

EPIFLORA

Volume 17 No. 3

Aug 2008





EPIFLORA

Volume 17 No. 3

Aug 2008

e Programme for 2008	4
e Library	4
dangered Species - Geckos and Skinks	5
dwinter Meeting	7
orophyllums - another of the plants we grow	8
ights on the Internet	2
rther reading	3
w is the time	5
d cuttings and seeds	6
ture Publication Dates	9

From the President

Dear fellow epiphyte growers

Our daffodils have been in flower now for a month, the magnolias are bursting new flowers each day and the cherry trees and plum are all ready to go – definite signs that spring is on its way (and will be here by the time you receive Epiflora). What a lovely time of year it is and for us epiphyte growers we await the flowering of epicacti, enjoy orchids in flower, and watch with anticipation as bromeliads colour up, tillandsias and vireyas flower and hoyas begin their growth period.

It's the time of year when one can become too enthusiastic to get going in the shadehouse, glasshouse or plastic house. Frosts might still occur therefore watering does need to be done with great caution in the part of New Zealand in which we live. This is one of the times of year when one can lose precious plants because of a desire to hurry them up into their growth time. I guess patience is best!

This is also the time of year when your committee starts thinking about the programme for 2009. So if you have any ideas for programmes do let the committee know as we always appreciate some help in this area. We have a committee meeting the lunchtime before our September meeting so let one of us know before then.

Soon will be the time to take cuttings of epiphytes so don't forget that Carol Rogerson holds many of our lists of plants and will happily act as liaison for exchange of cuttings. If you haven't already sent Carol your list maybe this is a good time to do so in order that those who wish can expand their collections.

Happy growing and I hope that you have an excellent flowering season.

Kind regards

Jane Griffith

August 2008

The Programme for 2008

Meetings are at Johnsonville Union Church (Dr. Taylor Terrace) and start at 2.00 pm. Sales, library books etc. are available at 1.30 pm.

Those on duty are responsible for preparing the room, assisting with tea and tidying the room at the end of the meeting and bringing a plant or other item for the raffle. If for any reason you are unable to do your allocated duty please arrange for someone else to do it.

September 13th Orchids - a talk by a member of the

Wellington Orchid Society

On Duty: Robyn Gibson, Vicky Gibson,

Penny Luckens

October 11th Plant Clinic

On Duty: Brian Read, Nola Roser, Marion

Austin

November 8th Epicactus topic

On Duty: Alice & Rex Hannam, Alison

Beeston.

December 13th AGM and Christmas Meeting

On Duty: Virginia & Jim Hayler, Jennie

Heath.

The Library.

Bev showed a new book that we have in our library. It is **Vireyas for New Zealand Gardeners** by John Kenyon and Jacqueline Walker.

Starting with an explanation of what a vireya rhododendron is and describing the plants in the wild the authors move on to what is the crux of the matter for most of us - the cultivation of these desirable plants and their use in garden design.

Don't forget if you would like to borrow books - just contact Bev and she will make sure the book is brought to the next meeting. If you live "out of Wellington" e-mail your request to Bev (threecatsnz@yahoo.co.nz) and she will tell you the process and costs.

Endangered Species - Geckos and Skinks.

At our June meeting we were very lucky to have **Dennis Keall** as our guest speaker. Dennis has this year been awarded the Queen's Service medal for the work he has done breeding endangered skinks and geckos and then repopulating colonies mostly in predator-free offshore islands. Dennis showed us a selection of stunning slides, and had brought along a number of his charges for us to see.

Dennis recalled that when he first spotted two apparently lifeless skinks, stiff after a particularly vicious frost, his heart sank. They were the first two precious scree skinks that he had bred and, like many of New Zealand's 90-odd species of native reptiles comprising tuatara, skinks and geckos, they were highly endangered. Reluctantly he picked them up and headed for the alcohol jar in the garage. But then – "I felt a tiny movement. When I first picked them out of the cage I could hold them like a pencil by their tails, but the warmth of my hands was just enough to revive them."

