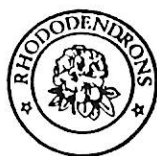


The Rhododendron, Camellia & Magnolia Group



BULLETIN No. 44 - August 1990

Forthcoming Events 1990

September 11 North-West England and North Wales
Branch Meeting (see text)
September 18-19 Great Autumn Show, Vincent Square
October 9-10 Flower Show with Ornamental
Plant Competition, Vincent Square

October 19-21 Autumn Week-end (see text)
October 30-31 Flower Show with Tree and Shrub Competition,
Vincent Square
November 16 South-West Branch Meeting (see text)
November 27-28 Flower Show with Ornamental Plant
Competition, Vincent Square

Rhododendron, Camellia and Magnolia Group

List of Officers, 1990

Chairman: B. Archibold, Starveacre, Dalwood, East Devon,
EX13 7HH. Tel: 040 488 221

Vice-Chairman: G. A. Hardy, Hillhurst Farm, Hythe, Kent, CT21
4HU. Tel: 0303 66516

✓ **Secretary:** (wef 1st Nov.) Mrs. J. Warren, 43 St. Michael's Terrace,
Stoke, Plymouth, PL1 4QG. Tel: 0752 562463

Treasurer: P. A. Reynolds, 3 Moorland View, Old Newton Road,
Heathfield, Newton Abbot, Devon, TQ12 6RT. Tel: 0626
834524

Membership Secretary: R. H. Redford, Fairbank, 39 Rectory Road,
Farnborough, Hants. GU14 7BT. Tel: 0252 523005

Tours Secretary: Mrs. V. M. Archibold, Starveacre, Dalwood, East
Devon, EX13 7HH. Tel: 040 488 221

Year Book Editor: The Lady Cynthia Postan, 84 Barton Road,
Cambridge, CB3 9LH. Tel: 0223 353314

Bulletin Editor: Geoff H. Taylor, Pant-yr-Holiad Garden,
Rhydlew, Llandysul, Dyfed, SA44 5ST. Tel: 023975 493

Recruiting Secretary: A. Stevenson, 24 Bolton Road, Grove Park,
London, W4 3TB. Tel: 01 994 05840

Seed Distribution Organiser: D. Clulow, Tilgates, Bletchingley,
Surrey, RH1 4QF.

Branch Organisers:

East Anglia: C. E. Grainger, The Gables, Finborough Road,
Stowmarket, Suffolk, IP14 1PY. Tel: 0449 615138

Ireland: Miss M. Forrest, Department of Horticulture, University
College, Belfield, Dublin 4.

North West and North Wales: J. K. Hulme, Liverpool Botanic
Gardens, Ness, Wirral, Cheshire, LG4 4AY.

South East: J. A. Fox, Holmwood House, Glenmore Road,
Crowborough, E. Sussex, TN6 1TN.

South West: Major R. A. W. Reynolds, Woodland Grove, Bovey
Tracey, Devon, TQ13 9LG. Tel: 0626 821 336

South West Wales: G. H. Taylor, Pant-yr-Holiad Garden,
Rhydlew, Llandysul, Dyfed, SA44 5ST. Tel: 023975 493

Wessex: The Lady Adam Gordon, Hethersett, Littleworth Cross,
Seale, Farnham, Surrey, GU10 1JL. Tel: 025 18 2054

Chairman's Notes

It is with sorrow that we say farewell to Betty French who is retiring as Hon. General Secretary at the October Executive Committee Meeting. Betty has coped nobly and cheerfully for many years and our grateful thanks go to her for all that she has done.

The new Hon. General Secretary is Mrs. Joey Warren whose address is shown in the List of Officers and we extend to her a very warm welcome.

It would be interesting to learn how members have fared with seed from the Group's seed exchange. Presumably there must be, by now, many who have a surplus of plants and, if so, perhaps they would care to write to the Hon. Bulletin Editor so that any unwanted surplus could be advertised in the Bulletin. This year, of course, David Clulow very kindly operated a plant exchange.

