

# *Horticulture*



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**JOURNAL of the ROYAL  
NEW ZEALAND INSTITUTE  
of HORTICULTURE**

*September,*  
*1947.*

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# ***Horticulture***

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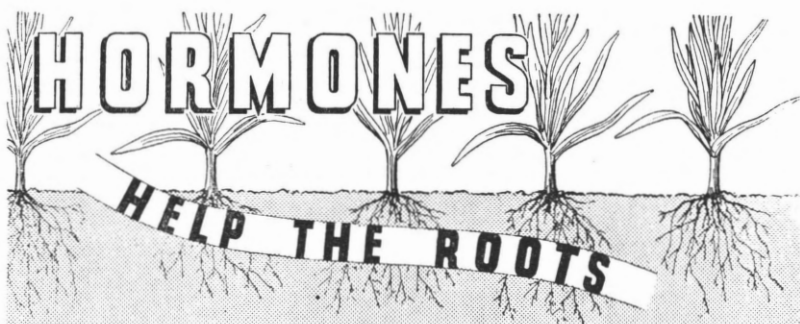
*Wellington, September, 1947.*

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### COVER PICTURE

The remarkable photograph reproduced on the front cover shows Tane Mahutu, probably the largest kauri tree alive, in Waipoua Forest, North Auckland. It was taken by Mr. William Davies, Hon. F.R.P.S., of Nelson, to whom the institute is indebted for permission to use it.



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# CHANGES IN POLICY OF INSTITUTE

## No Further Issues of "Horticulture"

**A**T the annual conference of the Institute of Horticulture in Hastings, in February of this year, it was decided that the executive committee should take steps toward making the institute better known and strengthening its membership and financial position. The executive committee gave this subject its careful consideration, and called a special meeting of members, which was held in Wellington on May 22, when certain important changes in policy, which had previously been circulated to all members, were discussed and approved unanimously. It is believed that the proposals, which are detailed in this article, will lead to a greater public interest in the institute's work and an increased membership, which, in turn, will enable the institute to play a much more important part in the horticultural activities of the Dominion.

### ASSOCIATES OF HONOUR

Persons who have given distinguished service to New Zealand horticulture may become Associates of Honour of the institute.

Appointments to this honour are to be limited to a number not exceeding 40, including the present Honorary Fellows, who will be asked to accept this honour in place of their Fellowships. The Associate of Honour will be conferred only at the annual meeting of the Dominion council and on the recommendation of the executive committee. The Associates of Honour will be presented with suitably-inscribed certificates and will not thereafter be required to pay any annual fee or subscription to the institute. The Associates of Honour will be entitled to use the letters "A.H.R.I.H. (N.Z.)".

### FELLOWSHIP OF THE INSTITUTE

**Fellows of the institute may now be appointed, up to a limit of 500 Fellowships.**

Fellows will be elected by the executive committee, on the nomination of the executive committee or a district council, and will be entitled to use the letters "F.R.I.H. (N.Z.)". Fellowships will be confined to persons who, by their activities, interests, or services to horticulture in the Dominion, are eligible for election in the opinion of the executive committee.

Fellows will each be required to pay an annual fee of £1/1/- to retain their Fellowship and will be issued with a certificate of election.

### PUBLICATION POLICY

**A complete revision of the institute's publication policy will affect every member.**

There are signs of a great horticultural renaissance throughout the world, which is finding its expression within New Zealand in a growing and eager interest in gardening on the part of thousands of home gardeners, and also in the urgent attention which is being paid to horticultural education by professional horticulturists.

The institute has a great part to play in fostering horticultural education in its widest sense. The National Diploma in Horticulture is now attracting more students of horticulture than ever before in its history, and the N.D.H. (N.Z.) seems destined to play a great part in raising the dignity and prestige of professional horticulturists in the Dominion. The institute's activities should, however, be extended toward giving much more information and help to the home gardeners, and toward giving to candidates for the institute's examinations more detailed guidance in their training.

