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SUBTROPICALS

is a forum for the exchange of ideas and information on the identification, growth requirements and sourcing of native and exotic subtropical plants (and tropicals) suitable for gardens in the milder parts of New Zealand.

SUMMER 2003

Volume 2 Number 4

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**SUMMER ISSUE
COPY DEADLINE**

All copy must be received by the 31st January 2004

Onwards

This summer issue marks the end of the second year since the **SUBTROPICALS** Society was formed.

Our membership has been growing steadily and a successful first conference and plant sale has been held. We are looking ahead to 2004 bringing increased membership and a higher profile with the Conference and Show moving to the much larger ASB Stadium.

The magazine has been using up our store of photographs very rapidly, so if you see any interesting plants or gardens on your travels these holidays, please aim your camera and shoot some film for us. The prize for the quarterly competition has jackpotted to \$100.00 this time so is well worth winning. If you don't wish to enter, just send them to us anyway!

Included with your magazine are the 2004 renewal form (with a special offer for prompt payment) and a membership form to give to anyone you think may be interested in joining.

Winter this year was cooler than usual and spring was the wettest I can recall. Those in frost free areas seemed to suffer not too badly, but those in marginal areas lost many plants to frost and/or rain. Canopy for the frost and better drainage for the rain!

Let's hope that the weather for the holiday season performs to everyone's satisfaction and, if you are going away, you return relaxed and healthy. Have a great Christmas, an enjoyable New Year and, be careful out there.

Marjorie Lowe
Editor

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FRONT COVER STORY

TOTARA WATERS

The tide is in, the sky is blue, the sun is shining – it's the essence of summer in Gil Hanley's front cover photograph taken at Totara Waters Subtropical Garden.

Although it appears to be deep in the countryside, the garden is only a relatively short drive from the city, on a tarsealed road in the rural outskirts of Whenuapai. A little over two acres, it runs from the road down to the tidal reaches of the upper Waitemata Harbour. On the further side of the inlet, a small stand of bush runs down to the water and beyond, bright green farmland runs to the skyline. To a city dweller, the peace and quiet is almost overwhelming - well worth a visit.

The amazing fact is that this garden is less than five years old. When Peter and Jocelyn Coyle bought the property it was mostly farmland. In the ensuing few years, they have renovated the house (it looks newly built), laid out the grounds, brought in mature plants like the enormous *Dracaena draco* that features on their folder, propagated plants for sale in the large greenhouse and generally created spaces and plantings that feel as if they have been there for half a lifetime. Much of the garden is planted in dry subtropicals – agaves, aloes, beaucarneas, cacti, dracaenas and yuccas with underplantings of succulents and bromeliads. Palms, cycads and many other species provide a contrast.

Peter grew some of the largest specimens in the garden from small plants and seedlings (they are now some twenty years old), successfully transplanting them to their new home. The lawns and plantings are immaculately kept and new and interesting species are added to the existing plantings.

At the bottom of the garden are not fairies, but the hulk of the former HMNZS Hawera, beached there in the mud amongst the mangroves. Built in 1912, the Navy requisitioned the ship in 1939 on the outbreak of war. A previous owner had the wreck burned for safety but, as a result, created a wonderful, enormous sculpture.

The opinions expressed in letters or articles in this magazine are the authors' own views and do not necessarily express the policy of the Subtropicals Society.

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FRAGRANT FLAVOURS - LIMES IN THE GARDEN

Nick Miller

In an earlier article - The Cool Subtropics/part four (Vol.2, No.2/23) - I mentioned that 'the Kusiae lime fruits very freely for the size of the tree and the limes it produces seem as good as any other - very useful for flavouring drinks and for culinary purposes.' This was written about a tree on Flying Dragon rootstock that had been in our garden for a little over a year. Now that this tree is about 6 months older and has gone through its second fruiting season, I feel that I can comment further.

The tree (really a shrub) is now 70cm high and has a maximum diameter of 80cm. From April to October, it has yielded between 40 and 50 fruits. These fruits, small and bright yellow when ripe, yield much more juice than the supermarket limes we usually buy and are more flavourful and fragrant. Considering the cost of imported limes, it has half paid for itself in less than two years. The fruits last well on the tree, without becoming dry. They have been very useful in drinks: the zest (grated rind) and juice of half a lime in Classic Dry lemonade make a very refreshing tippie that, of course, can be supplemented with rum or other alcoholic additives. They are also wonderful in marinades, fish dishes and stir-frys. I would imagine that a lime pudding would also be a fine thing to try. Buy a citrus zester - available at good kitchen shops. Ours looks like a stainless steel Surform tool and works very well.

I could find nothing about the Kusiae lime in our gardening books, so I turned to the internet. I came across an interesting website, 'Fruit of Warm Climates' (<http://www.hort.purdue.edu/newcrop/morton/>) and found out that the Kusiae is a form of the Rangpur lime (*Citrus X limonia*). The Rangpur may not be a true lime at all, being regarded as a probable lemon X mandarin orange hybrid originating in India. To quote from the website:

"Kusiae or kusiae lime is presumably a form of the Rangpur though it is even more limelike in aroma. It is believed to have evolved in India where virtually identical fruits are called *nasaran* and *nemu tenga*. Hawaiians believe that early Spanish settlers planted it on Kusiae or Strongs Island, in the Caroline Islands of Micronesia. In 1885, Henry Swinton introduced it into Hawaii where it was described and pictured by Gerrit Wilder in 1911. Budwood was taken from Wilder's garden in Honolulu to the Citrus Experiment Station at Riverside, California, in 1914."

It may grow well in Micronesia, Hawaii or California but it also seems quite happy at cool Lake Rotoiti. **(Continued on page 12)**

HELICONIAS FOR MILD CLIMATES

Russell Fransham

Heliconias have always seemed to be one of those unattainable tropical families that were out of the question for New Zealand, but there are at least six types (so far) growing well here outdoors. In the future, probably more species will be found that will thrive in our conditions.

The hardiest species come either from the northern and southern edges of their natural range in Central and South America, or from higher altitudes in the Andes. Evergreen perennials, heliconias (Heliconiaceae), strelitzias (Strelitziaceae) and bananas (Musaceae) are sub-families of the larger banana family. They grow in the same rhizomatous way as the related cannas and gingers. All require frost-free, sheltered and warm conditions.

Dappled light is best but they will grow well in full sun with some protection through the midday hours. Soils need to be quite rich, well loosened and permanently slightly damp. This can be achieved by a mulch of some kind but could also be brought about by planting an understorey groundcover that will shade the roots and preserve soil moisture, as well as covering up the rather leggy stalks of the heliconias below foliage level. There are many possible candidates that will achieve this effect. I could suggest *Ajuga* "Jungle Giant", *Viola tasmanica*, *Coprosma acerosa* "Hawera" or *Colocasia fallax* (dwarf Taro), but whatever is used, it needs to provide good coverage and foliage contrast without becoming too competitive or tall.

Heliconias originate from jungle margin conditions that seldom experience wind so they are spectacularly unsuited to a windy situation. Similarly to bananas, the leaves shred easily and can also suffer from windburn.

Flowering continues throughout the warm months and is only stopped by the cold. With many varieties, the stronger stems from the previous autumn will flower from October onwards in the spring.

