JOURNAL

American Rhododendron Society

Vol. 72 Number 4 Fall 2018

American Rhododendron Society
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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 (include proof if over 18)	$10.00
Regular	$40.00
Commercial	$90.00
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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.**



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FALL 2018 VOLUME 72 NUMBER 4
Journal American Rhododendron Society (ISSN: 0745-7839) Copyright © 2018 by the American Rhododendron Society. Published quarterly Jan. 15, April 15, July 15, Oct. 15 by the American Rhododendron Society. Periodicals postage paid at Carnation,WA, and additional mailing offices.

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Earl Sommerville's 'Razzberry'. Photo by Earl Sommerville.

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. 63, 2009]

Archives: www.lib.virginia.edu/small

ARSStore: www.ARSStore.org

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

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

From the President

Ann Mangels
Baltimore, Maryland

It seems like such a short time since writing a similar letter for the summer issue. I don't know about you, but to me one of the longest months of the year is June. I guess that's because the rest of the summer seems endless with lots of time for the fun things we like to do. Then one day we look at the calendar and it's almost September. Where did it go?

One question several you have asked regarding the ARS involvement with Hirsutum, and whether we might attempt to get information from the present group which oversees its operation. Bob Weismann has tried to contact the leader but hasn't had positive results. Hirsutum has been responsible for collecting information of rhododendron data which can be used for horticultural and scientific usage. He and Ken Webb have both been in contact with those who may be able to help us understand which electronic systems may be needed for ARS accommodation.

This week the ARS learned that the mediation issues regarding Van Veen issues have been completed and approved by the Portland Chapter's attorney. Brenda Ziegler's legal advisor and Mike Stewart, as well as Gordon Wylie and others, have read the Conservation Easement, which is basically what had been presented to the BOD in Bremen, Germany. The difference is that the family provision has been eliminated and will be indemnified by a monetary figure agreed to by the Portland Chapter. The ARS responsibility will remain as written in the previous agreement, namely to oversee that Van Veen Nurseries, Inc. (VVNI) Grantor, and the Portland Chapter uphold the Agreement. The American Rhododendron Society's role, as Grantee, is to enforce the terms of the Easement, which all pertain to VVNI as owner of the property. There will be no costs to the ARS. The three acre property will be restored to its Agriculture Uses.

This is a tremendous opportunity for the ARS to continue its relationship with VVNI and to know that Kathy's wishes have now come to fruition by the two organizations that have meant so much to her over her and her family's lives.

The other message I have to give is that as many of you know by now, our good friend and past President, Bob MacIntyre, passed away on August 11, 2018. He was 78 years old. There is an obituary in JARS this month which will tell you of his very fulfilling life. We got to know each other when Bob stepped in as President of the ARS, when we were both novices for what needed to be done. Bob was such a gentle and nice person who never complained and thoroughly enjoyed his role - he was a good man and supporter of the ARS!

Ann Mangels, President
Fall, 2018

From the Editor

Glen Jamieson
Parksville, BC
Canada

As I write this column, I am watching on TV the destruction and flooding that is occurring in the Carolinas from Hurricane Florence, and while I have not visited the coastal areas, having only been in Ashville, my heart goes out to all those that are experiencing such a major destruction. I know that there are many ARS members in the impacted area, and I can only hope they are safe and that their gardens are not being damaged too much.

I heard on the news that the flooding may be a one in one thousand year event, based on probability, as obviously there has not been documentation of floods over the past thousand years. Regardless though, with the rate of climate change happening today, whatever one believes as to the cause, the past is no longer a good indicator for the calculation of probabilities on what may happen in the future. Events such as this are likely to become much more frequent, and even more damaging if even the modest predictions of future temperature increases are realised! It will be very interesting to observe how we as educated societies respond, and how long it will take us to accept that the world's climate is beginning to change dramatically, and that both the economic and environmental consequences, particularly to future generations, will increasingly be significant.

It also makes me realise just how relatively benign the climate and environment is here in western North America. We have occasional heavy rains and with climate change, increasing drought and larger and more frequent forest fires, but these are generally much less life-threatening than are hurricanes and tornados, which do not occur here. Our big event will one day be a massive earthquake, which will cause huge damage and potential loss of life, especially in coastal areas, but on the positive side, should not at least affect our gardens too much!

Indiana azaleas

Ken Gohring
Marietta, Georgia

Photos by
Andy Whipple
unless noted.

Indiana is a state well known for its numerous agricultural farms but not known to be a place where American native azaleas occur naturally. The thought that deciduous azaleas couldn't be grown in Indiana has been dispelled by Dr. Andrew Whipple. Over a period of years, Dr. Whipple persisted and developed the proper discipline and practices to grow many of the 17 American native azalea species and other select deciduous azaleas in Indiana.

Set of Earl Sommerville Selections at Taylor University

Andy served as Professor of Biology at Taylor University, a small Christian university in the small town (population 3802) of Upland, located in east central Indiana. Upland is known primarily for Taylor University, where Andy taught, and a restaurant, Ivanhoe's Drive In, which offers hundreds of ice cream confections. The forces driving the Whipple pursuit of deciduous azaleas were the beauty of the various species and the challenge of "can it be done?"

The soils of Grant County, Indiana, where Upland is located, are described as clay loam or silt clay by US Department of Agriculture soil analyses. Upland is in USDA plant hardiness zone 5b where the extreme winter temperatures range from -10 to -5 ° F (-23.3° to -20.6° C). However, perhaps a more significant measure of plant adaptability for deciduous azaleas are summer temperatures and precipitation extremes, as many azaleas have adapted to winter temperatures in the northeast US. The average July temperature for nearby Indianapolis is 83.6° F (30.2° C) with state record highs reaching over 110° F (43.3° C). The average rainfall in July is 4.55 in (11.56 cm) but drops to 3.13 in (7.95 cm) in August and less for the following months.

Andy, well aware of the soil properties and culture requirements for azaleas, started a garden with standard cultivars and achieved some success in areas near his home where he had grown blueberries, cranberries and other acid loving plants. At the urging of his friend and Taylor associate, Paul Lightfoot, he attended the 2002 joint ASA and ARS Convention in Atlanta, where he was able to visit Atlanta area gardens. The Earl Sommerville garden, with its extensive collection of different native species and natural hybrids was a significant factor in his becoming a serious deciduous azalea advocate.

You-Ying and Andy Whipple. Photo by Mike Homoya.

The Strickland azaleas developed by Kelly Strickland of Tallahassee, Florida, were also a factor in developing the Whipple resolve to grow deciduous azaleas in Indiana.

Andy's scientific training and teaching were also significant factors in developing the Indiana azaleas. After the Atlanta convention, his first work involved experimenting with variable sites and raised bed features. The first plantings survived but with limited success. He observed the success that Paul had achieved with plants grown in soil with some sand and located on slopes with good drainage. These early plantings of various native azalea species and select cultivars survived the Indiana winters but struggled in the hot dry Indiana summers. A rigorous watering regimen was required to nurture the azaleas through the summer.

While this experimentation of growing deciduous azaleas at his home was taking place, Andy became knowledgeable of methods of propagating deciduous azaleas. The difficulty of reproducing many of the native species and cultivars by traditional methods was overcome by the use of micropropagation methods. He became familiar with the techniques of animal cell culture in graduate school and was able to adapt his experiences to propagating azaleas. His interaction with others experienced in the micropropagation of deciduous azaleas, in particular Earl Sommerville and Vivian Abney, provided Andy with a great deal of information and support in this endeavor. In addition he grew many plants from seeds. The result of these propagation efforts was a large number of plants in need of a home, and so Andy initiated an azalea project at Taylor University.

Paul Lightfoot, Andy Whipple and Joe Coleman. Photo by Mike Homoya.

This project had as its objectives:

1. to create a demonstration presentation on the Taylor campus to show that deciduous azaleas can thrive in Indiana,
2 to demonstrate that tissue culture methods can be used to propagate deciduous azaleas that are difficult to propagate using standard cutting methods, and
3. to make available plants for additional study.

Taylor University provided a sloping area near a small creek for the garden. In 2008, an initial application of 12 in (30.5 cm) of pine bark mulch was deposited. In April 2009, students at the University helped plant both seed grown and micropropagated deciduous azaleas. The initial plants were set 3.5 ft (1.07 m) apart with the expectation that there would be plant loss. For the most part, this did not happen and the dense planting resulted in close set plants and reduced weeding requirements. As the garden was enlarged over the next few years, a next step was to apply a layer of pine bark mulch to a depth equal to that of the initial design. Additional plantings and further applications of pine bark have taken place, and the result has been a success. The goals established for the project have been achieved and a lovely azalea garden now exists on the Taylor campus. The plantings have survived extreme conditions. A low temperature of -15° F (-26.1° C)

Earl Sommerville's 'Earl's Angel'.

Earl Sommerville's 'Razzberry'.

has occurred at least once since the garden was planted and in several instances, the temperature has dropped below -5° F (-20.6 C) and there were several days when the temperature did not rise above 0° F (-17.8° C). The winter damage has been negligible in spite of the low temperatures and the lack of consistent protective insulating snow blankets. The plantings include many of the Sommerville and Strickland cultivars as well as numerous native species and hybrids. In all, the Taylor gardens have ten of the eastern US native azalea species and another four are growing in the former Whipple home garden or the Lightfoot garden. A large number of the hybrids have their origin from the balds of the Southeast and other Southeast natural areas. The plants start blooming in April and continue through June. A prime bloom time is around June 10 when the bald hybrids put on dazzling displays. This bloom time coincides with the

Kelly Strickland's 'Louise Curtis'.

R. calendulaceum.

R. calendulaceum.

'Delicate Dawn'.

bloom time of many native azaleas located at high altitudes in the Southeast. This suggests that native azalea species retain to some extent their blooming time characteristics when propagated by either seed or tissue culture. Andy has now retired from teaching at Taylor University and has moved to native azalea country in the southern Appalachians. He has a home in Black Mountain, North Carolina, just east of Asheville and is a member of the ARS Azalea Chapter. He and his wife You-Ying have become active in group activities, participating in field trips to various native azalea sites in North Carolina and Georgia. Recently Andy hosted an open house and garden visit at Taylor on June 10. At this point in time, the Sommerville and Strickland azaleas were past blooming but the bald azaleas were in peak bloom. Another Azalea Chapter member, Joe Coleman of Atlanta, Georgia, drove to Upland on June 10 and photographed many of Andy's blooming azaleas. Joe, a serious azalea authority, was impressed with the garden. An interesting aspect of the plantings is Andy's selection of colors. He emphasized colors other than the orange of *R. cumberlandense*. As a result, there are fewer orange colored blooms and more yellow and red ones than one would normally see in natural locations, plus many suggesting the possibility of interspecific hybridization with floral

'Fireball'.

'Butter Bomb'.

attributes not found in the presumed parental species, including many pink flowered plants as well as those with yellow and orange blotches. Joe indicated that most of the plants that he observed were pastels. He also wanted us to know that he was able to enjoy some of the ice cream available at the nearby Ivanhoe's Drive In!

Ken Gohring is a member of the Azalea Chapter and an active contributor to JARS.

'Full Spectrum'.

'Debutante'

The glory of gardening: hands in the dirt, head in the sun, heart with nature. To nurture a garden is to feed not just on the body, but the soul.

Alfred Austin

Azaleas and Rhododendrons at Winterthur

Linda Eirhart
Winterthur, DE

"I do not know when I have enjoyed anything more and have comeback fired with a desire to plant azaleas in all directions…" H. F. du Pont letter to Charles Dexter, June 7, 1930.

