



MARCH 1994

The Yak

A CHAPTER OF THE AMERICAN RHODODENDRON SOCIETY

FRASER SOUTH RHODODENDRON SOCIETY
6835 232ND STREET
LANGLEY, BRITISH COLUMBIA
V3A 6H4, CANADA

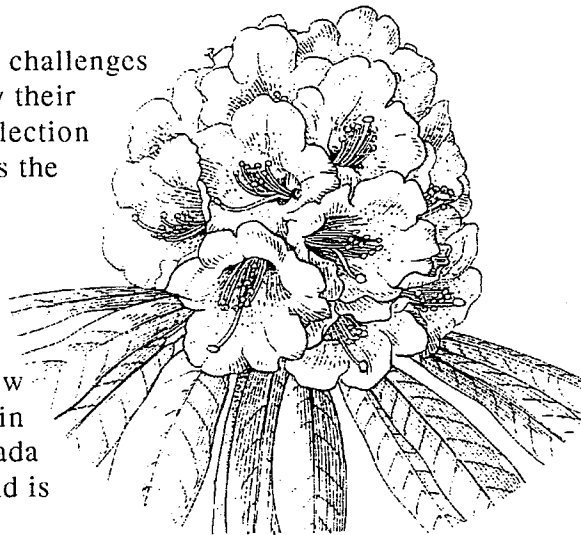
**Wednesday, March 16, 1994 Meeting
8:00 p.m.**

St. Andrews Anglican Hall
20955 Old Yale Road, Langley

GUEST SPEAKER: ALLEYNE COOK
"COMPANION PLANTS FOR LARGE RHODODENDRONS"

Alleyne Cook will give a presentation on the challenges of growing large rhododendrons (particularly their tendency to keep growing larger!) and the selection of suitable companion plants. He will discuss the use of large companions such as magnolias scaling down to primulas and herbaceous plants. Slides of gardens in England and Ireland will be included in the program.

Alleyne received horticultural training in New Zealand and England and worked for a time in Constance Spry's garden. On coming to Canada he worked for the Vancouver Parks Board and is now retired and living in North Vancouver.



R. arboreum

Thanks to Vern Finley and Charlotte Chase

At our February meeting Vern Finley brought a large selection of plants with interesting foliage, flowers and fragrance. Vern shared some rare specimens with our members which she had obtained from her garden as well as Dartshill.

And then Charlotte opened the bidding for our Annual Auction. When Charlotte wasn't too pleased with the bid—she bought the item!

Thanks to everyone who attended for your support.❁

New Members

A warm welcome to Marylyne and Ken House of Kamloops and Kathy and Greg Schuss of Matsqui.❁

Library News

Our library has a book on Magnolias which might be of interest to members.❁

Cameras Ready...

Mike Trembath has assembled a photo album of rhododendrons for display at our plant sales. We would like to add to the album on an ongoing basis and members are invited to donate favourite photos of their rhododendrons—shrub and flower please—be sure to include the name of the rhodo. Photos should be given to Diane Scott.❁

My Project

*by Harry Wright
President of*

North Island Rhododendron Society

We all seem to have projects every so often, thank goodness that they vary in size. At least mine do, I don't have any trouble doing my little projects but the larger ones seem to give me a little trouble in getting started, but once started, consider it done.

Over a year ago I suggested to all the Rhododendron Societies in District 1 that I would like to see a list of all the Rhodo hybrids and species grown successfully in our area. As of this date I have received approximately 30 submissions and I know that many of you already have started your list and for one reason or another it has dropped down on your priority list. At this time I would like to ask each of you to put this back on your project list for the spring and summer of 1994.

I will be receiving submissions until September 1994 and at this time will start compiling the information received. This is to be my project for 1995 as I hope to have it completed for the *Western Regional Conference Parksville/Qualicum September 1995*.

Please help me with "My Project".

