

# Horticulture

in New Zealand

Bulletin of the Royal New Zealand Institute of Horticulture (Inc.)



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**Spring 1981**

**HORTICULTURE**

IN NEW ZEALAND

BULLETIN OF THE ROYAL NZ INSTITUTE OF HORTICULTURE

NUMBER 21, SPRING 1981



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Cover photo : *Romulea bulbocodium* (Iridaceae)**ROYAL NEW ZEALAND INSTITUTE OF HORTICULTURE (INC)**

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# ~ Editorial ~

As an Incorporated Society, the Royal New Zealand Institute of Horticulture must function with an approved constitution. Some five years ago our constitution was re-drawn and ratified by members at the Annual General Meeting in 1976.

We did not however, at that time formalise any regulations to govern the conduct and activities of District Councils. Rather than hastily designing a set of regulations it was decided to pause a while to give the new constitution time to settle in and prove itself. This settling in period has taken place and we must now make moves to adopt a set of regulations which will be in the best interests of the Institute and of its District Councils. District Council secretaries will already have had a draft set of rules and they will already have had a request from the National Secretary asking them to consider the draft and forward any recommendation that they may have to the Secretary. Several returns of the draft have now been received and your National Executive will be bringing down a final draft at its next meeting, September 23rd.

The final draft will be re-circulated to all District Council secretaries within a month with a deadline for acceptance or modification. At the Annual General Meeting in Hawera, on May 8th, 1982, the District Council regulations will be submitted for approval.

Your consideration in this matter is urgently requested. After all, it will be your set of rules for the guidance of your District Council activities.

J.O. TAYLOR  
Chairman,  
RNZIH NATIONAL EXECUTIVE.

# District Council News

## WHANGAREI :

At our May meeting Mrs Lane from Cherry's Garden Centre spoke on Conifers, their history and their many types and varieties.

Conifers go back geologically to the Carboniferous period, long before broadleaved trees appeared. Strictly speaking conifers should include only trees of the order Coniferales, but yews and the maiden-hair tree (*Ginkgo biloba*) are usually called conifers, although they have their own orders. (Taxales and Ginkgoales.)

True conifers have seeds in hard woody structures called cones, and their leaves are narrow and needle-like. They form part of that great class of primitive plants called Gymnosperms (naked seed), with about 650 species which include the world's largest living thing (*Sequoia*) and the oldest (a small gnarled Bristlecone pine).

Mrs Lane told of the *Ginkgo biloba* being the remaining representative of a widespread and otherwise extinct race, but unknown in its wild state, forming a link between the ferns and the higher plants. The yews or *Taxus* comprise half a dozen species. Specimens 1,000 years of age are known. Araucarias, a family of 10 species including the majestic Norfolk Pine (*A. excelsa*) and the monkey-puzzle tree (*A. araucana*). There are over 200 species and cultivars of *Chamaecyparis*, a popular and common garden conifer. The genus *Podocarpus* contains some attractive species apart from our Totara; *P. macrophyllus* and *P. gracillior* are two hardy attractive species used extensively for landscaping, particularly for container planting. *Abies koreana* (Korean fir) is a remarkable slow growing fir which sets cones when only 1m high. Mrs Lane spoke of the rediscovery of the Dawn Redwood (*Metasequoia glyptostroboides*) in South West China in 1941 which had been thought to be extinct and only known as a fossil. It is also one of the few deciduous conifers. Frequent trimming and shaping is possible with most conifers.

The display table included the following :

*Luculia pinceana* - a welcome addition to the well-known *L. gratissima* and *L. grandiflora*, has large heads of soft salmon pink blooms each with a white circle around the centre.

*Cestrum* - an orange and a purple flowered variety, are ornamental garden plants belonging to the nightshade family. All parts of this plant are poisonous, even when dried.

Winter gladioli - unusual hood spike, the top petal of each flower is curved inward as if to protect itself. The curved petal could be reflexed back improving the appearance and making the spike attractive for floral work.

*Reinwardtia* - a rather untidy plant which suckers, but the bright-yellow buttercup-like flowers are a cheerful sight on dull wintry days.

*Callicarpa c. rubella* - also listed as *C. purpurea*, the best-known of a number of Asiatic shrubs. The purple head type berries hold long after the soft downy leaves have fallen.

*Camellias* - 'Dreamgirl', clear bright pink, large to very large semi-double, large orange boss of stamens, a hybrid of vigorous upright growth. 'San Dinas', a japonica, dark-red large semi-double with short yellow stamens.

## DISTRICT COUNCIL NEWS (CONT) ...

### AUCKLAND :

The May specimen table was one of the most interesting seen at this time of year and included :

*Murraya exotica* from Australia and S.E.Asia. A member of the Citrus family, this shrub has fragrant flowers like orange blossom, which are followed in the autumn by clusters of red berries. According to Harrison it is more widely cultivated in Australia than N.Z., makes a good hedge or small tree and is suitable for coastal or fairly frost-free areas.

*Correa pulchella* - also from Australia. A very attractive form with pretty pale pink flowers and small shiny leaves. This species is described as having pale red to vermilion flowers but is variable from seed.

*Nerine* hybrid - Dave Bull showed a plant with a lovely tall pink flower which he had hybridised himself.

From South Africa there was a pale pink Ifafa lily (*Cyrtanthus mackenii*) and a fruiting specimen of the Natal Plum (*Carissa macrocarpa*). This thorny shrub is drought and wind resistant and therefore useful in coastal areas.

*Hovenia dulcis* - the Japanese Raisin tree, is found naturally from the Himalayas through to Japan and is widely cultivated in Japan. The common name alludes to the taste of the sweet red pulp found in the flower stalks which become thickened and strangely contorted after flowering. The flowers themselves are insignificant - small and whitish. There are 4 other species of *Hovenia*, all found in the same general area.

