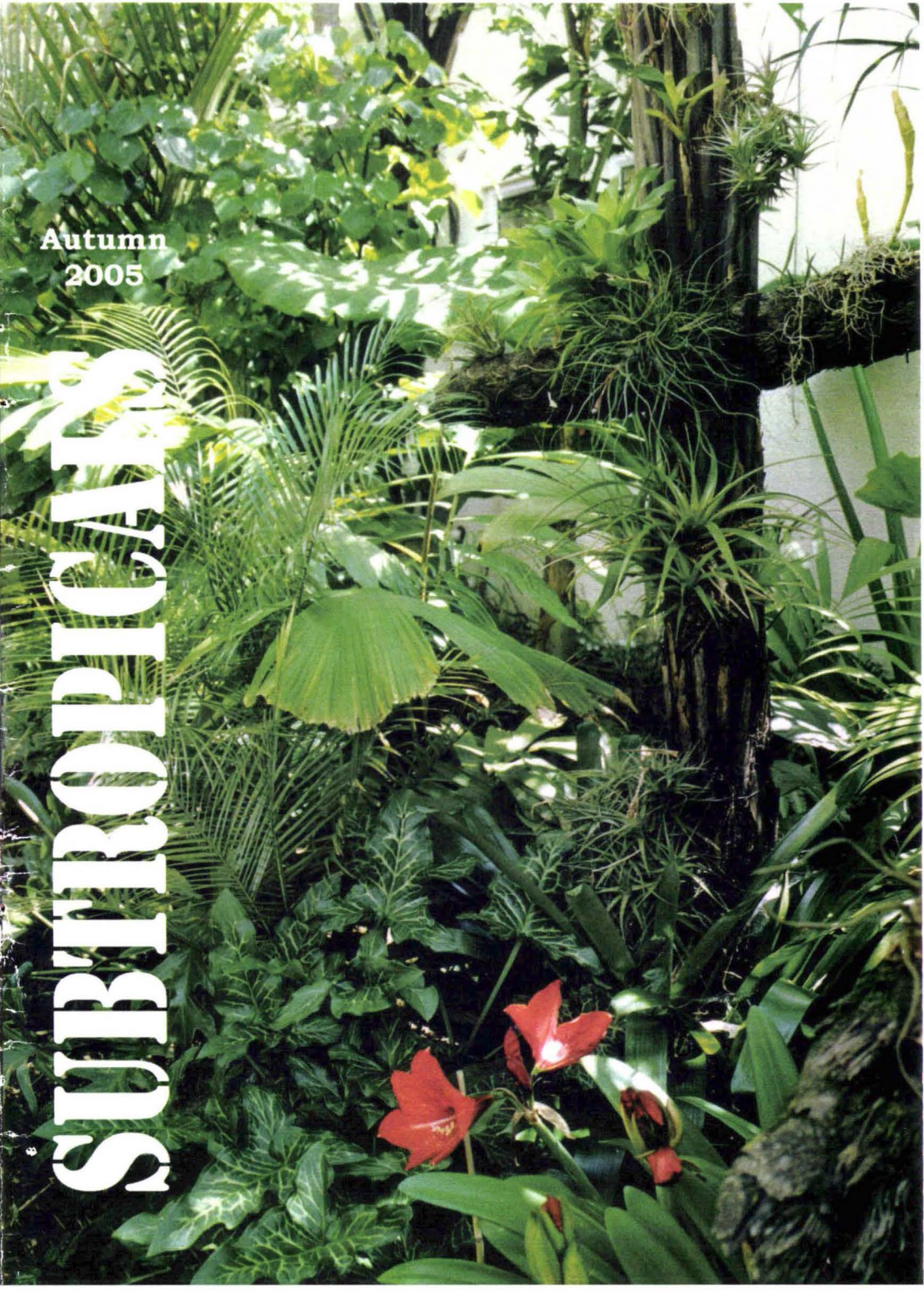


Autumn
2005

SUBTROPICALS





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 2005

Volume 4 Number 1

CONTENTS

- 5 Front cover story – No man’s land to ‘tropical’ garden
7 What’s on
8 *Dendrobium kingianum*, *Sobralia macrantha*
10 *Butia capitata*
15 *Dracunculus vulgaris*
16 *Pteris cretica*
18 *Rhabdothamnus solandri*
23 Conference 2005, Show/Sale
24 Climate zones
25 Heroic gardens festival
Nelumbo nucifera
Xanthosoma sagittifolium var. *aurea*
28 *Erythrina crista-galli*
30 Garden visits
33 Winning letter/photograph
34 *Allamanda laevis*, *Ixora coccinea*
36 Philodendrons
38 Question & answer
39 Plant sources
40 Book review
41 Back cover story – *Aloe polyphylla*
42 *Alcantarea imperialis*

**WINTER ISSUE
COPY DEADLINE
ALL COPY MUST BE RECEIVED BY THE 20TH APRIL 2005**

The weekend after Queen's Birthday

...is the time we celebrate with the annual conference and plant sale. The conference is a lot of fun for everyone and educational as well with six speakers on a wide range of subjects and the opportunity to ask all sorts of questions.

If you wish to attend, prompt return of the form included with this issue will save you ten dollars. Conference space at the ASB Stadium is limited and we were nearly packed out last year.

Helpers at the plant sale will this year be able to arrive before opening time on the Saturday to purchase plants. Details on page 24.

Garden visits are a new departure for the Society and we hope you will take advantage of the opportunities to see interesting gardens and meet their even more interesting owners. The form included is to help us find out your preferences.

Rosemary Steele has once again kindly compiled the 2004 index - a rather onerous task. As you will see, it has been integrated with the 2002 and 2003 indexes so that you will be less likely to lose it and it will be more efficient to use (and those who don't have the back issues may be tempted by the contents).

And the weather? A very wet spring, the coldest December for 59 years and now that it been warm for a while it has decided not to rain. Just as well that all that spring rain filled the reservoirs - the hose is being well used.

Marjorie Lowe
Editor

SUBTROPICALS

ADVISORY MEMBERS

Grant Bayley
Steve Benham
Robin Booth
Keith Boyer
Dick Endt
Russell Fransham
Jim Gilchrist
Terry Hatch
Pauline Isaachsen
Kevin Johnston
Jeffrey McCauley
Nick Miller
Barbara Parris
John Prince
Tim Saunderson
Rosemary Steele
Brian Timms
Martin Walker
Peter Waters

SUBTROPICALS

magazine

EDITOR

Marjorie Lowe
Phone/fax -
(09) 376-6874
marlowe@
subtropicals.co.nz
PO Box 91-728
Auckland 1030

COVER DESIGN

SCANNING

Grant Bayley
Ph (09) 849-4505
gbdesignz@
clear.net.nz

FRONT COVER STORY

NO MAN'S LAND INTO A 'TROPICAL' GARDEN

Brian Timms

The north side of this house is about two metres from the boundary which, when I first moved in here about eighteen years ago, was a very ragged tecoma hedge with the odd shrub and a plum tree with white flowers (and one pink branch) embedded in it. On the other side was a very unkempt front section with a huge old puriri tree at the front. I must confess that I cannot even remember what was in the area beside our house - a feijoa or two and some *Monstera deliciosa* come vaguely to mind. At that time I was only interested in succulent plants and this area was quite unsuitable, so rather beneath the radar!

But, a few years after I came here, the next-door owner subdivided and sold the front half, and a two-storied house promptly began to appear on it, one metre from the boundary. Thus the area became a rather shaded wind tunnel, though height-to-boundary considerations meant that the roof sloped away from us and let some light in and even some sun. The new neighbours, sensible folk, suggested that there was

FRONT COVER

The neighbour's south facing, white plastered house wall makes an attractive background for the exuberant planting. Red hippeastrums are bright in the dappled sunshine. Photographed in November.