Members will have seen the notice advertising pocket microscopes. These have now been sold out but our grateful

thanks must go to Committee member Clive Collins who so kindly made them available.

B.A.

The possibility of a London Branch

In order that consideration may be given to the formation of a Branch centred on the metropolis, would members interested in helping to create such a venture kindly contact the Chairman, Bruce Archibold.

The Royal Horticultural Spring Show, April 24-25

With a total of six challenge cups now in the hands of members, the Group was well represented in the list of prize-winners at this show and congratulations are in order for Mrs. C. Petherick (camellias), the Lady Adam Gordon (*R. falconeri*), Mr. Edmund de Rothschild ('Galactic'), and a special recognition must be awarded to exhibits from The City of Swansea (selected and staged by our own Ivor Stokes), responsible for gaining the remaining three trophies.

A really wonderful effort, but there are still quite a number of poorly supported classes in the rhododendron competition, with prize cards waiting in the wings.

Group displays

During April and May, the Group had a display in the shop at Wisley to increase awareness of membership benefits. This display consisted of photographs, many of which were specially taken by Michelle Williams. Also, we had a display of photographs at the RHS Show at Vincent Square in April. This proved a busy enquiry point and in addition to the distribution of 150 membership forms, some 15 new members were recruited on the spot.

Alastair Stevenson, the Group's Recruiting Secretary, would be pleased to hear from any members who might wish to distribute Membership Forms or with suggestions of places where we might put on further displays.

A.S.

Surplus Year Books

John Sanders, Badger Cottage, 101 Guildford Road, Bagshot, Surrey, GU19 5NS has the following volumes for sale: 1983/84, 1984/85, 1985/86, 1986/87, all at £6.00 ea. incl. postage.

Use of the term 'Azalea'

The Director General of The Royal Horticultural Society has expressed a wish to hear the views of Group members on how the word 'azalea' should be used in *common practise*, particularly regarding rhododendron species. Members with definite opinions are asked to contact the Editor, who will collate findings for transmission to the Director General.

Editorial Note

It is hoped to publish further Branch reports in the December issue. Would all contributors please ensure that copy arrives on the Hon. Editor's desk by 1st November (Address page 1 this issue).

BRANCH NEWS

North-West England and North Wales Branch

The Branch held their first gardens visiting day on Saturday 21st April with a tour of the garden of one of our members, Dr. Ian Wilson at Menai Bridge. Situated in a mild district, we saw good specimens of *R. 'Fragrantissimum'* in open situations. In a cold greenhouse *R. lindleyi* was flowering to perfection and perfuming the surrounding air.

After lunch at Menai Bridge, the party continued to Bodnant, which had avoided the major impact of late frosts in April that had caused widespread damage to blossom and young foliage on many plants throughout the country.

The next meeting is on Saturday 11th September at 2pm at Ness, when rhododendron propagation will be discussed and demonstrated.

J. K. Hulme

The South West Branch

On Saturday 7 April, 52 members and their guests made the long journey to visit three of our most westerly gardens - Trewidden, Trengwainton and Trelean.

Unfortunately several nights of hard frosts preceded our visit and had destroyed much of the colour. Nevertheless we were warmly greeted at Trewidden by Mrs. Elizabeth Bolitho, and Michael Snellgrove, the Head Gardener, and given an extensive tour of the garden. Piles of logs lined the paths, and the main driveway, evidence of the great gales of October '89 and January '90 when severe storms swept through the west country. Most of the Rhododendrons and Camellias escaped damage however, and a huge *Magnolia campbellii* had somehow also escaped the frosts, and created a lovely scene with its masses of pink blooms against a clear blue sky. Our tour ended at the Nursery which was well stocked, particularly with Camellias. I noticed some fine plants of *C. 'Capt Rawes'* and *C. 'Julia Hamiter'* being eagerly purchased, along with other treasures. Afterwards we thanked Mrs Bolitho, and Michael Snellgrove for kindly conducting us around the garden and presented them with a fine plant of *R. 'Gill's Crimson'*. A good Cornish plant that they had not got in the garden.