That was 17 years ago and just the beginning of a remarkable recovery. He hand-raised them with eye-droplets. It took over three years before they ate by themselves and another four years before they actually chased their food. Dennis says that he might not have been quite as dedicated if they hadn't been so rare, but he was more than satisfied with an unexpected bonus from what he thought were two males – a baby skink or neonate.

An amateur herpetologist, Dennis has been keeping and breeding lizards for over 30 years, having more than 400 in several beautifully made cages with carefully constructed habitats in the backyard of his Wainuiomata home. It's perhaps an unusual occupation for a successful accountant and financial planner, but Dennis says that there is a natural synergy between his work and his hobby. Planning for financial survival and independence is the same as planning to ensure a species survives: it's long-term, you need to do your homework, invest in quality products, work with good people and be prepared to innovate. At this time, it's all quiet in the dozen or so gecko/skink 'hotels' that dot the Keall's back yard

as the creatures largely stopped eating a month ago and "battened down for winter". That gives Dennis respite from having to catch fresh moths for them to eat.

Unusually, most New Zealand geckos and skinks are viviparous, having few live young after a long period of maturation. This characteristic makes them particularly vulnerable to extinction because the slow rate of reproduction is no match for the relentless rate of predation. The problem is that we've got cold-blooded reptiles, which don't operate in cold weather, being mismatched against warm-blooded predators, which are active all year round. Our lizards are designed to avoid predation by camouflage and staying still – that doesn't work for a hedgehog or stoat because they'll scent them. If you introduced a pride of lions into the Wairarapa, how many sheep would be left after 10 years? Extinction in the wild is inevitable – it's only a matter of time and numbers. In the wild, winter is a very dangerous time for them. Before man and mammals like cats, dogs, pigs, rats, and mustelids, the lizards' primary defences – camouflage and not moving – were reasonably effective. Nocturnal species are not very quick – they never had to be. They had the run of the leaf litter because their predators were all asleep. Now, as they tuck up somewhere for winter, if they're sniffed out by a mammal, they're history.

Time is running out for two of the largest, most colourful species of skink – the Grand and the Otago – which the Department of Conservation (DOC) estimates could be extinct by 2010. These handsome animals, with their striking gold and black markings, powerful limbs and long, tapering claws that are ideal for clinging to the schist-rock outcrops in tussock grasslands of their native Central Otago, have now been reduced to just two small populations: around Lindis Pass and at Macrae's Flat.

All lizards are struggling in the wild, but those in Otago are in the worst position. The most urgent need is to identify the key "agents of decline" and DOC is continuing experimental management programmes to see whether total predator eradication inside an enclosure fence or just intensive predator control will contribute to recovery in the wild. Predators are undoubtedly the biggest threat, but it is not known if there are other issues involved such as disease or the quality of their habitat, which is greatly altered.

The priority given to gathering empirical evidence partly underlines the differences in approach between professional and amateur conservationists that have led to some unhappy outcomes for the lizards in the past. Scientists concerned about DNA contamination of genetic strains, for example, have found it frustrating that some amateur breeders are more

interested in breeding success than preserving species purity. Equally, amateurs can take issue with the scientists identifying lizards by a code of clipped toes – what one sees as mutilation, the other sees as a legitimate technique. Lizards are now identified photographically and DOC maintains a comprehensive database of herpetofauna genealogy and population records going back to the 19th century.

For the Grand and Otago skinks, the best long-term hope lies in predator-proof enclosures such as that at Macrae's Flat, where scientists can identify the factors contributing to the population decline in order to better manage their recovery. Unhappily, because of the long list of predators – cats, ferrets, stoats, weasels, hedgehogs, mice – in future it may only be within such enclosures that we see such rare lizards as well as the more common geckos and skinks.

Dennis says he'll be involved with skinks and geckos as long as he can, but his challenge is to develop a "succession plan", to hand over his collection and knowledge to someone else. While his son Lance helps out whenever Dennis goes on holiday, he needs someone keen enough to eventually take over fully.

What's a New Zealand garden without lizards? Thank you Dennis for a fascinating afternoon.

Midwinter Meeting.

As usual - it was party time - Brian Read reports.

