





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.

Autumn 2003

5

Volume 2 Number 1

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WINTER ISSUE
COPY DEADLINE
All copy must be received by the 30th April 2003

So that was summer?

For the second year in a row, summer has been almost a non-event. The heat needed to trigger full flowering in some plants has not eventuated. Coming after such a long and cool spring, some of the more marginal species have not turned on their usual displays.

We celebrate the Heroic Festival Gardens with photographs and short articles on four gardens, all belonging to **SUBTROPICALS** members. There was so much to see and write about that the extra material will be used in later issues.

Unfortunately, the index for volume one has not been included with this issue, as the amount of time required to produce it was under-estimated. Our unpaid slaves are still toiling away and it will arrive with the winter issue.

However, the enrolment forms for the 2003 Winter Conference are included. Prompt enrolment will not only help with the planning but will also result in worthwhile savings in the cost of attending.

Some excellent speakers have agreed to come. It is hoped that the afternoon session (with a knowledgeable panel to answer any and every question), will result in a wide range of questions being asked from the floor. Written questions (sent in to the editor in advance) would mean that the panel would be able to give answers on more technical matters.

Also included is the form for those wishing to sell plants on Sale/Display Day. Whether it is one plant or many, your participation will benefit the Society, as this day is open to the public. It will help to raise funds and also give **SUBTROPICALS** a higher profile.

Marjorie Lowe Editor

SUBTROPICALS

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FRONT COVER STORY

HEROIC FESTIVAL GARDENS - Don O'Connor

Early evening and the shadows are starting to lengthen but the sun is still shining on the Herne Bay apartment towers in the distance and the plants that backdrop the pool. The cover photograph shows the view seen from the outdoor dining area, across the swimming pool to the border fronting the brush fence and the neighbour's greenery, with the skyline beyond. The fence will soon disappear as the vireya rhododendrons are growing rapidly. Brilliantly coloured caladiums and iresines fringe the pool terrace. Behind, red cannas glow to be followed later by *Hedychium greenei* in bright orangey-red.

The property is typical of many in this Herne Bay, older, close to the city area – a villa (at road level) with most of the land, in this case, dropping away to the rear boundary. While the garden in front of the house contains mostly traditional plants, they have been planted in much the same way as the subtropical garden to the rear.

In 1989, the back garden consisted of a large, sloping lawn, a concrete path to the clothes hoist and some fairly scrawny vegetation (surprise!) with steep steps leading down from the kitchen to the garden. A deck, constantly in use, has been built at floor level off the rear living room and kitchen. Below, a retaining wall was constructed, back filled and planted, giving the deck the illusion of being at ground level. Looking down from this level, the swimming pool and surrounds bask in the sun and appear to extend to the rear boundary.

It is here that traumatic events occurred. The original retaining wall supporting the south end of the pool proved to have been inadequately constructed and started to collapse. It is now buried behind the new retaining wall, giving greater depth of planting behind the pool. Some palms were cut out, leaving tall stumps for planting epiphytes, as their roots were found to have been putting pressure on the pool. Repairs to the pool and terraces were costly and time consuming but Don feels that he has ended up with an improved garden. And the plants? They had to be dug out and kept in pots for a year until the repairs were finished. Replanted, they now look as if nothing had ever happened to them.

Changing the pool surrounds from quarry tiles to schist and river pebbles has dramatically changed the atmosphere and the mottled blue and black liner gives a deeper, more mysterious look to the pool. This theme is continued throughout. The bottom photograph inside the front cover shows the water recirculating into the pool down a small waterfall constructed from large river stones and floored with a layer of river pebbles. The water drops (only about 20cm) into the pool with a quiet splash. The surrounding planting, facing north, includes palms, *Meryta sinclairii* 'Moonlight' and *Strelitzia nicolai*, for height.

At mid level are *Cycas revoluta* plants of varying age and size and more vireyas, notably *Rh*. Cordial Orange (extreme right in the photograph), which has whirls of very narrow, deep green leaves and brilliant orange flowers that are out now. Bromeliads are tucked in at ground level around rocks and other plants. The brilliantly red centred bromeliad to the left of *Rh*. Cordial Orange is an old favourite, *Neoregelia carolinae* var. *tricolor*, a terrestrial best grown in shade. The variegated leaves are always attractive and, after the plant has come into flower, the bright red centre lasts in colour until the plant dies.

Photo top left: Meryta sinclairii 'Moonlight'

On dull days this small tree lightens up the garden and on sunny days it positively gleams. Smaller and more tender than the species, the variegated puka needs protection from frost and strong winds when young. It usually grows to about 3.5m in the garden and also makes a good container plant. Variegated plants are often difficult to place successfully but here it is complemented by plants of varying textures and heights, all in plain shades of green. Palm and *Strelitzia nicolai* leaves are above, with neighbouring trees higher still. Cycads and the occasional ginger, canna and colocasia offer additional contrast.

Photo top right: Caladium bicolor hybrids

These gorgeously leafed tuberous perennials are native to tropical America – Trinidad, Guyana and Brazil. Belonging to the aroid family, they have typical arum-like spathes when in flower but it is the brilliantly coloured leaves for which they are grown. Much hybridised for the houseplant market in Europe and the United States, the range of colour and patterning seems endless.

Super-tropical (minimum temperature 18/19°C), they are deciduous in nature. They can be grown here, in the garden, if they are treated in the same way as dahlias are in cooler climates. When the leaves start to deteriorate, the tuberous roots should be lifted and dried off completely, then stored in a dry spot. In mid spring – or whenever the weather starts to warm up – they can then be placed in a warm place (the hot water cupboard?) and given some water to start them into growth again.

To make it easier to use them in the garden keep the plant in a pot. Then dig out a hole and place a pot a size larger than the pot containing the caladium in the ground. This way the caladium is easily removed for storage and another plant (cyclamen?) can take over the space for the cooler months.

Because of space requirements, only a few corners of this and the other Heroic Festival Gardens can be included in this issue. Here, the lathe house containing the spa pool (surrounded by ferns, begonias, coloured cordylines, gesneriads and aroids) has not been mentioned, nor the water lily pond surrounded by interesting and unusual plants. In later issues, photos and articles will be included from these four gardens.

FALSE CARDAMON

True cardamon, *Elettaria cardamomum*, is a member of the ginger family and is native to India. Like other elettaria species, it is tropical and requires a warm climate with high rainfall and rich soil. The base of each stem produces one or more flowering spikes, with a cluster of bean-like green pods, which contain small dark seeds. Cardamon pods are used in curries or to flavour coffee. In some countries they are chewed as a breath freshener.

Amomum compactum, often referred to as 'False Cardamon', is an inferior substitute for cardamon and is used in a number of countries throughout Asia. When it flowers, the flowers are small and straw coloured. Some of the 'cardamon pods' that we purchase are from this plant rather than the finer flavoured *E. cardamomum*.

'Cardamon' plants are occasionally sold in New Zealand by specialist nurseries or from garden centres. These plants are usually vigorous and hardy, unlike *E. cardamomum*. They are either a form of *Alpinia nutans* (which has leaves with the odour of cardamon) or they are hybrids between *A. nutans* and *A. katsumadai*. They rarely bloom, but when they flower, the inflorescence is terminal from the stem (not from the base of the plant) and the flowers are 'shell-flowers', similar to those of *Alpinia zerumbet* (photo – spring issue page 10) but upright, not pendent.

