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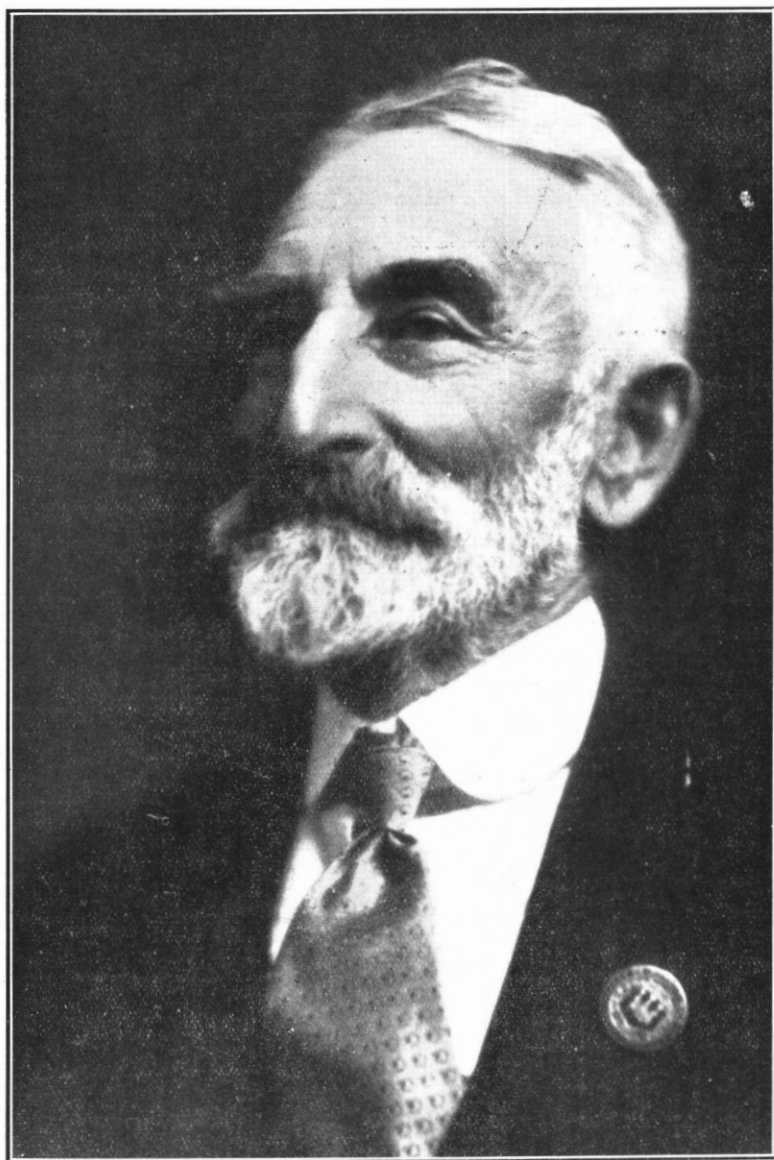
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H. J. Poole, Lower Hutt, winner of Peter Barr Memorial Cup.

# **JOURNAL OF THE INSTITUTE OF HORTICULTURE**

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## **HYDRANGEAS.**

By G. H. Huthnance.

Many plants in the horticultural world are grown on account of their floral value but, because their habits are not fully understood, those who grow them do not obtain the best results possible. One of the most abused plants is the Hydrangea and it is hoped to convey a better understanding of the requirements of this valuable flowering shrub.

It is not my intention to give a detailed account of any particular varieties, but to deal with the subject in a general and practical way.

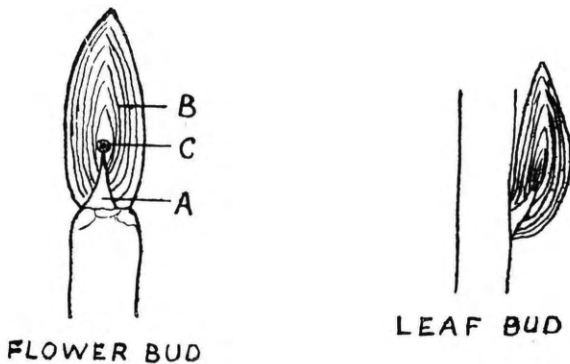
The value of the Hydrangea lies in its wonderful flowering qualities and its ease of culture. Regarding the latter point, whilst it is worthy of any prominent place in the garden, there is no plant that can be used so advantageously to fill odd corners about the garden. In fact, the Hydrangea revels in shady corners, where it would be useless to attempt to grow many other flowers.

Whilst most people know something of the value of the Hydrangea as a garden shrub, few realise that it is a most valuable subject for bedding purposes. Its love of shade and moisture makes it possible to have a bed of flowers nine inches to one foot high on the shady side of a building or fence. In such a situation, even the most expert gardener would be at more or less of a loss to suggest something else that would give a good bed of colour during the summer months. Several Annuals, such as Cineraria and Primula, will grow under similar conditions, but their main flowering period is earlier in the season.

Other uses to which the Hydrangea can be put are pot and tub culture. Bedding and pot culture will be detailed when dealing with propagation, whilst the reader will be able to select the best plant for a tub when I have dealt with pruning.