There were lots of apologies so there was only a select group of twelve at our midwinter meeting. The room warmed up though when we found out how to get the heater going!

There was a great selection of food and we all tucked in (and there was no need for a large tea that night). With tummies full we settled down in three teams to answer "Brian's Quiz Questions" (set with help from the Griffiths).

The quiz caused much discussion and great hilarity – particularly the question which started "I am a much admired hoya because of the unusual colour of my flowers". I am told the quizmaster turned beetroot red, and I know several were crying with laughter. All three

teams did well and all got several chocolate fish.

Then Phyllis presented the society with a bromeliad brass bell which was gratefully received. However a general vote felt that a cow-bell would have been more effective. Phyllis also brought the three items that were on the interest table.

There were five very impressive entries in the "garden hat" competition. Dianne was voted the winner. We finished with afternoon tea – not that we needed it after the sumptuous lunch. Those who were unable to come missed a very lovely and fun afternoon

Aporophyllums - another of the plants we grow ..

A number of us have one or more of these incredibly prickly things. Herman has many; they revel in the conditions in his cacti house and flower beautifully. Here are a few thoughts on them compiled from a number of sources - including a very nicely written piece by Eckhard Meier on the origin and history of the species Aporophyllum.

The word 'Aporocactus' is derived from a Greek word: 'aporia' which means impenetrable. This will ring bells for anyone who has tried to care for the plants. The history of Aporophyllum (perhaps we should say: X Aporophyllum because it's only made up of hybrids) is much more recent than that of Epicacti, Christmas cacti (*Schlumbergera*, or *Zygocactus*) or Easter cacti (*Rhipsalidopsis*, or *Hatiora*).

Aporophyllum were marketed for the first time in the United States, near Los Angeles in 1955, by the famous cacti specialist and producer: Harry Johnson. They were hybrids between Aporocacti and Epicacti. However some of the modern plants have a much more complicated history.

Little did Harry Johnson know what turmoil his creation, "Aporophyllum", would give rise to. According to experts on plant nomenclature the names he chose were not legitimate for a number of reasons. However he published them in his nursery catalogue and sold the plants – so the problem still exists and the experts complained.

From here on, we will use the term Aporophyllum for hybrid cacti which have cylindrical

stems that look like those of Aporocacti, and whose blooms also look like Aporocacti's blooms, but often are larger. With this wider definition, we can include Johnson's first hybrids, but we can also include intrageneric or multigeneric hybrids.

In the family tree of an Aporophyllum, we always find one or several Aporocactus, but it's possible to find also one or more following botanic genera: *Disocactus, Epiphyllum, Heliocereus, Nopalxochia, Selenicereus*, or *Weberocereus*. And of course, we also have hybrids between all these plants. The tree branches become extremely complicated.

The complete family tree of Aporophyllum 'Discovery' was set out by the famous botanist, horticulturist and British hybridiser Clive Innes. This tree covered five generations. We also find in the tree five different botanical genera, none of them are Epicacti.

Other Aporophyllum have simpler family trees; for instance:

Aporophyllum which are crossings between *Aporocactus* and *Heliocereus* are also called *Aporoheliocereus*.

Aporophyllum which are crossings between Aporocactus and Selenicereus are also called : Aporoselenicereus.

Aporophyllum which are crossings between *Aporocactus* and *Disocactus* are also called *Aporodisocactus* or *Disapora*.

Aporophyllum blooms have many advantages when compared to those of their Aporocactus ancestors, which also have very beautiful blooms. If we leave aside the small blooming hybrids, (which have the charm of a relative rarity), Aporophyllum have flowers of the size of Epicacti with medium or large flowers

The colour range of the flowers is wider, and often several shades can be seen on the same flower. The four species of Aporocactus have dark to bright pink or red flowers. Among Aporophyllum, we find the following colours: white (still very rare), pink, orangey colour, vermilion, magenta, and all the pastel shades you can imagine by mixing all these colours. White alone is rare. There were three cultivars known in 1994: 'Bintang Sinar', 'Iceberg', and 'Snowbird', which, alas, are in few collections. The explanation of this fact is that the red pigmentation of Aporocactus is a dominating characteristic, and thus, it is strongly dominant

when hybridising.