The clumps can look tatty unless regularly groomed. Every couple of months remove all the brown ragged leaves and oldest stems just as you would with cannas. Propagation is by division in spring.

- ***Heliconia subulata***, from the Peruvian Andes, stands about 1.8m to 2.5m high with scarlet bracts and yellow florets and is the commonest type here to date. In suitable growing conditions (photo page 9), a strong clump can reach three metres in height and breadth.

- ***H. spissa*** (sometimes encountered as ***H. spica***) is from Mexico and Belize and has unusually divided leaf-blades. These create a striking textural effect, complementing the tall, velvety cerise and cream flower spikes. The plants stand about 1.5 to 2 metres tall, depending on the growing conditions, but are usually shorter than *H. subulata*.
- ***H. schiedeana*** (or ***H. latispatha*** - again two names for the same plant) from Mexico is a statuesque 2m tall with heavier, glossy foliage and a 30cm upright crimson inflorescence with the red extending down the stem as well. (Musoid)
- ***H. aurantiaca*** is a shorter plant with three to five angular golden orange bracts and narrower leaves than the others. In contrast, *H. spica* and *H. schiedeana* have eight to twelve bracts. (Zingiberoid)
- ***H. pendula*** does well here and has a pendulous dark red flower spike where the stem zigzags between each bract. This one is prone to wind damage, needing perfect shelter to look its best.
- ***H. stricta*** "**Dwarf Jamaican Red**" is very new here. Growing only to about 50cm high, with a short, upright, dark red, lobster-claw type flower consisting of only three or four bracts, it makes a great tub plant for the deck. The leaves have a reddish midrib and margin.

I should emphasise that the ultimate heights of these plants can vary a great deal depending on the soil quality, shade and shelter provided.

There are many other heliconia species and hybrids here, but these are definitely hothouse plants and are jealously guarded by their owners who grow them for commercial flower production.

Photos: Clockwise from top left.

Top left: *Heliconia subulata* showing the bold flower and leaf form that make it such a striking sight in the garden..

Top right: A vigorous clump of *H. subulata*, growing in deep volcanic soil in Kevin Kilsby's garden. The highest blooms are level with the peak of the studio roof and probably about three metres high.

Bottom right: *H. aurantiaca*, with narrower leaves and orange and yellow inflorescence, a change from the other red bracted species.

Bottom middle: *H. pendula*, at present the only known hanging heliconia growing outdoors in New Zealand.

Bottom left: A handsome example of *H. spissa*, growing in Russell Fransham's garden and looking very tropical.





Abutilon insigne

Rosemary Steele

Some years ago a friend brought me a cutting of a plant she thought I might like, even though she didn't know what it was. It had extremely handsome cordate leaves and I was delighted to grow it for the foliage alone. Later, when it flowered, I was able to identify it as *Abutilon insigne*. The flowers are beautiful and hang on slender pedicels. They are an open bell shape, white or pale pink with dark red-purple veins. The petals have quite a thick texture and always make me think of some enamelled art nouveau jewel or Tiffany glass.

A. insigne is described by both the RHS 'Dictionary of Gardening' and Phillips and Rix's 'Conservatory and Indoor Plants' as being a shrub to 1.2m. For us it grows as a scandent climber, sprawling over everything in its path, and has reached many times 1.2m! I have seen it trained up a tree and controlled by pruning, and even then it grew more. Originating in Colombia and Venezuela, it is supposed to be tolerant to 0°C, but I suspect it may withstand some frost.

THE SANDPAPER VINE – *Petrea volubilis*

Robin Booth

Petrea volubilis is the most important garden species of more than thirty other species of the genus. This climber belongs to the Verbena family and comes from Mexico and Central America. It was named after Lord Robert James Petrie (1713-1743), an impassioned horticulturist who developed Thorndon Park in Essex, the United Kingdom. The common name alludes to the sandpapery feel of the leaves, which are hard and rough when they are mature. Another common name is 'Purple Wreath' because of the wreath-like sprays of purple flowers.

Growing in its natural woodland areas as a climber, it can reach 12 metres in height, but it doesn't grow this big in New Zealand. Some references say that it is a vigorous grower, but I find it has only medium vigour, probably because it is a bit cool for it here in Kerikeri.

Photos:

Top: *Abutilon insigne*

Grant Bayley

Bottom: *Petrea volubilis* photographed in Remuera in November. A splendid sight, it covers the trellised pergola on the deck above the garage. Although a slow starter, it is now 6m high with nothing else to climb on. The inset shows, not clearly, the inner petals that drop quite quickly, leaving the long lasting bracts in colour.

Try a plant in a hanging basket also. You can get a lovely weeping effect by training the branches.

If it has nothing to climb on, it tends to grow as a bushy shrub, which can be trimmed back to make it the right size for your position. Tying the climbing stem up a stake until the required height is reached, then pruning the growing tips to make them branch can make it into a standard very easily

Petreas are tolerant of a range of soils from quite moist to dry (once established). Frost-free sites are best but light frosts will only cause minor damage. It will grow in coastal conditions but give it some protection.

Flowering starts in early spring and can carry on until the autumn. The flowers are very spectacular and appear on racemes up to 30cm long. It is mostly the purple-blue calyx of each flower that is noticed, as the blue flower itself is quite small and lasts only a few days before it drops. The calyces persist for quite a long time, gradually fading to grey before they drop. There is a cultivar called Albiflora that is nearly white but I haven't seen it available in this country.

The Indians of the Amazon, Guyana and Brazil used the sap for the treatment of burns, wounds and abscesses.

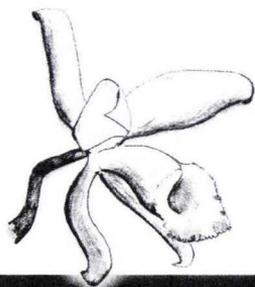
Propagation is by cuttings, air layering and sometimes root cuttings. I haven't seen seed in New Zealand. The plants generally have no pests and diseases, although sometimes aphids can congregate on new growths.

Not many plants give such wonderful blue/purple colours in the garden over such a long time. As it is so easy to control, why not try one in your little corner of this world. I think you will love it.

(Continued from page 6)

In an effort to extend the lime season, I have now planted a 'Bearss' lime, also on 'Flying Dragon' stock. According to the website quoted above, this is a form of the Tahiti lime (*Citrus latifolia*) and may not differ significantly from it. Supposedly it bears most of its fruit in summer and autumn. Time will tell.

If you have only a limited area of warm, sunny garden space, but would like a small-growing, attractive evergreen shrub, with fragrant flowers and extremely useful high-value fruit, then consider a dwarf lime. Our tree gives us as much pleasure as anything in the garden. Every subtropical garden should have one. And plant it within easy reach of the kitchen!



