



THE JOURNAL OF THE ROYAL NEW ZEALAND INSTITUTE OF HORTICULTURE (INCORPORATED)

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NEW ZEALAND PLANTS AND GARDENS

The Official Journal of the Royal New Zealand Institute of Horticulture (Inc.)

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EDITORIAL

HYBRIDISING IN NEW ZEALAND

Recently the R.N.Z.I.H. conferred on Mr L. Jury of North Taranaki the Plant Raisers' Award for his *Camellia* x 'Grand Jury'. This honour is not awarded lightly nor was it any idle whim that led the Institute to establish the Award. New Zealand needs many more hybridists and we must encourage hybridising as we never have before.

Hybridising is not new of course. For many hundreds of years man has been improving various economic crops by selection and by the deliberate crossing of different varieties or hybridising. Anyone who has studied the history of the rose for instance cannot fail to realise how our modern rose has been evolved over the centuries step by step. Much has been due to chance hybridisation where the pollination has been performed by insects or other natural agencies; some was performed by man and could be termed chance hybridisation too for Mendel did not publish his theory of genetics until 1865 to lie forgotten till 1900. Records of the crossings made which would be most valuable now are most noted for their absence or paucity. In the result we do not know all we should of the parentage of our roses and many other popular perennial flowers and their crossing bears a distinct resemblance to gambling. Most experienced hybridists in these circumstances work along definite lines with cultivars that are known to be good parents but even so do not expect more than six seedlings in one hundred thousand to be worth introduction. Dr A. S. Thomas of Melbourne says in 'Better Roses', 4th. Edition, "With the increased complexity of ancestry of modern roses there has arisen a greater element of luck in the production of new roses. Mendel's law becomes more a consolation in explaining disappointments than a help in achieving success". We may regard the highly hybridised specialists' flowers as extreme cases. Where species and fixed seed strains are involved Mendel's Laws may provide valuable guidance.

Nevertheless hybridisation is not for the man in a hurry for the material rewards though adequate in most parts of the world are not phenomenal. In populous countries where plant patents prevail the professional hybridist may live comfortably according to national standards and at the same time have one of the most creative and satisfying vocations. Occasionally a lucky break makes the news as when a chance hybrid apple discovered in a Hawke's Bay backyard was introduced in various countries of the world. This apple was of superb quality and the introduction was placed in good hands. Silence was maintained whilst propagation material was built up and plant patents and agencies were negotiated in various parts of the world. These efforts were well rewarded but remember the result was exceptional enough to make the news lines.

Up to the present our New Zealand hybridist has been out on a limb for not only is the local market very limited but New Zealand plant patents are still in the offing. Distant markets until recently have not been accessible to our hybridists and other horticulturists and the absence of plant patents in most countries has made overseas introduction difficult to supervise and precarious. However our world is rapidly shrinking as transport speeds up and more and more states are realising the great value of plant patents and better opportunities now exist for New Zealand hybridists. We expect these to continue to increase. If plant patents are introduced here the interest in plant hybridisation must increase in a most desirable manner for the raiser of new varieties will be sure of a just reward. To date our hybridists have been dedicated amateurs apart from the few professionals employed by Government Departments, agricultural colleges and large crop processing firms. This does not belittle their skill or ability in any way but in fact does them great credit for it is only too obvious that they could not expect material rewards. Even where the hybridist has earned his living from horticulture the term dedicated amateur still applies for owing to the lack of adequate material reward it has been an unremunerative sideline or hobby; more credit to them. We are richer for their efforts.

We are on the verge of a great horticultural revolution as modern transport annihilates time and space enabling perishable goods from the antipodes to reach the world's great markets in the merest handful of time. New Zealand must play its part by producing the highest quality horticultural goods for these markets evolving varieties suited to these markets and highly adapted to this environment and our cultural and marketing methods. Of course we may find it advisable to modify our methods where feasible. We have been given a lead by Government and other institutions in the production of better varieties of food crops and this trend must be followed and extended to cover the whole spectrum of horticultural production. There will be scope for the private hybridist from the humblest amateur dabbler to big research institutions and firms employing teams of professionals in a big way. Who are the hybridists to-day apart from the occasional professional employee? Mr Jury is one of many crossing camellias and associated plants. Many are working on daffodils, gladioli and other bulbous plants for the fun of it. Mr John Humm is noted for his work on flowering apples and the untimely demise of Dr Frances at the very moment his work on roses was coming to fruition was a staggering blow. However his records were not lost and the President of the National Rose Society of New Zealand, Mr Doug. Butcher, is setting a fine example to his fellow members by following up Dr Frances' work as well as working on his own lines. He has some most promising varieties and never loses an opportunity of enticing others into the joys of hybridising.

Now we come to the doyen of present-day New Zealand hybridists, Dr Yeates of Massey University, whose work on liliums has had worldwide impact. Great work has been done on our New Zealand flora all over New Zealand, Hebes, Leptospermum and New Zealand Flaxes being favourites. Yet strangely some of the most notable of the hybrid manukas such as 'Red Damask' and 'Scarlet Carnival' have come from that great rose and camellia hybridist, Dr W. E. Lammerts of Livermore, California.

What has this to do with you? Perhaps you could try your hand, too, even if you just dabble at it for small streams do build mighty rivers. Whatever you do, please keep the record straight for correct information on what has been done is invaluable to those hybridists who follow you.

JOHN GOVER.

RARE BOOKS AVAILABLE

The library of the late Mr G. A. R. Phillips, who was editor of this Journal for some years, included many rare and valuable books, particularly on horticultural topics. The disposal of some of these books, either in New Zealand or overseas is at present under consideration. Among them are such things as a bound volume of the Supplements to Elwes' Monograph on the genus Lilium, complete sets of the R.H.S. Yearbooks on Lilies and on Rhododendrons, the three volumes of Grey's Hardy Bulbs, Flora and Silva, 1903-1905; New Flora and Silva, 1929-1941; Curtis' Botanical Magazine, 1926-1965. Mrs Phillips' address is P.O. Box 5 (telephone 154), Paraparaumu.

(A complete list is too long to publish in this Journal, but if interested please communicate with Dr. Yeates, 51 Long Melford Road, Palmerston North, who has inspected the books. It is hoped to produce a cyclostyled list which may be sent to interested people.—Ed.)

NEW ZEALAND PLANTS AND GARDENS

LODER CUP AWARD, 1967

At a very fitting function presided over by His Worship the Mayor of Wellington, Sir Francis Kitts, the Loder Cup was presented to Professor John T. Salmon by the Under-Secretary to the Minister of Agriculture. Mr D. J. Carter, in Wellington on December 5th, 1967. The function, which was arranged by the two nominating bodies, the Wellington Branch of the Royal Forest and Bird Protection Society of N.Z., and the Wellington District Council of the Royal N.Z. Institute of Horticulture, was very well attended and widely representative of scientific, botanical and horticultural interests in the city. The Chairman of the Loder Cup Committee, Mr A. M. W. Greig, spoke in general terms of the objects of the Award-"To lovers of nature in New Zealand to encourage the protection and cultivation of the incomparable flora of the Dominion" and traced the origin of the Award to the visit to New Zealand in 1886 of Mr Gerald Loder, who later was President of the Royal Horticultural Society of England and subsequently became Lord Wakehurst. Mr R. C. Nelson, National President of the Royal Forest and Bird Protection Society, referred back to the boyhood of Professor Salmon whose interest in botany and photography first was aroused at the age of 10 years while treking over the countryside with his father, a surveyor and himself a great lover of nature. Professor Salmon, said Mr Nelson, had gone through on the years to develop an intense interest in both of these absorbing subjects. This deepening interest, particularly in our native flora, led Professor Salmon to travel extensively throughout the Dominion to study and photograph his sub-This work had now culminated in the publishing of his outjects. standing book, "New Zealand Plants and Flowers in Colour", which had become recognised as a standard book of reference and would do a tremendous amount towards promoting a greater knowledge of and love for our indigenous plant life. Mr Nelson reminded the meeting that Professor Salmon had also been strongly outspoken in defence of our native bush against loss in the progress and development of our country; his book, "Heritage Destroyed", had done much to awaken citizens to the urgent need for conservation and to the dangers of wanton destruction of our bush and plant life. Through Professor Salmon's efforts, with others, the Government was convinced of the need for a Nature Conservation Council, to which he was appointed a foundation member.

Mr I. D. Galloway, Chairman of the Wellington District Council of the Institute, read the citation in support of Professor Salmon's nomination. Presenting the cup and inscribed certificate to Professor

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Salmon, Mr Carter (who was deputising for the Minister of Agriculture) said there had been eight nominations received this year and, although the award could be made to only one, the unsuccessful nominees were to be complimented on their efforts, too, and he felt that the real reward in all of these things was the work itself and the results achieved. This did not detract, however, from the distinct honour achieved by Professor Salmon in gaining the award for his significant contribution towards the preservation of New Zealand's native bush and flora. He was a most worthy nominee and it had given much pleasure to the Minister of Agriculture, in whose custody the cup was entrusted by the donor, to announce the award this year to Professor Salmon. Responding to the presentation, Professor Salmon expressed the hope that the people of New Zealand would come to appreciate more their good fortune in living in a country renowned the world over for its great natural beauty. Today's generation owed a debt of gratitude to the early settlers who had the foresight to set aside large areas as reserves and sanctuaries.

We have here in New Zealand, more than in any other settled country, a harmony and integration of the national vegetation with the man-made landscape whether in the country or town. But we must understand the natural vegetation to appreciate it. Only through a real appreciation by the public and by Government will there be a genuine desire to preserve it.

Amongst the official guests present was Miss Nancy Adams who received the award in 1963.



FLOWERS FOR SHOWS

A Guide for Horticultural Shows and Floral Art Displays

Have you bought your copy yet of this essential and authoritative Handbook? It makes a fine present too: attractively printed and bound it costs only \$1.50 from **The Dominion Secretary**, **R.N.Z.I.H.**, **P.O. Box 450, Wellington**, or from your District Council Secretary.

Send your remittance now while stocks last.

PLANT RAISERS' AWARD

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 who has raised in New Zealand a cultivar considered to be sufficiently meritorious. The Award shall consist of an inscribed medal. The term 'individual' shall be deemed to include 'organisation'.

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 exact equivalents.

Conditions:

- (a) The cultivar shall have been raised within the Dominion of 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 3 (three) years prior to the raiser's name being submitted for consideration. The cultivar to be sufficiently fixed so as to be suitable for further propagation. The Award shall be granted only for a cultivar considered 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 herein defined.

Nominating Bodies:

Nominating bodies shall be:

(a) Any District Council of the Royal New Zealand Institute of Horticulture (Inc.).

- (b) Any Horticultural organisation or branch thereof, affiliated to the Royal New Zealand Institute of Horticulture (Inc.).
- (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 statemens shall be verified by a cerificate signed by the raiser.

Closing Date:

Nominations shall be submitted in writing to the Dominion Secretary, Royal New Zealand Institute of Horticulture, P.O. Box 450, Wellington, not later than 30th June each year.