As a decorative flower, the Hydrangea can compete with any other, and especially where large bowls of flowers and various shadings are required. Effective arrangement is made easy by long stiff stems, whilst the colourings range from white and blue to almost red, with many intermediate shades of soft pink, heliotrope, and mauve to almost purple. It will be found that the keeping qualities are improved by the removal of most of the leaves, the bruising of the stems and the addition of a little alum to the water.

Many people prune their shrubs as if they were trimming a hedge. So long as it is trimmed to the desired size or shape, little thought is taken as to the habits of the subject, such as the time of flowering and the wood that produces the flowers. This method is sometimes successful, but not so with the Hydrangea. Very often, with the best of intentions, the Hydrangea is cut back to all the lower buds every year, the result being few blooms and a lot of wood and leaf growth the following season.



If the terminal bud on ripened growth is dissected, it will be seen that the shoot (A) the leaves (B) and the flower (C) for the following season are already formed and are lying dormant until the warmth of spring starts them into growth. The terminal buds of well developed shoots of the current season's growth almost invariably contain this dormant flower bud formation whilst, with a few exceptions, the large buds, which are arranged in pairs near the terminal, contain the same formation. I must lay stress upon the fact that, the further the buds are from the terminal, the less likely they are to contain flower buds. It will now be obvious that the hard pruning of all the shoots means that mostly only leaf buds are left for the following season's growth.

In support of the argument against hard pruning we have only to observe an unpruned Hydrangea, resulting in a plant covered with blooms year after year.

Some growers advocate a certain amount of summer pruning and certainly this method has many advantages. When, however, one is busy with other matters, it is at times not possible to give attention to pruning at this time of the year. There is usually more time available in the winter months.

The first operation, as with most pruning, is to remove all weak growth. The next step is to select growths, with well formed buds, and to take care not to cut them back beyond those which contain dormant flower buds. If doubtful on this point, dissect some of the buds with a sharp knife. A person with very good eyesight can see the tiny bud formation, but average eyesight will require the aid of a magnifying glass to obviate too hard pruning.

With the object of keeping the plants from becoming too large, some may prefer to prune alternate plants hard every other year. I prefer, however, to prune some shoots hard, leaving others for flowering. The latter, the following year, will receive their hard pruning whilst the others will be pruned lightly for flowering. The idea, in short, is to have some shoots flowering i.e. pruned lightly, and others growing into flowering wood for the next season i.e. pruned hard.

If extra large blooms are required for show work it will be necessary to reduce the number of flowering shoots to a few very strong ones with good plump buds.

*Hydrangea paniculata grandiflora* which, with its creamy white flowers, is a worthy subject in any garden, is an exception to the foregoing rules of culture, and must be pruned hard each year to give a satisfactory result.

The *Hydrangea* is one of the easiest plants to propagate. Any piece of stem will grow if inserted in the soil. For bedding and pot culture, however, a special method of propagation must be employed. This consists of making a cutting three to four inches in length, leaving the terminal bud and one or two leaves intact. The correct time is when the terminal bud has become fairly plump which will be somewhere about the end of March or beginning of April, varying a little with district and the variety. To root these cuttings, it is not necessary to have a glasshouse or glass frame, in fact, I find the results are better if they are inserted in the open ground in a moist situation and shaded from the direct rays of the sun. If care is taken that the leaves do not wilt for want of moisture, these cuttings will root in a few weeks and, when the leaves drop off, may be used for pot culture, being very effective in glasshouse displays, or they can be bedded out in the garden, as previously stated. Success depends entirely on the principle of the dormant flower bud as contained in the terminal bud. With reasonable care, one can guarantee that each of these rooted tips will produce one well formed bloom.

Perhaps the most fascinating point about *Hydrangeas* and one that is often disappointing, is the propensity towards colour varia-

tion in different soils. In this respect, some districts tend to produce pink blooms whilst in others blues predominate. Variation of colour is based upon the principle of alkaline soils turning the blooms pink—acid soils turning them blue. Lime and animal manure together with open situation, tend to pink shades whilst sulphate of iron and a shady position, tend to blue shades. However, there seems to be no hard and fast rule as, it is sometimes found, that what affects the colour in a certain direction in one soil has a different effect in another. A position and a soil which would be expected to produce a blue shade will sometimes grow the best of pinks!

## SWEET PEAS FOR HOME GROWERS.

By M.L.G.

In the ordinary home section where there is not room for a trellis, excellent results may be had by using the boundary fences for this purpose. The posts must then be extended to a height of 10 to 12 feet by nailing battens to them. These may be of either 2 inch x 2 inch rimu or split matai fencing 3 inch x 1 inch. Allow an overlap of a foot and nail securely top and bottom with 3 inch nails, boring holes first with a brace and bit. This framework is then filled in with large mesh wire netting, which is quite cheap when bought by the roll. That 2 feet wide is the best, because if spaced about 4 inches apart, it allows free access to the plants behind. Leave the bottom course about 6 inches above the earth level for planting access, and strengthen the top one by threading fencing wire through and securing the ends round the corner posts. This takes 3 to 4 courses of wire netting. The plants will train themselves up behind this between the posts with very little attention, and will stand quite a lot of wind.

If there is a bed in front of these fences, enough space must be left between the other plants and the fences to make a walk at least 2 feet wide, as sweet peas will not flourish behind shrubs or trees; that gives them mildew, which makes the buds drop off. Where the fences run along paths, a trench about 8 inches wide gives splendid results if kept well watered and fertilised, even though it may only be dug out to about a foot.