Laelia purpurata

in flower for Christmas

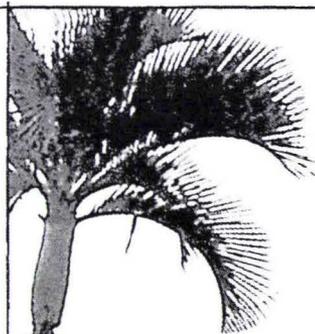
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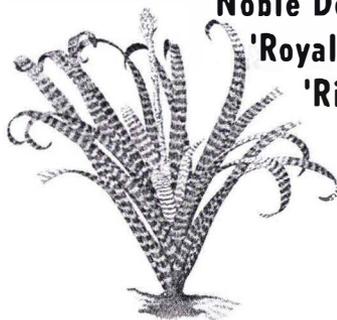
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Amorphophallus konjac

Voodoo Lily

Brian Timms

Lovers of the truly bizarre, look no further! There are about 180 species of *amorphophallus* from South-East Asia, the Pacific Islands and Africa. Most of these are too tropical to be grown in New Zealand, except perhaps in hothouses. The most famous is, of course, the gigantic and grotesque, *A. titanum*, from Sumatra, with *A. paeoniifolius* from a wide area of southern Asia, a close second. Few *amorphophallus* species are available in this country with *A. konjac* (also sold as *A. rivieri*) and *A. henryii* being the only ones that I have seen for sale.

A. konjac hails from southern China and Vietnam, so creeps into being subtropical. *A. konjac* needs to be dry in winter. All *amorphophallus* are herbaceous and lurk underground as tubers in the cooler weather. In Auckland, they appear about late September or early October.

Each tuber will only produce one leaf per season but, in the case of *A. konjac*, this has a smooth dull pink-white petiole, marbled with dark green and spotted white. It is up to 1 metre high, while the leaf may be up to 2m across and is very deeply dissected with many pointed leaflets. As the tuber will also put out a number of offsets which all end in smaller tubers, each of which will also put up a (rather smaller) leaf, the effect is of a small grove of these absolutely stunning, huge leaves.

But this spring I got a bonus. In mid-September a spike appeared in the *A. konjac* corner and I thought, 'That's an early leaf' and waited. It grew fairly rapidly at first and kept growing, and kept growing, until I suddenly realised that I had a flower on the way. After some weeks, the spadix (spike of minute flowers) pushed through the spathe (sheathing bract) but, as the spathe was slightly torn and unopened, I thought at first that the spadix itself would open, and waited and waited, until I suddenly realised what I was seeing. The spadix kept on growing until the whole thing reached about 1.5 metres, then the spathe slowly opened and everything was revealed in its rather repulsive glory.

About the same time, the spadix (now about 40cm long) started to smell extremely badly, luckily for us mostly during the day when the sun was on it and we were at work! The spathe was erect, funnel-shaped, about 30cm long and 20cm wide and dull brown with darker spots and wavy margins. The spadix was a dull, rather nasty red-brown. A close inspection (strong stomach required) showed a whitish zone of tiny bumps on the stem below the liver-coloured smelly bit and, below this, a series of rows of tiny, presumably female florets, all waiting for the flies which hovered around. Fortunately it was a bit early in the season for there to be many flies. After about five days the smell stopped and the spadix began to collapse, which process continues as I write, in early November. So it has all been a drama of some duration.

Now I have to hope that the tuber under the soil, which can get to 30-

40cm across, will not rot in the continuing wet weather. However, since it has survived the winter so far, I'm sure it will be all right.

In China, Japan and Vietnam, *A. konjac* has been cultivated for so long that it is no longer possible to tell escapes from wild populations. The tubers are harvested for domestic use at a year old. They are washed, peeled, sliced or grated, rinsed several times, then boiled. The starch is then dried and sieved to be used as flour. There are a number of other ways of preparing the tubers for eating as a vegetable. They are also harvested at a larger size for the commercial preparation of a variety of dietary aids, based on the fact that the starch grains from *A. konjac* are very large, absorbing a lot of water, so are easier on the stomach than starches from many other grains. *Amorphophallus* have great potential as a food source in tropical and subtropical countries. However, as usual, forest destruction is rapidly exterminating potentially useful (and interesting!) species faster than research can be done on them.

ONCIDIUMS

Jason Young

Dancing Ladies

Oncidium orchids are natives of tropical and subtropical America and are mostly epiphytes. There are about 400 species, with a few being popular in cultivation. These orchids can be divided into three categories - cool, intermediate and warm growers. The flowers, which vary in size from minute to 7.5-10cm, have large lips like swirling, yellow ballet skirts. Many flowers are produced in great numbers on long spikes, some of which branch and flower again after the first flush is over.

Nearly all oncidiums grow well in close quarters or will adapt to most gardens in the right positions. They need filtered light (shady with no direct sun) and frost-free areas. The potting medium can vary from pine bark mixes to sphagnum moss. The types that prefer drier conditions thrive on tree fern logs. To grow these successfully in the garden, it is best to attach them to a mount first, then strap it to a tree or ponga using fishing nylon.

Plenty of misting and regular watering are needed in summer. Liquid feed occasionally (at half strength) as this will encourage growth and keep the plant healthy - liquid Nitrosol, fish or seaweed fertiliser and Phostrogen are all suitable.

Oncidiums don't suffer from many pests and diseases. Occasionally odd aphids appear on the flowers and sometimes mites will be on the undersides of the leaves. To prevent these from becoming infestations, it is best to spray regularly with something like Super Shield.

Photo: *Oncidium* Sum Lai Wah, growing on a ponga stump at Tuakau. The long stems were flowering profusely on the 1st May this year.





BROMELIADS IN THE SUN

Marjorie Lowe

There seems to be a bromeliad for almost any kind of habitat. From the deep shade found on the rainforest floor to the searing sun experienced by desert cacti epiphytes; from tidal waters where bromeliads grow on mangroves to the high Andes where the days can be very hot and the nights extremely cold. So it is hardly surprising that there is a large variety of species able to withstand all day sun, or sun for much of the day.

Photos: clockwise from top left

Tillandsia capitata - native to Mexico and Cuba where it grows on exposed cliffs, rocks and tree roots in full light. Drainage must be perfect. Under the eaves on a sunny wall should protect the plant from excessive rainfall in winter and spring.

Billbergia Muriel Waterman - in 1946 this billbergia was named after the pioneer of bromeliad cultivation in New Zealand. Strong light and hard growing brings out the rich plum/purple colour and vivid silver-grey bands on the leaves. It is cold sensitive so needs a warm, protected spot outdoors.

Neoregelia concentrica cultivar - there are so many named and unnamed *N. concentrica* cultivars that it has become difficult to identify the true species. A strong, sturdy plant, it is frost tender. The colour in the centre can vary very considerably in depth - from deep mauve to dark purple.

Neoregelia hybrid - These attractive bromeliads can only be identified as neoregelia hybrids. Wonderfully colourful, they were photographed in full sun, growing at Snell's Beach. Strongly coloured plants like this need to be acquired when you can see what they will look like.

Aechmea ramosa - an epiphyte that can be a medium to large plant depending on growing conditions. It will grow in shade to sun for much of the day. The inflorescence stays in colour for months. Red bracts accompany the yellow berries, of which there are so many that the weight of them can make the stem almost horizontal.

Ananas bracteatus striatus - a striking form of pineapple that is said to be very edible. A terrestrial with a strong rooting system, it needs as much warmth and sun as can be provided.