Keith Boyer

Brunsfelsia undulata

Rain Tree

This shrub-like, small tree had its first flush of summer flowers in the first week of the New Year - at the same time that we, at last, had some good rain. Perhaps that is why it received its common name in its native Jamaica.

Generally it grows as a bush to about 2.5m but according to my references, over many years it can grow into a small tree. It is easily pruned to keep it within garden limits.

The outstanding feature of this plant is its long, flared, tubular, white aging to cream flowers, which are about 10cm long and 5cm wide. They smother the plant so that hardly any leaves are seen. Being sweetly scented is another bonus. Following this flush of flowers is a rest period then another flush of flowers appears. This is repeated three or four times over the summer and autumn period and is very consistent over the years.

Grow it in full or dappled sun in reasonably free draining soils and prune to shape after flowering has finished and you will have an interesting plant with very few problems.

Robin Booth

Brunfelsia pauciflora Yesterday, Today and Tomorrow

Pauciflora means few flowers and as you can see from the photograph, nothing could be further from the truth. This tender, evergreen shrub from Brazil and Venezuela simply smothers itself in purple flowers that fade to mauve and then white over a few days, hence the common name. These fragrant flowers are constantly renewed over the spring and early summer flowering period so that the general appearance is mauve against fairly deep green leaves.

The shrub brunfelsias do best in partial shade in rich, well drained slightly acidic soil. Such floriferous plants need feeding during the growing and flowering season and should not be allowed to dry out. These are quite tender plants and need protection from frost and wind.

The plant opposite, growing in Kerikeri under a large deciduous tree, was photographed in late November. It was about 1.5m high and about 3m wide. Annual pruning is necessary to maintain shape and to avoid legginess with a consequent decrease in flowers.

Calathea zebrina

Zebra plant

The rich dark green, heavily marked, velvety looking leaves of *C. zebrina* make it one of the more desirable foliage plants for moist shade. For years, calatheas have only been available as houseplants and were thought to be too tender to grow outdoors in our climate.

Adventurous gardeners have been experimenting and have found that some calatheas will indeed grow outside, despite a recommended minimum temperature of 15°C for most. *C. zebrina* is one of the larger species, growing to 1m high and with a spread of about two metres. The plant opposite, photographed at Nestlebrae Exotics in early October last year, had quadrupled in size since being photographed the previous Mayfast growth indeed for such a plant. It made me rush home to dig out mine to move it to another spot where it would have more room to grow.

Basic needs are for good, rich, fast draining soil, good shade, summer water, high humidity and protection from frost and cooling winds. Wind tends to damage the leaves as do slugs and snails. Baiting may be essential. To keep the plant looking at its best, regular removal of old and damaged leaves is needed.

Edith McMillan

Photos:

Top - Brunsfelsia pauciflora - a large bush photographed in Kerikeri in late November.

Bottom - Calathea zebrina







SUMMER PHOTO COMPETITION

And the winner is: Sonja Mrsich of Waipu, Northland.

Sonja took this photograph of a Dyckia with a small automatic camera at 7:15pm on the 27th November. It is growing in one of her beds devoted to succulents, not far from the succulents featured on the cover of the last issue (photographed by Grant Bayley).

• Dyckias are terrestrial, xerophytic bromeliads that form large mats of leaves. When left to multiply like this plant, the resultant show of multiple flowering stems is very striking.

Many of the 121 species (2000) are so similar that it is hard to distinguish between them. It is thought that this particular plant may be *Dyckia fosteriana* x *D. frigida*. It really pays to keep plant labels even if they are just thrown into an old box.

Arundina graminifolia (syn. bambusaefolia)

This sympodial, terrestrial orchid comes from the Himalayas, Southern China and through Southeast Asia. It is the only species in the genus. The tall (to 1.8m), thin stems are bamboo-like in appearance and carry fragrant, white to rosy-purple flowers that resemble small cattleyas.

Despite the fact that it is only recommended for tropical and warm subtropical conditions, in sheltered positions in the north it is evergreen and flowers most of the year. It is photographed here, growing in the ground outside the north-facing wall of a plastic house at Greens Bromeliads in Maungakaramea. This is a volcanic area so drainage is very good.

Arundina graminifolia needs full sun, plenty of water in summer and some fertiliser to accelerate growth. Because it grows so tall, it needs staking and protection from wind until the rooting system is established. It can also be grown on rocks.

Photo: Grant Bayley

• Sympodial:- Type of growth with successive stems or pseudobulbs, either joined by an obvious rhizome or with each new stem or pseudobulb arising from the base of the previous one.

Scadoxus multiflorus ssp. katherinae Blood Lily

The Blood Lily group of bulbous plants from South Africa is a wonderful addition to a garden. It includes both haemanthus and scadoxus, the species of which flower at different times during the year.

Top left: probably Dyckia fosteriana x D. frigida

Top right: Arundina graminifolia Photo: Grant Bayley

Bottom: Scadoxus multiflorus ssp. katherinae

The leaves and flowers of *S. multiflorus* ssp. *katherinae* tend to develop together in late spring, with the flower stalk starting to form near ground level and growing to nearly a metre high. The flowers usually open fully from early to mid January and hold well for a few weeks. The salmon-red flowers are in nearly spherical balls, which stand above the half metre long leaves. They are up to 25cm across and make a very bold statement.

The plant tends to die back completely over the winter period, though if it is a mild winter some of the leaves persist until the new growth starts in late spring.

The bulbs are slow multipliers so it takes a while for a good clump to eventuate. Seed is seldom set naturally so multiplication is a slow process and accounts for the price one has to pay for a plant.

I find that it is better to grow them in either dappled sun or light shade or, at the most, morning sun as the leaves yellow in the hotter afternoon sun. In shade, the soft green leaves give a wonderful backing to the strongly coloured flowerheads. Some water in the dry times is appreciated but they will survive droughts. Slugs and snails can sometime be a nuisance.

Robin Booth

COMING EVENTS

MARCH

Bromeliad Society – Sale and display of bromeliads at the Mt. Albert War Memorial Hall, New North Road, Auckland from 10am-4pm on Saturday the 22nd. Contact Secretary Ph. (09) 422-2235.

Palm & Cycad Society – Annual sale and display of palms and cycads in Hall 6, Greenlane Expo Centre, Auckland, from 9am-4pm on Saturday, 22nd and Sunday, 23rd. Contact Ph. (09) 296-7699.

APRIL

Bay of Plenty Orchid Society – Annual Show at the Te Puke Memorial Hall on Saturday the 5th (12-5pm) and Sunday the 6th (10am-3pm). Contact Nick Miller (07) 362-4747.

Auckland Regional Botanic Gardens – Native Plant Propagation Workshop – Sunday April 27th 10am-1pm. Bookings essential. Further information (09) 267-1457.

MAY

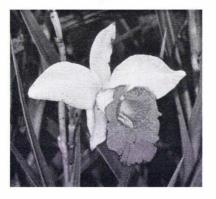
Auckland Regional Botanic Gardens – Garden Discovery Programme – The Subtropical Garden – Sunday 4th May 11am-1pm. No bookings required (cost \$8.00). Plant sales. Ph. (09) 267-1457.

Auckland Regional Botanic Gardens – Photographing Plants Workshop – Wednesday May 7th 10am-1pm. Bookings essential.

And on Sunday May 18th 10am-1pm, a repeat of the Native Plant Propagation Workshop. Bookings essential.