At the June meeting, Mr Barry McKenzie of Topline Nurseries gave a fascinating insight into some of the challenges faced by firms trying to get into the plant export market and of the expertise needed to ensure success. In Japan and South Korea where kiwifruit plants are the major export for Topline there was need for exporters to do their homework and for after-sales follow up. In Japan plants are marketed to the farmers by small family businesses through the prefecture system (prefectures are similar to local councils), while in South Korea the initial approach is made to the Director of the local horticultural research agency who then makes introductions to local farmers. The first sales of kiwifruit plants in Japan proved unsuccessful as farmers tried to grow them like rice, and most were lost! Another embarrassment occurred with the plant labels - there are different words in Japanese for male and female (human) and male and female(plant), and the wrong words were used! The firm now employs a Japanese interpreter who works in the nursery here and precedes the sales party to Japan, doing the groundwork, and every effort is made to ensure that the farmers know how to treat the plants.

Mr McKenzie was also involved in a project to establish a nursery in Saudi Arabia near the Dhahran airport. In this country the family heirarchical system dominates, and after the nursery and shade houses were established there was a row in the family supporting the venture and the eldest brother withdrew the finance so it was abandoned. The business then moved to Abu Dhabi in the United Arab Emirates which are more westernised. A nursery is being built with everything - nails, wheelbarrows and potting soil - supplied from N.Z. Plenty of water is available but a desalination plant is essential. Abu Dhabi is spending \$50 million on a 'greening' programme for an area the size of Waiheke Island!

## DISTRICT COUNCIL NEWS (CONT) ...

### AUCKLAND (cont)

The Northern Regional Meeting was held at the Auckland Botanic Garden on July 4, and local members plus representatives from Hamilton, Whangarei and Tauranga were there. At these meetings informal discussions are held on subjects relating to the RNZIH, with particular reference to the northern region. The next such meeting will be held on SATURDAY NOVEMBER 7, at 10am at the Botanic Garden.

MT. ALBERT RESEARCH CENTRE, DSIR will be open to the public on Saturday September 26, 9am - 4pm, and Sunday September 27, noon - 4 pm. Among topics to be featured in the displays are :

- . Horticultural production from tree and vine crops
- . New fruits - selection and breeding
- . Maintaining the quality of horticultural produce during storage and transport
- . Plant nutrition
- . Agents of plant disease, and the diagnosis of plant diseases including fungi, bacteria and viruses
- . Insects and other arthropods and nematodes
- . Control strategies for pests
- . Beneficial biological interactions
- . Botany - seeds, mycorrhizae, freshwater algae, diatoms and soils
- . Food science and technology - processing of fruits, vegetables, and fish, wine research.

Special facilities such as the electron microscope, the mass spectrometer, computer services, and the library will be open.

### SOUTH TARANAKI :

A most enjoyable one-day bus trip was held in April when a party of 36 visited Paraparaumu at the invitation of the Kapiti Horticultural and Beautifying Society for the first-ever International Chrysanthemum Festival. The invitation came initially to the Hawera Horticultural Society and, as has been the custom for a number of years, the trip was made as a combined excursion of both the Hawera Society and the Institute. We were most impressed with the Southward Motor Museum complex as the venue for the Festival in which we saw some 2500 blooms, overseas and NZ grown, very well staged, and among them the prize-winning exhibits of our own Hawera growers, Mrs Dawn Peters and Mrs Anne Mills.

### POVERTY BAY HORTICULTURAL SOCIETY :

Our extremely wet weather has left our gardens quite leached of the nutrients we have fed to the bed previously so with these conditions, it will be wise to replenish this loss quite soon that it may be carried down to the root area in the moisture while available - not so easy when dry. Roses particularly will respond and are healthier and more able to resist disease. Foliar feeding such as Zest or Maxicrop will boost the seedlings and perennials, etc.

At our Daffodil and Camellia Show on 29-30 August the Floral Art Society will produce a salute to the Royal Wedding. Treasures from Eastwoodhill's beauty will be displayed by Mrs Weatherall, and we are hoping that Mrs Bush will have many of her 15 Magnolia varieties in bloom for display. The Royal Forest and Bird Society and Mr Bayly's nursery are included in the displays.

## DISTRICT COUNCIL NEWS (CONT) ...

### WELLINGTON :

October 16-18 are the dates set for the Wellington visit to the Pukeiti Rhododendron Trust Garden and Tupare, Russell Matthews garden. Members will travel by bus to visit our national garden with one of the largest Rhododendron spp. and hybrids collections in the world. With its unique setting of native bush and choice exotics Pukeiti is already recognised as one of the gardens of the world. The Rhododendrons will be at their best during October and many thousands of visitors make the journey each year to see them.

The organisers of the student meetings inaugurated this year report that there is excellent attendance and that things are 'going like a bomb'.

### NORTH TARANAKI :

Evening meetings to come include both practical demonstrations and illustrated talks. On October 17th we will be hosting members from the Wellington District Council and have Mr L. Van Hameren to talk on Chrysanthemum culture and Committee member Mr D. West to give some hints on Dahlia growing.

On November 21st George Fuller will be the guest speaker, having just attended the 'World Orchid Conference' in Durban, South Africa, and seeing the West Australian wild flowers.

Our Past President, Mr T. French, had an Award of Honour presented to him for services to the Orchid Council of NZ, of which he is currently President. He was the Council's founding member and the Award was presented at the North Shore Orchid Society Branch on May 23, 1981. Congratulations, Tom!

### BAY OF PLENTY :

The Spring Show, held in conjunction with the Camellia Society, was held on August 21st and 22nd. This coincided with the Citrus Queen Festivities and in spite of cold, rather showery conditions, was well attended. Two visitors from California were present, and given a luncheon by the Camellia Society. The camellia blooms on display were as usual of a very high standard. A new class of mixed vegetables on a tray, open to any garden club or circle, brought in some luscious specimens of a wide range of varieties. We are now in the process of launching the "Gardens of the Year" competition, which will run in conjunction with the Tauranga Centennial celebrations this summer.

JULY 1981 -

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The President, Denzil Philp writes : "I have just finished a trip around New Zealand from Auckland to Dunedin with the Interflora Designer of the Year Contest held in five centres and during these past weekends I have spoken to many florists in their shops, and often in the markets, and the same statement has been voiced loudly and clearly : "Aren't flowers expensive!" Well, I guess they are, but then they are expensive for a shorter time than they are inexpensive. It seems an eternity, but if you count the weeks it's not a very long time.