INSIDE FRONT COVER

Clockwise from top left:

A tall leaf of a clump of *Anthurium coriaceum* (Birds Nest anthurium) stretches up to the bottom of the Timms' window.

The large, healthy leaves of an alocasia.

A mixture of palm fronds, bromeliads, aroids and New Zealand pepper (Kawakawa - *Macropiper excelsum*)

A pale orange masdevallia growing on a tree fern trunk alongside the climbing stem of a philodendron.

More shots of the colourful, spring flowering hippeastrums that flourish in this competitive environment.

The lovely, glossy leaves of *Arisaema ringens* with *Pyrrosia eleagnifolia*, a common native fern on ponga in the background.

Centre:

Looking down the bark path to the frame wall on the street side that helps to protect this garden from the westerlies.

Photos: Marjorie Lowe

not much point in putting up a fence so they planted a few pittosporums, an Archontophoenix palm and a mamaku (*Cyathea medullaris*). Later, I planted some small nikau palms and silver ferns (*Cyathea dealbata*) that I dug up from a friend's property in the Waitakeres. But much of the space was taken up by stored, potentially useful things, including an enormous filter for a marine tank (ultimately unsuccessful; but I give myself an A for effort!)

A few years ago I conceived a serious interest in tropical and subtropical plants and this area became a potential garden, especially as our section is very small. I made a raised bed with a meandering edge against the house, then laid a bark path, just wide enough to get along, between it and the rest of the garden. I put in a couple of ponga logs for things to climb up and also made some log gardens, by sawing vees in two ponga logs, then fixing them together to make a trough, and suspending them from walls and fences.

In summer the sun shines into this area for several hours on a fine day and even in winter it is quite well lit. I trimmed the lower branches from the existing trees to make a canopy about three to four metres high and suspended a sail of shade-cloth in one place where a tree had died. At the west end, there is a conjunction of buildings that creates a howling wind tunnel when it blows from the west and/or south (and when does it not?). So I built a frame wall 3.5 metres high with a gate in it and covered it with wind-cloth. It has not cured the problem but has improved it greatly. Anyway I am sure that a good breeze sorts out a lot of potential fungus problems in a damp and crowded garden. Lastly I added a sprinkler system attached to the side of the house, with a timer which gives 'rain' of three minutes duration, both morning and evening. Otherwise the wind dries the soil out amazingly fast. Luckily the timer is easily turned off if it is raining.

It is important to remember that many 'tropical' plants come from the mountain forests of their native countries, so are perfectly happy in relatively cool, damp, shaded conditions. I now have several species of large and medium palms, including about nine species of Chamaedoreas, which thrive here, also various ferns, anthuriums (both climbing and birds-nest types), assorted ctenanthes, marantas, cycads, orchids, bromeliads and large taros, which get colossal in the semi-shade and humidity. Weeds are not a serious problem, although the familiar tradescantia is a constant curse. The sheltered and sunny east end is, oddly enough, a problem area, but I am gradually finding things that are happy there. I trim the pittosporums heavily a couple of times a year and mulch the branches. This mulch is thrown around the plants with lawn clippings and anything else that begins to show signs of mortality. It is astonishing how rapidly a 10-20cm layer of

mulch disappears! The soil is rather poor, but has had a lot of old potting soil dumped on it at one stage, so the heavy mulch layer gives ideal growing conditions for rainforest plants. There is only one serious problem in all of this - the mosquitoes really thrive! But the little beasts were thriving long before my garden was there, so it is not my fault!

This garden is doing really well, is very crowded and quite spectacular. It is visible from all the windows on the north side of the house, so gives us a beautiful view where we could easily have had a fence or, worse, a direct view into our neighbour's windows. They are also happy, for the same reasons, and they don't even have to do any gardening.

WHAT'S ON

APRIL - 9th, 10th

PALM & CYCAD SOCIETY ANNUAL SHOW & SALE

Saturday & Sunday 9am-4pm

ARC Botanic Gardens, Hill Road, Manurewa.

Entry \$2.00, children free.

Door prizes and ample parking.

APRIL - 10th

AUCKLAND BOTANIC GARDENS FESTIVAL

Sunday 10am-4pm

Opening of the new Visitor Centre

Uxbridge travelling art exhibition

Guided tours of the Potter Children's Garden

Live music, face painting, food and rides

Sales of plants, preserves & produce

JUNE - 11th, 12th

SUBTROPICALS SOCIETY ANNUAL SHOW & SALE

**Saturday & Sunday, 9am-2pm at the ASB Stadium,
Kohimaramara, Auckland.**

Entry by \$5.00 raffle ticket, ample free parking

Free plant crèche to keep your purchases safe.

**The Conference is at the same venue on
Saturday 2:45pm onwards. Members & guests only.**

Dendrobium kingianum

Jonathan Voysey

This Australian species has been the object of much breeding work over the years, with the result that there are numerous hybrids and, according to Rentoul, 'it is impossible to estimate the varieties of this orchid'. A beautifully coloured complex, the forms can range from almost white, mostly pink to deep mauve, to red (Carrigan's Red).

D. kingianum is almost exclusively lithophytic in nature, growing in the crevices in rock faces that are vertical, flat or sloping. In these conditions it has become so tough that it is almost xerophytic (in Whakatane it is growing on a ponga log wall and flowering, well outside its normal spring season). *D. kingianum* grows best where plant detritus is trapped and it can form quite large colonies. An easy, cool growing orchid, the habitat is from Newcastle in New South Wales and into southern Queensland.

The photograph opposite shows a good-sized, free flowering clump, grown terrestrially in free draining sand and bark by Georgie Gardner at Ruakaka, not far from the shoreline. I grow mine in sun with plenty of air movement and the occasional squirt of the hose in dry periods. At the base of tree ferns, they are literally growing on roots but form a wonderfully green and lush, all year ground cover about 20-30cm high. No dead patches here - old leaves seem to disappear and mulch the pseudobulbs. New, rooted plantlets form in the leaf apex where the plant has flowered and can be removed and either given away or used to extend the planting. *D. kingianum* is reputed to be lightly scented but I have yet to detect any perfume.

Sobralia macranthus

There are several colour forms about of this tall (to more than two metres in its native habitat of Mexico to Costa Rica), terrestrial orchid. They have pinnated, alternate leaves the length of the reed-like stems and are evergreen, requiring all year moisture. The summer blooming, fragrant flowers resemble cattleyas and, although they only last for two to three days, a mature clump with many stems can be in flower for some time. They can be picked and used like hibiscus.

Most orchid books are aimed at glasshouse growers and they almost all say to grow this species in intermediate to warm conditions. The exception is Robert Friend (Australia) in *Orchids in your Garden*, who recommends them for subtropical to cool gardens in light shade, well drained and planted at ground level. Proving him right, the photo opposite was taken at Landsend on one January with *S. macrantha* planted amongst a host of other subtropicals and flowering well.





Butia capitata

(Syn. *Cocos australis*)

Jelly Palm, Wine Palm, Butia Palm

Kevin Johnston

Butia capitata is a feather palm from Brazil and Uruguay and is a member of a genus of at least eight species, all hailing from South America.

Wine Palm, Jelly Palm or Butia Palm as it is often referred to, is an extremely architectural palm often blue in appearance, although foliage colour is variable. It grows slowly to a trunk height of ultimately five metres and could be termed medium in size.