Nominating bodies are urged to take up the matter of this Award and to submit nominations of raisers who are eligible for consideration.

PAINTING A PLANT

Extract from Miss Allison's Talk on 1966 World Orchid Conference. To North Taranaki District Council.

A most interesting talk was given by the artist of the Royal Horticultural Society's Orchid Committee. This committee requires every award plant to have its portrait painted, and this they do through the services of a water colour artist. They still have no faith in the ability of colour photography to record the true size, form and colour of the orchid. Miss Jean Holgate, who has been the artist for the orchid committee for about twelve years, gave a talk about her approach to painting an award plant. She told us how important it was to have the plant before the colour faded and the texture started to wilt. She also explained how, when she had the plant, the first thing she had to do was to measure it and get the proportions absolutely accurately. She then sketched it according to the measurements, cut a stencil from this sketch, fastened the stencil on to her drawing board and sprayed the background around the stencil with a neutral colour. She then removed the stencil and painted in the flower. Before painting, of course, she had already tested out her water colour mixtures to get the colours as accurate as possible. All this painstaking work was to get the dimensions, shape, size and colour as accurate as was humanly possible and yet still capture the character of that particular orchid.

USEFUL SHRUBS FOR FLORAL WORK

MARGARET WATLING, Kennedys Bush, Halswell.

When an interesting, vital flower arrangement is studied, it will be found to possess clear-cut line, contrasts of form, and tints, tones, and shades within the chosen colour harmony. To achieve this, it is often necessary to turn to shrubs, not only for flowers, seed-pods and berries, but also for material to create an outline, or to blend flowers and container together with toning foliage. Flower-arrangers living in relatively frost-free areas have an even wider selection to call upon, as in the colder districts certain useful West Australian and South African shrubs, for example, are usually only available in florists' shops.

In general, all woody stems should be scraped and the ends split, to enable them to absorb water more easily, with foliage being immersed in water for several hours. Re-cutting stems under water is always beneficial, as is placing the stems in warm water after cutting and scraping.

Even during the winter months, shrubs supply material for floral work, with the variety increasing as spring approaches. A tall vase may be adorned with the elegant pendulous sprays of *Garrya eliptica*, showing the habit of growth of the grey-green catkins. *Eugenia myrtifolia* supplies purplish-rose berries in abundance from late winter, and brings welcome colour. The bright green *Euphorbia wulfenii* fills a between-season gap in bold forms, and despite the disadvantage of its smell, is an excellent subject for foyer and hall decorations.

At this time, *Hammamelis mollis*, the Witch Hazel, and *Chimonanthus praecox*, the Winter Sweet, are familiar subjects. The camellias join the springtime scene very early, beginning with the *C. sasanqua*, and continuing on to such favourites as 'Spencer's Pink'. All camellias last better if picked in the bud or half-open stage. *Salix purpurea* is a low-growing species of the ornamental "pussy willow", with a purplish tinge to its catkins.

Spring indeed is the most abundant season for shrub material, with yellow, pink and violet predominating. Forsythia has earned the reputation as a basic springtime floral material, and it may be picked in bud to hasten opening, and this also avoids weather damage. Prunus, too, responds to this treatment.

Stachyurus praecox has creamy-yellow flowers along the underside of its curving branches, and these may be used 'as they grow', or placed to turn upwards. Fremontia mexicana adds its rich gold flowers and deep orange bud to the yellow colour range, while the kowhais provide a subtle greenish-yellow. Acacia riciana and A. cultriformis, Knife-Leaf Wattle, are a change from the more frequently used



Vestia lycioides (see page 250)

(Photograph-Douglas Elliott)

types. The cream sprays of *Cytisus praecox* (broom) give flowing line, while *Corylopsis spicata* has yellow flowers set on bare stems in midspring, and this dainty shrub is an understatement in simplicity.

Line arrangements, perhaps with an Oriental touch, may be achieved by trimming the branches of *Chaeonmeles* (Cydonia japonica) into the desired shape. These flowers last better when picked at the 'partly-open' stage. The magnolias are another type of flower which lend themselves to uncluttered designs, the mahogany *M. soulangeana nigra* being particularly effective. The furry buds of *M. stellata* typify spring, and have texture interest. With all magnolias, it is wise to scrape the stems to ensure adequate lasting qualities.

The blue-violet spikes of *Buddleia salvifolia* look more effective when all the foliage is removed. A different form in this colour is provided by the dusty berries of *Mahonia lomarifolia*, which can be dried afterwards. The fuchsia-like flowers of *Vestia lycioides* give way to seed-pods which develop an attractive purplish tinge.

Grevillea glabrata has pendulous sprays of delicate white flowers, which 'soften' the line of pedestal bowls, while the white form of *Clianthus puniceus*, the Kaka Beak, has a greenish tinge, and is also graceful.

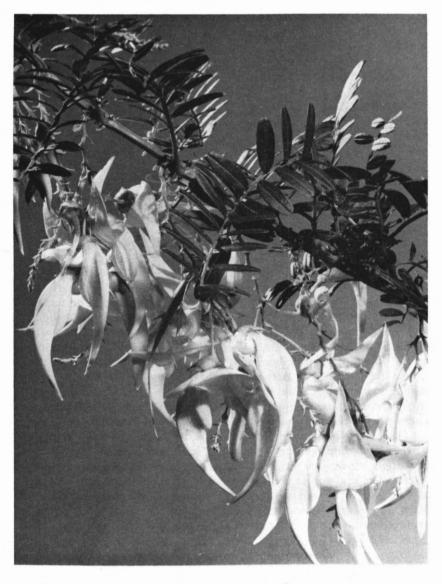
An exotic air is given by some of the more frost-tender subjects. The sweet-pea like flowers of *Podalyria calyptrata* are soft mauve-pink, and the white form, *P. calyptrata alba*, is also most attractive.

The lemon-yellow flowers of Dryandra formosa have interesting texture, and the various leucodendrons add colour, including L. discolour in crimson shades, and yellow L. salignun. Leucospermum reflexum is widely used, its burnt-orange blooms possessing character. The amber flowers of Banksia ericifolia retain good colour during a long flowering time, as does the more bronze B. spinulosa. In B. integrifolia, the greenish-yellow flowers are teamed with silvery foliage which has a white reverse.

The pendulous sprays of *Persoonia pinifolia* give added value with green and bronze-tinged berries, and these last well when picked. A bold effect is given by the waratahs—*Telopea speciosissima* and *T. oreades*, and such is the character of these flowers that even a single bloom, with suitable foliage, makes a striking design.

The proteas yield a wide variety of colour and sizes to the floral art scene, and their leathery foliage and long-lasting qualities are much appreciated. The most commonly used one is *P. nerifolia*, with its pink flowers edged with brownish-black, feathery tips. An unusual touch is given by the green *P. incomta*. The fragile pink flowers of *Serruria florida* 'Blushing Bride' are indeed a floral art treasure.

With the advance of the summer months, new materials emerge.



Clianthus puniceus f. alba

(Photograph-Douglas Elliott)

Roses are the most universally used shrubs in floral art, and their thorns may be removed easily with a potato-peeler, before the stems are placed in warm water to condition the blooms.

The glowing crimson flowers of the Bottle Brushes or *Callistemmons* may stay in flower just long enough to be incorporated in pre-Christmas decorations.

Hydrangea paniculata has trusses of creamy-white flowers, which gradually change to pink, and are valuable in pastel schemes. In general, hydrangea flowers should be allowed to develop fully before picking, and then the stem-ends are scraped and placed in boiling water for 10 seconds, before the blooms are ready to be arranged.

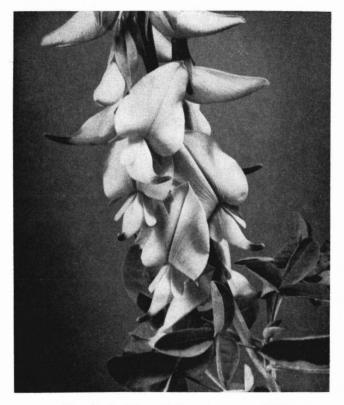
Caryopteris clandonensis has spikes of powder blue in summer, and the seed-heads are delicate in dried arrangements. An exciting chartreuse shade is found in the flowers of *Crotolaria laburnifolia*, West Australian Bird Flower, and it is sad that its dislike of frost restricts its distribution. *Clethra arborea* produces creamy-white 'lily of the valley' flowers, prizes for bouquets and sprays.

Colourful foliage, glowing berries and interesting seed-pods herald the arrival of autumn. *Hydrangea quercifolia* has an 'oak leaf' which assumes rich tones, as does the *Amelanchier canadensis*. The leaves of *Rhus typhina*, the Stagshorn Sumach, have brilliant colouring with the added attraction of the rusty-red 'stag's horns' which dry for winter decorations. More gay foliage is found in *Cotinus americanus* (smoke bush) while the purple-leaved variety of *C. coggygria* has feathery smoke-like plumes for decorative value. *Cornus baileyi* has very red stems and colourful autumn foliage. The semi-herbaceous shrub, *Ricinus communis*, commonly known as the "Castor Oil Plant", produces prickly red balls which are valued by floral artists.

Viburnum opulus americanum provides large clusters of shiny red berries from late summer, while the leaves assume autumn tonings. Crateagus carrieri has bright coloured fruits, as do the various cotoneasters. The crabapples are very much part of autumn, and the apples assume new brilliance when lightly polished with a soft cloth. It is often necessary to resort to florist's wire to anchor these fruits in an arrangement. Popular varieties are Malus 'Jack Humm' and M. 'Sovereign'.

Pyracantha angustifolia has yellow-orange berries which show to better advantage if all the foliage is removed—this applies to many shrubs used in decorative work, where foliage tends to obscure the berries. The fruits of the "Strawberry Tree", *Arbutus unedo*, are useful for orange-toned schemes. The berries of *Callicarpa dichotoma* resemble beads of purple enamel, and cluster closely to the fine stems. These berries may be dried and kept for endless decorations.

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Crotalaria laburnifolia (see page 252) (Photograph—Douglas Elliott)



Leucospernum reflexum (see page 250) (Photograph—Douglas Elliott)

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Climbing shrubs, too, must not be overlooked by floral artists. In Spring, abundant trusses of creamy bells are supplied by *Pandorea pandorana*, the Bignonia, and the vine assumes interesting twists for those with abstract designs in mind. The various forms of *Hedera*, the Ivies, are all invaluable to the flower-arranger. *Jasminum polyanthum* yields fragrance with its white blooms, tinged with rose-pink, while more fragrant flowers are found in the jaunty *Loniceras*, the Honeysuckles.

Clematis seed-heads, especially when green and silky, are novel and useful, while the scented flowers of *Mandevilla suaveolens* are followed by the long green pods. *Cobaea scandens* bells turn from greenishfawn through violet to deep purple, and for decorative work, these last best if picked in the green stage. The green seed-pods are also useful.

The yellow-orange berries of *Celastrus scandens* open to expose colourful seeds, and may be added to a dried arrangement selection.

