

JOURNAL

American Rhododendron Society

Vol. 74 Number 2 Spring 2020



R. ponticum and *R. luteum*
in northeastern Turkey - Page 60

Tour to the north-east of Turkey in 2007 - page 8

*Rhododendrons for Beginners: Section Schistanthe in the
Rhododendron subgenus Rhododendron - page 33*

2020 Rhododendron of the Year Plant Descriptions - page 46



American Rhododendron Society

A GUIDE TO THE SOCIETY

President: Ken Webb
Past President: Ann Mangels
Western Vice President: John Stephens
Eastern Vice President: Steve Krebs
Treasurer: David Banks
Secretary: Linda Derkach
Office Administrator: Katherine Sterner

Journal Editor: Glen Jamieson Ph.D.
Journal Associate Editor: Donald Smart
Webmaster: Bob Weissman
Journal Technical Reviewers: Kenneth N. E. Cox, Harold E. Greer, Steve Hootman, Stephen Krebs Ph.D., Sonja Nelson, Erik T. Nilsen Ph.D., Registrar Michael Martin Mills, Bob Ramik, Mark Widrechner Ph.D.

ARS Districts & Chapters

District Director Terms, starting in spring of years:

2020: District 3, District 4, District 6, District 11, District 12

2021: District 5, District 8, District 9

2022: District 1, District 2, District 7, District 10

Districts, District Directors, Chapter Chairpersons

DISTRICT 1

District Director: Chris Hodgson

Alternate: Chris Southwick

COWICHAN VALLEY CHAPTER - Rotating

FRASER SOUTH CHAPTER - Colleen Bojczuk

MT. ARROWSMITH CHAPTER - Glen Jamieson

NANAIMO CHAPTER - Rosina Schmidt

NORTH ISLAND CHAPTER - Maureen Denny

VANCOUVER CHAPTER - Rotating

VICTORIA CHAPTER - Brenda MacDonald

DISTRICT 2/ 3

District Director: Richard Fairfield

Alternate: Doug Keough

JUAN DE FUCA CHAPTER - Rosalie Preble

KITSAP CHAPTER - Kathleen Bullivant

OLYMPIA CHAPTER - Jack Horn

OLYMPIC PENINSULA CHAPTER - Nancy Chase

PENINSULA CHAPTER - Steve Johnson

PILCHUCK CHAPTER - Doug Keough

SEATTLE CHAPTER - Chip Muller

SHELTON CHAPTER - Tom Noreen

TACOMA CHAPTER - Walt Brooks

WHIDBEY ISLAND CHAPTER - Don Lee

DISTRICT 4

District Director: Brenda Ziegler

Alternate: Anne Gross

EUGENE CHAPTER - Terry Henderson

PORTLAND CHAPTER - Caroline Enns

SIUSLAW CHAPTER - Mike Bones

SOUTHWESTERN OREGON CHAPTER - Candy Baumer

TUALATIN VALLEY CHAPTER - Kathleen Crabtree

WILLAMETTE CHAPTER - Wallace Reed

DISTRICT 5

District Director: Tim Walsh

Alternate: Richard Jones

CALIFORNIA CHAPTER - Vacant

DE ANZA CHAPTER - Bee Brown

EUREKA CHAPTER - Max Abrahamsen

HAWAII CHAPTER - Sherla Bertelmann

NOYO CHAPTER - Ted Steinhardt

DISTRICT 6

District Director: C.J. Patterson

Alternate: Barbara Gingras

CONNECTICUT CHAPTER - Tom Flanigan

MASSACHUSETTS CHAPTER - Joe Bruso

DISTRICT 7

District Director: Melinda Martin

Alternate: Bob Warren

NEW YORK CHAPTER - Bruce Feller

PRINCETON CHAPTER - Lester Martin

DISTRICT 8

District Director: Steve Henning

Alternate: Linda Hartnett

GREATER PHILADELPHIA CHAPTER - Craig Conover

LEHIGH VALLEY CHAPTER - Dale Howe

SUSQUEHANNA VALLEY CHAPTER - Lewis Brown

VALLEY FORGE CHAPTER - Jerry O'Dell

DISTRICT 9

District Director: Bill Meyers

Alternate: Richard Mohr

MASON DIXON CHAPTER - Harry Reid

MIDDLE ATLANTIC CHAPTER - Jeanne Hammer

POTOMAC VALLEY CHAPTER - Richard Mohr

DISTRICT 10

District Director: Hale Booth

Alternate: Jackson McCarter

AZALEA CHAPTER - Janet Nicholson

SOUTHEASTERN CHAPTER - Sieglinde Anderson

TENNESSEE VALLEY CHAPTER - Leslie Dulin

DISTRICT 11

District Director: John Golab

Alternate: vacant

ANN ARBOR - Vacant

GREAT LAKES CHAPTER - Eric Oesterling

MIDWEST CHAPTER - Richard Bara

OZARK CHAPTER - Robert Stassen

DISTRICT 12

THE RHODODENDRON SOCIETY OF CANADA (RSC)

District Director: John Brett

Alternate: Bob Howard

RSC ATLANTIC REGION CHAPTER - John Brett

RSC NIAGARA REGION CHAPTER - Sondra Meis

RSC TORONTO REGION CHAPTER - Laura Grant

CHAPTERS AT LARGE

Director: Jens H. Hansen

Alternate: Carl Adam Lehmann

DANISH CHAPTER - Jens Holger Hansen

DUTCH CHAPTER - Henk Borsje

FINNISH CHAPTER - Kristian Theqvist

J. D. HOOKER CHAPTER - Sri Keshab C. Pradhan

SCOTTISH CHAPTER - John Hammond

SWEDISH CHAPTER - Torsten Bynke

NON CHAPTER MEMBERS - Contact Office Administrator

ARS Committees and Chairpersons

Archives: Sandra McDonald, Ph.D.

Azalea: James Fry

Budget & Finance: Dave Banks

Bylaws & Policies: Bruce Feller

Digital Publications: Bob Weissman

Editorial Co-chairs: Don Hyatt and Maria Stewart

Electronic Media: Bob Weissman

Electronic Newsletter: Dave Banks

Endowment: Bill Mangels

Fundraising: Vacant

Honors: Dee Daneri

Long-range Planning: Vacant

Membership: June Walsh

Nominations: Ann Mangels

Plant Awards: Linda Derkach

Program Library: Linda & Marvin Fisher & Donald Hyatt

Public Education: Harold Greer

Registrar of Plant Names: Michael Martin Mills

Research Committee: Juliana S. Medeiros, Ph.D.

Research Foundation: Karel Bernady

Research Foundation Treasurer: Perc Moser

Seed Exchange: Norman Beaudry

Shows & Judging: Bruce & Marianne Feller

Speakers Bureau: Vacant

Test & Display Gardens: Nicholas Yarmoshuk

Society Contacts

Katherine Sterner, ARS Office Administrator

P.O. Box 214, Great River, NY 11739.

Or email to: member@arsoffice.org

President: Ken Webb

Postal: 5008 Old West Saanich Rd

Victoria, BC V9E 2B2 CANADA

Phone: (250)-744-1785

Email: kenwebb@shaw.ca

Journal Editor: Dr. Glen Jamieson

Postal: 804 San Malo Cr., Parksville, BC

V9P 1S4 Canada

Email: ars.editor@gmail.com

Webmaster: Bob Weissman

Email: weissman@arsoffice.org

Honors Committee: Dee Daneri

Email: deedaneri@aol.com

District Directors & Committee Chairs

See ARS website: <http://www.arsoffice.org>

Society's Purpose

To encourage interest in and to disseminate knowledge about rhododendrons and azaleas. To provide a medium through which all persons interested in rhododendrons and azaleas may communicate and cooperate with others through education, meetings, publications, scientific studies, research, conservation and other similar activities.

Membership Benefits

- Chapter affiliation with scheduled meetings
- Journal American Rhododendron Society* published quarterly
- Annual convention and regional conferences
- Seed exchange
- Listing of registration of names and descriptions of new rhododendron hybrids published in the Journal

To Join the Society

Membership categories:

(January 1 – December 31)

Student \$10.00

(include proof if over 18)

Regular \$40.00

Commercial \$90.00

Sustaining \$75.00

Sponsoring \$150.00

Life single \$1,000.00

Life family \$1,500.00

You can join the ARS through your local ARS chapter (check the website www.rhododendron.org for chapter contact info) or by sending a check or money order directly to the Office Administrator of the American Rhododendron Society at the above address. Checks must be in US funds. Make checks payable to the "American Rhododendron Society." Membership includes one year (4 issues) of the *Journal American Rhododendron Society* and affiliation with the chapter of your choice. **To receive the winter issue of the Journal, renewals must be postmarked no later than Dec. 1.**



CONTENTS Spring 2020

Features

- 7 Tour to the north-east of Turkey in 2007 BY HANS EIBERG
- 14 Early Red-flowered Species BY PETER A. COX
- 18 Insects of Woodland Gardens: The Good, the Bad & the Beautiful BY LINDA GILKESON
- 22 Pleione Cultivation BY ATSUKO GIBSON
- 23 Saving the Lives of Ring-barked Trees and Shrubs BY ALAN EDWARDS
- 25 Haydite BioBlend–G(B): A Promising New Substrate for Growing Rhododendrons BY STEPHEN KREBS
- 27 One of the Best “Cameo” Hybrids: R. ‘Naselle’ BY MARIA STEWART
- 28 Righting Uprooted Rhodies BY EMILY AUNE
- 33 Rhododendrons for Beginners: Section *Schistanthe* in the *Rhododendron* subgenus *Rhododendron* BY GLEN JAMIESON
- 46 2020 Rhododendron of the Year Plant Descriptions BY LINDA DERKACH
- 52 Newly Registered Cultivar Names BY MICHAEL MARTIN MILLS

Society News

- | | |
|---|--|
| <ul style="list-style-type: none"> 30 Bronze Medal Awards <ul style="list-style-type: none"> Seattle: Katherine Thompson Diane Thompson 31 North Island: Garth Wedemire 31 Atlantic Chapter: <ul style="list-style-type: none"> Sheila Stevenson 31 Hawaii: Richard Rhodes 31 In Memoriam <ul style="list-style-type: none"> Nanaimo: Craig Clarke Vancouver: <ul style="list-style-type: none"> Alleyne Rex Cook 32 ARS District Directors Candidates 32 Things You Should Know About the ARS Website 58 New Members from 11/15/2019 through 2/20/2020 | <ul style="list-style-type: none"> 58 ARS General Fund Donations from 11/15/2019 through 2/20/2020 58 Donations to ARS Endowment Fund from 11/15/2019 through 2/20/2020 58 Deceased Members from 11/15/2019 through 2/20/2020 |
|---|--|

Publications

- 57 Rhododendron Calendar
- 57 2020 Photo Contest Rules
- 61 Points of Contact for Members and Chapters

ARS Digital Resources

Website: www.rhododendron.org

Office: www.arsoffice.org

JARS online: www.arsoffice.org/protect/login.asp

JARS back issues: <http://scholar.lib.vt.edu/ejournals/JARS> [to Vol. 64, 2010]

Archives: www.lib.virginia.edu/small

ARSSStore: www.ARSSStore.org

Blog: www.rhododendron.org/blog/default.asp

Plant Name Registration: www.rhododendron.org/plantregistry.htm

Cover Photo



R. ponticum and *R. luteum* in northeastern Turkey - Photo: Hans Eiberg

SPRING 2020 VOLUME 74 NUMBER 2

Journal American Rhododendron Society (ISSN: 0745-7839) Copyright © 2020 by the American Rhododendron Society. Published quarterly Jan. 15, April 15, July 15, Oct. 15 by the American Rhododendron Society, 1618 290th Ave. NE, Carnation, WA 98014-9608. Periodicals postage paid at Carnation, WA, and additional mailing offices. POSTMASTER: Send address changes to the *Journal American Rhododendron Society*, 1618 290th Ave. NE, Carnation, WA 98014-9608.

From the President

Ken Webb

Victoria,
BC,
Canada



Sadly, we had to postpone our 75th Anniversary Convention in Vancouver/Portland. As most of our members are at a critical age for Covid-19, we couldn't take the chance of them contracting this virus. For the safety of all, the District 4 Organizers have postponed it to 2022. It will be held in the same Heathman Lodge Hotel, about the same dates as it was going to be this year. There will probably be a few changes, but almost everything will stay the same. They promise an even better Convention with another two years to plan. Stay in touch for any further developments.

One of the best ways for any of our Chapters or Districts to make money to do worthy Rhododendron Projects, is by having a Convention/Conference. You should notice that there were many extra activities planned on this postponed Convention. They have two extra tours, one before and one after. Not only are there many wonderful and famous gardens organized, but they have included some of the natural beauty with the Columbia River and Mount Hood. They have also planned several large nurseries and an airplane museum. Hopefully, this ARS 75th Anniversary in Portland, Oregon will excite many members to try and hold a Convention in their area.

At other Conventions, we have been to wineries and a fairgrounds and in Chattanooga, we went to Rock City, an unusual natural formation that is a "must see". Remember to think outside the box. In today's world, we need to be innovative to make these things work in different areas. In Sidney, BC, we had a Convention that wasn't in a hotel. The participants had to stay in many different hotels and motels scattered around the area. On one of our European Convention tours, we stayed in some of the most unusual accommodations that you could ever imagine. At first glance, we all thought they were not going to be acceptable, but in actual fact, they probably made this Convention the most memorable.

There are many different benefits to having a Convention that probably outweigh the financial aspect. They bring together all the members from many different Chapters to work together with a common goal. They bring tourist delegates from around the world to see your local area. You can put all the finest gardens and tourist attractions on show for everyone to see. This can be a big boost for Hotels and Motels and restaurants and bus companies in your community. It involves the whole community, whether you are a Rhodo person or not. You get to meet many new faces, negotiating the deals you need to make a Convention work. And after it all, the helpers are much more connected, which can only be good for the Chapter/District.

The camaraderie and working together can greatly boost your interest in the local Rhododendron community. In Victoria, we find there is much more interest if there is a project to work on. Whether it is a Convention or a garden project or a potting session, it always seems to bring the best members out for the day. We get to exchange garden exploits and grandchildren stories and talk about our plans for the garden, as well as do something useful for the community and the Rhododendron club.

Most Conventions are now put on by a District, with many different Chapters participating. In BC, all the Chapters contribute on some kind of scale. On Vancouver Island, we have five Chapters who pitch together on most Conventions and projects. Many people help on the planning committee and there is always lots of manpower on the actual Convention day.

The Mount Arrowsmith Rhododendron Society has published a "How To" Convention Guideline, after their very successful Fall Conference last year. They are making that available to anyone who would like one. MARS had a practice run the year before with a one-day event that allowed them to make sure that everything was going to work OK. It was very well attended, and then the actual Conference had the highest turnout of any recent Fall Conferences.

The more money that Chapters and Districts are able to make having Conventions, the more rhododendron good deeds we can do for our community. Many Chapters are supporting local gardens and other endeavors, spreading the appreciation of rhododendrons throughout their communities. It's important to remember, though, that the ARS has no way to make money other than the dues for membership. One of the POBs suggests that we send about 10% of Convention profits to help them with the running of the Society. For anyone contemplating holding a Convention, the ARS also has a seed fund that you can borrow from for a startup budget. They will also advertise your plans in the JARS and on the website. The ARS will also want to have one of its Board Meetings at your Convention. This will bring many of the Board of Directors to your Chapter to help support your Convention.

So, please try and organize one of these Convention/Conferences in your area. Conventions are in the Spring and Conferences are in the Fall. Spring Conventions usually have a higher attendance because of the flowers but Fall Conferences can be very successful too. They can be a lot of work but are well worth it for the fun. Remember again, to think outside the box. Use your local facilities and natural beauties to showcase your rhododendrons and people. Remember also, that it might be the flowers that bring us together, but it is the people that keep us coming back.

"Gardening simply does not allow one to be mentally old, because too many hopes and dreams are yet to be realized."

Allan Armitage

From the Editor

Glen Jamieson

Parksville, BC
Canada



I really appreciate receiving the monthly chapter newsletters, as I often find material in them that can either be directly used in JARS or that can be expanded to make a more comprehensive article. As I'm sure most of you know, the ARS does not pay for JARS articles, so much of my job is trying to find or solicit interesting material that represents the diversity of rhododendrons (rhododendrons, azaleas and vireyas), that covers the different geographical areas in which rhodos are found, and that celebrates and/or educates members about the people engaged with rhodos and activities, including conventions and conferences, that they are involved in.

Over the years, I have been able to develop an extensive contact list of potential contributors, but I still find that much of the material that I use in JARS comes from a relatively small number of people, fortunately most of whom are ARS members. These writers are really exceptional, and they are often significant players in their own chapters as well as in the ARS as a whole. So, while I particularly want to thank them for their many contributions to JARS, I would also like to encourage other ARS members to consider writing about their experiences and/or activities for their own chapter newsletters, and perhaps ultimately for JARS as well. Even short notes can be of interest, as shown by the short articles in this issue about how to right tipped-over rhodos and how to help plants recover from having much of the bark chewed off by rodents or other animals.

On another note, the citations of awards (Bronze, etc.) given to ARS members are typically published in JARS, and I would like make members aware of the policy established around the characteristics of appropriate citations. Silver and Gold Medals and Pioneer Achievement Awards are awarded by the ARS Executive, and the maximum length of citations for these awards is 125 words. Bronze Medal citations are awards by chapters, and while there is no specific word length for the actual citation given to the recipient (the awarding chapter determines the format and pays for the citation's framing), for publication in JARS, the policy is to make Bronze Citations the same as that for Silver or Gold Citations, i.e., to have a maximum of 125 words. This is because the criteria for Bronze awards is relatively parochial and focused around local chapter activities, and as such, is not of high interest to most ARS members that live far away. There is thus a need to establish a guideline for the appropriate JARS Bronze citation length that balances the details of their contribution with the desire to make their contributions known to the wide ARS membership. It is great to acknowledge the significant contributions of our ARS members, and having a guideline such as this does not diminish the ARS' recognition of the activities of worthy awardees.

*From plants that wake when others sleep,
from timid jasmine buds that keep
their odour to themselves all day,
but when the sunlight dies away
let the delicious secret out
to every breeze that roams about.*

Thomas Moore

Tour to the north-east of Turkey in 2007

Hans Eiberg
Smørum,
Denmark



Trip route:

Trabzon, Giresun, Kulakkaya Yaylasi,
Bayburt, Rize, Artvin, Ardahan,
Çamlıhemşin, Trabzon
(Photos by the author)



Turkey and surrounding countries showing area of tour.

I had long dreamed of seeing the wild rhododendron species in Turkey close to the Caucasus. In this region, the following species have been reported: *R. luteum*, *R. ponticum*, *R. smirnowii* and *R. ungeronii*, and possibly hybrids between these species. After reading in the Turkish airline magazine “Skylife 4/2001” about a *R. luteum* which was said to be orange, it was an obvious goal to find this cultivar and possibly take pictures and seeds home to Denmark.

We had little time to organise this trip to Turkey, as we had already planned the holiday period for a trip to China, which was suddenly cancelled shortly before departure. Luckily, we were able to get air tickets to Turkey at the last minute, from 25 May to 12 June, with a stopover in Istanbul, where we had to hurry to our next departure because of earlier flight delays. Arriving in Trabzon, we could not initially find our luggage, as it turned out that our suitcases had been taken to the foreign transit area instead of to the domestic baggage area. When we finally retrieved them, we took a taxi to our two-star hotel, where we hoped we had a reservation. We had tried to book this hotel online, but were unsure whether they had received our messages, because we did not receive a confirmation. The hotel was open and we did have a room, even though they had not been notified of our reservation. The door could be locked with a key and there was a single channel with English news, with all the remaining stations in other Middle East languages.

The next day we went sightseeing in Trabzon, which was a nice town with many sidewalk restaurants and small grocery stores. Trabzon is not a major tourist destination for foreigners and few people there could understand English. Nevertheless, we found an Avis car rental and were able to rent a small car for 14 days, which we could pick up the next day. Fortunately, they could understand English there, which was not the case in two other car rental businesses we approached. With our nice new rental car, we left our hotel and drove west along the Black Sea to Giresun, where we spent the next night. From Giresun, we drove directly south towards Kulakkaya Yaylasi on a good road, stopping only to buy nectarines and bananas from roadside stalls for lunch. We drove for over 40 km without seeing any hotels or towns, so we were beginning to think that we might have to overnight in the car or else return to Giresun. Suddenly though, the road rose in elevation and we saw our first *R. luteum* and *R.*

ponticum, growing by the road edge. As we went higher, the abundance of the plants increased, and finally to our joy, we saw a road sign for Kulakkaya Yaylasi, where we arrived ten minutes later. It is only a little village, consisting of approximately 20 houses and a restaurant with a “hotel” sign.

We went into the restaurant, with some curious poor shepherds watching us closely. A young guy was in charge of the shop and fortunately, he said that he had available rooms. I was shown around and certainly there were beds in small rooms in several



Area toured in Turkey south of the Black Sea.



R. ponticum and *R. luteum* along the road.



Orange form of *R. luteum* near Kulakkaya Yaylasi.



R. caucasicum.

either broad or narrow petals. I harvested seed from the partially empty capsules from the best clones, i.e., those with the largest dark yellow flowers. However, there were no orange flowers. After this walk, we had tea at the hotel and then

places. He offered us his best room, which was really almost a shack with a shower and a double bed. There was no television and the price was 50 lira (then about \$USD 10, or 9 euros), which we felt was excessive under the circumstances. We ordered dinner for later that evening, and were able to choose between beef and lamb.

We then went for a walk for a few hours to see if we could find an orange *R. luteum*. We started to follow a forest road and ended up in a neighboring village. On the way, we went through small, abandoned cultivated areas with *R. luteum* growing in all locations where there was a little stony soil. The flowers varied in color and size, as well as having



Orange form of *R. luteum* near Kulakkaya.



Dinner at the hotel.



R. caucasicum.



R. caucasicum.

went for a walk in the village, where we saw electrical poles which led to another small town. In a pine forest around 800 m from the hotel, we saw a field between two small roads that needed to be explored, as it had both some orange and yellow flowers!

There were several old plants inside the field's dense vegetation, which was difficult to enter. I counted ten plants with orange flowers, which also had clear red stripes on their unopened flowers. The orange form was mixed with the yellow form. There were no intermediate forms, so the orange traits must be dominant, which means that their offspring could be 50% to 100% orange, depending on the pollen source. Mostly traits in plants are additive, so I expected a lower proportion of orange among the offspring.



White *R. ponticum* with darker blotch.



R. ponticum.



Deep purple *R. ponticum*.



R. ponticum.



R. smirnowii bud and foliage.

the further east we went, the drier it became. In the larger city of Bayburt, we again had to look for a hotel to stay in. We were unable to park closely to the main hotel, which was adjacent to a major market where burka dressed women were common in the street. We gave up trying to find a parking space in this cacophony of people and noise, and after a few laborious drive arounds in the city, we found there were only two other hotels, both two-star and also around the crowded marketplace. We decided then to find a hotel in another town closer to the coast and so drove on highway 915 over mountain passes to Rize.