Butias look at their best planted as solitary palms in a sunny situation with plenty of 'air' around them to show off their striking looks. They will often give a garden a more arid appearance. Relatively tolerant of coastal conditions, they will take some cold, at least a few degrees of frost, possibly down to minus 10°C. Wind will not bother them a bit.

Butia capitata will tolerate a wide range of soils from heavy clay to sand but does better and looks best on a sandy or open soil that tends to be light in moisture. Because it has a tolerance of dry conditions, slow growth and an architectural stature, it also makes a good container specimen.

Jelly and pickles that have a distinctive and unusual flavour, can be made from the mature fruit - hence the name 'Jelly Palm'.

This palm is widely available in New Zealand.

Top:

The leaves of this *Butia capitata* form are a distinct blue-green and what is most unusual, the erect inflorescence is a reddish purple, not the more common golden yellow. This is a young palm but has a spread of about four metres at this stage, while only about 2.5 metres high, including the 50cm trunk.

Bottom left:

The branch of ripening fruit is so weighted down that it is lying on the grass.

Bottom right:

A jar of butia jelly surrounded by ripe fruit that can be up to 35mm in diameter.

Photos: John Hague-Smith

OH YOU LITTLE BUTIA!

John Hague-Smith

In lieu of the one that was stolen, a friend gave me as a gift the *Butia capitata* palm shown in the photographs on the previous page. It was planted from a ten litre bucket in late 1999 and then had four or five leaves.

It is now growing in full sun all day, all year, in rich, free draining volcanic loam in Papatoetoe. A feather palm, it has very attractive new growth that is milky blue/green. The photos were taken in April 2004 and the palm has since sent up another flush of leaves and more fruit is setting.

Despite all the palm books describing this palm as slow growing, this particular specimen is growing flat out. Although last winter and spring were cool and wet, the trunk doubled in size to about 50cm high and the leaf spread is about 4 metres across. Perhaps it grows fast in the early stages or the conditions are so good it is making the most of them.

It was surprising that this palm fruited so early at only five to six years old. This year in its second bearing, there are four fruited branches just laden with fruit. They are delicious to eat, not unlike a loquat with a large stone enclosing the seed. Some fruit are fairly fibrous, depending on the palm.

A friend made the jelly illustrated and another friend made some wine for me. A fellow Palm Society member loves the jelly and uses it with savoury dishes.

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:
Phone (09) 296-7699
PO Box 3871, Auckland**

Palm and Cycad Society of New Zealand
Annual Show and Sale

Saturday and Sunday 9th and 10th April
9 am to 4 pm

at the
Auckland Regional Botanic Gardens
Hill Road, Manurewa

Entry - Adults \$2 Children Free
Door Prize each day
Ample Parking

To join **SUBTROPICALS**

send your cheque for
NZ\$35.00 – New Zealand membership

and via airmail overseas

NZ\$43.00 – Australia

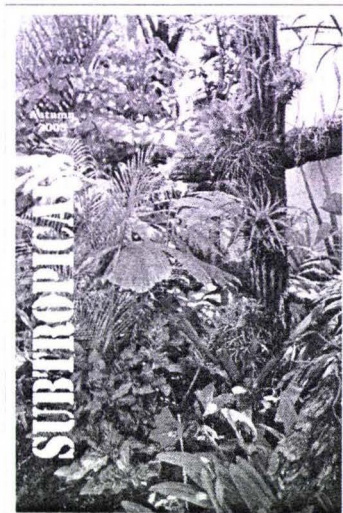
All other countries

NZ\$45.00

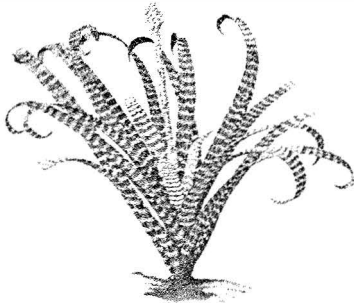
to **SUBTROPICALS**

PO Box 91-728, Auckland 1030

New Zealand



Alcantarea imperialis
red form



GREEN'S
BROMELIAD NURSERY AND
SUBTROPICAL GARDENS

P.D.C. Maungakaramea,
Whangarei 0250

Ph/Fax 09-432-3759

Email: kjgreen@xtra.co.nz

Mail Order Catalogue \$3

Visitors and tour groups welcome
by appointment

RUSSELL
FRANSHAM'S
SUBTROPICAL
NURSERY & GARDEN

Clements Road
Matapouri Bay
Northland
OPEN WEEKENDS
9am - 3pm
Or BY APPOINTMENT

Erythrina
crista-gallii
large, peak condition

For a catalogue
and
to order

Ph. 09-4343980

Fax: 09-4343179
russ@igrin.co.nz

or visit our web site
www.subtropical.co.nz

Send SAE for list to...



Aristea major
(summer issue)

Pittosporum cornifolium
from the Poor Knights

JOY NURSERIES

Jericho Rd,
R.D.2 Pukekohe NZ
Phone (09) 238-9129
www.joyplants.co.nz

Dracunculus vulgaris

Brian Timms

This aroid, sometimes known as the dragon arum, has a beauty that is definitely in the eye of the beholder, even to a devout aroid lover.

I obtained *D. vulgaris* as an *Amorphophallus* species but, as I had had the former about twenty years ago, I knew as soon as I saw the distinctive mottled stems and white-streaked leaves what it actually was. The plant pops up from its large buried tuber early in spring, or what passes for spring these days. Stems are up to a metre or two long, with dark green leaves with white streaks, and have a number of long, lanceolate segments - very decorative.

The flowers sort of nestle among the foliage rather than being held above it. They can be up to a metre long, but usually less, and are a rather nasty blackish-red spathe, heavily ruffled, leaning back from the top of the stem. The spadix is about the same length as the spathe, and black, with a rather wrinkled and warty appearance. I have seen photos on the Web of variants with pale cream and also very dramatic crimson spathes, but in each case the spadix is still black.

The scent produced by this flower has to be experienced to be believed. The neighbour who gave me my first dracunculus called it the "Dead Elephant in the Shrubbery Lily", but this is an exaggeration; probably a dead cat or smallish dog would be closer. The scent is strongest in the sun, or the heat of the day. Mine seems to attract relatively few insects, considering this, but it does appear in early summer (see remarks about spring above), so there are few about.

The whole thing is remarkably short-lived, and the lower leaves are dying even as the flower appears. The entire plant collapses and dries off a couple of weeks after the flowers die. The first time this happened I thought perhaps the pot had dried out so this year I kept it watered, to no avail. The whole thing takes about two months, and it stays in dormancy the rest of the year. I may try planting it in the ground for next season to see if that makes any difference, if I can find a vacant spot with the required drainage.

D. vulgaris comes from the eastern Mediterranean (Corsica to Crete and Turkey), so prefers a somewhat drier climate than ours and hence requires some drainage, especially when dormant. There is one other species in the genus, *D. canariensis* that is smaller, cream-flowered and from the Canary Islands only. It is not available here as far as I know. If anyone has one, or the related *Helicodiceros muscivorus*, I'd be very interested in obtaining one. (I am mad!)

Pteris cretica

Barbara Parris

Cretan Brake

Pteris cretica is a widespread species of the Old World and the New World tropics and warm temperate regions. As might be expected from such a distribution, it is a highly variable species with numerous cultivars. The form most commonly encountered in cultivation in New Zealand, and the one that is naturalised, is cultivar 'Ouvradii'. It generally resembles typical *P. cretica*, but is larger and has more pinnae. The fronds are once-pinnate, with the basal pinnae forked once or twice, and are held erect. The sterile fronds have rather broader pinnae than the fertile. Well-grown plants may reach a metre or more in height and width, slowly clumping up by rhizome divisions.

