

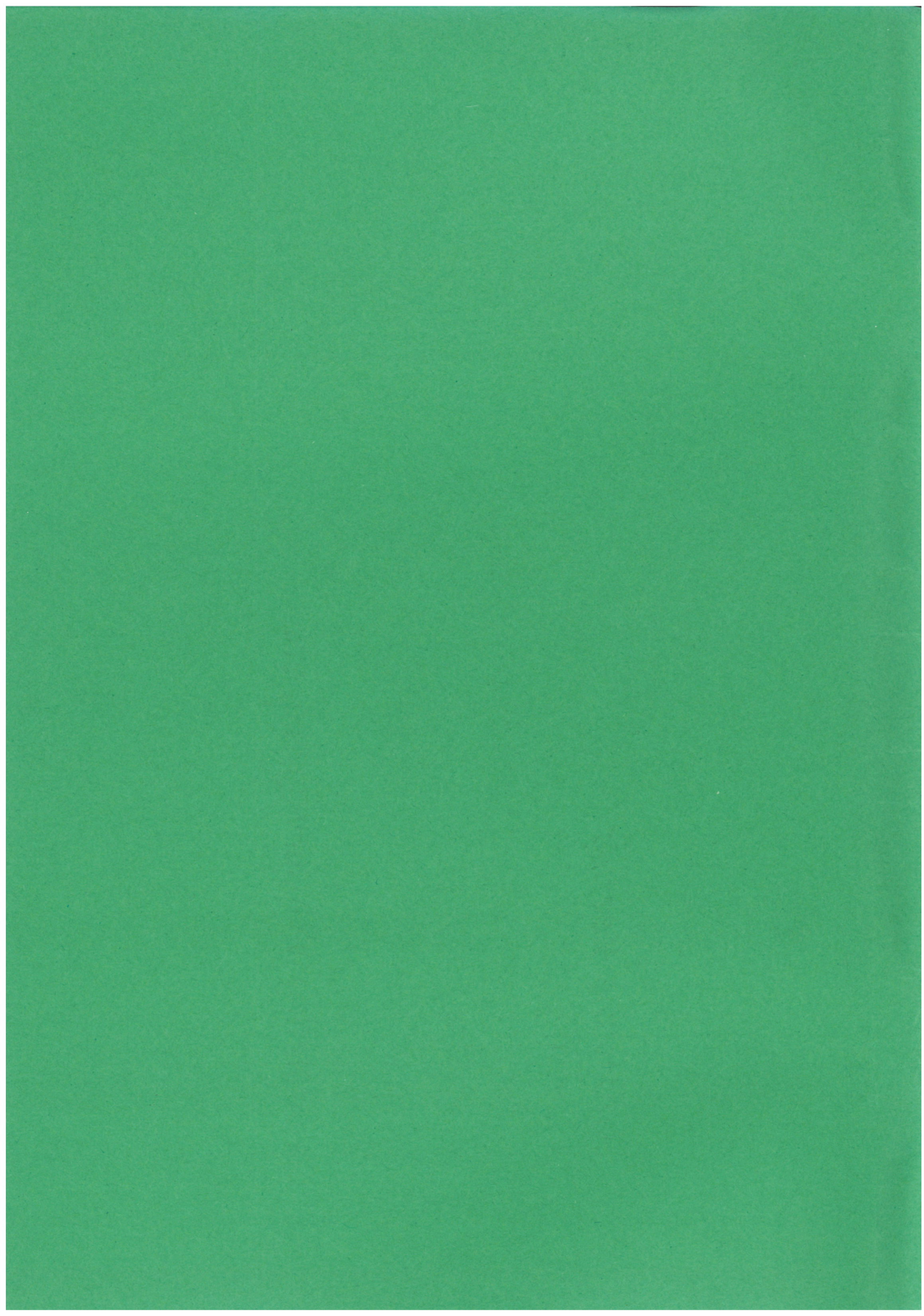


# EPIFLORA

Volume 9 No.1

February 2000







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## **From the President**

With this first magazine of the new millennium it is important to introduce to you the new members of the Society's committee. We welcome aboard Penny Luckens and Beryl McKellar. We thank Alison Beeston, Robyn Gibson and Nola Roser who have retired from the committee, for all their efforts on our behalf. We also welcome those new members who have joined us since the last edition of *Epiflora*.