The quarterly journal of the institute has not been a suitable vehicle for helping either the home gardener or the student, whose interests can obviously best be served by a publication which appears at least every month. Therefore, it has been decided that the institute should issue two types of publication—

1. Short monthly articles on general gardening subjects, notes of the institute's and district councils' activities, and regular notes for young gardeners on training subjects, following a systematic plan of campaign. The institute will make this information available to anyone who is interested in gardening and will not confine it to Fellows or members.
2. Longer articles on horticultural subjects such as the annual Banks Lecture, the subject of selected theses submitted by students, papers read at conferences, and other subjects of interest to the professional horticulturist rather than the home gardener, together with authoritative statements by the original workers on the latest horticultural developments overseas. These items will be published in the institute's annual report or as separate bulletins which will be circulated only to Fellows or members of the institute.

To enable the institute to fulfil its obligations to both amateur and professional horticulturists it has been decided that:

The institute's journal will be published annually (as an annual report) to include the items detailed in 2, together conference reports, minutes, and other purely domestic matters. The annual report will be issued only to Fellows and members.

Notes on subjects detailed in 1 will be published monthly in "The New Zealand Gardener", which will be sent monthly, free of charge, to each Fellow and member of the institute.

Frequent and authoritative bulletins will be published for issue to Fellows, members and students registered for the institute's examinations.

This is, therefore, the last issue of "Horticulture" which members will receive in the present form. Members will, however, begin to receive "The New Zealand Gardener" monthly, free of charge, as from next month, and will find a section of that publication devoted to institute affairs. In addition members will receive periodical bulletins and an annual report, which will be published each year as soon as practicable after the annual conference.

**The new arrangement puts an obligation on district councils and individual members of the institute to provide frequent notes on local horticultural activities for inclusion in the institute's section of "THE NEW ZEALAND GARDENER". The new policy will fail if members do not accept this obligation.**

On the other hand, articles of general interest supplied by members may be accepted by the editor and find space in the general pages of "The New Zealand Gardener", in which case payment will be made to the author at the journal's ruling rate.

"The New Zealand Gardener" is published on the first day of each month. Announcements and items of topical interest for early publication must be in the hands of the secretary of the institute not later than one month before the date of publication.

# Amendments to Constitution and Rules of the Institute

**A**MENDMENTS to the constitution and rules of the Royal New Zealand Institute of Horticulture were considered at a special meeting of members, held in the Dominion Farmers' Institute meeting hall, Featherston Street, Wellington, on the afternoon of Thursday, May 22. The meeting resolved that the following amendments be accepted and all the necessary legal steps taken to incorporate the changes in the rules:—

## RULE 3

- (a) Any person or company, or any society, association or other body registered under this or other Act may, by accepting the objects of the institute, become a member by subscribing to the funds of the institute and accepting and complying with the rules thereof.
- (b) **Honorary members:** Persons who have rendered special services to the institute, or who for other reasons are deemed worthy of particular recognition, may be made honorary members. Any member may suggest to the Dominion council, direct or through a district council, the name or names of any person or persons considered suitable for the honour, but no one shall be elected an honorary member except in accordance with regulations to be drawn up by the Dominion council.
- (c) **Life members:** Any person accepting the objects of the institute, and donating in one sum £5/5/-, shall upon election by the executive become a life member, with all the rights and privileges of a full member of the institute.
- (d) **Associates of Honour:**
  - (i) Associates of Honour may be conferred only on persons who have rendered distinguished service to New Zealand horticulture.
  - (ii) Associates of Honour shall be elected at the annual meeting of the Dominion council, and on the recommendation of the executive committee.
  - (iii) The number of Associates of Honour shall not exceed in all forty at any one time.
  - (iv) Associates of Honour shall not be required to pay any annual fees or subscriptions to the institute.
  - (v) A suitably inscribed certificate shall be prepared and presented to each person elected to be an Associate of Honour.
  - (vi) Associates of Honour shall be entitled to use after their names the words "Associate of Honour of the Royal New Zealand Institute of Horticulture, Inc." or the distinguishing letters "A.H.R.I.H.(N.Z.)."
- (e) **Fellows:**
  - (i) Fellowships shall be conferred upon those persons who, by their activities or interest in, or service to, horticulture in the Dominion, in the opinion of the executive committee render themselves eligible for election to the status of a Fellow.
  - (ii) Fellows shall be elected by the executive committee on the nomination of the executive committee or a district council.

