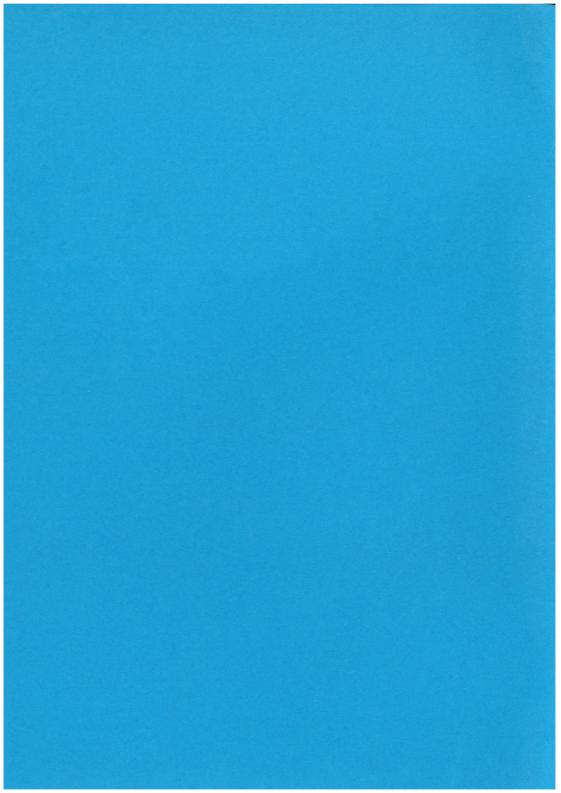


EPIFLORA

Volume 17 No. 4

Nov 2008





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From the President

Dear fellow epiphyte growers

At this busy time of year for epiphytes I do hope that you can spare a few minutes to read this edition of Epiflora. What a rewarding time it is as, over the last month, epicacti have been coming into flower and hoyas are starting their summer spectacular. There are always some orchids blooming and of course vireyas work just as hard to keep us in flowers most of the year.

This year has not been a particularly good flowering season for our epicacti except for our own hybrids which have put on a magnificent display. The paucity of flowers is nothing to do with the epicacti themselves but entirely due to our neglect during last autumn and winter. We have promised them we will do better this coming year!

We learned recently that Joy West, the only specialist commercial hoya grower in New Zealand, has given up growing hoyas therefore it is important that all of us who do grow hoyas take cuttings and propagate on so that the variety of hoyas can continue to spread around enthusiasts. For our part we have been taking cuttings for the past six weeks and will continue for the next month or so. Of course these cuttings will not be ready for sale until at least next summer.

At our Annual General Meeting in December there will be a number of changes of positions. Thank you for those who have volunteered to serve the Society next year and for those who might still be contemplating doing so it is not too late to volunteer. It was so encouraging to have such positive response from my letter both from those who felt they were prepared to give a year or two of their time and from those unable to do so but wished the Society to continue.

Roy and I wish you pleasant holidays and a relaxing time over the Christmas/New Year period and look forward to seeing many of you in Waikanae for our January barbeque.

Happy growing and kind regards

Jane Griffith

November 2008

The Programme for 2008/9

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.

December 13th AGM and Christmas Meeting

On Duty: Virginia & Jim Hayler, Jennie

Heath.

January 14th Visits to collections and Barbeque

February 8th Programme on Hoyas

On Duty: Jane & Roy Griffith, Isobel

Barbery.

March 8th Epiphyllum Species

On Duty: Kaye & Mery Keighley, Ruth

Finlay.

April 12th Bromeliads

May 10th Workshop on Plant Care

June 14th Schlumbergeras

July 12th Midwinter function

August 9th Orchids

September 13th Talk on Ferns

October 11th Rhipsalis

November 8th Visits to collections and Nga Manu

December 13th

AGM and Christmas meeting

Next Meeting

I nis is	our Christmas meeting - so do come and bring:
	A plate for afternoon tea
	A small wrapped gift (costing \$5 or less)
	Your special plant to "show and talk about" (if it is huge - bring a photograph
	instead)

The Library.