Shrubs are an invaluable source of foliage, with "all-foliage" designs having a special attraction. A never-failing stand-by for foliage at any time of the year are the various conifers, especially those tinged with gold, silver or bronze colouring.

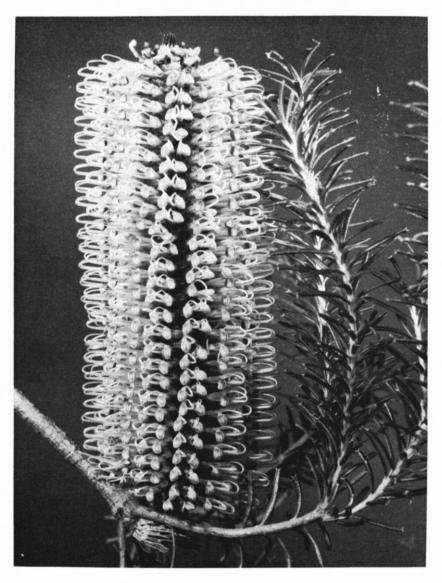
The glowing red foliage of *Photinia sp.* or the ever-useful *Parthenocissus tricuspidata*, the Virginia Creeper, need to be immersed in water for several hours to 'condition' them. The reddish-purple *Dodonea viscosa purpurea* adds variety.

Camellia sasanqua leaves blend well with roses, being similar to rose foliage. *Fatsia japonica* leaves have a boldness of form which is ideal for contemporary designs or large pedestal bowls, and have excellent keeping qualities, being undeterred by continual use.

Acuba japonica foliage works in with green to yellow schemes, while the wrinkled and 'gold-dusted' leaves of Viburnum rhytidophyllum create interest in an "all-foliage" arrangement. Colour is given by the variegated forms of ivy, fatshedera and pittosporum. Senecio greyii can change the scene yet again with its grey leaves and stems, and an aristocrat of the silver foliage range is Leucodendron argenteum, the Cape Silver Tree.

Shrubs are the 'mainstay' of hospital posy bowls and similar small arrangements, contributing firmness and good lasting qualities. *Thryptomene calycina* and *T. saxicola rosea* are much sought after, while *Micromyrtus ciliata* also provides sprays of small pink flowers, which gradually turn to red with age. From the winter months onwards, the white flowers of *Agonis juniperina* give their long-lasting value.

Erica parkeri blooms for an incredible length of time, and is a universal favourite, with its delicate pink bells. Apple-blossom, pink *Leptospermum scoparium* 'Fiesta' and glowing *L. scorparium* 'Red Damask' are but two samples of the useful manukas.



Banksia ericifolia (see page 250)

(Photograph-Douglas Elliott)

Entering into the mauve tonings are *Bauera sessiliflora* and *Calluna vulgaris* 'H. E. Beale', with *E. elegantissima* being even more dainty. The old, but not forgotten, *Rosmarinus* officinalis, the *Rosemary*, gives a fragrant touch.

Silvery-green *Protea scolymocephla*, being smaller than most of its relations, is just the right size to give focal interest in these types of arrangements.

In miniature arrangements, there is a need for material in proportion to the tiny containers, and to keep to this scale, it is sometimes necessary to use portions of flowers, or one floret from a cluster. The spider-like blooms of *Grevillea rosmarinifolia* and the buff-yellow *G. sulphurea* are unusual when placed in this context, and the serrated foliage of *G. asplenifolia* has character. The ericas in variety, assume a new role—*E. baccans, E. autumnalis;* the 'snowballs' of *E. perziza,* and the tiny bells of *E. multiflora Daviesii.* Other good 'miniature material' is found in boronias and thryptomene, florets of *Pieris japonica,Kalmia spp.* and *Clethra arborea;* the pink *Coleonema pulchrum,* the Diosma, and the sometimes overlooked Laurestinus, as well as the tendrils of passion flower.

Many materials retain good colour when dried, and give variety to winter decorations. The warm pink, papery flowers of *Phaenocoma prolifera* are a change from helichrysums, and the fluffy greenish flowers of *Phyllica pubescens* can be dried after contributing their excellent lasting quality to fresh arrangements. *Eriocephalus glaber* provides woolly white flower-heads, giving a misty effect.

Orange subjects to add to the selection are the bold form of *Banksia prionotes*, and the picturesque *Leonotus Leonurus*. the Lion's Tail. The cones of *Isopogon leucocephalus*, left after the flowers have withered, are also useful. Foliage for dried decorations can sometimes be a problem, and a valuable source of supply is *Banksia grandis*—the strongly serrated leaves dry a silver shade, and in the process assume delightful twists.

The versatile selection of forms and colours provided by shrubs emphasizes their value in floral arrangements.

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AWARD OF GARDEN EXCELLENCE: The Convener of the Sub-Committee told the Conference that they now especially sought nominations from the specialist Societies of plants worthy of this Award. Nominations should be forwarded to Miss J. Dingley, Plant Diseases Division, D.S.I.R., Private Bag, Auckland. Further information may be obtained from Miss Dingley, the Dominion Secretary of District Councils.

PLANT HUNTING ON BANKS PENINSULA

By JESSIE MOULD, Akaroa.

When my Grandfather came to Banks Peninsula in 1874, the bush had been cleared from the valley floors and the lower parts of the hill slopes so that to earn a living he walked daily to and from the tops of the hills to fell trees in the bush. In England his occupation had been a gardener in the stately grounds and parks of the homes of the Duke of Marlborough and the Earl of Jersey. I often wonder what he thought of the wholesale slaughter of the magnificent trees in his new country.

The early settlers built their homes of pitsawn totara which stands today—devoid of borer or rot but the piles were of white pine later used for the manufacture of butter boxes—so soft it was—with the result that when the piles rotted the houses sank and tilted. The pioneers could not be blamed for this misjudgement of the durability of the native timbers. They just did not know.

My grandfather must have found the native flora interesting as he learned their names and handed on his knowledge to his sons and daughters from whom I learned much of what I know today.

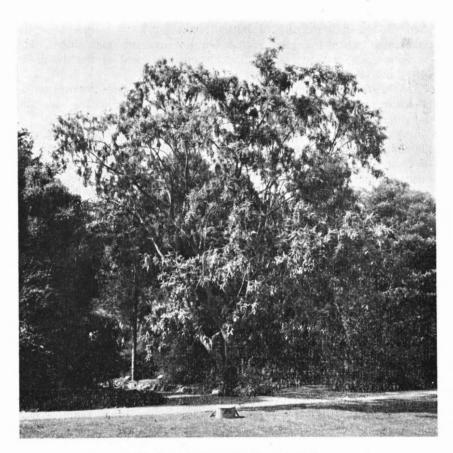
As a child, I roamed the hills of Banks Peninsula loving and knowing the names of every plant and tree that grew thereon. Impatient to clear the land to sow grass and raise stock, the settlers fired the bush at times and the hills I walked were strewn with fallen logs and naked tree trunks which appeared to me to stretch white leafless branches in agony to a God who had forgotten them.

My earliest recollection of native flora was of my father riding home from work on his farm and reaching above his head to break a branch of Kotukutuku, Fuchsia exorticata, laden with fat juicy konini berries and throwing it on the lawn for his small daughters to strip. Konini berries have a flavour all their own. I soon learned that the fattest, most delectable fruit grew on trees with their feet in the creek and also not to climb fuchsia trees as the branches are brittle and give way beneath the weight of even a small child; and one was punished for bathing in the creek with one's clothing on. I also observed that the pollen of the native fuchsia is blue not yellow as on most flowers. In more mature days I introduced my city-bred nieces and nephews to the delights of konini berries but soon found they were picking the fruit for me to eat. It must be an acquired taste! I have been known to sprinkle the purple berries on top of a cream sponge which venture was a gastronomical success but I have never been able to refrain from eating enough berries to make konini jam.

Tussocks were next to claim my attention. The silken symmetry

of the grasses swept by sea breezes appealed to my childish sense of the beautiful and I also imagined that every clump had grown especially for me to sit on, so that every available moment of the time spent on the Lands End run was filled with sitting on as many tussock clumps as possible. In a small-up town garden I grow the silvery-blue *Festuca coxii* as a reminder of the tawny wind swept paddocks I loved so long ago.

By my day most of the bush had gone from the hills with only narrow strips to follow the creeks up the gullies from the sea to the springs. The hillsides were dotted with kowhais (Sophora sp)—



Sophora tetraphera, the kowhai.

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splashes of gold in the August school holidays. I took a tiny kowhai home from the bush and planted it in my garden. Kowhais are supposed to bloom from 15 to 20 years old but mine took nearer 30. I used to measure its trunk with a circle of my fingers, then it took two sets of fingers and thumbs as it grew high beyond the willow hedge in which I had planted it, passing from juvenile form and foliage to adult and it was not until the home was no longer mine that my kowhai bloomed at last. We knew where to find the first kowhai in flower and mourned when progress took bends out of roads and widened them for tarsealing, thereby sweeping away our friends.

We knew where the last of the *Clematis indivisa* (now *C. paniculata*) grew high in the sun on the top of the tall manuka, *Leptospernum scoparium*, on the clay banks. Gradually they too disappeared, maybe when the manuka was cut for firewood. Only last spring, I missed, for the first time, a favourite clump which grew near the main road at the Hilltop.

Groves of Ngaio, *Myoporum laetum*, dotted the lower slopes of the hillsides: some with gnarled and twisted trunks that were most picturesque but unfortunately they now seem to be rotting and falling. Younger ones have not been encouraged to grow on account of their toxic effect on stock if eaten on an empty stomach (e.g. when the ground is covered with snow). The leaves of the ngaio are full of translucent oil glands giving them an attractive appearance together with the delicate lilac coloured flowers. Ribbonwoods, *Hoheria sp.*, remained with their layers of lace beneath the bark and myriads of white starlike flowers which bloomed during the cocksfoot harvest and higher up the Lowland Ribbonwoods, *Plagianthus betulinus*, and the Rusty Totaras, *Podocarpus ferringineus*—the younger generation which had escaped the axe and the saw two generations ago. There were the odd White Pine (Kahikatea), Podocarpus dacrydioides, and Black Pine (Matai), P. spicata, left—tall sentinels, reminders of the glory which had been.

It was the creeks and the gullies we especially loved. With Laing and Blackwell as our Bible we knew every tree in the valley personally the *Coprosmas* with their gay berries; the Kaikomakos, *Pennantia corymbosa*, with their scented flowers; the Lemonwoods, *Pittosporum eugenidides*, with their pretty pale crinkled leaves: the Rohutu, Myrtus *pendunculata*, with its feathery blossoms; the Five Finger, *Nothopanax sp.*, its bunches of hard, dark brown berries; the Broadleaf, *Griselina sp.*, the marbled leaves of the Putaputaweta, *Cardodetus serratus*; and the Mahoe (Whitey wood), *Melicytus ramiflorus*, with its milk white trunks, sweet flowers which perfume the bush and are followed later by violet berries which grow singly along the stems. We discovered that the mahoe provided the loveliest skeleton leaves which we took home to press. We pressed quantities of native flowers and leaves to send to our friends overseas and the "Doctor's Book", our Aunt's old "Girls Own Annuals", in fact all books of any bulk and weight bulged with specimens pressed between blotting paper and newspaper. It was a miracle the family Bible escaped!