The more sunny the aspect, the richer the colours will be, but a semi-shady position is quite satisfactory. A place which gets only about an hour's sun a day, or where southerly winds continually blow as down a funnel, is quite hopeless for sweet peas, even if the other conditions are good.

Mildew is the greatest enemy to success, and to obviate this, the writer advocates removing all laterals up to the top foot, also cutting off the bottom leaves as they age. This makes the flowers

larger and also allows closer planting with greater variety of colour. Select the strongest side lateral when the seedling is about 8 inches high, and stick to that. The writer does not believe in pinching out the tops, as from experience these bear the best flowers. It also induces the growth of bushy laterals, resulting in short stalks and overlapping, with attendant mildew. Better to have more plants of each with one sturdy stem like a cane, with a flourish of healthy bloom at the top.

The seeds should be selected, two or three from each pod, choosing the plumpest ones. Soak for 3 to 5 days in quite warm water, changing the water each day. They can be planted at the end of July, either in a sunny bench under glass in a greenhouse, or in a shallow box under a sheet of glass in a sunny window-sill or verandah, watering with warm water. Ordinary grocer's boxes can be sawn down to about 6-inch deep, and any holes or spaces in the bottom covered with strips of old lino. The soil is best half sand, half sifted soil, the brown loam from under grass being splendid. Prepare it a week before planting, lining with about an inch plain soil, then a good dusting of fertiliser, sprinkle water, and fill up with the prepared soil, watering thoroughly. When drained, pat down with a wooden mallet. The day before planting, water thoroughly again and make holes all over to let the water get well in, but do not mix up because the fertiliser must not be allowed to touch the seeds. It is kept underneath for warmth and future nourishment. When planting, make holes about an inch apart and an inch deep with a stick the size of your finger (the handle of an old paste brush is excellent). You can drop one seed in each hole and then cover with fresh earth, patting the whole down afterwards with the mallet. For large quantities of seed, it can be merely scattered over the prepared wet earth, spread out where required with the fingers, and then sprinkled with sifted soil or sand till covered, malleted down and sprayed with water. Any that come to the top afterwards can be pushed down with a stick. Where spraying is not practicable, water may be run over young seedlings from the sides of box or bench, by hosing on to that instead of direct, but warm water for seeds or pot-plants from a kettle is always the best stimulant, and the water should be warm enough to just bear your finger in comfortably.

The advantages of raising under glass instead of direct outside, are many. First, it allows the ground to lie fallow, dug up and open to the air, thus sweetened. Second, you are sure of all your seedlings, instead of many losses through slugs, birds, frosts, wash-outs, etc., and you can leave your old plants out till the end of May, when it would be too late to plant the new ones direct.

When preparing the trenches for the seedlings, dig all the earth out a foot deep and lay on the path. If hard or clayey, sprinkle sand all over (sea-sand will do) to an inch deep, then a good sprinkle of fertiliser (a thick peppering). Now put enough earth



back to cover the bottom a couple of inches deep and up the back of trench. Then lay the seedlings along in a row, leaning against the back, 6 inches apart, nearly fill this up with soil, then walk along, treading down with one foot, then finish the filling to the top, taking care to keep the plants upright. The seedlings are best put out when 4 to 6 inches high. After they are well started, select the best side shoot as previously described. It is a help when first planting out, if you can put down a small twig of manuka beside each one, to keep it off the ground till able to reach the wire netting. Should you be troubled with slugs, you should go out with a torch soon after dark and a pot of quicklime (an old saucepan is excellent) sprinkling this broadcast over the young plants every two or three days after they are first planted. The same is also the quickest and most effective cure for mildew after a wet spell at any time, or in the autumn, just dusting it out in small handfulls over the lower stalks and leaves, and it will not damage the most tender growth.

For the fertiliser, where stable manure cannot be had, blood-and-bone one time and a mixture of bonedust, sulphate of ammonia and muriate of potash, the next, gives most satisfactory results, but must never be allowed to touch the roots. After layering a couple of inches below in the first place, put small doses down between the plants every 2 or 3 weeks, a teaspoonful when young, a dessertspoonful when half or full grown, right through the season, and water your sweet-peas every evening in the summer (roots only). At least 3 successive crops may be had by planting a month apart, between and in front of the previous plants, up to December, or later if favourably situated for sun.

## RUSSELL LUPINS.

Having tried, with no little success, growing the various subjects which fall to the lot of every gardener, George Russell, a young man of sixty, who had little theoretical knowledge but had learnt a great deal from a keen study of nature, decided to devote the rest of his life to a definite object, and some old-fashioned blue and white Lupins exhibited at York Gala in 1911 fired his imagination. He made a start by buying plants of every known variety and by writing to all the corners of the world for seed. When they flowered, he must have felt that long life was promised or he would never have had the courage to carry on with such unpromising material. A start had to be made somewhere, and he decided to eliminate all but one or two of the better types, and so he continued year after year feeling he was making progress but, more often than not, realising he would be an old man before his dreams came true. The patience of the fisherman is quoted as something rather wonderful, but it pales to insignificance beside that of Russell who, when past three score years and ten carried on, although it meant waiting from June to June for nature to disclose the secrets of his work.