Dachylorhiza urvilleana.

At the hotel we then had our dinner, which was an experience. We had chosen the beef to be roasted, and it was wonderful, but the table settings were special. The hotel lacked tablecloths, so they used newspapers instead, with the bread placed on top of flattened plastic bags. We all had to eat from a shared salad, as I also did in Yunnan, China.

We left and drove through some lush valleys with good vegetation, but



Orchis pallens.

The drive went fine at first, but the road was narrow and wound its way through many small villages. At times it seemed to be just a country lane and we began to wonder if we had gone the wrong way by mistake, but suddenly we saw a sign for highway 915. We continued, and the road went through a farm and over stones, holes and mud, which was splashed up over the car's fenders, but we proceeded onwards. We should probably have had a four wheel car, so we were very happy when we finally reached the pass, where we saw *R. caucasicum* flourishing in many small colonies. Most were only in bud



Stopped by an avaianche.



Almost white *R. ponticum*.



Daphne glomerata.

and there were whitish-yellow and pink half opened flowers. The capsules were not opened yet, so I was able to collect a lot of seed. Further down the road, we found a white *R. ponticum*, which was something similar to *R. caucasicum* but with a darker blotch, perhaps just a good form of *R. ponticum* or a natural hybrid. I collected two seedlings around this plant. We were now finding *R. ponticum* growing everywhere, and also some *R. luteum*. Outside one of the houses we passed, there was a car blocking the road, but fortunately there was a woodcutter nearby who moved it. In Rize, we easily found a cheap hotel, but we could only stay there for one day, which was alright as its standard was very low. We explored a little around in Rize, but decided that we should go to the town of Artvin, which boasted of its beautiful scenery.

The trip to Artvin was exciting after we left the beach highway and drove inland into the country. Everywhere we encountered tea plantations and saw tea pickers working diligently. They used primitive cable cars to transport the picked tea leaves down the road, which was a just steel wheeled platform that was pulled back and forth. As we drove higher up, we found a deep blue *R. ponticum* colony on slopes along an open forest, where they created a dense understory. On the road, we also saw a man selling roasted fodder corn, which I would not recommend eating!

We arrived in Artvin in the afternoon and drove up several winding roads with hairpin turns to the city centre. We saw a hotel sign and took the first room which was located in a minaret in a cul-de-sac. The hotel owner had the job of navigating guest's cars back and forth and to find parking spaces for them. The hotel was very good and had employees that could speak English. We got a good room opposite the mosque overlooking a small garden with mulberries, tea and an ice bar. We stayed here for four days, and then later came back again to spend an additional two days. The city was nice to explore and there were small restaurants and tea places scattered outside, as it was a tourist town with foreigners. We found a specialty cafe where we bought tea for about a dollar a cup.



Close-up of *R. ungernii* foliage.



R. ungernii foliage with buds.



Light yellow *R. luteum*.



Warm yellow *R. luteum*.

We talked with a Turkish English teacher who recommended that we visit the local nature reserve, which was higher up in the mountains.

I had a scientific article that indicated that *R. ungeronii* and *R. smirnowii* were growing in the nearby neighbourhoods of Murgul and Damar. We went there the next day and drove through a splendid landscape, which became a rhodo garden when we got higher. By Damar, we stopped close to an area with many *R. luteum*, and I was able to collect seeds from a white-yellow *R. luteum*. I then hoped for the rest of our stay to find a white form, but failed - it was just wishful thinking!

The next day we drove up to the nature reserve north of Artvin, where there was a small series of shops for Sunday tourists just outside the gate to the reserve. There was no gate and access to the reserve was free. Soon we were driving through *R. ponticum* and *R. luteum* areas. On top of the mountain, there was a rock with rhododendrons on its leeward side. To my joy, these old plants were *R. smirnowii* with different colored indumentums. Some were completely white and others a darker beige, but there were only a few seeds, which I collected, and no seedlings were found. I also took a little cutting from one of the plants which had a light brown indumentum. We then continued on the road, which became worse and worse, until we met up with a shepherd, who claimed that we while we could continue, the way was difficult and very muddy, so we returned the way we had come. On our return, we found both *Orchis sambucina* and *marculatum* and *Leucorhis albida*.

Ardahan:

After a nice stay at the hotel in Artvin, we drove southeast to inspect the mountains around Ardahan. We also then went closer to the border with Georgia to find *R. ungeronii* and *R. smirnowii*, and hopefully exciting variations of them. It proved quickly that the local people were progressively poorer the further south we went and that the mountains were lower, until around 20 km before Ardahan. At that point, we went over a pass, where we again saw *R. caucasicum*. We decided to examine the spot more closely on our way back, and so drove back through Ardahan north to another mountainous area. Along the way, there



Helleborus orientalis.



Paeonia mascula.

were areas crowded with *R. luteum* which were growing in quite exposed habitats, and therefore were quite small and compact. We saw *Daphne* in various locations with both pure white or pink flowers, and pink and yellow primroses. In the wet areas, *Caltha palustris* (marsh marigold) was present and on the dry slopes grew the toxic jimsonweed (*Datura stramonium*), often with the blue scilla and gentians, among many other species. We did not find new places for *R. smirnowii*, but we could see *R. caucasicum* growing on the mountain slopes in the distance. On our return, we explored the shrubby area about 300m (985 ft) from the road that we saw earlier that had many *R. caucasicum*. We found a hotel in Ardahan, but decided the next day to return to Artvin where the hotel was more comfortable. In the vicinity of Artvin, we found a marshy area which was rich in *Orchis incarnata*, a rare species which is like *Orchis palustris*.

From Artvin, we then took a different route up into the mountains. We had earlier seen a sign for a copper mine, and hoped to see more *R. smirnowii* plants. It was a beautiful trip and we found both a single large *R. smirnowii* plant with many flowers and an area with clean white *R. ponticum*. There was also a *R. ponticum* with a great truss which looked a lot like the well known garden plant. Some of the places we saw had *Cyclamen heterifolium* and *Cephalanthera* orchids growing, and in a field we saw several large white and black butterflies (*Nemophila*), which are extirpated in Denmark.

After a few days' rest in the city, we decided to leave and following some advice from some of the tourists we met, we drove to the Ayder Doga Resort Hotel in Çamlıhemşin, located in mountains on the south shore of the Black Sea. Çamlıhemşin is a genuine tourist area with forests which remind one of Switzerland, but not for the beer we purchased! We decided to do one more run up the mountains, but the road quickly became narrow and muddy, so we parked our car and continued by foot. Soon we came to a beautiful waterfall and a little further on, there was an extensive avalanche 2.5 m (8 ft) high which blocked the way. However, we met some workers who said that we could pass if we clambered up a bit of a cliff, and then followed another road. We succeeded, and saw there was an excavator that was digging a way through the avalanche from the other side, but it would take another several days to get through. On the other side of the avalanche, there was good hiking, and we hiked for several hours in the area but only found *R. luteum* and *R. ponticum*. We found, however, a reddish variant of *R. ponticum*, but unfortunately there were no seeds. At another place, we found a *R. ponticum* plant with almost white flowers and a little red blotch, but this plant was not as white as the one we found in the forest by Artvin.

We then visited a famous tourist resort where there was an old monastery, and on the way there, we drove along a mountainside where white bellflowers and orchids grew abundantly. Interestingly enough, there was also a place where there were many bee hives and a lot of *R. luteum*. The Turks believe that honey from *R. luteum* is not dangerous, although rhododendrons contain toxic substances in their green leaves. The petals and the honey are probably not too toxic in small amounts, but another thing that can happen is for the honey to be infected by bacteria and thereby contain strong acting toxins that can be fatal. However, this problem is known from all types of honey where hygiene is poor. We saw both small orange poppies and columbine on our last drive which was back to Trabzon. We were fortunate to find a hotel outside of Trabzon in the vicinity of the airport with a beautiful view over the Black Sea and with a swimming pool. We then returned our rented car without damage and took a taxi to the airport. In summary, this trip is recommended, if you can handle bad hotels!

Follow up in 2019: All seed plants from Turkey survived the Danish winters except for *R. unguernii*, which was collected in Turkey at too low an altitude. Seeds that came from the *R. luteum* orange form produced only around 30% orange flower plants, but at least two plants have a more intense orange color, which I have crossed for more seeds. Some plants were attacked by mildew and some have an intense red autumn leaf color, so some selection can still be done. The orange *R. luteum* is a great plant and many of my friends now have this orange form in their gardens.

Hans Eiberg is a member of the Danish Chapter and a recipient of the ARS Gold Medal in 2018.

“Plant your own garden and decorate your own soul, instead of waiting for someone to bring you flowers.”

Veronica A. Shoffstall

Early Red-flowered Species

Peter A. Cox
Glendoick,
Perth,
Scotland



(All photos by John Roy; reprinted from *The World of the Rhododendron* 20, 2019, the journal of the Scottish Rhododendron Society)

Few gardeners who grow at least some rhododendron species realise how many early red-flowered species there are. By early I mean those that flower from February to April in an average year. There are a few well-known ones such as *Rhododendron barbatum*, *R. thomsonii* and the red forms of *R. arboreum* plus a multitude of hybrids and the rest tend to be largely ignored. And yet there are many other red-flowered species, most of which are little known, and lots of these have fine foliage (particularly splendid young growth) and bark in addition to lovely flowers. Admittedly they are prone to getting frosted in flower but can make beautiful plants the year round. They vary from being low to prostrate dwarfs to quite sizable trees.

I fear for the future of many of these taxa both in the wild and cultivation. Nurseries are unlikely to offer the majority of these, and wild seed will not be introduced, partly to do with the Nagoya Protocol and partly a general tightening up on any collecting and importing. The exchange of plants between botanic gardens and the general public has become very difficult. Countries are getting more and more worried about live plants being imported because of the international spread of pests and diseases. Countries like Australia and New Zealand have been very strict over the importing of any seed of plants that are not already in cultivation due to the fear of anything new that might become invasive. Global warming, over grazing, cutting for firewood and human disturbance continue to reduce wild populations.

Red flowered forms of the tree-like *R. arboreum* mostly come from low elevations so are only suitable for mild west coast gardens and these include subsp. *delavayi*, its subspecies *albotomentosum*, subsp. *nilagiiricum* and subsp. *zeylanicum*. These all make very fine specimens in suitable locations, most forming neat upright habits and compact trusses. The last two are later flowering. The related *R. lanigerum* makes a more rounded bush with early flowers coming from unusually large flower buds. The flowers vary from red to pink.



R. barbatum.



R. exasperatum.

Subsection *Barbata* gives us bristly plants with fine peeling bark giving all the year round attraction. By far the best known is *R. barbatum* itself but it is often not the best to grow with frequently inferior flowers and unexciting foliage, although there are good forms about such as those collected by Hooker in the 1850s. I prefer the closely related *R. argipeplum* with more consistent fine trusses. It was formerly known as *R. smithii*. Another close relation is *R. erosum* with handsome leaves and attractive young growth but with more open-topped trusses of smaller flowers. Another relative is *R. exasperatum* (actually meaning rough) with very fine foliage and often a compact habit, but it comes early into growth so needs protection. Its flowers can also be rather small. *R. succothii* is sometimes placed in this subsection. Like the other members of the subsection, it has a peeling bark but it is usually non-bristly and can be shy-flowering. I like to class *R. fulgens* as a relation of *R. succothii*, differing chiefly in its indumented superior leaves and better flowers, a handsome plant.

There are two species in subsection *Irrorata* with red flowers. Both are tender and start very early into growth so are only for the mildest gardens. *R. kendrickii* has narrow wavy-edged leaves. The best forms are nice but avoid those with small-flowers. *R. ramsdenianum* has wider leaves and we find it shy-flowering.

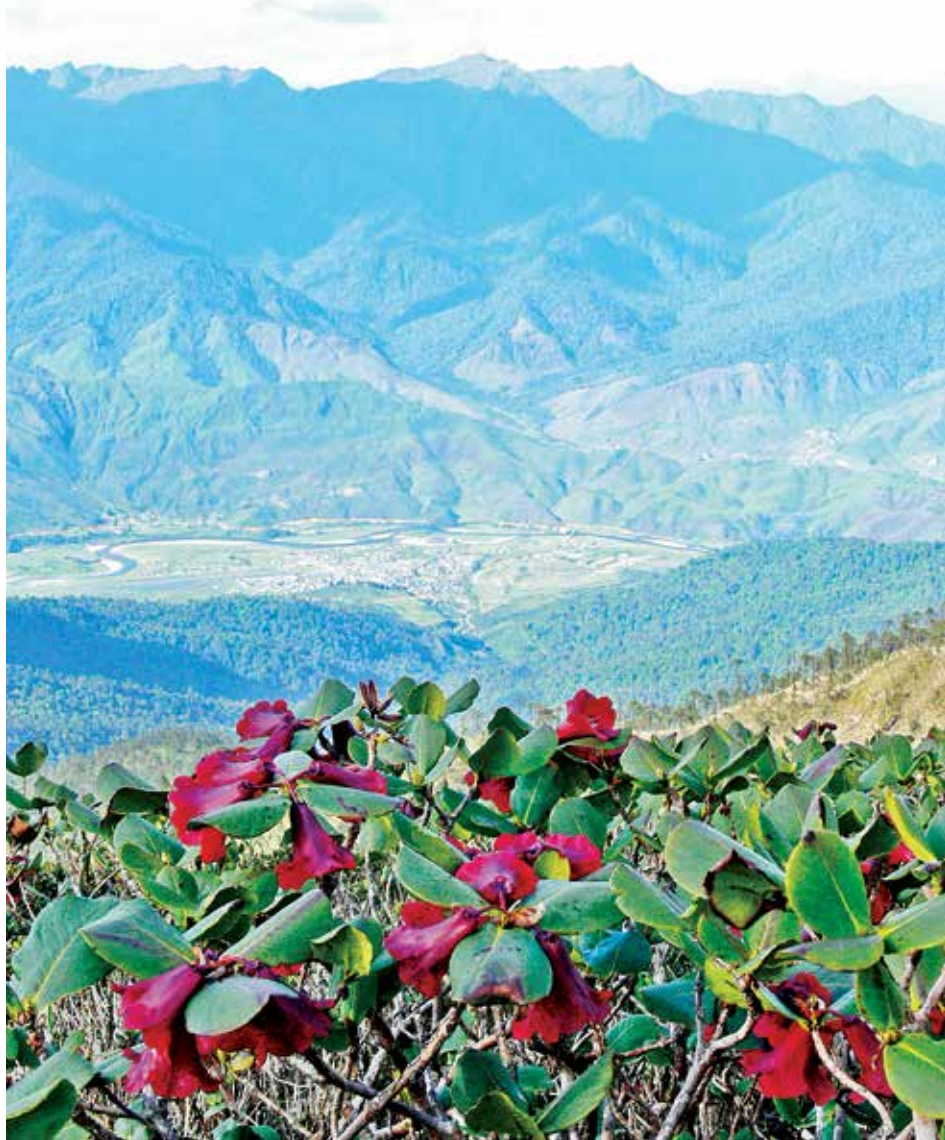
There are two red-flowered species in subsection *Maculifera*, *R. ochraceum* and *R. strigillosum*, and both can be of exceptional merit, if you choose good forms. The former was apparently not in cultivation until 1994 but has now been introduced a few times from different locations. So far my own collection in 1995 is the best with good foliage, a rounded habit and ball-shaped trusses of rich red flowers, freely produced. I regard it as being one of my outstanding introductions. It was found growing on the top of rocks and on cliffs, indicating that it requires perfect drainage. *R. strigillosum* is generally a bigger plant in all parts and produces more of a flat-topped truss but is none the less a good plant in its better forms with striking young growth and rich red flowers.

Subsection *Neriiflora* contains a multitude of species, subspecies and varieties. Many have variably coloured flowers and there are several natural hybrids. Many of these are high altitude plants in the wild so are not generally suitable for warmer districts.

R. beanianum, *R. catacosmum*, *R. coelicum*, *R. haematodes* subsp. *chaetomallum*, *R. piercei*, *R. pocophorum* are all related species of small to medium stature, early flowering and which require fairly exacting conditions to flourish. Most are from high altitudes, disliking summer heat and drought. All have attractive indumented leaves and nice red flowers but are more collectors' items for a specialised collection. These are what I would call endangered taxa, being hard to obtain and liable to disappear from cultivation. My son Kenneth collected a plant midway between *R. piercei* and *R. beanianum*, very free flowering and compact.

Rhododendron mallotum is different from the above, coming from a relatively low elevation and is unlikely to be hardy in cold areas. It has more of a tree-like habit, rather larger rugose leaves with fine dark indumentum. The fine red flowers are very early. It has a very limited distribution in the wild and may be threatened.

R. aperantum forms neat low mounds and is one of these species that can vary in the colour of its flowers, red being just one. It requires exacting conditions to grow well but is worth the effort. *R. microgynum* is a larger plant and more easily grown and freer flowering. *R. sanguineum* is another variable species but some have good red flowers. By far the most popular is the very dark var. *haemaleum*, as near to black as any



Arunachal Pradesh in northeast India.



R. piercei.



R. forrestii.

rhododendron taxon. Like the rest of the subsection it needs good drainage.

R. forrestii and *R. chamaethomsonii* are another story. The latter has proved to be an unsatisfactory species as most of the plants grown in cultivation under this name are undoubtedly natural hybrids with all shapes and sizes and even different coloured flowers. It is certain that it is difficult to make out what should be classified under a broader coverage under the name "*forrestii*" and what should be "binned" as a hybrid. For instance, the plants growing on the Doshong La in Tibet vary entirely according to whether they have shelter or not and grow taller where they have a little shelter and have more than one flower to the inflorescence. The question is should they be separated taxonomically. I think not. In cultivation *R. forrestii* is often of little horticultural value in areas with frequent spring frosts. If grown in sun, it gets its growth and flowers frosted most years, if grown in the shade, it will not flower. This is our experience in east Scotland and it has a similar problem elsewhere, which is sad as it could be a most charming garden plant with its comparatively large red flowers if only it was not so frost-prone. *R. chamaethomsonii* should be just a larger in all parts version of *R. forrestii* with generally more than one flower to the inflorescence.

R. neriiflorum is a very variable species, found wild over a very large geographical and altitudinal range. Subsp. *phaedropum* comes from the west end of its distribution, often from a very low altitude, so is often on the tender side. Subsp. *neriiflorum* is usually hardier and the better forms are worth growing, some of which can grow quite tall. The other species in the *Neriiflorum* alliance, *R. floccigerum*, *R. sperabile* and *R. sperabiloides*, are closely



R. sanguineum var. *haemaleum*.



R. strigillosum.

related with some scattered indumentum.

Subsection *Thomsonia* has the *creme de la creme* of early red -flowered species. *R. hookeri* is perhaps the finest from the western end of its distribution in western Arunachal Pradesh. It can make a big plant with a very attractive bark and magnificent red flowers in a good season. It is a pure chance that the “hooks” on the leaf underside are the easiest method of identification for this species. Those found at the east end of its distribution have different coloured flowers and rather different foliage and could be a new species. *R. meddianum* var. *meddianum* is not a very strong grower but is usually free-flowering with fine red flowers. I was also involved in the discovery of *R. subansiriense*, found in Arunachal Pradesh in 1965. There it made a fine erect small tree with smooth trunks and good crimson-scarlet flowers. Alas, in cultivation, it comes into growth so early that it gets growth-frosted almost every year, resulting in very few flowers. These three species are related to the well-known *R. thomsonii*, which at least in the fine Ludlow and Sherriff introduction, can be classed as an early red. This is a species that has good flowers, bark and foliage. Lastly in this subsection is the apparently related *R. thomsonii* subsp. *lopsangianum* which at present is a real taxonomic muddle including the few flowered and deeply indumented *R. sherriffii*. Leaves may be glaucous above or below and also vary from no or little indumentum. The last with some indumentum are undoubtedly related to *R. sherriffii*, a collector’s species of interest rather than beauty. I will not make any attempt here to unravel the different plants that have been given the name “*lopsangianum*”, only to say that what I think all they have in common is a fewer number of flowers to the truss than subsp. *thomsonii* and the flowers open earlier. They also have a tendency to be shy-flowering.

We can just hope that keen rhododendron species buffs will make attempts to propagate and distribute these species before they disappear from cultivation.

Peter Cox, a member of the Scottish Rhododendron Society, is an avid explorer for rhododendrons and the author of many books and articles on the genus.



ARSStore.org

Where every purchase benefits the American Rhododendron Society

Use these links to quickly go directly to the respective ARSStore

Amazon . ARSStore . org



Target . ARSStore . org



Walmart . ARSStore . org



**Use ARSStore.org For All Your Online Shopping
And Earn Up To 5% For The ARS**

Insects of Woodland Gardens: The Good, the Bad & the Beautiful

Linda Gilkeson
Saltspring Island,
BC



(Photos by
Author unless noted.)

Most of the insects you see in your garden are not pests! For example, butterflies are beautiful indicators of overall ecosystem health. The adults may desire nectar-producing flowers, but their caterpillars feed on native plants, so therefore their presence depends on healthy numbers of nearby native host plants such as cedar, willow, alder, maple, stonecrop, and spiraea. Some important native plants are especially valuable! For example, five species of butterflies depend on stinging nettle as food for their caterpillars.

Many insects you see in the garden are pollinators: This includes hundreds of species of native bees, such as bumble bees, leaf cutter bees, and many species of smaller bees, the majority of which nest in the ground. About 70% of bee species dig burrows in the soil, while the remaining 30% of bees nest in tunnels in twigs, old borer holes in wood, etc. Research has shown also that “non-bee” insects (flies, beetles, wasps and butterflies) are as valuable for pollination as bees. Flies are particularly valuable, with most pollination done by hover flies (*Syrphidae* family) and bee flies (*Bombylidae* family). The larvae of many hover fly species also eat aphids, making them immensely valuable to our gardens.

Thousands of native insect species are predators. Especially common are hundreds of insects that eat aphids (such as lady beetles, lacewings, hover flies, and aphid midges) and the many species of parasitic wasps and parasitic flies that lay their eggs in or on caterpillars and other insects. There are also many ground-dwelling predators, such as ground beetles and rove beetles that eat plant-damaging slugs and root weevil larvae.



Paraasitic eggs laid on a tent caterpillar.



A hover fly (*Syrphidae* family) drinking nectar.



A bee fly (*Bombylidae* family) is also a pollinator.



Plant with weevil damage on the right and weevil resistant rhodo upper left.



Viburnum leaf beetle (*Pyrrhalta viburni*) larvae.

Of course, some insect species are pests in our woodland gardens, and climate changes may be already making some of their effects worse. Pests with multiple generations per year [e.g., aphids and lacebugs (*Stephanitis* spp.)] have more generations in warmer years and if their numbers are very high by fall, there may be greater numbers overwintering to attack plants in the spring. As a changing climate brings more variable weather, plants may also be stressed by heat waves, longer summer droughts and heavy rainfall events in winter. Such stresses can weaken plants and make them more attractive both to sucking insects (such as scales and aphids) and to boring insects.