The colour which is still missing is pure yellow, which certainly could be obtained, especially if one starts from an Aporophyllum which contains the yellow pigment already, for example the cultivar: "Discovery". But all this research requires growing space, much time, much patience and tenacity, and last but not least, much money. Most hybridisers will not expend this amount of effort to produce a plant which is currently less valuable on the market than an Epicactus.

The famous hybridiser Curt Knebel writes, in his book "*Phyllocactus*", that a minimum of 6 to 8 years is necessary between pollination of two Epicacti and the first blooming of the hybrids resulting from the crossing. Thus this is the time necessary for one generation only and the creation of Aporophyllum "Discovery" required five!

If we compare them with Epicacti, Aporophyllum have many advantages: the plants are smaller and they are less demanding to grow

Eckhard grows his Aporophyllum in the same compost as all his epiphytic cacti, that is an acid and well drained mixture of leaf-mould, siliceous sand and perlite or vermiculite. But he notes that Aporophyllum also tolerate more mineral and less acid mixtures.

Aporophyllum like a sunny location and they are not burned by direct sun as Herman will attest. They cope very well with cold temperatures. : Eckhard thinks that the plants will tolerate a 5°C minimal temperature in winter though in Herman's greenhouse they may get lower temperatures than this.

Photographs on the following pages:

- Otago Skink Close up (image by DOC)
- Jewelled green Gecko (image by DOC)
- The Robust Skink
- Masdevalia "Susan"
- Aporophyllum "Schelia"









Volume 17, number 3

Aug 2008

page 11

Aporophyllum can easily withstand the soil being dry during the winter period, from May to September, when the first flower buds appear. It is then necessary to start to water gently, and provide fertiliser to assist flowering (a fertiliser with little Nitrogen). Aporophyllum are not very sensitive to diseases and parasites; but it is necessary to be careful about red spider mites. Cuttings are the ideal method of propagating Aporophyllum.

Insights on the Internet...

At our August meeting Virginia Hayler talked about how she got hooked on the internet and some of the ways it can be useful to people like ourselves who grow plants. Virginia also looks after our society's web-site..

The tale for Virginia started when she was still at school - way before the days of the internet. She had started a stamp collection and was encouraged to write to all the foreign consulates to see if they would send her stamps from their overseas mail to add to her collection. One thing led to another and letters led to pen friends and pen friends led to more letters. All this caused Virginia's interest in corresponding with people with different interests and from different countries to grow.

The next piece in the jigsaw puzzle fell into place when she became the editor for a magazine produced by a tropical fish owners and breeders club. She got a computer which she used to write articles. Then the internet started - and she got connected - and the rest, as they say, is history.

Sometime after this she had problems with her back and the pain at times made sleeping difficult so she used to write e-mails to correspondents in the middle of the night. E-mail may not bring new and exotic stamps to add to a collection - but it does produce rapid replies and Virginia found this new way of corresponding much to her liking.

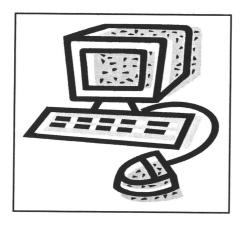
At first access to the internet was "dial-up" (using the telephone line) - and then came fast broadband connection - which left the phone line free for others in the house to use. Now with a digital camera she can exchange pictures as well as words - and has built several websites to display her pictures. Virginia found courses on the internet on graphic design and

used these to learn how to build and maintain websites.

The internet provides a wonderful resource where one can search for information on any topic. There are a large number of sites providing information on epis, hoyas and related topics. Virginia provided lists of some of the sites that she has found.

As she finished Virginia offered hints of other things that one could do - buy and sell things using "Trade-Me", catch up and keep up with friends using sites like "Friends Reunited", and do genealogical research with sites like "Genes Reunited".

Thank you Virginia for your knowledge and for the enthusiasm with which you shared it with us.