This species prefers light shade or rather open conditions and can certainly stand morning sun up to about 11 am. Soil preferences range from dry to damp - mine inhabits a raised bed on the south-east side of the house and gets by with a once-weekly watering, but it would be more lush with more water. It will cope with frost ('The Fern Growers' Manual' claims minus 12°C to minus 18°C), although it will die back with cooler temperatures. Removal of the dead fronds improves the appearance of the plant, and it appreciates a twice-yearly feed of general garden fertiliser. It is an attractive, undemanding and easy garden subject.

A number of other cultivars are occasionally available in New Zealand, usually sold as baby houseplants. 'Childsii' has irregularly fringed pinnae, which are also crested at the tips. 'Mayii' is slightly variegated with a cream central stripe on the pinnae, which are crested at the tips. 'Parkeri' is larger than 'Ouvradii', but with fewer pinnae. 'Roweri' has pinnae heavily crested at the tips. These cultivars are less strong than 'Ouvradii' and do better with light shade and moist soil.

Plants sold as *Pteris cretica* var. *albo-lineata* actually belong to *Pteris nipponica*. They are smaller than *P. cretica* 'Ouvradii', up to 0.5m high, with fewer and narrower pinnae that have a pale band along their midrib. Mine grows amongst totara roots on the south side of the house and receives no sun. People either love it or loathe it because of its variegated fronds. It is as tough as old boots, never needs grooming, and would look really good planted with *Asplenium oblongifolium*, one of the very few ferns that is happy with such conditions.

Top: *Pteris cretica*

Photo: Margaret Peart

Bottom: *Dracunculus vulgaris*





***Rhabdothamnus solandri* – a New Zealand link to the tropics.**

Nick Miller

Rhabdothamnus solandri is New Zealand's only native gesneriad. The gesneriads (Family Gesneriaceae) are largely tropical or subtropical and provide a number of popular houseplants, such as *Saintpaulia* (African Violet), *Sinningia* (Gloxinia) and *Streptocarpus* (Cape Primrose), but a number of them show promise as garden plants in the warmer parts of New Zealand. The genus *Rhabdothamnus* contains only one species and that species is confined to the North Island of New Zealand, together with some offshore islands. The natural range of this plant extends from about 34° south to 41° 40' south. It is unlikely to be the southernmost gesneriad in the world, as it seems probable that the Chilean species *Mitrorhia coccinea* may extend further south. There are fairly closely related genera in Australia, Lord Howe Island, some of the Pacific Islands and Chile.

Rhabdothamnus, which has the Maori name of taurepo, is a slender, much-branched and often rather straggly shrub that grows to one to two metres high. The leaves are broad ovate to orbicular, 50-90mm long by 30-70mm wide and are described as 'scabrid', meaning rough in texture (like sandpaper, in fact). The flowers, which are 20-25mm long, are nodding, light orange to tomato-red with red veins and have a corolla which flares out. The flowers are produced on and off throughout the warmer months.

Centre:

This photograph was taken in late May (early winter) in the Fernery at the Auckland Domain. At least thirty flowers can be seen here but there were probably more. This plant, while peaking in the warm months, almost always has some flowers present. As in nature, *R. solandri* spills gracefully down a steep bank in fairly heavy shade.

Clockwise from top left:

Close up of a flower on the plant above.

Photos: Grant Bayley

Two close ups of blooms at the Botanic Gardens, Manurewa.

Photos: Margaret Peart

Three differently coloured flowers, from deep red to golden yellow showing different markings.

Photos: Nick Miller

Rhabdothamnus is in cultivation as a garden plant in New Zealand, but is not widely known. It is grown by the native plant enthusiast rather than the general gardener, as it is attractive but not spectacular. It is seldom seen in garden centres, but a few specialist nurseries list it. A yellow-flowered variety has been collected occasionally and is still in cultivation.

I have long had an interest in this charming species and have viewed it in the wild at a number of locations. The preferred sites for these plants are on rocky slopes, well drained but moist. The soil itself may sometimes be clay-based, but the sloping, rocky sites make for good drainage. Almost every time that I have found *rhabdothamnus* growing in the wild, it has been growing near a stream, waterfall or the sea, so humidity seems to be desirable. They do sometimes occur in sites that vary from the norm for the species.

For about ten years, as part of my work as an environmental consultant, I paid annual visits to a site at Woodhill, to the north-west of Auckland. This site is a valley set among old sand dunes, with a small stream flowing down the valley floor. The valley is mostly in pasture, with occasional clumps of remnant coastal forest (the site is within four kilometres of the Tasman Sea). During previous visits I had not inspected this vegetation closely but, having some spare time during my visit on December 1997, I climbed the sides of the valley and approached a small forest remnant. This remnant clings to the sides of a small side gully and is shaded by *pohutukawa* and other trees. Much to my surprise, the ground-level vegetation turned out to be dominated by *Rhabdothamnus solandri* and a few ferns. These were growing in a 'soil' consisting of sand grains cemented together with iron oxides. The soil was quite dry, with limited water-holding capacity and the plants were often clinging to near-vertical faces. The root systems were spread in a shallow mat over the upper centimetre or two of soil.

The *rhabdothamnus* population here produced flowers of a particularly rich orange and I collected a couple of small seedlings that have settled down nicely in cultivation. The growth habit of *rhabdothamnus* is much-branching and tangled. This habit, common in New Zealand understory species, is referred to as divaricating. Some botanists believe that this evolved as a defence against browsing by moas. It was interesting to see that some of these plants grew in open pasture, which was obviously subject to heavy grazing by sheep and cattle. Yet they were quite untouched. Are they distasteful or is the divaricating habit really a good defence?

A few years ago, with our local angling club, I went on a trout fish-

ing trip, to the Manganuiateao River in the central North Island. This river flows off the slopes of Mount Ruapehu and eventually enters the Tasman Sea. The area that we were to fish is at the bottom of a deep valley, about thirty kilometres as the crow flies from the summit of Mount Ruapehu. The valley gets very cold in winter, although it is only at about 400 metres altitude, and snow may fall and persist in winter. The river is very attractive and a major habitat for the endangered blue duck. But what were those shrubs growing along the riverbank? Surely not? Yes, here was *Rhabdothamnus*, in a much colder climate than I would have thought to find it. I temporarily abandoned the fishing and found further colonies growing under patches of bush (open to grazing) further up the valley sides. They were a fairly ordinary strain, with the usual orange-red flowers, but surprisingly cold hardy. Certainly the downhill rush of the river to the sea would assist in draining away cold air, but in winter there must be a generous supply of cold air to drain! *Rhabdothamnus* is generally described as a plant of coastal forests and, by New Zealand standards, this area was far from coastal.

There were only a few seed capsules visible, which I collected and placed in my fly box for safe keeping. Alas, I later, absent-mindedly opened this and the seed pods floated merrily off towards the distant sea. However, I will be back. 'return, re-collect' as Frederic Sander telegraphed to one of his orchid collectors when a large shipment of orchids was lost in a cyclone. And the trout fishing? Well, the less said about that the better. But a very pretty place to visit.

What growing conditions do they like?

- Good drainage
- A soil that does not dry out badly
- Light shade
- Protection from strong competition
- If you have rocks in your garden they seem to go well with *rhabdothamnus* when the above conditions are met.

The shade may be supplied by a building (plant them on the east or south side of your house), shade cloth, or by plants that cast a dappled shade – kowhais, tree ferns, etc. If you are in a hurry, abutilons (Chinese Lantern) should do well. *Rhabdothamnus* will withstand bright sun when the roots are well shaded by other plants, as long as the competition for water isn't too fierce.