It was 1930 and Henry Francis (H. F.) du Pont had just returned from a visit to Charles Dexter, a prominent early 20th century rhododendron breeder. Mr. du Pont had actually been planting azaleas and rhododendrons at Winterthur as early as 1905. Winterthur, a few miles outside of Wilmington, Delaware, was home to Henry Francis 1880 – 1969. In his words "I was born at Winterthur and I have always loved everything connected with it..." (Henry Francis du Pont's letter to Harlan Phillips. 25 March 1962).

Winterthur Garden path.

Du Pont's first plantings would have been in the family's formal gardens in the early 1900s (Tyrrell 1962) and in the creation of a narcissi grove on the slope to the north of the house. He was planting thousands of bulbs in the style of the "wild garden" promoted by William Robinson (1883), a British

Winter hazels (*Corylopsis*) and Korean rhododendrons under-planted with hellebores.

horticulturist and author. Robinson's own words summarize the concept best. "It is applied essentially to the placing of perfectly hardy exotic plants in places and under conditions where they will become established and take care of themselves." Du Pont used this concept to create what many believe to one of the premiere naturalistic gardens.

Du Pont used broad sweeps of both exotic and native plants under a canopy of majestic oaks, tulip-poplars, and beeches. He extended his garden to the fields and farmlands beyond. As with many 18th century English estates, the garden and the countryside merge in a seamless whole with no clear boundaries. For the formal areas, he turned to his friend and one of the first female landscape architects, Marian Coffin. She designed the layout for the Reflecting Pool, Peony Garden and Sundial Garden, and du Pont selected the plants and color combinations.

Throughout the naturalistic and formal areas, du Pont used azaleas and rhododendrons. He especially valued them because they could provide color in the garden from early April through August. Though he was a collector at heart, once commenting that he must have been borne with the desire to collect, it was important to him that his plants create a beautiful whole. In a 1954 letter to Silvia Saunders, he stated "No matter how fascinating any plant may be, unless it looks well with its group, I do not want it."

Our Rhododendron season begins in early April with the pink shades of *R. oreodoxa* var. *fargesii*, *R. sutchuenense* and *R. sutchuenense* var. *giraldii*. Du Pont purchased these in 1944 from Charles Dexter's widow and he added them at the edge of his Azalea Woods, where you would be able to see the distant pink and white flowers of both the Saucer magnolias, *M.* x *soulangeana*, and the soft pink fading to white flowers of the Sargent cherry, *Prunus sargentii.* The daisy like blossoms of Italian windflowers, *Anemone apeninna*, in light blues, pinks and white carpet the ground beneath these rhododendrons.

Rhododendron mucronulatum 'Cornell Pink' echoes this color near the Sargent cherry and by the wonderful pink *Prunus* 'Accolade'. Early *Viburnum farreri* and *V. bodnantense* repeat the color, while adding their delightful perfume to the air. Adjacent to this area are lavender forms of *R. mucronulatum* mixed with the soft yellow of winter hazels, *Corylopsis.* Du Pont mentions this color combination as early as 1923 and under-planted the shrubs though the

Pink and white cherries with 'Cornell Pink', *R. mucronulatum* and winter hazels (*Corylopsis*).

years with perennials that would harmonize with their color combination, such as *Corydalis densiflora*, Helleborus hybrids, and *Primula abschasica*.

The lavender flowers of 'Conewago' and *R. yedoense* var. *poukhanense* soon join

R. mucronulatum 'Cornel Pink'.

the seasonal display and continue the color in nearby garden areas. Du Pont had acquired these plants from Joseph Gable in 1939 and 1941 respectively, after these men had begun correspondence in the 1930s. In 1939, du Pont wrote that he thought Gable's new azaleas were a "most interesting lot" and that Gable's mauves were "lovely and a better mauve than any Kurume I have." The pink flowers of *R. mucronulatum* 'Cornell Pink' give way in mid-April to the delicate, pure pink flowers of the Royal azalea, *R. schlippenbachii*. Professor Charles Sargent of the Arnold Arboretum recommended these plants to H.F. in 1919 noting that "Certainly it is one of the most beautiful of perfectly hardy azaleas and I am sure it will do well in Delaware." Du Pont ordered six plants from Cottage Gardens in 1922 and planted them along the main allee of the Pinetum, another planting project encouraged and helped along by Sargent.

In this same corridor are 'Miss Susie' azaleas and their pink flower buds echo the pink of the Royal azaleas. This cultivar from Dr. Thomas Wheeldon creates a tall, bright pink hallway in late April, just after the Royal azaleas are finished. Dr. Wheeldon was in communication with du Pont from the mid-1950s to early 60s and supplied him with many of the then new hybrids. Du Pont noted "I am grateful to him for letting me try all these new plants, which, if I waited for them to be offered by the nurseries, I would have long since left this planet". Before the

From left to right, Kurume azaleas #2, #46, and #48.

Italian windflowers, *A. apeninna*, fade in late April, they overlap for a few days with the salmons, reds and oranges of the Torch azaleas, *R. kaempferi*. Professor Sargent recommended and supplied these plants in 1919. They were used to create a tall corridor entrance to the Azalea Woods, concealing the expansive panorama of flowering Kurume azaleas one is about to enter.

Azalea Woods began as a nursery after the Chestnut blight killed the American chestnuts growing there, opening the forest floor to more light. Du Pont acquired his first Kurume azaleas in 1917 from Cottage Gardens Nursery on Long Island, just two years after they were first displayed at the Panama Pacific International Exposition. In 1920, Professor Sargent invited du Pont to Boston for a show of E. H. Wilson's "new race of azaleas" (Kurumes), stating that "If these azaleas prove hardy in the middle states, they will be the most important introduction the gardens of that part of the country which has been made for a great many years." Sargent sent him twenty-one different Kurumes in 1922, adding to his collection, but unfortunately, many of the original names did not stay with the plants, so du Pont and his staff simply referred to these Kurumes by assigned numbers.

Du Pont propagated these initial plants and began arranging them in large drifts of color. There are notes and letters through the years of their transplanting azaleas to create just the right combinations of color. He designed the center of Azalea

Kurume azaleas ‘Arnoldianum’, ‘Snow’, #4, and #5

From left to right, Kurume azaleas #48 and #46.

Kurume azaleas beneath dogwood trees.

Rhododendron 'Pink Pearl'.

recognize the names 'Pink Pearl' and 'Cherryblossom'. The color intensifies to a bright pink with 'Hinomayo' and two similar colored kurumes that vary slightly in color and flower shape. Du Pont often used this technique of using similar colored azaleas together, most likely to maintain the design while adding to his collection, but it also adds another level of detail and interest to the garden.

Beside the sweep of 'Hinomayo' azaleas, the color transitions to lavender with just a touch of cherry red. The lavender is from what we believe are 'Lavender Queen' and 'Mauve Beauty' azaleas and is blended with a few points of cherry red from Woods as a vision of white with three different white flowering azaleas, 'Snow', Kurume #16, and 'Rose Greeley,' under a canopy of white flowering dogwoods, *Cornus florida*, with a carpet of white *Trillium grandiflorum*. We have recently been experimenting with white flowering redbuds, *Cercis canadensis f. alba* and the two-winged silverbell, *Halesia diptera* var. *magniflora*, due to problems with dogwood anthracnose.

A few of the flower corridors spreading out from the center repeat the white color, while others bring in shades of soft pink, rose and salmon. Most of these are our numbered Kurumes but some may

Rhododendron 'Tan'

'Arnoldianum'*. Du Pont commented that it was to "chic it up," and Marian Coffin admired his talent with color when she wrote to him in 1948 after an early May visit to Winterthur. She stated "I can shut my eyes and see it all and am still undecided which azalea effect was the loveliest. You certainly handled the discords or near discords, which in your knowing hands became harmonies with consummate skill, and with those vibrant pinks and magentas that is no mean feat." Overlapping with the Kurumes and carrying the color later into May is one of du Pont's favorites, *R. mucronatum* and its cultivars. *R. mucronatum* was grown at Winterthur possibly as early as 1910, most likely received from Cottage Gardens. They were also the source for 'Magnifica'*, a white flowering form with a strawberry blotch, giving an overall light pink effect in the landscape. This form, along with a soft purple form called 'Winterthur'*, repeats throughout the 60 acre (24.3 ha) garden.

Flowering with these azaleas are the majestic broadleaf rhododendrons. The majority of ours are from the propagation efforts of Charles O. Dexter. Du Pont had visited Dexter in 1930 looking for soft yellow forms of *R. mollis* azaleas, and became entranced with Dexter's work with *R. fortunei*. He was especially interested

Rhododendron schlippenbachii, and 'Miss Susie'.

in Dexter's apricot colored forms, and Dexter sent du Pont young layered plants and flats of unnamed seedlings, which du Pont would number as they came into flower. Therefore, we have unofficial names of #1, the first to flower at the very end of April, up to #53, the last to flower in late May.

Du Pont's connection with nurserymen brought him several rhododendrons before the breeders officially named them. Joseph Gable would send him young plants still in the number stage. For example, 'Robert Allison' was received simply as 'Gable's Pink No.2' and 'David Gable' as 'Gable's Pink No.1'. These and 'Mary Belle' are still represented in the garden, as well as Gable hybrid CxC4 and 5x64.

Du Pont was committed to adding new plants to the garden. He acquired the Glenn Dale hybrids as early as 1949 from Henry Hohman of Kingsville Nursery, and later from Dr. Wheeldon. He used these and the Chisolm-Merritt hybrids in other areas outside of Azalea Woods to entice visitor to stroll through the garden. The salmon forms of 'Mayflower', 'Lullaby', and 'Coral Cluster' brighten a portion of the Pinetum.

Du Pont was also always searching for ways to extend the season of color. In 1954, he stated "I was always worried about the late bloom, but now I'm moving the Kaempferi hybrid azaleas above the garden, and it will increase the showing." By late May and into early June, the display is primarily Kaempferi hybrid azaleas, which Du Pont received from Professor Sargent and from Mr. Hunnewell of Wellesley, Massachusetts. There are two distinct color waves, which du Pont kept separate. Some flower slightly earlier and are described by him as red pink, while the other form is a blue pink. There are variations in each color form that we have documented so that we can

Reflecting Pool.

propagate and preserve these plants and the design.

Deciduous azaleas overlap the flowering time of the rhododendrons mentioned earlier and extend the color into summer. We have documented orders as early as 1907 for *R. arborescens*, as Du Pont used both native and oriental deciduous azaleas in the garden. In the Pinetum, he combined soft yellow, pink and orange flowered azaleas with the blue of Spanish bluebells, *Hyacinthoides hispanica*. In the 1950s he helped sponsor the doctoral work of Dr. Henry Skinner's exploration of the native azaleas and in return, received several plants. Our garden's rhododendron flowering season ends with the plum-leaf azalea, *R. prunifolium*, of which. S. D. Coleman and the National Arboretum sent several shades of orange-red in the early to mid-1960s.

Perhaps it is best to summarize du Pont's (1962) love of azaleas in his own words: "The longer I grow azaleas, the more I realize how beautiful they are when grouped in harmonious colors and pleasing contrast. They naturalize in every imaginable terrain and contour (no other species are in bloom in Delaware for almost four months) and due to their various height and habit of growth are never monotonous, and are perfect with countless varieties of bulbs and wild bloom."

Rhododendron 'Winterthur-Dexter #7'.*

Rhododendron ‘Winterthur-Dexter #7’.*

Note: Winterthur Museum, Garden and Library will be on the tours of "The Philadelphia Story: Rhododendrons in America's Garden Capital," at the May 2019 International ARS Convention.

* = Unregistered.

