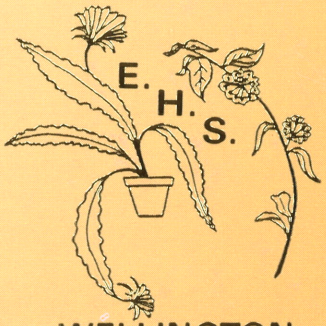

WELLINGTON

EPIFLORA

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Wellington Epiphyllum and Hoya Society

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Editorial

This is our very first effort as editors. Not that we've had much to do. All the material was provided by others and most of it was typed up ready. Just as well - we'd hardly qualify as Epiphyllum & Hoya experts or as editors for that matter, so you'll need to be patient with us and keep the articles coming in.

About the only thing we've contributed to this issue apart from this brief editorial is a change in the method of producing the cover. Your comments on this and anything else about the magazine would be appreciated. We won't promise to act on all the suggestions but we will listen and learn from you all. Next time, hopefully we'll have more idea of where we're going.

Alison & Peter Beeston
Joint Editors

Dear Fellow Epiphyte Lovers.

Such a lot has happened since I last wrote in Epiflora. Roy and I have been in the Northern Hemisphere for six weeks enjoying summer weather, holidaying and catching up with Epiphyte growers on the other side of the world. The Convention Committee have been extremely busy with last minute preparations for the Convention and a great deal of work has been going on behind the scenes as members get their collections ready for visits by Convention attendees.

It's a lovely time of year here in New Zealand as we watch many of our Epiphytes come into bud and realise that all the hard work of previous months is paying off. Let's hope that the weather will be kind to us so that our Epis are looking their best by mid-November.

It's encouraging to hear from Dianne O'Neill that registrations are coming in for the Convention. If you haven't already registered do make this a priority as the programme is looking particularly enticing and should provide interest for all those attending. A Convention of this nature is a wonderful opportunity to meet other epiphyte enthusiasts from around the country (and overseas), purchase plants rarely available at ordinary meetings and attend workshops, talks and see slides especially imported for the occasion.

I do hope that this coming season will be a successful one for you and your plants and I look forward to seeing you at the Convention.

Jane L. Griffith

Jane L. Griffith
President

GROWING EPIPHYLLUMS FROM SEED

First catch your seed.

1. Pick a fruit off an epi plant that has set seed
   a. Self fertilisation
   b. By being fertilised by insects
   c. By being hybridized ie crossed with another plant.

2. Prepare the seed by separating the seed from the flesh.

   There are various ways to do this.

i. I pick each seed out individually and put it on sheet of graph paper. I know exactly how many seeds I get from each fruit.

ii. McQuown in his book "Fine Flowered Cacti" recommends scraping the pulp from the fruit into a jar of water. The pulp being lighter than the water floats and can be tipped off. There may be empty or infertile seed and these float to the top with the pulp. There will be a small proportion of good seed with these, so all floating seed may be saved and sown. Personally, I wouldn't worry about them because there are usually many hundreds of seed and it is an impossibility to grow them all - space would prevent it unless of course you are growing commercially or the cross was very special with few seed produced.

After getting rid of the pulp the surplus water is drained off and the remaining seeds are spread on a plate and put in a warm place to dry. Each seed is surrounded by a sticky jelly and when dry they stick to the plate. They should be carefully scraped off and stored in a tin or other container.

Sowing.

I use a commercial seed soil. Phyllis Purdie used Bloom indoor seed mix for her cacti.

Water the soil before sowing.

*Sow seeds on the surface.
*Don't cover with soil.
*Cover with glad wrap and place in a bright situation.
- on a window-sill
- top shelf of the glasshouse etc.
*Keep damp
- they will stand being quite wet
- never let them dry out - that is the easiest way to lose plants.
- water with fungicide - "Bravo" or condys crystals. These will help prevent "dampening off".

The seeds will star sprouting within days. Leave them in the container for as long as possible before pricking out. Don't throw the mix away as seeds will continue to sprout and grow up to 3 years after sowing.