At 2.00 p.m. Major Simon Bolitho M.C. and Peter Horder, the Head Gardener, welcomed us at Trengwainton, and divided into two parties, we set off on conducted tours.

There was much to see in this beautiful garden both within the walled compartments on the right of the drive, full of tender plants, and along the main drive itself. Here all the devastation of the storms had been cleared, and as we walked slowly up the drive we enjoyed the sight and sound of the stream garden, with its series of waterfalls and massed Candelabra primulas, a truly beautiful scene in the bright sunlight. At the head of the drive we passed around the house, to the west, where, on the top lawn, the evidence of the full fury of the storm was clear. The huge woodland shelter belt had been totally destroyed. We returned to the lower lawn in front of the house, from where there is a fine view of the bay and St. Michael's Mount. Here we thanked Major and Mrs Bolitho and Peter Horder and presented them with a plant of *R. magnificum*, to replace an earlier loss, we were then all invited to sign the visitors book, before Peter led us back to our cars.

At 3.30 p.m. we set off for Trelean where Sqn. Leader George Witherwick has made a lovely valley garden, over the past 10 years, after 30 years of gardening in Surrey. With all that experience George has created something quite exceptional, and it was sad that the frost has stolen the colour on the night before our visit. However, there was a great deal to see. Fine large leaved species thriving under a canopy of oaks, a wide variety of very carefully chosen hybrids, as well as some of George's own hybrids, which were looking very good. From an open viewing point we had a lovely view of the Helford river, and then returned along a narrow winding path past a collection of acers, conifers, and choice shrubs and trees that would have done justice to a botanical garden! Finally after, returning to the lawn outside his house, where we presented him with *R. 'Snow Queen'*, he generously invited us to join him for a glass of wine in his new conservatory. Here we not only enjoyed the wine, but also the fragrance of *R. 'Harry Tagg'* and saw the lovely flowers of *R. rhabdotum*. Both plants appeared, a week later, on George's stand at the Cornwall Garden Society Show at Lanhedrock.

Saturday 5 May was a gloriously sunny day and at 10.30 a.m. 44 members and guests assembled in the Car Park at Abbotsbury

in Dorset. Unfortunately we had learnt that John Kelly, the Curator, had recently resigned, so I led the party around with the aid of a garden plan. The garden is beautifully maintained, and looked at its best. A new plant sales area was well stocked with good reasonably priced plants.

At 2.00 p.m. we were warmly welcomed at Minterne by Lord and Lady Digby. After a short introductory talk, on the lawn, by Lord Digby, we set off on a tour of the garden.

Lord Digby had mentioned a 'Stump museum' in his talk, and indeed we were to see some enormous root balls, first a 200 year old Cedar, and then a huge Wellingtonia, that still blocked one of the paths. Despite the damage, the garden was enjoyed by everyone. The blues of the *R. augustinii*, the lovely yellows of the *R. xanthocodon* hybrids, raised at Minterne, and the fragrance and colour of the Loderis and Azaleas completed a beautiful scene, in the coolness of the woods, below the lakes and cascades. We scrambled through the branches of a fallen beech to see the clear pink flowers of the fragrant *R. 'St. Probus'*, which had been so much admired during the 1985 tour. Finally, we were all invited into the house for a welcome cup of tea in the lovely hall, where musical concerts are held for over 200 guests. Afterwards Lord Digby gave a most interesting talk about the history behind the paintings that surrounded us in the hall. We then thanked both Lord and Lady Digby for their kindness and hospitality and presented them with a plant of *R. 'Odee Wright'* (*R. 'Idealist'* x *R. 'Mrs Betty Robertson'*). Lady Digby then invited us all into their Dining Room to see the Tapestries, about which she gave a most interesting history, and finally she led us out through their spacious Drawing Room, with its beautiful Chandelier, paintings, and lovely views of the garden.