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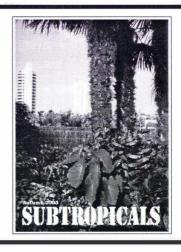
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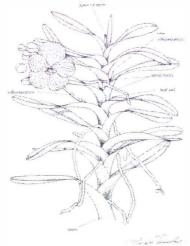
Platycerium bifurcatum Common staghorn Barbara Parris

P. bifurcatum used to be a common sight in the leafy older suburbs of Auckland in the 1950's and 1960's, as an epiphyte on trees or decorating the fronts of houses. It is an Eastern Australian native that is still being grown in Queensland in the time-honoured way, on the supports of the older houses that are raised well above the ground.

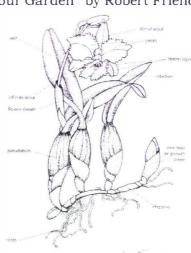
At first sight P. bifurcatum does not resemble a fern, as the young fronds do not unroll, but gradually expand in the manner of a flowering plant leaf. The fronds are of two sorts. The sterile ones are flat to the substrate on which they grow, but curve outwards at the apex, which is lobed. They start off green but age to brown and are persistent, with the young ones growing over the older ones to form a spongy mass that traps leaf litter and holds water. The fertile fronds are arching to pendulous, several times forked and remain green until just before they are shed. Spores are borne at the ends of the frond segments. New plants ('pups') are formed on the roots at or near the outer edges of the sterile leaves and can be cut from the parent plant when their base fronds are about 15 cm wide. This is the most common method of bulking up stock.

Plants can be displayed growing directly on trees (preferably those with smooth, not flaking, bark) and are best tied into a branch crotch, tied to a board and hung on a fence or other support, or tied to a large rock. Use panty hose or fishing line for ties until the plant has established. If a sufficient number of pups is available to stock a large hanging basket, this will make a striking display in time. Either potting mix or moss is a

• Illustrations courtesv - 'Orchids in Your Garden' by Robert Friend



monopodial - vanda



sympodial - cattleya

suitable medium. Growing in pots is possible, ideally in terracotta ones with coarse free-draining potting mix. Winter-wet roots plus cold, poorly drained mix equals certain death!

Slow-growing and stately, *P. bifurcatum* takes several years to make a 30cm diameter clump, but in time will make a massive specimen. Some old plants in Northland are well over a metre in diameter and are still spreading as their host trees continue to expand. These plants provide useful clues to the most suitable conditions. They get sun for part of the day, either early morning or late afternoon, but are protected from midday sun (and winter frost) by their host's crown of leaves.

Watering is only by rain, feeding is non-existent and grooming is unnecessary. This is the fern world equivalent of the easy-care succulent and ideal for those with little time to spend in the garden. Judicious liquid feeding and watering in the summer, however, will help get plants established and on the way to becoming metre-wide mammoths.

The Australian common name is 'Elkhorn'.

Brachychiton acerifolius Illawarra Flame Tree

This is a showy, briefly deciduous tree that sheds its leaves before flowering for approximately two months - usually at some time between November and February. In its native habitat, New South Wales and Queensland, it is well known for the variability of its flowering. As in the photograph opposite, flowering only occurs on branches that drop their leaves.

Unless pruned to develop a canopy when young, B. acerifolius is usually an upright tree to 12m but taller if grown in good, moist soil. If height is not a problem, it can be grown in quite small gardens. Being reasonably tolerant of dry conditions, it seems to be able to compete with other planting. When young, protection from cold and aridity is necessary but once established it will tolerate temperatures down to -3°C and becomes fairly drought resistant.

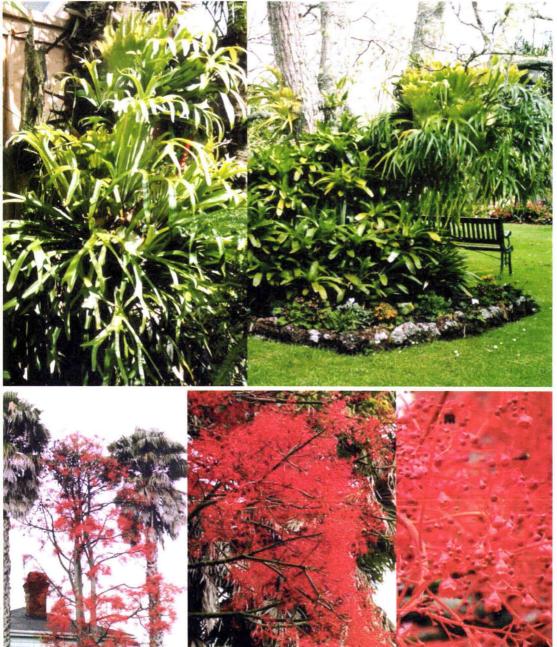
The brilliant red bell-like flowers with their red stems are much used for floral work. Some gardeners find the constant dropping of dead flowers and stems in season to be a nuisance so plant the tree where this will not be a problem.

Edith McMillan

Top left: A large Platycerium bifurcatum growing on a palm.

Top right: An even bigger plant growing in the crotch of a melia, complemented by a massive clump of *Neoregelia compacta*.

Bottom: Brachychiton acerifolius, showing its upright form between two Trachycarpus fortunei palms; in brilliant contrast against green palm leaves; a close-up of the red flowers and stems.









HEROIC FESTIVAL GARDENS - Kevin Kilsby

This seemingly mature garden is only seven to eight years old in its present form. Like the cover garden, its former persona was the traditional concrete path to the laundry hoist surrounded by extensive lawn – at least the large walnut tree gave it character.

Situated on the lower slopes of Mt. Albert, the rear garden of this quarter acre section is still dominated by the walnut but now the scene has changed and lush borders of subtropical plants surround the bright green lawn.

As is usual in volcanic areas, drainage is sharp. This makes it easier to maintain dry winter species but means that summer water is essential as these plants have wet summers. Close planting not only gives a very full effect but also reduces evaporation as the roots are shaded and, in turn, this makes it difficult for weeds to survive. The 60cm deep volcanic soil will grow almost anything.

Lawn! Borders! Traditional it is not. The largest and deepest border runs the length of the northeast boundary and is given height and scale by the interplanting of palms and foliage trees such as *Schefflera actinophylla* (Queensland Umbrella Tree), which will eventually have exotic inflorescences that look rather like octopuses. The photograph opposite shows a small portion of this border and the variety of foliage plants used. The garden looks good at all times of the year and there is always something of interest to be seen.

From the left – a silver leafed astelia sends out long, flax-like leaves over the lawn in front of a clump of *Philodendron* Xanadu. Above this is a large clump of *Alpinia zerumbet variegata* with large yellow striped green leaves. Alongside, and almost hidden from this angle, is a group of alocasias which, in flower, send out the most beautiful, wafting fragrance – one of the loveliest in the plant world. The soft, waving plumes of *Chondropetalum tectorum*, a popular member of the restiad family, contrast with the very large, tropical looking leaves of the alocasia.

Then two specimens of *Cordyline australis* 'Albertii', the variegated leaves of the taller plant gleaming in the sun. Behind, in mid border, are *Canna* Tropicanna (heavy planting keeps this aggressive canna in check) and large plants of *Iresine herbstii* in varying shades of red and copperbrown. Behind and to the left of the palm trunks, is another restiad – the feathery *Elegia capensis* (see close-up photo on page 36).

Tucked in behind mossy scoria rocks at lawn level, impatiens, *Solenostemon scutellarioides* (the new tongue-twisting name for coleus!), hypoestes and bromeliads complete the scene.

Top left: Epidendrum orchid hybrids in a variety of colours.