Send your lists to:

Harry Wright
769 Chaster Road
Courtenay, B.C.
V9N 5P2❁

CALENDAR OF EVENTS

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SATURDAY, APRIL 2, 1-4 P.M.
AFRICAN VIOLET ANNUAL SHOW AND PLANT SALE
 VanDusen Gardens, Vancouver

SATURDAY, APRIL 9
EARLY SHOW
VANCOUVER RHODODENDRON SOCIETY
 VanDusen Gardens, Vancouver

SUNDAY, APRIL 10, 1-4 P.M.
(date changed from April 3)
FRASER SOUTH SPRING PLANT SALE
 Clay's Nursery
 3666 - 224th Street, Langley

WEDNESDAY, APRIL 20
CHAPTER MEETING
 Guest Speaker: Lynn Watts of The Greenery Bellevue will give a presentation and have plants for sale

SATURDAY, APRIL 30
FRASER SOUTH'S WILLOWBROOK TRUSS SHOW AND PLANT SALE
 Willowbrook Mall, Langley

TOURS

1. DAVID C. LAM ASIAN GARDENS
SUNDAY, APRIL 17, 1:00 P.M.

A guided tour for Fraser South members with Mike Trembath and Don Martyn sharing their knowledge of rhododendron species. *meet at the Asian Gardens 9206 - house*

206-435-9232

2. HAMMOND'S ACRES OF RHODODENDRONS & BLOEDEL RESERVE, BAINBRIDGE ISLAND, WASHINGTON
SATURDAY, APRIL 23 - ALL DAY

Very few tours are allowed to the woodland gardens of the Bloedel Reserve of over 100 acres. Fraser South has been fortunate to obtain a reservation for a guided tour. On the way to Bainbridge Island we will stop at Dave Hammond's nursery and display garden near Arlington. Travel will be by car pool. Please contact David Sellars at 535-0763 if you need a ride or can provide space in your car. Arrangements will be finalised at the April Chapter meeting.

3. MIKE BALE'S AND SILVER CREEK
4. FRASER SOUTH MEMBERS' GARDENS

A new tour concept for Fraser South. Every Thursday evening from April 21 to May 26, 7:00 p.m. to dusk, one of our members' gardens will be open for drop-in visitors. Our gardens vary from some only recently started to collections of established plants. The objective will be to provide members with the opportunity to discuss successes and future plans, and to exchange information and ideas. Anyone interested in welcoming visitors on a Thursday evening please contact David Sellars at 535-0763.

5. SKAGIT VALLEY - R. MACROPHYLLUM

A tour to the Skagit Valley to view one of our native species in its natural habitat will be organized in June.

Ent. Asian Gardens 1:00
BC on 5/19/94

SPECTACULAR SPECIES

Calophytum means 'beautiful plant' and it could be argued that, for both flower and foliage, *R. calophytum* is one of the finest rhododendrons. I particularly like *calophytum* because it exhibits all the classic attributes of the genus rhododendron. Whether you look at it from afar or up close it is unquestionably a rhododendron! The dense foliage, sturdy branches and huge buds and flowers complement each other to provide a satisfactory overall picture.

There is a remarkable grove of *R. calophytum* just north of the waterfall in the Himalayan Garden at VanDusen. They are planted among larch trees which always seems to me particularly clever as the larches allow the sun to shine in during early March when the plants begin to flower and provide shade for these large-leaved plants in the heat of summer. Surprisingly, the plant is also heat tolerant and a number of large specimens can be seen grown in the open near the entrance to the UBC Asian Garden. According to Nick Weesjes he grew these plants from seed.

R. calophytum is one of the hardiest large species and according to Cox it is an easy, long-lived plant. It was discovered by Abbé David and collected by

Wilson in 1904. It grows in Sichuan and north Yunnan in China and is the dominant species in the Mt. Omei region between elevation of 1800 m and 4000 m growing in woods, thickets and bamboo.

Naturally, a fine species such as *R. calophytum* has been used for hybridizing. At Exbury, Lionel de Rothschild crossed *calophytum* with 'Loderi' and produced the early-flowering 'Avalanche'. Dave Dougan writes about this plant in 'Rhododendrons on a Western Shore' and described it as "one of our most beautiful rhodos". 'Avalanche' has been on our list for a couple of years but we still have not found a supplier. It is reported to be hard to root and because it is a large plant there may be less interest these days.