This year's programme promises to be an interesting and stimulating one which we hope will assist you in growing your plants.

The committee are keen to promote the Society more during this coming year and welcome your help in distributing brochures and inviting others to join our meetings.

These days we have a number of members who have considerable knowledge of the various epiphytes that we grow. Do ask if you need help with any of your plants or if you want cuttings of particular specimens as it is very likely someone will be able to help you.

I look forward to seeing as many of our members as possible at meetings and hearing from out of town members about ways that we can help you grow the plants that you enjoy. For those with internet access you may like to communicate with me by e-mail on: [griffith@globe.co.nz](mailto:griffith@globe.co.nz) or write to me at 249 Te Moana Road, Waikanae.

Happy growing and kind regards

Jane Griffith

29<sup>th</sup> February 2000



## The Programme for 2000

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

<b>March 11<sup>th</sup></b>	<b>Slides of Rhipsalis and Schlumbergeras</b> <i>(Slide show created by Dick Kohlschreiber)</i>
<b>April 8<sup>th</sup></b>	<b>Travellers Tales - Donal Duthie on his trip to China.</b>
<b>May 13th</b>	<b>Workshop on care of Epiphyllums</b>
<b>June 10th</b>	<b>Mid-winter event</b>
<b>July 8th</b>	<b>Schlumbergeras and how to care for them</b>
<b>August 12th</b>	<b>Discussion on soils and fertilisers</b>
<b>September 9<sup>th</sup></b>	<b>Creating new epi hybrids</b>
<b>October 14th</b>	<i>to be confirmed</i>
<b>November 11th</b>	<b>Visits to Collections</b>
<b>December 9th</b>	<b>AGM</b>
	<b>Talk on "Other Epiphytes"</b>

## News About People:

*There are a number of people to mention this time...*

We send sincere condolences to **Yvonne and Andrew Brunton** on the recent tragic death of their son-in-law in a boating accident.

**Dianne O'Neill** has had a short scheduled sojourn in hospital

Our best wishes go to **Nola Roser** who is currently in Auckland with her son who is terminally ill, we are thinking of you at this time..

## **Peter Beeston:**

Just before Christmas Peter Beeston died. He had been unwell for a while but appeared to be making good progress when he died suddenly.

Peter will be remembered by many of us for his enthusiasm for his plants; his thrill at seeing epiphyllums or aporophyllums flowering for the first time or for finding an unusual or particularly interesting plant. It was Peter who had two flowers with distinctly different colours growing on the same epiphyllum and what excitement for him and for us when this happened.

It was Peter and Alison we have to thank for the beautiful covers that we used to have on *Epiflora* and to them also for the work that was undertaken in their business to assist in the publishing of the magazine.

Peter was a superb craftsman whose work as a bookbinder will be remembered by many people in Wellington. Lesser known was his creativity in the kitchen especially in making pickles and sauces.

The Beestons moved to Waikanae in November and were still unpacking at the time of Peter's death. Although he only spent a short time on the Kapiti coast Peter was so very happy with their move and had great plans for the house and his newly acquired leisure time.

Our thoughts are with Alison as she adjusts to life without her soulmate. Thank you Alison for sharing Peter with us at the Society and for telling us so much more about him at his funeral.

## Hoyas..

*Virginia Stead* talked in February on her approach to keeping hoyas - *Mary Hardgrave* reports..

Virginia's introduction to hoyas began when her mother lived in Newlands. Her mother had *H. carnosa* growing in a lean-to shed near the backdoor and facing north. There it lived for ten years or so in a rather dark corner, yearning for some TLC. When Virginia moved to Levin she took the plant with her and gave it a special place in her home with plenty of light. You've guessed it - it truly rewarded her.

