

# The “Rhododendron” Horticultural Society— The Symbiotic Relationship Between the Royal Horticultural Society and the Genus *Rhododendron*

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## Background

The origins of the Royal Horticultural Society (RHS) can be traced back to 1804. On 7 March of that year, under the chairmanship of John Wedgwood, son of the famous potter, six other gentlemen including Sir Joseph Banks, president of the Royal Society, William Forsyth of Kensington and St. James', William Aiton of Kew, nurseryman James Dickson and two amateurs, Charles Greville and Richard Salisbury, met at James Hatchard's book shop to establish what we know today as the RHS.

My responsibility is the great garden at Wisley in Surrey, southwest of London. However, it was not the society's first garden. In 1821, the society leased 33 acres of ground adjoining Chiswick House from the Duke of Devonshire. It became a repository for plants introduced from China and the Americas by the society's collectors, David Douglas, John Reeves, Robert Fortune, and Theodore Hartweg. It was in the same year that John Lindley was appointed as Assistant Secretary. He was an extraordinarily busy man. Not only did he have numerous jobs within the RHS but he was also Professor of Botany at University College London and the Chelsea Physic Garden and editor of the *Gardener's Chronicle*!

In 1848 he published an account of the rhododendrons of Borneo. This paper was in response to a paper published by Carl Blume—a medical doctor who traveled widely in Borneo and Java, who in 1826 published an account of five species of rhododendron allies from S. E. Asia, named in honor of a French pharmacist friend, Vireya. It was never accepted as a botanical name, but is used loosely as a common reference for Malesian rhododendrons.

Lindley firmly rejected the genus Vireya and reported on Sir Hugh Low's findings that Vireyas were “perhaps the most gorgeous of native plants.” He also questioned their ability to be cultivated successfully. So Lindley may well have stimulated the likes of Veitch to send Thomas Lobb to S. E. Asia. He eventually brought back the first Vireyas into cultivation. *Rhododendron javanicum*, quickly followed by *R. jasminiflorum*, were introduced, with the latter exhibited at Chiswick in 1850, where it was reported “that few plants excited greater attention among the visitors most distinguished for taste and judgment.”

During the 1850s the society's attentions turned to creating another garden closer to the centre of London at

Kensington. This was made as a show garden for flower shows, while Chiswick became an experimental garden. Queen Victoria's husband, Prince Albert, who was President of the society, was instrumental in the lease of 22 acres of land immediately to the south of where the current Albert Hall is today. The garden opened in 1861.

It proved very costly to run, and following the Prince's death enthusiasm for the garden declined, and it eventually closed in 1888. Following its closure, it was agreed that the Chiswick garden should continue as a school of scientific and practical horticulture—both ornamental as well as useful.

By the end of the 19th century, Chiswick was considered to be too small and too polluted, so the hunt was on to find another garden.

Before talking about Wisley, I shall mention where the RHS is today with its four gardens and partner gardens:

**RHS Harlow Carr**, in Yorkshire, is the newest and most northerly of the four gardens, covering 60 acres. The RHS merged with the Northern Horticultural Society in 2001 and with the merger, acquired Harlow Carr. The Northern Horticultural Society was founded in 1946 with the objective of “promoting and developing the science, art and practice of horticulture with special reference to the conditions pertaining to the North of England” and is in an ideal location to view what can be grown successfully in the area.

**RHS Hyde Hall** is situated in the heart of Essex farmland in the southeast, only 40 miles from London. It has countryside views rarely associated with this part of England. Hyde Hall was donated to the society in 1993 by Dr. Richard (Dick) and Helen Robinson. Nearly 40 years of work has brought it from a windswept hill with just six mature trees to the present-day garden of 24 acres.

**RHS Rosemoor** is situated in the southwest county of Devon. Lady Anne Berry gifted Rosemoor to the RHS 11 years ago, since when the original eight acres have been greatly developed. Recent additions include Mediterranean and semi-tropical plants, which have been thriving during the recent long hot summers, and the newly planted Winter Garden. But what is perhaps the most popular feature of this delightful garden is the extensive rose garden, proving beyond doubt the lie that the West Country cannot produce beautiful roses.