R. calophytum

Another fine cross is *calophytum* crossed with *praeevernum* to produce 'Babylon'. Harold Greer describes the

flowers as "huge and satiny-white flowering at a time when spring is just beginning to take off its winter coat". The habit and foliage are also outstanding. It is curious, therefore, that Cox says, "it is difficult to see the aim of making a cross between two such similar and already fine species." We have managed to obtain 'Babylon' and it certainly grows like *calophytum* and if it flowers as a younger plant, so much the better.

David Sellars

IRON CHLOROSIS, OR WHY RHODODENDRONS NEED ACID SOIL

by Norma Senn

Like most members of the family, Ericaceae, Rhododendrons require soils that are acid or have a low pH. One of the reasons we do so well with Rhododendrons in our local gardens is that most of our soils are naturally acidic. But why are acid soils, or soils with low pH, so important in the growth of Rhododendrons? And, what can you do if your soil pH is too high?

The term pH is a scale used to express the acidity or alkalinity of a substance. The pH scale goes from 1 to 14 and the centre point of the scale is 7, which is neutral. As the numbers increase from 7 to 14, a substance becomes more alkaline. As the numbers decrease from 7, a substance is more acidic and the smaller the number, the stronger the acid. For Rhododendrons, we like to see soil pHs in the acid range, from about 5.0 to no more than 6.

The acidity of a soil affects the availability of mineral elements required by plants for growth. While all required mineral elements are affected to a greater or lesser extent by pH, of particular concern to us is iron. In neutral and high pH soils (7 or greater), iron becomes chemically tied up with the soil carbonates (including calcium carbonate), and many plants, Rhododendrons included, simply cannot absorb the "bound" iron. So, while the soil may be well-supplied, the iron is converted to unavailable forms which Rhododendrons cannot absorb. The result is iron deficiency and the condition we call lime-induced iron chlorosis.

Symptoms of iron chlorosis typically show up on the newest leaves. The veins on the young leaves remain dark green, but the interveinal areas turn light green to yellow. If the condition is allowed to continue, leaves may actually become white in colour. The growing point is also affected, and in time, plant death can occur. If you have plants with iron chlorosis, you can suspect the soil pH is too high and there can be several reasons why this might happen.

First of all, you may have soil with a naturally high pH. While this is a bit unusual here at the Coast, it can happen. Secondly, the soil may have been limed with materials like calcium carbonate or dolomite in

an effort to raise pH for other types of crops. Soils that are properly limed may have pHs of 6.0 and up, and the pH may remain "high" for several years.

Another reason why the soil pH can rise is from adding manures. Manures are good sources of organic matter for garden soils, but they have a high pH and their use can raise soil pH. If using manures, be cautious in using too much around Rhododendrons.

Sometimes we see localized iron chlorosis in Rhododendrons planted next to stucco buildings. There can be enough lime from the stucco leaching into the soil immediately adjacent to the building to cause the soil pH to rise.

The only sure way to determine the pH of a soil is to do a pH test and there are a couple of ways to do this. Litmus paper, purchased from a drug store, can be used to get a reasonably accurate pH reading. Dissolve about one cup of soil in two cups of distilled water, stir and let the solution sit for a couple of hours. Dip the litmus paper in the solution and determine the pH by comparing the colour of the litmus paper with the colour key on the package.

Many of the local garden centers will do free pH testing as part of their spring promotional sales. Again, a sample of soil is dissolved in distilled water and the pH is determined by use of a pH meter. Of course, if you have a complete soil test done, the soil testing lab will tell you the pH of your sample.

What can you do to try and lower pH if you find you have a high pH that's causing an iron chlorosis problem? There are a couple of methods to try. First, stop liming or adding manure.