Some years later Virginia made a move to Invercargill where she met up with a twenty year old hoya that had been living in a dark corner and had never flowered. She asked Morris Tarr what she should do with this plant. Without any hesitation Morris told her to chuck it out! Virginia did not take Morris' advice; instead she went back home, drew back the curtains and started feeding and watering it and again was rewarded for her care and attention. Shortly afterwards Virginia purchased two baby houseplants from the Warehouse *H. serpens* and *H. multiflora* (shooting star). Even though it is very cold during winter in Invercargill with ice forming on the inside of the windows ( a totally new experience for Virginia) a coal fire was kept burning 24 hours a day - meaning constant warmth in the kitchen/dining area and the hoya plants continued to flourish.

A couple of years in Invercargill was enough for Virginia. She returned to Levin and her passion for hoyas began. She now has twenty-seven different varieties - all of which are kept indoors..

Propagation is done in Spring. Cuttings are popped into rooting compound and then potted up in small containers - using potting mix from the Warehouse. When it comes to repotting at a later stage she recommends only going up to the next size pot. If too large a pot is used the small root system cannot absorb all the moisture from the potting mix and is likely to become water-logged and die. Virginia does not use the "dry-off" method when taking cuttings. This is where the cuttings are left to harden for 3-4 days before potting up.

Virginia noted that, should you receive a cutting through the mail that looks a little worse for wear - it will benefit from soaking for a few hours in slightly warm water to which a little



sugar has been added. Use 1/4 cup of sugar to 2 gallons of water. A few drops of vitamin B1 can also be added. This process helps to keep the cutting from further wilting. Another tip she passed on was to place the cutting in a vessel of water with a piece of willow. Willow contains a chemical that enhances rooting.

Mealy bug is not a problem in Virginia's collection. In discussion it was agreed that a warm humid area provided an ideal breeding environment for these pests. Plenty of air movement is the answer.

Virginia checks her plants every couple of days to see if they need watering. Some need more than others. If a plant does not seem to be thriving in one location - try moving it to another spot and see if that makes a difference.

Most hoyas will not survive in temperatures below 10 degrees (C). Many species are tropical or semi-tropical so require warm temperatures and plenty of filtered light. It was noted that since Jane and Roy Griffith had moved from Strathmore to Waikanae they have noticed a marked increase in the flowering of some plants. *H. compacta* had never flowered (though Merv Keighley was quick to point out that while he was looking after it in Miramar - it had flowered for him!). *H pauciflora* had also flowered much more freely. This species only produces flowers in groups of one to three - not a large cluster like many other hoyas.

Virginia's two most favourite hoyas are *H. serpens* for its little "threepenny" sized leaves; and *H. tsangii* for its fuzzy little pink flowers. Both plants have a lovely scent. Another sought after plant was *H. macgillivray*. This has a flowering pattern similar to *H. pauciflora* - but each flower can be up to three inches in diameter. It has the largest flower of all the hoya species. Virginia saw this plant in flower in Von Cross' collection in Auckland last November when she attended the Epiphyllum and Hoya Convention. Just before Christmas she obtained a plant from Morris Tarr as a Christmas present to herself.

Some hoyas - like *H. cinnamomifolia* do not have a pleasant smell. The flower also seems to attract flies. The scent of all hoya flowers is most noticeable in the evenings. This is because they are pollinated by night-flying moths.

Virginia has set up her own web-site<sup>1</sup> and has great fun contacting other hoyia enthusiasts. She recently had contact with Margie Stone - who many members will remember attended the Wellington Epiphyllum and Hoyia Convention in 1997. Many thanks Virginia for a really interesting talk which encouraged some good discussion.