IMPORTANT

Ensure that the container of seeds is labelled.
1. Name of seed or identification No.
2. Date of sowing.

When pricking out again ensure that all containers are labelled.

When young plants are past the juvenile stage - and this can last several years - a noticeable flattening out of the stems begins. This is when we get to the interesting stage. Flowering.

Take cuttings of the flattened stem, just as if you were taking a cutting of a flowering plant.

This is when the truth appears.

Is the flower different? - Very different - You are lucky.

If the flower is Ho Hum or the plant doesn't grow well destroy it!

There are too many Ho Hum flowers around now.

If it is highly perfumed, with large brilliant sea blue ruffled flowers - give it to me!!

Merv Keighley

What to Do With Your Epiphytes in Spring

Several people have requested that we include in the newsletter information about cultivation of the various Epiphytes during the year. Responding to this request we will make seasonal activities a regular feature in each edition.

All cultivation notes are generalised for the region and do not take into account localised climatic variations. Therefore go cautiously if you know that where you live or are growing the plants has greater extremes of temperature or precipitation.

Aporophyllums - Buds have been developing on Aporos for a while now although they are still quite small. Plants will require a small quantity of water, increasing the amount as the weather warms up.

Ceropegias - These plants are beginning to emerge from their dormant period therefore can cope with a light watering. Gradually increase watering as the weather warms and commence fertilising. Plants can be repotted during Spring and later in Spring cuttings can be taken.

Epiphyllums - Buds are beginning to set on most plants and some of the smaller flower varieties may already be in flower. Plants require increasing quantities of water and fertiliser should be applied. If a plant has scraggy off-shoots from branches these should be cut off to allow growth from the base of the plant.

Hoyas - This is the time to start watering - very sparingly initially, increasing as the weather warms. If cuttings were taken in Autumn this is the time to repot these into your favourite hoya potting mix using 75 ml pots.

Rhipsalis - as with the other Epiphytes watering should be stepped up as growth is vigorous at this time of year. Cuttings may be taken.

Rhipsalidopsis - as these are Spring-flowering plants they should be watered and fertilised regularly to encourage bud development. (Do not over-water especially if your plants are in a cooler situation). After flowering cuttings may be taken. As cuttings are often hard to strike it is advisable to place cuttings in either pumice/vermiculite or sand initially.

Schlumbergeras - it is recommended that these plants are watered and fertilised regularly at this time to encourage new growth. This is the best time to take cuttings and like Rhipsalidopsis are best rooted in pumice/vermiculite or sand.

Jane Griffith

STOP-OVER LOS ANGELES or How to resist
Epiphytic Temptation!

Six weeks in England and Canada sounded perfectly wonderful and then we realised that we could stop over in Los Angeles for three nights on the way to England. Dick Kohlschreiber made the generous offer of accommodation and with his tremendous hospitality gave us the best possible start to an altogether momentous holiday.

We knew from numerous American Epiphyllum journals that Dick is an expert on not only epiphyllums but many related genera and therefore we looked forward to seeing his extensive collection. Dick's collection was tantalising as he had so many plants that we do not possess in New Zealand and he kept saying "if only your Agriculture Department would let you take in a cutting of this or that" . Although it was the end of the Epiphyllum flowering season we could understand why Dick wins copious medals at competitions especially when he showed us slides of his plants.

Dick's organisation was tremendous and in the short time we were in Los Angeles he took us to Rainbow Gardens nursery and the nursery of Ethel Hurst. To see rows and rows of beautiful Epiphyllums, hear the owners of the nurseries extolling the latest hybrids and showing us pictures of them was so exciting but also so frustrating as we knew that we couldn't even slip the smallest cutting into our bags! At both nurseries we were interested to see how they grew their plants and their techniques for hybridisation. Dick also took us to Huntingdon Gardens - beautiful large gardens tucked amidst the housing of Los Angeles as an oasis in a concrete jungle. The Huntingdon is so extensive that you could spend several days there. The large area of cacti growing outside amazed us as did epiphytes growing in numerous trees.