Second, the choice of fertilizer you use can influence soil pH. Most fertilizers for Rhododendrons use ammonium sulphate as the major source of nitrogen. The ammonium supplies the needed nitrogen for the plants and the sulphate can react with the soil solution to form very weak sulphuric acid which will slowly acidify the soil. This is a slow process requiring several years to take effect.

Good sphagnum peat moss is a naturally acidic material, and while peat moss breaks down in the soil rapidly, it can temporarily ameliorate soil pH, and cause the soil to gradually become acid.

If you are really desperate, elemental sulphur can be used to lower soil pH in small areas, although this is a fairly expensive option. Work the sulphur into the soil to a six-inch depth at an approximate rate of one to three pounds of elemental sulphur per 100 square feet. This rate will lower the pH one number, for example from 7 to 6. Use the higher rate in heavy soils, the lower rate in sandy soils.

You may have read about some of the special iron fertilizer solutions which can be sprayed on the leaves to provide available iron to iron deficient leaves. However, many Rhododendrons have smooth, hard leaves, and it is difficult to get a spray solution to stick on the leaf surface long enough to allow absorption of the fertilizer. Unfortunately, foliar feeding of Rhododendrons really is not a viable solution for most of us.

Another specialty type of iron fertilizer is iron sulphate with a chelate. The chelate is a special chemical molecule which holds the iron in a form plants like Rhododendrons can absorb. Chelated iron is often used as a foliar feed for other species, but again, with Rhododendrons, it doesn't stick on the leaves long enough to be effective. Chelated iron sulphate can be worked into the soil; however, it is an expensive product, and is probably best used for just a few plants.

To my great surprise, I found my own garden soil has a fairly high pH, ranging from 6.2 to 6.5. It used to be a pasture soil, and I suspect was heavily limed in the past. In addition, it is a fairly heavy clay soil, which tends to have a naturally higher pH than lighter soils in the area. Consequently, I see iron chlorosis on a regular basis. It's interesting to see the variation in tolerance to iron chlorosis among my plants: the red flowered hybrids seem to be the most tolerant, while the yellow flowered hybrids are least able to tolerate the too high pH. I find that the most seriously affected species is *R. campylogynum*, which of course, is one of my favourite plants.

I'm gradually trying to lower the overall pH in my Rhododendron beds by using ammonium sulphate in the spring and early summer. For mulch, I've begun using bark mulch which may help lower the pH over time. I've also built some raised beds where I can concoct the soil type and pH I want. With raised beds, I am not only able to overcome some of the

drainage problems I have due to the heavy clay, but also. I was able to select a topsoil with a lower pH than the existing soil in the rest of my garden. By following the basic rules outlined above, I hope to slowly eliminate iron chlorosis in my own garden.✿

rootstalk

by *Indumentum*

I spent a week in Prince George in mid-January and I dutifully phoned home every night to check on the rhododendrons. Everything was okay until the Tuesday night when the sad tale unfolded. The Chair of the Landscape Committee drove up the icy driveway in the early morning, spun wheels on both axles of her all-wheel-drive vehicle near the top, hit the anti-lock brakes and slid backwards down the entire slope coming to rest in a prize rhododendron bed. The car was unscathed but a branch of *R. 'Snowstorm'* had broken while valiantly arresting the slide of the vehicle.

'Snowstorm' is a rather lovely yak cross by Jack Lofthouse (*R. yakushmanum* x 'Cary Ann'). The flower is somewhat undistinguished but the growth habit is elegant with horizontal branching and pretty leaves.

On my return at the end of the week I picked up the forlorn, muddy, broken branch and thought it might look nice on display in the house for a while. The Chair of the Landscape Committee found a small pot, dropped in a flower arranger's 'frog' and impaled the branch on the spikes in a couple of inches of water. The 'arrangement' had a somewhat Japanese flavour and we enjoyed its austere appeal for several weeks. Then, to our delight, the five buds began to swell a month later and we now have our first bloom in early March, two months ahead of schedule.

So next time the roads are icy or the winds are blowing branches off the alders, I'll know that I'll be able to get one more flowering season from those poor broken rhodos.