We are far more fortunate these days than we were a few years ago. I am sure there are some amongst us who remember the days of winter many years ago when all we had to work with were frosted camellias, the delicate blue *Iris stylosa*, poppies, unopened anemones (which we sat in warm water to open), and the luxury of Otaki Pink carnations, and lots of leaves. We even used to use the spikes of red hot poker cut into sections as flowers in our wreaths!

Haven't times changed the growers - their better use of glasshouses has given us such a wide selection for these dreary winter months. We now have superb hothouse roses in many lovely shades. There is something for everyone from the deepred 'Samantha' to the new delicate apricot of 'Cameo Cream'. Then there are the endless shades and qualities of the carnation, some even in spray form, iris unblemished and perfect, orchids, imported Australian gladioli, hyacinths, early tulips, violets (some perfumed), freesias in such a variety of shades including the doubles, all still perfumed, masses of new leucodendrons in all their different shades and sizes, proteas, thryptomene, new phylicas and today the lovely 'Blushing Bride' so rare a few years ago is in profusion and grown to perfection without a blemish (expensive yes, but one of the world's rarest plants almost unknown in its native South Africa).

Orchids get earlier and earlier. When there are none the growers import them from U.S.A. so we now virtually have orchids twelve months of the year, and the varieties we can obtain are the result of orchid fanciers planting quantities some 15 to 20 years ago. We could not have once offered a bride the butterfly orchid, White Phaelenopsis, or the imported White Singapore, or the extravagance of frilly white cattleyas as well as the improved varieties in cymbidium orchids in both miniature and standard size. Along with this wealth of cut blooms in the orchids we also have the flowering spikes in pots, both miniature and standard, to grace the living rooms of many apartments flowering for weeks.

I congratulate the winners of the Interflora Designer of the Year contest. These five designers will compete for the title of NZ Designer of the Year in Christchurch on 31st October at the James Hay Theatre of the Town Hall, a magnificent setting and an event that promises an evening to be remembered. The designers who will compete for this title are amongst the best in this country - Patricia Finnie, Christopher Barnes, Joanne Salter, Geoffrey Reese and Peter Johnstone.

P.S. Our Conference will be held in Wellington on 3-4th October.  
Be sure to visit Old St. Paul's to see the spectacular floral displays.



# News from the far north ~

From the WHANGAREI NATIVE FOREST & BIRD PROTECTION SOCIETY :

An area of 16 acres of native bush was transferred to the Mangonui County Council from the estate of Mr H.S. Matthews in May 1975. This is known as the Matthews Mission Bush.

Mr Matthews, a grandson of the pioneer missionary, had a sentimental attachment to the area from boyhood, and in later years his wife also held similar views on its preservation for future generations. They had it surveyed out of the home farm with the intention of giving it to some suitable organisation. It is reported that when a party of Kaitaia people were invited to inspect the area they did so much damage during the tour that Mr and Mrs Matthews decided that the bush should not become a reserve until after their deaths.

When it was offered by the Trustees, the Mangonui County Council accepted the area, agreeing to meet all legal and fencing costs, and future maintenance. There has been a fairly good recovery of native ferns and seedling trees since fencing was completed.

The reserve is a remnant of a larger area of bush near the Kaitaia mission station of the Church Missionary Society, established in 1833, with Joseph Matthews and Gilbert Puckey in charge. It was worked from the earliest days of settlement for timber, and because of its abundant bird life particularly pigeons, kakas and tuis, it was a ready source of food for the mission families.

The wooden rose - the parasitical flowering plant (*Dactylanthus taylori*), Pua-o-te-reinga (the Flower of Hades) being one of its several Maori names, is found growing on the roots of various trees in very widely separated localities from Hokianga to Wellington. This root parasite has no chlorophyll and lives on the sap of its host plant. Its dull reddish flowers have little beauty or charm. The male and female flowers are each found on separate plants and when fully developed emit a sweet, heavy scent that can be identified from afar.

When the roots of the host tree are boiled in diluted caustic soda, the points of attachment of the parasite are found to possess the form of 'wooden roses' which have been sold as curios to many tourists. There is the story that a cook in a timber mill in the King Country left his men to prepare their own meals, to collect wooden roses which evidently proved to be a more lucrative operation.

Pate is one of the commonest plants parasitised by *Dactylanthus taylori*, an extraordinary and unique plant. It is a root parasite belonging to the family Balanophoraceae and grows on the roots of possibly a dozen trees and shrubs in the forests of the North Island.

Colourful fruits - Generally our New Zealand plants are not very colourful, but when fruiting, one or two species stand out in prominent display. One of these is *Pittosporum cornifolium* or 'perching kohuhu'. It is usually found as an epiphyte on rata and other trees and is a shrub about 2 metres high. The fruit is a capsule which splits open to reveal a red-lined interior with black seeds embedded in a sticky yellow fluid.

Another plant, karo, is a sub-species of *P. crassifolium*, which is sought after by gardeners as a hedge plant and decorative shrub.

# Ivy

- (HEDERA )

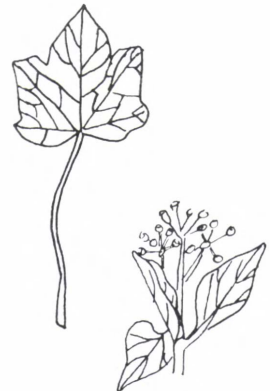
*(This is the first instalment of a series on Hedera, contributed by Mr J.B. (Ian) Laurenson, of 244 Frankley Road, New Plymouth. Several years have gone into the study of the subject, and this article is the substance of addresses given to the Auckland, Waikato and North Taranaki District Councils of the RNZIH, and to other groups. Anyone visiting New Plymouth would be very welcome to see Mr Laurenson's Hedera collection, first of course, phoning to ensure that he is at home.)*

Most people at sometime or other have been collectors, whether it be cigarette cards, autographs, stamps, or any one of a hundred different things.