Top right: Close-up of foliage in the border below.

Bottom: Section of the northeast border.

The top right photograph shows the lower planting around the base of the *Cordyline* Albertii in more detail. It is just a small example of the attention to detail and the careful but uninhibited colour choices that make this garden so satisfying.

If you missed seeing this garden during the festival, it is open to the public during the week. For information Ph. (09) 846-8964

Epidendrum ibaguense/obrienianum/radicans Crucifix Orchids

There seems to be a great deal of confusion about these orchids. Usually known only by their common name of crucifix orchids, these cane-stemmed orchids have been variously described as epiphytic or as both terrestrial and lithophytic. Possibly all three are correct, as they seem to have the ability to grow almost anywhere.

It is this ease of cultivation that seems to seems to make gardeners (and collectors) unappreciative of their sterling qualities. Some years ago, a friend in Remuera decided to move a large clump of orange epidendrums that to his knowledge had been there for more than sixty years. Magnificent all year, in winter it had a hundred or more brilliant orange flowering stems – a sight never to be forgotten. Placing a spade under the clump ready to start lifting, he promptly fell flat on his back. The plant(s) had been sitting on the surface all that time and had virtually no roots in the soil.

In the past, these orchids were only available 'over the garden fence' and the colour range was limited mainly to red and orange shades. Colours now include yellow, mauve to magenta, pink and nearly white. For some years now (and coinciding with the trend away from labour intensive traditional gardens) interest has been focusing on a plant that, when established, never stops flowering. Each inflorescence usually stays in flower for months and by the time it finishes, other stems have taken over. The spent upper stem produces new plantlets (complete with their own aerial roots), that can be left to grow on and climb higher and higher. Alternatively, the stem can be cut lower down forcing new growths and the plantlets removed either to give away or to start a new clump.

The main drawback of crucifix orchids is that, if not groomed reasonably regularly – once a year? - they develop into rather untidy clumps that include dead plant material. Evergreen perennials, their succulent leaves complement the showy flowerheads.

Growing requirements are minimal – full sun, reasonably high humidity, some summer water in a dry period and perhaps an occasional topdressing of compost (preferably homemade). They will stand some wind and a few very light frosts.

The native habitat is from Mexico, the West Indies to Central and South America.

AUTUMN COMPETITION

Open to all members of SUBTROPICALS.

To enter, send an anecdote, a paragraph, a page or an article on the subject of subtropical plants and/or gardens

to

The Editor

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THE COOL SUBTROPICS - part three Nick Miller

Having surveyed trees and shrubs in my two earlier articles, I will turn my attention to some other plants growing in our garden at Lake Rotoiti (which, by the way, is in an acute state of crisis, and looks like cowshed effluent due to a toxic cyanobacterial bloom). As I write this, in early March, the weather has cooled abruptly, and we have had some much needed rain. We appear to have lost our *Schefflera* Condor tree (mentioned in an earlier article) to drought - not a problem we generally experience. Many lamentations!

Ferns: Niphidium crassifolium (illustrated in Vol. 1 No. 3 p.17) grows well here, and makes a handsome display. We have two plants, one growing on a rock in nearly full sun, the other growing in the ground in nearly full shade. The plant on the rock does much better. A third plant appears to have succumbed, possibly due to too much water (it grows in the ground beside the greenhouse and receives run-off from the sprinklers). Platycerium bifurcatum (Elkhorn Fern) grows well, but rather slowly. We have established it on a pohutukawa tree and on tree fern trunks. It is noticeable how epiphytic orchids such as *Dendrobium kingianum* grow much better when placed beside an elkhorn fern. Recently, I was given a piece of another platycerium, possibly P. veitchii (Silver Elkhorn), which is similar but more silver in colour. It is growing well on a tree fern trunk, but would probably colour more if it was in full sun. Pteris pacifica and Pteris kingiana both do well, as does the indigenous and tropical-looking *Pteris comans*. We grow a variety of other ferns in our garden, but most of them would escape the 'subtropical' tag, although more are to be tried. I would comment that the beautiful giant maidenhair (Adiantum formosum), a native of New Zealand, can occupy a large territory when grown in light soils such as ours.

Bromeliads: We are still feeling our way with these. An early lesson was that potted bromeliad plants, bought from further north, rapidly succumb if grown under shadecloth in winter. The moisture-retentive potting mixes that are appropriate in warmer areas are not suited to a Rotoiti winter. Scoria in a 7mm grade seems to work well. In the ground, neoregelias, *Alcantarea* (*Vriesea*) *imperialis*, *Vriesea* 'Red Chestnut' and various billbergias have done well. Some of the tillandsias are promising to thrive but we need to try a wider range of bromeliads.

Orchids: Australian dendrobiums, especially the species *D. kingianum* and its many hybrids, do well, either on trees, rocks or in the ground. They seem very well suited to the climate of northern New Zealand. The hybrids come in a colour range from white, through various shades of pink, purple, dark wine, yellow and green. The Australian sarcochilus orchids also do well outside for us, in semi-shade, on trees or tree fern trunks. There is a wide selection of species and hybrids of these charming little plants, in pink, white or (occasionally) red. There are a

few specialist nurseries that will supply you with plants, or else check out the trading table at any orchid show, but get there early – orchid sales seem to be picking up.

Begonias: When we moved here in 1982, a large plant of Begonia haageana (syn. scharffii) I think, although it may be x Credneri, was in flower by our carport. I do not recall it being without flowers for a single day ever since. What a performer! Many of the cane-stem, rhizomatous or shrubby type begonias do surprisingly well here, despite our altitude. The main problem is acquiring plants in the first place and finding a name for them once you have got hold of them. The houseplant producers are very careless with labelling. Here are a few whose names we are reasonably sure of. Begonia angularis has excellent foliage (see Vol.1 No.1), does well in sun or shade, scrambling through shrubs or trees to a height of two metres or more and is in flower for most of the year. B. metallica also has handsome foliage and flowers in spring and summer. B. luxurians (photo p.43), with handsome finely divided foliage, grows slowly and is not as lush as I have seen it in Tauranga, but is still worth a place. B. fuchsioides, B. cubensis, B. echinosepala and B. x Erythrophylla (Beefsteak Begonia photo p.36) also do well. B. venosa, with marvellous round silver leaves, did not survive, alas. I may try it again in a more protected spot. Rex begonias often survive two or three winters before fading away, but seem to have barely got going before summer is at an end, however some seem better than others. We have been acquiring more begonias, as chance permits, and will try more of them outside as many of them are marvellous garden plants. If only there was a nursery specialising in these non-tuberous types and selling them with (correct) names! You can often find unusual begonias at plant stalls, boot sales etc. Good books on them are also in short supply, but that is another tale.

Aroids: Monstera deliciosa (Fruit Salad plant) does well, and provides an unsurpassed tropical effect. We have one plant that is starting to climb a 15m plus clump of mamaku – there's ambition. Philodendron cannifolia (probably) has done well outdoors in a pot and will soon be going into the garden. It looks something like a bird's nest fern, but with fleshy foliage. We have tried one or two other philodendrons – refugees from the baby houseplant section, but without much success as yet. Most alocasias have difficulty surviving the winter, but the miniature Colocasia fallax lives year round in a pot submerged in a fishpond. The plant known as 'Black Taro', Colocasia (? species), does well and spreads by surface suckers. Its pale yellow flowers are perfumed. In a shady spot, it retains its foliage throughout winter here in a mild year. Alocasia and Colocasia are two quite different genera (the plants look rather similar) and this causes some nurserymen much confusion, judging by some of the labels one sees in the garden centres.