Not surprisingly, many of these are terrestrials or lithophytes (growing on rocks). Many of the latter grow in full sun on cliff faces and rock formations where the absorbed and reflected sunlight keeps humidity to very low levels during daylight hours and they have adapted to these conditions. High temperatures and low air humidity can cause leaf 'scald' or burn to plants not so adapted, but the same temperatures accompanied by high humidity will not.

This is a problem in southern coastal Queensland, especially with aechmeas, billbergias, and neoregelias, in December, January and February. Often, all that is needed to cause severe plant damage is several hours on one day of these adverse weather conditions. Northern and coastal New Zealand usually have high humidity all year round, so this kind of weather does not often occur.

Problems with sun damage here are, usually, either because the wrong species has been used or because a suitable species has been grown under shady conditions and/or (commonly with commercial growers), forced for quick returns. It is preferable to deal with bromeliad growers whose stock is already hardened off – they will also be able to tell you which plants are sun hardy. Failing this, treat all plants with suspicion and acclimatise them to more sun slowly, starting from mid to late autumn.

As a very rough rule of thumb:

1. Stiffer and stouter leafed plants stand more sun than thin, soft leaves.
2. Dark leafed neoregelias usually need sun.
3. Red leafed aechmeas need sun if the leaves are thick and tough and shade if the leaves are thin (e.g. *Aechmea* Fosters Favorite).
4. Terrestrial and lithophytic bromeliads will usually stand full sun.

There are, of course, not only exceptions to this but there some bromeliads that will grow in both sun and shade.

Even if you have planted a suitable bromeliad in full sun, if there are plants nearby, in a relatively short time your bromeliads can be over-shadowed. The leaves will lengthen and usually green up. The solution is, either prune the overhanging foliage back, or move the plants to a sunnier spot, taking care to acclimatise the plants slowly or you will have leaf damage (in other words – sunburn!) Placing them in optimum conditions will bring out best colouring and form. Although exposed to full sun, bromeliads growing high up in trees, in clearings and at the outer edges of rainforests have the advantage of higher humidity and rainfall.

Some suggestion for the more exposed positions are:

TERRESTRIALS:

Suitable species of *Ananas*, *Bromelia*, *Dyckia* (Vol.2, No.1/10), *Fascicularia*, *Hechtia*, *Ochagavia* (Vol.1. No.4/36), *Orthophytum gurkenii*, some *Pitcairnia*s, *Puya* and some *Quesnelias*. *Ananas*, *Bromelia* and *Pitcairnia* - all have well-developed root systems and so need careful placement.

EPIPHYTES AND LITHOPHYTES

Aechmea - *blanchetiana* (a large plant), *caudata* and *caudata variegata* (stands part shade also), *coelestis*, *comata*, *cylindrata*, *distichantha* (four varieties), *gamosepala*, *nudicaulis* (varieties and cultivars), *phanerophlebia*, *pineliana*, *recurvata* (varieties and cultivars), *triangularis*, *triticina*.

Alcantarea: *imperialis*, *regina*, *vinicolor*

Billbergia: *nutans*, *vittata* hybrids, Muriel Waterman

Canistrum *Leopardinum*

Neoregelia: *ampullacea* hybrids, *concentrica* hybrids, *cruenta* (and hybrids like *Neo. cruenta x Neo. concentrica*), Fireball (and hybrids), *kautskyi*, *olens* (and hybrids), *pascoaliana*, *spectabilis*, *zonata*

Neoregelia cultivars: Apricot Beauty, Barbarian, Bea Hansen, Beefsteak, Black Knight, Black Tip, Deep Regard, Grande 'Fantastic Gardens', Hearts Blood, Hojo Rojo, Manoa Beauty, Morris Henry Hobbs, Noble Descent, Radiant, Red Gold, Rio Red, Rosatina, Royal Flush, Royal Robe, Sharlock, Sheer Joy, Suntan, Takemure Grande, Takemura Princes, Vulkan (

Portea *petropolitana*

Quesnelia *arvensis*

Tillandsia: *fasciculata*, *punctulata*, *somnians*, *stricta*, *xerographica*

Ursulaea: *macvaughii*, *tuitensis*

Vriesea: *fosteriana* (and many hybrids), *gigantea* (and many hybrids)

Wittrockia *cyathiformis*

Not as tough but still tolerant:

Acanthostachys strobilacea

Aechmea mariae-reginae, *mexicana*, *ramosa* (illustrated)

Hohenbergia correia-araujoi

Neoregelia chlorosticta

Portea leptantha

Tillandsias bulbosa, *crocata*, *cyanea*, *ionantha*, *lindenii*, *neglecta*

Vrieseas friburgensis, *phillipocoburgii*, *rodigisiana*

The above are just a few from the sun tolerant types. One has to remember that the same bromeliad, grown under different light and sun conditions, can appear to be completely different plants. The clarity of our light and the ultra violet radiation mean that full sun in the bromeliad's habitat does not always translate to full sun here.

BOOK REVIEW

TROPICAL FOLLAGE PLANTS

By Kirsten Albrecht Llamas

Reviewer: Nick Miller

The tropical plant enthusiast has been poorly served by authors and publishers for many years, compared to those who love roses, rhododendrons or rock gardens. Perhaps this reflects the fact, that for many years, the main publishers of good horticultural and gardening books were based in Britain, where the climate does not encourage the cultivation of tropical plants except, very expensively, under glass.

However, in the twentieth century, following two disastrous world wars, tropicals faded from fashion (except in the tropics) and so did their literature. Certainly there was *Exotica* and *Tropica* (both by A B Graf). But these days, useful as these very heavy books were, the standard of illustration just does not meet our expectations. Then came *Tropical and Subtropical Gardening* by Harry Oakman. Again, the illustrations are outdated. Also from Australia, various volumes by Stirling Macoboy are good, as is *Cultivated Plants of the World* by Don Ellison. Closer to home, *The Subtropical Garden* by Jacqueline Walker and Gil Hanley is useful, but restricted in scope. More recently, *The Tropical Look* by Robert Lee Riffle is also very valuable, but with a limited number of illustrations.

Now comes *Tropical Flowering Plants* and we have a new 'bible'. This handsomely produced and illustrated work of over 420 pages seems likely to become a major reference for many years to come. Kirsten Llamas has a master's degree in tropical botany and is a long-time member of the Tropical Flowering Tree Society. She is based in South Florida, consulting to a number of tropical botanic gardens, and has achieved much respect and recognition for her plant photography. She certainly has the credentials to write a book such as this one.

Although it may not seem important to many gardeners, the taxonomic treatment used in this book is thoroughly up to date, which will hopefully cut down on confusion in the future. Now, if only our nurserymen will follow it ...

The plant descriptions are arranged alphabetically by family, then genus, then species. This may mean that finding a particular genus may require referring to the index. However, the result is that readers will quickly start to realise what plant family any particular genus belongs to, and what its close relatives are.

An initial scan through this book reveals many plants that New Zealand readers will not regard as tropical. On reading the preface, it becomes apparent that the criterion for being included in the volume is

the ability to thrive in Zone 9 (with average low temperatures between 20-30°F or minus 7 to minus 1°C) or higher. This means that a number of the plants that have been included will grow in many areas of New Zealand. Special attention has been paid to woody plants.