Bev writes: "I have had a few enquiries for books from the library. It would be good to hear from more of you, even if it is to ask me if I can look up to see if a special subject is in a certain book. I have some new newsletters since the last list that we sent out, and hope to have a new list of the library books for the new year. Please remember the library"

Bev's phone number is (04) 2324688 and her e-mail address is: threecatsnz@yahoo.co.nz

How we got hooked

In this article **Carol Rogerson** tells us how she first became interested in epis - and how her collection has developed and diversified..

My grandmother initially got me interested in my first epiphytic plant when I was in my late teens with *Selenicereus grandiflorus*. I dutifully carted it around with me from place to place.

I have always really loved the epiphyllum flowers, I remember them growing outside in abundance at my aunts' houses up north when I was younger. Usually relegated to outside under the citrus trees when in flower and put away out of sight when not.

As my children got older I decided to invest more money and time into building up my collection. Initially quite a large proportion of the stock was purchased from Yvonne and Andrew Brunton at Craigmyle Epiphyllums. Always top quality plant material and I found them both very willing and helpful with advice.

One thing led to another and I now have a mail order nursery with website, have really tried to keep it low key as I'm an avid collector more so than a seller but it is nice to be able to offer a wide variety of epis to other plantaholics and it certainly saves many cuttings from going in the garden shredder.

It's marvellous to see a resurgence of interest in these plants and other epiphytic cacti. Many people who have grown epiphyllums in years gone by are now purchasing many of the newer hybrids, updating their collections and reawakening their fascination with these plants.

I am an avid collector of the early epiphyllum varieties from the 1950's and before. I've managed to get quite an assortment of these together through exchanges with other growers around N.Z. I'm always keen to trade with anyone for unusual and rare varieties.

I can't say I have a favourite epi flower - they're all drop dead gorgeous but I am very drawn to the yellows, I can't help myself. I'm like a child in a lolly shop when the plants are coming into bloom, up at dawn to see what has opened. Some of my newer plants are flowering for the first time this spring,. At the moment I seem to have the camera permanently hanging around my neck. I despaired of ever being able to take a decent photograph of these beautiful flowers but gradually over time and with loads of practice have managed the basics. Invariably being spring, a special flower will open and a gale will get up, tricky and a great deal of patience is required. More so to get a decent shot for the website. I think the flower I am most looking forward to opening this year is Clown and I'm sure it will live up to all expectations. Clown's offspring along with the many Ruby Snowflake and Tassel crosses are rampant growers here.

I have a huge love of all plants, daylilies feature strongly in our garden. I'm currently hybridising with these and have some lovely seedlings which I'm hoping to be able to offer in the next few years. Tall bearded iris have been a very successful experiment and these will also be offered in the future.

What orchids should we grow in Wellington.

At our September meeting our guest speaker was **Roy Walker** a foundation member of "Capital Orchids", avid orchid grower and now a member of the national judging panel.

"Well what orchid tribes work for Wellington? The first thing to be said is that what works for me won't necessarily work for you. The next thing to be said is that it is a most frustrating plant family - but once the bug has bitten you, you are infected for life. The third important point is that the biggest pest your plants have to put up with is you and the best orchid fertiliser is time!

"Wellington is a cool-growing area and so is good for species like cymbidiums, odontoglossums and masdevallias. When growing these plants worry about a very warm summer because they grow at about 5000 feet in the Andes. Now most growers work "on the edge", if a plant is accustomed to a minimum temperature of $15\,^{\circ}\text{C}$ - you try to grow it when the minimum temperature may drop to $10\,^{\circ}\text{C}$. Now if you make a small miscalculation - you are finished! Temperature can be critical for some species phalaenopsis will set a flower spike even if it is cool but big commercial growers aim for a minimum night temperature of $22\,^{\circ}\text{C}$, you can try for this and will get a large electricity bill.