Labour Day Weekend was a special time for rambles. The grass grew long and fat in the hay paddocks as it glistened and rippled in the sun and wind. The willows were lemon and green with furry catkins which we sucked for honey.

We knew the glade where the Wineberry, Arisotelia serrata, bloomed. The vari-coloured lily of the valley shaped flowers were one of my favourites. The sun shone through the clusters of blush to claret flowers lighting up the reddish backs of the leaves as they fluttered in the wind. Tangled masses of Bush Lawyer, Rubus australis, laden with panicles of gloriously perfumed white flowers, covered the trees. Native Jessamine, Parsonia capsularis, added to the pot pourri and later its long bean-shaped seed pods provided vegetables for our playhouse, Native Passion Flower vine, Tetrapathaea tetrandra, dangled its miniature orange fruits above our heads and we knew where the White Rata, Metrosdieros albiflora, grew and the green flowered mistletoe, Loranthus micranthus, too. The Passion Flower is one of those natives which grow no further south than Banks Peninsula and of this southern limit list we also knew the Nikau Palm, Rhopalostylis sapida, the Karaka, Corvnocarpus laevigata. The Ake-ake. Dodonea Viscosa, with its durable wood ("Ake-ake forever") and hop like fruit, the Pigeon Wood, Hedycarya arborea, the Macropiper excelsum, true pepper or Kawa Kawa and the Titoki, Alectryon excelsum. Titoki berries resemble a blackcurrant embedded in a raspberry, set in a velvety brown case. We especially prize titokis. Solanum aviculare, the Bulli bulli, and pungas, Cyathea dealbata, grew in the creek beds mid the ferns. We knew not to eat the berries of the Tutu, Coriaria sarmentosa. "So and So's sister had eaten them and died as a result." Supple jack vines, Rhipogonum scandens, and Mühlenbeckia (M. australis) made excellent swings and we knew where small sweetly scented pale green and lemon orchids, Microtis unifolia, grew on dry banks and the little hooded ones, Pterostylis banksii, with green flowers striped with white. Blue Wahlenbergias (W. gracilis) grew amid the grasses.

Cabbage trees, *Cordyline australis*, I loved. The family grumbled about the litter of leaves ours made but it would not have been Christmas to me without the scent of cabbage tree flowers mingling with the ham and plum pudding aromas. Lunching at school I lay on my back and studied the pattern of the blue sky as it was slashed and tattered by the leaves of the cabbage tree. There, too, grew the karaka trees with glossy dark green leaves similar to those of the laurel, and shiny,



Dodonea viscosa 'Purpurea' (see page 260)

hard berries which made excellent ammunition in our wars with our schoolmates. A Pohutukawa, *Metrosideros excelsa*, grew well near the whaler's tripods but it had been planted there and did not grow naturally on Banks Peninsula.

It was nothing for us to pack some sandwiches with a bottle of cold water ginger beer and take to the hills for the day just to see the Mountain Daisies, *Helichrysum bellidioides*, in bloom. We climbed the grass track to the Summit Road which wound around the top of the valley. The kotukutukus there were stunted and there were veronicas, *Hebe sp.*, and Pepperwood, *Drimys axillaris*. We loved to chew the

NEW ZEALAND PLANTS AND GARDENS

Pepperwood leaves even though we knew full well that they burnt our tongues. It was part of the routine. The steep banks above the road were covered with the true N.Z. Flax, *Linum monogynum*. Bidi-bidis, *Acaena sp.*, Creeping Fern, *Libertia ixoides*, the N.Z. Iris, and Ever-lasting Daisy, *Helichrysum bellioides*; sheets of snow in early December with the most pungent perfume. We envied our cousin who had a small patch growing in her home paddock down the valley. At the top of the valley was a bush reserve with tall trees untouched and from them grew long streamers of moist green moss and lichens, encouraged by the sea mists which drifted up from the Eastern Bays and wafted in small skiffs over the summit into the valley, like fingers exploring but daring



Cortaderia fulvida (formerly Arundo conspicua), the toe toe. (see page 263)

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to come only so far over the ridge. It was lonely on the summit with only the plaintive bleat of a lost sheep to break the stillness and I always half expected to meet a tattooed Maori in the bush. In this reserve grew the *Cordyline indivisa*, Broadleafed Cabbage Tree, with leaves which stretched like elastic and we knew a bank covered with *Ourisia macrophylla* which bloomed in early December. It was worth the walk just to see them. There were tall cliffs at the head of the valley surmounted by a stand of tall manuka trees, several of which had fallen in high winds leaving gaps which, when the sun shone from a certain angle, showed up white against the skyline. To us, down below in the valley, this was 'The Ghost' even though we knew perfectly well what caused the whiteness and did not believe ghosts actually existed anyway.

On the summit road most of the streams dried up in the summer and we, with the cold water ginger beer long sinced finished, eagerly rounded each bend in the road hoping for a trickle of water in the gully. We would not drink from the main creek which chattered down the valley. It was animal polluted. I remember once, as we jogged happily but tiredly down the paddocks in the dark, declaring I'd drink six cups of tea when we arrived home, and I did.

The scent of the creek in the dark is difficult to describe. It is probably a combination of damp leaf mould and sweetly perfumed flowers. I remember particularly the scent of the blackish-purple matipo, *Pittosporum tenuifolium*, flowers which I grow today in my small town garden, probably partly for sentimental reasons. Feathery Toe Toe, *Cortaderia fulvida* (formerly *Arundo conspicua*), and N.Z. Flax, *Phormium tenax*, with its red-brown flower heads grew in the creeks and swampy ground. Tuis loved the honey in the flax flowers and we used the sap from the leaf blades as gum. We unwrapped the limp, silken tassels of the toe toe buds—pink and cream which reminded me of the tail of the cream pony I longed for but never owned. There were rushes and bog plants and seaside plants. One quarter of the total number of species of native plants of New Zealand grew on Banks Peninsula but today there is more gorse and bracken than bush on the Peninsula hills.

I lived the better part of half a century before I realized that everyone did not see the trees and the flowers with the same eyes as I did and that though "Earth's crammed with Heaven and every common bush afire with God, only he who sees, takes off his shoes."

ASSOCIATES OF HONOUR

JOHN FREDERICK LIVING and PROFESSOR HUGH DOUGLAS GORDON

The honour has been conferred spontaneously upon Mr John Frederick Living and Professor Hugh Douglas Gordon without formal citations in virtue of their valued services to the Institute. These services are widely known to members.

Mr Living has been Dominion President since 1962 and for several years Chairman of the Finance Committee. He also served as Chairman of the Wellington District Council for a number of years and has generously supported the Institute in the furtherance of its objects.

Professor Gordon has been Chairman of the Examining Board since 1957, and in this capacity has given unreservedly of his time and experience in the successful administration of this important phase of the Institute's work. He has been a member of the Loder Cup Committee since 1957.

Both have evinced considerable personal interest in the work and activities of the Institute and have made substantial contributions to the deliberations and counsels of the Dominion Council throughout the years.

Citation in support of the Nomination of IOHN ELLIOT HUME

Mr John Elliot Hume was born in Scotland and spent his early years in the practice of horticulture, working on orchards in the Nelson area; being orchard manager for ten years.

In 1938 he joined the New Zealand Department of Agriculture in the Horticulture Division as an Orchard Instructor at Auckland, later moving to the same position at Roxburgh.

In 1945 he took up the position of orchard instructor at Tauranga and during the post-war years he was instrumental in establishing many returned servicemen on rehabilitation orchards. In particular he played a large part in guiding the development of the citrus and subtropical industry from a part-time to full-time occupation, with the accompanying increase in size of holdings and handling of the output.

After a period in Christchurch he was promoted in 1952 to Palmerston North as Horticultural Superintendent. Here his intense interest in horticulture has found full outlet. Besides supervising the official horticultural activities in the area covering Taranaki to Wellington and the Wairarapa, as well as Hawke's Bay for some years, he has especially stimulated the diversification of commercial horticulture in Taranaki (berry fruit, vegetables and subtropical production), and pip fruit orcharding in Horowhenua.

He has involved himself deeply and personally in all growers' problems and is very highly regarded by all horticultural producers in the area.

At its inception he was awarded the National Diploma in fruit culture without examination.

Apart from his official duties he has given unstintingly of his time to horticultural societies, giving numberless lectures and demonstrations and has also encouraged many young people to enter horticulture, subsequently advising and guiding them in their progress. In particular, he has served the Royal New Zealand Institute of Horticulture for seventeen years as examiner in the Oral and Practical and other examinations, and has always shown great understanding, but complete impartiality, towards the students. Recently he was appointed in his own right as a member of the Institute's Examining Board. In his quiet, unassuming but cheerful way Mr Hume has made a great impact on horticulture everywhere he has lived and worked. He has been unsparing in the hours spent on developing horticulture, whether officially or at other times. In fact, it is difficult to say when he is not engaged in promoting horticulture.

The Manawatu District Council unreservedly recommends Mr John Elliot Hume as Associate of Honour of the Royal New Zealand Institute of Horticulture.

Citation in support of the Nomination of MR JOHN PAIBA SALINGER

A graduate of Reading University, John Salinger obtained his B.Sc. (Hort.) in 1939. Following five years service with the British Army, he resumed his career in horticulture, and soon began administrative duties as Horticultural Advisory Officer in Hertfordshire. This appointment brought him into close contact with the large commercial glasshouse units of the Lea Valley area.

In 1949 he obtained the N.D.H. (Commercial), and four years later came to New Zealand as Horticulturist (later Horticultural Advisory Officer) with the Horticulture Division, Department of Agriculture, Wellington. Extensive travelling throughout New Zealand, visiting nurseries, public and private gardens, kept him abreast of the most advanced practices adopted by the best growers, as well as providing him with an overall concept of the range of ornamental plants cultivated throughout New Zealand.

Since its inception in 1954, he has been the Secretary of the Nursery

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Stock Research and Extension Advisory Committee—an official forum for the exchange of views between the nursery trade and Government and university departments.

Mr Salinger is well known, and respected, not only as a lecturer on many horticultural subjects, but also for his advice to public authorities with regard to urban beautification schemes.

He has assisted the Executive of the New Zealand Horticultural Trades Association (Inc.) and national specialist horticultural organisations, such as the National Rose Society of New Zealand (Inc.), and the New Zealand Rhododendron Association, in many technical matters.

In 1954 Mr Salinger joined the Royal New Zealand Institute of Horticulture, and quickly assumed responsibilities as a member of Wellington District Council. He represented the Horticulture Division on the Dominion Council, as well as being Chairman of the Institute's Plant Nomenclature, Plant Raisers' Award, 'Flowers for Shows', and Judging Certificates Committees. In addition, he carried out secretarial duties on the Institute's Publications Committee, and is an examiner for the Institute's Diploma examinations.

In 1958 he attended the 15th International Horticultural Congress at Nice, representing New Zealand, and is currently the New Zealand representative on the International Commission for Plant Nomenclature.