(iii) The number of Fellows of the Institute at any one time shall be limited to 500.

(iv) Fellows shall be entitled to use after their names the words "Fellow of the Royal New Zealand Institute of Horticulture" or the distinguishing letters "F.R.I.H.(N.Z.)".

The capital of the institute shall be derived:

#### **RULE 15**

- (a) From a subscription of 12/6 a year to be paid by every person who is a member, which shall be deemed to include a member and his wife. Seventy per cent. of such subscription shall be retained by the executive for the support of the institute, and thirty per cent. shall be paid to the district council in which the member is registered for the local expenses of the council, and from a subscription of 2/6 a year to be paid by every person under the age of eighteen who is a junior member.
  - (b) From annual subscriptions from societies, associations, companies, corporations, firms, and other bodies accepting the objects of the institute and paying an annual subscription of not less than £1/1/- for any one society. Seventy per cent. of such subscription shall be retained by the executive for the support of the institute, and thirty per cent. shall be paid to the appropriate district council for the local expenses of the council. The president, chairman, or head of such society, association, firm, or other body shall be a member of the district council.
  - (c) From an annual fee of £1/1/- to be paid by persons elected as Fellows in accordance with Rule 3, (e) (ii).
  - (d) From special payments for special information required by or services or privileges granted to members, such sum to be sufficient to reimburse the council for expenses incurred in connection therewith.
  - (e) From the Government or other bodies.
  - (f) From legacies and endowments.
  - (g) From any other source whatever.
-

## Prominent New Zealand Horticulturists

# MR. DAVID TANNOCK

MR. DAVID TANNOCK, M.A.H.R.H.S., A.H.R.I.H., N.D.H. (N.Z.), began his career in horticulture with his uncle at Antermoney House, Milton of Campsie, Stirlingshire, where he continued for a year as a journeyman before entering the gardens of Sir John Stirling Maxwell, at Pollok House. After three years there Mr. Tannock went to Ralston House, Paisley, for nine months before entering the Royal Botanic Gardens at Kew.



Mr. Tannock

During his early training Mr. Tannock studied at Kirkintilloch and obtained a second-class Science and Art Certificate in Physiography. Later, while at Pollok House, he attended classes in botany, chemistry, agriculture and forestry at the Technical College, Glasgow, and obtained first-class Science and Art Certificates in botany and agriculture, as well as first prize in the botany class. While at the Technical College he was awarded the Scholarship in Agriculture.

At the Royal Gardens, Kew, Mr. Tannock worked for nine months as a student gardener before being promoted to deputy foreman in charge of the palm house and tropical water lily house. During his stay at Kew he continued his studies in botany, chemistry, and physics at Richmond and at the Polytechnic, Regent Street, London, where he obtained a first-class Science Certificate in Advanced Botany, a second in Advanced Agriculture, and a second in Inorganic Chemistry.

In 1899 Mr. Tannock was appointed Agricultural Instructor at Dominica, West Indies, under the Imperial Department of Agriculture, Sir Daniel Morris being Commissioner. During the first seven months he acted as curator of the botanic station, and then became officer in charge of the agricultural school for boys.

On the recommendation of the director of Kew Gardens Mr. Tannock was appointed Superintendent of Reserves, Dunedin, and took up his duties there in June, 1903. The gardens and reserves at Dunedin at that time were in a very primitive state, but Mr. Tannock quickly realised the great possibilities, and laid plans for their future development. In the carrying out of the plans 326 acres were added to the reserves and the botanic gardens were developed. The special features added to the botanic gardens included a winter garden in nine sections, rose garden, rock garden, a native garden, azalea garden, rhododendron dell, arboretum, and nursery. In addition to numerous small reserves, flower gardens, and street trees, no fewer than 35 football grounds, 16 hockey grounds, 60 cricket wickets, 23 croquet lawns, 37 tennis courts, 2 golf courses and 32 children's play areas were constructed and added to the reserves. Extensive tree planting was also carried out on the water catchments areas at Waipori and on water reserves, about 15,000 acres being afforested, which is stated to be the largest scheme in the southern hemisphere.