Further reading

Our Society receives journals from a number of other societies with similar interests. These journals are all available from our library. In the last few months a number of interesting items have been published. Here are some snippets that you might find interesting. (Of course you really should go and read the articles for yourself!)

It is always nice to see the ways other people grow their plants. In the July 2008 issue of "SDES Epi News" - published by the San Diego Epiphyllum Society they have an article

on their "Annual Caravan" - when they visit members collections. They also refer to two websites http://homepage.mac.com/haroldhanson/PhotoAlbum53.html and http://www.kdbarto.org/SDES.html Both of these websites are well worth a look - just to see how others grow their plants. In the September edition is a letter from a member entitled "Pots - Tip No More" which provides a few suggestions on how one grower has solved the problem of overbalancing pots!

In the July issue of the Epi-Gram (published by the South Bay Epiphyllum Society) Dick Kohlschreiber writes about the problems with names. He recounts his experience of being interviewed by a lay reporter for an article - and on some of the naming misconceptions that abound. Dick has had the view for many years that what we used to call epiphyllums are hybrids that have little or none of that genus in their heritage. He has suggested names like epicactus or epi hybrid more accurately reflect what we are growing. However it seems some of



the long-time growers are not yet ready to give up the name epiphyllum!

Dick follows this up in the August edition with the first of two articles entitled **Epiphyllums**-the Real Thing in which he talks one by one about the species epipyllums.

In the April issue of **Epi-Gram** (Epiphytic Cacti and Hoya Society of Australia) there are two articles worthy of some study. The first by Rex Hardy is entitled "Understanding fertilisers". (*The more I listen to people the more convinced I am that not many people do* **Ed.**). The second article is entitled "Succeeding with Hoyas"; well there is something many of us could aspire to.

In volume 63, number 4 of **The Bulletin** (published by the Epiphyllum Society of America) they have published a number of photographs taken at the recent EPICON. It is interesting to see pictures of people like Rudi Dorsch and Dick Kohlschreiber and see what these "names" look like! They also have two pages of pictures of award winning blooms from their 49th annual show.

Happy reading.!

Now is the time

Spring has come - we need to remember this - and I am sure your rice crop is growing nicely. We can still expect some nights will be cold so it is a good thing to play it very safe - water in the first part of the morning before the sun gets too hot and early enough that the plants will absorb the water even if it does not appear!. As always pay great attention to what the weather is doing at your place. Here are some suggestions for Wellington growers - if you live in the north or the south you may need to adjust things a little.

Epicacti - You really should have done the pruning and repotting by now - but if you have not - do not despair, it is not too late; just try not to cut off too many buds. Start watering (in the mornings) and fertilise lightly..

Hoyas - as the days warm up water a little - particularly if your plants are protected from the night time temperatures. Soon you may start trying to unravel last years growth and take some cuttings in the process (if you do not have a heating pad to put the pots of cuttings on - wait a little before doing this). Start checking for mealy bugs and other pests and deal with any you find..

Schlumbergeras - most flowers should be over so now is a good time to repot. Put slow release fertiliser into the mix. Water sparingly when the plants seem dry.

Rhipsalis - these will be coming into flower soon (if they are not flowering already). Water regularly, but very sparingly. A little fertiliser is also a good idea.

Aporophyllums - Buds should just be appearing. Start watering a little and provide a little fertiliser. Increase the amount of water you give as the days and nights get warmer.

Ceropegias - Many of these plants will be looking quite dead. Resist the urge to throw them out immediately. There is not a lot to do but you should probably begin watering your plants soon (now if you have a warm location). When it gets warmer you can start to take cuttings. Continue to check for pests and deal with any you find immediately.

Orchids- Phyllis Purdie wrote:

Cymbidiums: Which have been outside will be coming into spike about now (we have harvested three already). Watch for snail attack and bring them indoors when the flowers are nearly ready to open.

Most other orchids: can be watered a little bit more, increasing the amount as the weather gets warmer. Watch out for surprise frosts. Keep *Phalaenopsis* and *Masdevalias* watered all the time.

Bromeliads - still nothing to do with plants growing outside (except to watch out for frosts) If you suspect a frost may occur - throw frost cloth over the plants.