Individual RHS members also have free admission to a wide range of outstanding and inspirational partner gardens numbering about 120 around the United Kingdom (UK).

## RHS Wisley

In 1903, after many years of searching for a larger garden “beyond the radius of the London smoke” to replace the garden at Chiswick, Sir Thomas Hanbury, a wealthy Quaker and founder of the celebrated garden of La Mortola on the Italian Riviera, presented in trust to the society 60 acres of freehold land at Wisley in Surrey. At that time, the society was committed to building a new exhibition hall and offices in Vincent Square (the construction work had already started), but there were heated arguments among the Fellows over whether the hall or a new garden should have priority for the available funds. Sir Thomas’ generous donation appeared to have come “out of the blue” and solved both problems at a stroke. By May 1904 the move from Chiswick to Wisley was complete; and, in July, the new headquarters at Vincent Square was officially opened by King Edward VII—both in time to mark the centenary of the RHS.

There is an expression “if it can grow at Wisley, then it can grow anywhere.” Our plant collection here is one of the largest in the world, with more than 25,000 taxa. What makes it unique is its diversity. Nowhere else can you find one of the most comprehensive collections of fruit growing alongside glasshouse plants, alpiners, and vegetables, as well as the conventional collections of bulbs, herbaceous and woody plants.

Yet it is far more than just a collection of plants, it is a source of inspiration. The Broad Walk provides gardening on the grand scale with 125 yards of mixed border plants where you can become immersed in plant associations: the alpine display houses, where alpiners in flower can be seen every day of the year; the demonstration gardens, where you can find examples of a similar scale to your own; or the Bicentenary Glasshouse and Learning Centre (opening 2007), where you can walk through 3,000 square yards of landscaped display.

Wisley is also a teaching garden where people of all ages learn horticultural skills. Each year, students from around the world join our training program to study for the Wisley Diploma in Practical Horticulture or specialist option certificates. Working alongside trained staff provides the appropriate practical skills necessary for their future careers. These skills are also passed on to RHS members, who benefit from attending horticultural demonstrations and garden walks covering a diversity of topics. Children and their teachers visit to learn all about plants and gardening.

There are two main areas in Wisley where rhododendrons are cultivated, in the Wild Garden and on Battleston Hill. The Wild Garden was formerly known as Oakwood when George Fergusson Wilson cultivated the area. He wanted to develop it as a wild garden and enlisted the help of William Robinson, the famous garden author and journalist, who lived at Gravetye Manor in Sussex. He was keen to develop it as a spring garden with a rich woodland floor of *Trillium*, *Lilium*, *Erythronium*, *Primula*, *Gaultheria*, and a host of smaller woodland aristocrats. It is low lying but has a high water table, which creates advantages and disadvantages. On the margins of the garden can be found large specimens of

old rhododendron hybrids, including ‘Pink Pearl’ and ‘White Pearl’, as well as many of the later flowering Exbury hybrids. The shrub zone includes an excitement of ericaceous plants: *Kalmia*, *Enkianthus*, and also a huge specimen of the Kurume azalea ‘Amoenum’, which has been partly under planted with *Paeonia emodi*. *R. viscosum* and *R. atlanticum* extend the flowering season—and the scent—well into summer.

By far the largest site for growing rhododendrons is on Battleston Hill. It was acquired by the RHS in 1936 and covers approximately 26 acres. The Mixed Border runs roughly north/south, which draws the eye to the Queen Elizabeth Border, the Queen Mother Border, and the highest point of the garden, which forms a ridge that runs roughly east/west.

The emphasis is to display a balanced collection primarily of rhododendron hybrids. However, there are also small specialist collections of recent and reintroduced species. We can thank the Rhododendron, Camellia, and Magnolia Group for sponsoring a collection of recent and reintroduced species, which has plants collected by Cox and Hutchinson, Rushforth, McBeath, Millais, and others. The Group also sponsored a collection of Rustica Flore Pleno rhododendrons that were planted in memory of Alan Hardy.