In addition to his work of directing the activities of the reserves department, Mr. Tannock took a very active part in conducting classes for teachers in horticulture, and also provided the gardening column for the "Otago Daily Times" for more than 30 years. "Practical Gardening in New Zealand" was edited by him, and he wrote "Rock Gardening in New Zealand" and "Potato Growing in New Zealand".

When the new honour "Associate of Honour of the Royal Horticultural Society" was instituted Mr. Tannock was elected among the first 30, and, with the late Dr. Cockayne, was one of the first Honorary Fellows of the Royal New Zealand Institute of Horticulture.

Mr. Tannock was largely responsible for forming the Association of Chairmen of Reserves and Parks Superintendents, and has been secretary to the association since its inception.

Horticulture in New Zealand, and parks horticulture in particular, has benefited enormously from Mr. Tannock's wealth of knowledge.

## **OBITUARY**

### **Mr. William Charles Hyde**

**MR** WILLIAM CHARLES HYDE, recently-retired horticulturist of the Horticulture Division, Department of Agriculture, Wellington, died recently in Palmerston North. He was a foundation member of the Institute of Horticulture, and never ceased to take an active interest in every phase of its activities. As an original member of the examining board he assisted materially in its organisation, and acted as an examiner of written, oral, and practical tests. He was also the original and only examiner of students' diaries. Among his many interests were research work, native flora, arboriculture, fruit culture, tobacco, nursery, seed and other industries, flower gardens and vegetables. He contributed in a scholarly style many interesting and informative articles to the institute's journal over a period of years—as recently as 1946 a "History of Tobacco Growing in New Zealand".

The institute will greatly miss his energetic and valuable services generously given ever since its initiation, and members will mourn a comrade whose charming personality and general conduct might well be taken as a model. A recent monthly meeting of the executive council resolved to convey the institute's condolence and sympathy to his widow and family.

—G.S.N.

## Papers and Discussion on Horticultural Education

**A**T the Sixth Science Congress of the Royal Society of New Zealand, held in May, 1947, in Wellington, horticultural subjects appeared on the programme for the first time when a half day was given to a consideration of all aspects of "Horticultural Education in New Zealand". This was an important occasion for horticulture, and the thanks of institute members should go to those who contributed toward the success of this meeting.

**T**HE chairman was Mr. J. P. Hudson, M.B.E., G.M., B.Sc. (Hort.), N.D.H., of the Horticultural Division, Department of Agriculture, and a symposium of six short papers was delivered as follows:—

**"The Future of School Gardening"**, by Mr G. V. Wild, B.A., B.Sc. (Agr.), Edin., Senior Inspector of Technical Schools, Education Department.—The formal school garden with numerous small plots is not now a feature of New Zealand schools, though it was common enough years ago. Most schools have an area where vegetable or field crops can be grown, and a few have well-developed areas devoted to other aspects of horticulture. The centre of interest is moving to scholars' home gardens, where excellent work is being done, specially in rural communities.

**"Home Gardeners—the Hope and Fear of Horticulture"**, by Mr. J. W. Matthews, F.L.S., editor of "The New Zealand Gardener".—The home gardener had a practical tradition long before the advent of scientific horticulture, which has confirmed many of his practices while condemning some. Advances in horticultural science are now so rapid and, in some cases, revolutionary that popular, simplified, but reliable guidance is needed. Without it the home gardener's activities may not only be retarded but may even become a menace to his neighbours. Methods of educating the home gardener were reviewed.

**"Training for a Successful Career in Commercial Horticulture"**, by Mr. B. V. Cooksley, president of the Dominion Council of Commercial Gardeners and immediate past president of Federated Farmers of New Zealand. This paper described the qualities, characteristics and training needed by a man who is to become a good employee or to achieve success in his own business. Apprenticeship and rehabilitation training schemes, correspondence courses, evening classes, and the choice and use of books and periodicals were also discussed.

**"The Training of Professional Gardeners for Public Parks"**, by Mr. M. J. Barnett, N.D.H. (N.Z.), Superintendent of Parks and Reserves, Christchurch.—The systematic technical education and efficient practical training of parks personnel were reviewed in the light of present training facilities. Possible future developments in horticultural education were considered in relation to the special needs of parks personnel.