Elected a Fellow in 1959, Mr Salinger gave unstintingly of his time to Institute affairs, and to him the Institute is greatly indebted for the publication, last year, of its outstanding booklet "Flowers for Shows",

Mr Salinger's recent appointment as Senior Lecturer in Horticulture at Massey University, now enables this eminent horticulturist to pass on his expert knowledge to the young student gardeners of New Zealand.

Citation in support of the Nomination of MR FREDERICK PARKER

Mr Parker has been actively engaged in horticulture in New Plymouth for a period of thirty years. He created Parker's Gardens No. 1 which became a famous attraction to the city, being visited by thousands of visitors, many from overseas. Much of the admission money was donated to horticultural and charitable purposes.

After disposing of this property he developed Parker's Gardens No. 2 which is one of the show gardens of New Plymouth to-day, open to the public at certain seasons, the revenue from this going towards improvement at Pukekura Park and Pukeiti.

He has been a member of the Board of Pukekura Park for over forty years and has given freely of his knowledge and assistance, both to the park and to Pukeiti Trust, of which he has been a member for

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very many years. During that time he has given quantities of ferns and shrubs to the Trust and has helped with the planting. He designed the brickwork and terraces on the western side of the Pukeiti Lodge and did the actual work.

Mr Parker's other great interest has been in the school grounds in his area and he has been responsible for the laying out of the West End, Devon Intermediate and Heidelberg Schools, where about 4000 trees and shrubs to-day beautify the grounds. Many of these he donated and the supervision and much of the planting was done by Mr Parker.

Last year he donated a large collection of orchids to Pukekura in memory of his late wife. In addition to this collection, valued at over \$2000, he has made provision for purchasing new varieties in the future.

At the present time he is engaged in designing an ornamental water scheme for Pukekura Park.

Mr Parker's knowledge and advice has always been available to the citizens of New Plymouth and visiting horticulturists.

Citation in support of the Nomination of MR CLIVE HENRY JENNER WILY

Mr Wily has been a member of the Institute for the past ten years and for the past nine years has been a valued member of the Auckland District Council executive, travelling thirty-six miles to attend.

Over many years he has specialised in the growing of rhododendrons combined with many other species of shrubs and trees of which he has an extensive collection and a knowledge of same and their requirements.

He has lectured periodically to members of the local District Council and horticultural societies and shown his fine blooms in season.

For some years now he has thrown his place open to horticulturists in October when the rhododendrons are in bloom and has on those occasions entertained hundreds of visitors.

He is a member of the Rhododendron Association and has one of the largest collections of rhododendrons in Auckland district.

Mr Wily has always been one of the first to put his hand in his pocket to help the local District Council and to this end he paid for life membership of the Institute not long after joining.

Last year at his own expense he had printed five hundred brochures setting out the aims and objects of the Institute, copies of which were forwarded to the Dominion Council and won the approval of the Dominion Council for same.

This citation is forwarded with the unanimous approval of the Auckland District Council.

HORTICULTURAL TOWN AND AROUND - CHRISTCHURCH

L. J. METCALF

For the past ten years I have contributed "Notes from the Christchurch Botanic Gardens" to this Journal. During that time many aspects of the Gardens have been covered, and while it would be possible to continue these notes for another ten years without undue repetition, I feel that the time has come for them to cease. In and around Christchurch there are many horticultural features which would be of interest to readers, but they rarely if ever receive any publicity. Consequently the aim of this new series of "notes" will be to deal with The Botanic Gardens will continue to be mentioned such features. from time to time, but only when there is something of particular interest. Finally I wish to thank all those people, who, over the years, have written to me because of their interest in "Notes from the Christchurch Botanic Gardens".

Christchurch abounds with parks and reserves and the City is fortunate that on the Port Hills quite a number of scenic and other reserves have been set aside for public use. The largest of these Port Hills reserves is Victoria Park and it is to be the subject of these notes.

Victoria Park is situated on the northern slopes of the Port Hills and faces out over the City. The whole Park is on the main spur of Sugar Loaf Hill (alt. 1628 ft.), a prominent feature of the Port Hills; there are aspects to the east and to the west, and even some southerly slopes. From the Sign of the Takehe on the Dyers Pass Road a side road leads up to Victoria Park and at an altitude of approximately 900 feet the Park Gate is entered. Recent land acquisitions over the past few years have extended the Park area, so that together with another reserve it is now possible to go from the Park entrance to the summit of Sugar Loaf without leaving reserved land. A scenic reserve of native bush on the southern slopes of the Sugar Loaf links up with the others at the summit. This means that almost the whole of the Sugar Loaf area is protected. The only thing which spoils its natural beauty is a tall television transmitting tower. However the building associated with the tower has been made as unobtrusive as possible.

The northern slopes of the Port Hills are, and were, mainly covered with tussock grasses. At times they suffer from severe droughts, and on the surface are not particularly favourable to plant growth. The main points in their favour are that they are warm and fairly frost free, and once some shelter has been obtained, many plants not hardy on the Plains can be grown. Victoria Park is just a little too high for the optimum growing conditions but none the less many plants do very well.

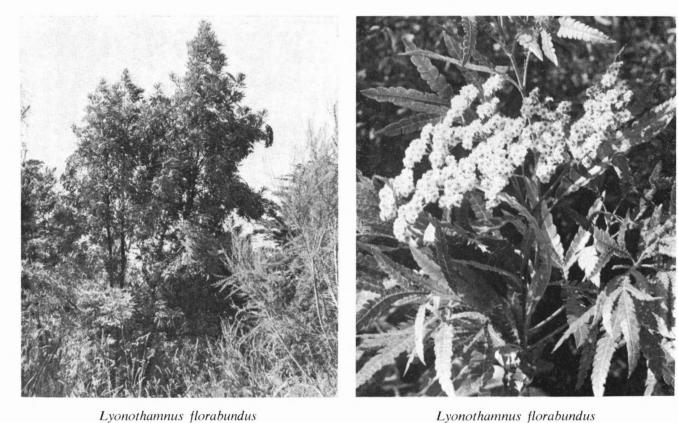
It has an area of more than 183 acres and was originally part of

the Cracroft Wilson estate. At first it was set aside as a Public Quarry Reserve, but in 1883 it became a scenic and recreation reserve. It was officially opened on the 22nd June, 1891, and was named Victoria Park to commemorate the Diamond Jubilee of Queen Victoria. At that time the area was designated a domain, with control vested in the then Selwyn Road Board. Upon the abolition of that Board it was vested with the Cashmere Domain Board, and at a later date was finally vested with the Christchurch City and Suburban Domain Board, the City Council being the Board.

From time to time various plantings were carried out, and as far as can be ascertained the first planting was carried out by A. L. Taylor who was Curator of the Christchurch Botanic Gardens from 1889 till 1907. Under his supervision small plantations of pines and eucalypts were established in the vicinity of the present tea rooms, and near the original park entrance. Somewhere about 1920 a small planting of native shrubs was established in a gully on the western side of the tea rooms by Mr Wickens, the then Superintendent of the Parks and Reserves. Nothing further appears to have been done until about 1926 or 1927 when Mr James Young, Curator of the Botanic Gardens, advocated the afforestation of Victoria Park. A block of about fifty acres on the higher slopes below the Sugar Loaf was planted with pines, eucalypts, and Douglas fir.

From 1929 onwards, under the direction of the late Mr M. J. Barnett, extensive plantings of both natives and exotics were carried out, the idea being to develop the Park for scenic and recreation purposes. It was during the depression years that some of the most extensive planting was undertaken along with the development of roads and pathways. Some very fine stone walling was done during these years. The main area planted during this time was the eastern slope below the tea room. Blocks of both native trees and shrubs, and exotics were put in, and these plantings are now maturing very well. After the last war the planting of other areas continued, and although not so extensive as formerly it still continues today.

The areas in the vicinity of the tea room were developed with lawns, tree and shrub borders, and pathways. The object being to make it more of a garden area. Originally it was intended to plant in certain geographical groups—Mediterranean, South African, Australian and so on. However, over the years this object became forgotten and today the plantings are mixed. There is quite a good collection of native trees and shrubs, while Proteas, Grevilleas, and many other warm temperate region plants thrive. Many conifers do exceedingly well and in some of the less well known areas of the Park there are some very fine specimens. In the next issue of the Journal I will describe some of the plants to be found there.



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Lyonothamnus florabundus Flowering tree at Bastia Hill.

(Photograph-E. G. Gibbs)

(Photograph-E. G. Gibbs)

Close up of Flowers

SOME INTERESTING PLANTS

W. R. STEVENS (Wanganui)

LYONOTHAMNUS FLORABUNDUS

There are several small islands situated off the coast of California and their flora is extremely interesting not only to botanists but to horticulturists. One of the most beautiful trees for a large garden occurs in three of these islands—Catalina, Santa Rosa and Santa Cruz—and is in fact referred to as the Santa Cruz Ironwood. It belongs to the family of Rosacea and is a tall evergreen growing up to forty feet. I have not been to any of these islands, but I did see several fine specimens which had been planted on the mainland, and they impressed me as a plant well worth trying out.

Late in 1957 some fresh seed was sent to me and to my surprise germinated very freely. Two of the seedlings were planted in a sheltered spot in my garden and these have now flowered for a number or years. The numerous small white flowers are borne on broad terminal panicles about eight inches across. When in flower in January it is quite an arresting as well as beautiful sight, the white flowers contrasting strongly against the dark green leaves.

It is a rapid grower and stands pruning well. First discovered on Santa Catalina in 1884 by W. S. Lyon, California's first State Forester, it was introduced into England in 1900. Unfortunately it did not prove to be hardy there and from this I should imagine that in New Zealand it would not be suitable for planting in districts subject to heavy frosts. As I do not experience more than four or five degrees of frost in this garden I have no idea of how many degrees of frost it will stand without injury. However in milder districts I would say that it is definitely worth trying, especially in coastal areas.

ERIOGONUM GIGANTEUM "St Catherine's Lace"

This is a most unusual and attractive shrub which requires very little attention provided it is grown in a warm, sunny aspect. My plants are now several years old and the only fault I can find with them is that they are rather brittle and suffer considerably in very strong winds. Apart from that it is not at all fussy and is worth a place in any garden as it stands up to drought conditions well. In fact it prefers a dry summer.

It makes a plant from five to eight feet high and as much across. A long flowering period, starting in January, with large grey-green inflorescences which deepen with age to many shades of tan, rust and

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Eriogonum giganteum

(Photograph-E. G. Gibbs)

brown. If picked at the right stage it dries very well and makes a splendid winter decoration, but care must be taken in handling as it is rather brittle.

Its habitat is confined to the two islands off California, Santa Catalina and San Clemente, where it occurs on steep rocky slopes.