## **What has happened to my seeds...?**

*Penny Luckens writes about a problem with which some of our members are only too familiar.....*

You've cross-pollinated your choicest epiphyllum blooms some months ago and now the fruits are plump and ripe. Tomorrow, you decide, is harvest day. The next day you arrive to find all your ripe fruits have disappeared without trace; they have been spirited away. There are no broken stems and no signs of other damage.

A slug or snail would usually leave a silver trail and a partly-eaten fruit, with usually a few holes in adjacent stems or stem edges. Possums are notorious for taking a bite or two out of most of the fruits, as well as leaving a trail of snapped-off stems. You thought your epi-house was possum-proof anyway. A weta might munch part of a fruit in a night but not 6 or 10 whole fruits, and you would probably find him or her tucked between or under a nearby pot.

The answer to your problem is rats or mice. Both are accomplished climbers. DSIR researchers found them high in the canopy of large forest trees in the Orongorongas. One of our members had them climbing three storeys up vertical tiled walls to nibble entrance holes in the insect screens of her windows in China. Given these climbing abilities, finding and eating ripe epi fruits up wide fleshy stems even in hanging baskets could be regarded as a simple evening exercise. Vertical wire mesh and netting is put up by humans for rat cross-country runs and roofing is corrugated just to allow rodent access underneath it.

They were spotted late one evening eating the eleventh of twelve fruits and all the yellow crosses. Ah well, at least I won't have too many seeds to sow, and seedlings to grow on!

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<sup>1</sup> You can find Virginias's pages at web address:  
[www.angelfire.com/co3/hoyagrower/index.html](http://www.angelfire.com/co3/hoyagrower/index.html)

## Philately Botannica.

*For many months **Brian Read** was pestered to devise a talk on epiphytes and stamps. He finally gave in and his talk was delivered at the September meeting. Clearly this was a talk that you had to hear to appreciate - but Brian has tried to set down some of the flavour of what he talked about.*

Many months ago the committee asked me to display stamps depicting epiphytes and other plants collected by members of our society. I demurred because, although mine is a wide-ranging collection, this was not a speciality of mine. After more prompting, I agreed to give a display of stamps with botanical subjects in their many forms and interpreted this widely to include horticulture, plant use and fungi, etc.

Little did I realise how much preparation time this would take, sorting through my collections for suitable material and then reducing the vast amount available to something more manageable with not too much duplication and to be of interest to everyone present.

This was very much a visual display, accompanied by a (hopefully) suitable commentary; and as such is not easy to write up for *Epiflora*. Unfortunately the display boards I had anticipated were not available so it was necessary to pass the pages round. Thus most people were looking at material whilst I had passed on to the next lot.

Now for a summary of what I can remember of my talk (I've lost the original notes). There were 116 pages in all - rather too much in hindsight.

Sometimes I think that all collectors are a bit mad! Why do we spend our hard-earned money on oddly-shaped exotic plants (often only attractive for a few weeks each year) or scraps of coloured paper? Squirrels collect nuts for future use. We put aside goodies for a rainy day - but we also amass comparatively useless items and then spend the rest of our lives adding to our collections and conserving them.

All of you collect epiphytes and other forms of plant life. I've collected cacti and other succulents for about twenty years (and killed off quite a few). But I've collected postage stamps for nearly sixty years and have never lost my fascination with them.





Millions of people all over the world, from kings and presidents to seven year old kids collect stamps. Why? Well they mean different things to different people and everyone can collect whatever they like. Philately (the love of stamps) has been called the king of hobbies and the hobby of kings.

All countries issue postage stamps (at an ever increasing rate). Their prime use is as prepayment for items dispatched through the post.

The first adhesive postage stamps (the penny black illustrated) were issued by Great Britain in 1840 to pre-pay postage and create a nationwide communication system at a reasonable price. Previously postage was very expensive and restricted to the wealthy. Over the years stamps have become paper ambassadors; depicting kings, presidents, history, geography and other subjects - often unique to that country. Increasingly flora, fauna, scenery and other tourist promotional subjects are being issued (Publicity and Propaganda!).