**"Training Horticultural Advisory and Research Officers"**, by Mr. P. W. Smallfield, M.Agr.Sc., Director of the Rural Development Division, Department of Agriculture.—An efficient research and advisory organisation is necessary to ensure the future welfare and prosperity of the horticultural industry. The selection of future research workers and advisory officers was discussed, together with the ways in which their technical training and intellectual development should be ensured.

**"Training for Horticultural Academic and Teaching Work"**, by Mr. J. P. Hudson, chairman of the session.—The development of national horticultural thought for generations to come will be influenced by the personality and enthusiasm of those who teach this subject at the higher level. This paper dealt with the training of the men on whom this great future responsibility will rest.



The graceful Bhutan cypress (*Cupressus torulosa*) in Risingholme Park, Opawa, Christchurch.



### FUTURE DEVELOPMENTS IN EDUCATION

Present facilities for horticultural education include the National Diploma in Horticulture (N.D.H.(N.Z.)), two-year courses at the two agricultural colleges, evening classes at five isolated centres in the Dominion, and the horticultural journals. Having discussed these, it was decided that other facilities were required, and that the following should be carefully considered with a view to their implementation:—

#### General

A National Council for Horticultural Education to co-ordinate all activities.  
A university degree in horticulture.

An extension of existing library facilities.

More authoritative pamphlets, bulletins and similar publications on horticultural subjects by the Department of Agriculture and/or the Royal New Zealand Institute of Horticulture.

Training in propaganda methods and public speaking for officers of the extension services.

More and better use of the radio.

#### Commercial Growers

Correspondence courses for growers in isolated districts.

A craftsman's certificate in horticulture.

An organised scheme of apprenticeship.

Part-time courses of instruction for apprentices.

Short courses at the colleges in special subjects for experienced employees and employers.

Field days and demonstrations at the colleges and on growers' holdings.

Growers' walks.

Many more lectures by authoritative speakers at growers' meetings.

#### Personnel of Public Parks

More part-time courses of instruction for young employees.

Scholarships or bursaries to enable parks personnel to go overseas to Kew, etc.

#### Teachers of School Gardening.

Improved facilities for teaching school gardening at teachers' training colleges.

Vacation courses in horticulture for teachers engaged in teaching school gardening.

More adequate recognition of the work of school gardening teachers.

Better facilities for garden work in schools.

#### Home Gardeners

More lectures by experts at meetings of horticultural societies.

Educational exhibits at flower shows.

**It is hoped that this session of the Science Congress will ultimately lead to the provision of the educational and training facilities which will best meet the needs of each class of horticulturist, so enabling horticulture to make its fullest contribution to the future welfare of New Zealand.**

The horticultural session was attended by:

Superintendents of parks and reserves	....	....	....	....	....	....	7
Members of staffs of parks and reserves	....	....	....	....	....	....	9
Representatives of the Department of Agriculture	....	....	....	....	....	....	9
Representatives of the Education Department	....	....	....	....	....	....	3
Representatives of the Department of Scientific and Industrial Research	....	....	....	....	....	....	4

Representatives of the State Forest Service	....	....	....	1
Representatives of the Royal N.Z. Institute of Horticulture	....	....	....	2
Commercial growers	....	....	....	4
Members of the staff of universities	....	....	....	3
Members of the staff of Massey Agricultural College	....	....	....	2
Members of the staff of teachers' training colleges	....	....	....	3
School teachers	....	....	....	12
Students at Massey Agricultural College	....	....	....	3
Representatives of the horticultural press	....	....	....	3
Representatives of horticultural societies	....	....	....	2
Landscape architect	....	....	....	1
Private gardener	....	....	....	1
Plant collector	....	....	....	1
Home gardener	....	....	....	1

Total: 71



A corner of the Botanic Gardens, Christchurch, with the River Avon.