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A garden is a complex of aesthetic and plastic intentions; and the plant is, to a landscape artist, not only a plant - rare, unusual, ordinary or doomed to disappearance - but it is also a color, a shape, a volume or an arabesque in itself.

Roberto Burle Marx

Rhododendrons for Beginners: Subsection *Triflora* in the *Rhododendron* subgenus *Rhododendron*

Glen Jamieson
Parksville, BC
Canada

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), and then secondly the species of deciduous azaleas in subgenus *Hymenanthes*, section *Pentathera* (Jamieson 2018b). The largest subgenus is *Rhododendron*, which contains all of the lepidote rhododendrons, species that have scales on the underside of their leaves, and a major section in it also has the name *Rhododendron,* This is a very diverse section, with 28 subsections containing upwards of 118 species. In this article, I will present the species in subsection *Triflora*, one of the subsections with the most species (at least 18). Triflorums grow particularly well in North America in the milder climates of Oregon through to British Columbia, and *R. augustinii* in particular puts on a spectacular display in our garden in the spring. (See page 37.)

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 is a brief review of the taxonomic relationships of this subsection 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 P*ogonanthum* (six species)
2) Section *Rhododendron* (28 subsections, 118 species)

1. *Afghanica* – 1
2. *Baileya* – 1
3. *Boothia* – 6
4. *Camelliiflora* - 1
5. *Campylogyna* – 1
6. *Caroliniana* – 1
7. *Cinnabarina* – 2
8. *Edgeworthia* – 3
9. *Fragariflora* – 2
10. *Genestieriana* – 1
11. *Glauca* – 5
12. *Heliolepida* – 3
13. *Lapponica* – 15
14. *Ledum* – 4
15. *Lepidota – 2*
16. *Maddenia* – 20
17. *Micrantha* – 1
18. *Monantha* – 2
19. *Moupinensia* – 3
20. *Rhododendron* – 3
21. *Rhodorastra* – 3
22. *Saluenensia* – 2
23. *Scabrifolia* – 5
24. *Tephropepia* – 5
25. *Trichoclada* – 4
26. ***Triflora*** – 18
27. *Uniflora* – 5
28. *Virgata* - 1

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

Section *Rhododendron*, Subsection *Triflora* (18 species)

I found the following descriptive summary of the utility of triflorums in the garden (Blake 1986), which I believe captures the features of the subsection well:
"The subsection *Triflora* contains a fascinating collection of what the casual observer could declare as "un-rhodo-like rhododendrons". Most of the triflorums are noted for their willowy growth and wide open, airy-fairy "butterfly" flowers, usually borne in small trusses. Apart from making a marvelous background for the shrub, rock and peat gardens, they can also be used to create a feature group or even a "walk" in the garden. Although most triflorums can be medium to tall growing, the subsection also contains one of the most appealing prostrate dwarfs, the almost legendary

R. keiskei 'Yaku Fairy' from the mist shrouded heights of Mount Kuromi on the Japanese island of Yakushima.

I would think that all rhododendron lovers would grow at least a few even in a small garden. Personally I would not like to garden without some of the good forms of *R. lutescens* with its breath of spring, the incomparable blue of *R. augustinii*, the pure pink of *R. davidsonianum*, the snowy white of my form of *R. yunnanense*, the amethyst of *R. oreotrephes*, the silvery foliage of *R. zaleucum*, and not forgetting the little baby *R. keiskei* 'Yaku Fairy'. I find all these easy to grow [where I live in Victoria, Australia], vigorous and quite sun hardy when well mulched. Although we occasionally have heavy frosts, so far my plants have not been harmed. I do provide a little shelter for the early flowering *R. lutescens*. The triflorums certainly add a graceful lightness to our gardens, and I think our gardens would be much the poorer without them."

The species in subsection *Triflora* have been organised in a number of ways in the literature, with Cox and Cox (1997) dividing them into two fairly distinct alliances: the purple and yellow species and the pink and white ones. McQuire and Robinson (2009) note that with many *Triflora* species, it is not possible to make a definite identification out of flower, and so they have emphasized leaf characteristics, such as the presence of the glaucous (a dull grayish-green or blue color) underside, the presence or absence of bristles, and the density of scales (a magnifying glass helps to discern the latter). Here, I present descriptions of *Triflora* species obtained from Cox and Cox (1997), McQuire and Robisnon (2009) and the RSBG website (https://rhodygarden.org/cms/), grouped by their leaf characteristics.

Leaf characteristics: (species in red are more available)

1. Leaf underside always glaucous (a dull grayish-green or blue color)
   - *R. ambiguum* (Sichuan)
   - *R. searsiae* (Sichuan)
   - *R. zaleucum* (Yunnan and Myanmar) (two var.)

2. Hairs on the leaves
   - *R. augustinii* (Hubei, Yunnan, Sichuan and Tibet) (four subsp.)
   - *R. yunnanense* (Myanmar, Yunnan and Sichuan)
   - *R. trichanthum* (Sichuan)

3. Rounded ovate leaf
   - *R. oreotrephes* (Myanmar, Yunnan, Sichuan and Tibet)

4. The remainder!
   - *R. amesiae* (Sichuan)
   - *R. concinnum* (Sichuan, Hubei)

R. davidsonianum (Yunnan and Sichuan)
R. keiskei (Japan)
R. lutescens (Sichuan and Yunnan)
R. polylepis (Sichuan)
R. rigidum (Yunnan)
R. siderophyllum (Yunnan and Sichuan)
R. tatsienense (Yunnan and Sichuan)
R. triflorum (Nepal to Tibet to Yunnan) (three var.)

Note: The cultural information for each species was obtained from the RSBG website, and consists of a set of three numbers enclosed within parentheses, e.g., (-5 (-20)/R2/6 (1.8)).

The first number ("-5") is the hardiness rating in Fahrenheit degrees and the second number ("-20") ") is the hardiness rating in Celsius degrees. This gives an approximation of the lowest temperature the plant can withstand without substantial damage. (See hardiness note below*.)

The second number ("R2") – R1, R2 or R3, is the ease of cultivation rating. This is a system developed at the RSBG to provide the average gardener with a quick and easy method of selecting the appropriate plant material.

R1 - easy and reliable using standard methods of cultivation.

R2 - easy if certain spe-cific cultural requirements are met; these are usually given in the general de-scription ("sharp drainage" or "requires shade" for ex-ample).

R3 — can be difficult even for the experienced grower.

The third number ("6") is the approximate height in feet in ten years from a two-year old plant, with ("1.8") the height in metres. This is estimated using the average rate of growth for that particular clone (or species) under typical garden conditions. in feet in ten years from a two-year old plant, with ("1.8") the height in metres. This is estimated using the average rate of growth for that particular clone (or species) under typical garden conditions.

With respect to **Hardiness**, average annual minimum temperature is generally accepted as the key factor in determining the hardiness of a plant, but there are other important factors such as moisture levels, age of the specimen, health, exposure, snow cover and soils. Thus, the minimum temperature given for an accession should be used only as a rough guideline to whether or not it will thrive in a given locale. Note: Data utilised is often from Great Britain or is based upon observations at the RSBG.

Species details:

1. Leaf underside always glaucous (covered with a white, bluish or greyish waxy bloom).

***R. ambiguum*:** Very similar to its close relative *R. concinnum* with the same strong growth habit and constitution. This species differs in having yellow flowers. Easy in sun or shade and perfect with any of the blue-purple trifloras. The leaves are white-glaucous beneath and it tends to be more compact in habit than its close relatives. One of the hardest in the subsection, and while not as showy as *R. lutescens*, is later flowering and hardier. (-10 (-23)\R1\6 (1.8))

R. ambiguum. Photo: Garth Wedemire

***R. searsiae*:** Rare in cultivation; flowers white or pale rose-purple with light green spots, with an elepidote corolla. Pointed leaves longer and narrower than most in the subsection. Free-flowering, fairly hardy and easily grown, but not particularly showy or distinctive.

R. searsiae. Photo: Marc Columbel.

***R. zaleucum*:** Rare in cultivation, as while it has large and attractive white to pink flowers and fine, reddish young growth, its one of the least hardy in the subsection, as its early growth makes it vulnerable to spring frosts. Glossy narrow leaves with long hairs on the margins. Its most striking character is the intensely glaucous white undersurface of the leaves, due to a coating of wax. Upright bushy growth habit. (+5 (-15)\R1\5 (1.5))

2. Hairs on the leaves.

***R. augustinii*:** An always beautiful spe-cies, and one of the most popular spe-cies for gardens in areas with a moderate climate. Easily grown in sun or shade

R. zaleucum. Photo: Garth Wedemire.

and very floriferous. Flowers in various shades and depths of blue to lavender-blue with green and ochre "eyes" and different colours of stamens can give a range of effects. Great with white and pink flowered rhododendrons. 'Cerulean Mist', an RSBG selection, is one of the finest form in the RSF's substantial collection of this species. (0 (-18)\R1 \6 (1.8))

R. yunnanense: One of the best all-around garden plants in the genus, which is quite variable and closely related to and/or merges with several others. Leaf margins sometimes with hairs/bristles. This easily grown species is adaptable and very floriferous, will tolerate drier sites than most rhododendrons and will flower freely even in considerable shade. Masses of pink to white flowers every year on an upright growing shrub. This species can make a great hedge or screen, and depending on the altitude where clones were initially obtained in the wild, is very variable in hardiness. (0(-18)\R1\8 (2.4))

R. trichanthum: The key distinctive feature of this species is the dense covering of hairs/bristles on the leaf, petiole, pedicel, flower, etc. Flower colour varies from dark plum to bluish-mauve, and it is one of the latest to flower in this subsection. Foliage and new growth are very attractive, but it needs good drainage to avoid leaf spot.(-10 (-23)\R1\6 (1.8))

R. augustinii. Photo: Garth Wedemire.

R. yunnanense. Photo: Garth Wedemire.

R. trichanthum. Photo: Garth Wedemire.

3. Rounded ovate leaf.

R. oreotrephes: This is one of the finest for foliage and habit and one of the most easily grown species in cultivation, doing best in light shade. It has beautiful, glaucous, blue-green new foliage and is always reliable, free-blooming, and like all Triflora, does not need to be deadheaded. This species appears to bridge subsections *Triflora* and *Cinnabarina* with its elliptic leaf shape and funnel-campanulate flower. 'Pentland' is one of the finest and most easily grown cultivars of this species in cultivation, and won an Award of Merit (AM) in 1990, having the darkest purple flowers of any form of the species. (-5 (-20)\ R1\6 (1.8))

R. oreotrephes. Photo: Garth Wedemire.

4. The remainder!

R. amesiae: Like most of the other species in Subsection *Triflora*, this is an easy and vigorous hardy species. This species is close to *R. concinnum* and *augustinii* with similar flowers of rose-purple to reddish or pinkish funnel-shaped flowers (mid-spring). It is one of the hardiest of the Trifloras and is a floriferous, adaptable and vigorous species that forms a large and bushy upright shrub – perfect with *R. augustinii, rigidum* and/or *davidsonianum*. Cox and Cox (1997) consider it either an extreme form of *R. concinnum* or a natural hybrid with *R. trichanthum*, as it has a bristly petiole. (-10 (-23)\ R1\6 (1.8))

R. amesiae. Photo: Hans Eiberg.

R. concinnum: This is an easy and vigorous, hardy species with deep purple to reddish or pinkish funnel-shaped flowers (mid-spring), and is one of the hardiest of Trifloras. This is a floriferous and adaptable species that forms a large and bushy upright shrub – perfect with *R. augustinii*, *rigidum* and/or *davidsonianum*. (-10 (-23)\R1\6 (1.8))

R. concinnum. Photo: Garth Wedemire.

R. davidsonianum: Large upright to spreading evergreen shrubs characterised by the bending up of the leaf blades, forming a "v" in cross-section. It has vigorous upright growth that is easy and floriferous in mid-spring, tolerant of sun or shade, and relatively drought resistant once established. This relative of *R. augustinii* has a similar growth habit, differing in its white to pink or lavender flowers, often with a darker blotch. Looks great when planted with *R. augustinii* and/or *rigidum*. The cultivar 'Ruth Lyons' is the very floriferous and slightly fragrant AM form with vibrant widely funnel-shaped deep rose flowers with an unmarked corolla. 'Caerhays Best' is another of the most colorful and floriferous cultivars, and is from Caerhays in Cornwall with flowers of palest pink with a large and prominent reddish blotch. (0 (-18)\ R1\6 (1.8))

R. davidsonianum. Photo: Garth Wedemire

R. keiskei: This is the only Japanese species in *Triflora*, is probably the hardiest, and is by far the dwarfest member of the subsection. It differs from the other species in its

pubescence on the upper leaf surface and the relatively large, brown scales on the lower leaf surface. 'Yaku Fairy' is the most dwarf form, and this famous 1970 AM form is a dense and prostrate mound with pale yellow flowers in mid-spring. A choice rock garden or container specimen. Easy and hardy in the garden. Another notable cultivar is "Bayport Beauty' by John Weagle in Nova Scotia, from "seed grown by Captain Steele circa 1964 from Wada". (-10 (-23)\R1\1 ft (0.3 m) across).