I don't know of anything more satisfying and absorbing than live plants. Many flowering plants are not very interesting apart from flowering time, but ivies give year-round interest. However, what really prompted me to do something seriously about *Hedera* was the apparent confusion in the nomenclature of the varieties available locally. For example, there is "*Sagittaeifolia*" which was labelled variously as "*Pedata*", "*Pin Oak*" and "*Pinocchio*". Several of the variegated forms, obviously quite distinctly different, were all called "*Milky Way*". This name, however, does not appear in any references as far as I am aware. Elizabeth Arter, writing in the '*Gardeners' Chronicle*' in 1968, mentions two varieties each of which is distributed under three different names in England.

I began some years ago to get a few ivies together for identification, not realising that it would develop into the extensive project that it has. At the time I knew of only half a dozen or so varieties. Growing them in containers has made it possible to move them about to compare some of the finer differences which would not be possible if they were planted outside against a wall.

The next thing was to consult authoritative references. I turned first to L.H. Bailey's *Standard Cyclopedia of Horticulture*, the American work which lists and describes quite a number of ivies. In this, mention is made of "*The Ivy*", a monograph by Shirley Hibberd, an English horticulturist, first published in 1872. He wrote other works including *Geraniums* and *Pelargoniums*. I was fortunate in being able to borrow through the Public Library, a copy of the second edition published in 1893. This proved to be most helpful and I am indebted to Hibberd for much of the material dealing with the early distribution of the ivy. Although the work was published before the days of photography, he gives very clear drawings and sketches which have made positive identification possible in a number of instances.



It was interesting to read that Hibberd wrote this book to 'sort out the many confusing ivy names', and that was 100 years ago.

For some of the more modern references I consulted the R.H.S. Dictionary of Gardening, "The Ivy Book" by Suzanne Warner Pierot, "Miniature Plants" by Elvin McDonald, The Rochford Book of House Plants, and various horticultural publications and articles such as Gardeners' Chronicle. In a copy of Horticultural Abstracts, published by the East Malling Research Station, reference was made to two recent papers on *Hedera*, one by Hans Siebold of Hanover, Germany, and the other by H.J. van de Laar of Gelderland, Holland. I was able to obtain translations of photostat copies of the two papers and as each has photographs as well as full descriptions of about 40 varieties, they have been very useful references. Here again we find that van de Laar was prompted to write his article because of "the confusion in the nomenclature of ivies in Holland at the present time".

I should say however that the main reference has been Exotica III, the "Pictorial Cyclopedia of Exotic Plants" by A.B. Graf. As well as many pages of clear photographs, about 90 varieties of ivies are listed and described.

There are many ivy-leaved or hederaceous plants with worldwide distribution which are sometimes taken to be ivies, e.g. ivy-leaved geraniums or pelargoniums, and *Senecio mikeoides* - Maori Ivy and German Ivy, both related to the Ragwort.

In early literature, Virginia Creeper (*Parthenocissus quinquefolia*) was mistaken for ivy and was even called *Hedera quinquefolia*. Other plants with climbing habits are called ivies, e.g. *Scindapsis* (the Devil's Ivy), *Rhus randicans* (Poison Ivy), *Nepeta hederaceae* (Ground Ivy), *Cymbalaria muralis* (Kenilworth Ivy), and Boston Ivy from the *Vitis* (Grape) family.

The *Hedera* or true ivies all originated in the northern hemisphere and are recorded from quite early times. In fact, apart from the grape vine, it is possible that the ivy is the earliest plant of any significance. In ancient Egypt, ivy was sacred to the god Osiris. It was one of the 420 plants found by botanists in the ruins of the Colosseum in Rome. In one of Dickens' books we read "Creeping on where time has been, a rare old plant is ivy green".

One variety, *Hedera poetarium*, from the Mediterranean area, derived its name from its use in wreaths for crowning poets in ancient Rome and Greece. Ivy was also used at festivals in honour of Dionysus and Bacchus, the Roman and Greek gods of wine. Bacchus was said to have been abandoned by his mother under an ivy bush for protection. When he grew to manhood he was crowned with ivy in the belief that it would prevent intoxication. Observation of these ancient festivals was one reason for the spread of the ivy from place to place. Sprays were hung over doorways to indicate that wine was on sale. It was used for medicinal purposes, both internally and as poultices, and a handful of leaves steeped in wine was a remedy for the after-effects of over-indulgence. Modern herbalists still include ivy in their remedies. Elizabeth Arter, mentioned earlier, records that it was thought to be beneficial to drink from a cup made from ivy wood. In the scientific field, on the continent, the wood is used to make thin plates to filter liquids.

In both England and America, when a tavern was established, a "bush" was hung over the door. This consisted of a bunch of hay or a branch of a tree, with ivy twined into it. Later a spray of ivy alone was used and then more permanent signs appeared such as "The Pig and Whistle". "The Hen and Chickens", "The Rover's Return" and "The Old

IVY (CONT) ...

Bull and Bush". In Shakespeare's "As You Like It" we find "Good wine needs no bush".

Some of our treasured traditions are older than the event they now celebrate. Our Christmas greenery, the holly and the ivy on cards and in the carol, originated with the symbol of pagan Rome's Saturnalia or festival of Saturn celebrated in December, when slaves were released temporarily.

We find five species of *Hedera* originating in Persia, India, England, North Africa and Japan. It is possible that that no other green plant has produced such a range of types. Many of these have appeared since the stricken areas settled down after World War II. Research so far however indicates that cultivars have been developed in Ireland, Jersey Island, Italy, Denmark, France, Bulgaria, Latvia, Russia, Switzerland, Holland, Turkey and U.S.A, and there may be other places as well.

The Persian Ivy (*Hedera colchica*) came from an area on the north-east shore of the Black Sea. Colchis was the port to which Jason was supposed to have sailed in search of the Golden Fleece. *Hedera colchica* is synonymous with *H. roegneriana*, named after one Roegner, an early curator of the Botanic Gardens of Odessa.