Impatiens: The New Guinea hybrids do not survive the winter. *Impatiens niamniamensis* ('Congo Cockatoo), with intriguing red and yellow flowers,

Does, and has been brightening the garden for some weeks now. It does well in shade. *I. sodenii* (Syn. *I. oliverii*), a shrubby species from Kenya and Tanzania that is very common (and has become a weed in the north), also does well, seeds itself around, and flowers for most of the year. It has soft lilac-pink flowers on fleshy stems. There appear to be two different colour forms – the other one has darker flowers and purple-tinged foliage. The houseplant being sold as *Velvetea* Secret Love is an impostor. There is no such genus as Velvetea – this is a marketing name dreamed up by a Dutch nursery. It is an impatiens species, possibly *I. campanulta* from India (not Africa, as the labels say) although this is uncertain. It has attractive hooded white and yellow flowers and has survived several winters here. There are very many beautiful impatiens species yet to be tried in this country.

The beautiful climber *Thunbergia grandiflora* sulked for several years then, about three years ago, it suddenly started to occupy territory. Every summer it ramps across nearby shrubs and produces a good number of its large blue flowers. Every season it seems to grow a little larger. This is a major problem plant in Queensland and I suspect that gardeners in the north should think twice before planting this species, beautiful though it is. Jasmines are beautifully scented climbers (and a few shrubs) but *Jasminum polyanthum*, from China, is a rampant weed (declared noxious four years ago) in this district, as elsewhere in the north. *J. angulare* (South Africa) has beautifully scented white flowers of a good size, and flowers heavily all summer. So far it has been relatively restrained. *J. nitidum* (New Guinea?) is growing in an upturned drainpipe and produces exciting large starry flowers in late summer. In a less confined root run or a warmer corner it might be quite spectacular. *J. sambac* survives but has so far proved unproductive.

SOFT, GREEN-LEAFED TILLANDSIAS Marjorie Lowe

Of the nearly three thousand species of bromeliads recorded in 2000, by far the largest genus was *Tillandsia*, with 532 species and probably more to be discovered. Unsurprisingly, this genus also has the greatest range of habitats - from the southern United States to the West Indies and Central America to southern Argentina.

The common perception of tillandsias seems to be of grey or silver-leafed plants - xerophytic in growth. These are indeed more widely found and are the source of the common name – 'airplants'. But, because of the climatic range and the huge variations (from desert and mountains to coastal fringe, and including rainforests) in growing conditions, they are to be found in many forms. Vrieseas can be found looking like typical tillandsias to which they are closely related. In a similar way, some tillandsias look like vrieseas, with wide, soft, green leaves. Although not

a large group, they include some very attractive species whose main requirements are for humid shade, air movement and fast drainage.

Tillandsia deppeana: An epiphyte, it comes from Mexico and the West Indies to Colombia and Ecuador in rain forests, open woodland and grasslands at 400-3000m It needs summer shade and light, but not continuous sun. The tall, much branched inflorescence has large, bright red bracts that form all the way up the spike with bright violet-blue petals - very striking and long lasting. When the red fades, the spike turns a greenish yellow. The plant in the photo (taken at Greens Bromeliads) was 1.5m tall. A good, healthy pup takes three to four years to flower.

T. guatemalensis: This plant, from Mexico to Costa Rica (including Guatemala, Honduras and El Salvador), grows in shady, moist and cool mountain forests at 1100-2600m. Reputed to tolerate temperatures down to -2/3°C, it is an epiphyte that comes in two forms. The larger one (illustrated) takes two to three years to flower and is supposed to pup rarely, but a form imported some years ago does produce a reasonable number of pups. The smaller form both pups and sets seed, taking about a year for a pup to flower.

The inflorescence (about 1 m long in the large form) has bright rustyred bracts up the stem and enclosing the flowers, which are bright blue. The bracts stay in colour for five to six months.

T. imperialis: This is a plant for the patient gardener, as it takes about four years to produce the flowering spike – five from seed. When flowering is near, the leaves start to blotch red. The inflorescence appears quickly and a month later the purple flowers with bright yellow stamens appear from within the lower bracts and move steadily upwards, lasting for about four to six weeks. The bracts (bright light intensifies the colour) remain red for about five months, thereafter fading to an attractive gold colour for a further two to three months. The plant can grow to about 50cm high, including the spike, and to 70cm across.

This bromeliad comes from the rain and cloud forests of central and southern Mexico at 1600-3000m. It grows high up on conifers and oaks as an epiphyte, but also on rock formations in damp, cool and cloudy conditions with cool nights. *T. imperialis* needs light shade, bright light and fast drainage, combined with generous moisture and a fairly cool position. Mine is grown on the south east side of the house.

In Mexico, these plants are offered in the markets at Christmas time. Known commonly as 'Christmas Candles', they are used for decoration at the festivities, but are also available at other times of the year.

T. leiboldiana: Again, moisture, semi-shade and fast drainage are required for this fairly small plant, which takes readily to basket culture. Although the rosette may not be much more than 20cm in diameter, the flower spike, with scarlet bracts and violet petals, can reach 60cm high. In bright light the leaves are often blotched with red.

Its distribution is from southern Mexico to Costa Rica, where it grows

epiphytically in forests from near sea level up to 2600m. There are several different forms, resulting in considerable variation in the colour of the bracts.

T. multicaulis: From southern Mexico to Panama, this species is epiphytic in dark, humid mist forests at 1500-2500m. It needs shade, moisture and cool nights.

What is unusual about this small, pale green, soft-leafed tillandsia, is that there are several lateral flower spikes from the leaf axils, and there can be as many as eight. A single plant in full bloom can be an impressive sight - if the plant is left undivided, even more spikes can result. The flower spikes look not unlike goldfish and vary in colour from orange to red, with purple-blue flowers. When the colour fades, the spike slowly turns yellowish-green to gold (like *T. deppeana*) and remains looking good for up to four months or more.

Pups usually flower in a year, especially if left on the parent plant. The inflorescences appear, fairly consistently, in mid to late summer and start colouring up in early autumn. The flowers appear after the spikes are fully coloured. *T. multicaulis* is variable in size depending on the growing conditions.

T. somnians: The only reference I could find for this very different tillandsia was in 'The Bromeliad Lexicon' by Werner Rauh. As a non-botanist I was completely lost, but did learn that it came from Northern Peru, is epiphytic and grows up to 2400 m.

Usually easily available here, it is unusual in that it is a climbing plant. The photograph opposite shows it scrambling up a very large walnut tree in Kevin Kilsby's garden. The inflorescence is not very showy, but the green leaves of the rosette can turn red in full sun. These rosettes seem to hang in space, attached to each other by stiff, bare stems at 60-80cm intervals. When the unrooted stem of my plant in the ground snapped off, I found the whole plant hanging in the air and growing steadily. Truly an 'airplant'!