R. lutescens: The long, reddish/bronze-tinged leaves usually make this one of the easiest Triflora to recognise. Its clones vary in hardiness and are often quite showy, but the larger flowered clones seem to be relatively tender. 'Bagshot Sands' is one of the best forms of this popular species, with masses of large yellow flowers in early spring, long willowy leaves, a vigorous bushy habit and bright purple-red new growth. Easy in sun or light shade. (0 (-18)\R1\8 (2.4))

R. polylepis: The dry and flaky scales on the branchlets and leaves characterise this species. It is rare in cultivation and of limited merit horticulturally, although selected purple forms are quite striking.

R. rigidum: An easy and floriferous species, tidier than the other species, and is similar to *R. yunnanense* and *augustinii* but with white flowers. This species is characterised by its

R. keiskei. Photo: Garth Wedemire.

R. lutescens. Photo: Glen Jamieson.

R. polylepis. Photo: Garth Wedemire.

leathery, usually glaucous, evergreen leaves and its rigid, relatively compact form. It has shiny blue-green foliage and an upright habit, and looks great blooming with *R. augustinii* and/or *davidsonianum*. Makes a fine screening plant. Easy and vigorous in sun or light shade. (0 (-18)\ R1\6 (1.8))

R. rigidum. Photo: Susan Lightburn.

R. siderophyllum: Not as showy as other Triflora and somewhat tender, it is similar to *R. tatsienense* and is usually distinguished by its dense trusses of small, typically white flowers and distinctive scales on the lower leaf surfaces. It comes from relatively dry and hot habitats, so it may be useful in hybridizing for greater heat tolerance.

R. tatsienense: A very rarely cultivated member of Triflora, with smallish, somewhat leathery leaves and white flushed pink to rose-lavender flowers in early spring. Some consider this a stabilized hybrid between the species *R. yunnanense* and *racemosum*, which are often found growing together in the wild.

R. siderophyllum. Photo: Steve Henning.

R. triflorum: This species is very variable in its features, usually characterised by the distinctive peeling mahogany bark on some forms (stunning with the sun behind it in the the late afternoon) and slightly to moderately aromatic shiny leaves, glabrous (without hairs) on the upper surface and glaucous on the lower surface. It has saucer-shaped, small yellow flowers in late spring to early summer. Many of the more desirable forms, including those considered to have superior flowers, such as var. *bauhiniiflorum*, are typically less hardy, which may explain its rarer occurrence in culture. (+5 (-15)\R1\4 (1.2))

R. tatsienense. Photo: Marc Columbel.

R. xichangense: This may be either a synonym of *R. davidsonianum* or a relatively newly described species, with the main difference between them being in the spacing of the scales on the lower surface of the leaves. It is just now being made available for cultivation by the RSF, and like *R. davidsonianum*, has white to pink flowers in mid-spring. (0 (-18)\R1\6 (1.8))

R. triflorum. Photo: Steve Henning.

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Glen Jamieson is the current president of the Mount Arrowsmith chapter and the editor of JARS. R. augustinii are centrepieces in his garden, and are the violet rhodos shown blow.

The photos above and below are R. augustinii in author's garden. Photos: Glen Jamieson.

Society News

IN MEMORIAM: Robert Corbett MacIntyre

Most of you will know by now that Bob MacIntyre, former ARS President, passed away unexpectedly this past summer. We have lost one of our truly knowledgeable, generous, active long-time ARS members. Opinionated as he was, he truly epitomized the generosity for which he was so well-known. Bob's long-term interest in rhododendrons, his commitment to the society, and his critical contributions to the ARS when he became President under difficult circumstances will long be remembered.

A strong-minded Scot, Bob served in a number of positions with the ARS, although the most important and unofficial one was his willingness to provide assistance, knowledge and hard work wherever he saw a need or when asked to contribute. He served as Southwestern Oregon Chapter president, as District Director for District 4, and as Western Regional Vice President before becoming ARS President. He was very proud to have been part of the team that turned the ARS around into a positive direction. When he retired as President, he worked with Gordon Wylie, Bud Gehnrich and Bruce Feller in rewriting the ARS By-laws and Policies of the Board, a huge project much needed.

An always enthusiastic volunteer, Bob always stepped forward to help put on Western Regional conferences. He and Marjene organized the Silent Auction many times and he made many phone calls during the conference planning to keep the conference committees moving along. A great organizer, he had a way of expressing his opinion without offending anyone, a trait to which many of us can attest. There was never any question that his intentions were truly focused toward the well-being of the Society, and his communication skills in keeping all involved informed and up-to-date were well known. Bob's last direct responsibility to the ARS Board was to submit the name of the next Western Vice President, with the announcement of candidate John Stephens at the 2018 Annual Convention in Bremen, Germany this past spring.

Bob particularly enjoyed participating in public events where, as many of us witnessed, he loved to "talk rhody". He was the "go to guy" for every rhody question we couldn't otherwise answer and for many that created confusion, only Bob could and would willingly explain in a way we could learn from. Locally, he and Marjene attended countless Mother's Day Rhododendron Celebrations at the Shoreacres Botanic Garden, a state park once called the Simpson Estate, and made the not insignificant round trip from his home many times to help at the O. Howard Hinsdale Garden restoration project near Reedsport, Oregon, where he helped plant and revitalize this old and much treasured rhododendron garden on Spruce Reach Island in the Umpqua River. His expertise was invaluable, whether providing suggestions for the care of many very old rhododendrons, helping host open garden days or simply acting as an advocate for the garden to both the garden's owner (the Bureau of Land Management) and to the public.

Along with shouldering the task of raising rooted cuttings to maturity as replacement transplants for the Hinsdale Garden, he was a prolific and successful propagator of many types of rhododendrons, although his particular love affair was with the many Maddenii hybrids he grew. He contributed many cuttings to the annual SWO Chapter cutting parties, seeds to the ARS seed exchange, and many plants, beautifully chapter, to

planting projects and to friends who admired his garden. If you weren't careful, he would furnish your whole garden! Each contribution came complete with instructions, growing tips and descriptions of plant habit and flower color.

In what spare time he had, he enjoyed woodworking and making furniture, and in fact, he built Marjene's first "hope chest" before they were married (it still resides in their bedroom). As his respiratory problems became more advanced, he had to give up woodworking, but fishing remained another passion and something he did regularly with friends at the best fishing holes near and far away.

The family asks that any memorial donations be made to the American Rhododendron Society (www.rhododendron.org), the Rhododendron Species Botanical Garden (https://rhodygarden.org) or the charity of your choice.

Robin Hansen, Gordon Wylie, Mike Stewart, and Ann Mangels

IN MEMORIAM: Werner Brack

Werner Brack, October 15, 1930 - August 12, 2018, was born and grew up in Switzerland, attended the University of Technology in Zurich, and moved to New York where he completed his college education with a BS in Electrical Engineering. He went on to help develop the satellite phone. Werner became interested in rhododendrons as a result of the walks he and his wife Patricia took through the Planting Fields Arboretum gardens with their two daughters, Elizabeth and Pippa, before buying their home in Nissaquogue, NY. Once in a house with the possibility of his own garden, he went to work developing one.

He soon had a lovely garden, not only growing a fine collection of hybrid rhododendrons, but also having a species walk which featured many fine species. particularly of those more difficult to grow on Long Island. He started hybridizing and in time had about nine plants that he named, and with most introduced in commerce: 'Brookhaven', 'Janet's Flair', 'Gotham Rheingold', 'Great Gatsby', 'Orange Leopard', 'Shoreham', 'Stonybrook', 'Voluptuous,' and 'White Elegance'. His name is engraved on the NY Chapter's Hybridizer's Cup five times for having the Best New American Hybrid. Werner joined the NY Chapter of the American Rhododendron Society in 1971 and soon served on its Board of Directors. He ran the chapter's Seed Exchange for many years and also helped with its flower shows. Werner arranged for the judges while his wife Patricia helped with clerking. He also gave a talk at the start of meetings, telling all what they should be doing with their plants at that particular time. Their work with the NY Chapter resulted in their being awarded the Bronze Medal in 1994. Werner's activities soon caught the eye of members from District 7 and he became a Director of the ARS, serving two terms on the Board. His work with the ARS engaged him further and he became Treasurer of the Research Foundation, responsible for maintaining the funds of the Foundation and for overseeing that groups awarded funds were properly paid, which culminated in his being awarded the ARS Silver Medal in 2010.

Werner was a presenter at many Hybridizer's Round Tables that were held at Regional and National Conferences, where he was held in high regard by his fellow hybridizers. Werner had amazing powers of observation and he noticed things about plants and the way they grew that eluded many of us. He was most generous with his knowledge and in sharing his plants with all those that expressed a keen interest. It was a privilege to have been associated with him and to have shared many hours with him.

Bud Gehnrich

IN MEMORIAM: Ruth Gehnrich

This past February we said our last good-byes to Ruth Gehnrich, long-time member of the New York Chapter. A consistent attendee at our chapter meetings with her husband, Bud, she cherished the many friendships she had with rhododendron people all over the country. For many years she willingly hosted the many speakers that spoke at the NY Chapter meetings. During the chapter's social events, Ruth was always willing to pitch-in and help with the hospitality issues. Her last contribution, even while battling illness, was to spearhead the chapter's first December holiday season social, which was a big hit.

Not really a rhododendron grower, for she left that up to Bud, her interests were knitting and quilting. Shortly after I joined the society in 1996, she confessed to me that she was more of a "weeder" than gardener. That task alone merits high praise for not too many people in or out of the Society like doing that job. Ever the supportive wife, Ruth was so concerned with her husband's hillside physical gardening demands, that she bought him an all-terrain vehicle, so he could easily move and tend his plants.

She grew up in Cambria Heights, Queens, NY, and lived in Greenville, NY, with her first husband until his passing in the 1980s. At about the same time, Bud lost his first wife, Anita. The two couples had been friends since their teenage years and soon Bud and Ruth married. Their marriage lasted 31 years and, according to Bud, they never, ever had a fight!

Her friends in the ARS who knew her will miss her very much.

Jim Fry

Flowers are restful to look at. They have neither emotions nor conflicts.