As a matter of interest also, from this same area came the plant Meadow Saffron or *Colchicum* from which was extracted a drug of the same name, used at one time for the treatment of gout. It is better known today as colchicine used in determining the chromosome counts in plants.

The English ivy (*Hedera helix*) - (*Hedera* - Latin for a cord, and *helix*, a snail or spiral) has sometimes been called *Hedera nigra* on account of its black berries. The large majority of smaller varieties seem to have originated from this species.

The nurseries of Manda, and Hahn in Pittsburgh, and Weber in California, have been responsible for many of them, and those names appear with the newer varieties, e.g. Manda's crested, Hahn's self-branching, and Weber's Fan.

When classifying or identifying a plant, a botanist must see the plant at all stages from the roots right through to flower and seed or fruit.

Ivies flower only under unusual circumstances which will be described later, so identification must be according to other features, such as :

LEAVES : SIZE - large, medium, small  
NUMBER  
OF LOBES - 1-7, or sometimes as many as 9  
SHAPE  
OF LOBES - short, long, broad, narrow, sharp or rounded  
SINUS - acute or obtuse angled, curved or bulging,  
(Junction of Lobes) overlapping  
BASE - shallow or deeply cut  
VEINS - prominently raised or depressed, white, green or red  
EDGES - smooth, undulate, crenate, rugose, dentate, contorted  
SURFACE - smooth, shiny, dull, matt  
TEXTURE - thick, thin, papery, leathery, soft, harsh  
COLOUR - light, medium or dark green to almost black,  
variegated and spotted in gold, white, creamy  
yellow

IVY (CONT) ...

PERFUME - some varieties give off a distinctive perfume when leaves are crushed

STEMS & PETIOLES - green, variegated, or shades of red. Wiry, soft or brittle.

HABIT OF GROWTH - fast or slow, self-branching, internodes long or short, aerial roots profuse, few or absent

Examples of all these characteristics are in my collection.

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*The next instalment will include sections on "Propagation and Cultivation", "Conditions under which ivies flower and set seed", "Uses", "Pests and Diseases".*

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KING KIWI NEWS

An interesting newspaper-like publication now appearing in our mailbox is the 'King Kiwi News', the Journal of the NZ Cut Flower Industry. The news about our current cut-flower exports makes fascinating reading, along with helpful hints to growers on the handling, packing, etc. of cut-flowers for export, and advice on buyers' needs. Did you know that carnations have been in very short supply this year, and that our Cymbidium season must begin earlier to satisfy northern hemisphere markets? The latest issue also features an article on Marketing Changes at Massey University, and an interview with a family of Dutch immigrants who have built up a nursery growing flowers under 5,500 m<sup>2</sup> of glass, in Glen Eden, Auckland.

News from district markets and growers is also included. To subscribe to 'King Kiwi News' send your name and address to :  
The Editor, King Kiwi News, P.O. Box 56, AUCKLAND.

'SOUTHERN HORTICULTURE'

'Southern Horticulture' is a new magazine which has just appeared in the office of the RNZIH. An independent quarterly journal, 'Southern Horticulture' is edited and published by Agricultural Press Co. Ltd., Box 10-128, Wellington. Mr David Yerex is the editor, and Mr Trevor Walton the Manager.

The first edition features articles on DSIR visit to Japan, Viticulture, Blueberries, Pipfruit, Sub-tropicals, Kiwifruit, Flower exports, Pests, Export vegetables, Blackcurrants, as well as news items and comments.

The Winter 1981 edition has 48 pages, well set out with many colour photographs, and is well worth having a look at to see if you should become a subscriber.

'Southern Horticulture' is available @ the special introductory rate of \$12 p.a. (four issues), and subscriptions should be forwarded to : P.O. Box 594, Masterton.

## THE LODER CUP IN WHANGAREI -

When the Loder Cup was presented to the President of the Whangarei Native Forest and Bird Protection Society (Miss Margie Maddren) in May of this year, the occasion was impressive, with a piper present to pipe in the cup, and flower posies presented by local children to all the women in the official party. Speakers included the M.P. for Kaipara, Mr Peter Wilkinson, Mr B. Gunning of the Loder Cup Committee, Mr J. Crispin of the Northland Harbour Board and the Whangarei County Council and Mrs E. Morgan of the Whangarei Ladies' Gardening Club. A citation was read by Mr Kevin Young, and a certificate from the Ministry of Agriculture and Fisheries was presented.

The occasion received full publicity in the Whangarei press, and local interest is being maintained by the display of the Loder Cup in the Whangarei Library. Miss Maddren keeps a bowl of native flowers near the Cup, and Mr Small has a display in tubs of native trees and plants. Nature has shown herself to have quite an important place in town in the far north!

The Whangarei Native Forest and Bird Protection Society continues to hold field trips and outings for members and friends, and enthusiasts aged from 3 to 86 attend.

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## CONGRATULATIONS -

Miss Margie Maddren (FRIH) of Whangarei was awarded the Queen's Service Medal for her sterling work in native flora preservation and conservation work generally. Our congratulations to Miss Maddren on this award.

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## OBITUARY

Mr Arthur Farnell (AHRFH) died recently in Auckland. Mr Farnell had been an active member of the Institute for many years, and received the Award of Associate of Honour in 1973 for his contribution to horticulture through his special interests in NZ native plants and gerberas. His seed strain of Gerbera - Farnell's All Doubles, is well known throughout the world, and in 1971 he was presented with the Plant Raisers' Award for producing this strain with 100% double strike.

Mr Farnell won the Campin Memorial Bowl of the Auckland Carnation and Gerbera Society five times in six years. To qualify for this award one must produce 24 distinct double varieties, and to do this for 5 years was a great achievement.

Mr Farnell's grandson, Mr E.J. Farnell, is carrying on the gerbera business in Whenuapai.