The entire plant collection at Wisley numbers more than 25,000 taxa, of which 1,700 are *Rhododendron*. This enables us to display a limited collection of tender species and hybrids under glass, dwarves in the Rock Garden, as well as mainstream/complementary and structure plants in association with other woody, herbaceous, and bulbous plants in the Wild Garden and on Battleston Hill.

The most recent changes have been seen during the past 10 years, following the storms of 1987 and 1990.

## Plant Trial Program

The main reason behind the purchase of the ground was to bring rhododendron trials to Wisley from Exbury. Plant trials have always been a cornerstone of the society’s activities, with rhododendrons being just one of 60 plant trials conducted each year.

Trials of seed-raised annuals, vegetables, perennials, glasshouse plants, bulbs, alpiners, and woody plants are assessed by 13 Standing and Joint Committees. These committees are composed of people who the society recognizes as having a huge practical and botanical knowledge of the plants they are being asked to judge.

They may be from the horticultural industry at large or from those growing plants in their own garden for a hobby.

This “intellectual property” is of enormous value to us. As well as asking these committees to judge plants during the period of interest, they also make recommendations on which plant trials we should be looking at in the future.

For instance, in the 1990s there were trials for *Penstemon*, *Osteospermum*, and *Diascia* and with the appropriate publicity were widely grown by the gardening public.

It is also important to draw together entries from as far afield as possible. Linda Jones and her colleagues in



the Trials Office are responsible for scouring the plant and seed catalogues of the world for entries so that when planted they are seen as comprehensive and not just reflecting what is currently available in the UK today. These are advertised in *The Garden* magazine and on our web site three years in advance of each trial to enable entries to be gathered together.

In the past there have been a number of awards to plants, which, unless you are in the know, can be bewildering. Preliminary Commendation, Award of Merit (AM), and a First Class Certificate (FCC) were available. However, in 1992 the Award of Garden Merit (AGM) was relaunched, producing at a stroke one award with which the gardening public could readily identify.

The AGM is the plant's kitemark of quality, being awarded to plants that have the following attributes: (1) outstanding excellence for garden decoration or use; (2) available in the trade; (3) good constitution and; (4) requires neither highly specialist growing conditions nor care.

When judging plants over the course of a season, or indeed over several seasons, each committee takes a three-step approach: A, AG, and AGM.

A = A plant considered to have AGM qualities during its first assessment or first year of assessment.

AG = A plant considered to have AGM qualities during its second assessment or second year of assessment.

AGM = Confirmation of the Award of Garden Merit.

Please note that a plant with an A or AG may not achieve an AGM, as it may not perform consistently. When plants are assessed throughout the course of the judging season, they should be seen to perform well and consistently, hence the three-step approach.

Every plant that has the AGM is given a hardiness rating, which admittedly is more easily achieved in the UK than the USA, but we too have our challenges.

H1 Heated glass

H2 Unheated glass

H3 Hardy outside in some regions or particular situations at which, while usually grown outside in the summer, need frost-free protection in winter (e.g. *Dahlia*)

H4 Hardy throughout the British Isles

H1-2 Between H1 and H2

H2-3 Between H2 and H3

H3-4 Between H3 and H4

Focussing down onto rhododendrons, they receive AGMs either after trial at Wisley or by committees deliberating at round-table meetings. How did trials of rhododendrons arrive at Wisley? To understand this, it is worthwhile stepping back in time to 1915.

### History of Rhododendron Trials at Wisley

When Charles Eley of East Bergholt in Suffolk visited his friend P. D. Williams of Lanarth in Cornwall in 1915, it was suggested that they form the Rhododendron Society, with Williams proposing Eley as the Honorary Secretary. It

was formed with minimum organization, with J. C. Williams (of Caerhays) as Chairman.

The founding members were P. D. Williams, Eley, and J. G. Millais of Compton Brow, Horsham. As well as inviting notable garden owners from various corners of the British Isles to join, Professor Isaac Bayley Balfour, W. J. Bean, Ernest Wilson, and George Forrest were elected as honorary members.