Sigmund Freud

Society News

Awards

Vancouver Chapter
Bronze Medal: Tony Clayton

Your steadfast support for many years of the Vancouver Rhododendron Society has contributed to its becoming a thriving and vital organization. You rarely miss a meeting, You have served on the Society's board and volunteered on short notice to capably assume the responsibilities of the chapter's highest office of president for the years 2011 and 2012. Your unfailing assistance in support of our Society's annual spring plant sale and truss show has been exemplary. Your ongoing twice-annual trek to Federal Way, Washington, to facilitate the transfer of species rhododendrons from the Rhododendron Species Foundation to Vancouver is widely appreciated and has enhanced many a private garden in southwestern British Columbia.

We are all extremely privileged to have you as an ambassador for the genus Rhododendron. For outstanding contributions, the Vancouver Rhododendron Society, a chapter of the American Rhododendron Society, is honoured to offer to you its highest award, the Bronze Medal.

Mount Arrowsmith Chapter
Bronze Medal: Barbara Kulla

Barbara is one of the unsung heroes of MARS. Since she joined many years ago, she has been a cheerful, willing volunteer and worn many hats doing necessary jobs that are often hard to fill. She has managed the tea table in years past, looked after the Dollar Table and has been a fixture at the annual Rhodo Show and Sale, seeking donated items for the hourly draws. Her talent for acquiring donations has led her to contribute to the Silent Auctions at the ARS Fall Regional Conference in Nanaimo and the subsequent 2015 ARS Convention in Sidney. As well, she has opened her garden for the annual Mother's Day Tour and hosted several potlucks. It is with great pleasure that we recognize this outstanding service to MARS with the chapter's highest honour, the Bronze Medal.

Bronze Medal: Kathy and Guy Loyer

Almost from the day they joined Mount Arrowsmith Rhododendron Society, Kathy and Guy have been willing volunteers. Ask for help and they are there, whatever the job. Kathy is serving her fifth year as a director. She has organized and chaired the successful annual Garden Tour for several years and most recently co-chaired with Guy the Rhodo Truss Show and Sale. Both have been active in previous shows. Guy is the official greeter for MARS and also one of the heavy lifters, literally, transporting signage, tables and shopping buggies for various events. Together they have a great eye for detail and organization. Kathy and Guy have been willing hosts over the years, opening their home on numerous occasions. With great pleasure, we recognize this outstanding service to MARS with the chapter's highest honour, the Bronze Medal.

Society News

ARS ONLINE STORE - ARSStore.org - Every Amazon purchase benefits the ARS at no extra cost when you go through the ARSStore.org website. Online purchases from Walmart or Target also benefit the ARS when you go through ARSStore.org.

Contact: Steve Henning
E-mail: manager@arsstore.org

REGISTRATION OF PLANT NAMES in NORTH AMERICA - Provides forms and assistance to register cultivar names for the genus *Rhododendron* with the Royal Horticultural Society; screens names for availability; and publishes new names in the JARS.

Contact: Registrar, Michael Martin Mills
E-mail: arsregistrar@gmail.com

SPEAKERS BUREAU - Maintains list of speakers available to anyone who plans programs, clinics and similar activities in the plant world. Notify Don Smart if you wish to add your name to speakers list or if you, as a speaker, have an address change.

Contact: Don Smart
E-mail: donolyn@comcast.net

WEBSITES - There are currently two ARS websites: **http://www.rhododendron.org** - The public website of the Society. Provides plant care information, a searchable database of rhododendrons and azaleas, a searchable database of nurseries and growers, Proven Performer lists, membership information, officers and directors, chapter contact information, the seed exchange, journal previews and articles, plant registration forms, and research grant details.

Contact: Webmaster, Bob Weissman E-mail:
weissman@arsoffice.org

http://www.arsoffice.org - The administrative website of the Society. Chapter presidents, treasurers, program organizers, membership chairmen and newsletter editors can find useful and up-to-date information. Society officers, directors and committees can access important materials needed to carry out Society business. A password is required to access information at this website.

Contact: Webmaster, Bob Weissman
E-mail: weissman@arsoffice.org

Rhododendron Calendar

2018 New Zealand Rhododendron Conference, November 3-6, 2018
https://www.rhododendron.org.nz/conference_info_2018.php

2019 ARS Annual Convention, Malvern, PA. Board Meeting. May 15-19, 2019.

2019 ARS Fall Conference, Parksville, BC, Canada. Board Meeting. Sept. 27-29, 2019.

2020 ARS 75th Anniversary Convention, Portland, Oregon. Board Meeting. Apr. 30 - May 3, 2020.

Society News

ARS Endowment Fund Update

Bill Mangels
Endowment Fund Chair
Baltimore, Maryland

The Society has been awarding endowment grants since 2003 and has awarded grants most years since then. Awards are determined by the Endowment Fund Committee (ETC and approved by the Board of Director's at their spring annual meeting. In order to be considered for a grant the project must create interest in and knowledge of the genus *Rhododendron*.

The grant guidelines indicate that awards are to be about $3,000 because of limited funds available and the desire to help as many worthy applicants as possible. The approved budget for 2019 awards is $10,000.

As an example of worthwhile projects, last year the board awarded a grant of $2,580 to the Friends of the Laurelwood Arboretum. They sought funds for educational display panels and the publishing of a booklet on the role of Laurelwood Gardens in rhododendron hybridizing. The sixteen page booklet discusses the Knippenberg Legacy and the role of East Coast hybridizers in the development of the Laurelwood Arboretum.

This year Gordon Wylie and John Hammond were awarded $2,919 on behalf of the O. Howard Hinsdale Garden located near Reedsport, Oregon. The historically significant rhododendron garden is undergoing restoration and is in need of irrigation. The funds are going toward supply of this equipment. These projects are decidedly different yet meet the grant objectives.

Guidelines for submitting an application for 2019 can be found at the OARS website. The deadline for submitting a grant request is March 1, 2019.

With the oversight of treasurer Dave Banks and the investment committee, the corpus of the endowment fund as of July 1, 2018 has now reached $918,000. This is a result of donations and market ap-preciation. Contributions from individuals, chapters and districts that give on special occasions have been and are much ap-preciated. Should you have questions and /or comment regarding the Endowment Fund Committee, I would be happy to receive them at wamangels@aol.com.

Research Foundation Update

Karel F. Bernady, Chairman
July 30, 2018

The Research Foundation announces changes in its Board of Trustees.

The Executive Committee approved in its action of July 10, 2018 the reappointment of Harold Greer and Perc (Percival) Moser, Treasurer, as Trustees for terms ending May 2021.

With these appointments the Board of Trustees is constituted as follows:

1. Harold Sweetman, Chairman of the Research Committee, for term ending May 2019
2. H.C. (Bud) Gehnrich, for term ending May 2019
3. Mike Stewart, for term ending May 2020
4. Karel F. Bernady, Chairman, for term ending May 2020
5. Harold Greer, for term ending May 2021
6. Perc (Percival) Moser, Treasurer of the Research Foundation, for the term ending May 2021
7. Ann Mangels, President of ARS, *ex o icio*, for term ending 2019

We welcome to the Board our two returning members.

2019 ARS Photo Contest Instructions

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 have been taken prior to July 31, 2019, and not have been entered in a JARS photo contest previously. Note: this is a change from the contest in previous years, and is being done on a trial basis at the request of some ARS members. Entries must be received by midnight PST, July 31, 2019. 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, Entries must be received by midnight, July 31, 2019.

Honey Scented Rhododendron Leaves

Kristian Theqvist
Turku, Finland

The range of various scents, fragrances and smells is wide-ranging within the genus *Rhododendron*. The flowers of many azaleas are pleasantly fragrant (e.g., *R. luteum* and *R. arborescens*) and you can perceive from some azalea's leaves an intense, some say an unpleasant, odor by touching them. In particular, the leaves of many lepidotes have on their scaled leaves an aromatic or herbaceous scent, and some species, such as *R. tomentosum* or *R. dauricum*, have a distinct, characteristic scent. The flowers of some elepidotes are also strongly fragrant, such as *R. fortunei* and many of its hybrids. Flowers produce nectar from nectaries located at the base of the perianth and while nectar may have a weak scent, it is mostly too weak for my sense to detect. When I emasculate flowers before pollination, I have gladly sucked both petals and my fingers that are sticky with nectar. I am aware that some rhododendron nectars may contain various amounts of poisonous grayanotoxin (Milne 2017) but my consumed amounts have been small. The nectar of 'Mikkeli' in particular is deliciously sweet. The leaves of elepidotes are as a rule without any scent but they do have a bad and bitter (poisonous!) taste, which is why deer seldom eat their leaves.

I had assumed based on my experience and knowledge that leaves of all elepidotes are without scent, until Jukka Kallijärvi (2013), a member of the Finnish Rhododendron Society, wrote in a gardening forum about his newest rhododendron. He had bought the cultivar 'Honigduft'* (translated from German to English as "Honey Scent") in 2013 from Baumschule Böhlje in Germany. German nurseries have written that 'Honigduft'* is a selection of *R. taliense*, but I have not been able to get further information on its origin. The leaves smell like honey even without touching them and the sweet scent can spread long distances on a warm sunny day. Jukka Kallijärvi and I have also noted the scent comes from a leaf's underside, even though its covered with thick indumentum.

In 2015 I sniff tested all the elepidote rhododendron species in my Rhodogarden, and I tried to find scent specifically from the new growth, as I had previously noticed that the scent is stronger on young leaves. I found scent mainly from some species in the subsection *Taliensia* (Table 1).

R. phaeochrysum ARS 2061/03 old leaf.

R. taliense 'Honigduf *.

Most of the species mentioned are from West or Northwest Yunnan, but some are from Sichuan. The species in Table 1 are are closely related and their morphological differences are mainly in the shape of the leaves and in the indumentum. The results of the sniff test for all species can be read from the url: http://www.rhodogarden.com/docs/Scented_elepidote_leaves.pdf

The honeyed scent was clearly strongest on the leaves of *R. sphaeroblastum*. My sense of smell is likely not especially sensitive, but I smelled its scent up to 100 m (328 ft) from the shrub when the sun shined on its leaves. It was surprising to arrive at the gate of our property and to smell a sweet scent of honey in the air. I traced the scent from our house located up on a hill down 75 m (246 ft) to the garden, and then straight to the leaves of *R. sphaeroblastum*. The scent of honey seems to attract Green shield bugs (*Palomena prasina*) and Dock bugs (*Coreus marginatus*), as they were abundant on the plant's leaves during their mating time for a couple of days.

The scent of leaves helped me to reveal a wrongly labeled seed batch that I had got

Table 1: Scented species in my garden from subsection *Taliensia*.