When it comes to managing pests, prevention is the key to a beautiful woodland garden. Choose species and cultivars with the fewest known pest and disease problems. Plant the “right plant in the right place,” taking into account the plant’s requirements for sun or shade conditions, soil fertility, pH and moisture to ensure plants are not stressed by poor growing conditions. Wherever possible, choose pest resistant species and cultivars. For example, rhododendrons with slightly rolled leaf edges prevent weevils from feeding on the leaves (e.g., ‘P.J.M.’, ‘Jock’, ‘Dora Ametis’, ‘Crest’, ‘Odee Wright’, ‘Point Defiance’, ‘Virginia Richards’, and the Yak crosses). Those with indumentum also may resist some insect feeding and diseases. We now should avoid planting *Viburnum* species favoured by the Viburnum Leaf Beetle (*Pyrrhalta viburni*), which has spread throughout the Pacific Northwest. There are some resistant *Viburnum* species including *V. bodnantense*, *V. carlesii*, *V. davidii*, *V. plicatum*, *V. sieboldii* and some others.

When purchasing plants, don’t also bring home problems. Pests often purchased on plants from nurseries include weevils, whiteflies, scale, mealybugs and spider mites. Inspect plants closely before you buy, checking the undersides of leaves and along twigs. Look for honeydew on the leaves, which is evidence that sucking insects are at work. If possible, slide root balls of rhododendrons and azaleas out of their containers to look for weevil larvae along the sides of the root ball.



Leaf cutter bee on goldenrod.



Yellow faced bumble bee (Family: *Apidae*) on verbena..



Red admiral nectaring. Photo: Elizabeth Cronin.



Cedar hairstreak.

Make sure problems are correctly identified too. Damage from poor growing conditions or extreme weather can look like pest or disease damage. Keep a close eye on the plants where you suspect a problem. Pests are hard to find because most hide during the day and some are very fast or very small and hard to see. It is common for damage to be noticed only after the culprits are done feeding and have left the plants.

To monitor for pests on problematic plants, look closely at leaves, do it regularly and keep notes and photos for future reference. Records are important because most species occur at the same time every year and you will be able to narrow down the time period where certain problems show up in your own garden. You may also notice that some plant species or cultivars are attacked less than others (and you should then choose to grow more of those).

Most of the insect control that goes on in gardens is done by the myriad of largely unseen beneficial insects. Your best bet to minimize pest damage is to protect, attract and feed these beneficial insects and let them suppress the nasty insect pests for you. These natural enemies need a safe environment without pesticides. Most of the beneficial adult insects feed on nectar or pollen (it is often their larvae that are the predators), therefore gardens with many kinds of plants blooming throughout the season attract the most beneficial insects. Pollinators of all kinds also feed on nectar and pollen from a variety of flowers, and adult butterflies must visit flowers for nectar. All of these insects thrive best where there are many kinds of flowers so as to provide a continuous supply of nectar from spring to fall. Nectar- and pollen-rich flowers that bloom in August and September are especially valuable in the Pacific northwest because that is the time of year when there are the fewest native plants in bloom. It



Honey bee on native Douglas aster.



Ground beetle. Photo: Elizabeth Cronin.



Moss's elfin. Photo: Simon Henson.



Pale swallowtail.

has been estimated that around half of bumble bee colonies die out over the summer from starvation once the rich food supply of spring-flowering plants is over.

To feed butterflies, pollinators and predators, emphasize trouble-free, easy to grow native plants that need little water in the summer. In the Pacific northwest, this might include *Arbutus* spp., maples, native willows, *Arctostaphylos* spp., Oregon grape (*Mahonia* spp.), salmonberry (*Rubus spectabilis*), *Spiraea*, salal (*Gaulthoria shallon*) and red-flowering currant (*Ribes sanguineum*). For the sunny edges of a woodland garden, stonecrop (*Sedum* spp.) is a valuable plant on rocky outcrops (and is the only host plant of the Moss's Elfin butterfly (*Callophrys mossii*)), while goldenrod (*Solidago* spp.) and native asters are among the best plants to sustain all kinds of beneficial insects in late summer.

It isn't widely known that beneficial insects need a water supply in the summer dry period, but research shows they live substantially longer and lay more eggs when they have access to a safe water supply. This can be as simple as a bird bath with a few rough stones in it to give insects a way to crawl out of the water if they fall in.

Although insect pests are mostly controlled by their natural enemies, you may need to step in on occasion to suppress pests. Options that do the least harm to beneficial insects, include:

- Physical controls: Shake adult weevils from plants, prune out tent caterpillar nests or remove daylily flowers infested by Hemerocallis gall midge.
- Water sprays: A strong blast of water suppresses aphids, sawfly larvae, thrips, spider mites and lacebugs while causing the least harm to beneficial insects.



A safe water source for beneficial insects.



Sun scald on rhodo.



Tunnel nesting bees use beetle holes.

- Least-toxic pesticides (as a last resort): These include horticultural oils, insecticidal soap and bacterial biocontrols for caterpillars and white grubs (*Bacillus thuringiensis* spp.). Beware of home-made sprays, as not only are they illegal, but if they do kill “pests”, they can also kill predators, pollinators and butterflies.

Most of important of all, enjoy the insects that live in your woodland garden, as their diversity and abundance are truly impressive!

Dr. Linda Gilkeson is a BC entomologist and gardener who has published many books on both gardening and insect pollinators and pests.

Pleione Cultivation

Atsuko Gibson
Federal Way,
WA



(Reprinted from the 2020 RSBG Spring Newsletter 45(1))

Pleiones are a miniature orchid that can be grown outdoors in the ground with very little care, with around 21 species in the genus. The flower looks like a miniature *Cattleya* flower and the color varies from white to pink to purple to yellow. In the wild, they grow in thick moss on tree trunks or on rocks. However, *Pleione* is considered a “terrestrial”

orchid, meaning they can also be grown in the ground. Some species are much easier to grow than others.

Pleione formosana and *P. bulbocodioides* are recommended for beginners, as they multiply quickly and can be grown with little care. Here is how you grow these adorable miniature orchids. If you acquire one in the dormant season, wait to plant it until late winter.

These plants are best grown in bright shade to full sun. The key is to choose a setting where the pseudobulb does not stay wet during the dormant season. So, by any means, don't plant them in heavy clay soil with no drainage. Your option could be a rockery where overhead rocks can shed the rain or under some eaves. If you plant one without any cover, you could place a plastic nursery pot over it to shed the rain. When you plant a pseudobulb, plant it so the top third of the pseudobulb is above the ground. There is no need to start watering until foliage emerges, which is after it blooms. If you live in USDA zone 8a or colder, you will have to dig them up and re-plant them every year, or grow them or grow them in a container. We have a patch of *P. formosana* that have been in the ground for over 15 years in the alpine garden, and they bloom beautifully every year. I should mention they are growing in thick moss, so they do have some protection from the cold.

If you opt to grow one in a container, it can be done just as easily. The bulbs can be potted in a barky soil mixed with some regular potting soil. No matter what soil you use, it must have sharp drainage. A “no watering rule” during the dormant season should be strictly followed. This is especially true with container culture, and more so if you bring the container inside during the winter months. A pseudobulb will not start growing roots until it leafs out, so that is why watering is not necessary. Overwatering in the dormant season will result in the rotting of the pseudobulb.



P. formosana

I grow *P. formosana* in a trough and leave them outside year around. Mine are placed on a table under a Douglas-fir tree, so the trough stays rather dry in the winter months. They have produced many “daughter bulbs,” which I have been sticking in between the bricks of my retaining wall. Lastly, don’t forget the slug bait whether you grow them in the ground or in a container. Some of you might think growing orchids is sensitive and difficult but give *Pleione* a try. I will bet you will have a very rewarding experience. For more info, go to <http://www.pleione.info/>.

Atsuko Gibson is the Assistant Curator at the Rhododendron Species Botanical Garden in Federal Way,

Saving the Lives of Ring-barked Trees and Shrubs

Alan Edwards
Dunedin,
New Zealand



(Reprinted from the Dunedin
Rhododendron Group Bulletin 2019:
39-41)

Last spring, I was disappointed to notice that one of a group of three *Pseudopanax larboreus* (“five-finger”), which I had planted on our roadside bank, had been ring-barked (or “girdled”) by the cord of a contractor’s weed-eater. The plants were three or four years old, raised from seedlings found in our garden. A band of bark about 1 cm (0.4 in) wide had been destroyed right around the main stem, which was about 2.5 cm (one inch) in diameter.

A quick check of gardening books and the internet made it clear that prompt action was essential if the plant was to have any chance of survival; the plant tissues immediately under the bark are vitally involved in the transport of fluids and nutrients between roots and leaves. Expert advice is that a plant which has lost bark on up to 25% of the circumference of the main stem will usually heal itself and survive. Wounds of 25% to 50% need to be treated; clean the wound with soap and

water, then cover it with something to prevent the wood from drying out and provide a barrier against the entry of pathogens. During the recovery period, the plant would be likely to lose some leaves and branches.

Significant ring-barking on a plant only one to two years old can be treated by cutting off the main stem just above ground level, then selecting the best of any resulting new shoots to become the new ‘leader’ or trunk.

Bark damage to more than 50% of the circumference (which could be caused by animals such as rabbits or rodents, as well as by humans) requires grafting to maintain the flow of nutrients until the plant can grow new bark. The process is called “repair grafting” or “bridge grafting” and is most successful when (as in my case) carried out in spring. However, stone fruit trees (e.g., plums, cherries) are not readily repaired by bridge grafting. However, it may be better to attempt a graft immediately rather



Fig. 1. The cleaned wound with flaps.

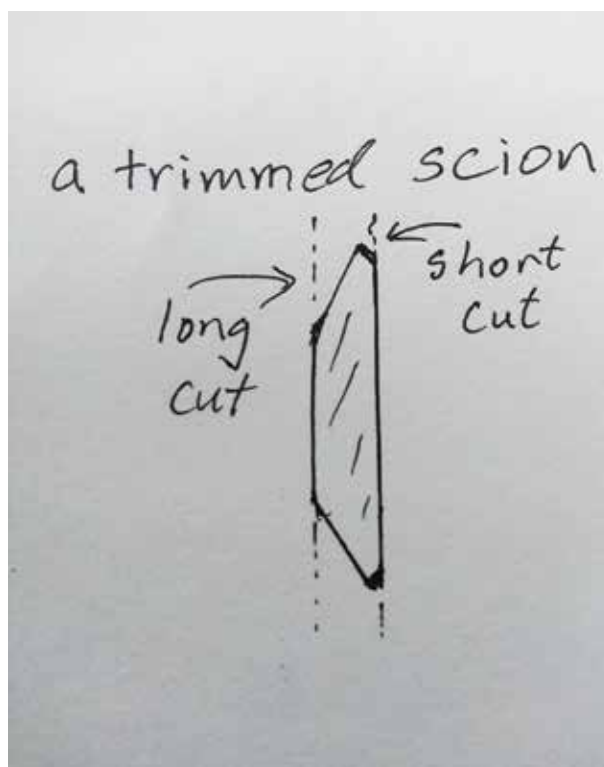


Fig. 2. The trimmed scion.

than wait months for the arrival of spring.

The technique involves obtaining small slivers of bark from a branch about one cm (0.4 in) in diameter and inserting them vertically under the edges of the surviving bark on the main stem, which bridges the bark gap and hopefully allows cells to link up and resume the transportation of life-giving fluids.

There are several stages to this process. On the problem plant (or another of the same family) find a small branch, about 1 to 2 cm (0.4-0.8 in) in diameter which you are prepared to sacrifice. Cut the branch off in the usual way, leaving a short collar so the plant can heal the wound. Mark out, perhaps with a felt-tipped pen, six or eight sections of bark (called 'scions') about 1 cm (0.4 in) wide by about 4 cm (1.5 in) longer than the height of the wound, with the longer measurement running along the length of the branch. Mark each scion so that, when removed, you will know which end was nearer the leaves and which nearer the main stem. In other words, when used in the grafts, the scion will continue to conduct fluids from the "root end" toward the leaves. With a sharp blade or knife, excise the marked segments of bark to a depth of about 2 or 3 mm (1/8 in), removing them carefully to avoid splitting or cracking.

Clean the wounded (ring-barked) main stem with soapy water, then rinse with clean water. Carefully cut the upper and lower edges of the wound to get rid of any ragged bark edges. Then cut vertically above and below the wound to create small flaps of bark of the same width as your scion strips; probably from four to six spaced around the circumference of the wound will suffice, depending on the circumference of the stem (Fig. 1).

Now trim the scions so they are slightly longer than the height across the wound plus the upper and lower flaps. Then carefully slice, with a slanting cut, the inner (non-bark) side of each end of the scions, from near the middle to each end, so that each end forms a shallow wedge.

Finally, make a very short sloping cut at each end of the scion from the bark side towards the end of each sliver, so that the very end comes to a point (Fig. 2).

Carefully but firmly push the ends of each scion under its "receiving" bark flaps. Secure each scion in place with a sharp tack or small diameter brad (not a nail, which is likely to split the flap and the scion) (Fig. 3). The aim is to have firm contact between the surfaces to allow cell-to-cell regrowth.

Finally, cover the whole grafted area to prevent drying out and the entry of pathogens; grafting compound or wax or a water-based asphalt emulsion is recommended. I used petroleum jelly (Vaseline).

If the wound is very wide (vertically) and the main stem is likely to move significantly in the wind, you could temporarily insert a twig or match under the middle of each scion while fitting it into place. Then remove the twig/match, leaving a slightly bowed scion which can flex but still have both ends fixed firmly in place under the bark flaps.

And how did the *Pseudopanax arboreus* fare? About 10% of its leaves yellowed and fell off during the summer but by autumn the plant had had a significant growth spurt and was looking very healthy.

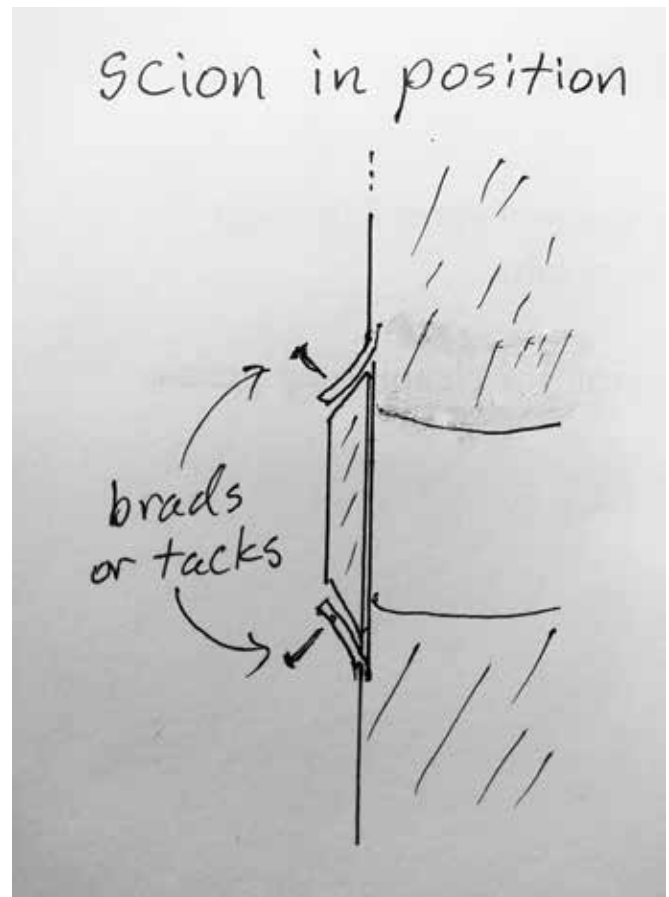


Fig. 3. Scion in position.

Alan Edwards is Editor, Dunedin Rhododendron Group Bulletin, and is a long-time member of the Group.

"The philosopher who said that work well done never needs doing over never weeded a garden."

Ray D. Everson

Haydite BioBlend–G(B): A Promising New Substrate for Growing Rhododendrons

Stephen Krebs
The Holden
Arboretum
Kirtland, Ohio



(Modified from the Spring 2018 newsletter of Great Lakes Chapter.)

Rhododendrons as a whole are plants that grow optimally in fairly restrictive conditions, including a requirement for well drained, organic acid soils with low nutrient content. For gardeners in regions with less optimal soils, such as the Midwest, the presence of higher clay content and pH often requires amending the soil and creating raised planting beds in order to provide acidic and well drained conditions. Without low pH, plants struggle to obtain key nutrients such as iron from the soil, and without good drainage, rhododendrons are vulnerable to root rot

disease caused by the invasive soil pathogen *Phytophthora cinnamomi* that thrives in wet conditions. This pathogen infects fine roots and works its way up towards the crown, destroying the vascular system (plumbing that connects roots and shoots) along the way. As the water supply is shut off, sudden and fatal wilting symptoms are observed above ground (Fig. 1).

At Holden Arboretum's Leach Research Station, we have had some success in breeding new varieties of rhododendrons that are resistant to *Phytophthora* root rot, and we are in the process of demonstrating that susceptible cultivars can be protected from the disease by grafting them to resistant rootstocks. Nonetheless, rhododendron resistance to root rot is not immunity — given enough pathogen pressure and environmental stress, even resistant plants may fail in the landscape. That is why cultural methods for disease avoidance, such as improving soil drainage, remain an important part of an integrated approach to disease control and plant health. Consequently, we were intrigued to learn about a new horticultural substrate called Haydite Bioblend–G(B) that is produced by DiGeronimo Aggregates in Independence, OH (Fig. 2). This structural soil product is being used extensively in urban plantings and also is technically specified for green roof plantings. Haydite is made from quarried shale, which is then crushed to variable sizes and heated to 2000° F (1100° C), whereupon it expands (think of it as a heat version of fracking). Although it shares some mineral composition with vermiculite, which is a hydrous phyllosilicate mineral that also undergoes significant expansion when heated, the two are quite different structurally. A raised bed of haydite will maintain its structure indefinitely, where a bed of vermiculite will become mush with watering. The overall structure of the haydite mix is very porous, with excellent drainage, but the expanded shale has a capillary action that enables better water retention than ordinary stone. A horticultural mix is made by adding some organic matter (pine bark) to 5% of the total mass and adjusting the pH to a friendly 5.0. It is also a very attractive, natural-looking product with pink and gray shades.

But is it good for growing our favorite plants? We are answering that question in a couple of ways. In September 2017, we prepared a new bed at Holden's Rhododendron Discovery Garden (RDG) by adding Haydite BioBlend to a depth of 18



Fig. 1. Advanced root rot symptoms.



Fig. 2. Haydite BioBlend G(B)



Fig. 3. Rhododendron Discovery Garden hybrid evaluation bed made from Haydite BioBlend.



Fig. 4. Healthy fibrous root system after one year in RDG Haydite bed.

in (46 cm) above the native soil, which is a poorly drained, high pH clay mixture. Rhododendrons were dug from a nearby field and planted in the bed at grade with its raised surface (Fig. 3). The planting was mulched with pine bark and left to overwinter in this very exposed site. During the subsequent growing seasons, the plants were not fertilized and were irrigated as deemed necessary (infrequently). As of September 2019 (two years post planting), the plants are performing well—the new foliage appeared healthy and extensive fibrous new root systems were present on a few plants that were dug up for observation and then replanted (Fig. 4).

In a greenhouse setting, we planted *R. 'Capistrano'* in containers with Haydite BioBlend and are comparing these with the same cultivar planted in pots containing a typical woody plant nursery production mix (85% pine bark: 15% peat). From those comparisons, we observed that the haydite mix is very suitable for rhododendron growth, as good as or better than the conventional bark mix (Fig. 5). The question of whether or not Haydite BioBlend offers better protection against root rot disease than other raised bed components (such as pine bark or topsoil) remains unanswered at this point in our trials. However, root rot disease is fairly common in the RDG, where the raised beds were formed from sandy-loam topsoil that was excavated and brought in from field sites in Lake Co., Ohio, that were possibly contaminated with the pathogen. If our new test bed provides superior health and growth, then this could be partly attributed to better drainage and disease avoidance in the expanded shale substrate. As a low fertility substrate, it will also need to be tested over the long term to learn about the management of plant nutrition.

Author's note: at the time of this publication, DeGeronimo Aggregates has closed its shale quarry operations that abut the Cuyahoga Valley National Park. Currently, Holden Arboretum is purchasing haydite from Arcosa Lightweight, which has production sites across the U.S. (arcosalightweight.com). The cost is about \$50/yard³ (0.78 cubic meters) plus shipping. Composted pine bark fines are then mixed in at about 1:10, v:v, bark:heydite. To stretch the budget, Holden is also experimenting with mixing topsoil, pine bark, and heydite in a 1:1:1 ratio by volume. Although somewhat costly at the outset, the horticultural blends may be economical in the long run. Planting beds made with expanded shale will remain raised and structurally porous indefinitely, unlike beds made from organic matter that eventually breaks down, becoming compressed and poorly drained. Furthermore, the good water retention in the heydite substrate may prove useful in drought management of shallow rooted rhododendrons in the landscape.



Fig. 5. Healthy rhododendron roots in containers of traditional bark mix (L) Haydite BioBlend (R).

Steve Krebs is the Director of the David G. Leach Research Station at the Holden Forests and Gardens, and a member of the Great Lakes Chapter.

One of the Best “Cameo” Hybrids: R. ‘Naselle’

Maria Stewart
Sandy, OR



Imagine corollas of rose-pink with yellow centers and orange spots formed into large trusses on a nicely rounded rhododendron. This is ‘Naselle,’ which is named after both a town and a river in the state of Washington. By the way, the word Naselle was derived from a Chinookan tribe named Nisal. Descriptions of ‘Naselle’ say that the new leaves are pale maroon. When they mature, the leaves are medium green and elliptic. The Award of Excellence was given to ‘Naselle’ in 1992.

Here is more about ‘Naselle’:

It is an elepidote which means that it does not have scales on the undersides of its leaves.

The cross was hybridized by Jim Elliot in 1987 and is (‘Big Sam’* × ‘Lem’s Cameo’), with ‘Big Sam’* being (‘C.I.S.’ × unnamed hybrid).

The leaves are elliptic and medium green when mature, which cover the plant nicely. Each large truss holds up to 15 beautiful corollas of rose-pink with yellow centers and orange spots, and it has been described as one of the most striking of the ‘Lem’s Cameo’ hybrids. This hybrid is well-branched and looks rounded in shape. It will grow into a four foot high by four feet (1.2 x 1.2 m) wide plant in ten years, and can tolerate temperatures to 0 to -5° F (-18 to -21° C). With respect to its optimal placement in a garden, it does well with filtered sunlight, but enough sunlight to produce those wonderful blooms.

* = unregistered cultivar.

Maria Stewart is a member and past president of the Portland, OR, Chapter. She and her husband, Mike, also owned and operated the Dover Nursery in Sandy, OR.