HAEMANTHUS KATHERINAE

This is a bulb from the summer rainfall area of South Africa, in particular Natal, Zululand and Swaziland. It is a plant that I always look forward to seeing in flower as I do not know of anything quite like it. This year it has been superb and I am sure this was, in part, due to the heavy rain we had in January. Also it was in part due to the manuring I gave it. This was in late spring when the first sign of growth appeared and I mulched the plants with a heavy dressing of old sheep manure. Besides feeding the plants this mulch helps to preserve moisture during the dry summer months. This year the flower stalks were taller than I have ever had them—just over three feet high and the cylindrical



Haemanthus katherinae

(Photograph-E. G. Gibbs)

flower heads were over ten inches in diameter. The colour is a glorious coral red and the flowering period is from two to three weeks.

Vegetative increase is not rapid and although I cross pollinate every year I do not get more than a few fertile seeds. Those that I have raised took four to five years to reach flowering size. Culture is not difficult providing two necessary conditions are kept in mind. The first and most important thing is to see that it is planted in semi-shade. I remember years ago planting one of my bulbs out in a sunny position just to see if the experts were right. They were; it would not grow at all and eventually died. The other important point is to see that the soil is *really* rich as it dislikes hungry soil as much as it dislikes full sun.

There are over forty species of Haemanthus, all from South Africa, but very few of them occur in the winter rainfall area. The most common species is *Haemanthus coccineus*, which does well in frost-free districts in New Zealand, flowering in early March. This has two large leaves which lie flat on the soil and I have heard the name given to it of 'Elephant's Ears'.

REGISTER OF JUDGES

Notice to Members

I wish to draw your attention to the service now being offered by this Institute in keeping a Register of Judges. When approved for entry in this Register the judge is given a small certificate in a plastic case suitable for carrying in purse or pocket—and signed by the Dominion President and Dominion Secretary of the Institute. The Register is kept in the office of the Dominion Secretary and lists judges in Floral Art, Roses, Camellias and other specialist Societies.

Nominating bodies take full responsibility that the conditions under which the judge is granted a Certificate are as stated in the application form, which may be obtained from the Dominion Secretary or District Council Secretaries.

J. F. LIVING, Dominion President.

THE RED SPIDER MITE

BY A. W. ANDERSON, A.H.R.I.H.(N.Z.)

Spraying is one of the more unpleasant tasks in the garden and we all try to take the easy way out, hence the popularity of the modern all-purpose spray. But it is beginning to appear that the more we try to simplify our methods of control the more we are forcing the pace towards the development of highly resistant strains of pest. Before the days of DDT and the proliferation of organochloride pesticides the average gardener managed to exercise a fairly efficient system of control. His methods may have been slow and primitive in comparison with modern practice but the secret of his success was that he used different materials for different pests at different times and thus didn't make the clean sweep of pests, their predators and everything else within sight. On the face of it the 'complete spray' should make control easier, but that is not so.

This is especially evident with the Red Spider Mite (RSM), one of the most familiar of pests and now rapidly becoming a very important problem, especially in the drier parts of the country. A minute reddish creature living in colonies on the under side of the leaves, sucking the sap and causing the foliage to become mottled, turn yellow and wilt, it weakens the plant and renders it less able to produce good flowers or fruit.

A Silent Battle

Biologists tell us that evolution is going on all the time but we think of it as a very slow process and it has been a startling insight into its workings to find how quickly pests such as RSM have been able to adapt themselves to a world full of new and poisonous chemicals. This creature has a life history similar to that of the honey bee although it is a mite more closely related to the spiders than to insects. The males are believed to be the result of unfertilised eggs, and in the small communities in which RSM live this is a process that can take advantage of inbreeding, a process usually regarded as bad, or at best more harmful than helpful.

I find this system of sexual inheritance difficult to explain, but what it amounts to is this. The offspring, through the male parent inherit in a double dose any minute variation that may arise because unfertilised eggs have haploid chromosomes, i.e. the same units of hereditary factors as the mature germ-cells of the mother. The females, the result of fertilised eggs, have diploid chromosomes which are contributed by both parents. Mating takes place once only. Eggs overwinter in cracks and crevices in the bark and in spring the females emerge to lay about ten eggs in a comparatively limited area such as one leaf. Later generations

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may lay up to about a hundred eggs each, the progeny inbreeding among themselves so that each colony is the result of one egg. It is easy to see how these small colonies favour any useful variation that may arise. It would be bred out and lost in a big community but isolation means that it can become an important character of the colony.

Considerable differences can arise between the colonies which are all the offspring of one female. The biologist will think of Darwin and the finches he found on different islands of the Galapagos, so distinct as to be different species but obviously descended from a common stock. In the same way a few survivors of RSM that have lived through a sub-lethal dose of say, malathion, could soon repopulate the garden with colonies capable of considerable tolerance of the spray.

That is just what happens. Needless to say the rise of the resistant strain is very slow at first, but gradually and irresistably the pest recovers its ground until the grower, who has been totally oblivious of the silent little evolutionary battle taking place under his nose, wakes up to the fact that the pesticide he has been depending upon is no longer effective.

What Can We Do?

During the past few years RSM have become a major pest, especially among fruit trees and roses, and it is here that the 'complete spray' is doing so much harm. I am afraid we all like 'to finish the bottle' and once a spray is made up we tend to squirt the last of it around under the mistaken idea that it is sure to do more good than harm. In fact, the reverse is more likely to be true.

Most gardeners know that RSM are unaffected by DDT but few realise that they may actually thrive on it. There is growing evidence that among roses, for example, DDT may alter the nitrogen and sugar content of the foliage and this in turn affects the fecundity of the female and the vigour of the offspring. But that is not all, DDT upsets the tranquility of the female, probably spoiling the flavour of the food, just as Maxicrop is thought to do. So that instead of depositing her eggs in a limited area she hops about starting off a number of small and limited colonies and these flourish through lack of competition, everything else has been swept away by the 'complete spray'.

So far I have said nothing about the balance of nature being upset by the complete spray, but a squirt, calculated to deal with both sucking and chewing insects is likely to kill everything within sight, enemies and beneficial creatures alike. The predators which live on our pests may not suffer any harm at first, but are likely to die through chain reaction for weeks afterwards. DDT may be passed through the bodies of RSM without doing them any harm, but predators, absorbing small sub-lethal doses over a long period are likely to suffer.

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So far as RSM are concerned we can make the food unpalatable through spraying with Maxicrop. I have often seen derris and pyrethrum pesticides recommended, but derris is only available as a dust, so far as I know, and this can only be used for rose bushes and the like, you cannot dust the underside of the leaves of a fruit tree very easily. The only pyrethrum-based spray I have tried has been woefully inadequate.

I recommend smothering RSM with white summer oil and using lime sulphur as a winter wash. These two are incompatible if used together or about the same time but are complementary in being totally different in their action. Avoid the complete sprays and do not squirt those last drops around because they are almost certain to do more harm than good.

"ENCYCLOPAEDIA OF FLOWER ARRANGING"

BY SHEILA MACQUEEN Faber and Faber.

This book must inspire both the ardent flower arranger and the keen gardener. In one volume, Mrs Macqueen has given her readers a varied feast that is sure to be read and enjoyed for a very long time. Her natural ability and skill in handling all types of plant material—common and exotic—is aided by her wonderful store of plant lore and her successful methods of preserving the life indoors of all the blooms, foliage and berries she uses so cleverly.

The art of drying flowers and foliage to be stored for the winter must be of interest to all—particularly those that live in large cities, or those that have all too little leisure time. Mrs Macqueen demonstrates clearly how such dried material can be used in conjunction with one or two fresh blooms to create an arrangement of great charm.

Norman Sparnon, a world-wide authority on Ikebana—Japanese flower arrangement—has contributed a valuable chapter which should be greatly appreciated by those interested in this form of floral art.

An encyclopaedia at the end of the book shows a wide range of plant material that this author has herself grown or used. Her methods for conditioning and preserving such plants should be valued wherever this book is read.

Excellent colour plates, as well as black and white ones and line drawings add to the attractiveness of a really fine production. Mrs Macqueen's lectures have commanded large and enthusiastic audiences in many parts of the world, while her generosity in passing on to others her wonderful store of knowledge is widely praised. She will be remembered as the late Constance Spry's chief assistant at the time of the wedding and later the coronation of Queen Elizabeth II, when she organised and helped with the magnificent floral arrangements placed in Westminster Abbey.

"KNOW YOUR GARDEN SERIES" 'BULBS AND PERENNIALS'

BY R. E. HARRISON & C. E. HARRISON (A REED BOOK)

It is with much pleasure that the writer reviews this book for the three previous 'Harrison' books have been on his shelves since first published and have been considered most valuable reference books. Moreover they have provided many a pleasant hour of relaxation and simple enjoyment.

We should consider this book as one of a series as it is complementary to the preceding books. In 1953 Mr R. E. Harrison published his 'Handbook of Bulbs and Perennials' which would have been an outstanding book at any time with its high quality paper, its liberal illustration in black and white and in colour and its painstaking attention to detail. Following the austerity publications of the war years, and the decade following, it gave the book-hungry horticulturists a taste of things to come. Further editions have followed and this book has been continuously improved and kept up to date.

In 1959 Mr Harrison followed up his success with 'The Handbook of Trees and Shrubs for the Southern Hemisphere'. Once again the same attention to detail was evident and lessons learnt in the production of the first book were applied. Both these books have filled a great need and are to be found on the shelves of most serious horticulturists. Meantime there had been a tremendous and ever increasing boom in colour following the introduction of two subtractive reversal colour processes about 1936. The film manufacturers had not been idle and the continuous improvement of their products and in the printing trade made possible the production of the modern, almost luxurious 'picture book' of the sixties. Although the Harrison's were not the first New Zealanders to produce a horticultural book in this field they were early and in 1965 produced 'Know Your Trees and Shrubs'.

The companion work 'Know Your Garden Series Bulbs and Perennials' appeared in 1967 and this we review now. Primarily an identification book your reviewer had occasion to resort to it shortly after it arrived. He had photographed an attractive bulbous flower of unknown identity and perusal of this book provided speedy and positive identification. There is only one danger. So attractive are the many photographs that one may easily be sidetracked from the task of identification in hand.

The short chapter 'Taking the Photographs' is of great interest to all serious photographers and indicates that neither film stock nor time were spared in the effort to obtain the best possible results. In the result we have pictures of amazing colour fidelity. Credit also must be given to the printers for even given transparencies of correct colour balance printing inks and methods have their limitations and great skill, patience and "know how" are necessary to obtain true colour.

The near-blues are notoriously difficult colours to reproduce photographically, a technical problem being involved. *Aster* 'Frikartii' was in flower so specimens were picked and the colour compared directly with illustration number 59. The colour of the lower flower may only be described as one hundred per cent.

Plant photography is most frustrating at times and often a compromise is necessary to obtain a reasonable result. A book of this nature might easily be spoilt by poor composition but generally the composition is good, sometimes excellent and even the occasional lapse may be classed as acceptable. Such lapses must be forgiven in any work on this grand scale for often it is Hobson's Choice—"Take it or leave it".

Where possible the photographs have been taken in their subject's growing locations, but recourse has been had to indoor shots where this has not been possible. Many of these are close-ups and in the nature of flower portraiture. In the result most are natural and pleasing though the lighting is rather flat in this critic's judgment. For all that the pictures do not lack depth and perhaps it would be better described as soft and subtle lighting.