Species	Origin of plant	Scent
R. alutaceum var. *iodes*	Rhododendron-Haven, Denmark	Weak scent of honey
R. *phaeochrysum* var. *phaeochrysum*	AC3931, Muge Che, Sichuan, 3600–3900 m (11,811 – 12,795 ft)	Strong scent of honey
R. *phaeochrysum* var. *phaeochrysum*	ARS 2061/03, RSF 95/048 x 94/010, Warren Berg, Zheduo Shan, near Kanding, Sichuan	Strong scent of honey Weak scent, not honey but an un-pleasant odor of urea
R. phaeochrysum var. *agglutinatum*	AC4802, Zheudo Shan, Ganzi Pref., Sichuan, 3800 m (12,467 ft)	
R. sphaeroblastum	Rhododendron-Haven, Denmark	Strong scent of honey
R. taliense 'Honigduft' *	Bartels P lanzen, Germany	Very strong scent of honey
R. taliense	Hans Eiberg, Cangshan, Yunnan	Strong scent of honey
R. taliense	Rhododendron-Haven, Denmark	Strong scent of honey
R. traillianum	Jens Nielsen, JN655, Yunnan	Strong scent of honey

R. sphaeroblastum.

from the ARS 2013 Seed Exchange. I had bought seeds from the batch ARS 2061/03, RSF 2001, labeled as *R. przewalskii*. The origin had been from Warren Berg's collection in Zheduo Shan near Kangding in Sichuan, and a cross pollination had been done at the Rhododendron Species Foundation (RSF) between two of the plants (95/048 × 94/010). The leaves of the plant that I had raised from the seeds had a strong scent of honey! I communicated my puzzled finding on the Yahoo Rhodo Group and Hans Eiberg commented that the leaves looked more like *R. phaeochrysum*. I wrote questions to the Group on what could have been the mother plants, how they looked and could there have been a mix-up. Steve Hootman from

the RSF responded to this and after some checking, he apologized and told that there has been an error. The RSF had received the plants from Warren as *R. przewalskii* and there was an obvious assumption that they were correctly labeled, as they had come from Warren. Steve wrote: "On Zheduo Shan in 2006 (where many *Taliensia* are supposed to occur including the two species discussed here), I saw only *R. phaeochrysum*, a sea of that single species over many square miles." Pleased with this information, I made a correction to my database and to the label of my plant.

I found the only scented non-*Taliensia* species to be *R. watsonii,* from subsection *Grandia*. Its leaves had a moderately strong scent, not of honey, but rather a strange spicy scent. I think that there are likely more elepidotes with scented leaves, as my collection of species is limited only to the hardier ones. I have not been able to find any research publications on the subject, and my questions are where does the scent come from? Are there special "scent glands" on the lower surface of the leave, and what is the primary function of the scent — to repel or attract? This is an intriguing puzzle and I hope to find more information to satisfy my curiosity.

R. sphaeroblastum new leaf underside.

R. taliense.

R. traillianum

* Unregistered hybrid

References:

Kallijärvi, J. 2013. *Rhododendron 'Honigduft'.* http://www.kielometsa.fi/176077128/1618157/posting/

Milne, R. 2017. *Rhododendron.* Reaction Books Ltd: 224 pp.

Kristian Theqvist is the president of the Finnish Rhododendron Society and the president of the Finnish Chapter of the American Rhododendron Society.

Species in the Garden: *Rhododendron racemosum*

Sonja Nelson
Mt. Vernon, WA

Photos by author.

Compared to the pleasingly symmetrical forms of many rhododendrons in our gardens such as *R. degronianum* of which the dome-shaped "yaks" are a subspecies, *R. racemosum* is an undisciplined rascal. Its upright growth can produce a scraggly plant lacking in both order and tidiness. Its flowers, although attractive in themselves, occur at the ends of the upright growing branches and accentuate the haphazard plant form. Its leaves, also attractive, do the same. Adding to this, its branches can form ungainly "water sprouts" (Cox 1993). How to make use of this mischievous rhododendron in the garden requires some thought—or at least a sense of humor. However, before dealing with its ungainly form, the place to begin growing the species in the garden is finding a site where it will grow and thrive, and this starts with understanding the climate and location of its home in the wild.

The Homeland

The distribution of *R. racemosum* is the north half of Yunnan, China, where it is very common, and SW Sichuan and W. Guizhou, 2500–14,000 ft (762 - 4267 m) on plains, in scrub, forest margins and rocky slopes often in hot, dry conditions but occasionally wet conditions (Cox and Cox 2008). It is also known to grow on limestone outcrops (Kneller 1995). This much tells us that we are dealing with a species unlike the bulk of species in the genus. Legend has it that when Lionel de Rothschild was asked where *R. racemosum* grows, he said, "It grows where nothing else will." (Kneller 1995).

Peter Cox in his book "The Cultivation of Rhododendrons" (1993) describes an "imaginary perfect site for rhododendrons." The actual sites where *R. racemosum* grows in the wild are compared to this "imaginary perfect site":

Perfect site	Native *R. racemosum* sites
Deep, well-drained, sandy loam soil.	Rocky slopes.
Sheltered or open woodland.	Open hillsides.
Rainfall 50 in. (1270 mm) during summer.	Dry and occasionally wet.
Minimum temperature 14° F (-10° C).	Hardiness –5° F (-20° C).

Fig.1. *R. racemosum*, unpruned, growing between two plants of *R. decorum*. Skagit County Master Gardener's Discovery Garden.

Paying attention to where *R. racemosum* grows in the wild gives clues where it will grow in a particular garden. This species stretches the climate and site preferences for the genus and gives gardeners a chance to fill a difficult spot with a rhododendron. (Of course, *R. racemosum* may, in addition, grow in sites less drastic.)

A Disorderly Plant Form

Left to grow at will in a garden site, *R. racemosum* functions as a nonconformist that defies the principles of attractive plant form and, in so doing, can be the wrong plant among rhododendrons of more staid form (Fig. 1). Nothing wrong with this, especially if displaying the natural character of a plant is an objective. Choosing a more compact dwarf form and growing among other dwarf rhododendrons where any ungainly form is minimized is one option. Another option is to lightly constrain its disorderly form by planting against a fence or the railing of a deck or planting as a hedge and lightly pruning to keep it in check (Fig. 2). Yet another option is for the gardener to take up the challenge of subjecting the plant to some drastic discipline.

Gardeners at the Master Gardeners Discovery Garden near Mount Vernon, WA, changed the plant form of its *R. racemosum* altogether by growing it as an espalier in a flat plane against a trellis. Wires were attached at a middle location at the bottom of the trellis, fanning out towards the sides and top (Fig. 3). Major branches were selected on one plane against the structure, and those branches that stuck out in front or in back were pruned off. Because of the density of the plant, there was no

Fig. 2. *R. racemosum*, unpruned, planted against a deck railing. Author's garden.

shortage of branches. Using horticultural tape designed for this purpose, branches were attached to the wires forming the shape of a fan. The ungainly upright growth habit, therefore, was turned into an asset because the branches naturally grew straight toward the top and sides of the trellis (Fig. 3). *R. racemosum* produces its flowers at the ends of its many branches, but as an espalier displays them openly on one plane.

Botanical Features

To understand a plant's character, looking at it from a botanist's point of view is helpful. Botanically speaking, the flowers of R. racemosum are produced in racemes (a type of inflorescence), hence the name "racemosum" (Fig. 5). One to four racemes are produced at a leaf axil, creating a kind of "flower cluster" there. The corolla of the flower is funnel-shaped and about one inch (2.5 cm) long. The flower color ranges widely from white to pink ('Rock Rose' is a common R. racemosum selection). The result visually is a plant bearing many "puffs" of delicate flowers, some of them hidden on the inside of the plant. The oldest racemes are toward the base, and new ones are produced as the plant grows.

The leaves are up to two inches (five cm) long, without hairs or glands (glabrous) on the upper surface and bluish gray with a waxy bloom (glaucous) and scales on the lower surface. The leaf arrangement on the many branches is alternate.

Fig. 3. Wires attached to a trellis to train *R. racemosum* into a fan-shaped espal-ier. Sunnyside Gardens, Seattle.

Fig. 5. *R. racemosum* flowers in racemes. Skagit County Master Gardener's Discovery Garden.

This branching system is the key to explaining why *R. racemosum* differs so dramatically in plant form from the dome-shaped yaks, for instance. In the yaks, three or more branches or leaves form at a node terminating in a circle of leaf buds called a whorl. The result is a rounded plant form. In *R. racemosum*, the leaves are scattered up and down the branches, resulting in an irregular plant form. No amount of pruning is going to turn *R. racemosum* into a yak, but its scraggly form can turn into an asset if the plant is treated as an espalier.

Plant Ancestry

One of the pleasures of growing a species rhododendron in the garden is learning its connection to its native homeland, in this case China. One might call it "armchair plant travel." Gardeners can learn where plant hunters discovered it in the wild, often risking their lives to do so, and what botanists find when they look at its leaves, flowers and other plant parts to determine which species it is. Indeed, a gardener can get lost in the alleyways of this gigantic genus looking for a particular

species to see where it fits into the big picture. Here, taxonomists can help. They take the large view and organize all the groups and subgroups of a genus into a "tree" so that the particular species, in this case *R. racemosum*, can be placed to show its closest relatives and ancestors, in other words, its phylogeny or evolutionary development. A taxonomic tree of the genus is the essential "map" that helps find the way to a particular species.

Taxonomically, *R. racemosum* belongs to the genus *Rhododendron*, subgenus *Rhododendron* (the lepidotes), section *Rhododendron*, and subsection *Scabrifolia*. *R. racemosum* shares this subsection with the relatively unknown *R. hemitrichotum*, *R. mollicomum, R. pubescens, R. scabrifolium* and *R. spinuliferum*. These rhododendrons, at least as garden plants, are all upright growing and straggly plants. Except for *R. spinuliferum*, they all have their flowers growing from axillary inflorescences as was described for *R. racemosum* above. So here, found buried in the branches of our "tree," are bits of information about our species *racemosum* that point to its place in the evolution of the whole genus.

In the Spring 2018 issue of JARS, Editor Glen Jamieson began a comprehensive look at the classification of genus *Rhododendron* in his article "Rhododendrons for Beginners, Rhododendrons, Azaleas, Maddenias and Vireyas—their differences and latest systematics" to show the current classification and how it has evolved. It is a useful guide to our rhododendron taxonomic "tree."

For many years, botanists classified rhododendrons according to their morphology, determining where they fit in taxonomically according to their similarities and differences of their leaves, flowers and form. The species, accordingly, took their places on the "tree", giving gardeners and scientists the order they craved to comprehend such a sprawling genus. All well and good—until scientists began looking at rhododendron DNA for further clues to the relationships among these plants. In 2005, Benjamin Hall, Loretta Goetsch and Andrew Eckert published a paper to refine even further the relationships (Goetsch et al. 2005). Their purpose was to determine whether the subgenera of the genus were "monophyletic", i.e., derived from a single source. All species with a perceived single ancestor were collectively called a "clade," thus answering some questions about the evolutionary biology of the genus. Through DNA, species rhododendrons, including our R. racemosum, continue to reveal their many stories.

A Rogue's Contribution to the Garden

The possible uses of R. racemosum in the garden run the gamut from a group of unpruned plants to a dwarf form in a mixture of other dwarf rhododendrons to a pruned hedge to a formal espalier. Not bad for an undisciplined rogue. In addition, this species, like any other Rhododendron species, gives the gardener who cares to take a look at its botany and taxonomy a grand perspective of the genus as a whole.

References:

Cox, P.A. 1993. *The Cultivation of Rhododendrons*. London: B.T. Batsford: 288 pp.

Cox, P.A., and Kenneth N.E. Cox. 1997. *The Encyclopedia of Rhododendron Species*. Perth, Scotland: Glendoick Publishing: 396 pp.

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Goetsch, L., A Eckert and B.D. Hall. 2005. The molecular systematics of *Rhododendron (Ericaceae):* A phylogeny based upon RPB2 gene sequences. *Systemic Botany* 30 (3): 616-626.

Greer, H.E. 1996. *Greer's Guidebook to Available Rhododendrons, species & hybrids. Third edition*. Eugene, OR: Offshoot Publications: 228 pp.

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Sonja Nelson is a member of the Pilchuck Chapter and is a a previous Editor and Associate Editor of the Journal American Rhododendron Society.

Adopt the pace of nature: her secret is patience.