Rhododendron ‘Naselle’. Photo: Don Wallace - Singing Tree Gardens..

SINGING TREE GARDENS
Nursery
WWW.SINGTREE.COM

HUGE SELECTION OF
Rhododendron Hybrids and
Species Shipped Nationwide
FREE SHIPPING ON
ORDERS \$149 OR MORE!

5225 DOW'S PRAIRIE RD. MCKINLEYVILLE, CA
707-839-8777

Van Veen Nursery
Specializing in Rhododendrons and Azaleas
Since 1926



Custom Propagation Services : We are READY to Receive Your Cuttings!
Expert Knowledge & Over 80 Years Experience
Extensive Collection of Rare & Unique Rhododendrons and Azaleas
We Ship Throughout the US and Internationally
No Order too Large or Small!

Please do not hesitate to Call or Email us with any questions you may have.

www.vanveennursery.com

[vanveennursery@facebook.com](https://www.facebook.com/vanveennursery)

503-777-1734 | vanveennursery@hotmail.com | 4201 SE Franklin St Portland OR 97206

Righting Uprooted Rhodies

Emily Aune
Eugene, OR



All photos by the author.
(Modified from the April 2019 Eugene Chapter newsletter.)

Following winter snow damage that uprooted rhododendrons in Hendricks Park, the oldest city park in Eugene, OR, there were six completely uprooted rhododendrons that needed some help (Figs. 1 & 2). Since rhododendrons are shallow rooted, there is often the option of standing them back up. The following is the method we adopted.

First, we dug out soil below and around the root ball in the hole where it will be placed back into the earth. Often when a plant uproots, soil from the exposed part of the root ball will fall back into the hole, and surrounding soil will fill the lowest area. If this soil is not removed, the replanted rhododendron will sit higher than it used to, and be less stable.

Secondly, we got our staking system of wires ready and installed. From the depths of the garden shed, I had found several nifty wire stake anchors that we pounded into the ground with the rod I am shown holding in my right hand (Fig. 3). We then removed the rod, leaving the wire stuck deep in the ground. When there is tension placed on the wire, the short below-ground piece attached to the end of the wire pivots to a horizontal direction, where it anchors the wire, keeping it from pulling out of the ground.

Next, depending on what power one has available to lift the rhododendron, brute strength, a tractor, a “come-along” (Fig. 4), or a team of volunteers (Fig. 5), stand the rhododendron back up into an upright position. If the rhododendron is too heavy to do this, it can be pruned prior to standing it up.

To help hold the plant up, a “crutch” made from old rhododendron or oak wood can be utilized to give support in the direction of the fall. I buried the bottom of the “crutch” into the ground, after finding just the right angle and position on the plant. The wires can now be attached, but make sure there is some protection for the plant around the wires. An old section of garden hose works well (Fig. 8) and protects the trunk from the wire or rope cutting into the trunk. If the anchors



Fig. 1. Uprooted rhododendron.



Fig. 2. Much larger uprooted rhododendron.



Fig. 3. Using a rod to drive the anchor into the ground.

in the ground are not sufficient to secure the plant, other stabilizing wires can be attached to sturdy stakes or sometimes neighboring trees or shrubs.

Finally, add soil around the base of the plant to fill in any gaps. You will likely have to give some extra tending to the rhododendron for the next couple of years, especially if it is a large plant, but with some extra water, it should now survive for many years to come. The wires can be removed once the rhododendron trunk does not move when it is gently pushed, as this indicates that supporting roots have now grown into



Fig. 4. Using a "come-along" to pull the plant upright. the surrounding undisturbed soil.

Emily Aune is the secretary of the Eugene Chapter.



Fig. 5. Volunteers help push the plant upright.



Fig. 6. Use of a crutch to hold the plant upright.



Fig. 7. Another use of a crutch to temporarily hold plant upright.



Fig. 8. Using wire with section of hose to protect the plant..

Society News

Double Bronze Medal

Seattle: Katherine Thompson

The Seattle Chapter of the American Rhododendron Society awards you, Katherine Thompson, its highest honor, the Double Bronze Medal, on December 1, 2019, in recognition of your many years of service. As our Newsletter Editor and Membership Committee member, you carried out your duties with great skill. The time you spent volunteering generously for our various activities is highly appreciated. Knowing you and your many acts of kindness created a kinship among SRS members. Katherine, you have earned the Seattle Chapter's appreciation, respect and friendship, and its Double Bronze Medal.

Seattle: Diane Thompson

The Seattle Chapter of the American Rhododendron Society awards you, Diane Thompson, its highest honor, the Double Bronze Medal on December 1, 2019. Diane, the members of SRS gratefully thank you and commend you for your tireless dedication to our Chapter and Society. Serving twice as President, and countless hours on the board and in many other ways, you inspire us to carry on with mutual friendship and love of rhododendrons! You have in every way earned this Double Bronze Medal.

Bronze Medal

North Island: Garth Wedemire

It was with great pleasure that President Maureen Denny presented the American Rhododendron Society Bronze Medal to Garth Wedemire on December 10th, 2019. Garth has a long history with the ARS and has been the recipient of many prestigious awards. Moving to the Comox Valley in 2014, he joined the NIRS Executive and continues to participate actively in all chapter activities. Garth has many talents and is incredibly generous with his time, knowledge, and expertise. Teacher, presenter, plantsman, photographer, technology wizard and valued member of our club, we thank Garth for his many contributions and congratulate him on being awarded the ARS Bronze Medal by the North Island Rhododendron Society.

Society News (Continued)

Bronze Medal

Atlantic Chapter: Sheila Stevenson

The Atlantic Chapter of District 12 awards the Bronze Medal to Sheila Stevenson. Sheila has been at the heart of our chapter for over thirty years, and has served us in most every society position, including for over ten years, as President. She has volunteered at plant sales, outreach events, and is currently overseeing planning for the garden and site tours for the 2021 ARS Spring Convention. We especially recognise Sheila's key role in the creation of the Rhododendron Interpretive Panels now installed at Agriculture Canada's Kentville Research and Development Centre. Sheila and her husband Stephen Archibald, also host many of our chapter's out-of-province and international speakers at their home.

Thus, on behalf of the ARHS, many sincere thanks Sheila for your hard work, dedication, and good-hearted friendship!

Hawaii: Richard Rhodes

You were elected to be Secretary for our Hawaii Chapter - ARS in 2011 and have held that position ever since. You have supported our Chapter and our activities wholeheartedly, often behind the scene with few folks knowing. We've come to depend on you, beyond your position as secretary, for fun, great food and friendship, too. You're not one for the lime light but, this time you can't avoid it as the Hawaii Chapter -ARS presents you with a Bronze Medal in appreciation for all you do. "For he's a jolly good fellow" ...

In Memoriam:

Nanaimo: Craig Clarke

We all rely on those special people that form the foundation of our clubs. They are the ones that keep us moving forward and vibrant by taking on whatever task needs to be done. The Nanaimo Rhododendron Society is feeling a profound sense of loss with the passing of Craig Clarke on January 14th, 2020, one of our founding members and a friend to all. Craig joined our club as part of the original club executive in the fall of 1992 and over the years, he played a major role in our club, serving the NRS in virtually every possible capacity: President, Vice President, Secretary, Director, newsletter editor, webmaster and on many committees, including the Greig Rhododendron Species Garden advisory group. In 2002, he received the Bronze Medal in recognition of his contributions to our club. He continuously served on our executive for 27 years and, with his wife Joyce, was a fixture at our meetings. Together, they attended many ARS conferences over the years. Craig will be dearly missed by the rhododendron community throughout District 1. Our heartfelt condolences go out to Joyce.

Vancouver: Alleyne Rex Cook

Canada and the world lost one of its foremost plantsmen and a last link to the greats of the past when Alleyne Rex Cook, ARS Gold Medalist, passed on Sunday, Oct 20, 2019. Our beloved "Cookie," as his friends knew him was born in Kaponga in rural New Zealand in 1924. His Aunt Mavis became his horticultural inspiration, and as a young man, he apprenticed at New Zealand's world class nursery Duncan and Davies. He then did military duty during the occupation of Japan, where his world of flowers was much expanded.

In 1950, he moved to Britain with letters of recommendation from Duncan and Davies in hand. He soon found work at the legendary Sunningdale Nursery in Surrey, under the late nurseryman and garden designer Jim Russell, where he helped move the magnificent collection of rhododendrons from Roza Stevenson's Tower Court Garden to Windsor Great Park. At Tower Court he was offered the chance to dine with renowned plant hunter Frank Kingdon Ward. He tells of moving a ten metre bed of *R. forrestii* by rolling it up like a carpet and placing it atop a bed of rocks liberally topped with organic matter and coarse sand and grit, where the plants flourished. Jim Russell also had Cookie design the deciduous azalea plantings at Castle Howard.

In 1954 he moved to Vancouver, BC, Canada, and was soon at work doing garden installations part-time for the City of Vancouver Parks Board, where he almost single-handedly promoted rhododendrons in those early days. There, Barbara, whom he had met onboard the ocean liner Rangitata while sailing to England years before, became his wife. Cookie befriended many of the then greats of the garden world—luminaries such as Ray Berry, James Barto, Halfdan Lem, Ray and Del James and particularly Ted and Mary Greig. During this time, he was a frequent visitor to the Greig's Royston nursery on Vancouver Island, and when in 1966, the aging Greigs felt it was time to close the nursery, Cookie enticed the Vancouver Parks Board to purchase their amazing collection. Little did he know that Mary Greig had stipulated that Cook, and only Cook, should handle the move and the planting. Consequently, the Parks Board hired him the day of the purchase. Situated within Stanley Park, his planting became the "Ted and Mary Greig Garden," as it contained both the Greig's hybrid rhodos and later Cookie's own magnolia hybrids. Later, all the Greig's species rhodos were moved under cover of darkness to Vancouver's Van Dusen Gardens, where they formed the basis of its famous species collection.

Cookie was also largely responsible for planting many of the magnolias on Vancouver city property, being a bit of a bad boy by adding two "O's" to a purchase order for 10 *Magnolia kobus*, so the city was forced to plant a thousand instead of ten, becoming a more beautiful place as a result. He was a great believer in the adage "tis better to ask for forgiveness than to seek permission." More than anyone in the Vancouver area, he stimulated interest in rhododendrons both as a gifted speaker and through his leadership efforts to preserve important plant material which was at risk.

Cookie was also an accomplished writer on topics horticultural, and he always had time for people, be they distinguished or home gardeners. He was always digging, dividing, and layering plants, which he shared widely. Many of his rhododendrons were recently moved to the Sunshine Coast Botanical Garden. Cookie was an Honorary Life Member of the ARHS (an Atlantic Chapter of the ARS) and did much for the growth of the ARS in District 1 (BC). His knowledge, wit, and beautiful photographs enthralled audiences and did much to build membership, and his willingness to share his knowledge attracted many keen young gardeners to the rhododendron scene, and these in turn, infected by his enthusiasm, helped give District 1 its remarkable vigour. Alleyne made rhododendrons irresistible!

Society News *(Continued)*

ARS District Director Candidates

ARS District Directors (DD) and Alternates are elected for 3 year terms and the term starting years are staggered over three years so as not to have all new Directors starting in the same year.

Districts 3, 4, 6, 11 and 12 have terms starting in 2020 at the end of the the spring convention in May. Here are the candidates as elected by their members:

District 3 (Juan De Fuca, Kitsap, Olympia, Olympic Peninsula, Peninsula, Shelton, and Tacoma Chapters)

Director: Richard Fairfield (Continuing)

Alternate: Vacant

District 4 (Eugene, Portland, Siuslaw, Southwestern Oregon, Tualatin Valley, and Willamette Chapters)

Director: Mike Bones

Alternate: Anne Gross

District 6 (Connecticut and Massachusetts Chapters)

Director: CJ Patterson (Continuing)

Alternate: Vacant

District 11 (Ann Arbor, Great Lakes, Midwest and Ozark Chapters)

Director: Pending

Alternate: Pending

District 12 The Rhododendron Society of Canada (RSC), (RSC Atlantic Region, RSC Niagara Region, RSC Toronto Region Chapters)

Director: John Brett

Alternate: Sondra Meis

Things You Should Know About the ARS Website

One of the “gems” found at the ARS public website (www.rhododendron.org) is the rhododendron and azalea plant database. Accessed by the public millions of times each year, this is the go-to place to lookup information about rhododendrons you may be interested in having in your collection.

Complete descriptions are provided for every rhododendron species currently in cultivation. The ARS website descriptions for hybrids and named species are consistent with the plant name registrations published in the RHS rhododendron-name registry. In this regard, the plant descriptions provided at the ARS web site are uniquely more accurate than most of the descriptions found at other websites. The ARS website displays available data for each plant's flower, truss shape, fragrance, bloom time, foliage, plant habit, height in ten years, cold-hardiness temperature, elepidote/ lepidote type, hybrid parentage and the name of the hybridizer or plant selector. Thanks to the kind sharing of ARS members and others, almost every plant in the ARS website database has an accompanying flower truss photograph.

By design, the 2000+ rhododendrons and azaleas listed in the ARS website database generally are available commercially in the trade. Growers and nurseries in Europe, the U.S, Canada, Australia and New Zealand have been consulted to decide what plants to include in the ARS database. The ARS proven performer selections and every Rhododendron of the Year selection is listed in the ARS website database. Provided links enable people to easily view informative descriptions for all these plants.

Convenient searchability is one reason the ARS rhododendron and azalea database is so frequently utilized. One can search by cultivar or species name, flower color, height in ten years, bloom time, fragrance, or hybridizer. Multiple parameter searches are possible using any combination of these search parameters. Perhaps, you are considering adding a new rhododendron in your garden, and would like the flower to be pink, bloom midseason, the plant to be five feet (1.5m) in ten years, be hardy at or below -10°F (-23°C) and be an elepidote. Search results include the well-known and popular hybrids R. ‘Party Pink’, ‘Rocket’, ‘Trudy Webster’ and ‘Wheatley’ and the species R. *periclymenoides* and *prinophyllum*. It would typically take hours to search for suitable plants using nursery catalogs and traditional printed resources but using the ARS website it takes just a couple of seconds to identify rhododendrons that satisfy any specific search criteria.

The ARS plant database can be accessed from anywhere any time, any day of the year. Perhaps while visiting a local nursery, you see a rhododendron that you like, but it is not in bloom. Before purchasing the plant, you would like to see the flower and know how tall the plant will be in maturity. Using your smart phone, this information can be instantly obtained from the ARS website. It's recommended to bookmark the web address of the ARS database for quick access.

If you haven't yet made use of the ARS website to look up descriptions of rhododendrons and azaleas head over to www.rhododendron.org, navigate to “Plant Data”, and check out the searchable rhododendron and azalea database.

Bob Weissman, ARS Electronic Media Committee Chair, Mountain View, CA

Rhododendrons for Beginners: Section *Schistanthe* in the *Rhododendron* subgenus *Rhododendron*

Glen Jamieson
Parksville, BC,
Canada



(Images are from www.vireya.net unless otherwise noted.)

In previous articles, I discussed first the general characteristics and taxonomic relationships among the main types of rhododendrons in cultivation, i.e., rhododendrons, azaleas, vireyas and maddenia (Jamieson 2018a). The largest subgenus in genus *Rhododendron* is *Rhododendron*, which contains all of the lepidote rhododendrons, species that have scales on the underside of their leaves, and the largest section in that is *Schistanthe*, which includes all the vireyas. This is the biggest section in the genus with over 300 diverse species, and the way its species have been taxonomically grouped is still being debated. Argent (2015) considered all vireyas to be in subgenus *Vireya*, not subgenus *Rhododendron*, and has proposed unique groupings of species, but his classification system is not accepted by many researchers, including myself. Within section *Schistanthe*, there is presently no widely accepted groupings of species, and recent studies (Craven *et al.* 2011, Goetch *et al.* 2011) and ongoing work in nuclear gene sequencing is resulting in significant new understanding and revisions as more and more species are studied. I have therefore decided not to discuss any further taxonomic relationships among vireya species in this article. Instead, because most ARS members are unfamiliar with vireyas and to encourage them to try growing vireyas, I will present a selection of species in subsection *Schistanthe* grouped by their relative availability, ease of culture and some of their visual features, namely 1) the more hardy vireyas, 2) the more fragrant vireyas, 3) very floriferous or large truss vireyas for garden culture, 4) tiny vireyas for pot culture and for those with limited space, 5) trailing vireyas for hanging pot culture, 6) warm climate species for places like Florida, southern California, etc., and 7) vireyas with unusual corollas (colour, shape, size) or leaves (shape, size and rugosity). I suggest this will be more useful to most readers not already very familiar with the wide diversity of vireya species.

First though, I would like to summarise some of the reasons why vireyas are worth growing, and what their cultural requirements are for those ARS members that are still unfamiliar with this group of rhododendrons. Chaikin (1994) stated “Vireyas may look like rhododendrons, and botanists may classify them as rhododendrons, but they are really [orchid-like], culturally speaking, ... [and] can even be planted in an orchid mix. ... However you look at them, the novice should not conclude that vireyas can be grown in the same fashion as other rhododendrons.” However, this generalization also does not mean to imply that they can be grown like the tropical orchids many of us are familiar with, such as phalaenopsis, cattleyas, etc. Along with the Asteraceae, the Orchidaceae is one of the two largest families of flowering plants, having about 28,000 currently accepted species, distributed in about 763 genera. In contrast, the *Ericaceae*, while large, is much smaller with only about 4250 known species spread across 124 genera, including about 1000+ rhododendron species. The cultural requirements between many orchids thus varies greatly, and so Chaikin (1994) should perhaps have stated more clearly that vireyas, which mostly come from higher elevation in tropical mountainous areas, prefer conditions only like those of the cooler growing orchids, such as cymbidiums, coelogyne and some dendrobiums. If grown in the same microhabitat preferred by tropical, lower elevation, heat tolerant orchids, which most of us likely think of when we think of orchids, i.e., in relatively closed, seasonally warm to hot greenhouses, most vireyas will die. Most vireyas to survive need cool temperatures but to be kept above freezing, and so on Vancouver Island, Canada, where I live, I keep my many vireyas outside from March to November, but move them into greenhouses with minimal heat (heaters come on at 3° C (37° F)) during the other months. I really only need to do so for the few weeks of subzero temperatures we have during the winter, but I have too many plants to move them in and out just when freezing occurs, so I bring them all into my greenhouses for the entire winter. Vireyas can be kept in greenhouses throughout the year if the greenhouses are kept cool during very hot days, such as occasionally occurs at the Rhododendron Species Botanical Garden (RSBG) in Federal Way, WA.

Some articles (e.g., Cavender 1993) have suggested that overwatering of vireyas is the major mistake many people make, and that they should be allowed to dry out between waterings. As epiphytes, many are adapted to feast or famine in regards to water and fertilizer, but more importantly, they need a fast draining medium to grow in. Bertelmann (2009) emphasized that “Vireyas must have good media drainage and air in the medium. Orchid growers treat their vireyas generally like their orchids, and besides the medium, vireyas want bright light, but not necessarily full sunlight, and like orchids, vireyas don’t mind being pot tight...but, there is a difference in being pot tight and being root bound. Vireyas have a fine root system with a few larger “carrot” roots but no taproot. The fine roots can form a solid barrier in their pots preventing proper water absorption and leading to stress. Vireyas respond to transplanting very well and love having their roots loosened or trimmed. However, when you prune the roots, be sure to prune the branches of your vireya too, which helps it to recover more quickly from the repotting and produces a denser plant that will cover itself with blooms. I suggest keeping your plant regularly watered. One

of the lessons learned from growing vireyas in Hilo, Hawaii, is they love water, just not soggy feet. In other words, it's not how much water but how quickly the water runs through the medium that is important. I know, we've all heard we should water heavily and allow the vireya to dry out well before re-watering. Well, Hilo is the rainiest city in the USA and it is not unusual to have a solid month of rain. The vireyas absolutely love it! This has led us to rethink our watering. Keeping the vireya slightly moistened at all times works better than letting it swing between very dry to very wet—far less stressful to the plant.

Go sparingly with your fertilizer. Time release with trace elements, fish emulsion, rhododendron fertilizers, chicken manure are all things vireyas love, sparingly. Half to one third of the recommend application is fine. Vireya's favorite fertilizer seems to be a good old organic mulch around its roots, even in a pot if it is kept outside in the elements. There are too many appropriate [but often region-specific recipes] for rhododendron medium to discuss here, but I want to mention one though: cactus mixes. Believe it or not, vireyas will grow in these media because it tends to have exceptional drainage and aeration."

I follow Bertelmann's (2009) watering schedule here on Vancouver Island. I lightly spray my vireyas daily each day in the afternoon when outside, simulating mountain clouds and rains, and with my media (peat/coir and 60% perlite in an open sleeve) and in my mild climate, my vireyas are surviving well. So, if in the right quick-draining media, frequent watering is not necessarily bad.

Osborn (1969) stated "The incredible variability [in the cultural requirements of many vireyas] carries over from the varied ecological niches they may come from. Species originally found growing epiphytically in pure organic debris have been reported to be able to aggressively colonize barren clay left from gold mining operations at Edie Creek, Papua New Guinea. *R. inconspicuum* is reported to be at home both in mossy forests and on limestone ridges. Some species grow only on hot rock faces, whereas the gaudy, almost too bright yellow *R. laetum* is a swamp plant. Clearly, most generalizations about [vireya] growing practices will be subject to exception." Often if one experiments, cultural success can be had with many different cultural media and watering patterns. Even in Hawaii and California, the best North American climates to grow vireyas outside, there are many places where vireyas don't do well, or will do well (e.g., for the latter, around Hilo, Hawaii, and the San Francisco Bay area in California).

Vireyas are also quite happy in small pots, since as epiphytes, they are used to a restricted root run. Cavender (1993) stated "My parent plant of *R. lochiae* X *R. culminicola* is in a ten-inch (25 cm) basket and is over three feet (91 cm) in diameter. The absolute worst thing you can do to a vireya is put it in a big pot and water it every day! I prefer hanging planters rather than baskets. Hanging planters have a well inside the bottom of the container rather than a saucer on the outside. This helps to slow run-off. My soil mix ranges from pumice, bark, peat to pure coarse bark. Peter's 20-20-20 or Fish Fertilizer once a month is fine. We hang vireyas in the same conditions that fuchsias enjoy, the north or east side of the house. We take ours into the greenhouse in the winter. Vireyas will not tolerate freezing but they don't require lots of heat either! I run my greenhouse [in the winter] at about 40° F (4.4° C) and they do fine. It has been my experience that the average home [with central heating] is too dry for vireyas to flourish. They need more humidity! If without a greenhouse, then plant rooms, spa or hot tub rooms, etc., work well. Remember, vireyas will bloom in the winter as well, so don't hide them away. The thing to remember is that vireyas are rhododendrons! All will thrive if given conditions they like, and the same general rules apply to vireyas as to hardy rhododendrons.