We returned to our cars feeling we had all enjoyed the most splendid day.

Forthcoming Event: Autumn meeting to be held at The Riverside Inn, Bovey Tracey on Friday 16th November. Plant Sale, Quiz, Buffet Supper and Talk by John Gallagher, 'The Wonderful World of Camellias'.

R. A. W. Reynolds

South West Wales Branch

Meeting at the Hall, Angle on 28th April, we enjoyed the hospitality of a fellow member. With such an early season, many of the old camellias retained only a few flowers, but hybrid rhododendrons were in bloom. Having three aspects seawards, this garden suffers from wind and it was pleasing to see few marks of the winter storms; presumably trees in this situation have matured with wind as a constant companion. Against the house, a fine *Magnolia grandiflora* thrives with a height of 21ft. (6.5m) and 43 inches (103cm) in girth, while in the walled garden a *Ginkgo biloba* measured 16ft. (5m) in girth at regrettably only 2ft. (60cm) due to the tree forking into three trunks. The overall height was estimated at 36ft. (12m), growth being obviously curtailed by wind, but this tree may still qualify for recording.

After lunching well at a local hostelry, we moved off through Pembroke town to 'Four Ashes' at Cosheston, where in addition to our usual presentation of a Group genus representative, we gave a plant of *Bomaria multiflora*, for which the gardener had been searching for some time, but with the help of members a specimen was located. Among the vast array of plants in this garden, *Clanthus puniceus* was very fine, while the greenhouse subjects evoked great interest. The hybrids of *R. cinnabarinum* were putting up a good show with no obvious signs of powdery mildew and one ponders on the role of the oil refinery, some distance away but on the prevailing wind - waste gas is burnt-off at that site. We were also privileged to see the gardener's own garden where different levels and contrasting foliage were used to great effect. Our visit concluded with tea and a lively discussion; not entirely confined to Group genera and I seem to remember etched glass being examined, but the scene was one from the garden!

On the 14th May, we visited Post House Gardens, home of another member and a very active participant in Branch affairs. Here, the rhododendrons were perhaps at their best with *R. cinnabarinum* var. *roylei* being particularly admired. After a tour around the garden, we repaired to the tea room, where a Branch AGM was completed in just 6 minutes! The secret to brevity was the excellent tea to follow and a 'Bring and Buy' sale, which was well patronised, with half of takings going to Branch funds. With a good turn-out, it was unusual to hear horticultural problems

The Rhododendron, Camellia & Magnolia Group

Annual General Meeting, 24th April, 1990

CHAIRMAN'S REPORT 1989

Possibly the main item of news to take place during the year has been the alteration in the Group's name, agreed by Council, to include the word Magnolia thus making us the Rhododendron, Camellia and Magnolia Group. Although our interest is thus expressed the judging of the genus remains with Floral B Committee.

It is very pleasing to report that the membership continues to expand both at home and abroad and, thanks to the good housekeeping of our Treasurer there has been no necessity to increase the subscription.

Two new Branches have been formed, one in South West Wales organised by Geoff Taylor, and one in North West England organised by Ken Hulme covering that area and North Wales.

Sadly two resignations from the Executive Committee have to be reported - firstly Walter Magor, who feels that he should now step down, which decision has most reluctantly been accepted, more especially in view of the fact that he has been a member of the Executive Committee since the inception of the Group and was, in fact, its first Chairman. His great wisdom, experience and, above all kindness will be sorely missed.

Secondly, John Gallagher has felt that pressure of work and other matters have meant that he will not be able to stand for re-election and our thanks go out to him for his valued help and advice in the past.