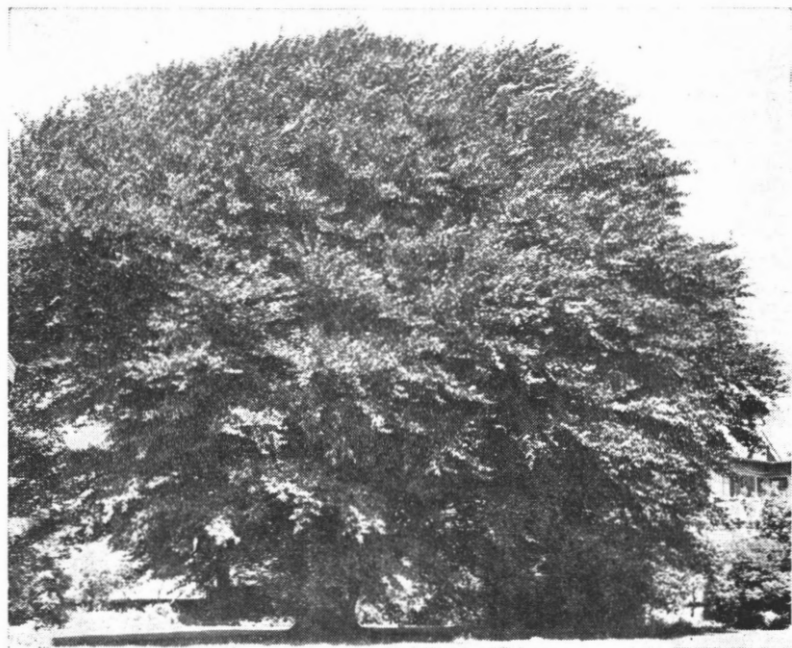
## A DELIGHTFUL MAGNOLIA: *M. SIEBOLDIE*

THE delightful species, *Magnolia sieboldii*, formerly *M. parviflora*, a native of Japan and Korea, has long been known in gardens. It was discovered about 100 years ago; there is a figure in "The Garden" for 1883. It is usually seen as a wide-branching shrub 7 to 15 feet in height and is a healthy though not a vigorous grower. The cup-shaped, drooping flowers appear on the leafy branches in May, and succeed one another, a few at a time, till August. This long flowering period should alone commend *Magnolia sieboldii* to a wide circle of plant lovers.

The petals are solid white, about 2 inches long, and in the centre are numerous rosy-crimson stamens. Quite small plants will flower freely, and the flowers are deliciously scented. The oblong leaves are 4 to 6 inches long, with rounded bases and abruptly pointed tips; the petioles are hairy, and so are the principal nerves on the undersides of the leaves. The leaves are dark green and smooth above, greyish and downy underneath.

*M. sieboldii* is possibly one of the easiest of magnolias to grow if given a semi-shaded position. It is perfectly hardy; it may be damaged by late frosts, but from such damage to the young leaves and shoots it soon recovers. It enjoys a soil rich in peat and, when once thoroughly established, *M. Sieboldii* should remain undisturbed.

—Ralph E. Arnold in "The Gardener's Chronicle," August, 1946.



A common beech (*Fagus sylvatica*) growing in the garden of Mr. A. B. Edwards, Fendalton, Christchurch.

# Formation of a Chalk Garden at Kew

By J. O. TAYLOR, formerly of Christchurch and now at the Royal Botanic Gardens, Kew, England.

AS far as it has been possible at Kew, the species have been grouped according to their taxonomic classification, so that the desert-loving cacti, the peat-loving ericaceae, the epiphytic orchids, and so on are found together in the environmental conditions most suited to them. However, other types of grouping occur. The elaborate rock garden is the home of thousands of species belonging to most diverse families which collectively form a community sharing a common environment.

AS a comparatively-new departure in horticulture, the result of the enthusiasm of the director, Sir E. J. Salisbury, this principle has been extended by the construction of a chalk garden on an area of ground which was once the Yucca collection at the west end of the T range. Here conditions have been introduced for the growing of a chalk-down species and other calcicole herbs in as ideally-suited surroundings as could be desired.

The construction involved three months' work for six men, two of whom were mainly occupied with the positioning of rocks and the others in the carting away of unwanted loam and the introducing of about 200 tons of chalk in its required forms. The area of about one chain square on a southern slope was excavated to a depth of two feet, and the base built up 18 inches with broken rock chalk topped up with fine rock chalk. The surface soil, of a depth of six inches, comprised the top spit taken from a natural chalk-down formation. To give a typical outcrop effect large Cumberland water-worn limestone rocks were built in to the slope, and these also served to hold the newly-built surface till time brought the final consolidation. No drainage was deemed necessary, because of the gradient of the slope.