Ralph Waldo Emerson

What is an *Azaleodendron?*

Alan Edwards

Dunedin, South Island, New Zealand

(Reprinted from the Dunedin Rhododendron Group Bulletin 2018)

The term has two possible meanings, depending on context. Botanists use the word as a technical term to refer to rhododendrons which are hybrids between species from what was known prior to 2005 as subgenus *Pentanthera*, containing what we think of as deciduous azaleas, and subgenus section *Tsutsusi*, an extensive grouping of evergreen azalea species. Gardeners use the term in a wider, non-technical sense, to refer to hybrids whose parents include a conventional evergreen rhododendron (usual one without leaf scales) and a deciduous azalea.

In spite of the fact that such a hybrid is difficult to achieve, because the parents are so different, or, in evolutionary terms, are so genetically "remote", some early examples were discovered in an English nursery around 1800. These were crosses between *R. ponticum* and *R. periclymenoides* (syn. *R. nudiflorum*). Such hybrids are usually sickly specimens with strange foliage. A very few early hybrids are still around, perhaps the best known being the yellow-with spots-flowered 'Broughtonii Aureum', produced about 1830 in England.

A number of azaleodendrons known as Hardijzer Hybrids were registered by H.W. Hardijzer of Boksoop, Holland, between 1958 and 1964. All are hybrids of *R. racemosum*, which, exceptionally, does have leaf scales, and Kurume (evergreen) azaleas. The plants are evergreen and the flowers fairly small, somewhat resembling those of *R. racemosum*.

Everything that slows us down and forces patience, everything that sets us back into the slow circles of nature, is a help. Gardening is an instrument of grace.

May Sarton

Azaleodendron ‘Martha Isaacson’: *R. occidentale* X ‘Mrs Donald Graham’. Photo: Margaret Hunt.

Azaleodendron ‘Glory of Littleworth’: parentage unknown. Photo: Blue Mountain Nurseries.

Rhododendrons in the Mist: Hiking Roan Highlands

Arlington, VA

Photos by author.

Rhododendron catawbiense, Catawba rhododendron — in the mist

Finally, I made it to the southern Appalachians to see the native hododendrons and azaleas blooming in the wild. Don Hyatt of the Potomac Valley chapter of the American Rhododendron Society (ARS), is largely responsible for luring me to this visual feast. Also a member of our local rock garden chapter (again a 'Potomac Valley' chapter, but of the North American Rock Garden Society, NARGS), Don has been visiting the native azaleas and rhododendrons (all are botanically classified as rhododendrons) for a couple of decades. He has shared his travels in presentations for our rock garden chapter, including tantalizing images of expansive views and big swaths of rhododendrons and azaleas in awe inspiring hues. I wanted to see them for myself.

Don's hiking companion, George McLellan, unbelievably almost 80-years-old (I hope I have his endurance when I am his age), has been coming even longer. They know the plants so intimately they have named several with exceptional characteristics, notably 'Big Bird', a big yellow *R. calendulaceum* Flame azalea, and 'Molten Lava', a glowing yellow-orange one, and many others I can't remember.

By the time we hiked Roan, our group had grown to seven (five of us began the trip in southwestern Virginia several days earlier), including Charlie Andrews,

president of the Azalea chapter of the ARS in Georgia, a passionate native azalea expert, and Mike Bamford, also from that chapter and a newbie like me, as neither of us had walked this way before. Joe and Halit were making a repeat visit.

Starting at Carver's Gap, 5512 ft (1680 m) elevation, the hike takes you over three balds -- Round Bald, Jane Bald and, finally, Grassy Ridge Bald at 6,165 ft (1880 m). Beginning in North Carolina, the trail crisscrosses the North Carolina-Tennessee border and follows the Appalachian Trail until it veers off to the right towards Grassy Ridge Bald.

From a distance, the Catawba rhododendrons appear pruned, as they are compact, their lower leaves are mostly gone, exposing lichen-covered trunks and their rounded tops are relatively a uniform height. "So patterned is their arrangement that one might think this is a portion of some great estate, a detached portion, perhaps of the fabled Vanderbilt holdings near Asheville," wrote Maurice Brooks about the Roan Highlands in 1965 in "The Appalachians".

It is somehow comforting to know that Brooks, a Professor of Wildlife Management at West Virginia University for more than 30 years, retiring in 1969, and an authority on the ecology of the whole Appalachian range, saw more than 50 years ago what I saw. Charlie says the deer are grazing on them, but the altitude and winds have shaped them too, as has the grazing of livestock by local farmers and the Catawba Indians before them.

The rest of our motley crew (l to r) Joe, Halit, Mike, Charlie, and George, who has been visiting the Roan for something like 25 years.

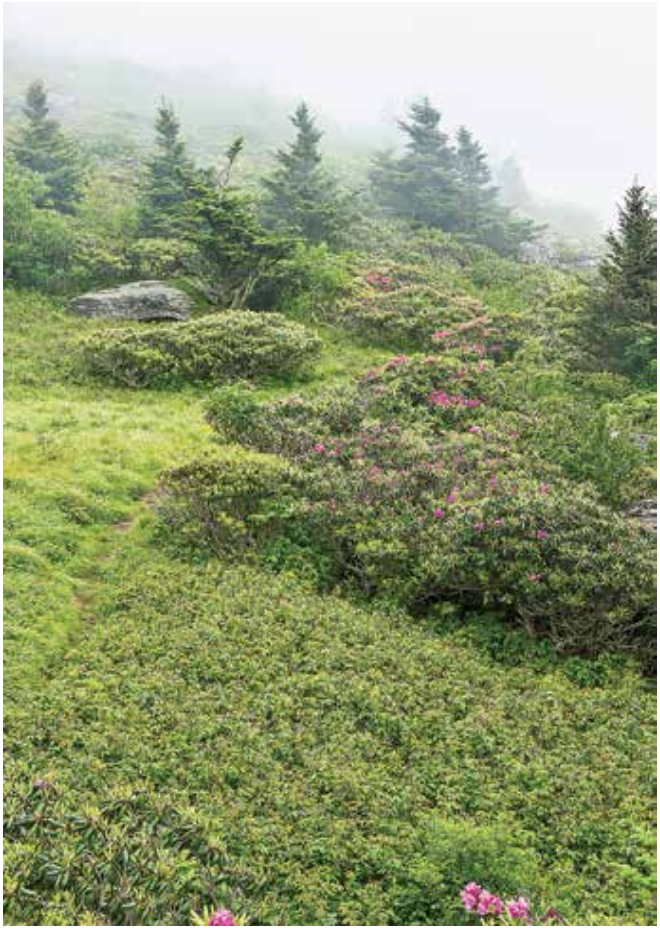
Views appeared and disappeared as clouds floated in and out, over and around us. The sun dodged about, suddenly shining on a stretch of landscape set off by darker terrain in the distance still under overcast skies. The changeable light was dramatic.

Dare I say some of the *R. calendulaceum* were more beautiful in bud than in flower? The striations of color can be exquisite. These plants typically produce flowers ranging from deep orange-red to pale yellow and everything in between. They bloom for about four to six weeks, usually beginning in mid-June. The Flame azalea is the only species on Roan, according to Charlie's excellent article in "The Azalean".

The infamous Don Hyatt

Balsam (*Abies balsamea*) and Fraser fir (*Abies fraseri*) grow on the slopes of the balds. Mike and I began trading stories of hiking on Mt. Washington in the White Mountains of New Hampshire, as we are both originally from New England, perhaps sparked by seeing vegetation reminiscent of Mt. Washington? As Brooks pointed out, the "Southern peaks [of the Appalachians] in the 6000 foot range, all of them in North Carolina and neighboring Tennessee are clothed in spruce and fir forest, in appearance almost identical with the one on Mt. Washington just below the 5000 foot contour." The tallest of the southern Appalachians, Roan among them, are as tall or taller than Mt. Washington. However, most of the southern mountains never reach above the tree line, unlike their northern cousins, yet they share some similar plants and habitat but at slightly different elevations.

Charlie checking on old friends.



Stone, conifers, and rhododendrons beautifully arranged along the slope.

In the images here, I show some of the range of adjacent colors, yellow to orange, in *R. calendulaceum* growing together These azaleas tend to grow in protected areas such as on a southern slope and are sometimes confused with *R. cumberlandense*, which can have vivid red to orange flowers, rarely yellow. The latter also bloom later, generally have smaller flowers, and the undersides of the leaves can have a whitish or blueish cast.

The veteran members of our group told us the bloom on Roan this year was not at its most spectacular. Some of the Flame azaleas were still in bud —how nice that they take their time—and the Catawbas simply did not have as many blossoms as they can have during a banner year. I will take their word for it but can't complain, as the scenery was fabulous and the bloom was plentiful, if not its most robust.

Big patches of *Vaccinium* were also present and these provide brilliant red fall color, a reason to return later in the season, if not for the blueberries! As you begin and end the hike, the trial passes through a forest of conifer, which is is quite a contrast going from cloistered woodland to open meadows.

Alas, this was my last day with the group. They continued on the following day to Robbinsville, NC, and then into the Smokies. Our adventure began in Grayson Highlands State Park in southwestern VA, and also included visits along the upper Blue Ridge Parkway south of Fancy Gap (Linville Falls was a highlight) and to Elk Knob, where more flora and fauna dazzled. The Roan Highlands were exceptional, however. My appetite is whetted for a return to the south mountains next year when I hope to get into the Smokies. Go if you can, as it is a wonderland!

A great view for a cloudy day!

Those “pruned” rhododendrons again!

The bright green in the lower left may be bracken fern.

References:

Andrews, C. 2018. The southern Appalachians – an azalea paradise. The Azalean 40(1): 4-10, 17-21.

Brooks, M. 1965. The Appalachians. Houghton Mifflin, Boston: 346 pp.

Sarah Strickler is a new member of the Potomac Valley Chapter. She worked for nearly 30 years in the book publishing industry and today, she works exclusively caring for and designing gardens in the Washington, DC, area.

Just love these buds!

A Treat From Subsection *Triflora*: *R. davidsonianum* 'Ruth Lyons'

Maria Stewart
Sandy, OR

(modified from the May 2018 *Rhododendron News*, the newsletter of the Portland chapter)

When the month of April arrives, our gardens show us that Spring is really here and if the winter has been kind to our rhododendrons, our reward is a bounty of blooms. One such reward is an upright grower with clouds of pink flowers, *R. davidsonianum* 'Ruth Lyons'. This named form is one of four that have been selected from the species *R. davidsonianum*, the other forms being the 'FCC' form, 'Serenade', and 'Caerhays'. The trait that separates 'Ruth Lyons' from the other forms is its clear, medium pink flowers. Other forms of *R.. davidsonianum* may be spotted red and the color range is from very light pink to pink to light purplish rose.

Here is more about *R. davidsonianum* 'Ruth Lyons':

Classification:
Subgenus: *Rhododendron* Section: *Rhododendron* Subsection: *Triflora*
Species: *davidsonianum*

Distribution in the wild:
Szechwan and Yunnan at 6000 to 11500 feet (1830 to 3500 m) elevation.

Structure: upright growing and somewhat open, but still a handsome plant, especially when in bloom. It is hard to see the leaves then, because the flowers are so abundant.

R. davidsonianum 'Ruth Lyons'.

About its name: named after Dr. W.H. Davidson who was part of a Friends Mission in China. Additionally, Ruth and Marshall Lyons were early rhododendron people in Eugene. James Barto, the earliest well-known rhododendron hybridizer in Oregon, gave this form of *R. davidsonianum* the name of 'Ruth Lyons'.

Flowers: clear, medium pink; corollas are about two inches (five cm) across; long white anthers extend beyond the corollas; may be a polyploid.

Foliage: fairly narrow and about 2.5 inches (6.4 cm) long; dark green with a few scales on top and dense scales on the undersides.