Patrick Hawarth, having coped nobly with the Bulletin, felt that it was time for a change and we are all very grateful for the hard work that he put in, the results of which spoke for themselves. His place has been taken by Geoff. Taylor who, as mentioned previously, is also organiser of the South West Wales Branch.

Ray Redford found, due to the expansion of the membership and increasing pressures at work that he could no longer act as both Treasurer and Membership Secretary and we are indeed grateful that he has handed over the Group's financial affairs in such a healthy state to his successor Peter Reynolds.

A new post of Recruitment Officer has been filled with great success by Alistair Stevenson.

Finally on this subject, Betty French, our General Secretary has decided that she must now step down and our very sincere thanks go to her for all the hard work that she has so willingly carried out on behalf of the Group.

We have one new member of the Executive Committee namely Clive Collins whose presence is most welcome.

Members will hardly have missed being impressed by the excellent standard of the Yearbook under the Editorship of Lady Cynthia Postan, and the issues of the Bulletin produced by the new Editor bode well for the future.

The Branches continue to flourish and, with the two new additions, will ensure an even wider coverage of excellent lectures, garden visits and social events that have been a feature up to now.

The seed exchange organised by David Clulow proved to be an outstanding success and, in fact, supplies of seed proved to be too little to meet demand.

The annual tour in Cornwall was once again, thanks to Valerie Archibold our organiser, a great success and the weather was kind. The autumn get-together was held at the Manor House Hotel at Moreton-in-Marsh and was greatly enjoyed by those attending. A one day visit to two gardens near Devizes proved popular.

In view of the alterations in the make-up of the Executive Committee of the Group it becomes necessary to amend the Constitution and it had been hoped that suitable amendments could have been put to this meeting but, as discussions are to take place with a sub-committee of the RHS which may well affect any amendments the matter will have to be put back.

As to the future, a plant exchange has been organised by David Clulow at which members can exchange all the surplus plants they have grown from seed obtained from the seed exchange! This year, as an experiment, the Tours Organiser is running a mini tour in South West Wales followed by a full tour in the Lake District and S.W.Scotland. Additionally a one day visit has been arranged to the Valley Gardens at Windsor.

Finally I must express my very warm personal thanks to all members of the Executive Committee for all their support and help which has been invaluable to me.

B.A.

The Royal Horticultural Society
The Rhododendron, Camellia & Magnolia Group
The year 1st November 1988 to 31st October 1989

EXPENDITURE			INCOME		
	88/89	87/88		88/89	87/88
YEAR BOOKS					
printing		(1706.25)	SUBSCRIPTIONS	4074.00	(3460.43)
dispatch	303.80	(348.94)	Adv. Subs. Prev. Yr.	283.00	(863.80)
back YB disp.	31.14				
BULLETIN				4357.00	(4324.23)
printing	709.32	(749.77)			
dispatch	441.96	(307.13)	BANK INTEREST	237.47	(68.60)
<i>Editor's</i> postage	2.52	(12.74)			
stationery	24.36	(44.87)	DONATIONS	75.50	(87.00)
telephone	1.80	(4.71)			
TREAS. & MEMBERSHIP			SALE BACK YBs	238.15	(46.35)
Comp. stationery	55.08	(37.89)			
other	20.13	(2.95)	REFUNDS	15.00	(1289.55)
<i>Treas.</i> postage	160.27	(39.85)			
stationery	42.85	(1.85)	SEED SALES	964.95	
telephone	29.30	(8.00)			
other	27.20	(7.89)	J. FORDHAM YBs	40.00	
CHAIRMAN			SICH Rh BOOK	1107.00	
postage	43.74	(40.06)	CFWD BULL ED	22.30	
stationery	18.72	(7.45)			
telephone	7.60	(4.30)			
other	10.20				
PRINTING GENERAL	296.47	(172.09)			
MINUTES SEC.					
postage		(13.38)			
stationery		(2.29)			
telephone		(2.07)			
printing minutes		(26.23)			
GENERAL SEC.					
postage		(11.50)			
YEAR BOOK EDITOR					
postage	52.00	(103.61)			
stationery	21.00	(3.91)			
telephone	18.00	(30.00)			
other	3.95	(15.88)			
<i>photo competition</i>	10.00	(10.00)			
TOUR SEC.	26.23				
DISPLAY UNIT					
transport	41.23	(44.20)			
other		(46.98)			
BANK CHARGES	44.16				
REFUNDS	15.00	(1289.55)			
SICH Rh BOOK	1209.29				
DEPRECIATION	142.30	(28.36)			
SURPLUS					
profit	1297.75	(691.03)			
set aside for YBk	1950.00				
AUTUMN WEEKEND '88	2312.45	(2436.67)	AUTUMN WEEKEND '88	7057.37	(5815.73)
SPRING TOUR '88	11960.63	(12422.23)	SPRING TOUR '88	2312.45	(2436.67)
				11960.63	(12422.23)
	21330.45	(20674.63)			
				21330.45	(20674.63)

