hosted by Nicholas Rust called The Story of Jewel Orchids. Jewel orchids were very popular a few years back, and have made a recent comeback, so if you know anyone passionate about growing them, please invite them to come along to the meeting.

With the days getting shorter and the temperatures starting to cool, you may need to consider increasing watering intervals and reducing the amount of fertiliser you apply.

All the best.

Greg

Brief report on the Garden Visit to Thames

On February 3rd, a group of 12 NZOS members had a great day out in Thames, visiting Allan Benson's place to see how he grows his orchids. Allan lives near the beach and runs two greenhouses – one with a plastic cover and the other with shade cloth.

Allan's setup was pretty impressive, focusing mainly on orchids but also including some hoyas, bromeliads, and a few of other plants. Everyone was quite taken with how Allan organised his greenhouses. He grows most of his orchids in a bark and pumice mix, while those requiring more moisture are grown in tree fern fibre mix.

Allan is big on using fertilisers regularly, and it shows in how vibrant his flowers look. The highlight for many was the morning tea Allan and his wife put on for us.

After lunch, we headed over to Roger Gass's place to see his collection. Alongside orchids, Roger has an interesting collection of houseplants, and he shared with us how he controls the climate in his greenhouse. He also has plants growing outside, including a stunning yellow *Sobralia*.

Despite the weather at times, the day was enjoyed by all, and we are grateful to Allan and Roger for their hospitality.

Greg



Report from the February meeting

This past month, I spoke about some of the more common ingredients we use to make our potting mixes.

For a basic mix, I recommended using 7 parts Kiwi Orchid Bark, 1 part crushed charcoal, and 1 part pumice. If you're looking to boost moisture retention, consider adding 1 part tree fern fibre or 1 part sphagnum moss. These additions can significantly enhance the potting mix's water-holding capacity.

It's crucial to sieve all the nuggety-type ingredients we use, especially those with particles 2 mm or less. This process is key to preventing excess water retention and ensuring optimal airflow through the potting mix.

Another beneficial practice is soaking the orchid bark. This step removes tannins, waxes, and contaminants thus enhancing the bark's potential to retain more moisture. Additionally, it provides a better surface for root adhesion.

I use hardwood barbecue charcoal, which I purchase from shops that sell South African products. I wrap the bag in canvas and ride over it with my ute to break down the charcoal into smaller pieces. Please check that whatever charcoal you use does **not** contain any flame accelerants.

Noel ended the session by sharing how his plants are growing using this 7/1/1 mix, a comparatively simple mix, after his early years in orchid growing where "experts" at the time suggested adding all

sorts of things such as rice husks, vermiculite, perlite, and sphagnum peat, all with dubious benefits in hindsight.

He mentioned that he felt the roots were growing nicely and drilling into the mix and brought some plants along as examples of how they are growing.

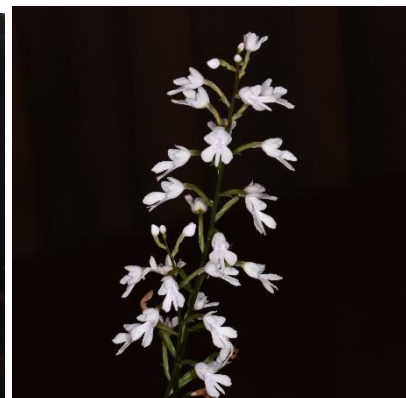
He said that he used 50% No. 2 Kiwi Orchid Bark and 50% No. 3 Kiwi Orchid Bark for fine-rooted orchids such as Oncidiums, Miltonias, Coelogynes etc. (No.2 on its own is ok for seedlings, but just too fine for bigger plants, and holds too much moisture with little air movement).

For orchids with thicker roots such as Cymbidiums, he uses No. 3 Kiwi Orchid Bark still in the 7/1/1 ratio.

To get the most from your potting mix, try matching the ingredients to the size of the bark you are using.

