



VANCOUVER
Rhododendron
SOCIETY

WWW.RHODO.CITYMAX.COM

END OF SEASON - NO GENERAL MEETING

ANNUAL POTLUCK DINNER - SUNDAY JUNE 8, 2008
4:00 P.M. AT THE HOME OF JOE AND JOANNE RONSLEY.

SEE PAGE 7 FOR THE RONSLEY'S CONTACT INFORMATION
TO OBTAIN DIRECTIONS TO THEIR HOME.

President's Message By Joanne Ronsley

The VRS activity year is inexorably drawing to a close—a sad time in some ways, but I think we all need a couple months to recharge. And a quiet, lazy summer, or one of distant adventures, is always appealing. But we do not close with a whimper! Our potluck supper was to be held at the home of **Richard and Heather Mossakowski**. But due to Richard's hospital stay, the venue has been changed to the home of Joe and Joanne Ronsley. The date is the same -Sunday, June 8th, at 4 o'clock. Everyone always has a good time at these events, which have a long tradition dating back all the way to the last century. If you have not signed up to bring a specific item for the menu, please contact either Vern Finley or me. But in any case, don't miss the event.

Our Show and Sale appears to have been quite successful, but I'm afraid I don't yet have the final figures. They will be available by September. And speaking of September, next year's speakers' programme is one we can all look forward to, beginning with **Garratt Richardson** from Seattle, who has been participating in Asian plant expedition for many years, initially while he was a practicing physician, and since his recent retirement. All members that know Garratt are looking forward to his visit.

Since it's the end of our activity year I also want to thank our hard-working Executive, and everyone else that has contributed to make the Vancouver chapter one of the most lively and successful in the ARS. Our Vice President **Sean Rafferty** seems to be ready and willing to undertake any task, and to deal with it superbly. Our new Treasure, **Dana Cromie**, and our new Secretary, **Jasbir Gill**, have both plunged into their jobs with enthusiasm and extreme competence. Membership Chair **Philip MacDougall**, who leads an incredibly busy and varied life has nevertheless been attending to the life blood of our organization, membership. I don't have to tell anyone what a wonderful job **Todd Major** has been doing on the Indumentum; everyone can see for himself, or herself, this beautiful publication. And our members at large—**Don Haslam, Tony Clayton, and Norah Hall**—have contributed both their hard work and their wisdom to our organization in an extraordinary degree. And I must credit **Joe Ronsley** for organizing our outstanding Speakers' Program which is the envy of ARS Chapters from coast to coast.

Continued See "Not on the Executive" on Page 2

Not on the Executive, but very apparent in their service to the VSO is **Bill Spohn**, our webmaster without peer. Everybody loves **Douglas Justice** and his monthly bouquet, and **Gerry Gibbens** too when Douglas is away in some exotic place. **Jacquie Clayton** and **Heidi Schneider** have been wonderful at the refreshment table, as we all know. **Charlie Sale** and **Jim Hall** have conducted our raffles reducing the burden of our rent of the Floral Hall to relative insignificance. **Vern Finley** is, as she has been for so many years, again coordinating our June potluck supper, and has been her usual stalwart self at the show and sale.

Thank you to our growers, who provide the fabulous abundance of rhododendrons for our annual Show and Sale, we could not do it without their enthusiasm and energy. To our knowledgeable presenters of all kinds, and to everyone else who ask good questions of our speakers and are just there to contribute to the vitality of our meetings. It's a pleasure to work with such an organization.

So I expect to see nearly all of you on June 8th, and for those very few who can't make it because of some extremely dire circumstances, I'll see you in September. Everyone have a lovely summer!

Joanne

Sikkim State Council of Science and Technology Bioinformatics Center

Non-traditional Uses for Rhododendron.