PLANT RAISERS' AWARD - *perhaps you have raised a new cultivar and are unaware of the RNZIH Plant Raisers' Award. For your benefit the Objects and Conditions are set out below :*

Nominating bodies are reminded that the above Award is open for the receipt of nominations. The objects and conditions are as follows :

OBJECTS : The Award is to be granted to any nominated individual or organisation who has raised in New Zealand a cultivar considered to be sufficiently meritorious. The Award shall consist of an inscribed medal. Note : a cultivar is an assemblage of cultivated plants which are distinguished by any characters significant for the purposes of horticulture and which when reproduced sexually or asexually retain their distinguishing features. The terms 'cultivar' and 'variety' are synonymous.

CONDITIONS : (a) The cultivar shall have been raised within New Zealand. The raiser may be either an individual or an organisation. (b) The cultivar shall have been in cultivation for a period of at least three years prior to the raiser's name being submitted for consideration. The cultivar is to be sufficiently fixed so as to be suitable for further propagation. The Award shall be granted only for a cultivar considered to be an outstanding development, improvement or selection of an existing type, or an entirely new plant of merit.

(c) Sufficient evidence of the bona fides of the raiser, and full information of the cultivar raised, shall be submitted to the committee.

(d) In the event of the Committee requiring further evidence, specimens of the cultivar shall be submitted to the Committee for consideration by at least three competent judges appointed by the Committee for this purpose.

(e) The Award shall be granted solely to those persons or organisations who have bred the cultivar from seed. The Award shall not be granted to introducers of plants from the wild, or of bud sports vegetatively produced in the first instance.

(f) The raiser shall be nominated to the Committee by one of the horticultural organisations defined below :

NOMINATING BODIES : Nominating bodies shall be :

- (a) any District Council of the RNZIH,
- (b) any horticultural organisation or branch thereof, affiliated to the RNZIH,
- (c) any incorporated horticultural organisation.

NOMINATIONS : Nominations shall be supported by a statement (8 copies) furnishing particulars of the raiser, the cultivar that has been raised and its parentage (if known), the number of years the cultivar has been cultivated. Where the cultivar is of a genus which is registered by an International Registration Authority, details of the plant shall have been submitted to that Authority prior to its submission to the Committee. All statements shall be verified by the certificate signed by the raiser.

Nominations shall be submitted in writing to the Secretary, RNZIH, P.O. Box 12, Lincoln College, Canterbury, not later than 30 June each year.

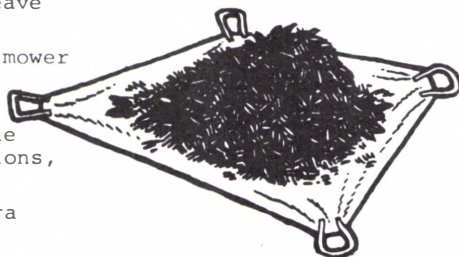
This year the Plant Raisers' Award was made to Mr Ossie Blumhardt, of Whangarei, for his Camellia cultivars 'Gay Baby' and 'Tiny Star'.

## SAFETY WITH POWERED MOWERS -

### YOU WOULD BE BETTER PROTECTED IF YOU MOW AS DIRECTED

#### READ & LEARN THE SAFETY INSTRUCTIONS BEFORE USING A POWERED MOWER

- \* Know your controls. Read the maker's manual carefully. Learn how to stop the engine quickly in any emergency.
- \* Make sure the lawn is clear of sticks, stones, bones, wire and debris. They could be thrown by the blade.
- \* Stop the engine and disconnect spark plug wire before checking or working on the mower.
- \* Before using, always visually inspect to see that blades, blade bolts and cutter assembly are not worn or damaged. Replace worn or damaged blades together with their fixings in sets to preserve balance.
- \* Damaged blades and worn bolts are major hazards. Check all nuts, bolts and screws often.
- \* Always be sure the mower is in safe operating condition. Use only replacement parts made and guaranteed by the original manufacturer of your mower.
- \* Add fuel BEFORE starting the engine. Avoid spilling petrol and do not fill the tank while the engine is running or while you are smoking.
- \* Do not mow while people, especially children, or pets, are in the mowing area.
- \* Never use the mower unless the grassbox or guards provided by the manufacturer are in position.
- \* Do not mow barefoot or in open sandals.
- \* Disengage all blade and drive clutches before starting.
- \* Start the engine carefully with feet well away from blades.
- \* Do not operate the engine in a confined space where exhaust fumes (carbon monoxide) can collect.
- \* Stop the engine whenever you leave the mower.
- \* Stop the engine before pushing mower across gravel drives, walks or roads.
- \* Do not allow children, or people unfamiliar with these instructions, to use the mower.
- \* On slopes or wet grass, be extra careful of your footing.
- \* Never cut grass by pulling the mower towards you.



*Make sure your grass clippings include only grass clippings!*



## SAFETY WITH MOWERS (CONT) ...

- \* Do not overspeed the engine or alter governor settings. Excessive speed is dangerous and shortens mower life.
- \* Store fuel in a cool place in a container specifically designed for the purpose. In general, plastic containers are unsuitable.
- \* Never pick up or carry a mower when it is operating.
- \* WARNING - blades continue to rotate after machine is switched off.

BE A SAFETY FIRST PERSON.

*(Hayters, Great Britain)*

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## BOOK REVIEW -

"Fruit Gardening in New Zealand" by Ralph & John Ballinger, Caxton Press, 1981.

This is a sequel to the very popular "Vegetable Gardening in NZ" and should meet with equal success.

There are three basic sections : the first covers background material such as planning, soils, fertilisers, tools, planting, budding, pruning, etc. The second, and largest, deals with individual crops which can be grown in New Zealand. The third gives monthly reminders for the fruit gardener. There are 120 pages with an ample supply of good quality photographs and diagrams. It is well written and generally easy to follow.

It is surprising that a book with such a simple and successful format has not been available in New Zealand, and this book will fill an obvious need for the home-gardener. At \$7.95 it will be a popular buy for many households.

One of the problems a writer of such a book will always find is where to draw the line in the amount of detail to be included. The authors have generally coped with the problem adequately, but I imagine one or two areas could cause the home-gardener a few uncertainties. For example, the text and diagrams of pruning will give the uninformed reader a taste of where to aim, but there are gaps in the details needed to achieve these aims. Perhaps a little more background to pruning in the first section giving more basic principles needed for pruning either trees, bushes or vines might have helped, the authors still keeping details for individual fruits short and succinct. Budding and grafting are likewise described too briefly to be very instructive.