The Rhododendron Society *Notes* were published from 1916. As it was mandatory for members to write, the notes were highly informative. They also organized the first Rhododendron Show in 1926, filling the RHS Hall at Vincent Square. The show was considered a huge success and was repeated the following year, but it did not attain the high standards of the previous year, due in part to a severe frost that taxed many of the exhibitors.

In 1927 under the chairmanship of Lionel de Rothschild, the Rhododendron Association was formed, which enabled a larger number of interested people to take part in promoting rhododendrons. The Association published Year Books between 1929 and 1939 containing lists of species, expedition numbers, the stud book on hybrids as well as the establishment of plant trials of hardy hybrids introduced since 1918, to be conducted at Exbury.

Requests were sent to nurserymen to enter one specimen of each plant for trial. A Joint Committee, composed of RHS and the Rhododendron Association members, was empowered to inspect plants and make recommendations for awards. These were planted in open ground adjacent to woodland to the north of Exbury House. During the first and second years, the committee made several visits with the first awards being recommended after their visit during the first week of June in 1933—one FCC and 14 AMs were proposed. The following year invitations were extended to Dutch nurseries.

In 1938 Mr. de Rothschild proposed that the Rhododendron Trial be relocated to Wisley, on the north-facing slope of Battleston Hill. Never having been cultivated in the strict sense before, this was no light task, with Scots pine and chestnut to be felled, old stumps excavated, and the dense undergrowth of bracken and bramble cleared. Yet by 1940, the committee met for the first time with six varieties recommended for AM.

No further meetings took place until 1945, when deciduous and evergreen azalea trials were conducted.

With the arrival of Francis Hanger as Curator at Wisley from Exbury, a new phase in rhododendron cultivation and introduction took place. Hanger coordinated the introduction of rhododendrons from Lord Aberconway at Bodnant, Edmund de Rothschild at Exbury, Royal Botanic Garden Kew, J. C. Williams at Caerhays, Sir Giles Loder at Leonardslee, and J. B. Stevenson at Tower Court.

On the morning of 23 November 1946 we read that "the Curator with a bus load of students and trainees together with two lorries set off on the 16-mile trip to Tower Court near Ascot to collect the gift of more than 150 species totally some 300 plants, including some large specimens up to 10'

in height.” Over the three days they worked lifting the plants which “everyone found very enjoyable despite the continuous fine rain.”

Hanger had a good eye for plants, favouring primary crosses between species; however, primary hybrids themselves open doors for interesting possibilities. ‘Beefeater’ was a back cross using *R. elliottii* with *R. ‘Fusilier’*, a *griersonianum* x *elliottii* hybrid.

Hanger quotes the advantages: “It must be remembered that trusses of *R. elliottii* are very full with many more flowers per truss than *R. griersonianum*, and when the two are mated it is highly probable that the resulting hybrid will carry lax trusses with fewer flowers, but back-crossing rectifies this fault and improved the color, making a truer intensified red.”

Hanger also saw the huge value of *R. yakushimanum* as a parent. By using it as a seed parent he considered the progeny would retain the dwarf compact habit and flower from a very early age. First introduced by Lionel de Rothschild to Exbury in 1934, Hanger brought one of the two plants with him to Wisley. This was subsequently awarded a First Class Certificate when exhibited at Chelsea in 1947. Hanger described how it was planted on Battleston in 1945 and had outgrown the Exbury plant due to a “liberal supply of spent hops and water.” When seen at Chelsea, Hanger reported that “its white flowers commanded appreciation, however, if it had been seen a week earlier, it would have been more beautiful as the buds of the upstanding compact trusses were rich pink, fading to a pale pink as they developed to be finally pure white when opened.” The FCC clone is known as ‘Koichiro Wada’ after the source of this and many other plants from Wada’s Hakoneya Nurseries in Japan.