A particular frustration in reading through this book is the repeated experience of encountering wonderful plants that we will probably never be able to obtain, thanks to the absurdly bureaucratic and money-grubbing biosecurity regulations that are now in place. However, I can hardly condemn this fine volume on that account!

Getting down to specifics:

The introduction to each plant family (there are over one hundred and twenty listed) is brief but useful, detailing the main characteristics, number of genera, uses, etc. The introduction for each genus is similar. Each species (some hybrids are also listed) is described, and comprehensive cultural directions are given, together with any information of special interest. The photographs are uniformly excellent, not large (usually about 4cm x 6cm - some are much larger) but very well reproduced, well suited to identifying plants from. They average about five per page and there are 1500 of them.

So what faults can be found?

There are certain genera that could have been given much fuller treatment. For example, *Begonia* (one species and a few hybrids), *Hoya* (three species) and *Cordylina* (one species). It might have been better to have devoted more space to genera, which do not have an extensive literature, than to such groups as bromeliads (eleven pages) or orchids (eight pages) for which there is a huge array of specialist books. The family Ericaceae only gets a brief mention (on vireyas) and the many exciting tropical members, such as *Dimorphanthera*, are ignored. It would have been nice to read of the tropical Pacific species of *Metrosideros*, but our pohutukawa is the only species mentioned.

However, for many genera this will be an invaluable reference. For example, five pages are devoted to *Heliconia* and the ginger family (Zingiberaceae) gets twelve pages. *Jacaranda* is well treated (it appears there may be better species than *J. mimosifolia* for the wet climate of northern New Zealand), as are *Bauhinia*, *Dombeya*, *Tibouchina*, *Brunfelsia* and a whole host of other plants that grow well in New Zealand, about which good information has been lacking until now.

There are some useful appendices - on invasive and potentially invasive species (pay close attention to this list), rare and endangered species (often being in cultivation is their best chance of survival), plants for coastal areas and those for dry areas. There is an excellent glossary, a good bibliography and a list of interesting web sites.

This book will fill a large gap in the garden literature. It deserves being read through slowly and thoroughly. When you have done so, you will have a much greater appreciation of the floral wonders of the warmer

parts of the earth. It is not cheap, but for what you get the price is reasonable, especially considering what you can pay for horticultural 'pot-boilers'. It would make an excellent and much-cherished Christmas present. Let us hope that the author is also working on a companion volume – **Tropical Foliage Plants**.

Tropical Flowering Plants: A Guide to Identification and Cultivation Text and Photography by Kirsten Albrecht Llamas
Timber Press. ISBN 0-88192-585-3
Available from Touchwood Books \$129.95 plus \$5 00 p&p.

With the number of plants included from cooler areas, the title of the book should perhaps have been Flowering Plants for the Tropics. This, of course, is an advantage for those New Zealand gardeners living in cool and chilly Zone 9 and struggling to create a subtropical garden. If the author is correct in suggesting Zones 9-11 for *Heliconia rostrata*, living as I do in Zone 10b, growing this particular species should be a breeze. Has anyone tried growing it outdoors yet?

As a gardener who grows only evergreen species, I particularly appreciate the dormancy information on bulbs. For years I have been irritated by plant books telling me that crinums are evergreen and deciduous, but then not informing me which ones were which.

At this stage, I have been too busy to work my way systematically through the book, but am intending to do so over the holidays. Already I have found the succinct cultural notes very useful. Of course I would like more in some areas and less in others, but that is always the way. I suspect the book will become tattered from frequent use. **Editor**

Average annual minimum temperature

ZONE	CELSIUS	FAHRENHEIT
9a	-3.9° to - 6.6°	20° to 25°
9b	-1.2° to - 3.8°	25° to 30°
10a	-1.1° to 1.6°	30° to 35°
10b	1.7° to 4.4°	35° to 40°
11a	4.5° to 7.2°	40° to 45°
11b	7.3° to 10°	45° to 50°
12	10° to 15.5°	50° to 60°
13	15.6° to 21.1°	60° to 70°
14	21.2° to 26.6°	70° to 80°

• The above chart is based on the US Department of Agriculture Hardiness Zones, but with Zone 11 divided into two and the addition of three further zones (12, 13 and 14) to cover the warm subtropical and tropical areas of the world.

QUESTIONS & ANSWERS

Q...Can you help? **Bangkok Rose** - neither a rose nor even a *Rosa* species. Seen growing in Cairns, but not in any of my Queensland or Australian plant books. I think the common name is rather like that of some of the so-called 'lilies', which are not botanically anywhere near *Lilium*. It could be a member of Malvaceae but I don't remember a pistil such as those flowers have.

The plant was 90-120cm tall and the flower was like a double hibiscus and pink, although colour is not always a reliable guide. I know the difficulties of trying to identify something!

Joan A. Swinbourn - Tauranga

A...Not recognising it by its common name, we then turned to books and Rosemary Steele turned up trumps. *Cultivated Plants of the World* by Don Ellison (Queensland) has an index of common names, which included Bangkok Rose. It turns out to be *Mussaenda erythrophylla* 'Donna Luz', described as having '...large clusters of deep apricot (!) coloured flower bracts', Rubiaceae. *Mussaendas* are described in this book as 'growing in climates from temperate to tropical, although most prefer the warmer temperatures'.

There is also a photograph of this plant in *Tropical Flowering Plants* by Kirsten Albrecht Llamas but with no common name, which may possibly be an Australian appellation. *Mussaenda erythrophylla* (Africa) '...a probable parent of the pink-flowered hybrid *mussaenda*' '...older hybrids were made in the Philippines and Southeast Asia. They were named for well-known women of the region'.

Zones 10-11, blooms in the warm months.

If this is the correct identification, then unless this plant is already in the country, the chances of obtaining one are virtually non-existent. Zone 10 occurs here in pockets, so it could be possible to grow it in a warm corner.

Second query from Mrs. Swinbourn:

Further to my recent request for identification of a plant bought somewhere in the north as *Dietes robinsoniana*. The plant is now flowering and is an *Aristea*, probably *thyrsiflora*. I have identified it from *South African Wildflowers for the Garden* by Sima Eliovson. (?1973 edition) There is no illustration or botanical description.

A...*Aristea major* (syn. *A. thyrsiflora*) is illustrated on page 343 of *The Reader's Digest Gardeners' Encyclopaedia of Plants and Flowers* (1991 edition).

Another listing, on page 266 with photograph and short botanical description, is in *Plants for Warm Gardens* by Roger Phillips & Martyn Rix. Both these books should be in your local library.

Doryanthes palmeri

Edith McMillan

Spear Lily

Although the common name is Spear Lily, *Doryanthes palmeri*, one of the two members of this genus, belongs to the Agave family, as does our native flax. Like New Zealand flax, *D. palmeri* is an evergreen perennial but on a bigger scale. The large rosettes of dramatic, arching leaves, two metres or more in length, make a bold statement. A clump can also be at least two metres across - difficult to accommodate in a small garden.

Patience is required as it can take up to ten years to flower. The three-metre flower stalk bears an almost horizontal, long flowerhead composed of large panicles of red bracted, red-orange flowers borne in spring.