Greg

Plants on display - compiled by Noel Townsley





Rossy Fleischer

Psh. *cochleata* (was at one time Epi. *cochleata*)

3rd

Gga. *galeata*

Sngl. *woodii*

Gga. *armeniaca*

C. *tigrina*

2nd

Richard Legg

Paph. Bel Royal (*rothschildianum* 'Janet' x *kolopakingii*)

1st

Ctt. White Bridal x Rlc. Mariae

Daniel Maunsell

Onc. Aka Baby 'Raspberry Chocolate'

Noel Townsley

Zyt. *grandiflora*

Milt. *rignellii* v. *alba* x *spectabilis* v. *semi alba*

Gom. *longipes*

Alcra. Peggy Ruth Carpenter

Dame Kiri Te Kanawa turns 80



If you saw the news recently, you will have seen that renowned NZ opera singer Dame Kiri Te Kanawa turned 80 recently.

For those who weren't around at the time, Dame Kiri was part of the official opening of the **1990 World Orchid Conference** held in Auckland, which the NZOS was closely involved with, nearly 34 years ago now.



Dame Catherine Tizard (Governor General of NZ at the time) and Dame Kiri Te Kanawa viewing some of the many orchids on show at the World Orchid Conference

Amongst the orchids on display at that World Orchid Conference was *Cymbidium* Kiri Te Kanawa 'Pauline Rei', which received a BRONZE MEDAL at the conference. This was a hybrid done by Geyserland Orchids of Tamatea with Mighty Mouse. 4 plants from this cross have received awards, and a number of others varietals became popular with growers at the time.



Cym. Kiri Te Kanawa 'Pauline Rei'



Cym. Kiri Te Kanawa 'Princess' JC/AOS, AD/CSA

Some sad news regarding a former NZOS member

Older members may well recall Derek Lamb, who was NZOS treasurer for a number of years. Sadly, I have to report that Derek passed away recently. He was 90 years old. As well as our treasurer, Derek also served on the committee for the 1990 World Orchid Conference, a major undertaking by the NZOS.

Derek ran a business buying and selling collectable stamps and coins. He used to sell mint stamps to the NZOS that he did not particularly want, for us to use to post out the newsletters (in the days before email was available). So, it was quite common to receive your newsletter with a number of small value stamps attached to it to make up the postage value – no doubt to the annoyance of the NZ Post Office, who had to cancel all the stamps at the time they were posted.

News from the Interweb



In a new study published in *New Phytologist*, scientists at the Royal Botanic Gardens, Kew, along with partners in Latin America, Asia and Australia, present an updated family tree of orchids, tracing their origins to the northern hemisphere some 85 million years ago. Not only does the study shed new light on their complex and fascinating evolutionary history, but the study's authors hope their findings will help inform future orchid conservation planning.

The orchid family, *Orchidaceae*, is often lauded by scientists as one of the greatest evolutionary marvels within the plant world. Not only are these flowering plants found on every continent except the Antarctic and in virtually every habitat, including north of the Arctic Circle, but they are also incredibly diverse, with an estimated 29,500 species—nearly three times more than the recognized number of bird species globally.

It is generally accepted that orchids originated as far back as around 90 million years or more ago, but they were previously thought to have emerged on the supercontinent Gondwana, in what is present-day Australia. However, the new study indicates their common ancestor may have originated in the northern hemisphere, on the supercontinent Laurasia, before spreading out further into the world. RBG Kew's scientists came to this conclusion after assembling the most densely sampled orchid tree of life ever produced. This new family tree includes nearly 40 percent of all the accepted orchid genera and about seven percent of the known species diversity.

This tree was reconstructed by merging different types of DNA sequence data obtained from across the orchid family. Central to the task was new, 'high throughput' gene capture data produced at RBG Kew as part of the Plant and Fungal Tree of Life (PaFToL) project. The resolution of the tree was further enhanced by combining the results with already published DNA sequences of many orchid species. These DNA 'barcoding' sequences reflect decades of effort to establish family relationships between the various branches of the orchid evolutionary tree. Taken together with geographical distribution information, this wealth of data yielded a new orchid tree of life that also shows how orchid species diversity is distributed globally.