At last in 1925, at an age when most people are satisfied with an armchair in the corner, results began to come; a better type of flower, colours not seen before and Russell knew that success was round the corner. The years had not been wasted. People began to talk and, from 1932 onwards, the road alongside the allotment where they were grown became the Mecca of gardeners in June, when the plants were in flower. Trade growers, who would not at first acknowledge that a dabbling unknown had left them far behind, came along with tempting offers. They were allowed to admire, but Russell loved the child he had created too well to sell. He was making a living as a jobbing gardener. Money was of little importance and, for a long time, he could not make up his mind to share with anyone else the pleasures these plants had given him for so long.

From 1930 onwards, he had been receiving offers which would have tempted many, who were much better placed in regard to the comforts of the world—£50 for one plant, £25 each for many others, £5 for a thimbleful of seed from an enthusiastic American! He refused all, including a Royal Gardener and many bigwigs of the Seed and Nursery trade. At last, realising that his attitude savoured of "the dog in the manger," he decided that his joys would be increased by sharing with others. When making arrangements for distribution, financial reward was not the first consideration. He wanted the strain associated with his name and to turn it to account in building a career for a boy who, for some years, had helped him in his work. When eventually it was agreed that Bakers should have the privilege of taking over the development and distribution, it was conditional on the boy being given an opportunity of continuing the work he too had grown to love.

The least sensitive observer of this new strain of Lupins will surely be conscious of the great boon which Russell's devotion and perseverance has bestowed upon the world. In almost any walk of life whether art, literature, or industry, an equally notable achievement would have brought public recognition and honours; but Russell, now well over eighty years of age and justifiably proud of a task well done is still the old gardener of York who does a job here and there where needed.

NOTE:—The above has been extracted from booklet issued by Bakers of Codsall, Wolverhampton.

A happy inspiration and a love for the beautiful were sufficient inducements to impel a humble gardener, George Russell, to devote twenty years, in the autumn of his life, to the improvement of a common everyday plant. The ordinary lupin—*Lupinus polyphyllus*—in which blues and whites were the dominant colours, were rather poor material for a commencement, but visualising the importance and possibilities of new colours, he set to work on his self-appointed task—on a small allotment!—and has now succeeded in "improving" *Lupinus polyphyllus* out of all recognition, in fact, the "Russell Lupins" as they are termed, would be more correctly described

as a new "race" rather than an improvement of an old. I do not know which other Lupinus species were used in the work, but from the range of colours obtained I suspect *L. lexiflorus*, *L. lepidus*, *L. leucophyllus*, *L. mutabilis*, *L. nootkatensis* and *L. subcarnosus* have all played some part; be that as it may, the results can only be described as astounding, quite as important, and quite as distinct as the modern Spencer sweet peas are against the old "grandiflora" varieties.

My first impression was indescribable; never before have I seen such marvellous colourings, or been thrilled by such rich exotic blendings, and I can safely claim to have seen every "worth-while" plant or race of plants which has been introduced during the past forty years; I have praised some, and condemned many, but with the exception of Spencer sweet peas, I have seen nothing to come within a mile of the new Russell Lupins as staged at the R.H.S. Horticultural Show by Messrs. Baker, in scores of shades and colours—self-colours of rich pink, orange-yellow, strawberry-red, bi-colours of royal purple and gold, apricot and sky-blue, rose-pink and amethyst and dozens of intermediate shades and combinations, on hundreds of massive spikes. The highest possible R.H.S. Award, the Gold Medal, was never more richly deserved.

Massive is the term for the impressive spikes of flowers, on which the blooms appear to be more closely packed than in the old forms, but this is accounted for by the shape of the back petal, or standard—large and widespread like the wings of a butterfly in flight, instead of small and folded back like a moth at rest. The wing petals, which fold over the keel, are distinctively shaped, nearly semi-circular, and in size proportionate to the wide-open standard, making a delightfully balanced flower, just right for showing to perfection the charm of the colourings and shadings. The strength of the plants has been in no way impaired by this striving for colour—rather the reverse, the massive spikes and rich green foliage being ample evidence of healthy vigour. The habit is all that could be desired, in heights of 3 to 4 feet; others with spikes of flowers of the same exquisite colourings but growing only 12 to 15 inches in height are in evidence, a future Tom Thumb section, of which more anon, when their type is definitely "fixed." It is interesting to know that large stocks of plants for sending out in the autumn and of seeds for sale next spring, will be available, and no garden need be without its quota of Russell Lupins next season.

Well done, George Russell!

NOTE:—The foregoing article by D. W. Simmons, member of the R.H.S. Floral Committee, appeared in the July issue of "My Garden."



The Royal Horticultural Society's Peter Barr Memorial Cup, Awarded 1937, to H. J. Poole, of Lower Hutt, for work in connection with the advancement of the Daffodil.

**PETER BARR MEMORIAL CUP.**

This Cup is the outcome of a wish of some of the late Mr. Peter Barr's admirers to do something to perpetuate his memory and in recognition of his great work in the cult of the Daffodil. The Cup is awarded annually by the Narcissus Committee of the Royal Horticultural Society to anyone who, in its opinion, has done good work of some kind on behalf of the flower.

The Cup is an artistic piece of craftsmanship, the design being modelled from living flowers supplied by Mr. P. R. Barr, V.M.H., a son of the late Mr. Peter Barr and, among those who have held it, will be found the most distinguished daffodil growers of Great Britain.