Hanger successfully bred *R. yakushimanum* hybrids with *R. ‘Tequila Sunrise’* (*R. yakushimanum* x ‘Borde Hill’) in 1951 and *R. ‘Renoir’* (‘Pauline’ x *yakushimanum*) in 1951. ‘Borde Hill’ is a Doncaster cross and ‘Pauline’ is an unknown raised by Lowinsky. Also, over the years Windsor, Waterers, Arthur George of Hydon Nurseries, Harkwood Acres, Peter Cox, Ken Janeck, David Leach, and Hans Hachmann have all focussed on *R. yakushimanum* to produce plants that are of excellence not only for their flowering quality but also for their foliage value.

In the late 1990s the late John Bond proposed the establishment of a new Trials Committee, the Woody Plant Trials Sub-Committee, to take a fresh look on trials. In 1996 a trial, which contained about 120 cultivars of *R. yakushimanum* hybrids was planted in an attempt to kick start the interest among the gardening public. This was to:

- Assess and compare old and new cultivars and nominate outstanding performers for the AGM.
- Assess the performance between differently propagated plants of the same cultivar, whether micro-propagated, grafted, or from cuttings.
- Make a permanent record through herbarium specimens, photographs, and written descriptions for the RHS Horticultural Herbarium at Wisley.

With the range of experts drawn together, an assessment

would be thorough in the current period and in the coming years, with a 10-year trial being proposed.

There is no obvious distinction on how micro-propagated vs. grafted vs. cuttings-raised plants once established differ in their performance. Initially, however, grafted plants of ‘Hachmann’s Marlis’ were flowering earlier than cuttings-raised plants, and cuttings-raised plants of ‘Babette’ were more floriferous.

The judging notes are valuable, not only for the vast reservoir of flowering data, growth responses etc., but also judges’ poetic prose – “good doer, flowers, nice shape, dies prettily; good head of flower; not a pretty flower; sugar plum fairy in boots; flower color a bit bright, would walk out of any good garden centre.”

The final judging of this 10-year trial is now complete, with 28 of the 134 entries being judged as Award of Garden Merit standard. They are a mixture of plants that have been widely available for many years, with the more recently introduced hybrids primarily from Hachmann. For a complete list, please refer to: [www.rhs.org.uk/plant\\_trials.asp](http://www.rhs.org.uk/plant_trials.asp).

### **Other RHS Support for the Genus *Rhododendron*** **Genetic Assessment**

During the late 1940s the RHS employed Dr. E. K. Janaki Ammal, an Indian geneticist, to make an assessment of chromosome numbers on a variety of woody plants, including *Rhododendron*. More than 360 species were taken, primarily from the newly established collections on Battleston Hill, but also from the Royal Botanic Gardens of Kew and Edinburgh, Lord Aberconway’s garden at Bodnant, and J. B. Stevenson’s garden at Tower Court. The work highlighted that, with one exception, all the elepidote (156 species) were diploid ( $2n = 26$ ). (*R. diaprepes* from Tower Court was the one exception). When the lepidotes were examined, 78 were found to be polyploid (1/3 of the species counted). Polyploidy ranged from triploids ( $2n = 39$ ) to dodecaploids ( $2n = 156$ ). For those of you who are not familiar with the work, her papers were published in the *Rhododendron Association Year Book* of 1950.

### **International Rhododendron Registration**

In 1955 at the 14<sup>th</sup> International Horticultural Congress at Scheveningen in the Netherlands, the RHS was appointed the International Cultivar Registration Authority for *Rhododendron* and by 1958 the first International Rhododendron Register had been published. Rhododendron and azalea growers had to a large extent shaped the form and content of this Register. In the Rhododendron Society notes for 1926 H. D. McClaren and E. N. Wilding published a “list of Rhododendron hybrids that have flowered and have been named and of which the parentage can be traced back to the species on both sides.” This consisted of a list of more than 100 names, excluding Vireya and Azalea.

In 1929 the Rhododendron Association *Year Book* contained a “list of Hybrid Rhododendrons compiled from the lists of principal nursery gardeners.” The list had expanded



to 600 names. In 1945 the Rhododendron Association became the Rhododendron Group of the RHS, with its first *Year Book* being published in 1946. The new *Rhododendron Handbook* came out in 1947. This contained a systematic account of *Rhododendron* species and collectors' numbers.