Vireyas are distinguished botanically from other rhododendrons by having seed with two long tails, and enthusiasts soon find that the seed is also distinguished by retaining its viability for only a short time. Most vireyas occur where the growing season is continuous, with the seed germinating as soon as it falls, unlike rhododendrons of temperate climates whose seed must maintain their viability through the winter. Once vireya seed is more than a couple of months old, little if any germination can be expected."

With respect now to the higher level of rhododendron taxonomy, cladistics is the systematic classification of groups of organisms into clades on the basis of shared characteristics thought to derive from a common ancestor, and here again is a brief review of the taxonomic relationships of *Schistanthe* in the genus *Rhododendron*:

Genus *Rhododendron*

Clade A

Subgenus *Rhododendron*: Small leaf or lepidotes (have scales on the underside of their leaves). Three sections, about 400 species.

Subgenus *Choniastrum*: Eleven species.

Clade B

Subgenus *Hymenanthes*: Large leaf or elepidotes, including most deciduous azaleas. Two sections, with about 157 species.

Clade C

Subgenus *Azaleastrum*: Nearly everything else, most notably deciduous azaleas such as *R. schlippenbachii* and many evergreen

azalea species from northeast Asia. Three sections, about 120 species

Subgenus *Rhododendron*

1) **Section *Pogonanthum*** (six species)

2) **Section *Rhododendron*** (28 subsections, 118 species)

3) **Section *Schistanthe*** (vireyas, 300+ species)

The vireyas described below are listed in alphabetical order within each feature grouping. Information is from Argent (2015), Chris Callard's www.vireya.net, and the RSBG website rhodygarden.org. There is a wealth of information at www.vireya.net, as it also contains an archive of most of the relevant vireya literature and has advice on how to grow vireyas.

Vireya Groupings and the Selected Species Discussed:

- 1) **more hardy vireyas:** *R. commonae*, *R. kawakamii*, *R. saxifragoides*. Also *R. rushforthii*, *R. sororium*, *R. densifolium* and all the other species from Vietnam.
- 2) **more fragrant vireyas:** *R. armitii*, *R. dianthosmum*, *R. goodenoughii*, *R. herzogii*, *R. jasminiflorum*, *R. konori*, *R. leucogigas*, *R. loranthiflorum*, *R. suaveolens*, *R. superbum*.
- 3) **very floriferous or large truss vireyas for garden culture:** *R. goodenoughii*, *R. konori*, *R. leucogigas*, *R. loranthiflorum*, *R. superbum*, *R. zoelleri*.
- 4) **tiny vireyas for pot culture and those with limited space:** *R. anagalliflorum*, *R. acrophilum*, *R. burtii*, *R. gracilentum*, *R. rubineiflorum*, *R. wormersleyi*, *R. wrightianum*.
- 5) **trailing vireyas for hanging pots culture:** *R. anagalliflorum*, *R. caliginis*, *R. christi*, *R. jasminiflorum* var. *punctatum*, *R. pauciflorum*, *R. rarum*, *R. viosum*.
- 6) **warm climate species for places like Florida, southern California, etc.:** *R. christiana*, *R. javanicum*, *R. laetum*, *R. longiflorum*, *R. loranthiflorum*, *R. macgregoriae*, *R. malayanum*, *R. nieuwenhuisii*, *R. zoelleri*.
- 7) **vireyas with unusual corollas (colour, shape, size) or leaves:** *R. ericoides*, *R. herzogii*, *R. himantodes*, *R. praetervisum*, *R. stenophyllum*, *R. taxifolium*, *R. rugosum*, *R. tuba*.

Species Details by Grouping:

1. The more hardy vireyas.

R. commonae (Epithet: after the entomologist Arnold Foerster's wife)

This species from 1800-4000 m (5900-13,000 ft) in both Indonesia and Papua New Guinea occurs in terrestrial grassland at the edge of *Papuacedrus* (conifer family *Cupressaceae*) forests and on ridge crests, where it flowers freely throughout the year. It sometimes forms a thick woody basal burl from which numerous shoots can arise from dormant buds that allows it to regenerate after the upper stems have been destroyed from freezing or fire. Its crenulated leaf margins are quite distinctive. Flowers in cultivars in cultivation can be bright red, pink or a very pale yellow. It grows and flowers easily but irregularly several times a year, forming nice rounded clumps. Gerdemann (2005) suggested that this species might have a hardiness rating to approximately 20° F (-7° C). In his garden, the form of *R. commonae* from the Laiagam Garden in Enga, Papua New Guinea, survived 10° F (-12° C), although it died to the ground and only its stem portions below ground that were protected by fallen leaves lived.



R. commonae. Photo: Chris Callard.



R. densifolium. Photo: L. Muir.

R. densifolium (Epithet: dense leaf)

This shrub to 1.3 m (4.25 f) from 1000-1800 m (3280-5900 ft) from southern China and Vietnam has twigs to 1.5 mm (0.06 inches) diameter and 7-15 small leaves in loose pseudowhorls (a circle of leaves, but with the leaves emerging from separate axils (the junction of leaf and stem)). Its smallish yellow flowers are mostly solitary, occasionally paired, semi-erect to half-hanging, and in cultivation it can flower irregularly throughout the year. It grows easily in cultivation and is a dainty plant.

R. kawakamii (Epithet: after Takiya Kawakami, a Japanese collector in Taiwan)

This shrub to 1.5 m (five ft) from sub-montane, humid forests in Taiwan occurs epiphytically on the trunks of Taiwan cypress (*Chamecyparis formosensis*) or terrestrially in open areas from 1400-2600 m (4600-8530 ft) elevation. It grows easily, flowering once a year, with three to seven bright but small yellow flowers occurring in an umbel (an inflorescence that consists of a number of short flower stalks) from June to July. It is relatively hardy, and Argent (2015) reported that it has been growing successfully outside without protection in Edinburg, Scotland, although it is likely to die under extreme conditions when they occasionally occur, such as -11° C (12° F) in December 2009 and -16° C (3° F) in December 2010. Edinburgh is periodically exposed to cold waves, and is often the coldest city in the UK. Its average winter temperature is above freezing even at night, although light frosts occur quite often. Gerdemann (2005) reported that in his garden on the central Oregon coast, it has grown well for twenty-three years, surviving temperatures below freezing for extended periods, and only suffering minor injury when exposed to 10° F (-12° C).



R. kawakamii. Photo: F. Muller.



R. rushforthii. Photo: W. Molyes.

R. rushforthii (Epithet: after Keith Rushforth, its collector)

This Vietnamese species can grow to 1.5 m (five ft) and is distinctive in having blueish-green leaves that are much larger than its closer relatives, such as *R. kawakamii*, to which it has many similarities. However, it does differ in having a hairy and scaly ovary, a hairy style and unusually, flower bud scales that are fringed with both hairs and scales. It has attractive bright yellow flowers, which with its blueish-green leaves makes it very attractive. It only flowers once a year, and while it suffers from higher temperatures, in the UK it has survived at -8° C (18° F).

R. sororium (Epithet: Latin, from *soror* = sister, presumably referring to its closely related species) (No photo)

This shrub has smooth twigs about 2 mm (0.08 in) in diameter and leaves arranged up to five together in pseudowhorls. Its yellow flowers are solitary or rarely in pairs, and are outside densely scaly, as is the pedicel. Overall, it is quite similar to *R. emarginatum*, which has rougher twigs, a slightly shorter corolla, a thinner pedicel and smaller leaves, and so its recognition at this time as a unique species is being questioned.

R. saxifragoides (Epithet: Like *Saxifraga* because of its tussock-forming habit)

This dwarf species to 15 cm (6 inches) from 3225-4000 m (5900-13,000 ft), the highest elevation that any vireya grows, in both Indonesia and Papua New Guinea. It forms tussocks, i.e., mats up to one m (three feet) in diameter, with subterranean spreading woody branches and only very short, thick twigs above ground. In cultivation, they can grow horizontal branches up to 80 cm (32 inches), which in the wild in a bog would become buried. It is the only species to have stomata on both sides of its leaves, and has erect seed capsules when they mature. Its flowers are solitary, or rarely in twos, and are pink to red. It grows slowly, flowers intermittently and has flowers raised well its foliage. It is relatively difficult to grow, but it has been used in a number of more easily-grown hybrids, particularly by Oz Blumhardt in NZ, with registered names prefixed by the word 'Saxon'. 'Saxon Blush' and 'Saxon Glow' are presently being used in commercial production in Europe (see Puddey and Ciarrocchi 2019).



R. saxifragoides. Photo: Chris Callard.

2. Some of the more fragrant vireyas

R. armitii (Epithet: after William Edington de Margrat Armit, a Belgian officer of the Queensland mounted police, who led an expedition to Papua where this species was first collected).

This small shrub to two m (6.5 ft) is from both the central and northern districts in Papua New Guinea and Goodenough Island. Larger plants in particular are covered in delicate pinkish-white scented tubular flowers, often in mid-winter. They will however flower at almost any time of year, and will begin flowering on smaller plants. Flowers are either straight or slightly upwardly curled and are five to seven in an open, one-sided umbel, held either horizontally or half-hanging.



R. armitii. Photo: Hank Helm.



R. dianthosum. Photo: Bovees Nursery.

R. dianthosum (Epithet: after *Dianthus*, as the flowers have a similar carnation perfume)

This species from Papua, Indonesia, grows to two m (6.5 ft) in the wild, and in cultivation, is slow growing and relatively compact. Its three to six flowers per umbel are white to pink with darker pink edges, with a scent of carnations. Its beautiful, strongly scented flowers are just produced once a year, in late summer in Scotland.

R. goodenoughii (Epithet: after Goodenough Island, Papua New Guinea, which was named after Commodore Goodenough, a British naval sea captain)

This species is a strong grower, to four m (13 ft) in the wild, and was introduced into cultivation in the late 1960s. It flowers prolifically at least once a year, and its 8-22 white, sweetly scented flowers in each umbel are first held semi-erect in a tight cluster by the collarette of bracts, which later spread and fall away, allowing the umbel to open up with the flowers becoming horizontal. This is quite distinctive, and the beautiful fragrance makes this a very desirable species.



R. goodenoughii. Photo: R. Currie.



R. herzogii. Photo: Chris Callard.

R. herzogii (Epithet: after Th. Herzog, a missionary in the Finisterre Mountains in New Guinea)

This erect shrub to two m (6.5 ft) from Papua New Guinea is a popular, relatively free-flowering species with resinously aromatic foliage and beautifully scented white or pink-flushed flowers. Its five to ten flowers per umbel are held stiffly semi-erect and curve outwards. There are two varieties, *herzogii* from the eastern end of its range and *occidentale* from the western end, with the latter having much shorter, straighter flowers and a broader corolla tube mouth in proportion to the length of the tube (5-6 times, versus 8-16 times for var. *herzogii*). However, Argent (2015) reports that Frédéric Danet observed this may instead be because of different pollinators in open and forested areas, i.e., where the plants occur in different microhabitats, rather than the result of a clinal geographical transition.

R. jasminiflorum (Epithet: scented flowers like that of *Jasminum*)

This shrub to 2.5 m (8.25 feet) from the Malaysian Peninsula has six subspecies, based on leaf size, hairs on the corolla, and the number of flowers in the umbel (truss). Subspecies *jasminiflorum* var. *punctatum* is the most cultivated one, with 5-15 white or flushed with pink, scented, trumpet-shaped flowers per truss. In cultivation since 1845, it is a magnificent species that grows and flowers easily, mostly once a year from December through February, but it can be in flower in any month. It is extremely fragrant, and in a pot, can be easily kept to a height of about 45 cm (18 inches).



R. jasminiflorum. Photo: Chris Callard.

R. konori (Epithet: named after a god or semi-mythical leader of the Hattam people in New Guinea)

This shrub or small tree to six m (20 ft) occurs throughout the main mountain ranges of New Guinea, and also from Ferguson Island, New Britain and New Ireland in Papua New Guinea. Like *R. superbum*, it performs well in cultivation with its large white to pale pink, powerfully scented flowers. It has four to ten, 19 x 15 cm (7.5 x 6.5 inch) flowers per umbel, and its flowers often have pink spots at the bases of the lobes. Being a bit too large for good pot culture, it grows best in the ground, but in cultivation, its flowers, while still huge, are always smaller than those seen in the wild. It naturally hybridizes around the Anggi Lakes with *R. asperum*, producing plants with smaller corollas. There are two varieties, the larger *konori* and the smaller in all its parts *phaeocephalum*, with the latter possibly a natural hybrid with another species, which grows well with lovely pink perfumed flowers and is more suitable for pot culture.



R. koneri. Photo: R. Currie.



R. leucogigas. Photo: Bovees Nursery.



R. leucogigas. 'Hunstein's Secret'. Photo: R. Currie.

R. leucogigas (Epithet: white giant, alluding to its enormous flowers).

This erect shrub to three m (ten ft) from the Cycloop Mountains in Papua, Indonesia, is epiphytic on tree trunks in riverine forests. Its five to eight strongly scented flowers per umbel are held semi-erect to half-hanging, are white with pale pink on the tube and at the junction of the lobes, and are about 14 cm (5.5 inches) long. Although it grows relatively slowly and flowers best every other year in cultivation, it is so spectacular when it does flower that it is highly sought for, and has become the parent of many spectacular hybrids that grow with hybrid vigour, making them easier, quicker and much more floriferous than the parent species.



R. koneri 'White Giant'. Photo: R. Currie.

R. loranthiflorum (Epithet: with flowers like *Loranthus* (parasitic plants in the showy mistletoe family Loranthaceae))

This epiphytic shrub to three m (ten ft) is from mountain tops in the north-eastern islands (Goodenough, New Britain, Bougainville, etc.) of Papua New Guinea. It is wonderfully floriferous and plants are covered in masses of white flowers, often in late winter. Trusses consist of three to seven



R. loranthiflorum. Photo: L. Muir.

flowers, held either semi-erect to half-hanging. Plants from Mt Veve, Bougainville Island, are scented, most strongly at night, but lose their fragrance during the day.

R. suaveolens (Epithet: sweetly smelling)

This very attractive and distinctive epiphytic and terrestrial species to three m (ten ft) from Borneo has long, white to flushed pink, usually scented flowers with pale green leaves that have the main vein predominantly dark red in at least the broad basal part. Somewhat similar to *R. orbiculatum*, it has however narrower flowers with a smaller corolla lobe, many more flowers (12-25) in a strong umbel and longer leaves. It has been in cultivation since 1966 and grows and flowers well as a cool greenhouse plant in temperate countries, flowering mostly in the winter months. Cultivars from Mt. Kinabalu appear to always have a strong scent, whereas those from Mt. Lotung have no scent.



R. suaveolens. Photo: R. Mitchell.

R. superbum (Epithet: superb)

This is a stiff shrub that can grow to six m (20 ft) in the wild in the Central Ranges of Papua New Guinea. It is easy to cultivate and usually flowers in April or May, and while it will flower when young, it does so most freely when established

and fairly large in size, when it gives an exquisite display with its large, powerfully scented flowers. Its three to six trumpet-shaped flowers per umbel are huge, up to 14 x 12 cm (5.5 x 4.5 inches), are fleshy or waxy in texture, and are white to very light yellow, sometimes flushed with pink, shading to deep pink. It is generally epiphytic on the upper branches of large trees just below the true moss forest level. It hybridizes naturally with *R. hellwigii* where the species distributions overlap, and all really pink forms may be natural hybrids. Argent (2015) describes a subspecies *ibele* from the Ibele Valley that has a shorter corolla tube, but apart from some other minor differences is otherwise quite similar.



R. superbum. Photo: R. Currie.

3. Very floriferous or large truss vireyas for garden culture

R. goodenoughii (see (2) above)

R. konori (see (2) above)

R. leucogigas (see (2) above)

R. loranthiflorum (see (2) above)

R. superbum (see (2) above)

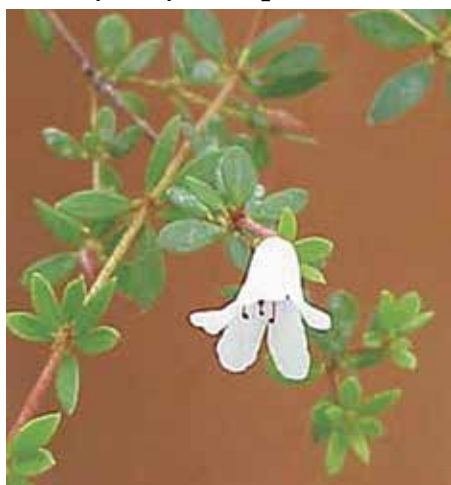
R. zoelleri (Epithet: after Hugo Zöller, who led the first expedition to the Finisterre Mountains in New Guinea in 1891)

This shrub to three m (ten ft) occurs throughout the mainland of New Guinea as both an epiphyte or terrestrial in a variety of habitats from sea level to 2000 m (6560 ft). Its four to eight nine cm (3.5 in) flowers are in a complete or slightly open umbel, and usually have a yellow tube and broad orange to reddish margins to the lobes, so that it appears the flower has a “yellow star” in its throat. In the wild, flowers are often visited by butterflies of the genera *Ornithoptera* and *Papilio*. With its large flamboyant flowers, it is one of the most popular New Guinea rhododendrons in cultivation, and because of its low elevation in the wild, requires more heat than the majority of vireyas. As a result, it is one of the main parents of the many heat tolerant hybrid vireyas produced in Queensland which are successful garden plants there. These hybrids are also popular in California, where they can bloom from seed in three to four years.



R. zoelleri. Photo: Chris Callard.

4. Tiny vireyas for pot culture for those with limited space



R. anagalliflorum. Photo: Chris Callard.

R. anagalliflorum (Epithet: with flowers like *Anagallis* (pimpernel, Primulaceae).)

A dwarf prostrate or creeping plant to 15 cm (six inches) from Papua, Indonesia, and Papua New Guinea with very slender twigs (0.5-0.7 mm) with 3-5 leaves together in tight pseudowhorls at the upper 3-4 nodes. Its white flushed with reddish purple near the base flowers are solitary, half-hanging to hanging. It grows well as a delicate alpine and flowers continuously when established. It is sometimes confused with *R. rubineiflorum* (see below) when not in flower, and like that species, is used successfully in hybridizing, particularly for trailing hybrids suitable for hanging baskets.

R. acrophilum (Epithet: summit loving, although not apt!)

This shrub to one m (3.25 ft) from the Philippines, initially described in error from the top of Mt. Mantalinajan because of confusion with *R. madulidii* (which has white flowers), has twigs 1-2 mm (0.04-0.08 inches) in diameter and three to five mostly horizontal or half-hanging, unscented, usually bicolor flowers with a yellow tube and orange lobes 25 x 50 mm (1 x 2 inches) in size. It is great in cultivation, first flowering at 15 cm (six inches), with a compact habitat, bright green leaves and freely produced flowers. It flowers irregularly at least twice a year, with deadheading encouraging new bud formation.



R. acrophilum. Photo: Chris Callard.

Low temperatures induce the most intense bicoloured or orange flowers, whereas higher temperatures lead to pure yellow flowers from the same cultivar.

R. burtii (Epithet: after B.L. Burt, Edinburgh botanist who first collected the species)

This tiny species from Borneo grows to 80 cm (32 inches) in the wild, is smaller in cultivation, and has usually solitary or paired, hairy, red hanging flowers with small, 10 mm (0.5 inch) wide leaves that have only a few small scales. The flower pedicels are quite long, allowing the flowers to hang freely vertically downwards. It is quite attractive, and flowers freely but irregularly up to eight times per year.

R. gracilentum (Epithet: slender, alluding to the delicate habit of the plant)



R. gracilentum. Photo: Chris Callard.

This is an erect or prostrate shrub to 60 cm (24 inches) from Papua New Guinea with very tiny twigs (1-1.5 mm in diameter) and mostly solitary, hanging, unscented, red or pink cylindrical flowers and small leaves. It is widely grown, and forms compact, slow growing plants which cover themselves in flowers, mostly just once per year in May or June. It has been used for hybridizing, and its compact form, small leaves and relatively large flowers make it an attractive parent.

R. rubineiflorum (Epithet: ruby-red flowers)



R. burtii. Photo: Chris Callard.

A low shrub to 20 cm (eight inches, usually much less) from both Papua, Indonesia, and Papua New Guinea where it is epiphytic or at the base of trees, it has very tiny twigs (0.75-1.5 mm in diameter) and solitary or occasionally paired, horizontal or half-hanging red or pink flowers. Like *R. gracilentum*, this species is now widely cultivated and used in hybridizing. It too has for its size very large bright red flowers that contrast with its small leaves and delicate habit, and is easily grown. It is sometimes confused with *R. anagalliflorum*, but differs because of its greater vigour, longer internodes (up to four cm (1.5 inches), 2.5 cm (one inch) in the latter), and different flower features, most notably colour.



R. rubineiflorum. Photo: R. Currie



R. wormsleyi. Photo: R. Currie.

R. wormsleyi (Epithet: after John Wormersley, Chief of Division of Botany in Lae, Papua New Guinea, and collector of the species)

This erect shrub to two m (6.5 ft) in the wild from Papua New Guinea grows mostly terrestrial in mossy forest or in grassland at 3200-3960 m (10,500-13,000 feet) elevation. It has very tiny twigs (1-2 mm in diameter) and very tiny leaves spirally arranged along the upper part of twigs and one to four hanging bright or deep red flowers per umbel. The species is slightly fickle and being an alpine plant, is prone to sudden

death if the temperature gets too high, but otherwise a pretty species with a good erect habit.

R. wrightianum (Epithet: after C.H. Wright, assistant keeper of the Kew Herbarium)

This shrub to one m (3.25 ft) from Papua, Indonesia, and Papua New Guinea has 3-5 leaves together in tight pseudowhorls and 1-4 red, pink and rarely white flowers per umbel hanging vertically. It is epiphytic in mossy forest or terrestrial in sandy or peaty soil at 1370-3250 m (4500-10,660 feet) elevation, and is rare in cultivation.



R. wormsleyi plant. Photo: Bovees Nursery.



R. wrightianum. Photo: Chris Callard.

5. Trailing vireyas for hanging pot culture

R. anagalliflorum (see (4) above)

R. caliginis (Epithet: mist or fog, the climate in which this species seems to be perpetually found)

This straggling, many branched shrub to 50 cm (20 inches) from Papua, Indonesia, and Papua New Guinea has very tiny twigs (1-2 mm) and 4-7 leaves together in tight pseudowhorls, often noticeably different in size in the same pseudowhorl. Its 1-2 unscented, white to pale pink flowers are a little curved and



R. caliginis. Photo: Chris Callard.

hang vertically. This is a striking dainty species owing to its linear leaves which are densely covered with dark brown, dendroid scales when the leaves are immature, remaining underneath when they mature. A pink form in cultivation is probably a hybrid.