being thrashed out in the mediums of both Welsh and English!

With the benefit of a specially invited guest acting as our guide, those who survived the delays from police road blocks on most routes out of Dyfed, met at Hergest Croft on June 2nd when in addition to the azaleas, many of the rhododendrons were still in flower with bushes of *R. falconeri* presenting a fine display. Of particular note, *Davidia involucrata* was at its best, while we admired the various birches and maples, both of which form National Collections at this venue.

With the 16th June being the last sunny day of spring, we met at Carrog, just south of Aberystwyth, where we were entertained to coffee before exploring this treasure store of plants. Our attention was caught by a good late flowering red hybrid rhododendron almost certainly containing *R. elliotii* blood and an unregistered hybrid showing evidence of *R. cinnabarinum* breeding. Following removal of *R. ponticum* by mechanical means, a recently replanted area included a really good clump of *R. vialii*, while against the wall, *Abutilon megapotamicum* and *Solanum crispum* were in full flower. With many of the party protesting that at least a whole day was required to appreciate this fascinating garden, we drove to Aberystwyth, where most members availed themselves of facilities offered by the Students' Union of The University College of Wales, adjacent to our next venue, Botany Garden, which surrounds the Principal's residence. Following a satisfying repast and cooling drinks, members were with some difficulty aroused from comfortable chairs!

Met by the curator, we toured the garden, which contains many unusual plants, some being quite tender, including even a spiny cactus wintering outside in these maritime conditions. Some hybrid rhododendrons were still in flower, while *Magnolia tripetala* and *Magnolia wilsonii* were very attractive. Leaving the garden, we visited the university campus, where plantings initiated by the late curator are now mature and it was very pleasant to see so many lesser known species and varieties planted in such profusion. Culminating with a visit to the glasshouses, where orchids and many species of tropical plants are cultivated under stove conditions, this day will be one to remember and incidentally resulted in a number of enquiries from potential new members.

G.H.T.

The indumentum on rhododendron leaves

As a flowering shrub the Rhododendron is without equal in its range of colour; its leaves range in size from 3mm to 1m in length and their shape and texture is equally varied. New vegetative growth is often as spectacular as the flowers, especially in the case of some of the elepidote species. No other shrub can be moved so easily and almost at any time of the season - you can

hardly kill it with too much water, or even by setting fire to it. Frank Kingdon Ward, the great collector, records seeing a whole area of rhododendrons burnt to the ground on a hillside in western China which had all regenerated when he returned some years later. Drought, however, can be fatal to them.

A feature peculiar to the elepidote species of rhododendron (subgenus *Hymenanthus*) is the indumentum on the underside of the leaf, varying from the plastered form typical of *R. insigne* to the densely woolly form characteristic of such species as *Rr. bureavii*, *haematodes* and *yakushimanum*. Some species also have a tomentum on the upper surface of the young leaves, which may be persistent as in *R. eximium*, a subspecies of *R. falconeri*. The Falconera subsection are mostly large-leaved and are native to north-east India, Nepal and western China, an area of high rainfall.