Clockwise from top left:

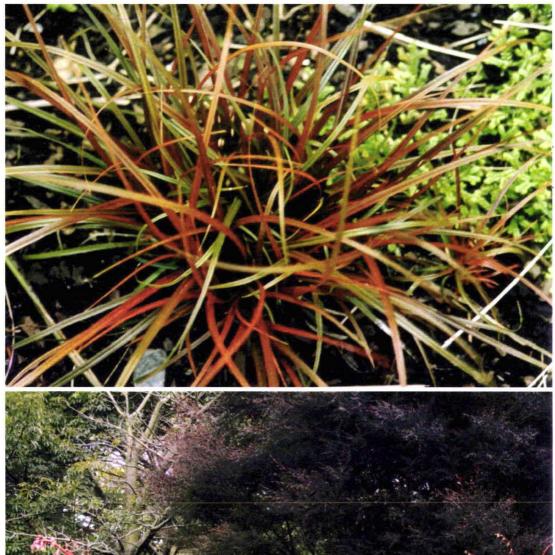
Tillandsia guatemalensis – large form
Tillandsia somnians – climbing up a walnut tree
Tillandsia leiboldiana
Tillandsia multicaulis – red form
Tillandsia deppeana

Centre: Tillandsia imperialis - in flower

WARNING! Copper in any form is death to bromeliads, so watch those copper sprays and do not use copper wire to attach plants to host trees.

Tanalised timber is also lethal. Raindrops and/or condensation dripping onto bromeliads from treated timber (even when painted) leads to disfigurement of the plants and, quite often, eventual death.







THE GREAT PRETENDERS

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

Uncinia uncinata

Hook grass/Hook Sedge

This is a most attractive and garden worthy member of the cyperus (sedge) family. The common name comes from the way the seeds, which have hooks, attach themselves to passing animals and trampers. Consequently, this is not a plant to be used to edge paths or plant borders unless you are prepared to remove the seed heads.

The leaf colouring of *U. uncinata* is variable, ranging from dark green when found growing in the shade to a startling reddish-brown in full sun. It grows to 40-50cm high and is wind resistant. This species makes an ideal ground cover when planted en masse or an equally suitable candidate for container planting. As with most sedges and grasses, this hook sedge appreciates lifting and dividing every few years to maintain a good garden-worthy display.

Of the thirty New Zealand species, three are in garden use in the wake of increasing interest in grasses and similar plants. *U. uncinata* comes from Golden Bay, Nelson, growing naturally in cooler and drier conditions. Under more humid conditions it becomes a short-lived perennial that can be vulnerable to rust.

Steve Benham

Beschorneria yuccoides

Mexican Lily

This member of the agave family has marginally succulent grey-green 1m leaves in a basal rosette that can be 1.5m or more across. These leaves are much softer than agave leaves and are gardener friendly.

The flower stems can grow to 2m long but, because of the weight of the flower heads, tend to bend out at differing angles, sometimes ending up only 50cm above the ground. Placing it beside a driveway, as in the photo opposite, means that some of the flowering stems end up being sideswiped. Surrounded by either other plants or clear space, the inflorescences can lean unimpeded in whatever direction they choose. The stems are usually pink with green flowers and rosy bracts but the general impression is of bold pink flower spikes.

Free draining soil and full sun are basic requirements and it will stand wind and temperatures down to (probably) -5°C (grows in SW England).

Edith McMillan

Photos:

Top: Uncinia uncinata

Bottom: Beschorneria yuccoides: in full colour in mid September.

Elingamita johnsonii (one of our 'no common name' natives) Robin Booth

A small tree up to three metres, this is a plant seldom seen in garden centres but it is one that should be planted more often. This favourite of mine is found naturally only on West Island of the northern Three Kings group of islands. Its name commemorates a passenger steamer, the Elingamite, which was wrecked below where the tree was found by Major M. E. Johnson in 1950. It is a genus of only one species.

A dense, bushy, small tree, which can grow wider than it is tall, it is very tolerant of coastal situations. Its leaves are always glossy, smooth and satiny and fit in very well with a subtropical feeling. The flowers are small, yellowish and in clusters at the end of the branches. One needs to look closely at the flowers to be able to tell the sex of the plant. This is necessary, as males and females are on separate plants and only the female carries the wonderful, large clusters of bright red berries. These berries take many months to ripen, but even in the green stage they are very ornamental. When red, they hang on to the tree for a long time and birds don't seem particularly keen on them – a great advantage.

Plants sold in garden centres are usually seedlings, which means that you won't know for several years whether you have male or female plants. For myself, I collected pieces graft wood from a known male and female tree and grafted them onto the two plants I had. Needless to say, when my original plants flowered, I had the female on the male and the male on the female. I used a conventional cleft graft, which seemed to take easily.

This is a plant well suited to a smaller garden, especially a windy, coastal one, but is not suitable for frosty sites.

QUESTIONS & 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.

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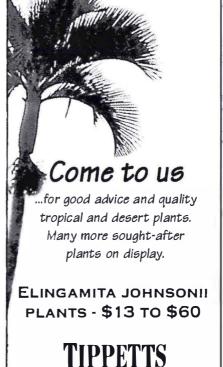
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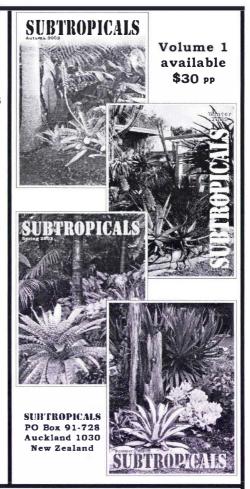
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PLANTS FOR DRY CONDITIONS Brian Timms

The Agave parryi has a long history. I lived in Oratia some years ago and my landlady's daughter was friendly with my teenagers. She had a part-time job doing repotting for Karl and Nancy Johnson who lived in Blockhouse Bay (about 1985), on a section jam-packed with greenhouses and succulent plants generally. My daughter brought the A. parryi home as quite a small plant. I repotted it into a bucket and kept it on my back verandah for some years. Eventually it moved with me a couple of times and ended up in its present position about 1989, where it has been ever since, growing slowly larger and putting out offsets. Usually it will spread out over the garden using runners, which will appear up to a metre or so away. Anyway, this plant was my first ever succulent!

When I first arrived in Auckland from Christchurch, I built a greenhouse thinking that it would be necessary for a number of vegetables that were only successful this way in the cold south. At that time, I grew almost only vegetables and had very few ornamental plants. I soon found out that tomatoes, peppers, aubergines etc grew well in the garden in the 'winterless' (if only) North and the greenhouse was not required. So I had one all ready and virtually empty when I became a cactus and succulent fanatic. On moving to my present house I began growing them as garden plants and have since become interested in all types of subtropicals, but I still retain a special place in my heart for that plant!

Many agaves are excellent garden subjects, requiring as much sun as they can be given and good drainage, as they tend to become dormant in the winter and don't appreciate wet roots at that time. A sure sign of root rot and subsequent possible loss is when the plant gets a lot of dead leaves (a few is normal) and the growing part becomes smaller instead of bigger. Dig up, remove the collar of dead leaves and replant with better drainage. The plant will probably re-root but will take at least a year so don't panic.

Many agaves grow much larger and faster in cultivation, with good soil and water, than in their native Mexico. They will become very large and extremely aggressive, sending out runners and invading the rest of the garden, even coming up in the lawn. Alas, some of the most beautiful species will do this and may have to be removed if you don't have a lot of room. And they have rows of hooks up the edges of each leaf and also fearsome spines (awns) on the ends of their leaves, which are quite capable of causing an infected wound. Their beautiful patterned and coloured symmetry makes them worth it all. Eventually they will flower a very large and fast growing spike, which will grow up to several metres tall and hold many usually rather insignificant flowers. The main rosette will then die, often quite slowly, but will usually produce a number of offsets (if it hasn't done so already).