Often plants are used to 12 hour days and 12 hour nights so our winter short days do not encourage growth. Of course you can grow anything - it just takes money.

Orchids give good value for money per orchid, just think how long the flowers last; but it is very difficult to have a mixed orchid collection as they all have different needs. I have horticultural training so I always ask "does that plant give a dividend?". If it does not work pass it on to someone else and concentrate on growing the ones that work for you.

If you refer to overseas books remember that their light levels are not what we are used to so, for us, some shade may be necessary. Cymbidiums need about 30% shade but when they finish flowering they need good light.

I suggest:		
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- start with cymbidiums
- then try kingianum (Australian dendrobiums)
- then masdevallias
- next you could try Paphiopedillum insignie (slipper orchids)
- maybe sarcochilus, also disa orchids which will grow outside
- and don't forget pleonies.

What pests (apart from you!) do you need to worry about? Scale is probably the worst, it is hard to get rid of as it is resistant to the common sprays, oil is one of the only remedies for it. A weta can be a real problem as can woodlice (they break down the bark). Neem oil can be useful but nothing beats having conditions the plants like - and don't forget most orchids need high humidity"

Development and History of Epicacti.

How often do you think about the history of the plants we grow? Most have seen one or more of the original species plants - and know that is where things started from. **Fran Hunter** traces some of the steps in between..

There has been confusion about naming the species (genera) that make the plants many call Epiphyllum. This name [epiphyllum], through discussion and debate, is still used, but many people are becoming comfortable calling them epicacti because of the species used to make the hybrids we grow. Some hybrids have no epiphyllum species in their heritage, but they were/are still called 'epiphyllums'. This led people to ask the serious question of "What IS the correct name for a plant with no epiphyllum species in its background, and what should we call a plant that is part epiphyllum and part some other species?" Nopalxochia, Heliocereus, Disocactus and Epiphyllum were the genus names of the species making up the coined term, "epicacti". These first three names above are now all botanically called Disocactus. Very simply put, the hybrids we grow that have colour such as red, pink, orange, purple etc., have Disocactus in their parentage. Although plants from several genera of cacti have been used by people to develop epicacti it is generally accepted that the parent plants

have come from two genera, Epiphyllum and Disocactus. Other terms used to refer to these plants:- Phyllocacti, Orchid Cacti, Peacock Cacti. ... Cactus is singular, Cacti = plural.

Some of today's epicacti hybrids are so vastly different to the so called epiphyllum hybrid of two hundred years ago. There are records of who hybridisers were and what they did. Plants were brought from the Americas and grown in Europe and England. Many plants were killed when they were grown in overheated glass houses (Stove houses), but as more knowledge was gained, better growing conditions were used. Most of us are more interested in how to grow them than the history. A good starting point is Scott E. Haselton's book "Epiphyllum Handbook" published in 1946 by Abbey Garden Press, Pasadena. This was reproduced with permission in the States, so soft back copies maybe available but generally rare. It contains some really good information. Some of the facts have been built on as people discover more things about epicacti plants.

1651 - discovery of the first epiphytic cacti and taken back to England and Europe (Germany) *Nopalxochia phyllanthoides*. At some point in its history this plant was called "Deutsche Kaiserin" and also when traded or given to others was called "German Empress". Its habit is pendulous growth and has pink slow opening flowers. One condition it seems to suffer from is spotting and die back with some growers. Species are often harder to grow than hybrids.

1811 is the first sketchy record of any hybridising of epicacti. This took place in England, but unfortunately little seems to be known of this effort.

1820's - Hybridising using *Heliocereus speciosus* and *Nopalxochia phyllanthoides*. **1830** Jenkins and Smith made the first recorded hybrid between these species. Heliochia – a composite of the genera names. People were pretty impressed with the results. Then in **1840** another species was added. *Epiphyllum crenatum*. So came the hybrid names, Epixochia and Heliophyllum. And so the genetic shuffling started. These species came from Central Mexico high elevations on the mountain ranges. *E.crenatum* is from Honduras and unlike the other white and night flowering epiphyllums, has flowers that usually last three days. It has small cotyledons like other Disocactus, unlike most other epiphyllum species. These cacti, because of their flowers, were very popular in Belgium, France and other parts of Europe. Most of the hybrids up to **1850** were still the results of extensive crosses between the Nopalxochia species and Heliocereus.