It is always difficult to advise on sprays for the home-gardener. The spray programmes given by the authors are good but some indication of the most essential ones would be valuable. Thus the person who realises he or she is unlikely to apply the full range would know at a glance which are the ones that cannot be missed. Nevertheless this is a book which deserves to be successful and should be an essential part of the gardener's library.

- Dr D.I. Jackson

"Horticultural Research International Directory of horticultural research institutes and their activities in 61 countries" 3rd revised & extended - ISBN 90-220-0765-0

This book was published for the International Society for Horticultural Science by the Centre for Agricultural Publishing and Documentation, Wageningen, Holland, in 1981. It provides a list of the principal horticultural research institutes around the world from Alaska to New Zealand. It lists research workers and their research interests.

The book consists of 698 pages and provides an index of places and an index of research workers. The current price is approximately NZ\$58 and at this price its limited use makes it suitable for purchase only by research institutions, and libraries. It is however a useful reference on overseas workers for NZ researchers planning overseas travel.

- Dr M.B. Thomas

"Herbaceous Perennials" by F.A.Giles, R.Keith, D.C. Saupe, published by Reston Publishing Coy., Virginia 1980.

This is an interesting, easy to read, encyclopaedic guide to many of the more commonly grown herbaceous perennials. The book is arranged in alphabetical order based on genera and is divided into two sections, the first on herbaceous perennials and the second on bulbs.

The description of each species is good, although metric measurements are not used and the times of flowering are at variance with New Zealand conditions by about six months. Many of the cultivars mentioned may not be available in New Zealand.

The major drawback with this book is that even the more common New Zealand native herbaceous perennials such as *Arthropodium*, *Libertia* and *Myosotidium* are not mentioned, as well as many relatively common perennials from around the world such as *Agapanthus*, *Alstroemaria*, *Anigozanthos*, *Anthemis*, *Aruncus*, *Brodiaea*, *Brunnera*, *Calceolaria*, etc. Another drawback is the poor quality of some of the line drawings from which one would have great difficulty identifying the species. In general however, the book is well arranged and easy to follow with the nomenclature being completely up-to-date, the authors acknowledging their use of Hortus III in this respect.

The book is 356 pages in length, contains 318 line drawings and describes 136 different genera, as well as many more species, varieties and cultivars within each genus. Estimated price is US\$14.95.

- R.A. Edwards

## THE CHELSEA FLOWER SHOW

Mr Hugh Redgrove (FRIH) of Auckland was a recent visitor to the U.K. where he was able to visit the Chelsea Flower Show, the Mecca for horticulturists from around the world. The account which follows first appeared in 'Commercial Horticulture', August 1981.

The greatest show on earth! If you are thinking of flower shows then there is no doubt at all that you will have in mind the Chelsea Show in London, held every year since 1911 in the third week of May.

And why is it so special? Why so different from those Continental Floraries that go on for months at a time? It is surely because of the efforts and skills of individual nursery firms who year after year make a special effort to exhibit new and interesting plants using this show as their principal shop window.

Add to these the spectaculars - the large displays of corporate bodies - the Royal Parks, the Bulb Growers of Holland, the Union of South Africa, the Farmers' Union - these adequately replace the spectacular exhibits of the seed firms of yesteryear.

These exhibits nearly fill the huge marquee which covers 2½ acres except for a small area for the display of garden plans and scientific information. Every flower, shrub or tree that will normally flower during the first six months of the year is exhibited.

Keen gardeners flock to the Show from every part of the British Isles and indeed from far beyond. I remember I met the head gardener of the fabulous Butehart Gardens at Vancouver in 1977 and I found that he was shortly to be on his way to Chelsea, just as I was at the time. It is a great opportunity to contact the leading specialist growers to see what is new, not only in plants and shrubs but also in the equipment needed to grow them well, and to gain inspiration from the various gardens that are still an important feature of the Show. In short, there is something for everyone, and much more for the gardener than he can see in one day.

I was attracted to a fine exhibit of daffodils by Michael Jefferson Brown, all of superb quality, yet all retarded in cool store, for in gardens all narcissus were finished weeks ago.

Other groups of bulbs attracting much attention were from Van Tubergen, Avon Bulbs, Amand and Broadleigh Nurseries. Every Spring flowering was represented, some of them two months later than their normal flowering time. There were many interesting species of tulips, some early-flowering gladioli from Amand, but not many other South African bulbs, which I found surprising.

Delphiniums and Begonias were both of unbeatable size and shown by Blackmore and Langdons, seventy varieties of Paeonies were on display from Kelways, and perennials in variety from Carlile, Blooms and Bees. In the latter exhibit Astilbes and Paeonies were again prominent and I wonder how long it will be before we can buy roots of 'Bowl of Beauty', an outstanding single pink with cream centre, in New Zealand.

Bees showed some lilies too, and I was impressed with the fine spikes of Connecticut-King with upward facing yellow flowers and their group of *Lilium candidum*, all forced of course, and with clean foliage up every stem. They also had a few stems of *L. testaceum* so seldom seen these days. Other exhibitors showed healthy stocks of *L. Enchantment*.

## CHELSEA FLOWER SHOW (CONT) ...

The house-plant grower has much to inspire him or her. There are Gold Medal groups from Rochford, from the Royal Parks and from the Belgian nurserymen, all with superb specimens and many rare varieties. Numerous African violets in every possible colour were the size of dinner plates.

There was also a large group of Ivies from Fibrex, so well grown in baskets, pyramids and tubes that no one would begrudge them the Gold Medal they won. Varieties new to me were 'Cecilia' in which the green and cream three-pointed leaves have curly edges and 'Kolibri', small grey and white leaves splashed with dark green.