Medicinal:

- *Rhododendron arboreum*'s nectar is brewed to make wine and is effective in diarrhoea and dysentery. Its Corolla is administered in case of fishbone stuck in the gullet. Snuff made from the bark of the tree is excellent cold reliever. Young leaves can be processed into paste and applied on the forehead to alleviate headaches.
- *Rhododendron campanulatum* is also used as snuff and is effective in case of cold and hermicrania. Also the species is used in curing chronic rheumatism, syphilis. The dried twigs and wood are used by Nepalese against phthisis and chronic fever. On being burnt its smoke causes irritation.
- *Rhododendron cinnabarium* is used in making flavoring agents, jam etc. The fried corolla of the species is liked by local inhabitants in Sikkim which taste delicacy while it is poisonous to animals.
- *Rhododendron setosum* is used in making of aromatic oil, perfumery and cosmetics.
- Extract from the *Rhododendron thomsonii* is used as natural insecticides as in valley of North Sikkim, while it is toxic/poisonous to human beings.

Religious:

Rhododendron lepidotum and *Rhododendron anthopogum*'s leaves are used as incense in Buddhist Monasteries. The flowers are used as offerings to pay homage and for decoration purpose at social occasions (photo below).

Other uses:

- *Rhododendron arboretum*'s wood is used to make Khukris' handle, box and are as well used as common fire wood and occasionally converted to charcoal for blacksmith work.
- *Rhododendron falconeri* is used in making covers for fruit packaging, bamboo shoots' canning etc. for distant marketing.
- *Rhododendron fulgens*'s leaves are used as wick for lighting fires by the local inhabitants of northern Sikkim.
- *Rhododendron hodgsonii*'s wood is used to make spoon and ladles and also handles of khukri. Since the wood is hard, is a good fire wood and making wooden rods etc.
- The leaves of *R. hodgsonii* are used for packing apples and other temperate fruits.

Article courtesy of the Sikkim State Council of Science and Technology - Bioinformatics Center. Visit their website at this link: <http://www.dstsikkim.gov.in/disc.htm>



Photo above - an incense burner in front of the Jokang Temple in Lhasa, Tibet. Men & women feed the burner with *R. anthopogon* leaves which releases a heady aroma that fills the street. Photo by Barbara Cook.

VANCOUVER RHODODENDRON SOCIETY - ANNUAL TRUSS SHOW AWARDS

BEST IN SHOW

Park & Tilford Trophy - V. Finley
for highest aggregate points for best exhibit

R.C. Rhodes Trophy - V. Finley – Prelude (op)
for Best yellow or orange plant or truss (excluding azaleas)

Best Potted Species R. quingefolium- D. Kehoe

Best Species in Show R. schlippenbachii - V. Finley

HYBRIDS TRUSSES/SPRAYS

Wally Zeglat Memorial Trophy - V. Finley
for highest aggregate points for hybrid trusses/sprays

B.C. Nursery Trades Trophy - M. Charlton/ C. Sale – ‘Phalarope’
for best hybrid rhododendron truss

Teamsters’ Joint Council #36 - V. Finley – ‘Captain Jack’
for best red hybrid rhododendron truss

Claydian Cup - V. Finley – ‘Golden Witt’
for best blotched hybrid truss

A sampling of rhododendron
species judged at the show.

augustinii ‘Bt Wisteria’
augustinii ‘Playfair’
augustinii ‘Tower Court’

bodinieri
campylogynum
ciliatum

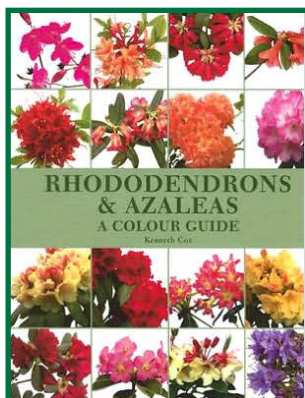
concinnum v. pseudoanthinum
davidsonianum ‘Caerhays Pink’

dendrocharis
glaucophyllum v. tubiforme
gymnocarpum
hatsguri
irroratum

lepidotum v. eleagnoides
metterianum
morii

oreotrephes v. exquisitum
pseudochrysanthum
rex ssp. fictolacteam
rubiginosum
yunnanense
xanthocodon