The Award of the Cup in 1937 to Mr. H. J. Poole of Lower Hutt is a special honour to horticulture in New Zealand, as this is the first occasion it has been awarded outside of Great Britain. As it was not considered practicable to forward the Cup to New Zealand, the Royal Horticultural Society marked the occasion by having a replica made in miniature. This was forwarded to Mr. Poole through the New Zealand Institute of Horticulture and it was duly presented to him, on the 26th August, at a meeting of the Executive Council of the Institute.

The presentation was made by Mr. F. S. Pope, President, who expressed the Institute's deep pleasure with the well-earned award as Mr. Poole's wonderful work with daffodils, over a very lengthy period, is so well-known. Mr. Poole thanked the President for his remarks and stated that he was very pleased, for the sake of New Zealand, to have received the Award of the Cup. Mr. Poole gave some interesting reminiscences of world famous daffodils and daffodil growers and of his own experiences with this flower.

The holders of the Cup to date are as follows:—

1912	Rev. G. H. Engleheart	1925	F. H. Chapman
1913	P. R. Barr.	1926	W. Poupart
1914	E. M. Crosfield	1927	J. T. White
1915	P. D. Williams	1928	The Brodie of Brodie
1916	Mrs. R. O. Backhouse	1929	G. W. Leak
1917	Walter T. Ware	1930	H. Smith
1918	Miss E. Willmott	1931	J. L. Richardson
1919	Rev. J. Jacob	1932	W. B. Cranfield
1920	J. Duncan Pearson	1933	Guy L. Wilson
1921	A. M. Wilson	1934	E. A. Bowles
1922	W. F. M. Copeland	1935	F. A. Secrett
1923	Charles H. Curtis	1936	Alfred W. White
1924	J. K. Ramsbottom	1937	H. J. Poole (N.Z.)

The late Peter Barr's visit to New Zealand, during a world tour in the late nineties, undoubtedly awoke great interest and re-

sulted in daffodil growing being more generally taken up in this country. Previously, in New Zealand, the raising of new varieties from seed had been very haphazard, and the importation of newer sorts very spasmodic.

The late Mr. Thomas Mason of Lower Hutt was one of the earliest raisers of daffodil seedlings and he, with the late Mr. F. Cooper, probably held the most up-to-date stock of daffodils in the Dominion.

At the first Daffodil Show held in Wellington in 1898, Mr. Cooper was the chief exhibitor. Emperor, Empress, and Gloria Mundi were outstanding varieties at that time.

In the opening years of the present century, King Alfred and Lucifer created a sensation, when shown at the Hutt Show. From this time on, Mr. H. J. Poole yearly imported and distributed the best varieties obtainable. In 1924 he visited the daffodil shows in England where he secured, for introduction into New Zealand, such splendid varieties as Beersheba, Royalist, Kantara, Merkara, Glorious, Moira O'Neill, etc. Each year brings some further advance in new varieties and Mr. Poole continues to secure the best of these for distribution to New Zealand growers.

The importation of Fortune, by the late Mr. Robert Gibson, and other red-cupped varieties by Mr. Poole has had a marked influence on seedling daffodils raised in this country, and many fine flowers have been produced which, in some cases, equal if not excel many of the British-raised varieties.

The progress and evolution of the modern daffodil has been really amazing. The plant was known and cultivated several hundred years before the birth of Christ; in the seventeenth century less than fifty varieties were in circulation; to-day the latest Classified List issued by the Royal Horticultural Society gives the names of 6,700 varieties. Of the older varieties, many are now lost to cultivation, while others have been superseded by the aristocratic flowers which grace the daffodil shows of to-day.



### THE P. D. WILLIAMS MEDAL.

A desire having been expressed that the Royal Horticultural Society should establish a memorial to the late P. D. Williams, the Council decided in December, 1935, that the memorial should take the form of a medal to be awarded in alternate years for Daffodils and Rhododendrons, the two plants in which P. D. Williams was especially interested. A fund was accordingly opened, and a sum of £372/7/9 was subscribed. Meanwhile the Council commissioned Mr. Langford Jones to prepare a design for the medal, and it will be seen from the illustration that he has been successful in producing an excellent representation of P. D. Williams. The Daffodil and Rhododendron appear on the reverse.

The first specimen of the medal, struck in gold, has been presented to Mrs. P. D. Williams. The first medals to be offered for award were those in a special class at the 1937 London Daffodil Show for six incomparabilis and/or Barrii varieties with red or orange colouring in the cup. To mark the inauguration of the medal, the Council decided in September, 1936, to present silver medals to the following societies for award at their Daffodil Shows in 1937: the National Daffodil Society of New Zealand, the Royal Horticultural Society of Victoria, Australia, and the Amateurs' Horticultural Society of Hobart, Tasmania.

In 1938 the Medal will be awarded for Rhododendrons, and the precise terms of the Award will be announced in due course—R.H.S. Journal, July, 1937.