The Spear Lily is native to northern New South Wales and eastern Queensland, usually growing on cliffs and rocky hillsides in and near rainforests. Half hardy, down to 0°C, it will stand light frosts. Grow in full sun and provide humus-rich, well-drained soil, then stand back and wait.

The clumps of leaves are so handsome and bold that this plant is well worth growing as a foliage accent.

The photograph opposite was taken in mid October, on a very sunny day, in the Zoological Gardens in New Plymouth.

Bryophyllum pubescens

Grant Bayley

Bryophyllum pubescens was previously called *Kalanchoe pubescens*. Bryophyllums have pendulous flowers and are different from kalanchoes in that they normally produce plantlets on either the stems, the leaves and/or the flowerheads. All bryophyllums are native to Madagascar, whereas kalanchoes come from a wide area.

In fairly rich soil, my plants of *B. pubescens* grew well in the shade of a clump of cannas. They grew to about 60–70cm, including the flower head. Flowering is from late spring to early summer with the plantlets forming on the flower inflorescence area.

This plant does not seem as invasive or as weedy as other bryophyllums in my environment as the flower head/plantlets are easily pruned to keep the plant tidy.

Photos: Grant Bayley





BEUCARNEAS AS GARDEN PLANTS

Brian Timms

There seems to be some problem with the name of the genus that these plants belong to, with some people insisting that all or some of them should be called *Nolina*. No, they are all *Beaucarnea* and most of us are unlikely to come across a *Nolina* in New Zealand.

The plant in the photo is *Beaucarnea stricta* and we may also encounter *B. recurvata* or *B. guatemalensis* locally. The common factors of this genus are the massive globose or conical base, the deeply textured corky bark and the trunk or trunks, eventually breaking into branches, with their distinctive heads of long, tough, tapered, drooping, dull green leaves. They all need good drainage, plenty of water and will take full sun or some light shade. Flowers are small but come in large dramatic panicles rather like those of cabbage trees.

B. recurvata is far and away the most common species in cultivation and, as the ubiquitous 'Ponytail Palm', is available in every nursery or garden centre. In Auckland's climate it grows very well and quite quickly. Old plants with bases a couple of metres across and trunks 4 or 5 metres high are not unknown. *B. recurvata* is sort of intermediate between the other two species, with leaves up to 1.5m long but generally about half this length. It usually has several trunks of different sizes, as well as a number of buds around the base which don't ever seem to come to anything. Interestingly, I saw a number of very large, old plants at the Adelaide Botanic Gardens that only had one trunk that branched massively about 2 metres up into a very wide canopy of heads. *B. recurvata* is somewhat variable; for instance I have one that is not particularly good as it sheds its leaves a little too soon and never quite looks as elegant as it could. But it is large and grows well and I'm not going to get rid of it! However some have maroon new leaves (soon fading to green) and it pays to have a good look at a group of young plants should you be thinking about buying one.

B. guatemalensis is being imported, as more or less large plants which have been grown in the ground in Central America and apparently trimmed by either blind or mad people with machetes, and shipped in containers to our fair shores, and presumably to many other shores as well. Here they are rerooted in pots and are often rather pleasing shapes as a result of their misadventures. I found one at Pots 'n' Planters that was a perfect bonsai and have planted it in a medium sized bowl where it will stay for many years. It is quite small and squat with several heads and has beautiful long, thin, drooping leaves, which are a rather pale maroon when they first grow out. Another that I have in the garden has

very long leaves that spiral gracefully as they droop to the ground. It is growing very quickly. To the layman, only the very long leaves distinguish it from *B. recurvata* and I must take the seller's word for it that they are different species; they certainly look different.

B. stricta is much less common, and I know of very few. The leaves are much shorter and stiffer than *B. recurvata*, and the trunk and base tend to be more deeply and geometrically patterned. In my experience, it is also a much slower grower than the others. A friend of mine has tried to grow them for sale, treating them like cacti (i.e. very dry), but has had little success. Another friend, who has seen them in Mexico, says that they have lichen on the trunks in the wild. The indications are, then, that they need rather more moisture than one might imagine, rather like *Aloe polyphylla* that will struggle in very dry conditions. Certainly my *B. stricta* is in a damper and less well-drained situation than the other beaucarneas. Whatever you do, don't plant them in a hole in the clay!

The only *Nolina* I have ever seen to my certain knowledge is *Nolina longifolia*, a rare beauty with a less thick and succulent trunk and very long, shiny and lethally knife-edged leaves. I could not give it enough drainage and it resented our recent very wet winters. I finally gave the poor half-dead thing to a friend, with no guarantees, and when I saw it recently it was just starting to put out some new shoots, in a large pot in full sun. I'd rather have such a rarity alive where I can visit it than dead at my place. If you find one, congratulations! Full sun, maximum drainage and watch those cutty-grass leaves! It will slowly grow into a large and very spectacular tree.

WHAT'S ON

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The festival will be held on Saturday and Sunday
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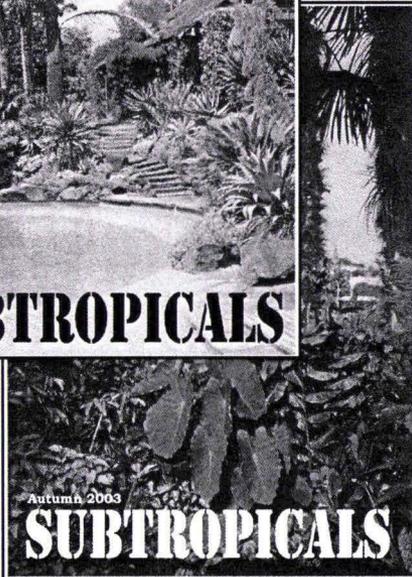
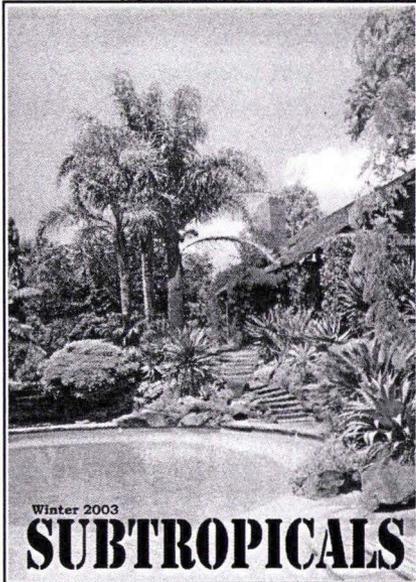
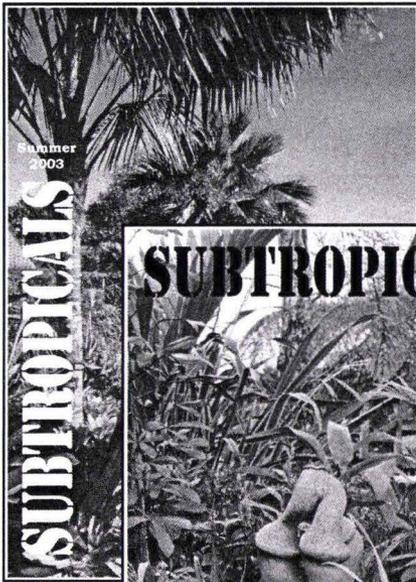
Two are country gardens suitable for picnics

Tickets are \$25 for the weekend, available from December 1st
www.heroicgardens.org.nz

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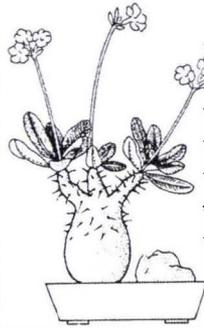
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Hatiora gaertneri

(Syn. *Rhipsalidopsis gaertneri*)

Grant Bayley

Known in the Northern Hemisphere as the Easter Cactus, this evergreen perennial is still often found for sale under its old name of *rhipsalidopsis* and sometimes even as *zygocactus*, an invalid name.