Most philatelists collect the stamps of their own country and other countries that interest them; but many also collect stamps on a topic - such as music, the olympics, cartography, cats and dogs, flower arranging, road safety etc. The list of topics is endless, if you've got an interest its bound to be on stamps somewhere.

The first pages of stamps I displayed were on epiphytic cacti and succulents kindly prepared by Bob Gibson (Robyn's husband). They were a mix of stamps and postal stationery suitably annotated. As with most plant stamps they concentrated on the flowers but, as is so often the case, were not always clearly identified by the issuing country.

My own display commenced with a souvenir booklet from Sweden on the life of Linnaeus who established the binomial nomenclature principle in botanical classification.

Then I showed three pages from a hand-illustrated collection of flowers I acquired many years ago. The ornate drawings were, to my mind, too fussy and thus lessened the impact of the stamps themselves.

Then A to Z by country - 107 pages in all of some sixty odd countries including: Ajman roses, Albanian heliopsis, Antiguan tobacco and sugar, Australian state floral emblems and fungi, Cook Islands euphorbia, mushrooms from Finland, East German protected plants, from Great Britain - national nature week, Kew Gardens and trees; Indian potato research;

Japanese cherry blossom; Philippine dendrobiums, Singapore orchids (of course!); Sri Lankan tea planting; United Nations medicinal plants; and of course New Zealand orchids, vineyards and roses.

In summary I showed a wide range of these miniature works of art in the botanical field. They depicted mostly flowers -especially orchids and roses galore; but also trees, fruit and other crops and fungi.

Stamps were shown in all their varied forms. Mint and used, covers (mainly first day covers), miniature sheets, presentation packs, se-tenant issues, maximum cards, overprints, imperforates etc.

An important feature of my session was the wide range of questions from the floor. None of this waiting till the end of the talk nonsense! It makes things much more interesting if everyone is involved and it keeps the speaker on their toes.

With any hobby the more you know, the more fun it is. With philately you are always learning; not only about stamps but also about history, geography, the arts, sport and even epiphytes.

There is virtually no subject of general interest not covered by stamps. Anyone can start a collection on their own particular or peculiar interest. Remember you collect what **you** like. There are no rules.

## **Epicactus "AB958"**

*Andrew Flower writes:*

The plant is a *Chiapas/Disocactus nelsonii* hybrid grown by Anwyl Bromeliads from seed supplied by G Kohres of Darmstadt (Germany). It flowered for the first time in 1999. The habit is rather sprawling, but the bright colour and floriferousness are attractive.



**Epicactus "AB958"**

photo by Andrew Flower



## **Notes on some problems associated with making wide improbable crosses in breeding Epiphytic Cacti.**

*This article by Frank Sibl first appeared in the November 1993 edition of **Epiphytes**<sup>2</sup>. It seems appropriate to reprint it - given the increasing interest among many of our members in the creation of new hybrids. The society library has a collection of issues of **Epiphytes**. The Journal appears four times a year and is notable for the quality of its articles and of the colour pictures that accompany many of them. If you would like to subscribe yourself - contact a member of the committee for details.*

Sooner or later any serious epicacti lover will try their luck in raising a new hybrid. Expectations are always high, "it will be an outstanding flower, if not a new form then a new colour break, it will be one of the best in its class". As we all know only too well, nature does not work that way. The high expectation of the one single factor of many factors appearing on the very first cross attempt with few seeds only, whilst possible, is highly unrealistic. A bloom of indifferent characteristics is for many breeders the end of the experimental line. In controlled plant breeding the integrity of the breeder is as important as the plant. Only a few growers are ready for the self imposed discipline.

Actually seed produced from a deliberate cross pollination may not be of hybrid origin even when every precaution has been taken or may not be the result of the selected paternal parentage. In 1987 I made a cross (identification number FS87-J36) using *Epicactus* "Deutsche Kaiserin" as a pod parent and *Schlumbergera* "Madame Butterfly" (a cross made by Andrew Savio) as pollen parent.