Much of the early work on the Register was carried out by Dr. Harold Fletcher, while he was Director at Wisley, followed by David Pycraft in 1970, and then Dr. Alan Leslie in 1983. It was Alan who was instrumental in ensuring the second edition of the Register and Checklist was printed. It comprises more than 28,000 entries for cultivar and group epithets, as well as the names of nearly 2,000 individuals or firms who have played a role in raising, naming or registration of these plants, including all azaleas, azaleodendrons, and vireyas. He has received considerable help from around the world, including the United States, Australia, New Zealand, Belgium, Germany and Japan, as well as numerous colleagues in the United Kingdom.

Working hand in glove with the Registrar at Wisley is the Keeper of the Horticultural Herbarium, who holds in excess of 80,000 specimens and is dedicated to dealing with horticultural plants. Plant sources are from the RHS Gardens, RHS Plant Trials, Flower Shows, and from specialist National Collections under the National Council for the Conservation of Plants and Gardens (NCCPG) scheme. This was established "to conserve, document, promote and make available Britain and Ireland's rich biodiversity of garden plants for the benefit of everyone through horticulture, education, and science." New techniques are continuously developed, including the use of images, both digital and 35 mm., and the use of the RHS Colour Chart, and all improvements are added to the RHS Horticultural Database (BG Base™).

### Nomenclatural Standards

An important development has been the concept of nomenclatural standards for new cultivars and the creation of standard portfolios. This information will help solve problems for the taxonomists of the future, with specimens being used in morphological, molecular, and DNA investigations.

Today there are more than 500 standards of *Rhododendron* cultivars, which can be found on the RHS Web site [www.rhs.org.uk/research](http://www.rhs.org.uk/research). This will give details of whether a standard is an image or pressed specimen with its dates and cross-references wherever possible.

### RHS Colour Chart

The RHS is also responsible for the color chart. The first systematic color identification reference appeared in 1905 from the Société Française des Chrysanthemistes, but it wasn't until 1958 that the RHS published its own in strips fastened together with four fans (yellow to red; red-purple to blue; blue-green to yellow green; grey colored). The international significance led to attempts to harmonize the RHS Colour Chart with the Munsell and ISCC-NBS Color System.

In 1986 the RHS collaborated with the Flower Council of Holland on reprinting, as some of the pigments used earlier were no longer available. Since that time two further reprints have followed, also increasing the number to the 884. A quarter size chart has since been added.

### Promotion and Management of Trials

It is important to promote trials. Inevitably the success of these trials is also down to effective publicity. Trial plans are begun three years ahead of planting as described above. Round table discussions between RHS staff and Trials Committee members take place to cover all the planning issues as listed below:

- Length of trial, planting date, age/size of plants, objective, judging criteria, records, specialist on the genus
- Cultivation – planting distance, arrangement, staking, pruning, deadheading
- Soil conditions, mulching, watering, fertilizer, and shading
- Propagation
- Pests and diseases
- Botany

For the specialist, the RHS is publishing Plant Trials and Awards (Salad Potatoes, *Miscanthus*, Perennial Yellow Daisies, *Delphinium*, *Spiraea japonica* (with colored leaves), *Canna*, Hardy Lavenders, Shrubby *Potentilla*, Hardy *Geranium*, Silver Saxifrage, *Hyacinthaceae* (little blue bulbs). So far, 11 have been published and can be ordered through the leaflets sent to the ARS/ASA convention or through the main RHS Web site.

### Specialist Group

The Rhododendron, Camellia and Magnolia Group of the Royal Horticultural Society have their own Web site at [www.rhodogroup-rhs.org](http://www.rhodogroup-rhs.org). This says: "Three groups of plants, one group of enthusiasts worldwide. As a member you can enjoy garden visits, seed distribution, programme of meetings, shows, year book (annually), and bulletin (3 times a year)."

"This is open to members of the RHS in the UK for a subscription of £15.00 or worldwide (£20.00). The site is an ever-expanding resource concerning the classification, cultivation, and care of plants in these three genera for enthusiasts at all levels of expertise."

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