Euphorbia millii var. millii Crown of Thorns

This is part of a large species complex from Madagascar with many sizes and flower colours (red, cream, green, brown (these last are small and rare). Most form a very thorny bush or thicket - the thicket producers will also root where they touch the ground, so need some controlling. I planted this one in the top of a terracotta pipe, which I found in a neighbourhood rubbish skip. It has been moved once or twice, pipe and all!

When it gets too large I just prune it. It is very floriferous (not all forms are) and usually has some flowers, often many. A larger variety, *E. millii hisloppii*, has been the subject of an intensive breeding programme in Thailand, where they have produced many forms of large flower size and many colours. Some are finding their way into this country and are worth buying when you see them. Just remember the words - large, spiny and thicket - and you will probably be all right! Another point to remember is that all euphorbias have a milky sap, produced copiously, which is very toxic. Whatever you do, keep it away from your eyes, mouth or cuts or scratches. I prune it with long-handled loppers, then wash the bush with the hose until the sap stops running, usually quite quickly. As with agaves, their beauty makes their nasty habits worth tolerating. Give them all the sun you can, for compact growth and plenty of flowers and they never seem to need water, even in the driest summer.

Brian Timms

Xeronema callistemon Poor Knights Lily

The iris-like, evergreen leaves of this member of the lily family provide a bold foliage effect in the garden, where a clump can be up to 1m in height and, with age and suitable growing conditions, greater in spread. The exotic looking bottlebrush flowers in rusty red arrive in spring (the photograph was taken at Nestlebrae Exotics in early November) but flowering can take several years.

In nature, *X. callistemon* is confined to the rugged, offshore New Zealand islands of the Poor Knights and the Hen and Chicken Islands, which are situated off the Northland coast, 23k from Tutukaka. Once this was a very rare plant in cultivation but, like *Tecomanthe speciosa*, its popularity has grown. Growing on cliffs and amongst rocks, its requirements are for very fast drainage, full sun and protection from frost. It withstands salt-laden winds and appreciates the occasional summer watering with seaweed water. Growing in a pot, with constricted roots and sharp drainage, seems to encourage flowering.

Top left: Euphorbia millii var. millii

Top right: Agave parryi

Bottom: Xeronema callistemon









HEROIC FESTIVAL GARDENS - Peter Brady

Another quarter acre section, this time in Mt. Eden, and so of course it is volcanic in character. Originally part of a bluestone and scoria quarry, unlike the previous garden this one has very little soil. The volcanic outcrops have been incorporated into the garden, resulting in undulations and various levels that give it much character. Gravel paths wind around in a heavily planted rear garden. Peter uses the Japanese technique of 'borrowed' planting. Trees belonging to his neighbours appear to be part of his space, adding extra height and scale to the existing plantings.

This property was acquired complete with a full complement of privet, honeysuckle, onion weed, kikuya and tecomaria – clearing all this out took some time. Photographs taken before either the house or the garden were renovated make it clear what a massive job this was.

Pots have played a large role here – not just decoratively but for many practical reasons. Peter believes that many plants like a fairly restricted root run and tend to do better in pots. Also plants that require different watering regimes (he grows many succulents and bromeliads in pots) can be catered for. Watering in very porous volcanic areas is rather like pouring it down the drain and, with the current price of water, becomes a rather expensive process. Potting mixes can be tailored to the requirements of the plants – acid, alkaline, added leaf mold, peat for water retention etc. Another advantage is the freedom to move plants at any time of the year either for their health or to change the design in another area.

The photograph, below opposite, shows a view of the rear garden with the boundary invisible in the background. High up on a tree trunk, coppery-wine cymbidium spikes hang down. To the right, one of Peter's unusual plant combinations – a clump of *Strelitzia regina* in flower, at its base a large *Angelica archangelica*. A hardy perennial (usually grown as a biennial), angelica has beautiful, divided and toothed, highly polished very dark green leaves that give a tropical look. The flowers in greenish-white umbels add to the effect.

Below and alongside the living room deck, at the rear of the house, is a pond overhung with tree ferns (photo Vol.1, No. 4, p. 36). A very large sculpture tumbles down into the water amongst the water lilies and goldfish. Sculpture is very important in this garden and is everywhere one turns, ranging from huge lumps of glass to commissioned pieces. Like the pots, these are often on the move as Peter decides to create new compositions.

Photo top left:

On the driveway side of the house, facing southeast, is a two-metre deep plant bed against the house. Amongst a wide variety of mostly shade loving plants are bromeliads, calatheas, vireyas, clivias and ferns.

Phoenix roebelenii

Pygmy Date Palm

Top left:

A small, slow growing palm from Laos and Vietnam that rarely exceeds 3m in height. The solitary stem is topped, when mature, with a dense crown of fine leafed feathery fronds about a metre in length.

A very useful palm for small spaces, it will grow in sun or shade but probably looks best, as here, in part shade. Old leaves, which tend to hang down, should be trimmed off close to the trunk.

Half-hardy to 0°C, it will not stand heavy frost. Wind tolerant, it needs watering until established when it becomes reasonably tolerant of dry conditions. It is also good as a container plant.

Begonia Erythrophylla

Beefsteak Begonia

Top left:

Found in many older gardens, this begonia has certainly stood the test of time. The cross between *B. hydrocotylifolia* x *B. manicata* was made in 1845 and seems to have been popular ever since.

One could probably describe it as the 'aspidistra' of begonias. A creeping, rhizomatous plant, it will grow and flower in heavy shade and is very tolerant of drought. But of course it grows even better with a modicum of care and attention. The leaves are glossy, deep green, about 10cm across, and are a feature of this plant. It makes a very good ground cover.

Flowering time is spring, when the plants are almost smothered in bright pink flowers held on tall stems above the leaves. Frost tender, it will survive some frost if planted, as it is here, under the protection of taller plants.

Elegia capensis

This member of the Restio family (known as restiads) was probably the first to be introduced into this country. With the growing interest over the years in grasses, both native and exotic, restiads have very quickly become popular.

E. capensis is one of more than three hundred South African restiads. These reed-like plants have many growing advantages. Sun and free draining soil are required. At up to 2m high, with a strong clumping habit, *E. capensis* is softly vertical. The feathery foliage can give a weeping effect to the upright stems (see photo on page 19), while the unusual bracts which enclose the foliage at regular intervals up the stems lend an exotic air to the plant. In one of his unusual plant combinations, Peter has contrasted very white arum lilies and their tropical looking leaves with the airy foliage and height of the elegias. Very effective.

The garden is open to the public every first Saturday of the month from 11am to 1pm. Ever changing, it is well worth a visit.

BOOK REVIEW

'SUCCULENTS for the contemporary garden' Yvonne Cave

When I picked up this book, I flicked through it and enjoyed the excellent photographs on every page. Those in the main body of the book helped to identify genus, species and hybrids.

The introduction started with 'What are succulents and how do we define them?' The next three words were - 'Succulents or xerophytes...'. Out of interest, I looked up my Collins dictionary - 'succulent - having thick fleshy leaves or stems'. Being interested in cacti, I checked but found there were none. I wondered why they were not mentioned, even if only in the introduction, as they are not only succulent plants but some make great garden specimens. There are also other succulent plants that make good garden subjects.

I understood the necessity to define succulents, but the next section in the introduction was headed - 'Are there really connoisseurs of simple plants like succulents?' I wondered why this question was asked. As a gardener, I had bought this book because of its title - 'Succulents for the contemporary garden'. On page 11 there is a section on 'Indoor housed collections' and, in the plant dictionary, many plants are included that can only be grown under controlled conditions. This means that about thirty percent of the plants included in the book, are of little use to the general gardener becoming interested in succulents.