Hatiora gaertneri is one of two species from southeastern Brazil where it grows epiphytically on trees and rocks. A pendulous plant, it is much branched and spreading, the older stems becoming woody and thickened with age. The 'leaves' or pads are modified stems (like other cacti) and have hairs or soft bristles in the growing area of each pad. This characteristic helps to distinguish them from the *schlumbergeras*, close relatives.

Flowering is in late spring/early summer with masses of bright orangey/red blooms, which each usually last for over ten days – longer than most other cacti. The flowers are open trumpets and several may be grouped at the end of the stems. *Schlumbergeras*, with which they are often confused, usually have only one hose-in-hose flower at each tip and are winter flowering.

QUESTIONS & ANSWERS

Q...We have a raised bed along the rear of our property. It is southeast facing and gets sun in summer, but a fair bit of shade from the house in winter. Being in Point Chevalier, it also tends to be quite windy. We have had several large *Eugenia* trees removed and are now looking for ideas for a subtropical planting.

The raised bed is about seven metres by two metres and has a timber retaining wall about 80cm high. We need privacy from nearby houses and a site in the street behind us that will one day be built on. We are on a half site.

The rest of the garden has bromeliads (about two hundred and fifty or more), tree ferns and a Port Wine Magnolia hedge. We like the idea of some giant *strelitzias* – where would we get them of a good size? Any suggestions for planting this area gratefully received.
Catherine Lee – Auckland

The answer needs more space than available this issue so, having checked out the site, it will be in the autumn magazine. Suggestions from members welcome – remember that southwesterly wind.

Hattoras prefer drier conditions than *Nopalxochia phyllanthoides* (refer Vol.2, No.3/29) or *Schlumbergera truncata* (refer Vol. 1, No.2/34 and 4/42) but will tolerate fairly extreme conditions. They are frost tender to 5°C, requiring partial shade and rich, well-drained soil if grown in the ground.

Summer water may be needed in dry areas but the plants should be allowed to dry out between waterings. In winter they need only a little moisture to prevent dehydration. *H. gaertneri* makes an excellent subject for a hanging basket – see photo opposite.

The popular 'Rhipsalidopsis' (!) range of hybrids available at garden centres has been created from *H. gaertneri* and *H. rosea* (pink flowers). This has extended the range of colours available.

Haemanthus coccineus

(Blood Lily, March-flower, April-fool)

A member of the Amaryllidaceae family, *Haemanthus coccineus* is a large, fleshy, deciduous bulb from the winter rainfall area of the southwest Cape Province in South Africa. This plant is a little more commonly seen than the closely related *Scadoxus multiflorus* ssp. *katherinae* (Vol.2, No.1/10) from summer rainfall areas, which is winter dormant.

Summer dormant, the flower head of *H. coccineus* appears before the leaves, like a bright red paintbrush with a mottled white handle sticking out of the ground. Yellow pollen tips the brush. The young plant opposite was photographed at the beginning of March. Flowering seems to be slightly earlier here than South Africa, perhaps because we have some summer rain.

Each flower is soon followed by two large leaves, looking like tongues lying flat on the ground. These leaves can grow up to 80cm long and 30cm wide. However, the photograph opposite shows a very old clump of Blood Lilies where, because of competition, the leaves are considerably smaller. In spring the leaves die back (rather messily), leaving the ground bare during summer. Slugs and snails love these leaves, especially during the dieback period.

The bulbs are best planted with the neck half out of the soil. They resent disturbance, but if they have to be moved it should be done before growth begins with the flowers in February/March. They are best in light shade but will grow reasonably well in sun all day long. Protection from frost is needed for the leaves. Above 5-7°C is preferable.

Photos: Grant Bayley





THE GREAT PRETENDERS

(plants that look subtropical but are hardier than you expect)

Libertia grandiflora

(New Zealand Iris, Native Iris, Bush Iris, Mikoikoi)

A native perennial of lowland and hill forests in the North Island and Nelson/Marlborough, *L. grandiflora* is an adaptable plant found in damp situations that can stand some dryness. In my garden, it grows well in a garden bed that is damp in winter and dry in summer.

Although sometimes group planted, Mikoikoi is more effective when used with contrasting foliage forms. Its narrow, linear leaves make a distinctive clump of evergreen foliage that forms almost a half sphere with the lower leaves lying on the soil.

Tall flowering stems, well above the leaves, continue to appear for some weeks in spring. They carry many bright-white, three petalled flowers, which soon produce seedheads that self sow freely. The clumps expand also by rhizomatous growth.

Frost hardy to -5°C , *L. grandiflora* will stand both full and part sun and being grown in fairly windy positions.

Jonathan Voysey

Scleranthus biflorus

Another New Zealand native evergreen perennial - this time a low and dense, emerald or yellow green, mossy looking plant that forms wrinkled cushions of foliage that are very reminiscent of Sharpeis.

This scleranthus is a North Island coastal plant that grows on rocks and in crevices in the sides of cliffs. Resistant to sea air and sun, it enjoys moisture but must have sharp drainage to grow well. Fully hardy, this plant is said to survive down to -15°C .

Fungus sometimes causes parts of the cushion to turn brown and die. Remove the damaged portions and spray the whole plant with fungicide.

The photograph opposite was taken in mid spring in the walled garden at Paloma Gardens, Fordell, Wanganui. The unusual and simple planting scheme consists of an undulating groundcover of *Scleranthus biflorus* between large, lichened boulders interplanted with cycads - all *Cycas revoluta*.

BACK COVER STORY

Asplenium polyodon

Barbara Parris

Asplenium polyodon is another one of our handsome, garden-worthy New Zealand native ferns, but is far less well known in cultivation than *Asplenium bulbiferum* or even *Asplenium oblongifolium*. It is a widespread species, ranging from Madagascar to the Hawaiian Islands. In the wild it may grow on the ground, on rocks, on root masses at the base of trees or as an epiphyte, sometimes high up in forest trees and often associated with clumps of astelia and collospermum.

The fronds are slender with glossy toothed pinnae - arching on ground or rock dwelling plants and pendulous on epiphytic ones. The fronds on large, old plants may be up to two metres long.

A. polyodon has an ill-deserved reputation for being difficult to grow from spores, which may have put commercial growers off trying it and an equally undeserved reputation for being difficult to cultivate. I have had no problems at all, either with growing it from spores, or from cultivating plants (and I've had a lot of failures with spores and plants over the years!) The spores are quick to germinate, but like other members of the genus, the resulting prothalli are very slow to fertilise and produce young plants.