The normal colour is an orange-red to tomato red, however there is some variation and some velvety dark reds are around. There are various pale orange forms which are attractive. A number of yellow forms (sometimes known as var. *aureus*) have shown up over the years and at least one clone is still in cultivation. It is a very pretty, soft (free-

range) egg-yolk yellow, but a weak grower. It has much less colour in its stems than other forms and this may be a diagnostic feature. It is presumably an albino and thus may have less dark pigment in the plant itself, as do yellow clivias and pale forms of some other plants. The original cultivated material of the yellow form was collected from the Kaitake Range near New Plymouth several decades ago by Sir Victor Davies (of Duncan and Davies fame), but seems to have largely disappeared. The plants which were sent to me by Bill Clarkson of New Plymouth, were grown from cuttings taken from a cultivated plant growing in Taranaki, not far from the Kaitake Range, so they are likely to be derived from this original collection. They have smaller leaves than most plants that I have seen and seem less vigorous than most – possibly due to many years of vegetative propagation.

Occasionally a yellow form has been found elsewhere. A botanist friend has seen yellow-flowered plants growing on the Hen and Chickens Islands. Living on isolated Great Barrier Island in the early years of this century, Fanny Osborne, developed an interest in painting flowers, particularly the native flora which surrounded her home. I have a copy of *Fanny Osborne's Flower Paintings* (Jeanne Goulding, 1983, Heinemann), which contains delightful paintings of both an orange and a soft yellow form of *Rhabdothamnus solandri*. The text comments "Here, the specimen which Fanny Osborne painted was a soft yellow and was probably collected in the bush near her home at Tryphena, Great Barrier Island". It is noticeable that the form which is shown has no striping visible, unlike the orange-red forms which are usually heavily striped. The yellow form which Mrs Osborne painted had leaves of similar size to the orange form. It would be useful to obtain material of one of these other yellows, in the hopes that they are stronger growing.

There is also a light yellow-orange clone around, labelled 'Gold'. Produced by Naturally Native of Tauranga, this is a strong grower. Good garden centres occasionally carry it. Recently we stopped and inspected a population of *rhabdothamnus* growing on the road bank on a back road (very 'back' indeed) in northern Taranaki. There were some really fine dark red forms among them. Hopefully the cuttings that we collected will root.

If you have a suitable spot in your garden, here is a native species that fits in well with the subtropical look, has attractive flowers and foliage, and always attracts attention from garden-minded visitors. I commend it to your attention. And if you know of a strong-growing yellow flowered form, please contact me!

millern@wave.co.nz

SUBTROPICALS - CONFERENCE 2005

The weekend after Queen's Birthday, June 11th, and 12th, is a date not to be missed. The Redwood Lounge at the ASB Stadium, Kohimaramara will again be the venue for what will be our third conference.

The space worked out well last year, although we were operating close to capacity. It will be interesting to see how many more members we can manage to accommodate. As before, the Conference starts at 2:45pm which gives 45 minutes for those who are stand holders at the plant sale to organise themselves.

There will be six talks on various subjects (to be specified in the winter issue), with breaks for afternoon tea/coffee, pre-dinner drinks and dinner. The evening will end at approximately 9:30-10pm with a question and answer session followed by a plant auction. Much expertise will be present so dream up your curliest questions and, if they are very technical, send them in writing to the editor who will pass them on to the appropriate people. The auction will, we hope, contain some special plants - so if you have something different, interesting or just a favourite please bring it along to help raise funds. Don't spend all your money on Saturday morning, keep some for the evening auction.

The Conference is not open to the public but members are welcome to bring guests. When you book for them please include their names so that we can supply personalised nametags. If you return your application form (with payment!) before the 30th April, you will save \$10.00 per person. The costs remain the same as previous years.

As well as the knowledge to be gained from the talks and discussions, the Conference is primarily a social occasion, a chance for members to meet and fraternise. Last year was great fun - let's make 2005 even better.

SUBTROPICALS SHOW/SALE

We learnt a great deal from last year's first time at the ASB Stadium and hope to make this year's show run as smoothly and efficiently as possible.

In response to requests, members who help to run the show will be issued with special passes so that they can indulge in early-bird forays,

between 8am and 8:50am on the Saturday before the doors open.

Because there were some security problems, this year everyone on the sales stands and helping with the show will be issued with nametags. This includes Friday night when we will need more volunteers to speed up the setting up process. The rosters will allow for extra people in each area over the weekend so that everyone can take time out to browse, buy and have a cup of coffee. When we close at 2pm on the Sunday, we will need more help to clear up.

Many members pitched in enthusiastically last year to make the show a success. The plant crèche was most successful and will probably need more room this time! It would be good if we could again have a stall devoted to selling miscellaneous plants donated by members. If you have any plants that could be available in June, please get in touch. Every little helps.

The applications for selling space are included in this issue and the proposed plans and information will be sent out to anyone interested in taking part. The aim is to present the widest range possible of high quality subtropical plants, in an attractive and knowledgeable way. The feedback is that the public love talking to specialists who really know their field. Spaces available range from quite small to fairly large and specialist growers are particularly sought.

AVERAGE ANNUAL MINIMUM TEMPERATURES

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 United States 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.

HEROIC GARDENS FESTIVAL

Kavin King & Mark Yandall

Once again, another great collection of interesting gardens. One of the most successful aspects of this festival is being able to return to gardens previously visited and see the changes made in response to ebullient plant growth and developing plant preferences.

In this garden a favourite *Ceiba speciosa* has been removed because of its rampant growth and has been replaced by a group of three *Archontophoenix cunninghamiana*, which not only allow more northern sun in but screen off the upper storey of the townhouse opposite. These townhouses, built twenty years ago, are semi-detached so that each has garden on three sides, in this case on two levels matching the inside floor levels.

Kavin's and Mark's garden concentrates mainly on foliage, some of which (especially the bromeliads) is colourful. There are flowering highlights throughout the year – Bird of Paradise, camellia, cannas, clivias, a cherry tree, *Cordyline* 'Nigra', gardenia, *Gloriosa superba*, heuchera, *Stromanthe sanguinea*, vireya rhododendrons, gingers, heliconia and the dwarf pink banana – an amazing amount in a small space.

And yet this is one of the most peaceful and relaxed gardens to be in. The water features, a small jet in a brilliant blue pot plus the lotus and stainless steel waterfall, reinforce this feeling and then at dusk the soft lighting comes on. Dining and entertaining alfresco, day or night, have immense charm in this setting.

The *Magnolia grandiflora* is regularly pruned to keep it in bounds and plants are moved or changed according to performance and the availability of exciting new acquisitions.

Nelumbo nucifera

Lotus, Sacred Lotus

A single genus that has only two species – *N. lutea* from temperate North America south to the West Indies and eastern Mexico and the Sacred Lotus from southeastern Asia, India, Oceania and northeastern Australia.

Both temperate and tropical lotus are deciduous. They are tuberous aquatic herbs that bloom in the warm months. The round leaves can be up to 60cm across and are joined to the stem at the centre of the leaf. Grown in full sun in shallow water they are carried 90cm-1.8m above the surface of the water.

The 10-20cm wide fragrant flowers are carried singly on separate scapes and last for two to three days. They are followed by very distinctive, ornamental, woody fruit that are good for dried arrangements. The tubers and seeds are both edible and are widely available in Asian markets. They are highly esteemed in Chinese cookery.