R. christii. Photo: Bovees Nursery.

R. christii (Epithet: after Konrad H. Christ, a Swiss fern botanist from Basel)

From Papua, Indonesia, and Papua New Guinea, this 1.2 m (4 feet) mostly epiphytic shrub has very tiny twigs (1.5-2 mm in diameter) and has been in culture since the 1940s. It has 3-4 sub-sessile leaves together in tight pseudowhorls at the upper 2-3 nodes. It flowers at irregular times and its inflorescence is an open umbel of 2-5 flowers with a bicoloured corolla: a yellow tube with reddish-orange lobes, which look very attractive against its dark green, glossy foliage. There are two forms—a large-leaved one and a small-leaved one, and in cultivation, it tends to be sprawling, great for a hanging basket or on a block of tree fern.

R. jasminiflorum var. *punctatum* (see (2) above)

R. pauciflorum (Epithet: few flowers)

This shrub to two m (6.5 feet) from the Malaysian Peninsula has very tiny twigs (1-2 mm in diameter), obovate to almost circular dark to light green leaves that are a little shiny above, and solitary or sometimes paired dark pink to red flowers. There sometimes appears to be up to five together due to the simultaneous opening of lateral buds. This species makes a great plant for a hanging basket, being very floriferous and compact. A specimen grown by Dick Cavender in Oregon trailed well over a metre (3.25 feet) from a hanging basket and was reported (Argent 2015) to be in continuous flower over a seven-year period!



R. pauciflorum. Photo: Hank Helm.



R. rarum. Photo: Chris Callard.

R. rarum (Epithet: rare)

This slender, much-branched shrub to 1.5 m has very tiny twigs (1-2 mm diameter) from Papua, Indonesia, and Papua New Guinea and 2-5 leaves in pseudowhorls, which are often very different in size in the same whorl, with very small leaves between larger ones. Its pink to dark red flowers are solitary or paired, and it flowers freely several times a year. It is an elegant, easy and resilient grower, and has been used extensively in hybridizing.

R. viriosum (Epithet: robust or strong, because of its dominant qualities when used in hybridizing)

This shrub to 1.5 m (five feet) in cultivation has twigs two mm in diameter and is one of two species from mountains in northern Queensland, Australia, the other being *R. lochiaie*, which is both a larger plant and a more vigorous grower. It has 2-6 leaves together in tight pseudowhorls, and 6-12 red to deep pink, half-hanging to

hanging flowers in an open umbel. The main flowering season is July in the Northern Hemisphere, February and March in the Southern, and is more strictly seasonal than the majority of vireyas. It flowers when quite young and does not grow rapidly into



R. lochiai. Photo: K. & G. Hagan.

a large plant. Its red flowers have a tough texture, both of which are dominant in its hybrids, making its progeny's flowers resilient and long-lasting. The similar *R. lochiai* is also the only vireya to have been reliably crossed between section *Rhododendron* and section *Schistanthe* [previously called *Vireya*] (*R. lochiai* X *R. virgatum* (subgenus *Rhododendron*, only species in section *Virgata*), Rouse and Blumhardt 1991), although the hybrid 'Little Pioneer' is sterile and is a poor grower. **Note:** Cavender (1993) recommended *R. lochiai* for pot culture, but since then, *R. viriosum* has been recognised, and the latter is likely the plant he referred to.



R. viriosum. Photo: Chris Callard.

6. Warm climate species for places like Florida, southern California, etc.

(The species with "?" have ranges that can extend from sea level to as high as 2750 m (9000 feet), so heat tolerance is greatest for those cultivars collected at lower elevations):

***R. christianae* ?** (Epithet: after Christian Crutwell, the mother of Canon Crutwell, who worked as a missionary in New Guinea for 25 years)

This shrub to 3 m (10 ft) from 600-1525 m (1970-5000 ft) from Papua New Guinea has 2-5 tubular, yellow shading to orange flowers in an open umbel. When in full flower around June, it is compact and a mass of orange that is very conspicuous. Although a bit lanky in cultivation, it has good heat tolerance and is the parent of many hybrids. The best forms have a strong orange blush to the lobes and a yellow tube.



R. christianae. Photo: R. Currie.



R. javanicum. Photo: R. Currie.

***R. javanicum* ?** (Epithet: after Java, the island on which it was first collected)

This species from sea level to 2500 m (8400 ft) from Sumatra, Java and Bali has ten subspecies, with the complex being mainly low altitude forest epiphytes that are characterised by large, elliptic, acutely pointed leaves and large funnel-shaped flowers in a range of colours (red, orange, yellow, yellowish-cream and some bicoloured). Some subspecies, like subsp. *javanicum*, bloom all through the year, with a preference for the dry season, and it has orange flowers with red or violet markings at the mouth, grows and flowers well, and has a better shape than most of the other subspecies. Subsp. *brookeanum* has a delicate lemon-like fragrance.

***R. laetum* ?** (Epithet: cheerful or bright)

This shrub to 3 m (10 ft) from 1800-2300 m (5900-7550 ft) in the Anggi Lakes area in Papua, Indonesia, has broadly funnel-shaped, fleshy, sometimes fragrant flowers that are pure yellow at first, becoming suffused with red or orange with age. It grows well, is one of the best yellow vireyas, and is fairly heat tolerant. It is slightly similar to *R. zoelleri*, differing mainly in the pure yellow of its flowers and shorter petioles.



R. laetum. Photo: Chris Callard.



R. longiflorum. Photo: Chris Callard.

R. longiflorum (Epithet: long flower)

This shrub to 3 m (10 ft) from sea level to 1500 m (4925 ft) is also a widespread

species, being found in southern Thailand, Malayasia (Peninsula and Borneo), and Indonesia (Sumatra, etc.). It has three to ten horizontal to semi-erect flowers 40-60 mm long (1.6-2.4 inches) per umbel, with flowers orange, pink or red and often with a yellow throat. It was one of the parents of the early “Veitch” hybrids in the 19th century and was also proposed to be one of the main parents by Prof. Holttum in Singapore in his breeding programme for vireyas for lowland tropical gardens (the Japanese invasion of Singapore in World War II stopped this effort). It requires more heat than most vireyas to grow well, has attractive flowers and will bloom repeatedly throughout the year if conditions are right.

R. loranthiflorum (see (2) above. p. 38.)

R. macgregorae ? (Epithet: after Lady MacGregor, wife of the Administrator of New Guinea and Lieutenant Governor of Papua) 359

A common shrub or small tree to 15 m (50 ft) from 120-3000 m (400-9850 ft) from nearly the whole island of New Guinea, with 3-7 leaves in a tight pseudowhorl. It has 5-25 shortly tubular, unscented, light yellow to orange or with a yellow tube and reddish orange lobes flowers in a complete umbel. Natural hybrids are common, especially with *R. zoelleri*. A variety of colored cultivars are now propagated, from pure yellow to intense oranges, pink and a spectacular bicoloured form with a yellow tube and red lobes. It is a very tough species, and because of its low altitude distribution, is more heat tolerant than most vireyas and can give an exceptional display of flowers.



R. macgregorae. Photo: L. Muir.



R. malayanum. Photo: M. Robinson.

Ethnology at Leiden University)

This slender shrub to 60 cm (2 ft) is widespread in Borneo and is mostly epiphytic in dense, humid forests, from 100-800 m (330-2625 ft) elevation. It has twigs 1-3 mm (0.04-0.12 inches) in diameter, rugose leaves and broad ‘saucer-shaped,’ mostly solitary, horizontal or half-hanging, yellow flowers. It flowers several times a year but to thrive, needs much warmer and moister conditions than most other vireyas, reflecting its lowland habitat in the wild. It is a very delightful and distinctive species and according to Christy Hartsell (pers. comm.), George Argent said “this is the only true warm greenhouse vireya. I have to bring this plant into the greenhouse if temperatures drop below 4.5° C (40° F).”

R. malayanum ? (Epithet: from Malaya, a general term for a wide area of the SE Asia archipelago in the 19th century)

This erect shrub to 5 m (16.5 ft) from southern Thailand, Malaysia (Peninsula and Borneo), and Indonesia (Sumatra, Java, etc.) was the first vireya to be described, and is the most widespread vireya species. There are three varieties and two forma, with the large-leaved forma *latifolium* coming down almost to sea level (200-1500 m; 660-4925 feet) in Borneo, usually on peaty accumulations over white sand. Its flowers are smallish, waxy and glossy, and range from bright red to pink, flowering from April to October. It was one of the parents of the early “Veitch” hybrids in the 19th century.

R. nieuwenhuisii (Epithet: after the explorer A.W. Nieuwenhuis, Prof. of



R. nieuwenhuisii. Photo: C. Callard.



R. ericoides. Photo: Chris Callard.

R. zoelleri (see (3) above p. 39.)

7. Vireyas with unusual corollas (colour, shape, size) or leaves.

R. ericoides (Epithet: resembling the South African heather *Erica*, referring to its leaves)

This wiry alpine shrub endemic to Mt. Kinabalu in Malaysian Borneo can grow to

1.5 m (five feet) in the wild but is much smaller in cultivation. Its leaves are heather-like, very dense and are spirally arranged, and its bright red flowers are solitary or paired and hanging. It is cultivated with some difficulty, as it does not tolerate high temperatures and grows slowly; plants collected at the lower end of its altitudinal range are most successful. Its bizarre heather-like appearance makes it one of the most unusual and distinctive vireyas.

R. herzogii (see (2) above p, 89.)

R. himantodes (Epithet: referring to its strap-like leaves)

This slow-growing shrub to two m (6.5 ft) from Borneo has slender twigs and leaves in pseudowhorls of 12-25 or regularly spirally arranged. Its 8-15 flowers per umbel are erect or semi-erect, and its unscented flowers are white with prominent brown scales. It is a very dainty species and is very distinct with its narrow strap-shaped leaves and short, white, brown scaly flowers with highly contrasting chocolate brown anthers. Its flowering time is irregular, but it flowers regularly, usually once a year, and because of its foliage and flowers, it is stunningly attractive.



R. himantodes.. Photo: Chris Callard.



R. praetervisum. Photo: Chris Callard.

R. praetervisum (Epithet: overlooked, referring to its being initially associated with *R. longiflorum*)

This endemic species to Mt. Kinabalu in Borneo, Malaysia (1100-1800 m elevation) grows in the wild to two m (6.5 ft). It has 4-6 larger (18-32 mm, one inch) leaves along with a few small ones in distinct pseudowhorls. There are 3-7 unscented, relatively long, hanging, pink or purplish violet flowers in an umbel. Introduced into cultivation in 1963, it was first labelled as *R. longiflorum* before *R. praetervisum* was described (the latter has a style with no hairs), although now it's hard to rationalise why it was not recognised earlier as the flowers of *R. longiflorum* are held semi-erect and are orangish-red in colour. It flowers most profusely around March, and is easy to grow.

R. rugosum (Epithet: referring to its rugose (wrinkled) leaves)

This is another endemic species to the Malaysian mountains in Borneo (2000-3500 m elevation), where in the wild it can grow to eight m (26 ft). Its most distinctive feature are firstly its 60-120 mm (2.5-5 inch) elliptic, rugose leaves that have the extreme point deflexed downwards and margins often rolled inwards (revolute), and secondly, its 8-14 pink or purplish pink half-hanging flowers in an open umbel. Its new foliage is covered in bright orange-brown scales on both sides, which later rub off to leave a dark green leaf. It grows slowly and usually flowers only once a year in the spring, when it can be spectacular. It hybridizes naturally with *R. buxifolium* and possibly other species as well, forming the hybrid swarm *R. xcoriifolium* and the named hybrids *R. xkeditii* and *R. xliewianum*.



R. rugosum.. Photo: Chris Callard.



R. stenophyllum subsp. *angustifolium*.
Photo: Chris Callard.

R. stenophyllum (Epithet: narrow-leaved)

This Malaysian endemic species from Mt Kinabalu, Borneo (like *R. ericodes*), can grow to three m (ten feet) in the wild and is distinctive because of both its 10-15 narrow, linear (40-70 mm long, 2.5-5 mm wide; 1.75-3 inch x 0.1-0.2 in wide) leaves in pseudowhorls and secondly, its 1-3 bell-shaped, bright waxy orange to red unscented flowers together, held stiffly horizontal. Its leaves look a little like those of the Japanese umbrella pine, *Sciadopitys verticillata*). Although first described in the late 1800s, it was just introduced into cultivation in 1979, where it grows and flowers well and is now widely distributed. There are two subspecies, *stenophyllum* (from 2700-2800 m (8860-9200 feet) elevation) and *angustifolium* (from 1500-2400 m (4925-7875 feet) elevation), with the latter having longer, narrower leaves and flowering less frequently. Overall, it is a strange looking but handsome

rhododendron that can be very floriferous, especially if grown at cooler temperatures.

R. taxifolium (Epithet: with leaves like *Taxus* (yew, Taxaceae))

This epiphytic Philippine shrub is endemic to Mt. Pulag and grows to about 1 m (3.25 feet) in the wild, has very tiny twigs (1-2 mm in diameter) and its 12-25 narrow, linear leaves are crowded into moderately dense pseudowhorls. Its white, unscented flowers are sometimes solitary, but mostly 3-5 together in an open umbel, that are half-hanging unless caught up in the foliage. Although only introduced into cultivation in 1992, it is now widely available, as it grows easily and flowers profusely. For a rhododendron, it has an attractive but bizarre appearance, like *R. ericodes*, but it is much easier to grow successfully, and it is well worth growing as a small pot plant.



R. taxifolium. Photo: Chris Callard.



R. tuba. Photo: Chris Callard.

R. tuba (Epithet: referring to the trumpet-shaped corolla)

This terrestrial shrub to 5 m (16.5 ft) from Papa New Guinea has 4-5, 25-50 mm (1-2 inch) leaves together in tight pseudowhorls. What makes it so distinctive are its 4-7 scented flowers in an open one-sided umbel, with 65-80 mm (2.5-3 inch), weakly curved, trumpet-shaped corollas that have a pink tube and white lobes. It is a vigorous grower that can cover itself in beautiful flowers once a year in the spring.

Acknowledgements

Thanks to Sherla Bertelmann, Christy Hartsell, Steve Hootman and Dennis Bottenmiller for their input and constructive comments.

References

- Argent, G. 2015. *Rhododendrons of subgenus Vireya*. 2nd ed., Royal Bot. Garden Edinburgh: 454 pp.
- Bertelmann, S.D. 2009. I Dare You...I Double Dare You! *J. American Rhodo. Soc.* 63: 17.
- Cavender, R. 1993. Hanging Basket Rhododendrons. *J. American Rhodo. Soc.* 47: 93-94.
- Chaikin, R.W. 1994. Vireyas Are Not Rhododendrons. *J. American Rhodo. Soc.* 48: 192.
- Craven, L.A., F. Danet, J.F. Veldkamp, L.A. Goetsch, and B.D. Hall. 2011. Vireya Rhododendrons: their monophyly and classification (Ericaceae, *Rhododendron* section *Schistanthe*). *Blumea* 56: 153-158.
- Gerdemann, J. 2005. Breeding Vireya Rhododendrons for Cold Hardiness. *J. American Rhodo. Soc.* 59: 101-105.
- Goetsch, L.A., L.A. Craven and B.D. Hall. 2011. Major speciation accompanied the dispersal of Vireya Rhododendrons (Ericaceae, *Rhododendron* sect. *Schistanthe*) through the Malayan archipelago: Evidence from nuclear gene sequences. *Taxon* 60 (4): 1015-1028.
- Osborn, H. 1969. Vireya Section Rhododendrons in California: A preliminary report. *Quar. American Rhodo. Soc.* 23: 216-221.
- Puddey, N., and E. Ciarrocchi. A Collaboration Between Vireya Nurseries in Australia and Italy. *J. American Rhodo. Soc.* 73: 26-29.
- Rouse, J. and O. Blumhardt. 1991. 'Little Pioneer': A Vireya-Rhododendron Hybrid. *J. American Rhodo. Soc.* 45: 6-12.

Glen Jamieson is the current president of the Mount Arrowsmith Chapter and the editor of JARS.

2020 Rhododendron of the Year Plant Descriptions

Linda Derkach and Bob Weissman

ARS Plant Awards Committee

GREAT LAKES USA REGION

Elepidote Rhododendron: 'Francesca'

Flower vivid red, no markings, tubular-campanulate, 3½" across. Held in trusses of 19-25 flowers. Blooms late midseason. Leaves ovate, slightly inclined margins, dull, mid green. Broad, rounded, open habit. Does best in a somewhat shady location. Grows to a typical height of 6 ft. in 10 years. Cold hardy to -10°F (-23°C). Hybridized by Consolini.

Lepidote Rhododendron: 'Ginny Gee'

Flower white with pink mottling at edges both inside and on reverse, tubular funnel-shaped to widely funnel-shaped, wavy lobes, ¾"-1" across. Flowers fade to light pink or white. Held in terminal clusters of multiple buds each with 3 - 5 flowers. An early midseason bloomer. Leaves elliptic, acute apex, cuneate base, 1¼" long, dark matte green, retained 2 - 3 years. Some reddening of leaves in winter. Compact, very dense growth habit. Grows to an approximate height of 2 ft. in 10 years. Cold hardy to -10°F (-23°C). Hybridized by Berg.

Evergreen Azalea: 'Red Red'

Flower strong red, unmarked, openly funnel-shaped, 1¾" across. Truss has 3 to 4 flowers. Blooms midseason. Leaves elliptic to broadly elliptic, acute apex, rounded base, 1½" long, glossy, grayish olive green, turning reddish yellow in winter. Upright, broad plant habit. Low growing to approximately 2 ft. high in 10 years. Cold hardy to -15°F (-26°C). Hybridized by Shammarello.

Deciduous Azalea: *R. austrinum*

Flower variable from plant to plant - yellow to orange, narrowly funnel-shaped, 1½" across, slightly fragrant. Held in radially symmetric trusses at the stem tips. Blooms early midseason. Leaves ovate or obovate to elliptic, up to 4" long, light green, deciduous. Round plant habit. Grows to a typical height of 5 ft. in 10 years. Cold hardy to -5°F (-21°C). Native species found growing in the wild in Northwestern Florida to Southeastern Mississippi.

MID-ATLANTIC USA REGION

Elepidote Rhododendron: 'Bea MacDonald'

Flower light orange-yellow with 0.25" edging of strong pink and a red-brown flare, widely funnel-campanulate, crinkled edges, 3.1" across. Lax truss has 7-9 flowers. Blooms early midseason. Leaves narrowly elliptic, broadly acute apex, rounded base, dull green. Spreading, dense plant habit. Grows to a typical height of 2 ft. in 10 years. Plant and bud hardy to -5°F (-21°C). Hybridized by Cowles.

Lepidote Rhododendron: *R. keiskei* var. *keiskei*

Flower pale yellow, widely funnel shaped, 1½" - 2" across. Inflorescence 2-6 flowered. Blooms early midseason. Leaves lanceolate to narrowly elliptic, acute apex, cuneate or rounded base, 1¼" to 3" long, bronze-colored when young. Open growth habit. Grows to a typical height of 2 ft. in 10 years. Plant and bud hardy to 0°F (-18°C). Native to Japan (widely distributed, Honshu to Yakushima).

Evergreen Azalea: 'Wagner's White Spider'

Flower white with faint yellowish-green spots on the top three petals, single, 3" across. Petals are strap-shaped. Truss holds 2-4 flowers. Blooms early midseason. Leaves oblong, broadly acute to rounded apex, cuneate base, 2" long, flat edges, matte, moderate green. Intermediate plant habit. Grows to a typical height of about 3 ft. in 10 years. Plant and bud cold hardy to at least -5°F (-21°C). Hybridized by Wagner.

Deciduous Azalea: *R. periclymenoides*

Flower pink, rarely white, tube often deeper colored, funnel-shaped, fragrant. Truss holds 6-15 flowers. Blooms midseason. Leaves elliptic to oblong-obovate, up to 4" long, bright green, deciduous. Usually a non-stoloniferous shrub. Grows to 5 ft. tall in 10 years. Cold hardy to -15°F (-26°C). Native species found in the eastern United States growing from New England to Georgia, and westward to Ohio and Tennessee.

NORTH EAST USA AND CANADA REGION

Elepidote Rhododendron: 'Mist Maiden'

Flower pale purplish pink aging to white with moderate yellow dorsal spotting and deep purple pink stripe, openly funnel-shaped, wavy lobes, 2½" across. Ball-shaped truss holds 14-17 flowers. A midseason bloomer. Leaves oblanceolate, acute apex, cuneate base, convex, 5¾" long, yellowish-green, retained 5 years. New growth has grayish tan indumentum. Grows broader than tall. Grows to a typical height of 3 ft. tall in 10 years. Hardy to -20°F (-29°C). Selected by Hanger.

Lepidote Rhododendron: 'April Rose'

Flower purplish red, widely funnel-shaped, double, 1½" to 2" across, slightly fragrant. Terminal truss holds 3 to 4 flowers. Blooms early. Leaves elliptic, acute apex, cuneate base, flat, 2" to 4" long, deep green, leaves turn reddish-bronze in fall. Broad, upright habit. Grows to a typical height of 3 ft. in 10 years. Cold hardy to -25°F (-32°C). Hybridized by Mehlquist.

Evergreen Azalea: *R. eastmanii*

Flower white, lobes pink tinged on newly opened flowers, yellow to orange blotch on upper lobe, funnel-shaped, 1"-2" across, glossy, mid green, strongly fragrant. Truss has 5-9 flowers. Blooms midseason. Leaves ovate or obovate to elliptic, acute to obtuse apex, mucronate tip, cuneate base, 1¾" - 3" long. Tall-growing non-stoloniferous shrub or small tree. Native deciduous azalea recently discovered growing in South Carolina.

Deciduous Azalea: 'Pink Clusters'

Flower strong purplish red, unmarked, funnel-shaped, wavy-edges, 1.4" across. Truss has 3 flowers. Blooms midseason. Leaves ovate, cuneate base, obtuse apex, flat, 1¾" long, glossy, green. Dense plant habit. Grows to a height of about 2 ft. in 10 years. Cold hardy to -15°F (-26°C). Hybridized by Mezitt.

NORTH WEST USA AND CANADA REGION

Elepidote Rhododendron: 'Viennese Waltz'

Flower light red at edges shading darker in throat with orange-brown spots in dorsal lobe on orange background, funnel-shaped, 2" to 3" across, fragrant. Densely packed in large conical trusses of up to 34 flowers. Blooms early midseason. Leaves elliptic, apiculate apex, cuneate to rounded base, 4¼" to 5½" long, dark green, retained 2 years. Upright, open habit. Grows to a height of 5 ft. or more in 10 years. Cold hardy to 0°F (-18°C). Hybridized by Lofthouse.

Lepidote Rhododendron: 'Vibrant Violet'

Flower vivid violet with brownish-orange anthers, widely funnel-shaped, 2" across, wavy to frilly lobes. Held in terminal clusters composed of 4-5 trusses each with 5-6 flowers. Bloom early. Leaves near elliptic to wider than lanceolate, concave, acute, cuneate, about 1½" long, dull, dark yellowish-green, retained 2 years. Round, well-branched shrub. Grows to a height of 3 ft. in 10 years. Cold hardy to 0°F (-18°C). Hybridized by Fujioka.