Free drainage is important at all stages of growth, therefore: soggy growing medium = rotted roots = death.

Ideal conditions are:

- A very free-draining medium
- Light or partial shade, which can incorporate direct sunlight for part of the day, either early to mid-morning or late afternoon.
- Preferably but not essentially, fairly high humidity.

A hanging basket suspended over a pool would be ideal, with protection from all except very light frosts. A spring application of slow release fertiliser is much appreciated as, like many asplenium species, they enjoy a good feed.

Back Cover Photo:

Grant Bayley

As evocative of the holiday season as scenes of blue skies and water, bush scenes bring back memories of Christmas tramping trips. This shot was taken very close to sea and surf - on the track leading to the falls at Piha - *Asplenium polyodon* growing on a nikau.

SUMMER COMPETITION

No entries were received for the spring competition, so the prize will jackpot to:

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TROPICAL FLOWERING PLANTS

by

KIRSTEN ALBRECHT LLAMAS

Entries close on the 31st January, 2004. Send your article, paragraph snippet or photograph to Competition, PO Box 91-728, Auckland 1030.

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PLANT SOURCES for this issue

Abutilon insigne – Nestlebrae Exotics, Helensville. (Photo p. 11)

Amorphophallus konjac – Caves Tree Nursery, Hamilton.

Asplenium polyodon – Oratia Native Plant Nursery, Auckland, Fronds, Cambridge-Te Awamutu Road.

Beaucarnea stricta – Landsendt, Auckland, Caves Tree Nursery, Hamilton. Arbours, Clive, Hawkes Bay.

Bryophyllum pubescens – have been unable to find anyone retailing this plant, but a member is willing to propagate some. Ph. (09) 376-6874.

Chiranthodendron pentadactylon – Wharepuke, Kerikeri, Caves Tree Nursery, Hamilton.

Doryanthes palmeri – Joy Plants, Pukekohe, Landsendt, Auckland, Wharepuke, Kerikeri.

Farfugium japonicum 'Crispata' – Tippets, Grey Lynn, Auckland. Joy Plants, Pukekohe, Wharepuke, Kerikeri (Photo p.43)

Haemanthus coccineus – Joy Plants, Pukekohe, Wharepuke, Kerikeri.

Hatiora gaertneri – Arbours, Clive, Hawkes Bay. Hunt in general nurseries under *Rhipsalidopsis* or *Zygocactus*. Should still be in flower/in stock.

Heliconias – Russell Fransham, Matapouri Bay, Landsendt, Oratia, Auckland, Wharepuke, Kerikeri. You may have to hunt for some species and then wait for delivery. There should be a good variety available at next year's show. Perhaps even some not listed in the article.

Libertia grandiflora – Joy Plants, Pukekohe, Oratia Native Plant Nursery, Auckland, and native plant specialists.

*Oncidium*s – Various species and cultivars available from Pottering About, Whakatane and Sunrae Orchids, Drury.

Petrea volubilis – Wharepuke, Kerikeri. Appears sometimes in retail nurseries.

Scleranthus biflorus – Joy Plants, Pukekohe, Oratia Native Plant Nursery and most native plant specialists.

Sun loving bromeliads – a very wide variety, including many of those listed, is available from Green's Bromeliads, Maungakarama, Whangarei, Exotica, Point Wells, Warkworth, Pottering About, Whakatane, Landsendt, Oratia, Auckland, Wharepuke, Kerikeri.

•Remember that Show 2004 will display these and other unusual subtropical plants - a great chance to meet the specialist growers.

The Palm & Cycad Society of New Zealand

meets on the first Tuesday of each month excepting January. The society arranges field trips and has a seed bank, library and a quarterly magazine.

Enquiries: (09) 296-7699 or write to PO Box 3871, Auckland

MEXICAN HAND TREE

Robin Booth

Why should a tree be called a 'hand tree'? Is it the shape of the leaf or the way the tree grows? No, it is because of the five-fingered hand which grows from the centre of the flower. Yes, it does come from southern Mexico and Guatemala.

Belonging to the Bombacaceae family, which includes both the Baobab and Kapok trees, and called *Chiranthodendron pentadactylon*, this tree also has the common names of 'Monkey-hand tree', 'Mexican hand-flower' and 'Manitos'. The Aztecs knew the tree well, calling it Maxpalxochjicuahuitl (Flower Hand Tree). From it was made a medicine for the relief of pain and inflammation. The Spanish first described it from one ancient tree that lived in a remote valley. It was not allowed to flower by the Aztecs in case it died. Later, many trees were found in a completely different area.

This is not a tree for the small garden, but is evergreen and always creates comment when in flower. It is fast growing and can exceed twenty metres in height and ten across when mature. When my two trees were planted in loose soil, they grew extremely fast and when a storm happened they partially blew over. As the lower branches reached the ground, they supported the trunk so I left them as they were, where the trees stabilised and then developed extra leaders which have resulted in very wide trees.

QUESTIONS AND ANSWERS

Members are invited to write in about any problems they have with identification, health, where to place specific plants etc. as well as queries and comments on articles appearing in the magazine.

Our advisory members will endeavour to supply solutions and answers.

**Write, fax or email to
Q & A - PO Box 91-728, Auckland
Phone/fax (09) 376-6874
Email marlowe@subtropicals.co.nz**

The large cordate leaves are up to 30cm long and have 3-7 shallow lobes. They are smooth green above but lightly brownish-green and felted below.

The flowering season is just starting now (late spring) and carries on into the early summer. The five fluted buds form towards the end of the branches and gradually open into a deep red, waxy calyx from which extends a five fingered red hand with long, pointed red 'nails'. The calyx tends to point upwards and has five depressions, which hold nectar that the tui and waxeye love. After flowering, 20cm deeply fluted, furry, woody capsules form, which flower arrangers would enjoy.

The tree can stand light frost and is quite drought resistant. A beautiful yellow flowered form has been created by crossing *Chiranthodendron* with *Fremontodendron*, which is closely related.

The Mexican Hand Tree is certainly a tree for the person who has space, wants a weird but wonderful flower and wants to attract birds with nectar.

Photo: Robin Booth

***Farfugium japonicum* 'Crispata'** **(Syn. *Ligularia tussilaginea*, *L. kaempferi*)** **Jonathan Voysey**

Previously *Farfugium japonicum*, this evergreen perennial has had various name changes but has now been returned to *farfugium* – let's hope it stays that way. A subtropical plant from Japan and hardy down to 0°C, *F. japonicum* (like many hostas) has been much hybridised in the search for ever more elegant leaf forms.

The cultivar 'Crispata' has curled and crested leaf edges and is heavily veined greyish-green on the upper side of the leaves, which are rather leathery. The undersides are almost white and lightly felted. The leaves rise directly from the rootstock on 30-50cm stems.

The flower stalks are from 30-60cm tall and bear sparse daisy-like, bright yellow flowers in late summer. Although the flower heads look appropriate in amongst subtropical plants, many gardeners remove the spikes on the grounds of unsuitability.

Although happiest in light, moist shade, both the species and cultivars will stand some sun if kept reasonably moist. Compost enriched soil gives best results, but beware, slugs and snails find the leaves most delicious and baiting is highly recommended.