This moisture factor helps to explain the function of the indumentum and tomentum, since this superficial skin or coating forms a seal or blanket against excessive loss of moisture through the leaf pores by the physical process of transpiration mostly caused by the heat of the sun's rays. This is demonstrated by the fact that the tomentum is only present on the upper surface of the new growth for a relatively short period of time while the sun is at its hottest and the young leaves are particularly vulnerable, after which it disappears. The indumentum on the under side of the leaf, however, persists for almost the entire life of the leaf. Its primary function is to reduce the transpiration due not so much to the sun's rays as to the dry winter atmosphere of excessive cold and frost in these high mountain regions. Once these leaves lose their moisture content, they dry and crack and wither and fall off the plant; being evergreen, the leaves are an important means of absorbing moisture from the atmosphere, so a plant denuded of them is likely to die.

Species with a thick or woolly indumentum on the underside of their leaves include *Rr. campanulatum*, *fulvum*, *mallotum* and *watsonii*; those with a plastered indumentum include *Rr. arboreum*, *argyrophyllum* as well as *insigne*. Other species which have tomentum on the upper surface of their leaves include *Rr. bureavii*, *pachysanthum* and *yakushimanum*. The two latter species grow on islands subject to high winds and rainfall and are exposed to full sunshine. *R. bureavii* comes from the same sort of environment as *R. eximium*.

What is the purpose, one wonders, of the different colours and forms of indumentum, which in some cases is no more than a thin powder. In some species the colour changes as the leaf ages; *R. yakushimanum*, for instance, has the colour and feel of a white kid glove to start with and later changes to a rusty brown while the texture becomes less silky. There must also be some connection between indumentum and the hairs which are so much in evidence in some subsections. Again, what is the reason

Autumn Week-End, October 19th-21st, 1990

The week-end this year will be held once more at the Roebuck Hotel, Wych Cross, Forest Row, Sussex. We visited this area last in 1987 one week after the great hurricane, and this will be an opportunity to re-visit Sheffield Park and see the progress which has been made since the awful devastation we all saw there.

We hope also to visit Wakehurst Park, which has changed considerably following the damage by the hurricane, and the new design in parts of the garden is very interesting.

If you wish to join the week-end please complete the form below with £20.00 deposit per head and I will send you the final details. The cost of the hotel accommodation will be less than that of the Manor House Hotel in Moreton-in-Marsh which we visited last year, and there is no single supplement at the Roebuck.

V.A.

To: Mrs V Archibold, Starveacre, Dalwood, Nr Axminster, Devon EX13 7HH. Tel: (040488) 221
Please send me details of the Autumn Week-End; I enclose £20.00 and a s.a.e.

Name Accompanied by

Address

Tel:

for the thick floccose covering sometimes found on the stems of the new growth, for instance in *Rr. bureavii* and *yakushmanum*? Is the presence of hairs or that floccose covering perhaps to impede creeping insects intent on getting to the new growth buds in order to lay their eggs? Mother Nature seldom wastes her efforts. Why do some rhododendrons have bracts which are sticky and thus ensnare small flies, as in the case of *R. discolor* and the hybrid 'Polar Bear' and *R. rex*?

Another peculiarity is the ability of some rhododendrons, especially those with long and narrow leaves, to curl up tight like a cigar in extreme cold wind or frost, while the leaves of others droop by their petioles. These changes in leaf form serve the same purpose as does the indumentum in reducing the surface area subject to moisture loss. Those plants which have no indumentum conserve moisture in other ways. Not only do rhododendrons, as evergreens, need rainfall and humidity in good measure for good health, but they need to conserve the moisture within their tissues in dry and windy conditions. During prolonged easterly winds or hard frosts in winter many rhododendrons present a somewhat dejected look with drooping foliage or leaves curled up tight. They will behave in the same way in times of summer drought, doing their best to conserve what moisture they can be reducing the surface area exposed.