Yvonne Cave offers valuable personal experience on how she copes with frost in her garden. The identification of the locations or regions where the photos were taken would give further insights into growing the plants. Details of the plants' native habitats are given, giving the reader some idea of growing conditions.

On checking, I found that the plants featured in the book are available in New Zealand, although you may need to hunt to find some of them.

After having read this book, when a friend started talking about sempervivums I knew exactly what he meant! For gardeners this is a useful introductory book.

Grant Bayley

(A Godwit Book published by Random House. - \$39.95)

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PLANT SOURCES for this issue

Agave parryi – Coromandel Cacti, Auckland Racing Club, Landsendt, some succulent specialists

Arundina graminifolia - Wharepuke, Kerikeri

Begonia luxurians - Wharepuke, begonia enthusiasts

B. Erythrophylla – Tippetts, houseplant sections, 'over the garden fence' Beschorneria yuccoides – Joy Nurseries, Wharepuke

Brachychiton acerifolius - now generally available

Brunfelsia paudflora - generally available

B. undulata - Wharepuke, Kerikeri

Caladiums - watch the spring bulb advertisements and check with the supermarket style plant centres

Calathea zebrina – Tippetts, Wharepuke, sometimes in houseplant section Dyckias – Greens Bromeliads, Len Trotman, Te Atatu, Ak, Auckland Racing Club. *Dyckia* Suntan – Coromandel Cacti

Elegia capensis – Joy Nurseries (restiad specialist), Russell Fransham Elingamita johnsonii – Tippetts, Wharepuke, Oratia Native Plants, Ak. Epidendrum ibaguensis/radicans – Tuckers Orchids, Redvale, Auckland, Wharepuke, Tippetts and 'over the garden fence'

Euphorbia millii v. millii – Wharepuke, Tippetts, some succulent specialists Meryta sinclairii 'Moonlight' – this is a hard one. Originally bred by Duncan and Davies, this is in short supply. You will have to put your name on the 'want' list and patiently wait for it to become available. Phoenix roebelinii - generally available

Platycerium bifurcatum – Tippetts, Wharepuke, Ferns Garden Centre, Ak. Scadoxus multiflorus ssp. katherinae – Joy Plants, Wharepuke, Tippetts Strelitzia nicolai – Russell Fransham, Tippetts, Ferns Garden Centre. Tillandsia deppeana, T. guatemalensis, T. imperialis, T. leiboldiana, T. multicaulis, T. somnians – Greens Bromeliads, Len Trotman, Te Atatu, Ak. Uncinia uncinata – native plant specialists (Oratia Natives) and grasses/reeds specialists (Joy Nurseries)

Xeronema callistemon - this native plant is now generally available.

• Some members found *Adiantum aethiopicum*, (Vol.1, No.4, p.16) hard to find. Oratia Native Plant Nursery has some stock or you could try other native plants specialists.

BEWARE

Many plants, especially those bought from houseplant sections, have been forced under heat and have been over-fertilised. Before these can be planted out in the garden, they need to be hardened off. Very tender species may need to be kept under unheated cover for up to a year and planted out in early summer when the weather warms up. Some bromeliads need to have the potting mix removed and be repotted afresh.

BACK COVER STORY

HEROIC FESTIVAL GARDENS – Bruce Fraser and Glenn Crewther

On the left, driving around a bend in the road, the suburbs seem to be disappearing and the countryside taking over. An illusion of course, because the trees, the grass and the empty space belong to Churchill Park, one of the larger public open spaces in Auckland.

This is the backdrop to our last garden. The large, in depth, section runs fairly steeply from an access driveway that runs parallel with the road down to the park boundary – a steep slope with a shallow stream meandering at its base. A gardener's dream, it is not without its problems.

The photograph on the back cover shows the link log retaining wall that supports the road above. Not the easiest construction to beautify, Bruce and Glenn have planted this public space with the toughest of palms, agaves, yuccas, agapanthus, rosemary and various small succulents. Theft is a problem so the plants have to be not only survivors but not too appealing to the light-fingered. Once upon a time the *Agave attenuata* plants would have disappeared overnight!

The driveway is the access for four properties, which have full frontages to it. The beauty of the way in which Bruce and Glenn have tackled the problems of being below the road, is shown in the bottom photo, inside cover. Looking up to the house on the far side of the road, the garden appears seamless – both road and driveway have disappeared. The palms on the berm and the conifers planted at regular intervals in front of the house opposite give the illusion (in this photo at least) of North Africa.

The driveway has a 1m wall of river stones that includes the source of the waterfall, which drops down into a small pool about 1.5-2m below on the garden side. The water then wanders through a river stone lined channel and drops again - this time into a large pond raised above the house-level terrace on a timber frame. The planting is full and varied and, like all the other gardens, much attention is paid to the contrasting colours, textures and forms of the foliage plants. The palms are already tall enough to give some scale.

The feeling of being in a hole that so many below road properties have, is completely eliminated here. The front entrance is on the same level as the terraced area – the only steps are the broad ones leading down from the carport and driveway, a matter of about a metre. The house is two storeys at the rear, with a very large, north facing deck that looks out at park level at the 'countryside' behind and down to the stream at the bottom of the section. Between the deck and the stream is another garden but that will have to wait for another time.

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Strelitzia nicolai

Giant Bird of Paradise

When looking at a really large clump of *S. nicolai* from Kwazulu Natal and Eastern Cape in South Africa, it is hard to realise that these are perennial plants. But the species, *S. alba* (Great White Strelitzia), from Natal is even larger. It grows to 10m in large groves.

At 4-6m, *S. nicolai* is just a baby by comparison but still not to be taken lightly as it is a clumping plant that can bulk up over the years. Dead and battered flowers and leaves need to be removed regularly to keep it looking good. An extension-pruning saw is necessary as it attains its full height. If not carefully placed, it can be rather hard to manoeuvre with the saw in order to make the cuts.

The flowers are not as showy as the orange *S. reginae* but, in their own way, are quite striking in purplish grey with white flowers and a dark blue tongue. In a (very) large flower arrangement they would be long lasting and elegant.

The main attraction in the garden is the fans of bold, banana-like leaves that make a very tropical looking silhouette. Although listed as frost tender, *S. nicolai* will stand temperatures down to -2°C but needs some protection against wind to limit damage to the 1-2m long leaves. Feeding when young will help to push the plant to full size. The aim is to achieve and maintain size without lush growth and the need for division. When mature, the plants need little or no feeding and will withstand brief periods of drought. Full sun or partial shade and well drained, moist soil – dryish in winter – are the main requirements.

Begonia luxurians

Palm-leaf Begonia

Discovered in the Organ Mountains in Brazil in 1848, this fibrous rooted, clumping plant is classified as a 'shrub-like' begonia. An evergreen perennial from the humid tropics, it is one of the tallest of the fibrous rooted begonias, reaching 2.5m in height.

The leaves are the reason for its popularity and, although its common name is the Palm-leaf begonia, the similarities to marijuana leaves have led to some confusion. These leaves are large, palmate and can be up to 30cm across. Because they are bare-leafed (not hairy), the plants can stand more sun than many other begonias. Bright light, sun (but not midday sun), moist, well-drained soil with added compost and protection from wind and frost are their requirements.

In the photo top right, the flowers are about to open. They are fragrant with white petals and sharp yellow stamens.

Photos: Grant Bayley

Unless otherwise stated, all plants featured in articles in **SUBTROPICALS** are evergreen.