**ARBOR DAY, 1937.**

The date fixed for Arbor Day this year, by the Hon. Minister of Internal Affairs, was Wednesday, 11th August, 1937, and the usual circular was forwarded by his Department to all local and other interested bodies. The following summary of observances of Arbor Day throughout the Dominion may be of interest:—

- AUCKLAND:**—City Council, in association with the Forestry Department and the local District Council of the Institute, commenced a beautification scheme at the Park Road entrance to the Domain. Tree planting ceremonies were held at various schools.
- BALCLUTHA:**—Shrubs were planted at South Otago High School.
- BLenheim:**—At practically every school, each class planted a tree in the play grounds. Fifty native shrubs were planted at the Blenheim School and some trees at Redwoodtown School.
- CAMBRIDGE:**—Postponed through dry weather.
- DANNEVIRKE:**—Memorial Kowhai was planted at High School.
- DARGAVILLE:**—Six Coronation Oaks and 200 Kauris were planted by the Borough Council, also two memorial Camphor trees, donated by the Women's Institute and Women's Division of St. John's Ambulance.
- DUNEDIN:**—Tree-planting ceremonies were held by twenty-one primary and secondary schools, under the direction of the City Reserves Committee, Headmasters' Association and Dunedin Amenities Society.
- EKETAHUNA:**—Trees were planted in the grounds of the District High School.
- ELTHAM:**—Flowering Cherries commenced a Coronation Row at the Eltham School and other trees were planted.
- FAIRFIELD:**—Tree planting in streets was commenced.
- FEILDING:**—A start was made with the planting of both sides of Derby Street.
- GERALDINE:**—Flowering trees were planted at the District High School and also at Todd Park.
- GISBORNE:**—Observance was made by the primary schools in the district. A programme of tree-planting will be carried out by the High School in about a month's time, as that is thought to be a more suitable date.
- GREYMOUTH:**—Sycamore trees were planted, at the Recreation Ground, by pupils of various schools. Addresses were given by the Mayor and the Chairman of the Reserves Committee.
- GREYTOWN:**—A Coronation Oak and two other trees were planted in the Kahutara School grounds.
- HAMILTON:**—At the Hamilton West School, two Coronation Oaks and other trees were planted. Native and exotic trees were planted at other schools.
- HAWERA:**—Tree-planting was carried out at the Main School and celebrations were held at the Turuturu and Tawhiti Schools,



- HELENSVILLE**:—Trees were planted at the Park on behalf of the Town Board, Women's Institute and its Gardening Circle.
- HUNTLY**:—Two Coronation trees were planted by the Mayor and shelter trees were planted by representative school children.
- INVERCARGILL**:—About 500 children, representing the various schools, took part in tree-planting ceremonies at Queen's Park, Turnbull-Thomson Park, Bain Park and South School and about 260 trees and shrubs were planted. Speeches were made by the Mayor (Mr J. Miller), Chairman of the Reserves Department (Mr. A. W. Jones) and others. All arrangements were made by the Superintendent of Reserves (Mr. B. P. Mansfield), who also directed the planting operations.
- LEAMINGTON**:—Four Coronation trees, donated by Mrs Howard Lewis, were planted at the school.
- LEESTON**:—Senior pupils of the School made a commencement with tree-planting of five acres, set aside for this purpose by the Ellesmere County Council. 1200 trees were donated, sufficient to plant about one and a half acres.
- LEVIN**:—Trees were planted in Exeter Street and Cambridge Street South, whilst the planting of exotic and many native trees was carried out at the District High School.
- MANAIA**:—The Town Board arranged extensive tree-planting of 250 native trees, etc. in the Domain Gardens and Reserve, by pupils of the Main School.
- MATAMATA**:—The Beautifying Society arranged tree-planting ceremonies at both schools.
- MOTUEKA**:—Trees were planted in the school grounds and native trees in the Borough Domain.
- NAPIER**:—Trees were planted at several schools.
- NEW PLYMOUTH**:—Totaras were planted at Burgess Park on behalf of citizens and borough councillors. Members of the Pukekura Park Board planted native trees near the entrance to Brooklands. Tree-planting was carried out at several schools.
- OAMARU**:—The North Otago Tree Planting Association held its inaugural planting at the Railway Reserve, just south of the Waitaki bridge. Tree-plantings were made by pupils of various schools at King George's Park, Orana Park and the Waitaki Boys' High School.
- OTAHUHU**:—Native trees were planted at Sturges Park in the presence of 1200 children and a large number of residents.
- PAEKAKARIKI**:—School and other representatives planted trees at the Domain.
- PAEROA**:—Spanish Chestnuts were planted by school children in Hill Street.
- PAHIATUA**:—A Coronation tree was planted at the District High School.
- PALMERSTON NORTH**:—The Terrace End Progressive Association, in conjunction with the School, made its first planting of

the gravel pit, which had been handed over by the Railway Department to the City Council, for use as a Reserve.

**PATEA**:—Pohutukawas, donated by various citizens, were planted in Bedford Street.

**RANGIORA**:—Three hundred and fifty trees were planted in the High School grounds and in its plot.

**ROTORUA**:—Members of the Ngongotaha Domain Board planted trees in the street approaching the Domain.

**TAIHAPE**:—School children planted 250 trees in the Papaki Scenic Reserve under the supervision of Mr. E. A. Abbott, Borough Director.