1845 is the first recorded use of an epiphyllum species used in hybridising. Two plant breeders, in France, Charles Simon and Lorenzo Courant, used what they considered the 30 best hybrids known at the time and crossed them with *E. crenatum*. The results of this cross were amazing and hundreds of new hybrids with various colours and shadings resulted. These men exhibited their flowers at shows and won several major prizes.

1890 hybridising of epicacti had spread through Europe to Germany. Johannes Nicolai produced around 300 new hybrids. Later, **1901**, in Germany, Curt Knebel recorded his crosses and produced a book "PHYLLOCACTUS" in which he describes and records around 429 hybrids. Some are still grown today. His aim in growing these cacti were to produce better flower structure, greater strength and endurance and result in the origination of double flowers and smaller compact free blooming plants. He used other available species including *Disocactus nelsonii*.

Epicacti plants were collected (unnamed) from Brittany and taken to the USA, then around 1930 hybridising and collecting of epicacti started in the United States of America. Since then extensive hybridising has been made by many people.

As a result of this work, the Epiphyllum Society of America started the useful reference book, "The Directory of Species and Hybrids". It shows quite a long list of registered plant names and hybridisers. Largely worked on by Dr. Richard W. Kohlschreiber.

Some of the early USA hybridiser's names that stand out are Theresa Monmonier, Wressey Cocke, and George French all who had a major impact on the development of the modern epicacti.

1939 *Disocactus macranthus* was discovered in the rain forest mountains around Mexico. The discoverer, Tom MacDougall, a botanist, named this plant. Its discovery adds to the gene pool for hybridisers with a wider flowering season, day perfumed flowers and abundant flowers on the one plant.

One of the hybridisers of the mid **1940**'s, Theresa Monmonier owned Ventura Epiphyllum Gardens, an Epiphyllum nursery in California. She bred small flowering epicacti by using *Nopalxochia phyllanthoides* and Disocactus species and hybrids - such as 'Bambi', 'Gay Senorita', 'Sea Breeze' to name a few.

Photographs on the following pages are by Carol Rogerson
Carol's shade house and Garey
Easter Bunny and Jolly Roger









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In the late 1970's those hybridising in America began using *Disocactus macranthus* in their hybridising. Wressey Cocke created several lovely very small flowering epicacti, often referred to as jewel cacti. Examples are "Sand Pebbles", "Tiny Flame", "Lollipop" (all from the cross of "Vive Rouge" x *D. macranthus*). Also another cross he did was between "Ruby Snowflake" and "Tassel" resulting in very popular hybrids like 'American Sweetheart', 'Petal Pusher', 'Hot 'N Spicy', 'Angel Fluff', 'Spring Fling', 'Bob Grimshaw' and many, many more.

Another major American hybridiser of the 70's is George French, Best known for his development of the pure large yellow epicacti, one which bears his name 'George French'. Other hybrids from him, you may know, are "Jennifer Ann", "Radiant Fire", "Chuckles", "Masada", "Satin Ruffles" to name a few.

In New Zealand, hybridisers who have registered their crosses are:-

- 1) Roy and Jane Griffith (private growers) twelve crosses registered in 2005 include "Waikanae Beauty", "Waikanae Radiance" and "Waikanae Sunshine".
- 2) Yvonne and Andrew Brunton (Craigmyle Epiphyllum Nursery) registered twenty four hybrids in 2008, some names are "Kiwi Candyfloss", "Kiwi Grand Event" and "Kiwi Honey Bright".

Without hybridisers work, we wouldn't have new plants to enjoy.

Plant Clinic.