One exhibit entirely of hardy ferns was a cool green oasis in the midst of brilliant colour and there were two varieties of maidenhair that appealed to me. They were *Adiantum pedatum imbricatum* and *A.p. aleuticum* and both of these should be quite suitable for outdoor cultivation in any part of New Zealand. Two unusual forms of *Arthyrium* were *A. felix-femina* with very narrow crested fronds and a form of the male fern called 'Askew' which had very large terminal crests.

There were many exhibits of pelargoniums, regal, ivy, and zonal, and a particularly well grown group came from Oakleigh Nurseries. Apparently numerous new varieties are being raised every year as I find that many I noted this year were not on display at the 1977 Chelsea. Not everyone will want a really black one such as 'Morwanna' but there are some who will find it irresistible like the black viola, but the huge flowered salmon pink ones such as 'Pink Bonanza' and 'Georgia Peach' are quite superb by any standard.

The dark pansy-flowered 'Pompei' is another to covet and there are many more - Zonals, too, and Ivies were there in several new colours and two good ones new to me were 'Xenia Field', a very good deep red 'zonal', and 'Yale', a good crimson 'ivy'.

There are still strawberries every year at Chelsea more than a month before they are ripe outdoors. This year Ken Muir arranged his exhibit of plants well covered with ripe fruit, on revolving pedestals each devoted to the country in which they were raised - not the best way to choose varieties for New Zealand but interesting all the same.

There were a host of rhododendrons in the show and those which should be especially interesting to New Zealand nurserymen are the new dwarf varieties bred from that unusual Japanese species *R. yakusimanum* (note the revised, correct spelling). From the species, which most plantsmen must have seen at Pukeiti where there is a fine specimen at least 25 years old, many dwarfs have been raised with fine heads and larger florets in almost every shade and these are virtually made-to-measure for the smaller town gardens today.

Some varieties are already being propagated here, but they grow very slowly and it will be some years before there are many available. Many were shown in a fine bank of colour by Hydon Nurseries, alongside the outdoor rockgarden.

The table rock gardens in the main marquee were possibly less numerous than in past years, but still full of interesting plants. I noted *Tropaeolum polyphyllum* on one - a plant I have wanted to acquire for many years - but summertime in flower is not the time to move it. And one does have to remember if one gardens around Auckland that some of the mountain plants don't flower freely enough to be worthwhile.

CHELSEA FLOWER SHOW (CONT) ...

Better hunting grounds are the Alpine Houses at Kew, Wisley, Edinburgh and Oxford, where the habitat of each plant is quoted and can be used as a guide.

The rockgarden near the Embankment entrance showed this type of construction at its peak of perfection, with streams, waterfalls and pools. This Gold Medal garden was built and planted by Paul Temple.

The tree and shrub exhibits were full of interest. Notcutts made a breakthrough with an original idea. They divided their large rectangle with several 2m walls and on each side they displayed well grown climbing plants in considerable variety. The public were able to walk through this exhibit but it was so popular that it took some time.

Among other well known varieties I noted a dark maroon *Clematis* called 'Niobe', the fine white variety of 'montana' type called spooneri (syn. *chrysocoma*), a honeysuckle with orange-red flowers called *Lonicera tellmanniana* and a form of the Californian *Fremontia* with extra large flowers named *Fremontodendron* 'Californian Glory'.

Notcutts had some lovely Japanese cherries in full flower which must have been retarded in some way for the show. They were full standards too, which is the form most favoured in Britain and which I feel could be used in New Zealand to a much greater extent than is at present the case. Standards give the home gardener the opportunity to garden on two levels or even three, to the benefit of the garden centre as well as making the garden itself more interesting and colourful.

I must mention three other fine exhibits of shrubs and trees - Hilliers had a fine range with many rareties, rhododendrons, cherries, azaleas - Reuthe had mainly rhododendrons, very colourful and Waterers also a beautiful exhibit - all three had Gold Medals.

Among the new plants up for award was a species of *Berberis* from the Himalayas which had long arching sprays of lemon-yellow flowers. It received an Award of Merit 'subject to naming'.

Other Awards of Merit were given to *Lavendula pedunculata* sent by Kew and *Paradisia liliastrum*, a bulbous plant with spikes of white flowers like our Reinga Lily. The lavender is rather like *L. stoechas* but with longer stems and much larger longer petals.

Two plants also received F.C.C. which is the higher award. These were *Magnolia liliflora* 'Nigra', which is always admired in my own garden each spring. It is planted much less frequently in NZ than the usual *M. liliflora*, mainly because the latter is the easier one to propagate.

The second F.C.C. Winner was an azalea species previously known as *Rhododendron roseum* but now renamed *R. prinophyllum*. This deciduous azalea has clusters of rose pink, clove-scented flowers, very freely produced in mid-spring with the new leaves. On suitable soils it makes a medium to large shrub reminiscent of *R. luteum* (syn. *Azalea pontica*). Several more rhododendrons received awards but on this occasion I did not see any very new colours.

# Welcome

to the following new members :

Prof. D. Petrarroia, Buenos Aires	S.C. Shewry, Kaeo
Mr K. Bowskill, Auckland	Ms C.G. Street, Auckland
Mr M. Pijacun, "	A.W. Childs, Christchurch
Mrs B.L. Pavlovich, Hamilton	S.R.Barfoote, Auckland
Jennie M. Russell, "	Ms B.I. Hewat, Tolaga Bay
Betty King, New Plymouth	H.B.L.Knight, Auckland
Mr & Mrs L. Hoskin, New Plymth	Ms J.K. Lawrence, Invercargill
Mr S. Ryan, Hawkes Bay	P.M. Naylor, Auckland
Mr & Mrs H. Cullinane, Russell	G.L. Pye, Whitianga
Miss H.S. Sanders, Whangarei	Ms J.L. Riddle, Urenui
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L.A.J. Frost, Urenui	K.N. Watson, Auckland
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D.C. Oemcke, Manawatu	Ms J.A. Lowe, "
L.R. Pratt, Auckland	J. Lucero, "
Miss R. Kake, Rotorua	A.P. Beer, Pukekohe
Ms R.A.L.Robinson, Auckland	W.D. Brown, Rotorua
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RNZIH Regional Horticulture Sub-Committee - P.O. Box 11-379,  
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