Photos by Todd Major



Recommended Reading

Rhododendrons and Azaleas
A Colour Guide
by Kenneth Cox

The most comprehensive single volume on rhododendrons and azaleas ever published. Chapters cover the history of rhododendrons, how to cultivate them, rhododendrons in the landscape, maintenance and husbandry, pests, diseases, problems and disorders, propagation, and buying and collecting rhododendrons. The major part of the book is a rhododendron and azalea encyclopaedia, a complete survey of the Genus *Rhododendron*, including all cultivated hardy species, the most important commercial rhododendron hybrids, deciduous and evergreen azalea species and hybrids and tropical *Vireya* rhododendron species and hybrids. Over 1100 pictures are featured, illustrating cultivation practice, propagation and gardening design ideas. Listings include extensive assessment of performance of varieties for different countries and climactic conditions, notes on hardiness, height and spread, and flowering time. Advice on cultivation and proven performers. The name of the parent plants, the raiser and similar varieties.

ISBN: 978 1 86126 784 9. 240 pages Hardback
November 2005 RRP: £29.95 Site Price: £23.96 plus postage & packing UK £6 Foreign £8.50

Article courtesy of The Crowwood Press. Visit their website at this link: <http://www.crowoodpress.co.uk/>



An Interesting Idea

An imaginary walkway or river of colour is created out of thousands of *Muscari* at an unknown garden in Holland.



Botany Without Borders July 26 – 30, 2008 University of British Columbia, Vancouver BC

A Joint Annual Meeting of the:
[Canadian Botanical Association/L'Association Botanique du Canada](#), [American Fern Society](#), [American Society of Plant Taxonomists](#) [Botanical Society of America](#)

Keynote Speakers Include (click on the blue hyperlinks for more information):

- Paul Stamets presenting [Solutions from Nature: How Mushrooms Can Help Save the World](#)
- Loren Rieseberg presenting [Speciation Genes in Plants](#)
- Carl Wieman presents [Science Education in the 21st Century: Using the tools of science to teach science](#)

There are also special luncheons hosted by various member botanical gardens, poster sessions and networking opportunities. Several fantastic field trips have been organized and these trips will be led by knowledgeable experts. The field trips include:

- Paleobotanical Trip to Princeton and McAbee
- Cypress Mountain: Vascular Plants and Bryophytes
- Mt Cheam - Seed Plant Walk
- Ferns of North Vancouver
- The Rise (and Fall) and Rise (and Fall) and Rise of the UBC Botanical Garden
- A trip to the Riverview Arboretum
- Ethnobotanical walk at Cypress Mountain.
- Bryophytes of the Vancouver Area
- Asian Gardens of Vancouver: the Asian Garden at UBC Botanical Garden, Nitobe Japanese Garden, and Dr. Sun Yat San Garden.
- UBC Farm
- Treasures of Pacific Spirit Park
- VanDusen Garden
- Mount Baker: Alpine Flora

Visit the 2008 Botany Conference website at this link:
<http://www.2008.botanyconference.org/>

DNA from herbarium specimens settles a controversy about origins of the European potato

Researchers : Mercedes Ames and David M. Spooner
USDA, Agricultural Research Service, Vegetable Crops Research Unit, Department of Horticulture, University of Wisconsin

Landrace potato cultivars are native to two areas in South America: the high Andes from eastern Venezuela to northern Argentina and the lowlands of south-central Chile. Potato first appeared outside of South America in Europe in 1567 and rapidly diffused worldwide. Two competing hypotheses suggested the origin of the "European" potato from the Andes or from lowland Chile, but the Andean origin has been widely accepted over the last 60 years. All modern potato cultivars predominantly have Chilean germplasm, explained as originating from breeding with Chilean landraces subsequent to the late blight epidemics beginning in 1845 in the UK. The Andean origin has been questioned recently through examination of landraces in India and the Canary Islands, but this evidence is inferential. Through a plastid DNA deletion marker from historical herbarium specimens, we report that the Andean potato predominated in the 1700s, but the Chilean potato was introduced into Europe as early as 1811 and became predominant long before the late blight epidemics in the UK. Our results provide the first direct evidence of these events and change the history of introduction of the European potato. They shed new light on the value of past breeding efforts to recreate the European potato from Andean forms and highlight the value of herbarium specimens in investigating origins of crop plants.