When we boarded the train to London our minds were still processing all that we had seen in those three short days. We were most grateful to Dick and do hope it will not be too long before we can return his hospitality here in Wellington.

Roy and Jane Griffith

Schlumbergeras

The genus was named for Frederic Schlumberger, a well-known collector of cacti at Chateau de Anthieux, near Rouen, who was a patron of horticulural botany, by Charles Antoine Lemaire (1801-1871). There are five species in this genus of ephiphytic or saxicolous cacti native to S.E. Brazil. However the best-known are the numerous hybrids derived from Schlumbergers truncata and S. russeliana and known throughout the world as Christmas cactus. These plants with their stems of flattened segments and zygomorphic flowers in shades of magenta, red, purple, salmon pink, white, and more recently yellow flower in the middle of winter. Moreover as their flower initiation is triggered by decreasing day length with night time temperatures from 40-65 F commercial producers are able to produce flowering plants for sale at pre-determined times. In Europe this is usually Christmas, in America also at Thanksgiving and here they appear in florists and garden centres just before Mother's day (May). Under natural light conditions flowers may appear in May, June and July with some plants producing more than one flush of blooms.

The plants were introduced to Europe from the Organ mountains in Rio de Janeiro in 1818 and were soon with each other, particularly in France and later in Germany. Many of the early hybrids were weak growers and were usually grafted on Pereskia or Cereus. Only the hardiest have survived. The varieties found in N.Z. and Australia up to 1960 were mostly reddish-purple or magenta, with flowers that hung straight down from the end of the stems. Then American breeders started to develop varieties with a wider range of colours - "White Christmas", "Lavender Doll", "Twilight tangerine" and "Peach parfait" - in the 1960s, with the first true yellow "Gold Charm" introduced to Australia in the mid 1980s.

Many of the newest varieties are protected by Plant Variety Rights legislation, and unauthorised propagation and sale of these registerd varieties is illegal (as is the case with floral carpet roses). New varieties may arise in a number of ways.

1. Natural mutations (often known as "sports") arise usually as a branch or stem producing flowers of a different colour from the rest of the plant. Plants propagated vegetatively from this branch continue to have the new characteristics. "Christmas flame" ("Gold fantasy") is a natural mutuation from "Gold charm" which occurred in a batch of "Gold charm" plants in a Florida greenhouse.

2. Hybridisation or crossfertilisation is the most common method of producing new varieties. The pollen from the so called parent is placed on the stigma of the female parent. If the two plants are compatible each pollen grain develops a pollen tube which grows down through the style to the egg waiting inside the ovary. Each pollen grain and egg cell has undergone a process whereby the amount of genetic material found in the normal cells of the parent plant has been halved, When the pollen cell grows down and fuses with the egg cell the genetic material in the nucleus is then back to the normal amount. This embryo cell then deveops into a seed. The ovary wall is stimulated to develop into a fleshy protective container for the seeds.

Both Schlumbergeras and Epiphyllums have flowers where the pollen ripens and is shed before the stigma surface has expanded and become receptive to pollen grains. This helps to ensure that pollen from a different flower will germinate on the stigma surface, but most of the species and varieties are actually self-sterile. The inner chemistry of the plant prevents its pollen from germinating on its stigma. Unless pollen from a different variety germinates on the stigma and grows down to fuse with the egg cell the flower, including the ovary will wither and drop off. Not all varieties produce viable pollen grains. The oldest variety in N.Z., commonly grown as a huge old plant by many people at least back to the 1950s had poorly developed anthers and defective pollen. Its magenta flowers hung straight down off the ends of the branches rather than coming out at an angle like most of the later "hanging basket" varieties.