The resulting plant no. FS87-J36-1 has the basic vegetative characteristics of an epiphyllum type of plant, but is morphologically different from both the maternal as well as the paternal plant. Its branches are elongated (up to 1 m. long), have certain resemblances to branches of a trailing *Disocactus* type called "Vista Star", with prominent purplish ribs sometimes found in *Deutsche Kaiserin*. The bloom's inner petals are narrow, linear, apiculate, of dull pale pink "flesh" colour, marbled in darker lavender pink, and arranged in more or less tubular shape. Sepals are narrow, linear, somewhat shorter and in shades of tannish-orange, in-curving and rather interestingly are not basally coalescent but are polysepalous; that is to say sepals are

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<sup>2</sup> The journal of the Epiphytic Plant Study Group..

not united and are not even inserted on the same level but randomly i.e. sporadically attached to the receptacle. The tube is green with minute purplish scales, longer than the flower, culminating in a receptacle which is an elongated cone shape. Flowers like those of the maternal parent take a long time in developing, and their flowering season coincides with that of the parental species. Blooms are extra small, berries are tiny.

It is generally considered that progenies inherit the vegetative plant structure from the seed parent and the colour and bloom characteristics from the pollen parent. Could then a successful cross be claimed? I suggest that would be irresponsible. No doubt the new plant is a result of a cross pollination but it is not certain if it resulted from the selected paternal pollen.

Results of controlled plant breeding where botanical species are used are more predictable, but species are relatively rare in cultivation and modern “hobby breeding” mostly uses the Epicacti - hybrids of the *Hylocereeae* (sensu Barthlott, 1988) - group of plants, due mainly to the ease with which many can be hybridised to produce a whole new range of bloom forms and colour combinations. Whilst most of Epicacti are not self-fertile, that is they depend upon the exchange of pollen from flowers of a different plant, some can be. In the absence of reliable records there is need for various preventative measures to be implemented. In the more conservative trend the breeder simply notes if the plant sets seed if left alone or not, and then implements further recommended control crosses. Thus for example F.R. McQuown recommends:

“ Plants that do not set seed if left alone (self-sterile) be protected but not emasculated (as a precaution against natural cross by insects). Plants that do set seed (self-fertile) be emasculated but not protected (as a precaution against self-pollination). For plants that do not set seed if left alone - emasculation and protection are not necessary and the suggested control tests to check this should include pollination with pollen from the same plant and pollination with pollen from a different plant”

The US Department of Agriculture assume self-fertility in each case, with recommended preparation of the flower by:

- Protecting the plant from environmental extremes,



- ❑ The female plant should be opened before the anthers open and all anthers should be removed
- ❑ A paper bag should be placed over the flowers or plant to protect the exposed stigma from accidental pollination
- ❑ The male flower should also be bagged to prevent its contamination from other pollen sources

Breeders often, quite unwittingly and without realising it, make a “mixed pollen fertilisation” by using insect contaminated pollen. One wonders how accurate and how reliable is the record of the inheritance of our Epicacti hybrids and how reliable indeed are the “fixed lines of known ancestry” published in our directories.

Is there a way to predict cross pollination with a reasonable degree of accuracy and then a way to verify the results? The outline recommendations for simultaneous control pollination are of considerable help. When working with mixed ancestry of plants it should be recognised that their seeds carry within themselves the effects of some past cross pollination which may be expressed. Indeed it is difficult to make plants and the more extensively a plant has been hybridised, the less likely it is to conform to any general rule, best expressed, “expect the unexpected”. Further it is recognised that characteristics in which variations may and do occur may manifest in many variable forms. The breeder should “know” plants used in order to recognise outstanding or unusual characteristics when these occur. Not all traits are desirable. When for example I crossed Epicactus “Mollie Sinclair” x *Heliocereus aurantiacus* var. *blomianus* the progeny (FS87-H156-1) inherited the least desirable genetic trends of both parents, making it horticulturally undesirable. Yet, even such apparently unsuccessful crosses have a point or two to teach us, here it is easier to transfer weakness (expressed dominant factor) than strength (the “recessives” are “pure”).