Usually grown in shallow, still water ponds, *N. nucifera* can be grown in large tubs submerged about 20-30cm below the surface and topped with gravel or small pebbles to keep the soil from floating away. Grown directly in the pond bottom soil, they can be too vigorous. Lack of space for a pond can be overcome by growing lotus in large pots as in this garden. Dwarf forms suitable for pot culture are steadily becoming available.

Xanthosoma sagittifolium* var. *aurea **Tannia, Tanier, Yautia or Cocoyam**

The leaves of this aroid are a startling lime green against the dark green of the *Ctenanthe compressa* and the Mondo Grass. A shady position protects the leaves from sunburn. Good soil and summer water will encourage growth – the species is enormous – although *X. sagittifolium* will withstand drier conditions than taro. Frost tender, it can look somewhat dispirited in winter and early spring if not protected from cold winds and low temperatures. Flowers are rare and (like philodendrons) usually only on species, heating up when fertile.

The genus originates in tropical America but, because this is the most important aroid food crop after *Colocasia esculenta* (Taro), it has become a staple in many places, especially Africa.

Top left:

An elegant stainless steel water feature – quiet and cooling by day, glowing at night. Background plants are left: black stemmed taro and right: *Farfugium japonicum* 'Gigantea'.

Top right:

A perfect lotus – *Nelumbo nucifera* 'Mrs. Perry D. Slocum'

Bottom:

Continuing to the right of the water sculpture is a raised bed of foliage plants under the shade of a *Magnolia grandiflora*.

From left: *Asplenium australasicum* (Birds Nest Fern), *Farfugium japonicum* 'Argentea', *Xanthosoma sagittifolium* var. *aurea* and behind – *Ctenanthe compressa*, *Stromanthe sanguinea* and *Cordyline* 'Nigra'.





THE GREAT PRETENDER

Erythrina crista-galli

Cockscomb Coral Tree, Cockspur Coral-tree

Edith McMillan

Although some books refer to *Erythrina crista-galli* as being a shrub as well as a tree, this appears to happen only in much colder areas where frost cuts it back to ground level. However, with the damaged wood removed, it comes back vigorously in spring to make a showy, unbranched, multi-stemmed shrub about two to three metres high. This constant cutting back results in outstanding racemes of flowers (not unlike clematis). *E. crista-galli* is reputed to be the hardiest of the erythrinas and, if the roots are protected from freezing, it can be grown as cold as Zone 8 (Albrecht Lamas).

Most of the approximately one hundred and twenty species of *Erythrina* are widely distributed in the tropics, particularly Africa and South America. The deciduous *E. crista-galli* comes from the eastern slopes of the Andes – from Brazil to Argentina. In time, it can become a gnarled, rough-barked tree of great character, sometimes growing to nine metres.

In the frost-free parts of New Zealand, this tree grows rapidly to reach about six metres with a similar spread. Full sun, together with a well drained, average to fertile soil is required. This species will stand some drought but will also withstand fairly high rainfall if the drainage is good - its habitat includes rainy parts of Brazil. The canopy is dense and provides good shade but pruning is necessary to keep the plant to a single stem (it is often multi-trunked) and to provide clearance under the branches. (Beware – the leaf stalks have prickles!)

The bright red to wine coloured flowers appear in spring for a month, usually October/November. This is the first flush of up to three flowering periods (cut back old flower stems after each cycle). Pat and Bruce Johnston of Weymouth say that their young tree (close-up opposite of flowering raceme) was out of flower for Christmas but came into bloom again in February and was still flowering in early March. They are close to the sea and are on volcanic soil so drainage is perfect. The deciduous period is brief (mainly June and July) and by September some new leaves appear, but are still sparse when the first flowers arrive. The almost mature tree opposite is just around the corner from the Johnstons, on the main Weymouth Road.

Photos: Bruce Johnston

GARDEN VISITS

Since **SUBTROPICALS** first started three years ago, some of our members have expressed the wish that they would love to see some of the subtropical gardens of our members and to be able to talk with the owners about how they grow their plants.

Recently, one of our horticulturist members with an extensive knowledge of subtropical gardens, bravely offered to organise garden visits and to lead groups of members in voyages of discovery. To make these visits really worthwhile, he felt that numbers needed to be restricted for each outing. This way there would be greater opportunities to learn more about successes and failures in different settings.

So that we can learn more about everyone's preferences and interests, an insert questionnaire in this issue asks if you are interested in joining in these garden visits. If you are, would you please use the back of the form let us know your preferences – coastal, bush, city, suburban, small, large, water features, etc. And if there are any gardens that you would particularly like to visit, please say.

The society would like to make these visits a regular part of the **SUBTROPICALS** year. If the forms are returned as soon as possible to give us an idea of the number of members interested, it should be possible to arrange the first outing to take place after the conference/show, perhaps in early spring.

QUESTIONS & ANSWERS

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

Our advisory members will endeavour to supply solutions and answers.

Write, fax or email to

Q & A

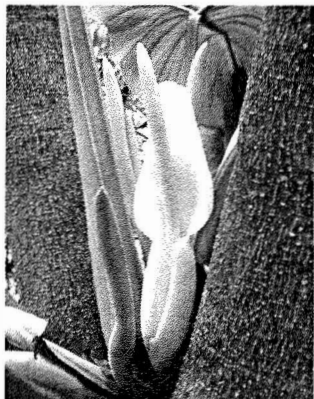
PO Box 91-728, Auckland, 1030

Phone/fax (09) 376-6874

Email – marlowe@subtropicals.co.nz

WHAREPUKE

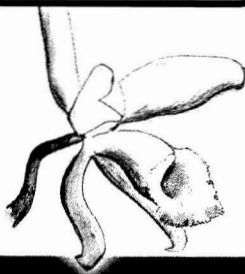
www.sub-tropicals.co.nz



Philodendron species
and cultivars

*Sub-tropical
Garden &
Nursery*

190 Kerikeri Rd. Kerikeri
Ph 09-407-8933



**Dendrobium
kingianum
cultivars**

suitable as ground covers

**Jim & Sharon
Gilchrist**

pottering about

Military Road R D 7
Whakatane

Phone/fax (07)322-8201
potteringabout@xtra.co.nz

www.potteringabout.com

LANDSENDT

108 Parker Road
Oratia, Auckland

Phone (09) 818 6914
Fax (09) 818 6391

Email endt@ihug.co.nz

Open Monday - Saturday
9am - 5 pm
Sundays by appointment



**Alcantarea
imperialis**
large
plants

Check out our web site
www.landsendtexotics.co.nz

NESTLEBRAE EXOTICS

www.helensville.co.nz/nestlebrae.htm

Herb, fruit and palm seeds

(tours by appointment)

219 South Head Rd, R.D.1
Helensville 1250
Ph (09) 420-7312

Weekend Gardener

NZ's do-it-yourself gardening magazine 

FOR REAL GARDENERS
THROUGHOUT AUSTRALASIA
- WEEKEND GARDENER - 

**HAVE A GARDEN
AND A WEEKEND**

SUBSCRIPTIONS

NZ: Freephone 0800 113 305.

Online: www.weekendgardener.co.nz

Australia: Freephone 1800 113 305

Online: weekendgardener.com.au 

WEBSITE www.weekendgardener.co.nz 



LETTER/PHOTOGRAPH COMPETITION

And the winner of the \$50.00 Touchwood Books voucher for the autumn issue is Georgie Gardner of Ruakaka.

She writes:

Allamanda laevis is sometimes known as *A. arborea*. From north-eastern Brazil, it grows to about three metres, preferring hot dry conditions in full sun. The growth is quite fleshy and it has a similar growth habit to plumeria (frangipani) with leaves and flowers on the ends of the bare stems.