Toward the front the garden flattened out in the form of a miniature delta, where an artificial bog was made. That area was excavated to a depth of three feet and the bottom "puddled" with clay, on which a mixture of loam and limestone was built up to become the basis of the calcareous bog which collects the rainfall from the slope.

On the north-west side of this garden a dry wall was built to dispense with the necessity of taking down another slope, and this also emphasised the effect of height. Incidentally, the stones of this wall came from a bombed portion of the Houses of Parliament.

Of necessity two out of three large elms were removed from the summit of the mound, and their place is to be taken by such calcicoles as white beams, yews, box, wild cherries, spindle trees, *Daphne mezereum* (mezereon), *Clematis vitalba* (old man's beard), *Daphne laureola* (spurge laurel), and other such chalk scrub species. On the left side have been planted exotic species, and on the right the native lime lovers. As yet the planting of the garden is not complete, but groups of the following are happily established: *Polygala calcarea* (milkwort), *Primula verie* (yellow cowslip), *Aubretia gloriosa*, *Allysum saxatile*, *Iberis corraefolia*, *Phlox diffusa*, *Phlox bifida*, and *Linum arboreum*. Eventually it is hoped that rarer and less social species, and perhaps the terrestrial orchids, will be successfully introduced.

## NOTICES TO STUDENTS

### Classes in Horticultural Subjects

**A**N effort is being made by many professional horticulturists throughout the Dominion to help students who are preparing for the institute's examination. The following facilities are now available, and the secretary would be glad to know of any others which are not noted:—

**Christchurch.**—Regular lectures on horticultural subjects. For details apply to Mr. R. E. Cutler, 41 Hood Street, New Brighton, Christchurch, E.3.

**New Plymouth.**—Classes in horticultural subjects. For details apply to Mr. B. A. Norman, Elliot Road, Westown, New Plymouth.

**Petone.**—Classes in horticultural botany, covering the syllabus of this subject for the junior examination. For details apply to the Hutt Valley Memorial Technical College, Petone.

**Correspondence School,** Education Department, Clifton Terrace, Wellington.—Correspondence courses in chemistry, bookkeeping, horticultural botany, and plant protection for the junior examination. The last two courses are only in skeleton form at present, but are available to students who wish to take them.

**Night classes** in chemistry and bookkeeping, suitable for candidates taking these subjects in the junior examination, are available at most of the larger centres. For details apply to the local Director of Education.

#### SYLLABUS OF THE N.D.H. (N.Z.)

Copies of the syllabus, prescription and conditions of examination of the National Diploma in Horticulture (N.D.H.(N.Z.)) can be obtained on application to the secretary of the institute.

#### "A GUIDE TO STUDENTS OF HORTICULTURE"

A brochure with the title "A Guide to Students of Horticulture" has been prepared for the guidance of students who are taking the examinations of the institute. The guide makes valuable suggestions about methods of studying, and gives details of the facilities which are at present available for candidates.

A chapter is devoted to the use of books, and an extensive list is included of the most authoritative textbooks, grouped under the headings of the examination subjects. Notes are given about the periodicals and other literature published in New Zealand and also on the subject of keeping a garden diary.

Applications for the guide should be made to the secretary of the institute.

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The director, in having this new form of garden established at Kew, has enlivened an interest in the study of calcicoles as opposed to the study of the lime haters, the calcifuges, and to quote his words we have a typical example. *Gentiana clusii* (a calcicole) and *Gentiana excisa* (a calcifuge) have both been termed *Gentiana acaulis*, and the latter now is merely a name without a plant. A prominent distinction between these two is that *G. clusii* has a sharply-pointed apex to its calyx, and that of *G. excisa* is blunt.

## YELLOW-FLOWERED POHUTUKAWA ON MOTITI ISLAND

By GEORGINA RUTHERFORD

THE yellow-flowering pohutukawa grows on the little island at Motiti, and, though I have made inquiries, no one can give me much information except that "It has always been there."