3 Induced mutation is the third method of producing new varieties. The plant material is treated with chemical agents or radiation to affect its genetic make up. Colchicine used to be the chemical employed to double or mutiply the chromosome levels. Sterile triploids with three sets of chromosomes could have their chromosomes doubled to three pairs and thus become fertile. Doubling of the normal diploid chromosomes produces tetraploids (with 4 sets) which often were sturdier plants. The breeders of the new strains of Schlumbergera known as "Showcase Zygo" in N.Z. and Australia and Cobia Collector Series in U.S.A. admit that these were produced by induce mutation. They are characterised by thicker, more upright stems, larger buds and wider and thicker petals. The variety "Cambridge" has the same ancestry as "Gold Charm" and "Christmas Flame" ("Gold Fantasy" in Australia) but has more sets of chnromosomes and a far more erect growth habit.

The trend has been from an open-branching, pendant plant to a compact upright plant which has the end 1 or 2 phylloclades (segments) pruned off each year after flowering. This certainly produces a more easily handled plant for the commercial grower, and is similar to the many other plants that have been dwarfed without reducing the flower size and turning them into suitable candidates for Victorian bedding schemes.

Much of the charm of some of the paler varieties lies in their translucence and lightness of form. I hope that in the flood of new upright varieties such as the "Showcase Zygos" the earlier hanging basket types will not be lost.

Penny Luckens

Schlumbergera russelliana
Stems arching and pendent to 1m. Stem segments 2-3.5 x 0.5 - 1.5cm. margins crenate with 1-2 notches each side, areoles apical ands marginal often bearing 1-2 weak bristles. Flowers nearly regular, pericarpal, strongly winged or ribbed, tube 3cm, limb almost regular not oblique, stigma creamy white and style shortly exserted. Winter flower.

S. x buckleyii (S. truncatum x S russellianum)
Christmas cactus. Intermediate between parents. flowers slightly zygomorphic, limb somewhat oblique. Stigmas purple. stamens and style long exserted- garden origin. winter flower

S. truncata
Stems to 30cm or more becoming pendulous, stem segs oblong truncate 2.5 - 8 x 1-4cm, margins sharply serrate-dentate with 2-4 forward pointing teeth each side,midrib prominent. flowers 7 x 4.5cm zygomorphic. axis abruptly angled between pericarpal and tube. pericaarpal terete tube 4cm. limb strongly oblique. stamens and style long exserted.

S. orssichiana resembling S. truncata
stem segs 5 x 3 cm. margins curled as well as dentate. flowers 9 x 9cm, tube 1 cm. petals purple pink towards tip, white below. pericarpal 5 -6 angled. autumn-winter flower.

S. opuntioides
Small opuntia like shrub. stems erect or arching to 40cm (reaching 120cm in nature from woody base 10cm diam.) Stem segments obovate to oblong, compressed 5-7 x 1.5 -4cm, areoles in diagonal rows as in opuntia. spines few to numerous to 5mm, bristly white to yellow brown. flowers strongly zygomorphic, deep pink, pericarpal obscurely 5 -7 angled, stigmas almost white. spring flowering. fl 6 x 4.5 cm.

S obtusangula
Similar to S.opuntioides but stem segments terete or obtusely angled. Flowers nearly regular, 5 x 2.5cm. spring flowering.

+++ 1993 EPIPHYLLUM AND HOYA CONVENTION

We are hoping that as many of our members as possible will be at the Convention in November. If you have not got or cannot find the registration form and information sheets Dianne will be delighted to supply them to you. Her address is

Mrs D O'Neill
7 Blackbeech Street
Upper Hutt.

By the time you read this you will be too late for the "early payer" discount; but $54 for the whole weekend (including meals etc,) still is good value.

PHOTOGRAPHIC COMPETITION

One of the features of this year's convention will be a photographic competition. All attending are eligible to enter. There will be three classes:

Epiphyllum
Hoya
"Other" epiphytic cacti (including Ceropegia, Aporophyllum etc.)

Conditions of entry

* Photographs are to be 6" x 4" (15.2cm by 10.2cm approximately.)
* Members are limited to two photographs in each class.
* If the name of the subject is known it should be written on the reverse of the photograph or on the mount.
* The entrant's name should be clearly shown on the reverse of the photograph.
* All photographs are to be delivered, or posted to reach us in time for judging at 12 noon Saturday 20 November.