**TAUMARUNUI**:—Oak trees were planted at the school.

**TAUĀNGA**:—Trees were planted at Jordan Park.

**TE AWAMUTU**:—Native trees were planted at the District High School.

**TEMUKA**:—Trees were planted at the School.

**THAMES**:—The planting of trees in Queen Street, by school pupils and others, was arranged by the Beautifying Society.

**TIMARU**:—Tree-planting ceremonies held at Alexandra Square, West End Park and Maori Park, were well attended by citizens and pupils of the various schools.

**WAIPAWA**:—Memorial trees were planted, on behalf of the Women's Institute, at Nelly Jull Park.

**WAITARA**:—The planting of six Pohutukawas in McLean Street was authorised by the Borough Council.

**WANGANUI**:—The Wanganui Beautifying Society arranged the planting of a line of trees down the main drive and along the boundary line at the Health Camp, Gonville, by representatives of the various schools and others.

**WELLINGTON**:—The principal ceremony was the planting of Pohutukawas at Ruahine Road, Hataitai, when the Wellington Beautifying Society, the Wellington Horticultural Society and the City Council combined. A unique function was the formal opening of the Rhododendron Dell at Kelburn, planned by Mrs. Charles Haines on behalf of the Wellington Beautifying Society. Planting took place at many schools and colleges, and altogether some 3,000 trees were planted in and about the city.

**WHANGAREI**:—Tree-planting took place at the Public Library and the schools.

**THE NAMING OF PLANTS.**

NOTE:—The following article is reprinted from the January, 1937, Journal of the Royal Horticultural Society. An article entitled "Name this Plant," by Dr. H. H. Allan, appeared in the Institute's Journal of September, 1936.

Names are given to plants so that when they are spoken or written about there may be no confusion as to the particular plant referred to. Every plant must therefore bear one name only, which must be universally accepted.

At the International Horticultural Conference of London in 1930, Paris in 1932, and Rome in 1935, the nomenclature of garden plants was fully discussed and general agreement was reached on most matters that relate to the naming of garden plants.

The principles governing the naming of plants by botanists were accepted as the basis for the naming of plants of garden origin, these principles being:—

1. A plant can bear but one valid name.
2. The valid name is the earliest which conforms to the accepted Rules of Nomenclature.

Names of species and botanical varieties are framed according to the Rules of Botanical Nomenclature agreed at the Botanical Congress of Vienna in 1905 and revised at the Congresses of Brussels in 1910, Cambridge in 1930, and Amsterdam in 1935.

Briefly the botanical name of a species consists of two words of Latin form. The first is that of the genus to which the plant belongs, written with an initial capital letter; the second, the earliest specific name given by Linnaeus in 1753 or by botanists subsequently, so long as it conforms with the rules, written usually with a small initial letter (e.g. *Berberis aggregata*). A capital initial letter is, however, given where specific names are derived from names of persons (but not places) (e.g. *Berberis Wilsonae*, *Campanula Allionii*) or are those of old genera (e.g. *Crataegus Oxyacantha*, *Ranunculus Flammula*). The Paris Conference recommends that for horticultural purposes all specific names should be written with a small initial letter.\* The gender of the specific name is the same as that of the genus (e.g. *Ranunculus parnassifolius*, *Primula japonica*, *Arum maculatum*, but most trees are regarded as feminine, so *Quercus sessiliflora* and *Fagus sylvatica* are correct).

For a full discussion of these botanical names the "Rules" should be consulted.

In order to obtain uniformity in the use of generic names, a list of the genera which are sometimes divided by botanists has been drawn up and recommendations are made as to the name to

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\* This recommendation follows the practice of zoologists in naming animals. For the present the Society thinks it better to follow the recommendation in the "Rules of Botanical Nomenclature" in its own publications.

be retained in horticulture. These names are chosen in conformity with the Rules and apply only where differences of treatment are given by botanists. At the Horticultural Congress in Rome in 1935 a list of specific names of plants of horticultural interest was agreed for international use for the ensuing six years and, in addition, certain lists of names of garden varieties were also adopted as standards for future use.

Names of botanical varieties follow the name of the species to which they belong. Thus, e.g., the botanical varieties of *Narcissus triandrus* would be *Narcissus triandrus* var. *albus*, *N. triandrus* var. *calathinus*, *N. triandrus* var. *concolor*, and so on. These varietal names follow the same rules as specific names.

Names of species and botanical varieties are thus fully provided for.

Plants raised in gardens as seedlings or sports of these species or as hybrids between species often have to be named by non-botanical people, and the following rules, agreed to at the International Horticultural Conferences of London and Paris, are for their guidance. They are based on the principles and rules which have been briefly outlined.

- (a) The name of a horticultural variety should be placed after that of the species to which it belongs, and its status should, or may, be indicated by the contraction "var." Examples are given below.
- (b) The varietal name should be Latin form only when it expresses some character of the plant, e.g., *nanus*, *fastigiatus*, *albus*, or its place of origin e.g., *kewensis*.

The use of Latin proper names for horticultural varieties is not permissible, e.g. *Iris pallida* ~~Smithii~~ would be an inadmissible name for a garden variety.

- (c) The name will thus usually be a "fancy" name, beginning with a capital letter, e.g. *Galega officinalis* var. "George Hartland," not *Galega officinalis* var. *Hartlandii*; *Dianthus deltoides* var. "Brilliant," not *Dianthus deltoides* var. *brilliantissimus*; Pea "Masterpiece."
- (d) Varietal names must not be translated when transferred from other languages, but must be preserved in the language in which they were originally described. When desirable a translation may be placed in brackets after the varietal name.
- (e) As far as possible names of horticultural varieties should consist of a single word; the employment of not more than three words is permitted as a maximum.