It loses its foliage in winter and dies back alarmingly only to bounce back again about October to flower throughout the summer. It is a tender shrub that does not like our damp winters, but has survived six years in my garden.

Photo: Georgie Gardner

SPONSORED BY

TOUCHWOOD BOOKS

Specialists in gardening and horticultural books

All our 20,000 books, new and second-hand are listed on the Internet at <http://www.touchwoodbooks.co.nz>

We have books on begonias, bromeliads, cacti and succulents, epiphyllums, ferns, heliconias, hoyas, orchids, palms, Mediterranean gardening and tropical plants - all available by mail order.

PO BOX 610, Hastings

We are only as far away as your telephone

Phone (06) 874-2872

Fax (06) 874-2701

Email - mail@touchwoodbooks.co.nz

Allamanda laevis

This plant was originally sourced from John Whitehead, one of the earliest specialists in the country of tropical and subtropical plants. As far as we know it is not currently available.

SUBTROPICALS has made a point of not featuring any plant that (one) – will not grow somewhere in the country and (two) is unobtainable. *Allamanda laevis* is definitely growing here and all we have to do is to ensure that it is propagated and added to the growing list of interesting new plant material.

Fortunately one of our professional members is willing to do the necessary and with Georgie Gardner's kind permission, this particular plant may well be available in a year or two.

Editor

Ixora coccinea

Flame of the Woods, Jungle Geranium

William Platt

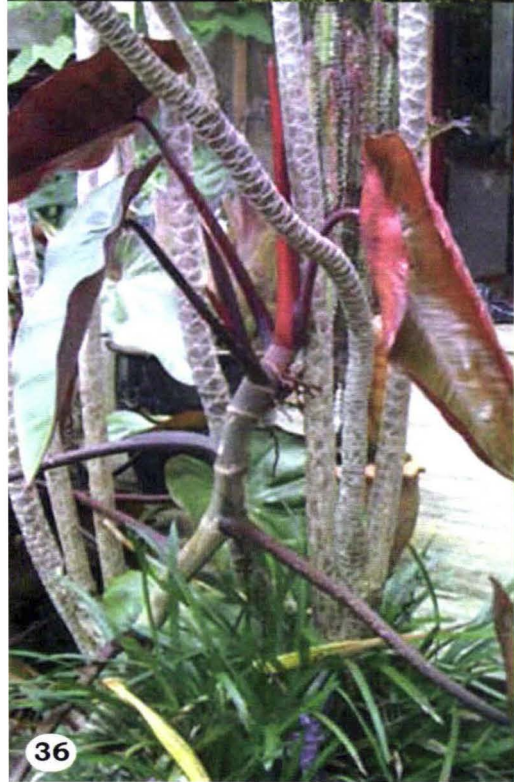
There are approximately 300 species of *Ixora* widely distributed in the tropics, especially in Africa and Asia. Rubiaceae (variously known as the Coffee, Gardenia or the Madder family) includes many warm climate plants such as bouvardia, burchellia, coffee, gardenia, manettia, pentas and rondeletia, all of which grow here.

Ixoras are a little more tender but do well in warm, frost-free positions where they are protected from cold winds. Opinion seems divided about exposure to sun but full sun in winter and dappled or part shade on the hottest summer and autumn days would seem to be the best combination. High humidity and moist, well drained and slightly acidic soil are the basic needs.

They grow well in pots, but like hibiscus, they are heavy bloomers over quite a long period and need to be kept moist and well fed. The plant opposite was in a pot due to lack of garden space and paid the price of my neglect one summer – I still feel guilty.

Availability of plants has been somewhat erratic but they are currently available sold as *Ixora coccinea*. Albrecht Llamas suggests that ixoras, especially *chinensis* and *coccinea*, have been so hybridised and manipulated by breeders that it is virtually impossible to identify them accurately. It is preferable just to make your choice by colour, which is mostly in the red, coral, orange range.





PHILODENDRONS

Robin Booth

To give a really tropical look, there is nothing to beat the philodendrons, a group of plants (aroids, Arum family) that are usually grown for their magnificent leaves, either as houseplants or, in warmer areas, outside in the garden. The name *Philodendron* means 'tree lover'. Many of the different species that come from the tropical Americas are climbers. They find a host tree and, as they climb, their leaves will often get bigger the higher they go.

Other species are small plants growing as clumps on the ground, such as the cultivar *Philodendron* 'Xanadu', and the species *P. wendlandii*, or as epiphytes amongst the branches. Some grow in full sun and can make huge clumps such as *P. bipinnatifidum* (syn. *selloum*) which will stand a surprising amount of cold and frost. Few of the many species (seven hundred or more) are grown in the garden in New Zealand as most are too cold sensitive, but we have enough forms to give a very tropical look to the garden.

They cross-pollinate to give interestingly variable-leafed hybrid plants. Many of the named houseplants are hybrids or cultivars so try some of them in the garden, as they may be hardier than you expect. Grow them under trees where the conditions are more even over the winter period. Good drainage and regular moisture are essential for healthy, fast growth.

Many people don't realise that the species can also have very attractive flowers that are generally cream to white in colour but not always. I had a lovely clumping plant, *P. speciosum*, which flowered for me before, unfortunately, dying during one of our cold, wet winters.

Top left:

A typical flower of a philodendron species

Top right:

A close up of the large leaf of *P. bipinnatifidum*

Bottom right:

The ill-fated inflorescence of Robin Booth's *P. speciosa*

Photos: Robin Booth

Bottom left:

***P. scandens* var. *rubra* - a climber, showing the red young leaf**

Photo: Russell Fransham

This plant had huge, elongated, heart shaped leaves and is one of the biggest leafed species but is rather tender. It had two flowers. On the outside it was reddish green but inside it was the most beautiful shade of carmine red, which to me was quite unexpected as all my others are cream or white.

Unfortunately I was too late to be able to pollinate the flower for seed (they generally don't set seed in New Zealand). An interesting fact is that the philodendron flower heats up when it is ready to be pollinated. If you want to propagate a few, try them from cuttings, which will strike readily. ● *P. selloum* is now regarded as a synonym of *P. bipinnatifidum* but is still sold under that name when the leaves are not as deeply indented.

Q & A

Would any of your team be able to help me with the following query? I have three *Hymenosporum flavum* 'Gold Nugget' shrubs. Unfortunately there is a big absence of flowers on them. They have been in the ground for a year and a half in a raised planter 4m x 1.5m in Daltons tub mix with irrigation. They get sun nearly all day, losing it at about 5pm. The first year in the ground there were a few flowers. This year I got the grand total of five!!! The shrubs are big and leafy and look very healthy, maybe too much leaf and therefore no flowers? I have met other gardeners in Tauranga who have the same problem - we can't all be doing the wrong thing? Or can we?

Bernadette Ross

I am sorry to say that *H.* 'Gold Nugget' is a very unreliable and erratic bloomer. About one year in four you will get a good lot of flowers if you are lucky, but the rest of the time it's as Bernadette describes. I just use this cultivar as a foliage plant with interesting form, colour and texture and any flowers are a bonus.

Russell Fransham

● **What price plant breeders eliminating those most valuable of characteristics of this species - FLOWERS and FRAGRANCE!!!**

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.

All articles, illustrations and photographs in this magazine are copyright and may not be reproduced (in whole or in part) in any other form or medium without the express written consent of the editor.

PLANT SOURCES for this issue

***Alcantarea imperialis* -**

Greens Bromeliads, Maungakarama (red form), Landsend, Oratia Exotica, Warkworth

***Aloe polyphylla* -**

Coromandel Cacti, Mt. Wellington, succulent plant specialists and houseplant sections.