This is particularly well exemplified in the case of *R. yakushmanum*, as recorded in the article in *Rhododendrons, 1988-9, with Magnolias and Camellias*, at p.27. Three different forms of this species grow on this island south of the Japanese archipelago. As might be expected, the small-leaved form grows at the summit of the island. At the bottom, in abundant moisture, a large-leaved form is to be found while the FCC form, with its long thin leaves which curl in from the sides into a tight cigar shape in cold and dry conditions, occupies the middle ground. This is probably because the wind velocity is greatest at this height, and this is also my experience on the Lizard peninsula in the Trelean valley, where the rhododendrons that get the full blast of the cold east winds curl their leaves most tightly.

George Witherwick

Some facets of powdery mildew

As a result of reduced emissions from industry, atmospheric sulphur has declined by about 40% since 1970 and crops are now suffering loss of yield due to lack of sulphur. Released by The Ministry of Agriculture earlier this year, such information may or may not be relevant to the increase of powdery mildew on rhododendrons.

A member of the class *Ascomycetes*, the causative organism of powdery mildew belongs to a group of fungi, some of which possess biologic qualities, permitting them to live on one species of plant, while attacking another. Such a quality suggests genetic instability with the possibility of mutation perhaps influenced

by environmental change. Many species of powdery mildew have branched mycelium with hyphae continually penetrating the leaf cuticle to obtain nourishment. In mild areas experiencing little in the way of hard and sustained frosts, evergreen subjects are prone to almost continual attack, these fungi requiring little warmth to maintain active life. This may explain why the worst outbreaks are to be found on the west coast of the British Isles, in parallel with reports from the western seaboard of the USA. With the host plant dormant and the fungus active, it is unlikely that any systemic preparation will be very effective and thus treatment must be aimed directly at the organism, but with almost continual spore production, any substance that 'kills' may well be toxic to the rhododendron. Using modern fungicides, we are therefore left with only control measures.

However, it is suggested that the near-forgotten remedy of sulphur be re-examined and while little modern research has occurred on the efficacy of this element, it is known that the sulphonamides despatch living micro-organisms by the sulphur-containing compounds interfering directly with the reproductive mechanism.

While we are unlikely to ever have the facility of treating rhododendrons with sulphonamides, colloidal sulphur is now available in a spray pack and the manufacturers are working to produce a concentrate suitable for dilution. A further sulphur-based fungicide is currently the subject of enquiries and might be available for amateur use in the future. The use of flowers of sulphur as a fungicide may be restricted by modern legislation, but it was used extensively in conjunction with a 'Sulphurator' (ref. RHS Dictionary of Gardening) many years ago for the control of powdery mildew on fruit bushes and other subjects. However, flowers of sulphur may be used as a fertiliser and there is apparently no restriction on the height of application! A dressing around any rhododendron will contribute towards a local increase in atmospheric sulphur, protecting young growth and incidentally helping to maintain soil acidity.

Finally, it often seems to be forgotten that like most plants, rhododendrons require food and great advantage may occur from the use of granulated 20-10-10 NPK fertiliser plus 5% of magnesium sulphate (Epsom Salts) applied as a top-dressing in spring. No fussy rates of application - small handful for a well-grown dwarf and pro-rata. Health and good constitution in any plant offer the best resistance to disease.

Fungicides available for general use

'Benlate' (Benomyl) - Not recommended, but may keep uninfected plants clear.

'Nimrod T' (Eupirimate) - Recommended for general control.

'Tumbleblite' (Propiconazole) - More effective than 'Nimrod T' but may damage young growth - use with great care!

'Safer's Fungicide' (Colloidal sulphur and fatty acids) - Trials indicate equality with other fungicides and may be more residual.

G.H.T.