Article courtesy of the American Journal of Botany. Visit their website at this link <http://www.amjbot.org>

Interesting Websites

The following list of websites is by no means exhaustive but there is a plethora of good information and some very cool pictures contained on the pages of the [website links](#) below. Click on the link to visit each site.

If you know of an interesting website, not necessarily rhodo related, please send me the web address to my email at stmajor@shaw.ca. Thanks Todd Major.

Australian Rhododendron Society Inc

<http://www.ausrhodo.asn.au/>

- Scroll down to see some great pictures and a description.

Iowa State University Hort News - Phytophthora Root Rot on Rhododendron (Azalea)

<http://www.ipm.iastate.edu/ipm/hortnews/1995/8-25-1995/prr.html>

- A topic of relevant interest to anyone growing rhodos.

British Forestry Commission

<http://www.forestry.gov.uk/news1/865186AD6C5C3FF680257211003C3290>

- A Story on *R. ponticum* removal and other stories about forestry in UK. Use their site search engine to look for stories.

Johan Vanderhaegen

<http://www.johanvanderhaegen.com/article/view.web?articleId=1#History>

- An article on the history of the azalea.

BBC News - Papua's 'lost world'

http://news.bbc.co.uk/2/shared/spl/hi/pop_ups/06/sci_nat_papua0s_0lost_world0_/html/7.stm

- A story on an epiphytic rhododendron that grows high in the treetops in Papua, New Guinea. Scroll down and click on the numbers on the bottom of the page to see more pictures from the expedition.


Taranaki Rhododendron and Garden Festival, located on the west Coast of New Zealand's North Island

<http://www.rhodo.co.nz/index.html>

- Great photos, good design lots of information. Use side bar menu by holding your mouse over the topic of choice. Look under the side menu of "gardens" and then pick from the list of gardens to see. Scroll down and click on pictures you want to see.

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- EXPERT ADVICE**
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questions? PHONE THE GARDEN LINE...
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 NORTH VAN: 604-980-6340 OR 988-8082

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Join the Vancouver Rhododendron Society

Come out and enjoy our monthly lecture programs with insightful speakers working in the fields of horticulture, botany and plant preservation. Share with others the knowledge of rhododendrons and acquire plants from member growers. Receive monthly email issues of the **INDUMENTUM**.

Guests are always welcome at our monthly meetings!

Philip MacDougall,
VRS Membership Chair
14776 90th Avenue
Surrey, BC V3R 1A4
Email:
philipmacd123@hotmail.com



Contribute to the INDUMENTUM

Letters to the **INDUMENTUM**, news, pictures and anything rhodo or just for interest, can be e-mailed to Todd or Shannon Major at stmajor@shaw.ca. If you wish to mail us an article or some pictures (which we will return to you) please give us a call at 604 941 7507 to obtain our mailing address. We need pictures! The larger the picture file size the better the result on screen and in print. If you don't send something, you'll have to live with what we print.

Visit our online repository for past **INDUMENTUM** issues, hosted by the UBC Botanical Garden and Centre for Plant Research at this web link:
www.ubcbotanicalgarden.org/vrs

Visit our website at www.rhodo.citymax.com

Todd & Shannon Major,
INDUMENTUM Editors

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TAM



Garth Wedemire

Rhododendron conservation in the Sikkim Himalaya

By K. K. Singh, S. Kumar, L. K. Rai and A. P. Krishna

Rhododendrons form a major plant group at upper temperate locations having a characteristic slow growth rate and sizable horticultural value. Asia is the homeland for rhododendrons and many species had been hunted out of the region during British rule. About 98% of the Indian species are found in the Himalayan region, among which 72% are found in Sikkim. Due to human interference the natural populations of rhododendrons in the entire Himalaya are gradually diminishing. The major threats to rhododendrons are deforestation and unsustainable extraction for firewood and incense by local people (photo right by O.R. Vetaas, rhododendron deforestation in Lukla, Nepal).