Evergreen Azalea: 'Pearl Bradford'

Flower light purplish pink, with distinct, vivid purplish red spots, funnel-shaped, single, 3" across. Truss has 1 or 2 flowers. Blooms late. Leaves elliptic, mid green. Broad and spreading plant habit. Prefers some afternoon shade. Grows to a typical height of about 4 ft. in 10 years. Hardy to -5°F (-21°C). Hybridized by Morrison.

Deciduous Azalea: 'Fragrant Star'

Flower pale yellow in bud opens pale yellow inside, yellowish white outside, unmarked, tubular funnel-shaped, wavy lobes, 1½" across, very strongly scented. Blooms midseason. Leaves obovate, obtuse at apex, cuneate at base, 2" long, bluish-green, deciduous. Upright plant habit. Height: 4 ft. in 10 years. Cold hardy to -20°F (-29°C). Hybridized by Briggs Nursery.

SOUTH CENTRAL USA REGION

Elepidote Rhododendron: 'Dandy Man Pink'

Flower inside pink, shading lighter in throat, with maroon stripping on dorsal lobe, outside deeper pink. Ball-shaped truss has 11 flowers. Blooms early midseason. Leaves oblong, acute apex, rounded base, 5" long, semi-glossy, dark green, retained 3 years. Good heat tolerance. Typical height: 6 ft. in 10 years. Plant is cold hardy to -20°F (-29°C). Hybridized by Thornton. Also known as 'Honey Creek' or 'Mighty Titan'.

2020 Rhododendron of the Year Plant Descriptions - continued.

GREAT LAKES USA REGION



'Francesca'. Photo: Hirsutum.



'Ginny Gee'. Photo: Hirsutum.



'Red Red'. Photo: Oakland Nursery.



R. austrinum. Photo: Tijs Huisman.

MID-ATLANTIC USA REGION



'Bea MacDonald'. Photo: Frederick Thurber.



R. keiskei var. *keiskei*. Photo: Jim Wilhite.



'Wagner's White Spider'. Photo: Pinterest.de.



R. periclymenoides. Photo: Everard Daneil.

NORTHEAST USA REGION



'Mist Maiden'. Photo: Sally & John Perkins.



'April Rose'. Photo: Paul & Linda Lawry.



R. eastmanii. Photo: Mike Creel.



'Pink Clusters'. Photo: Sally & John Perkins.

Lepidote Rhododendron: 'Landmark'

Flower strong purplish red with faint scarlet spotting, openly funnel-shaped, wavy edges, ¾" across. Held in dome-shaped truss with 25 flowers. Blooms midseason. Leaves elliptic, broadly acute apex, rounded base, down-curved edges, about 2" long, semi-glossy, dark green. Upright, open habit. Grows to height of about 4 ft. in 10 years. Cold hardy to -15°F (-26°C). Hybridized by Mezitt.

Evergreen Azalea: 'Hinodegiri'

Flower strong purplish red, single, funnel-shaped, 1⅛" across. Truss has 3 flowers. Blooms early midseason. Leaves obovate, about ¾" long, glossy, mid green, may turn wine red in fall and winter. Dense, mounding plant habit. Grows to a typical height of 2 ft in 10 yrs. Cold hardy to 5°F (-23°C). Hybridizer is unknown.

Deciduous Azalea: 'Rosy Lights'

Flower deep purplish pink with vivid reddish orange spotting on dorsal lobe, openly funnel-campanulate, wavy dorsal lobe, 2⅜;" across. Dome-shaped truss with 8 flowers. Blooms late midseason. Leaves oblanceolate to narrowly elliptic, acute apex, cuneate base, 2¾" long, flat, bullate, moderate yellowish green. Upright, well-branched shrub. Typical height: 4-5 ft. in 10 years. Very cold hardy to -35°F (-37°C). Hybridized by Pellett.

SOUTH EAST USA REGION**Elepidote Rhododendron: 'Dexter's Vanilla'**

Flower creamy white with purplish-pink edged lobes and along central veins of lobes, reddish-brown marking on upper lobe, openly funnel-shaped, 3½" across, fragrant. Held in flat to lax trusses of 8 flowers. Blooms late midseason. Leaves elliptic to oblong, apiculate apex, cuneate base, 5" long, glossy, olive green, retained 2 years. Grows to a height of 3 ft. in 10 years. Plant is cold hardy to 0°F (-18°C). Hybridized by Dexter.

Lepidote Rhododendron: 'Yellow Eyes'

Flower pure white with prominent spotting of greenish-yellow (ages yellow) on upper 3 petals, broadly funnel-shaped, 1¼" across. Dome-shaped truss has 8-9 flowers. Blooms early midseason. Leaves elliptic, down-curved edges, 1¾" long, dull green, retained 2 years. Leaves turn bronze in winter. Plant has an upright growth habit. Grows to a typical height of 3 ft. in 10 years. Plant and bud hardy to -15°F (-26°C). Hybridized by Nearing.

Evergreen Azalea: 'Autumn Twist'

Flower white to light pink with purplish-pink blotch, stripes and sectors, about 3" across, single, openly funnel-shaped. One of the Encore™ series of azaleas. Spring bloom is followed by a second late summer to early fall blooming. Leaves are dark green. Plant has a rounded growth shape. Typical plant height in 10 years is 3 to 4 feet, but it can grow up to 6 feet tall with comparable widths. Plant is hardy to -10°F (-23°C). Hybridized by Robert Lee.

Deciduous Azalea: 'Aromi Sunny-side-up'

Flower vivid yellow with a vivid orange-yellow blotch, tubular funnel-shaped, 1¾" across, moderately scented. Flat truss holds 8 to 16 flowers. Blooms early midseason. Leaves elliptic, acute apex, cuneate base, 2¾" long, dull, yellow-green, deciduous. Shrub grows to 6 ft. or more in 10 years. Cold hardy to 10°F (-12°C). Hybridized by Aromi.

SOUTH WEST USA REGION**Elepidote Rhododendron: 'Senator Henry Jackson'**

Flower white, unmarked, openly-funnel-shaped, held in ball-shaped trusses with 8-10 flowers. Blooms late midseason. Leaves narrowly elliptic, or linear lanceolate, edges recurved, 5" to 6" long, dark green, sparse white-colored indumentum. Mounding plant habit. Typical height: 3 feet in 10 years. Plant and bud hardy to -5°F (-21°C). Hybridized by Larson.

Lepidote Rhododendron: 'Saffron Queen'

Flower vivid yellow with darker spotting on dorsal lobes, funnel-shaped, 2½" across. Held in lax trusses with 8 - 9 flowers. Blooms early midseason. Leaves lanceolate to oblanceolate, up to 3½" long, glossy green. Upright, open growth habit. Prefers some sun. Grows to a height of about 4 ft. in 10 years. Hardy to 20°F (-7°C). Hybridized by Waterer.

Evergreen Azalea: 'Vuyk's Scarlet'

Flower deep red with darker spots towards base of throat, funnel-shaped, frilly-edges, 2" across. Inflorescence 1 or 2 flowered.

2020 Rhododendron of the Year Plant Descriptions - continued.

NORTHWEST USA REGION AND CANADA



'Viennese Waltz'. Photo: Hirsutum.



'Vibrant Violet'. Photo: Frank Fujioka.



'Pearl Bradford'. Photo: Pinterest.



'Fragrant Star'. Photo: Hirsutum.

SOUTH CENTRAL USA REGION



'Dandy® Man Pink'. Photo: Lincoln Nursery.



'Landmark'. Photo: Monrovia Nursery.



'Hinodigiri'. Photo: Oregon State.edu.



'Rosy Lights'. Photo: Singing Tree.

SOUTH EAST USA REGION



'Dexter's Vanilla'. Photo: Hirsutum.



'Yellow Eyes'. Photo: Pinterest.



'Autumn Twist'. Photo: Encore.



'Aromi Sunny-side-up'. Photo: Az. Soc.

Blooms midseason. Leaves 1" long, glossy, dark green, turn dark red in autumn. Compact, spreading habit. Typical height is 2 feet after 10 years. Cold hardy to -10°F (-23°C). Hybridized by Van Nes. Award of Merit from the Royal Horticultural Society in 1993.

Deciduous Azalea: 'Jock Brydon'

Flower white suffused pink, center petal speckled strong orange, tubular, wavy and ruffled edges, 2¾" across, fragrant. Ball-shaped truss holds 12 to 16 flowers. Blooms late midseason to late. Leaves elliptic, 3½" long, olive green. Upright, dense plant habit. Grows to a typical height of 7 ft. in 10 years. Cold hardy to -5°F (-21°C). Hybridized by Clausen. Award of Merit from the Royal Horticultural Society in 2012.

SOUTHERN CALIFORNIA/HAWAII REGION

Vireya Rhododendron: 'Tropic Glow'

Flower golden yellow, shaded orange-red on lobes, funnel-shaped 3⅛" - 3½" across. Truss has 4-6 flowers. Blooms several times a year. Leaves elliptic, 3⅛" to 4" long, with minute, scattered brown scales on young leaves. Grows to a height of 7-8 feet in 10 years. Hybridized by Lelliott.

SOUTH WEST USA REGION



'Sen. Henry Jackson'. Photo: Chris Anderson.



'Saffron Queen'. Photo: Don Wallace.



'Vuyk's Scarlet'. Photo: Plantetorvet.dk.

SOUTH WEST USA REGION (Continued)



'Jock Brydon'. Photo: Singing Tree Nursery.

SOUTHERN CALIFORNIA/ HAWAII REGION



'Tropic Glow'. Photo: Brown's Nursery.

The Rhododendron, Camellia & Magnolia Group

THREE GROUPS OF PLANTS – ONE GROUP OF ENTHUSIASTS, WORLDWIDE

If you share a love of
rhododendrons, camellias and
magnolias, join us!

Benefits include a yearbook,
regular newsletters, tours
and annual seed list.

Visit
www.rhodogroup-rhs.org
for full
details



You are invited to join the
Australian Rhododendron Society
Victorian Branch



www.rhododendron.com.au

Benefits: Annual Journal, bi-monthly newsletter, opportunities
to participate in projects, expeditions and conferences,
automatic membership of the national body:
– The Australian Rhododendron Society Incorporated.

Contact the Membership Secretary: vcrhodo@gmail.com
or write to: PO Box 296, Olinda, Victoria, 3788, Australia

Newly Registered Cultivar Names

Michael Martin Mills
North American Registrar of Plant Names
Philadelphia, Pennsylvania

The following rhododendron and azalea names were approved and added to the International Rhododendron Register before Jan. 19, 2020, by the Royal Horticultural Society, which serves as the International Cultivar Registration Authority for the genus *Rhododendron*. (Information on the registration process follows the descriptions of cultivars.)

Key

(a) – deciduous or evergreen azalea

(r) – elepidote or lepidote rhododendron

(v) – vireya rhododendron

(z) – azaleodendron

X – primary cross

(s) – seed parent of cross, if known

x – cross of an unnamed parent

* – not registered

H – hybridized by

G – grown to first flower by

R – raised by

S – selected by

N – named by

I – introduced commercially by

REG – registered by

Royal Horticultural Society color numbers in parentheses, unless another system is noted

(r) ‘Brewster Butter’

Elepidote rhododendron: unknown parentage. H (1985-90), G (c. 1995): Robert A. Furman, Brewster, MA; S (2019), N (2019), REG (2019): Karen Humphries, White Horse Beach, MA. Flrs 15/ball truss, funnel, 2.1 inches (53mm) long x 3-3.5 inches (76-89mm) wide with 5-6 rounded lobes, wavy margins. Bud: light purplish pink to pale purplish pink (55C-55D). Inside and outside: light greenish yellow (5D) shading to light greenish yellow (5C) at center and base, with a few deep greenish yellow (152C) spots on inside dorsal lobe. Filaments and style similar in color to corolla. Fragrance: light. Truss 6 x 6 inches (152 x 152mm). Lvs 4-6 x 2-3.2 inches (102-152 x 51-81mm), elliptic, oblique base, obtuse apex, flat margins, up-angled from midvein, moderate olive green (147A) to moderate yellow green (147B), matte. Shrub 8 feet (2.4m) high x 9 feet (2.7m) wide in 30 years; intermediate habit, lvs held 2 growing seasons. Plant hardy to -10°F (-23°C), buds to -5°F (-21°C). Flowering midseason (mid to late May on Cape Cod).



‘Brewster Butter’. Photo: Donna Delano.

(r) ‘Cloud Crest’

Elepidote rhododendron: ‘Besse Howells’ (s) X ‘Calsap’. H (1996), N (2019): C.A Warkentin; G, REG (2019): W. Warkentin family; both Fonthill, Ontario. Flrs 17/conical truss, saucer, 1.5 inches (38mm) long x 2.5 inches (64mm) wide with 5 rounded, notably dissected lobes, frilly margins. Bud: deep purplish pink (N66D). Inside: pale purplish pink (55D) with strong purplish red (61B) nectar pouches and speckled blotch in dorsal lobe, 0.75 x 0.75 inch (20 x 20mm). Outside: pale purplish pink (55D), shading to light purplish pink (55C) on midveins. Calyx: 0.2 inch (5mm) long, pale yellow green (94D). White filaments; moderate orange yellow (164B) anthers; pinkish white (N155C) style; deep purplish red (61A) stigma. Truss 5 x 5 inches (127 x 127mm). Lvs 4 x 1.5



‘Cloud Crest’. Photo: William Warkentin.

inches (102 x 44mm), elliptic, rounded base, broadly acute apex, flat margins, grayish olive green (NN137A), matte, above; moderate yellow green (N148A), below. Shrub 1.8 feet (0.6m) high x 2.8 feet (0.8m) wide in 10 years; dense habit, lvs held 2 growing seasons. Hardy to -15°F (-26°C). Flowering midseason (late May in Niagara Falls area).

(r) 'Crawford'

Elepidote rhododendron: 'CeeCee' (s) X 'Sedona'. H (2005), N (2019), REG (2019): Stan B. Southerland, Chapel Hill, NC; G (2015) Deborah Sievert, Hillsborough, NC. Flrs 8/dome truss, funnel, 1.4 inches (34mm) long x 2.2 inches (55mm) wide with 5 rounded, slightly wavy lobes. Bud: deep purplish pink (73A). Inside and outside: pale greenish yellow (2D). Whitish filaments & style, green stigma. Truss 4 inches (102mm) high x 4.5 inches (114mm) wide. Lvs 5.9 x 1.4 inches (149 x 35mm), elliptic, cuneate base, broadly acute apex, downcurved margins, moderate olive green (137A), semiglossy. Shrub 2.5 feet (0.8m) high x 4.3 feet (1.3m) wide in 12 years; intermediate habit, lvs held 3 or more growing seasons. Hardy to 10°F (-12°C), heat tolerant to 100°F (38°C). Flowering early season (mid-April in central North Carolina).



'Crawford'. Photo: Stan B. Sutherland.

(r) 'Fashion Plate'

Elepidote rhododendron: [(*R. fortunei* cream clone x *R. vernicosum*, aff., 18193) x 'Mary Belle'] (s) X [('Dido' x 'Chlorops' x *R. lacteum*) x 'Golden Star']. H (probably 1983), G (c. 1990), N (1990s): Joseph Becales, Glen Mills, PA; REG (2019): Greater Philadelphia Chapter, ARS. Flrs 8/ball truss, broad funnel, 2.25 inches (57mm) long x 4 inches (102mm) wide with 7 rounded, wavy, often recurved lobes. Bud: light orange yellow (24C). Inside: pale greenish yellow (1D) shading to light greenish yellow (4B) toward base, with small basal, dorsal flare, moderate red (180B), lighter away from base, 0.5 inch (13mm) tall. Outside: pale greenish yellow (1D). Calyx: 0.2 inch (5mm) long, strong greenish yellow (151C). Fragrance: light. Truss c. 5 x 5 inches (c. 125 x 125mm). Lvs 4.75 x 2.1 inches (121 x 54mm), elliptic, rounded-oblique base, broadly acute apex, downcurved margins, convex with depressed midrib, moderate olive green (146A), matte. Shrub 4.5 feet (1.4m) high x 3.25 feet (1m) wide in 7-8 years; open habit. Hardy to -1°F (-18°C), probably lower. Flowering midseason (early May in Philadelphia). Notes: Parentage is the result of research by Karel F. Bernady of Chester Springs, PA, Greater Philadelphia Chapter, ARS. *R. fortunei* x *R. vernicosum* (part of the seed parent breeding) was a cross by Joseph B. Gable, Stewartstown, PA; see *Hybrids and Hybridizers*, 1978, Livingston and West, eds., p. 65. The pollen parent was hybridized by Robert A. Furman, Brewster, MA.



'Fashion Plate'. Photo: Michael Martin Mills.

(v) 'George Argent'

Vireya (lepidote) rhododendron: 'Pastenello' (s) X 'Lemon Spice' *. H (pre-2000): Graham Snell, Maleny, Queensland, Australia; G (2019), N (2019): René Siracusa, Pahoa, HI; REG (2020): Hawaii Chapter, ARS. Flrs 10-14/dome truss, funnel, 3.25 inches (83mm) long x 4 inches (102mm) wide with 6 rounded, slightly wavy lobes. Bud: brilliant yellow green (150B). Inside: brilliant yellow (13C) shading to yellow-pink tones at margins. Outside: pale orange yellow (16D). Fragrance: light. Truss 4.5 inches (114mm) high x 8 inches (203mm) wide. Lvs 5-7 x 2-3 inches (127-178 x 51-76mm), elliptic, cuneate base, acuminate apex, flat margins, moderate olive green (137A), glossy. Shrub 7 feet (2.1m) high x 3 feet (0.9m) wide in 10 years. Hardy to 35°F (2°C), heat tolerant to at least 84°F (29°C). Etymology of name: for George Argent, a taxonomist and botanist at the Royal Botanic Garden Edinburgh and noted expert on vireya rhododendrons.

* 'Lemon Spice' – not registered. Deep yellow; = [(*R. leucogigas* x *R. zoelleri*) x (*R. laetum* x *R. zoelleri*)] X 'Gardenia Odyssey'. It is thought to have been hybridized by Graham Snell.



'George Argent'. Photo: René Siracusa

(r) 'Horseshoe Lake'

Elepidote rhododendron: 'Besse Howells' (s) X 'Catawbiense Boursalt'. H (1996), N (2019): Brandon Warkentin; G, REG (2019): W. Warkentin family; both Fonthill, Ontario. Flrs 10/ball truss, broad funnel, 2 inches (51mm) long x 3 inches

(76mm) wide with 5 rounded, partially dissected lobes, very wavy margins. Bud: strong purplish red (71D). Inside: very pale purple (76C) shading through pale purple (N75B) to strong purple (77B) at margins; yellowish white (155D) dorsal area surmounted by moderate orange yellow (164C) speckled blotch. Outside: pale purple (N75B) blending to strong purple (77B) at margins; vivid purplish red (67B) midveins. Calyx: 0.1 inch (2mm) long, light yellow green (145C). Dark red (183A) stigma, vivid purplish red (67B) style shading to near-white at base; very pale purple (76C) stamens. Truss 4 inches (102mm) high x 5 inches (127mm) wide. Lvs 5.5 x 2 inches (140 x 51mm), elliptic, rounded base, broadly acute apex, flat margins, moderate yellow green (139A), matte, above; moderate yellow green (148B), below. Shrub 3.5 x 3.5 feet (1.1 x 1.1m) in 10 years; intermediate habit, lvs held 2 growing seasons. Hardy to -15°F (-26°C). Flowering mid-season (late May in Niagara Falls area). Etymology of name: for Horseshoe Lake, Jasper National Park, Alberta.



'Horseshoe Lake'. Photo: William Warkentin.

(a) 'Lisa Anne Gutierrez'

Evergreen azalea: 'Desiree' (s) X ('Maruschka' x 'Florence Waldman'). H (2002), G (2004), REG (2020): Joseph Klimavicz, Vienna, VA.; N (2019): Joseph Gutierrez. Flrs 2-3/terminal, saucer, hose-in-hose, 1.5 inches (38mm) long x 3 inches (76mm) wide with 10 (5 + 5) rounded, wavy lobes. Bud, inside and outside: white, with large dorsal blotch, light yellow green (144D). White pistil and filaments, brown anthers. Lvs 2 x 0.8 inches (50 x 20mm), elliptic, cuneate base, broadly acute apex, flat margins, moderate yellow green (146B). Shrub 2 x 2 feet (0.6 x 0.6m) in 5 years; open habit, vigorous, floriferous. Hardy to 0°F (-18°C). Flowering midseason (c. May 1 in Washington, D.C., area). Etymology of name: for a daughter of the namer; naming rights acquired in an auction of the Azalea Society of America's Northern Virginia Chapter.



'Lisa Anne Gutierrez'. Photo: Joseph Klimavicz.

(a) 'Madeline Cosby'

Evergreen azalea: ('Betty Christopher' * x 'Komo-kulshan') (s) X ('Maruschka' x 'Florence Waldman'). H (2003), G (2005), REG (2019): Joseph Klimavicz, Vienna, VA; N (2019): Patricia Elizabeth Cosby, Rockville, VA. Flrs 2-3/terminal, broad funnel, hose-in-hose, 1.5 inches (38mm) long x c. 2.75 inches (c. 68mm) wide with 10 (5 + 5) rounded, wavy lobes. Bud: white with varying flecks and sectors of vivid purplish red (67B), deep purplish pink (67C) or strong purplish pink (67D). Inside: white with varying flecks and sectors of vivid purplish red (67B), deep purplish pink (67C) or strong purplish pink (67D); dorsal blotch of strong purplish red (67A) or light yellow green (145C) or a combination of the two colors. Outside: white with varying flecks and sectors of vivid purplish red (67B), deep purplish pink (67C) or strong purplish pink (67D). Lvs 1.5 x 0.5 inches (38 x 13mm), elliptic, cuneate base, broadly acute apex, flat margins, moderate yellow green (146B), semiglossy. Shrub 3 feet (0.9m) high x 4 feet (1.2m) wide in 10 years; intermediate habit. Plant hardy to 0°F (-18°C), buds to 10°F (-12°C), heat tolerant to 110°F (43°C). Flowering midseason (April in Washington, D.C., area). Etymology of name: for one of the Cosby siblings who created an expansive azalea and rhododendron garden in Rockville, VA, and donated it to the Lewis Ginter Botanical Garden.



'Madeline Cosby'. Photo: Joseph Klimavicz.

* 'Betty Christopher' – not registered; = 'Mrs Nancy Dippel' x 'Schroeder's White Glory'; synonym: 'Laurie Russell'; raised by H.C. Weiskittel, Chase, MD.

(r) 'Marshmallow Moon'

Elepidote rhododendron: 'Tony' (Shammarello) (s) X 'Catawbiense Boursalt'. H (1996): Dylan Warkentin; N (2019): C.A. Warkentin; G, REG (2019): W. Warkentin family; all Fonthill, Ontario. Flrs 13/ball truss, broad funnel, 2 inches (51mm) long x 3 inches (76mm) wide with 5 rounded, somewhat wavy lobes. Bud: vivid reddish purple (N74A). Inside: white shading to vivid reddish purple



'Marshmallow Moon'. Photo: William Warkentin.