***Butia capitata* -**

Usually easily available from palm specialists and sometimes in garden centres.

***Dendrobium kingianum* -**

Pottering About, Whakatane, most orchid specialists

***Dracunculis vulgaris* -**

Perennial and bulb specialists but you may have to hunt

***Erythrina crista-gallii* -**

Russell Fransham, Matapouri Bay, Pottering About, Whakatane
Strikes easily from cuttings

***Ixora coccinea* -**

Pottering About, Whakatane. You may find some in the houseplant sections - Kings Plant Barn, St. Lukes, Auckland have them at present.

***Nelumbo nucifera* -**

Wrights Water Gardens, Pukekohe

This can be quite hard to find.

***Pteris cretica* -**

Riverview Nurseries, Whenuapai, Crump's Fern Nursery, Whenuapai. A common fern available from time to time at garden centres.

Philodendrons -

Wharepuke, Kerikeri, Russell Fransham, Landsend, Pottering About
These are most commonly seen as small plants in the houseplant section of garden centres.

Philodendron bipinnatifidum (syn. *selloum*) Palm Farm (large specimens) and Wharepuke, Russell Fransham, Landsend, Pottering About

***Rhabdothamnus solandri* -**

Erratically available and some colours have to be sought out. Yellow - Bill Clarkson, 4 Camden Street, New Plymouth bill.clarkson@xtra.co.nz
Native plant specialists - Joy Plants, Pukekohe, Oratia Native Plant Nursery, Tawapou Coastal Natives at Matapouri, Whangarei.

***Sobralia macrantha* -**

There are several forms around and the usual sources are divisions from friends or the trading tables at Orchid Society branches.

***Xanthosoma sagittifolium* var. *aurea* -**

Russell Fransham

BOOK REVIEW

Hippeastrum: the gardener's amaryllis

Veronica M.Read

Reviewed by Nick Miller

This book is a joint publication from the Royal Horticultural Society and Timber Press. The author, Veronica Read, holds the National Plant Collection of *Hippeastrum* in the United Kingdom. *Hippeastrums* are known to most New Zealand gardeners as those gaudily-coloured trumpets sold as throw-away pot plants or as bare bulbs in packets for those who like to grow their own plants and only available in a rather limited selection. A read through this book will reveal a very different story.

Chapter one is titled '*Amaryllis* or *Hippeastrum*?' and clearly sorts out the confusion between *hippeastrums* (from South America) and the so-called 'Belladonna Lily' (*Amaryllis belladonna*) from South Africa. It also deals with the 'Blue *Amaryllis*' (*Worsleya rayneri*). Both *Amaryllis belladonna* and *Worsleya rayneri* are fully described and their characteristics, cultivation, propagation and breeding are well covered. Neither of these two genera has been successfully crossed with the *hippeastrums*. The genus *Hippeastrum* contains about eighty species from the Americas.

Chapter two deals with these species. Their habitats, plant development, cultivation and breeding are covered, together with relatively brief descriptions of twenty-five of the best known species. A few of these are grown in New Zealand. Many others sound very enticing – will they ever reach here under our present plant-importing regime? It would have been good to see more information on the individual species and, in my opinion, this is the main weakness of this book. Although somewhat outdated, the *R.H.S Dictionary of Gardening* deals with more species and in more detail.

Chapters three through seven deal with various groups of hybrids, in great detail. The various chapters describe 'Large Flowering Singles', 'Smaller Flowering Hybrids', 'Yellow *Hippeastrums*' (like yellow *clivias*, most are still a fairly pale yellow), 'Modern Hybrids' (many of these incorporate additional species in their background and look to be delightful plants) and 'Doubles'. Virtually all of the hybrids commercially available, and some yet to be, are described.

Chapter eight describes the structure and development of the *hippeastrum* plant. This is detailed and fascinating, drawing on many

years of research carried out mostly in Holland. It will give any gardener a clearer understanding of bulbs in general.

Chapter nine is titled "Growers' Guide to Cultivating Better Hippeastrums" and the title says it all. Considerable attention is given to potting mixes, with the Kew mix (loam, coir and composted forestry wastes) particularly favoured. It sounds not dissimilar to some orchid mixes, with good drainage and moisture retention regarded as paramount.

Chapter ten concerns commercial breeding and production and would certainly be of great interest to those who grow amaryllids on a larger scale. This is followed by an appendix giving further information on the chapters dealing with hybrids, a glossary and an extensive bibliography.

The finest feature of this book is the 48 pages of excellent illustrations - mostly high-quality photographs but also some paintings and lithographs from old botanical publications. These present a most mouth-watering array of species and hybrids, which will dispel the preconceived notions which many of us have concerning what a hippeastrum should look like. The book in general is well presented and well produced. It does tend to be a title for the hippeastrum specialist. However, having once browsed through it, you may wish to become a specialist. As one who grows only a few hippeastrums, under difficulties due to our large bulb-fly population, I found it fascinating. Now, if we could only overthrow those officious bureaucrats who want to tell us which plants we are allowed to grow, we could really see the new worlds being developed from an old favourite!

Royal Horticultural Society Plant Collector Guide

ISBN 0-88192-639-6. Hard cover. 296 pages.

\$79.95 plus \$5 p&p from Touchwood Books.

BACK COVER STORY

***Aloe polyphylla* - update**

This aloe in flower was the largest of its species I had seen. It produced a huge nine-headed inflorescence. (see article 1/2-26,27)

Unfortunately the owner tired of the plant and disposed of it a short time afterwards to a landscape gardener. Digging it out and removing it was a massive job.

Photo/text: Brian Chudleigh

Alcantarea imperialis

(syn. *Vriesea imperialis*)

Marjorie Lowe

Roberto Burle Marx, Brazilian artist and landscape architect, championed the use of his country's native flora in his private, commercial and public landscapes. *Vriesea imperialis* (as it was then known) was made famous by his use of it, often in large groups in raised beds, particularly in public spaces. Such a large plant lends itself to use on a grand scale.

This species comes from the rocky slopes of the Organ Mountains in Rio de Janeiro State, where it grows in full sun at about 1500 metres but enjoys cool nights and can stand dry conditions. Described as a giant of the genus at 1.80m or more in flower, when it is grown in better conditions there it can reach 3-5 metres.

Even when out of flower, *Alcantarea imperialis* is an impressive sight with broad, leathery leaves up to 15cm wide and 1.5m long. The leaves of the red form glow in the morning light even before the sun has reached them (photo was taken early in heavy overcast). The flower spike of the plant opposite is more than three metres high. Its owner, Adrian Havermans, bought it four years ago when it was then 3-4 years old and about 60cm high and wide. It is flowering now at between seven and eight years of age. The plant had been imported from Hawaii and grown on by Landsendt at Oratia. Caroline Melling says that other plants from that importation are also flowering.

Even faster, Maureen Green, of Green's Bromeliads, says that her red form, also imported from Hawaii but as a very small plant, flowered at five to six years. The green forms seem to take a longer time to flower here – about ten to twelve years. So if you have the space, sun, good drainage and are frost-free, you need no longer feel that maturity takes too long – many of the other foliage vrieseas take 5-10 years to flower.

Plantlets form around the base of the plant while it is still quite young and can be detached to form new plants. Often these are adventitious plants rather than pups and so take almost as long as seeds to develop. If the base of the parent plant is in shade (in a border) these may not form. But being monocarpic, bromeliads die after flowering (often quite slowly) and so the whole process has to start again.

Photo: Grant Bayley