A set of rhododendrons which are classified as rare/endangered may be wiped out from the biota in the near future if proper conservation measures are not made. The present work incorporates biotechnological and conventional methods to counter the threat on survival of these plants. Studies on in vitro *Rhododendron maddenii* from the cotyledonary nodal segments, young leaves and stems, have yielded positive results. The goal of the work is to find out means of conservation through in vitro and ex situ mass propagation and restoration of rhododendron population in the wild.

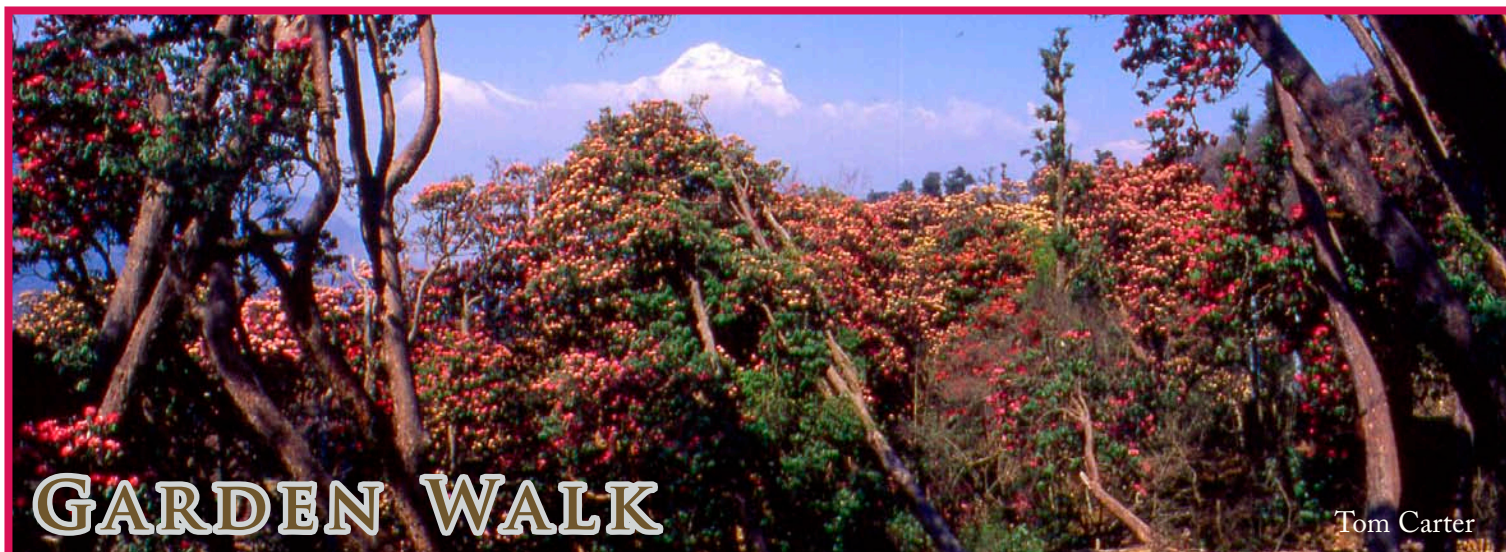
Rhododendrons cover a vast section of southeastern Asia between the northwestern Himalaya through Nepal, Sikkim, eastern Tibet, Bhutan, Arunachal Pradesh, and upper Burma, western and central China. More than 90% of the world's natural population of rhododendrons is from this region.



The genus *Rhododendron*, having about 50 species in India, is mainly distributed in the Himalayan region¹ (one species, *R. nilagiricum* in southern India), and is one of the most neglected group of plants in terms of scientific inquiry in India. The first of many rhododendrons which were to come from southeastern Asia was the tree species *R. arboreum* with blood-red flowers, which was discovered by Captain Hardwicke in 1799. *R. campanulatum* was introduced in England in 1825 and the beautiful *R. barbatum* was introduced in 1849. In 1849 and 1850, Sir Joseph Hooker's expedition to Sikkim in the eastern Himalayas discovered forty-five new species, including the yellow-flowered *R. campylocarpum* and *R. wightii*; the red-flowered *R. thomsoni*; the small trees *R. falconeri*, *R. grande* and *R. hodgsoni* with their enormous leaves; the epiphytes *R. dalhousiae* and *R. maddenii*; the large vigorous *R. griffithianum* with massive white flowers; and the interesting *R. triflorum*, *R. edgeworthii*, *R. fulgens*, *R. niveum*, *R. wallichii*, *R. lanatum*, *R. glaucophyllum*, *R. cinnabarinum* and *R. lepidotum*. Both the explorers found *R. hookeri* and *R. nuttalli* from Bhutan in 1852.