Over six hundred illustrations on 152 pages of high quality glossy paper comprise the body of the book but there are 39 pages of interesting text on a high-grade matte surface. This is in addition to the short descriptive notes accompanying the pictures. However the main purpose of the book is as a pictorial record of bulbs and perennials in general cultivation and as a means of identification. For more complete description, additional varieties, cultural details, etc., you should refer to "The Handbook of Bulbs and Perennials" which you should already have on your shelves.

This latest book will also provide many pleasant hours of browsing and relaxation and it should be in the waiting room of every physician, surgeon and dentist in New Zealand, chained down of course.

CONFERENCE HIGHLIGHT: The gentlemen seated at the official table at the Conference wore button-holes of roses. It was a charming touch that provided the Dominion President with the HT Rose 'Living' for his lapel.

LETTERS TO EDITOR

Dear Sir,

I was interested in the list of plants for Awards of Garden Excellence chosen by a sub-committee and published in the December issue.

But can you tell me the authority for changing the names of the parents of *Magnolia* 'Soulangeana' from *M. denudata* and *M. liliflora* to *M. heptapeta* and *M. obovata*?

Also what is the authority for *Tibouchina-langsdorffiana* instead of *T. semidecandra*?

In the introductory paragraph to the list I read that these plants 'are relatively easy to obtain'. I question if this applies to *Rosa* 'Cecile Brunner' (except by begging cuttings from friends), *Lobelia fulgens* 'Queen Victoria', and *Kniphofia* 'Ernest Mitchel'. The kniphofia doesn't appear in any of the catalogues I referred to, including that of the leading grower of perennials.

I doubt if even *Cyclamen neapolitanum* is relatively easy to obtain from nurseries.

The sub-committee does not explain what 'relatively easy to obtain' means. To be of any practical use it should surely mean the plants are stocked by the average nursery.

DOUGLAS ELLIOTT.

Concerning Rosa 'Cecile Brunner' some nurseries still list this rose though it is more difficult to obtain through the trade than a few years ago. However there is one point to watch. Some nurseries are supplying Rosa 'Bloomfield Abundance' in error. In the Waikato area I noted plants of R. 'Bloomfield Abundance' with nursery labels 'Cecile Brunner'. A few authorities say R. 'Bloomfield Abundance' is a sport of R. 'Cecile Brunner' but 'Modern Roses 6' and the Royal National Rose Society's latest edition of 'Roses — a Selected List of Varieties' consider it to be a separate cultivar in its own right. It would be hard to accept it as a sport for there are about ten distinct differences from the alleged parent. In other words if a sport it is a most remarkable one.

Perhaps the most noticeable differences are in (1) the time of flowering. R. 'Cecile Brunner' flowers at least four weeks earlier. (2) R. 'Bloomfield Abundance' has toothed green bracts at the base of the bloom; the bloom in the opening stages is a colder pink and slightly daintier in form. Most blooms of 'Cecile Brunner' show a peachy tint in the centre. (3) The flowering habit. The large airy flowering sprays of R. 'Bloomfield Abundance' are quite distinctive and the writer knows of nothing quite like them in the rose world.

Some authorities suggested that R. 'Bloomfield Abundance' is more

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vigorous than R. 'Cecile Brunner' but we know of many bushes of both varieties six and seven feet tall while the Clg. form of R. 'Cecile Brunner' is one of the most vigorous and desirable of climbing roses being smothered in bloom for most of the flowering season.

Incidentally if you wish to do some budding and have no root-stocks you may bud on to Clg. R. 'Cecile Brunner'. When the bud has taken make a cutting of the budded portion and set it out to root.

Mr Elliott's other queries are referred to the Convenor of the Award of Garden Excellence for her reply.

EDITOR.

ROYAL NEW ZEALAND INSTITUTE OF HORTICULTURE (INC.) ANNUAL REPORT OF THE DOMINION COUNCIL

For the Year Ended 30th September, 1967.

(Abridged from the Report submitted to the Annual Dominion Conference)

Ladies and Gentlemen,

The Dominion Council has much pleasure in presenting the 45th Annual Report for the year ended 30th September, 1967. The many matters dealt with during the year by the Dominion Council are herein reviewed for the benefit of members.

MEETINGS: Quarterly meetings of the Dominion Council, the Examining Board and regular meetings of sub-committees have been held throughout the year to deal with the many phases of the Institute's work.

IN MEMORIAM: The passing of several esteemed members during the year is recorded with regret and in particular: Sir Robert Macalister, former Dominion President (Wellington); Mr W. D. Cook (Gisborne); Mr T. D. Lennie (Christchurch); Mr G. A. R. Phillips (Paraparaumu); Mr D. C. Mackenzie (Palmerston North); Mr F. T. Morrison (Wellington); Mrs J. Stevens (Wanganui); Mr A. H. Cockayne (Wellington).

MEMBERSHIP: The total membership stands at 1667, including 38 Associates of Honour, an increase of 65 over last year.

FINANCE: Profit from the sales of the publication "Flowers for Shows" has assisted the finances this year. The financial strength of the Institute, however, rests upon a strong membership, which must be increased and present members are urged to help by enrolling new members.

The financial assistance received from the Internal Affairs Department for the Journal and from the Department of Agriculture for examinations is acknowledged with sincere appreciation.

Policy and Finance: There still remains a pressing need for forward looking, both in regard to policy and finance for the Institute. A review of the finances relating to the conduct of examinations was followed by representations to the Minister of Agriculture resulting in an increase in the capitation paid to the Institute, commencing for the year 1967-68.

The Dominion Secretary's office continues to give considerable service to the

examinations and general affairs of the Institute at a rate of remuneration below what 15 comparable with present-day costs.

Examination Fees payable by Students: All-round increases in these fees were approved during the year.

NOMENCLATURE: Progress continues in the study of Hebe cultivars in Christchurch, New Plymouth and Otari (Wellington).

The Committee approved and adopted the name "Wairere" (meaning "Waterfall") for the cultivar of Weeping Leptospermum at Otari Native Plant Museum, where also a national collection of Hebe cultivars is to be set up.

"NEW ZEALAND PLANTS AND GARDENS": The Dominion Council deeply regrets the death of the editor, Mr G. A. R. Phillips, during the year. Mr Phillips had brought considerable horticultural scholarship to his office and this was reflected in the high literary quality maintained by the Journal throughout the time of his editorship (from 1956). Appreciation of the help received from Mr J. P. Salinger in publishing the June issue and of Mr J. F. Gover, the September issue, is warmly expressed.

Mr J. F. Gover, of Christchurch, is Acting-Editor at present. A change in cover design has been deferred for a time; the Journal will continue as a quarterly; the annual reports will be published in abridged form rather than in full; New Zealand persons going overseas are to be encouraged to write on their observations for publication; New Zealand authors will continue to be encouraged.

HISTORIC AND NOTABLE TREES: Mr R. W. Burstall, of the New Zealand Forest Service, Rotorua, continues to assist in compiling information from the material on hand and from personal inspections. Some sections are completed for final checking. The form of publication has not yet been decided.

"FLOWERS FOR SHOWS"—HORTICULTURAL HANDBOOK: Sales of this publication during the first year have been satisfactory. More remain on hand for sale. It has been well received and is meeting a real need.

OPPOSUM CONTROL: The eradication of the opposum menace from our land continues to concern us all. This major national task will not be easily achieved. The Institute sincerely hopes the Government will press on with research into ways and means of finally removing this national pest.

ARBOR DAY: This annual observance was again fully supported throughout the Dominion by the Institute taking an active and leading part.

LODER CUP AWARD: This annual award is offered to "Lovers of Nature in New Zealand to encourage the protection and cultivation of the incomparable flora of the Dominion". The 1967 award has been made to Professor John T. Salmon of Wellington.

EXAMINING BOARD: The Examining Board bears the full responsibility for the conduct and administration of the Institute's examinations. The Institute has full statutory authority to issue diplomas and certificates in Horticulture, Fruit Culture, Apictulture, Vegetable Culture, School Gardening.

A new certificate examination for Horticultural Salesmen has been devised to replace the Seedsman's Certificate. This new examination scheme has been submitted to the Minister of Agriculture for official approval and gazetting.

A comprehensive review of the syllabus for the National Diplomas in Horticulture and Fruit Culture is being conducted by the Examining Board.

REMITS BEFORE THE 1967 DOMINION CONFERENCE: Details of these remits and the discussion thereon have already been published in the report of the 1967 Conference in the June, 1967, issue of "N.Z. Plants and Gardens."

- (1) As regards Preservation of Trees. (Wellington.) This matter is still under review.
- (2) As regards Hen and Chicken Islands. (Whangarei.)

The Geological Survey Report has been released, disclosing considerable copper deposits valued up to \$110,000,000. The economic value of these deposits could not be ignored. The Institute had written to the Minister of Science asking that the survey report be referred to the Fauna Protection Advisory Council.

The Government had already received weighty statements from various bodies objecting to mining operations and interference with the flora and fauna on the islands. The Dominion Council could only press for adequate precautions for the protection of rare plant and animal life and had full confidence in the Nature Conservation Council and Fauna Protection Council.

The differing views of the Whangarei District Council are fully respected.

- (3) As regards Conservation of Soil and Trees in Subdivisions. (Auckland.) This was referred to the Municipals Association and the N.Z. Counties Association. Copies of the remit had been sent to all municipalities.
- (4) As regards Use of Sprays. (Taupo.) The remit had been passed to the Commissioner of Works and to all District Offices of the Ministry of Works.
- (5) As regards Litter. (Manawatu.) A national conference, convened by the Minister of Internal Affairs in June, 1967, was very largely attended by representatives of major organisations. A council has been set up to consider a national campaign against litter. The Institute is represented on this Council.
- (6) As regards Recognition of the National Diplomas. (Auckland.) In view of the review of the Examination Syllabus being undertaken by the Examining Board, it was inopportune to press for greater recognition of the Diplomas. It would be taken up again after the result of the review had become settled.
- (7) As regards Publicity for Horticultural Careers. (Taupo.)
- District Councils were asked to arrange local publicity, through Press and Radio. The Canterbury District Council held a symposium on Horticultural Education.

AWARD OF GARDEN EXCELLENCE: Eighteen plants were granted the Award for 1967. The list of plants, with descriptive notes on each, was published in the "N.Z. Plants and Gardens" December, 1967, issue. Once a basic list of approximately one hundred plants has been approved, a reduced number of Awards will be made each year.

PLANT RAISERS' AWARD: The Award has been made to Mr L. E. Jury, of New Plymouth, for the camellia "Grand Jury", for 1967.