- (1) A varietal name in use for one variety of a kind of plant should not be used again for another variety of that kind, even though it may be attached to a different species.

That is, the use of the name *Narcissus Pseudonarcissus* "Victoria," should preclude the use of "Victoria" as a varietal name for any other species of *Narcissus*,

such as *Narcissus poeticus* "Victoria." Similarly there should be but one *Iris* "Bridesmaid," one *Plum* "Superb" and so on.

- (2) Varietal names likely to be confused with one another should be avoided. For instance, the use of the name "Alexander" should preclude the use of "Alexandra," "Alexandria," and "Alexandrina" as varietal names for the same kind of plant.
  - (3) Where personal names are used to designate varieties, the prefixes "Mr.," "Mrs.," "Miss," and their equivalents should be avoided.
  - (4) Excessively long words and words difficult to pronounce should be avoided in coining varietal names.
  - (5) The articles "a" and "the" and their equivalents should be avoided in all languages when they do not form an integral part of a substantive, e.g. "Colonel," not "The Colonel"; "Giant," not "The Giant"; "Bride," not "The Bride."
  - (6) Existing names in common use should not be altered to conform to these rules, but attention should be paid to them in all new names proposed.
- (f) The names of horticultural hybrids are formed in the same way as those of horticultural varieties (see paras. a-e). (Hybrids are indicated by the multiplication sign x placed before the name of the hybrid).
- (g) The "genus" of bigeneric hybrids (i.e. hybrids between species of two different genera) is designated by a formula showing the parent genera in alphabetical order, and where necessary by a name compounded of the names of both genera, e.g. *Laeliocattleya*, *Ureocharis*, *Chionoscilla*.
- (h) The "genus" of multigeneric hybrids (i.e. hybrids between species of three or more genera) is also designated by a formula and/or a conventional name, preferably that of a distinguished person to which is added the termination "ara," e.g. *Potinara*, *Vuylestekeara*. The names of trigeneric hybrids already in use, e.g. *Brassolaelocattleya*, should be retained. All hybrids in which the same genera are combined receive the same generic name, no matter how they were combined, e.g. the same generic name would apply to all combinations of the genera *Brassavola*, *Cattleya*, *Epidendrum* and *Laelia*.
- (i) All plants raised by crossing the same two species of plants receive the same specific name, variations between the seedlings being indicated where necessary by varietal names framed as already described. In practice in cross-bred plants, the specific name is frequently omitted, e.g., *Iris* "Ambassadeur."
- (k) In order to be valid, a name must be published.
- (l) The publication of a name of a horticultural variety or hybrid

- is effected by a recognizable description, with or without a figure, in any language written in Roman characters.
- (m) The description must appear in a recognised horticultural or botanical periodical, or in a monograph or other scientific publication, or in a dated horticultural catalogue.
  - (n) The mention of a variety without description in a catalogue, or in the report of an exhibition, is not valid publication, even if a figure is given. It is desirable that descriptions of new varieties in horticultural catalogues should also be published in periodical horticultural papers.

### INSTITUTE NOTES.

**PERSONAL.** At the August meeting of the Executive Council, greetings from Mrs Knox Gilmer were received and heartily reciprocated, and her proposed return, at the end of the year, was noted with pleasure.

**CONGRATULATIONS** have been conveyed to Mr A. White N.D.H. (N.Z.), formerly of Waimate, on his appointment as Curator of Parks and Reserves at Nelson, and also to Mr. G. A. R. Petrie, Invercargill, who recently passed the Institute's Intermediate Examination, on his appointment as Gardener to the Southland Hospital Board.

**EDUCATIONAL.** All students on the register have been requested to forward their diaries for examination before the end of September. Those eligible for the various examinations have been notified that formal applications and other requirements must be lodged not later than the same date.

Mr R. W. Balch N.D.H. (N.Z.), Cockayne Gold Medallist, 1936, formerly of the Christchurch Botanic Gardens, recently left for the Royal Botanic Gardens, Kew. Mr Noel Lothian, exchange trainee from the Melbourne City Gardens at the Christchurch Botanic Gardens, returns home shortly on his way to Kew Gardens.

The Executive Council has expressed its regret to the Taranaki District Council on Mr. T. Horton's relinquishment of its Chairmanship, for health reasons. Congratulations have been extended on Mr. G. H. Huthnance's appointment as Chairman.

**LODER CUP COMPETITION.** The Loder Cup Committee notifies that the Cup is open for competition to the whole of New Zealand, and that it will be awarded to the person or organisation who or which, in the opinion of the Committee, has performed the most meritorious act during the year, ending on the 30th November next, or whose work has culminated in that year in furthering the sentiments of the donor as expressed on the Cup itself, namely ". . . to encourage the protection and cultivation of the incomparable flora of the Dominion."

The closing date for receipt of nominations is the 30th November next.

**CONDOLENCE.** The Institute has extended its sympathy to the relatives of Saul Solomon K.C., of Dunedin, who was elected an Honorary Fellow in 1927.



NEW ZEALAND INSTITUTE OF  
HORTICULTURE  
(INCORPORATED.)

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