There has been no concerted effort on the estimation of total number of species, sub-species and varieties of rhododendrons. Rhododendrons, which are the denizens of high altitude environment, have a characteristic slow growth rate. Ranging in size from small mat-like growths in alpine region to giants having heights of over 25 metres (photo next page) is another characteristic feature of the genus.

Continued See "On record, 98% of the Indian species" on page 9



On record, 98% of the Indian species is found in the Himalayan region among which 72% is found in Sikkim. In the light of the above, Sikkim may be considered as the most appropriate location for conservation and propagation studies of rhododendrons in India.

The 36 species of rhododendrons in the Sikkim Himalaya showed barrel-shaped altitudinal distribution. Nine different altitudinal distribution ranges were categorized between 1500 and 6000m. *R. arboreum* is a common species that showed distribution from 1500 m elevation up to 4000 m, while other species of wide ecological amplitude ranging from 2500m up to 6000m were *R. anthopogon* and *R. setosum*. Highest species occurrence was recorded between 3000 and 3500m. The species availability decreases drastically from 4500m upwards and 2500m downwards. Species concentration increases with the latitudinal progression from south to north.

Rhododendron forests are attractive destination for a large number of visitors (photo above), the increasing influx always exerting more pressure regarding its survival. It provides habitat for a variety of wildlife, including avifauna. The rhododendron flowers have a great range of colours, shapes and sizes in their wild form. Horticulturists in the Western countries have further worked over it to produce quite a good range of beautiful hybrids, some of which have earned awards and merit citations at the Royal Horticultural Show, UK in the past. As the rhododendrons are conducive to inter-generic crosses a new scope of hybridization is open to be tapped. Revolution in the horticultural aspect of the genus is needed to fully convert the aesthetics of rhododendrons into commercial advantage.

Existing Threats

Conservation of biotic resources remains one of the basic needs in terms of preserving biotic diversity which, in time, translates into the richness of biotic wealth. Planthunting expeditions by the earlier explorers from Europe into interior Asia since the turn of the century, had set the trend for removal of rhododendrons in large scale from the region. In Britain, the Pacific Northwest

and northeastern United States, these rhododendrons found way to many gardens both in natural forms and hybrids. However, little importance was given to the genus in its homeland, that has gradually led to the present conservation threat on many species.

With the shrinking of green cover almost everywhere, the rhododendrons are also experiencing the impact of disturbed ecological systems. This is clearly visible in the Himalaya, where the ecological systems and land physiography are understood to be fragile and found to be easily disturbed. In the context of Sikkim Himalaya, though heavy degradation is not evident, it surely shows certain signs of the menace entering the region. The rise in population with demand on land for farming, increased animal husbandry practices, construction of roadways, hydel power stations and allied works, army personnel garrisoned at alpine locations and lately the tourist influx have collectively resulted in the building up of considerable pressure on the availability of rhododendron species.

The major threats to rhododendrons are deforestation and unsustainable extraction for firewood and incense by local people. Due to the presence of polyphenols and flavonoids, rhododendrons make excellent firewood that burns even under wet conditions. Rhododendron firewood is also being used in the high-altitude trekking corridor for the purpose of tourism.

A total of eight rhododendron species recorded out of 36 species (with 45 different forms, including sub-species and varieties) in the Sikkim Himalaya, are now in definite danger of elimination unless immediate resurrection measures are taken. Some of the species have already become scarce, for example, *R. leptocarpum* is endangered and reported to have only 16 surviving individuals at present in the region. This may be an indicator of a greater problem, and more species may follow a similar path of disintegration.

The authors work in the G.B. Pant Institute of Himalayan Environment and Development, Sikkim Unit. Visit their website at this link: <http://gbpihed.gov.in/main.htm>