DISTRICT COUNCILS: It is through District Councils that the Institute is known, by and large, in district areas. There is so much done at the national level which is not readily known or understood by the general membership and citizens, but District Councils have an opportunity of providing the liaison between Dominion Council and these folk. District Councils are stronger in some localities than in others, but all can and do play a part, for which the Dominion Council expresses its appreciation and solicits strong loyalty and support throughout the ensuing year. It is pleasing to know that new members are being enrolled in District Councils to replace resignations, etc., but no appreciable increase in overall membership is occurring. It has been stressed that the strength of the Institute rests upon a strong membership. The work of the Institute merits much stronger membership-strength and it is sincerely hoped that present members will rally their forces throughout the ensuing few years and embark upon a determined effort to increase the membership substantially. Valuable work has been done during the year by sub-committees appointed at Auckland, New Plymouth, Christchurch and Palmerston North for special purposes. The Dominion Council is indebted for this special help.

NATIONAL PARKS BOARDS: The Dominion Council continues to make nominations for election to these Boards.

JUDGES' REGISTER AND CERTIFICATES: During the year applications for registration were approved and appropriate certificates issued as under. The Register comprises at present:

Floral Art—Decorative Work 48, Cacti and Succulent 2, Cut Flowers, Shrubs 12, Chrysanthemums 2, Roses 2, Daffodils 1, Vegetables 2, Liliums 5, Dahlias 1, Gladioi 1.

The Iris Society and the National Rose Society have supplied full lists of their accredited judges.

LIST OF SPEAKERS: A list of persons qualified to speak at members' evenings has been circulated amongst District Councils, and will be kept up to date.

CAREERS BOOKLET: This booklet is most helpful in channelling young people into horticultural careers. An increased interest in horticulture is quite noticeable.

DUGALD MACKENZIE MEMORIAL PRIZE: The Dominion Council was very pleased to receive the capital sum of \$300 donated by Mrs D. C. Mackenzie for an Examination Prize Fund in memory of her late husband. The prize goes annually to the best thesis submitted for the National Diploma in Horticulture.

MEMBERSHIP BROCHURE AND POSTER: Supplies of these are now available to publicise the Institute and solicit new members.

N.Z. HORTICULTURAL PRODUCERS COUNCIL — UNIFICATION OF HORTICULTURE: Discussions have culminated in the passing of a resolution forming The N.Z. Horticultural Producers' Council within the Institute on 3rd October, 1967. Each member-organisation would retain full autonomy, the object to discuss problems common to all horticultural producer organisations and seek satisfactory solutions. Horticultural education is one important issue of common concern to this new Council and already their helpful consideration has been given to the Institute's examinations.

HORTICULTURAL HOSTS: The possibilities of a scheme of horticultural hosts being instituted to promote horticultural interest in cities and towns amongst local and overseas visitors have been examined and will now be discussed with the Government Tourist Department.

FOOT AND MOUTH DISEASE PRECAUTIONARY MEASURES: The Director of Horticulture has indicated essential precautionary measures against the introduction of infected plant material and horticultural products from England and had appealed to all for understanding and co-operation.

VISIT OF MR AND MRS F. P. KNIGHT, ENGLAND: In association with the N.Z. Institute of Park Administration, and the Pukeiti Rhododendron Trust. Institute extended an invitation to Mr F. P. Knight, Director of the R.H.S Garden at Wisley, England, and Mrs Knight to visit New Zealand on a lecture tour, including the Banks Lecture at our 1968 Conference; they will be in New Zealand from 17th February to 19 March. We acknowledge with appreciation the generosity of the President and Council of the Royal Horticultural Society in granting Mr Knight leave of absence to make this visit.

STUDENT MEMBERSHIP: Membership privileges, except voting, for students registered for the Institute's examinations at half rates up to the age of 21 years, are being considered.

NATIONAL ARBORETUM: There is afoot a scheme for the establishment of a National Arboretum in Canterbury.

A.N.Z.A.A.S. CONFERENCE, CHRISTCHURCH, JANUARY, 1968: Liaison with this Conference of the Australia and New Zealand Association for the Advancement of Science, is being maintained.

PLANT -SELECTORS' RIGHTS: The Department of Agriculture submitted a draft scheme for plant selectors' rights in New Zealand (protection in the nature of plant patents). There was general opinion that such a scheme was not necessary, but protective rights might encourage more plant breeding. Legally, such rights would be difficult to enforce.

THANKS: The Dominion Council extends its sincere thanks to all who have contributed to the successful running of the Institute throughout the past year.

CONCLUSION: As Dominion President I wish to express my sincere thanks to all who have worked solidly throughout the year in the interests of the Institute and of horticulture.

I believe the visit to New Zealand of Mr and Mrs F. P. Knight will be the highlight of 1968 for us, as an Institute, and for horticulture in general. Coming from the Homeland and being one of the world's leading horticulturists, Mr Knight will bring to us a depth of knowledge and eexperience which should greatly enrich our own as he meets and talks with us. His will be the first visit to New Zealand of the Director of Wisley Garden, and we were honoured to receive his acceptance of the joint invitation to come.

Looking back through the past year it might be felt that little has been achieved of outstanding merit; but the steady progress maintained in examinations work and the continued provision of opportunities to young men and women to equip themselves with worthwhile qualifications in horticulture is surely a commendable and encouraging service for the Institute to engage in.

Looking about us to-day we observe an increasing interest amongst young people in horticultural education and careers. The horticultural industry is moving forward and unification for the purpose of pursuing common interests while preserving the autonomy of each diverse section of it, would appear to be a very logical step. Horticultural education is of distinct common concern to all sectors. The Institute has provided a useful function in bringing horticultural producer-organisations into joint consultations on this vitally important subject.

Looking forward, we hope for a strengthening of this unification for the lasting benefit of the Institute, of horticulture itself and its contribution to the economy of our country. As for our Institute, it would seem that it will bear even greater responsibilities in the field of education. Already the challenge is being met in reviewing the present examinations syllabi. But education is not confined to the examination room or study desk; there is a wide field open before us in the conduct of lectures, demonstrations, conferences, symposia, etc., to suit the horticultural needs of every citizen. With the stimulus of the visit and lecturing tour of Mr Knight, let us press on with greater endeavours in our service to others.

On behalf of the Dominion Council,

J. F. LIVING, F.R.I.H.(N.Z.), Dominion President.



Camellia 'Grand Jury'

(Photograph-Douglas Elliott)

DISTRICT COUNCIL REPORTS

NORTH TARANAKI

NOVEMBER—The Annual General Meeting, attended by about eighty members including some visitors from Hawera, was marked by several changes in the office-bearers. Mr W. J. Messenger, the president for the last three years, was replaced by Mr T. P. French; Mr H. P. Thomas, the secretary for eight years, became a vice-president, and Mr H. V. George was elected secretarytreasurer. Miss Young, treasurer for many years had tendered her resignation. The meeting paid tribute to the outstanding work of these retiring officers for the Institute over a long period. Special mention was made of Mr Thomas who, as secretary, had with understanding and thoughtfulness kept the wheels turning smoothly for so many years.

A strong committee was elected and we look forward to another year of interesting and instructive meetings with large atendances. These will be supplemented by at least two week-end excursions and several days trips. Each year we have been honoured by visits from outstanding overseas horticulturists and this year with the visit of Mr Knight to start it off promises to be no exception.

PLANT RAISERS' AWARD 1967

Plant Raises' Award 1967. At the conclusion of the North Taranaki District Council Annual General Meeting the retiring president, Mr W. J. Messenger, presented to Mr L. E. Jury the bronze medal which he had been awarded for raising the Camellia 'Grand Jury'.

In making the presentation Mr Messenger said that it gave him great pleasure on behalf of the North Taranaki District Council and of the Royal New Zealand Institute of Horticulture to hand to Mr Jury this Plant Raisers' Award for his Camellia 'Grand Jury'. In doing so he wished to express to Mr Jury the appreciation of all members, indeed all plant lovers, for what he had done for horticulture generally and for the culture of lilies and camellias in particular. Mr Messenger also said how pleased members were to hear how highly Mr Jury was regarded in the United States for his work with camellias. Mr Messenger presented the medal with these words: 'Congratulations and thank you for what you have done'.

Mr Jury in reply described the camellia as a large salmon pink with some reticulata in it but unlike reticulata it flowered for about five months, about double the time of the usual reticulata season. The name 'Grand Jury' had twice been suggested to him. It had been said that as the Grand Jury contained twelve good men and true so this camellia had the good qualities of twelve camellias. Although Mr Jury felt this was an exaggeration he thought the camellia had many good qualities and so chose that name. In conclusion Mr Jury said that the congratulations and appreciation of the members of the Institute and others made him feel that he may hove done something worthwhile.



Mr L. Jury receives the Plant Raisers' Award Medal from the President of the North Taranaki District Council, Mr W. J. Messenger.

WAIKATO

The Annual General Meeting was held in October and was followed by a social evening. A film 'Journey into Spring' showed the coming of spring to the British countryside by detailed observations of plant and animal life at Selborne in Hampshire, the parish of the 18th century naturalist, the Reverend Gilbert White. This is a film of very high standard of photography and enter-tainment and was obtained on loan from the National Film Library.

In November, Mr J. P. Salinger, Senior Lecturer in Horticulture at Massey University, gave a most interesting talk on "What's New in Horticulture". The many developments and new techniques that have occurred over the last decade or so show just how fast horticulture is advancing and the potentially great future it has in New Zealand in both the domestic and commercial spheres. At this meeting we had the pleasure of meeting Mr and Mrs Gover of Christchurch. Mr Gover is the new Editor of "Plants and Gardens" and outlined the aims of the Journal and new arrangements concerning the change of Editor and place of publication.

A two-day Course for Commercial Nurserymen was held in Hamilton in November organised by the Department of Agriculture in conjunction with the New Zealand Horticultural Trades' Association and over 200 people attended. The final session, in which two local members of the Institute gave their views on the nursery trade from the home gardener's point of view, was most entertaining. Another feature of this course was the display by local nurserymen of collections of Conifers and Hebes. It is seldom that such a wide range is exhibited at one time and naturally they attracted very much interest, although the naming caused much discussion and differences of opinion!

The New Zealand Horticultural Trades' Association will be holding its Annual Confrence in Hamilton in February, the first time Hamilton has been chosen as the venue. It is encouraging to see the increasing degree of co-operation between such organisations and the Institute, which must help further horticulture in New Zealand.

During the latter part of last year the Waikato Rose Society staged a most successful show in the new halls at the Claudelands Show Grounds in Hamilton. Despite the usual worry of bad weather immediately prior to the show, the blooms staged were of a very high standard and there were other imaginative exhibits to entertain the public who turned up in large numbers. Although the Show Grounds are not in the centre of the city, the Rose Society proved that a good flower show can still attract the public, and it is to be hoped this success is the forerunner of many more in the years to come. Whilst competitive classes still have their place they are alone not enough to sustain interest and a diversity of exhibits is essential. Commercial nurseries and horticultural traders can do so much to further horticulture by staging exhibits at shows.

Garden competitions were held in many Waikato towns in the spring and the prize-winning gardens were of a noticeably higher standard than of a few years ago. Obvious the trend is to use flowering trees and shrubs with annuals for colour effect with very few or no vegetables and fruit. Special features, such as rock gardens and pools, are becoming increasingly used, generally with good effect, but there is still much scope to widen the range of plants grown in our gardens.