Dr. Natalia Przelomska, Lecturer at the University of Portsmouth and Research Associate at RBG Kew says, "Generating the 'gene capture' data in the laboratory from such a range of species wouldn't have been possible without the geographical and historical breadth of the collections accessible for research in RBG Kew's Herbarium."

"I had the privilege of extracting DNA from field samples ranging from those recently collected by multiple field botanists involved in this research, going back to botanists such as A.C. Maingay and E.L. Ekman, who were exploring the Old-World tropics and Neotropics in the 19th and 20th centuries." Orchids are one of the most species-rich flowering plant families (rivalled only by the daisy family, Asteraceae) but also one of the most threatened. Some of the biggest threats to orchids today include deforestation, illegal trade, and climate change, which can cause extinctions or reductions in their ranges and population sizes.

As reported in RBG Kew's State of the World's Plants and Fungi 2023 report, 45 percent of the world's known plants are estimated to be at risk of extinction, and this figure is even higher within the orchid family, with an estimated 56 percent of species under threat.

Having a better understanding of the individual branches of the orchid family tree and how they all connect will help scientists discover and describe new orchid biodiversity. In particular, they hope to achieve this in those parts of the globe where biodiversity loss is, unfortunately, accelerating.

According to the new report, one way to help conserve orchids is to understand better patterns of speciation—the evolutionary process by which populations develop into distinct species. In this case, it can reveal which ecosystems have above-average levels of orchid diversity as well as the highest evolutionary potential to host new orchid diversity.

Dr. Oscar Pérez, Research Leader—Integrated Monography at RBG Kew, says, "Our study is the first in revealing, at a global scale, which ecological regions have both the highest orchid evolutionary potential and species richness. That is, ecological regions that in very recent timescales (i.e., the last 2-3 million years) have served as the cradle of unprecedented speciation that resulted in the accumulation of remarkably high levels of orchid species diversity."

"We think that such areas could have the carrying capacity to harbor even more diversity in the immediate future, for as long as their native ecological regions are protected. As such, the information our study provides on speciation and species-rich patterns can inform policies about the prioritization of ecosystems for their conservation."

Unfortunately, orchids are going extinct at an alarming rate when compared to the time it took them to speciate—about 5 million years. This indicates they may not be able to bounce back from extinction in human timescales, even without a precise estimate of the number of orchid species that have gone extinct.

Prof. Alexandre Antonelli, Director of Science at RBG Kew and senior author of the study, says, "Orchids are not only extraordinary jewels of nature, they also hold untold mysteries about life on Earth: how species evolve, adapt and move. Safeguarding their future is critical for protecting the complex interactions they play in ecosystems and making sure those stories can one day be unveiled by scientists."

This new study is but the first step in the scientists' goal of drawing up a complete orchid tree of life encompassing all known genera. The authors also aim to establish the orchid family as the model lineage of choice for understanding how speciation and extinction happened across different ecosystems worldwide. Furthermore, this will help to understand how climate change, deforestation and illegal trade can affect the distribution of such species diversity in the near future.

2024/2025 FUTURE PROGRAMME AND UPCOMING EVENTS

20 March 2024 – NZOS Meeting Night

5-6 April 2024 – Te Puke OS Show

17 April 2024 – NZOS Meeting Night

11 May 2024 – NZOS **Autumn Show**– Western Springs Garden Community Hall

15 May 2024 – NZOS Meeting Night

19 June 2024 – NZOS Meeting Night

6 July 2024 – NZOS **Winter Show** – Western Springs Garden Community Hall

17 July 2024 – NZOS Meeting Night

21 August 2024 – NZOS Meeting Night

14 September 2024 – NZOS **Spring Show** - Western Springs Garden Community Hall

18 September 2024 – NZOS Meeting Night

16 October 2024 – NZOS Meeting Night

20 November 2024 – NZOS Meeting Night

19 February 2025 – NZOS Meeting Night

19 March 2025 – NZOS Meeting Night

16 April 2025 – NZOS Meeting Night

10 May 2025 – NZOS **Autumn Show** – Western Springs Garden Community Hall.

21 May 2025 – NZOS Meeting Night

18 June 2025 – NZOS Meeting Night