If you have plants indoors once temperatures are getting over 20°C you can start to water lightly. However be sure that there is sufficient air movement to enable the plants to dry out before nightfall. A number of *Tillandsias* will be initiating flower buds so full-strength phostrogen a couple of times a month will help them along.

Odd cuttings and seeds

Epiphytic Experiments

Did anyone see this note in "Kereru" the newletter put out by the Karori Sanctuary Trust? It said:

"For the last two years we have collaborated with Wellington City Council and Landcare Research in carrying out experimental planting of northern rata seedlings. Initially just hinau were used as host trees, but last year we also planted seedlings in pine trees. This winter we will be adding the native rewarewa to the experiment. Plants in exposed sites were affected by the drought last year, so several new sites will also be used this year. If rata can successfully be grown epiphytically on non-native conifers, it will be a massive breakthrough in the replacement of exotic species with natives. But rata that grow epiphytically also grow much taller than those that begin life on the ground, so these experiments are hastening the restoration of giant emergent rata in the Sanctuary".

For further information see: www.sanctuary.org.nz

An Anniversary

On 25th November 2008, the Epiphyllum and Hoya Society of Australia will have been in existence for twenty years (its actual name is "*The Epiphytic Cactaceae-Asclepiadaceae Society of Australia*" so wisely they have a shorter name that does not require the consumption of beer to get ones tongue around it!) . The society first came into being through the efforts of Des Ellery, who became the Foundation President of the Society. We extend our congratulations to them and hope they go from strength to strength in the coming years.

Gardens to Visit

Those of you that enjoy visiting gardens as you trip around the country might be interested in this website: www.gardenstovisit.co.nz They have 62 gardens listed now - and doubtless aim to list more as time goes on.

Another perspective on fertilising...

This is a somewhat irreverent view from one of the big American commercial growers... published on one of the discussion forums...

The reason that you switch from 10-10-10 to 0-10-10 in the 3 winter months is to promote blooms. When you stop providing nitrogen to the plant, it goes into survival mode. This is true with most plants that flower. And to survive they flower in order to make seed pods and perpetuate the species. And since our plants flower in spring, we want to stress them right before that time in order to get as many blooms as possible. This is why it is generally recommended that you use a balanced fertiliser all year except during the 3 winter months when you use 0-10-10. Since we have members from both hemispheres, I have refrained from stating which months to use the 0-10-10. I think people can figure it out based on where they live.

Remember, epis bloom because they are stressed, not because they are happy.

One more item on the internet

Attila Kapitany has added some more interesting photos of Australian succulent plants on his website. Its certainly worth a browse.

 $\underline{http://australiansucculents.com/index.php?page=cult-trial}$

Back numbers of "Epiflora"

The first edition of Epiflora appeared in March 1992. We have limited stocks of back numbers for most issues from Volume 2 (March 1993) onwards. Ask the editor for details.

Errata

In the last issue of *Epiflora* we published a photograph of *Zygocactus* "Erin". _It appears the photo was wrongly identified, we are now not sure what the correct label should be and have been unable to source a correct photo.

Future Publication Dates.

EPIFLORA is published quarterly by the Wellington Hoya and Epiphytic Plant Society.

Comments and contributions are most welcome. The society aims to encourage discussion and debate; opinions expressed are those of the authors and do not necessarily represent those of the society. It is the policy of the society to publish corrections of fact but not to comment on matters of opinion expressed in other publications All material in Epiflora may be reprinted by non-profit organisations provided that proper credit is given to WHEPS, Epiflora and the author.

Please address correspondence to:

249 Te Moana Road, WAIKANAE.

Or:

griffith@globe.co.nz

Closing dates for contributions:

Summer 2008 Edition - 8th November 2008 Autumn 2009 Edition - 8th February 2009

Subscriptions:

Subscriptions are due on 1st of January and are:

Members -

\$12.00

(overseas members)

\$NZ24.00 or \$US12.00)

Additional Associate Members -

\$4.00

(At same address as a member)

Society web address:

Find us on the web at: www.epihoya.freewebsitehosting.com/