(N74B) near margins; prominent dark red (59A) blotch and spotting, some spots almost at margins. Outside: white, midveins shading to vivid reddish purple (N74B). Calyx: 0.1 inch (2mm) long, moderate yellow green (N148B). Truss 4.5 inches (114mm) high x 5.5 inches (140mm) wide. Lvs 5.5 x 2.5 inches (140 x 64mm), elliptic, rounded base, broadly acute apex, flat margins, grayish olive green (NN137A), matte, above; moderate yellow green (N148A), below. Shrub 3 feet (0.9m) high x 2.6 feet (0.8m) wide in 9 years; intermediate habit, lvs held 2 growing seasons. Hardy to -15°F (-26°C). Flowering midseason (late May in Niagara Falls area).

(r) 'Sapphire Sky'

Elepidote rhododendron: 'Nova Zembla' (s) X unknown. H (1994), N (2019): C.A. Warkentin; G, REG (2019): W. Warkentin family; both Fonthill, Ontario. Flrs 12/ball truss, broad funnel, 1.5 inches (38mm) long x 2 inches (51mm) wide with 5 rounded, wavy lobes. Bud: strong purplish red (67A), with vivid reddish purple (N74A) midveins. Inside: strong reddish purple (NN74D) shading to strong reddish purple (NN74A) at margins; deep purplish red (71A) blotch, 0.75 x 0.75 inch (20 x 20mm). Outside: strong reddish purple (NN74D). Deep purplish red (71A) stigma; white anthers. Truss 3.5 inches (90mm) high x 4 inches (102mm) wide. Lvs 4 x 1.75 inches (102 x 44mm), elliptic, rounded base, broadly acute apex, flat margins, grayish olive green (NN137A), matte, above; moderate yellow green (N148B), below. Shrub 3.2 feet (1m) high x 2.5 feet (0.8m) wide in 9 years; open habit, lvs held 2 growing seasons. Hardy to -15°F (-26°C). Flowering midseason (late May in Niagara Falls area).



'Sapphire Sky' Photo: William Warkentin.

(r) 'Sheer Elegance'

Elepidote rhododendron: 'Nova Zembla' (s) X unknown. H (1994), N (2019): C.A. Warkentin; G, REG (2019): W. Warkentin family; both Fonthill, Ontario. Flrs 12/dome truss, campanulate, 1.75 inches (44mm) long x 2.25 inches (57mm) wide with 5 rounded lobes, cupped margins. Bud: strong reddish purple (NN74A) at tip, shading through light reddish purple (NN74C) to strong reddish purple (NN74D) at base. Inside: moderate purplish pink (N74D) with moderate orange (170D) dorsal spotting. Outside: moderate purplish pink (N74D) with vivid reddish purple (N74B) along mid ribs. Calyx: 0.1 inch (2mm) long, light yellow green (150D). Moderate purplish pink (N74D) filaments and anthers, strong reddish purple (72C) style, deep purplish red (61A) stigma. Truss 3.5 inches (90mm) high x 5 inches (127mm) wide. Lvs 4 x 2 inches (102 x 51mm), elliptic, rounded base, broadly acute apex, wavy margins, grayish olive green (NN137C), matte, above; moderate yellow green (N148A) below; new growth strong yellowish green (N144A). Shrub 2.2 feet (0.7m) high x 1.5 feet (0.5m) wide in 6 years; intermediate habit, lvs held 2 growing seasons. Hardy to -15°F (-26°C). Flowering midseason (late May in Niagara Falls area).



'Sheer Elegance'. Photo: William Warkentin.

(a) 'Simone Girls'

Evergreen azalea: 'Rebecca Taffet' (s) X 'James Stewart'. H (2006), G (2019), REG (2020): Joseph Klimavicz, Vienna, VA; N (2019) Barbara Simone Kirkwood, Great Falls, VA. Flrs 2-3/terminal truss, saucer, semidouble, 1.5 inches (35mm) long x 2.8 inches (70mm) wide with 15 rounded, wavy lobes. Bud: strong purplish pink (62A) shading to very pale purple (69A) at base. Inside and outside: very pale purple (69A) shading to strong purplish pink (62A) at margins, more pronounced on outer lobes; with strong purplish pink (63C) speckling on 3-4 dorsal lobes. Calyx: 0.1 inch (1mm) long, strong yellow green (144B). Pistil rarely present, does not set seed; stamens often distorted. Lvs 2 x 0.8 inches (50 x 20mm), elliptic, cuneate base, broadly acute apex, flat margins, moderate yellow green (146B), semiglossy. Shrub 1.5 x 1.5 feet (0.5 x 0.5m) in 5 years; open habit. Hardy to 0°F (-18°C). Flowering midseason (early May in Washington, D.C., area). Etymology of name: for three generations of women with Simone as a maiden or middle name: Barbara Simone Kirkwood, Nicole Simone Kirkwood, Elliana Simone Cisz.



'Simone Girls'. Photo: Joseph Klimavicz.

(a) 'Vernon Bush'

Deciduous azalea: *R. prunifolium* open-pollinated. S (2012), G (2012): Vernon Bush, Huntsville, AL; I (2017): Earl Sommerville, Marietta, GA; N (2019), REG (2019): Huntsville Madison County Botanical Garden Society Inc., Huntsville, AL. Flrs 5-7/dome truss, tubular funnel, 2.5 inches (64mm) long x 2.25 inches (57mm) wide with 5 broadly acute lobes, slightly wavy. Bud: vivid reddish orange (34A). Inside: vivid reddish orange (N30A), with vivid reddish orange throat (N30B); faint blotch that fades away as flower ages. Outside: strong yellowish pink (31C). Calyx: 0.1 inch (2mm) long, brilliant yellow green (149C). Vivid reddish orange (34A) style and filaments, 3.5 inches (90mm), notably exserted. Truss 3.75 inches (95mm) high x 5 inches (127mm) wide. Lvs 2-4.2 x 0.5-1.4 inches (51-107 x 13-36mm), elliptic, cuneate base, acute apex, wavy margins, moderate olive green (137A), matte. Indumentum: sparse fine hairs along margin and midvein, light yellow green (145B). Shrub 9 feet (2.7m) high x 5 feet (1.5m) wide in 7 years; intermediate habit. Hardy to 4°F (-16°C), heat tolerant to 95°F (35°C). Flowering late season (mid-July in northern Alabama). Etymology of name: for Vernon Bush, specialist in deciduous azaleas of southeastern North America. Notes: Flower is notably larger than typical *R. prunifolium* flowers. Parent plant wild-collected in Lee County, AL, by R. Oneal Smitherman; given to Vernon Bush, who collected open-pollinated seed from it.



'Vernon Bush'. Photo: Tracy Cook.

References

Names conform to the rules and recommendations of the *International Code of Nomenclature for Cultivated Plants, Eighth Edition* (2009). Color names are from *A Contribution Toward Standardization of Color Names in Horticulture*, Robert D. Huse and Kenneth L. Kelly; Donald H. Voss, editor (ARS, 1984).

To register a rhododendron or azalea name

North Americans: Electronic registration may be submitted at www.rhododendron.org/plantregistry.htm. The site also provides instructions and forms for downloading and completing manually. Those submitting paper applications should use only the current form (revised 2019). The quickest way to obtain paper forms is to ask a friend with Internet access to go to the ARS website and print the form and instructions. Questions, completed paper forms, all photographs and requests for paper forms should be directed to Michael Martin Mills, North American Registrar, arsregistrar@gmail.com; 632 Burnham Road, Philadelphia, PA 19119; 215-844-6253. There is no fee.

All others: Please direct inquiries to Sharon McDonald, International Rhododendron Registrar, sharonmcdonald@rhs.org. uk; mailing address: RHS Garden Wisley, Woking, Surrey GU23 6QB, United Kingdom.

“The most noteworthy thing about gardeners is that they are always optimistic, always enterprising, and never satisfied. They always look forward to doing something better than they have ever done before.”

Vita Sackville-West, 1892 – 1962

Rhododendron Calendar

- 2020** Spring Convention has been postponed until 2022 due the COVID-19 Virus restrictions.
- 2020** ARS Fall Regional Conference, Gettysburg, PA, Board Meeting, Sept. 25 - 27, 2020.
- 2020** New Zealand Rhododendron Association's 76th convention, Timaru, Oct. 27 - 30, 2020.
- 2021** ARS Spring Convention, "Rhodos Down East: Exploring the North Atlantic Region", Wolfville, Nova Scotia, Canada, June 2-6, 2021,
- 2021** ARS Western Regional conference, Florence, OR, October 13, 14 and 15, 2021.
- 2022** ARS 75th +2 Anniversary Convention, Vancouver, Washington. Board Meeting. April 27 - May 1, 2022.
- 2022** Fall - Eastern Area - Open
- 2023** ARS Spring Convention, Atlanta, GA. Joint ARS/ASA meeting. Dates to be determined.

If you can help in the future, please contact Ann Mangels at wamangels@aol.com.

2020 ARS Photo Contest Rules

The Contest is open only to ARS members in good standing as of the contest closing date. Judges and their immediate family (spouse, parents, siblings, and children) and household members are not eligible. By participating in the Contest, each entrant fully and unconditionally agrees to and accepts these Official Rules and the decisions of the Judges, which are final and binding in all matters related to the Contest. There are no prizes except bragging rights, and the Editor of JARS has the right to publish runner up and winning entries.

All photos submitted must not have been entered in a JARS photo contest previously. Entries must be received by midnight PST, July 31, 2020. All entries should prominently feature either rhododendrons, azaleas and/or vireyas in the composition. Competition categories:

- 1) Flower, truss or spray;
- 2) Plant in bloom;

- 3) Landscape or plants in the wild or in gardens;
- 4) Foliage;
- 5) People, Insects, or Animals; and
- 6) Other, for creative or artistic effects of any kind that involves these plants. This could involve the use of software products like PhotoShop.

Photo Guidelines:

- 1) The Photo must be in .jpg, .jpeg, or .gif;
- 2) Images submitted should be sent by email and be of modest size, about 1024 to 1280 pixels in length and 480 to 768 in width, which would correspond to a dpi of at least 300 for a 3 x 5 in (7.6 x 12.7 cm) photo;
- 3) Cropping of digital images and minor adjustments to exposure and color balance is permitted for entries in all categories. Advanced image editing features available in

software products like Photoshop should not be used except for entries in category six;

- 4) The Photo caption and/or description must not exceed 200 characters in length. Provision of some details about the camera and settings for each entry is also desirable, and for submissions in category 6, include a brief explanation of how the image was created;
- 5) The Photo cannot have been submitted previously in an ARS contest (chapter contest submissions are acceptable); and
- 6) The number of entries by any individual per category is restricted to two.

Please email entries to Glen Jamieson at ars.editor@gmail.com. Entries must be received by midnight, July 31, 2020.

New Members 11/17/2019 - 2/20/2020

Commercial

NON-CHAPTER

Patrick Rombout

Regular

ANN ARBOR

Lauren Davis

CALIFORNIA

Jeff Heon & Julia Carlson

DJ & Josie Traver

CONNECTICUT

Dorothy Bonbrake & Sarah Becker

COWICHAN VALLEY

Allison Barber

Pyra Draculea

Elsie Sands

Rhonda Wiley

DANISH

Svend H. Hansen

Mikael Thejll

Svein Erik Tønnesen

DE ANZA

Caroline Beverstock

Chen-Hao Hsu

DUTCH

R. Mensink & Hortus Haren

R. Koot

EUREKA

Cathy Bonser

FINNISH

Piotr Kaleta

FRASER SOUTH

Colette Savarie

KITSAP

Katherine Pollok

MASSACHUSETTS

Jeffrey Gagner

Elizabeth Pilcher

Martin Souza

Carter Wilkie

MIDWEST

Azalea Path Arboretum

& Botanical Garden

Donald Mitchell

MT ARROWSMITH

Maureen & Brian Cranwell

Kristin Murray & Dan Carroll

NANAIMO

Jessica Gemella

Christine Guist

Mike & Mary O'Neill

NOYO

Branden Roscoe

PORTLAND

Mike Darcy

Donna Guerrero

POTOMAC VALLEY

Laury Bershad

Bonnie Pavlak

Margaret Vogel

PRINCETON

Tim & Rebecca Nugent

RSC ATLANTIC REGION

Marie Axler

Syd Dumaresq

Kathleen Hall

Deborah Hall

Dr Ruth Jackson

Rebecca Lancaster

Walter Ostrum

Freeman Patterson

Jacqueline Shields

RSC NIAGARA REGION

Julie-Anne Cote

Stephanie Jocius

SIUSLAW

John & Dorothy Curtis

John Mautino

TENNESSEE VALLEY

Shona Cross

VALLEY FORGE

Agnes Hong

Renee Thompson-Hohl

Bonnie & Phillip Witmer

VANCOUVER

Donna McCrea

Joanne Tench

VICTORIA

Aaron Brice & Tyler Harfield

Diane Whitehead

Student

EUREKA

Molly Cribari

MT ARROWSMITH

Amy Brendon

Emman Breukers

Jackson Britton

Isabella Brugman

Nick Ekelynd

Lee Fish

Taylor Funk

Braydon Garbe

Kyan Leduc

Taiya McLellan

Grace McMahon

John Meccard

Emma Miller

Georgia Paddle

Ina Powell

Dan Schellenverg

General Fund Donations from 11/15/2019 through 2/20/2020

Donn & Louise Teubner	MASON DIXON	\$25.00	Joe Harris	TENNESSEE VALLEY	\$10.00
Joseph Miller	MIDDLE ATLANTIC	\$10.00	Kate Read	TACOMA	\$40.00
Ronald & Elaine Kreskey	SIUSLAW	\$10.00	Peg Van Patton	EUGENE	\$50.00
Karen Hoover	VALLEY FORGE	\$40.00	Hal Graboske	CALIFORNIA	\$10.00
Gerald J. O'Dell	VALLEY FORGE	\$50.00	John & Shirley Shuster	MASSACHUSETTS	\$25.00
Scott S & Nancy J Stowell	SEATTLE	\$25.00	Douglas B. Harding	MASSACHUSETTS	\$60.00
William F Bedwell	MIDDLE ATLANTIC	\$50.00	Barbara R. Langstroth	MASSACHUSETTS	\$50.00

Endowment Donations from 11/15/2019 through 2/20/2020

Bill & Sandi Hennig	SOUTHWESTERN OR	\$10.00	
V. Alton Dohner	SOUTHWESTERN OR	\$25.00	
Jenkins Arboretum & Gardens	VALLEY FORGE	\$10.00	
Marshall A Asheerg Jr		\$25.00	IMO Virginia Banks
Chapter donation	MIDDLE ATLANTIC	\$100.00	IMO Virginia Banks
Brigitte & Donald Paine	MASSACHUSETTS	\$20.00	
Joan Roberts	VALLEY FORGE	\$10.00	
Liz & Frederick Ray Ball	VALLEY FORGE	\$2.00	

Deceased Members 11/15/2019 through 2/20/2020

Burlingame, Wes	620 Rutledge Dr	Hendersonville, NC	28739
Höge, Svante	Uppsalavägen 39 193 34	Sigtuna	SWEDEN
Huse, Robert	8070 Wellington Ln	Chattanooga, TN	37421-1118
Smith, Jane	12728 54th Ave NE	Marysville, WA	98271-9003
Velinty, Jennifer	419 Sherwood Loop	Florence, OR	97439-0046

**NEW ZEALAND
RHODODENDRON
ASSOCIATION (INC)**

Subscription: 2020
Individual NZ\$40 • Couple NZ\$45 • Overseas NZ\$55

Membership Includes:

- Annual Bulletin
- Newsletters
- Annual Conference
- Lectures and Garden Visits

For further details contact:

Secretary
Pauline Allen
25 Pomona Street
Gore 9710
Southland
New Zealand

Email: nzrhododendron@xtra.co.nz
Website: www.rhododendron.org.nz



**The Azalea Society
of America**

Dues \$30 per year
Includes four issues of
THE AZALEAN
For more information or
to receive a membership brochure



Contact: Membership
The Azalea Society of America
2963 Fort Lee Street
Oak Hill, VA 20171-1812
or email pabeck@gmail.com
www.azaleas.org

Whitney Gardens & Nursery

Rhododendrons & Azaleas – Hybrids & Species
Maples, Magnolias, Kalmias, Conifers, Camellias and Perennials

We ship from our garden to your garden.
Catalogue available on website.

P.O. Box 170, Brinnon Washington 98320-0170 (306264 Hwy. 101)
Phone: (800) 952-2404 • (360) 796-4411 • Fax: (360) 796-3556
E-mail: info@whitneygardens.com • Web Site: www.whitneygardens.com

Want to Learn About Lilies?

Join the North American Lily Society!
Membership includes four full color
Quarterly Bulletins and a color
Yearbook loaded with information
about lilies.



Dues are just \$25 per
year for us members.
For more information
and to join visit:
www.lilies.org

NALS Executive Secretary,
PO Box W, Bonners Ferry, ID 83805



Support Rhododendron Research by Contributing to The Research Foundation of the American Rhododendron Society

Please include the following information to support ARS Research Foundation:

- ♦ A check written to the ARS Research Foundation.
- ♦ If a gift is in memory of or in honor of an individual, please include name and contact information for this person.
- ♦ Please include your name, address, and contact information.

Please mail all of the above information to:

**Perc Moser, Treasurer, ARS Research Foundation, 301 Caversham Rd,
Bryn Mawr, PA 19010**

THE NORTH AMERICAN
**ROCK GARDEN
SOCIETY**

If you are interested in rock gardening in North America or in rock-garden plants from North America, then NARGS is for you.

Membership includes full-color Rock Garden Quarterly, online archive back to 1938, meetings across North America, and an annual Seed Exchange.

Annual dues \$40 in North America, \$45 elsewhere. Join online on the website using PayPal, Mastercard or Visa. Alternatively write to: NARGS, PO Box 18604, Raleigh NC 27619-8604, USA.

www.nargs.org



Broken Arrow Nursery
Growers of Rare and Unusual Plants
13 Broken Arrow Rd., Hamden, CT 06518
For mail order visit:
www.brokenarrownursery.com

AZALEA HILL GARDENS & NURSERY
EVERGREEN AZALEAS

We grow Glenn Dale, Back Acre, Robin Hill, Satsuki, Huang, Holly Springs and others
Azalea Liners: 4-inch pots. We ship!
1106 S. Evans Road, Pine Bluff, Arkansas 71602
Phone: (870) 247-1574
Visit: www.azaleahillgardens-arkansas.com

Do you love species rhododendrons?
Like to live in the Pacific Northwest?
Chimacum Woods is working on a succession plan. Call us! 206-383-2713

ADVERTISING IN ARS JOURNAL

Advertising Rates - B & W

	SIZE	1 TIME
1"	2-3/8"x1"	\$20.00
A	2-3/8"x3"	\$50.00
B	4-7/8"x3"	\$88.00
1/2 pg	7-3/8"x4-6/8"	\$175.00
full pg	7-3/8"x9-5/8"	\$325.00

Advertising Rates - Color

	SIZE	1 TIME
1'	2-3/8"x1"	\$40.00
A	2-3/8"x3"	\$100.00
B	4-7/8"x3"	\$175.00
1/2 pg	7-3/8"x4-6/8"	\$275.00
full pg	7-3/8"x9-5/8"	\$425.00

DEADLINE FOR ADS:

FEB. 15 Spring issue
MAY 15 Summer issue
AUG. 15 Fall issue
NOV. 15 Winter issue

Send copy or inquiry to:
Donald Smart, Associate Editor
Journal American Rhododendron Society
1618 290th Ave. NE
Carnation, WA 98014-9608
Email: donolyn@comcast.net
Phone: 425-443-7135

The American Camellia Society

Online Membership Sale: \$10

Call toll free to join with special offer!
(877) 422-6355
www.americancamellias.org

ARS 2020 SEED EXCHANGE

The 2020 ARS Seed Exchange Rhododendron Seed List will be open through May 2020.

Our catalog of available lots can be viewed at the ARS and Danish web sites:
<http://www.rhododendron.org/seedexchange.htm>
and <http://www.rhododendron.dk/ARS-seed.htm>

Hard copy lists available upon request, \$3.00 refundable with your order.

Norman Beaudry, Chairman
ARS Seed Exchange,
7921 Deepwell Drive,
Bethesda, MD 20817-1927 USA
ARSseed@gmail.com

Points of Contact for Members and Chapters

There are THREE principal points of contact for areas that members and chapter officers need to know:

MEMBERSHIP and CHAPTER

SUPPORT: Our Office Administrator Katherine Sterner is taking care of all membership issues. Renewals—including checks—should be sent to her to be recorded and deposited.

ARS Office

PO Box 214

Great River, NY 11739

Email: member@arsoffice.org

Fax: 866-883-8019 (toll-free)

JOURNAL (JARS) SUPPORT:

Associate Editor Donald Smart now takes care of ALL JARS mailing support including missed or damaged copies.

1618 290th Ave. NE

Carnation, WA 98014-9608

E-mail: donolyn@comcast.net

FINANCES: Bills and payments—other than membership checks—should be sent to ARS Treasurer Dave Banks. This includes Endowment and chapter payments for medals and insurance. Checks can be mailed, otherwise contact Dave for EFT transfer details. American Rhododendron Society PO Box 6414 Williamsburg VA 23188-6414 Email: arstreasurer1@gmail.com Phone: (h) 757-258-8632; (c) 757-561-9444; Fax: manual, by arrangement.

Donations to the Research Foundation should be sent to Perc Moser, Treasurer, ARS Research Foundation, 301 Caversham Rd., Bryn Mawr, PA 1901

If you aren't certain whom to contact—contact either Katherine or Dave! This is an evolving new structure and I'm certain there are things that we haven't thought about. Dave Banks dfbanks@earthlink.net



ARSStore.org

Where every purchase benefits the American Rhododendron Society

Use these links to quickly go directly to the respective ARSStore

Amazon . ARSStore . org	
Target . ARSStore . org	
Walmart . ARSStore . org	

Use ARSStore.org For All Your Online Shopping
And Earn Up To 5% For The ARS

MENDOCINO COAST BOTANICAL GARDENS



1,000 RHODODENDRONS INCLUDING 124 SPECIES AND 315 TAXA
PLAN YOUR ESCAPE... GARDENBYTHESEA.ORG



ORGANIC®

EXPERTS TRUST THE #1 BRAND IN ORGANIC GARDENING

Laura LeBoutillier grew up working in her parents' garden center. Since then, she and her husband Aaron have published hundreds of inspirational and educational gardening videos online for over 2.4 million loyal fans. Laura loves her garden and uses only the best products to ensure it looks beautiful. That's why she trusts Espoma Organic® for her fertilizer and potting soil needs.

Espoma. A natural in the garden since 1929.



Visit www.espoma.com/video to see our inspirational videos.