Many breeders rely solely on the typical Mendelian 2-trait chart for the original Mendelian Laws of Heredity, for predicting outcome and verification of results (by backcrossing). I suggest these laws best apply when working with “pure lines” - species and near species that breed true from seed. Only then can we reasonably predict an outcome and establish some logical rules and procedures to follow in order to gain the desired results. And it is in this area that it has the greatest practical applications. However even here it should be noted that the figure of 16 offspring required to show all possible combinations of two factors, (64 for three factors and 256 plants for four variable factors etc.) represent the proportion and numbers which may be expected and not necessarily those which will be found. That simply means the breeder may meet with success in one out of 64 or 256 seedlings. The more

crosses the breeder makes, the greater their chances of getting what they want or of getting something different. Professional breeders use large numbers - like Luther Burbank in breeding lilies - he used as many as 500,000 plants in a single test. Cobia's experimental figures are also very high. Even when working with "pure lines" modern geneticists are demonstrating that the Mendel discovered rules of biological inheritance are subject to more and more exceptions. First there were modifications due to the discovery of the so called "syntenic" or "linked" genes leading to the concepts of Linkage and Crossing Over.

There have been some remarkable discoveries. For example, the assumed sexual equality indicated by textbooks, namely that each parent gives the progeny one of each pair of chromosomes is not always the case. It has turned out that progeny can get two from the maternal side and none from the paternal side. The "gene is a gene is a gene" of the inheritance laws could be marred by the so called "imprint genes" where some bits of DNA appear marked as having come from a particular parent and may have a "parent of origin" effect such as a genetic disorder. And what about non-mendelian inheritance through transmission via cytoplasm rather than chromosomes, matrilineal inheritance, mutations etc.

I have amplified the exceptions to the Mendelian Inheritance because I do not believe in the so called "ultimate proof of hybridity" by back crossing. This theory seems only to offer inconclusive results.

Back to the "Deutsche Kaiserin" x Schlumbergera cross mentioned above. On that occasion I did protect without emasculation the mother plant (brown paper bag, tie etc.), but I did not protect the paternal plant. To further complicate this matter I should mention that in our back yard we have tiny black ants, perhaps a bit bigger than the so called "Argentinian" ants. These ants are not only flesh scavengers, devouring dead insects, but are also fond of fruit and flower nectar in search of which they travel from bloom to bloom performing unwanted acts of pollination. At that time I was not aware of their activities. Their eradication is next to impossible and even the protection of blooms is difficult. Interestingly berries resulting from such pollination are only 1/4 to 1/3 the size of a berry resulting from a man made pollination.

Clearly I lost control over the pollen parent. Was the pollen I transferred to the stigma of "Deutsche Kaiserin" "clean" or was it contaminated by bees? Did the ants penetrate the protective measures I used causing contamination? If either bees contaminated the parental pollen or the ants added either contaminated parental pollen or pollen from a different source, the question arises - which plant could the pollen be from? My records indicate that plants

flowering at that time were Spring flowering Disocactus types of plants which could explain certain vegetative similarities mentioned previously.

I should add that a sister seedling has more pronounced Disocactus type similarities.

I do believe that there are more accurate ways to distinguish between clonal horticultural varieties and to document their parentage, indeed various biochemical techniques are used successfully for this purpose. For example Cobia sponsored phytochemical evaluation conducted at the University of Central Florida. But these are complicated, costly laboratory procedures out of the reach of ordinary breeders. I conclude by suggesting that unless one could demonstrate without reasonable doubts that the improbable cross *Epicactus* x *Schlumbergera* has been obtained, it is more likely that the production of seed has resulted from the maximum use being made of the available more compatible pollen in the mixture (regardless how administered). Horticulturally there is nothing really outstanding about this cross - just another different bloom. The only correct option to indicate its heritage is *Epicactus* "Deutsche Kaiserin" Ex Nat. I used the progeny's pollen for further experiments.