The unusual colour of this pohutukawa does not stand out in any distinctive fashion; on the contrary, when looking for it among the beautiful if common shades of red among which it grows, the first feeling is one of disappointment. It is so pale, so insipid, among its showy cousins, but the filmy delicacy of this rare species is most attractive.

The particular tree from which I have been able to obtain cuttings that have at last struck grows on the steep cliff that we call "the other side of the island"—the side opposite the one that faces Tauranga, our mainland. It is evidently an old tree, having its roots firmly embedded in the side of a deep gully. It grows fairly straight for about 15 to 20 feet, then, where the branches begin, stretches itself right across the gully, so that there is considerable difficulty in obtaining cuttings or flowers.

This tree usually flowers earlier than the red variety, but this year, in common with many pohutukawa, evidently there have been very few blooms. We visited the tree between Christmas and New Year and saw only one flower, which we managed to pick by throwing a fishing line over the bough and drawing it down. Even then the danger of falling over the cliff was great when releasing the branch.

It seems strange that no one on Motiti has ever taken an interest in this tree before. I know of a family here—Europeans, too—who quite recently had a friend over who brought a sugar bag and took away branches for cuttings. I was dismayed at the hacked appearance of the tree. The family knew of the yellow flower long ago, but was indifferent about it, and I trust I may be pardoned for hoping the bag of cuttings all died.

Of course it remains to be proved whether the flower will still come yellow elsewhere, or if they will do what so many of my hydrangeas do—turn to another shade when I am counting on them being the colour I planted. I do trust, however, that the yellow-flowering species will remain yellow—perhaps a little insipid, but lacy-looking and unusual. I think that should a group grow together the effect would be exquisitely delicate.

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# ROYAL NEW ZEALAND INSTITUTE OF HORTICULTURE (INC.)

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## OBJECTS

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The objects of the Institute are:—

1. To encourage, foster and improve every branch of horticulture.
2. To exercise all the powers and functions of a horticultural nomenclature and certificating board, including the making of decisions and reports in regard to the nomenclature of plants, and to issue, in the name of the Institute, certificates, medals or diplomas for novelties of merit or new varieties.
3. To assist and promote horticultural education in every way possible.
4. To promote legislation having for its objects the advancement or protection of horticulture.
5. To assist research work in connection with any or all branches of horticulture.
6. To endow or assist any chair, lectureship, or horticultural teaching in New Zealand, in colleges, universities or other educational institutions the Institute may decide upon.
7. To promote the interchange of horticultural knowledge and to co-operate with Governments, scientific or other societies or bodies, or persons in any part of the world who may be working along any or all of the lines covered by the objects of this Institute.
8. To undertake or assist in the introduction and acclimatisation of any fruit tree, flowering tree or plant, forest tree, seeds or other form of plant life which, in the opinion of the Institute, should be introduced.
9. To establish, assist or endow libraries, and to obtain by purchase, exchange, or otherwise, books, papers and other publications relating to any or all of the matters covered by the objects of the Institute.
10. To arrange for the carrying out of work of "bud selection," the testing of new varieties of trees, plants, vegetables and any and all things necessary to the better understanding of tree and plant life and the maintenance or improvement of the standard of such.
11. To arrange for the selection and breeding of any or all classes of trees and plants for testing, and for the supply of certificated propagating material to nurserymen and others on such terms as may be arranged.
12. To carry out, arrange for or assist any object or objects which, in the opinion of the Dominion Council or of the Executive, come within the scope of horticulture, in its widest sense (not excepting forestry or agriculture).

# ROYAL NEW ZEALAND INSTITUTE OF HORTICULTURE (INC.)

## MEMBERSHIP

Subscriptions for membership of the Institute are as follows:

Individuals: 12/6 a year (including member's wife).

Juniors under age eighteen: 2/6 a year.

Societies, local authorities and commercial houses: 21/- a year.

## JOURNAL

The Journal of the Royal New Zealand Institute is published quarterly and issued free to all members.

## EXAMINATIONS

Examinations are held yearly in November.

Students desiring examination should make early application to:—

DOMINION SECRETARY,

Royal N.Z. Institute of Horticulture,

P.O. Box 1368, WELLINGTON.

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