At our October meeting a number of people brought in some rather sad plants that were clearly in need of attention of some kind. We discussed the possible causes in each case - and then made suggestions on what should be done some determinations were:

- for a hoya with suspected slater damage "it is too far gone try taking a cutting or two and chuck away the original plant"
- for a hoya with sooty mould "wipe the leaves with a wet cloth, or/and use winter oil similarly"; "spray with a warm mixture of oil and water"
- for a rather sad epi "prune it and hope for new growth if none comes chuck it"

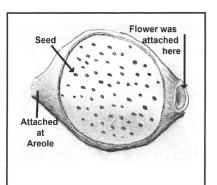
In passing it was noted that:

- hoyas do like a dressing of dolomite lime once per year; sprinkle a little lime on the soil surface in spring and water well.
- spring is also a good time to feed Vireya rhododendrons try using sheep pellets dissolved in water
- vary the fertilisers you use from time to time (you would find a diet of endless lettuce boring). Choose a fertiliser for the effect you want - a high nitrogen one for growth of foliage, a low nitrogen one to promote flowers and fruit

Five features of cacti (Epicacti are Cacti)

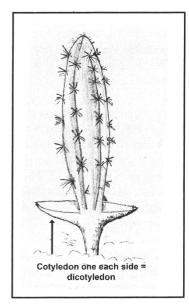
by Grant Bayley

- 1) Areoles. These, usually, small, often furry growth areas or points/locations, are where the spines, new growth and or flowers emerge. Many epiphytic cacti seem to have small areoles and no spines and their areoles are sometimes hidden or almost hidden.
- 2) Perennial persistent for more than two years. This is clearly confirmed by epicacti seedlings generally taking three years or more to flower. Epicacti also have a juvenile and adult stage of stem growth. Both stages exhibit cacti



characteristics and are seen clearly in the juvenile form as a standard cactus look alike.

3) Flowers are funnel to wheel shaped and the ovary forms below the flower.



Petal number is usually 'many'. With hybridising, heavy selection has led to the development of a wide

variation. With epicacti the colour variation is enormous too – one colour to mixtures in the one flower. Epicacti do not have blue flowers.

- 4) Fruit are one celled, seeds are scattered throughout the mass. (Compare this with tomatoes that have more than one cell and seeds are attached to specific areas.) The fruit shape, with epicacti, is highly variable between different clones or seedlings and ranges from ball to elongated egg shape. Colour with epicacti varies from green through yellow, pink, purple and red. Sweet, juicy and edible when ripe.
- 5) Dicotyledon plant (seed leaves like the first fat leaves out of the germinating bean seed). When epicacti are grown from seed, the seedlings' initial form has two cotyledons as do other dicotyledons. In epicacti this is more pronounced than most other cacti. I have noted that cotyledons persist for over a year. Note:- On occasions it is not uncommon to have the odd three cotyledons from the one seed with epicacti.

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!)

In the latest issue of "Asklepios" - published by the International Asclepiad Socity there are two articles of interest. One is by David Liddle and Paul Forster entitled "Notes on some commonly cultivated hoya species from Australia, Papuasia and Melanesia". The article is carefully written and the photos of the plants, their flowers and some of the locations where they grow are superb. There is also an interesting piece on *Riocreuxia flanaganii* which comes from Kwazulu-Natal.

In the November issue of the **Epi-Gram** (published by the South Bay Epiphyllum Society) Dick Kohlschreiber talks about a problem many of us with largish collections have - answering the question: "I know I have got one - but where is that plant?" and he offers some practical suggestions that may help. He also writes about the care of schlumbergeras - saying "I still consider schlumbergeras a challenge to grow.." Well if he does But he has some useful hints to help.



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.

Finally in the November issue of NZ Gardener there is an article by Ruud Kleinpaste entitled "20 Bad Bugs - and how to beat them" - well this is the time to attack the pests.

Happy reading.!

Now is the time

Summer has come - well with a few false starts and hiccups.. 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 - Start watering regularly - preferably early in the day. Enjoy the flowers as they come. After each plant has finished flowering you can repot and prune it.