## References

- Beagley, S.; A New Genetic Code; **The Bulletin**, November 10 1992 pp77-8  
Briggs, D., Walters, S.M.; **Plant Variations and Evolution**,  
Kennedy, E.M.; **Genes in Action**  
Martin, F.W.; Hybridisation Techniques for Succulent Plants, **Cacti and Succulent Journal** (US)  
McQuown, F.R.; **Plant Breeding for Gardeners**  
Longman; **Illustrated Dictionary of Botany**

## Odd Cuttings and Seeds

### Are Epi hybrids self-sterile?

Penny Luckens notes that epiphyllum hybrids are usually regarded as self-sterile, needing pollen from another hybrid before seed will set. However Cheerfulness, one of the small-flowered varieties, seems to set an abundance of fruit - even when

unpollinated. She asks - is it, and perhaps other varieties, self-fertile? Does anybody have any comments on this, or other particularly small-flowered varieties, in this regard?

### **Books and CD's**

We have recently heard that a CD-ROM has been produced containing pictures of Epiphytic Cacti and their hybrids. The pictures have been taken by Frank Supplie and the CD is put out by The Epiphytic Plant Research and Information Centre. For ordering and price information contact the EPRIC foundation at [pric@worldonline.nl](mailto:pric@worldonline.nl)

We have also heard that Rainbow Gardens 1999/2000 catalogue of books is now on their website at: [www.cactus-mall.com/rainbow\\_bookshop](http://www.cactus-mall.com/rainbow_bookshop)

This includes a few additional items to the printed version and a few items are deleted which have gone out of stock.

And lastly - news of a new supplier of books. They say - "at Yellow Cactus Bookshop you will find:

- 160 Cactus and Succulent titles... many new books added at least every week;
- where to buy those books at minimum possible price;
- automatic book price comparison system covering 40 bookstores;
- extensive search page - find books in other bookstores;

Their website address is [www.cactus-books.com](http://www.cactus-books.com)

### **And New Society Web sites...**

The International Hoya Association now has its own web-page - you will find it at:

<http://www.international-hoya.org>



The San Diego Epiphyllum Society also now has a web presence:

<http://www.surfnfax.com/epi>

Both these sites are worth a visit.

And hot off the e-mail here is news of a new discussion group for anyone who grows or wants to grow Hoya or Dischidia it is called [Hoyas4U@Onelist.com](mailto:Hoyas4U@Onelist.com)

Join by going to <http://www.onelist.com/>. Of course some of you will know that there is already one other Hoya group on Onelist. [www.onelist.com/group/hoya](http://www.onelist.com/group/hoya)

### **Society sweatshirts and short-sleeved shirts.....**

A number of members have asked if it is possible to buy any more of the Society shirts that were produced a couple of years ago. The answer is yes - if we get enough orders. If you would like to get one - contact Isobel **at or before the next meeting (March 11th)**.

### **Baking soda as a fungicide.**

Continuing the theme started in previous issues of using "household" remedies for some of the pests and conditions that plague us - here is a note from Keith Taylor (New Jersey) on using baking soda...

Generally fungi need acid conditions to thrive. Blackspot is a fungal infection. A solution of baking soda (sodium hydrogen carbonate/sodium bicarbonate) is alkaline and therefore washing the plant with this solution will inhibit the blackspot. I suspect that it is a fungistat rather than a fungicide but it may be fungicidal. I would be concerned about its effect on plant tissue but have no evidence that it will cause damage, but I would recommend that a spot test be carried out before the plant is deluged. Avoid the solution getting into the soil. Too much sodium is bad but it will also make the soil alkaline which is bad for many cacti, particularly the epiphytes.

## **Future Publication Dates..**

***EPIFLORA is published quarterly by the Wellington Epiphyllum and Hoya 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.*

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