Hoyas - water when dry. Fertilise. Keep a wary eye out for mealy bugs and other pests - they love warm humid conditions. Start enjoying the flowers - it is not too late to take cuttings.

Schlumbergeras - it is still a good time to repot. Put slow release fertiliser (buy some at the next meeting if you have run out) into the mix. Water sparingly when the plants seem dry.

Rhipsalis - water regularly as they come into flower. A little fertiliser is a good idea.

Aporophyllums - Water regularly and enjoy the flowers. After flowering take courage (and gloves) and prune and tidy up the plants.

Ceropegias - Flowers should be beginning to appear. Water when dry. You need to start the regular task of unwinding runaway growth that is invading other plants. Keep in a warm sunny place for maximum flowering. Give plants that still look dead just a little longer before you throw them out.. Check for pests and deal with any you find immediately.

Orchids- Phyllis Purdie writes:

"You can water everything when they are getting dry, how often this happens will depend on the weather and where you grow your plants. Plants which have flowered can be given fertiliser which has a high nitrogen content to encourage growth. The others need to flower first - so a low nitrogen fertiliser should be used. Make sure the plants do not get burnt with the increased sunshine.

Bromeliads - Andrew Flower advises - "Now the threat of frost has passed (?) those tender bromeliads that were being sheltered indoors over winter can be let out... give them a few weeks shaded from direct sun, to avoid burn marks on the leaves. Greenhouses will be needing shading if not on already, and try to keep air circulation going and air temperatures under 35 °C if possible."

Now is also the time to pay next year's subscription

The society's year runs from January to December so subscriptions for 2009 are now due. You will find a renewal form in this issue of Epiflora (unless you have already paid). Please bring it with the cash to our December meeting - or send it to our treasurer.

Odd cuttings and seeds

A new book on hoyas

We have received details of a new book on Hoyas called "The Genus Hoya - Species and Cultivation" by Katarina Stenman and Anders Wenstromm. If you want to look at the details on the web the address is: http://www.freewebs.com/botanova/books.htm. The sample pages look most interesting. The price is US\$45 (including postage). If anyone is interested please contact the editor - as a group discount is available.

A magnificent Epi Calendar

We have received a copy of "Hunter's Collection" a calendar with pictures of epi hybrids put out by Frances Hunter and designed by Grant Bayley. Frances has just a few left - they are priced at \$17.00 including postage. If you would like one - her e-mail address is franjron@ihug.co.nz

Another anniversary

We hear that the Wellington and Hutt Valley Branch of the Cactus and Succulent Society of NZ celebrates its 60th anniversary at their AGM this December. From what we hear the society is flourishing and will be good for another century at the least (apart from Merv, their president, who will be well past his use-by date by then)!!.

Correct insecticide use - an economic imperative.....

This is the title of an article we saw recently in the Farmlands magazine. While they emphasised the disadvantages of incorrect application from a farmers perspective (unmarketable produce, risks to export markets and the high costs of pesticides) some of the other points are ones we should take note of...

They note that there are many methods of controlling the pests that damage and destroy plants and insecticide use is only one of these. When using any control method it is important to understand the life cycle of the pests so that the intervention is made at the optimum time to achieve the best result, and with minimal side-effects. Depending on where an insect lives and how it feeds will determine the type of insecticide to use. As has been said before-know your enemy. Just to say Systemics for suckers and Poison for munchers is too simplistic. The article is in our library

Another new book

Well a reissued book actually!. Chuck Everson (who used to run Rainbow Gardens bookshop) notes that: A CHECKLIST OF BRACHYSTELMA, CEROPEGIA AND THE GENERA OF THE STAPELIADS was reprinted in late 2007. This updated version is published by the International Asclepiad Society. 128 pages. Retails for about \$US25.00. Available from the International Asclepiad Society at: _www.asclepiad-international.org

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.

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.

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Subscriptions:

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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/