Hardiness rating: 0º F. (-18º C).

Siting in your garden: likes both sun and filtered sunlight.

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.

I don't like formal gardens. I like wild nature. It's just the wilderness instinct in me, I guess.

Walt Disney

T IS FOR TRIFLORA

Norman Todd
Victoria, BC,
Canada

(modified from the January 2002 Victoria Chapter newsletter.)

"To me, the plant *augustinii* fills one's senses with more than a flowing cascade of 'blue'."

The easiest thing to do is make a lumpy white sauce. The second easiest thing to do is to grow *Triflora* rhododendrons. The third easiest thing to do is to ignore the *Triflora* rhododendrons.

The *Triflora* (three flowers) has been a neglected section of the *Rhododendron* genus in most gardens on Vancouver Island. The best known of the group is *R. augustinii.* Still, it is not a plant that one can find in the average nursery. A potential buyer of a rhododendron will trip over a slew of 'Unique' and 'Jean Marie De Montague' cultivars without sighting one species of the *Triflora.*

The *Triflora* subsection of the elepidote rhododendrons is a large and important group that is centered in Western China. Most get to be quite tall and, with their smaller narrow leaves, have a slender, willowy look. Many of them have flowers, not only at the end of the branches, but also in the axils of the topmost leaves, so they put on a big show when in bloom [see the photos on page 187 in this issue]. Interestingly, many of the *Triflora* have more than the basic number of chromosomes. This is termed polyploidy. Some have twice the normal 26 chromosomes and some three times. Cox says this limits the amount of hybridization that can take place among those with different counts.

I warm to some plants in the garden in no small part because of their association with where I got the plant, or who gave it to me, or because of the plant's history of discovery and introduction. R. augustinii commemorates Augustine Henry. There are reports that Dr. Henry may not have been the wittiest of plantsmen (the spouse of one weekend host of Henry's always found excuses to be absent from his endless, boring botanical litanies) but he knew his stuff. Trained as a medical doctor, initially in his native Ireland and then at Edinburgh, he joined the Chinese Maritime Customs. After a year at Shanghai, he was sent to Ichang (Yichang) on the Yangtze as assistant medical

officer where for long periods of time, he was bored out of his wits. "Oh, if you knew the weariness of the exile's life. I have become a great collector of plants, and after exhausting the neighbourhood, I thought of going into the mountains, so I spent six months in two journeys into the interior."

Probably the greatest of Henry's legacies was the introduction of the handkerchief tree (*Davidia involucrata*). Henry didn't collect plants; he preserved herbarium specimens (5000 species) and after following up the French missionary Pere David's original discovery of the handkerchief tree, it was his specimens that stimulated the English nursery Veitch to send out Ernest Henry Wilson to bring it back to England and subsequently to North America.

Henry, on retiring from the Orient, took up the position of Professor of Forestry at Dublin and had a second career, which testifies to his intellect and industry. So I like *R. augustinii*! There is also *R. henryi* (subgenus *Azaleastrum*, section *Choniastrum*) that is rare in cultivation, which is related to *R. latoucheae*, which was recently introduced by Peter Wharton. To me, the plant *R. augustinii* fills ones senses with more than a flowing cascade of "blue".

The colour of *R. augustinii* ranges from white to wine. The "blue" forms of *augustinii* are not seen as frequently in gardens as they should be but the other shades are downright rare. I have a clone called 'Burgundy', but 'Marine' is the most popular of the *augustinii's*, being quite deep coloured, almost purple, but I like the paler ones every bit as much. There are a couple of very good specimens in the University of Victoria's Finnerty Gardens.

There is no doubt that the colour of *augustinii* varies from garden to garden. Ernie Lythgoe experienced this sensitivity many years ago. He admired a plant of *augustinii* in Vern Ahyers' garden, and carefully nurtured a cutting to flowering size, only to be disappointed in the muddiness of the blue. Soil characteristics have a big effect.

Similarly, the literature says, has temperature! The colder the winter, it is claimed, the more red in the blue. After several years of casual, unscientific observation, I decided that the "blueness" had more to do with the then Canadian Prime Minister Mulroney's standing in the opinion polls rather than winter temperature.

The first of the *Triflora* to bloom in spring, in February in British Columbia, Canada, is the yellow-flowered *R. lutescens.* Under-plant *lutescens* with the dark purple form of *Helleborus orientalis*, the green flowered *Helleborus foetidus*, some of the early flowering daffodils and perhaps a few primulas, and then call for Van Gogh. Then, next to *lutescens,* plant its cousin, the pink March blooming *R. davidsonianum.* The *davidsonianum* clone 'Ruth Lyons' has no markings in her throat - regarded by some connoisseurs as a mark of purity - but I like the ones with the jewels on their throats just as well. Continuing this theme of tall, willowy exclamation marks, plant the April flowering *R. augustinii* and the white flowering *R. rigidum* side by side. There is a very good form of the latter that I got from

Oregon's Greers Nursery. This has a tennis ball sized truss of six or eight snowy flowers, thus stretching the name *Triflora*, even for a taxonomist, and dark chocolate anthers.

This resplendence of rhododendrons is not complete without the inclusion of the latest of the *Triflora* to bloom – *R. tricanthum*. I think the best forms of *tricanthum* are the deep purple ones. This extends the floral show to mid June. With five plants, one can have a five-month succession of colour. Since expense is not a consideration in this imagery, let's add around the perimeter of the grouping a clump of the smallest of the *Triflora* – *R. keiskei*. The tiny form of *keiskei* 'Yaku Fairy' is the best known and is certainly a gem, but there are other larger forms which might be more suited to our *Triflora* extravaganza. As an aside, I was told that the way to grow *keiskei* 'Yaku Fairy' is in a pot. Every year knock the plant out and put another two cm (one inch) of soil in the pot, and then 'Yaku Fairy' will spill over the rim of the pot, cascading down to form a splendid wig.

For those with space and who like to develop a theme to its most replete, one of the easiest to please of all the *Triflora* is *R. yunnanense*. Reportedly, it has a very wide geographical distribution and a large altitudinal range. It varies in flower from white through pink to pale purple. I think the form with white flowers and coral markings is probably the best. I find that *yunnanense* is one of these shrubs that is taken for granted like some conifers or spireas. It is an essential element in the landscape but assumes a kind of complementary demeanour.

The collector can add the whimsically named *R. ambiguum* – an easy doer with soft yellow flowers in April/May. There is also an interesting multi-coloured form of the type species *R. triflorum*. The cream flowers are suffused with red and pink and green. At this point I have to add that probably the least garden worthy of all rhododendrons in my garden is a *triflorum*. Its flowers are the same insipid colour as the leaves, and it is an aesthetic disaster! The reason I keep this plant is not for any horticultural or botanical interest, but for human interest. If any visitor notices the flowers, that person is immediately elected to my "Growers' Hall of Fame". However, this plant is the exception – most triflora are fully worthy of the space they occupy.

For recreating the landscape, or for the new gardener, but especially for the gardener who has had some unsatisfactory experiences with rhododendrons, there are plants out there that deserve your attention,

Tis a lesson you should heed
Try, try again.
If at first you don't succeed,
TRIFLORA."

Reference

McCarter, J.A., and J.C.E. Fuller. 2005. *A Rhesplendence of Rhododendrons.* Victoria Rhodo. Soc., Victoria, BC: 118 p.

The late Norm Todd was a productive member of the Victoria Chapter and owner of the Elk Lake Rhododendron Nursery. A book of many of his newsletter contributions, including this one, has been published by the Victoria Rhododendron Society (McCarter and Fuller 2005).

My passion for gardening may strike some as selfish, or merely an act of resignation in the face of overwhelming problems that beset the world. It is neither. I have found that each garden is just what Voltaire proposed in Candide: a microcosm of a just and beautiful society.

Andrew Well

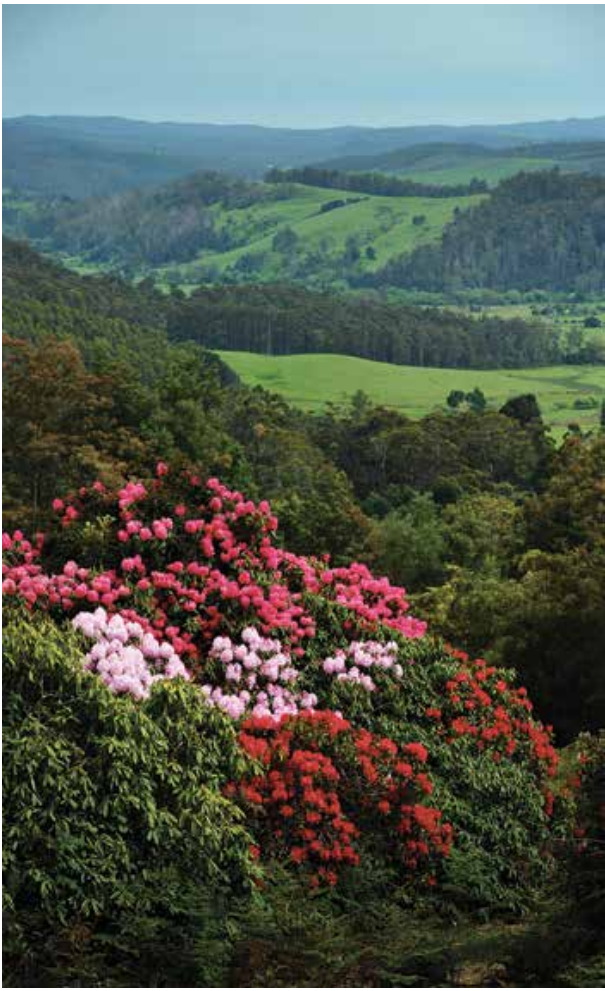
The Lalla Flower Farm, Lalla, Tasmania

Margy and Chris Dockray

Lalla, Tasmania, Australia

The island of Tasmania is the smallest, most southern state of Australia, and the home of the Lalla Flower Farm (also known as the WAG Walker Rhododendron Gardens) is 42 ha (104 acres) of gardens, parkland and forest a 25-minute drive from Launceston in northern Tasmania. During its century long history, the property has gone through several iterations, from a large commercial nursery to cut flower production to a public reserve, and now, to gardens.

Frank Walker (orchardist and plantsman) developed the property as a propagation nursery for fruit trees to support his expanding local orchards around 1900. The Lalla Red Delicious apple was developed here and was subsequently exported around the world. Known as the Mountainside Nurseries, the nursery expanded to include propagation of plants for private and public gardens and parks, and donated over 2000 trees to the Tasmanian Government to commemorate the fallen soldiers from WW1.



View from the topmost area of the property - remnant rhododendrons gone wild for over 50 years and rehabilitated by us over the past de-cade, overlooking the surrounding Lalla valley.

Many of these trees still grow along the aptly named "Heritage Highway" between Launceston and Hobart. When Frank's son William Alexander George (WAG) took over the business, he expanded it into the cut flower trade, growing rhododendrons and azaleas, heathers, chrysanthemum, gladioli and spring bulbs, and the property became known by the Walker's as "The Flower Farm".

After WW2 it became the largest nursery in Tasmania, famous for its collection of rhododendrons and azaleas and until a few decades ago, it boasted the largest collection of rhododendrons in the southern hemisphere.

The nursery operations moved into Launceston in 1965 and the extensive nursery stock was simply left in the ground in rows where it grew undisturbed for fifty years. The native vegetation also grew, reverting many areas from horticulture to native forest. From a busy site employing dozens of people, the nursery entered two decades of sleepy quiet, being accessed for cuttings and flowers, and occasional rootstock.

In 1982 the Tasmanian government leased the property for 25 years, developing and transitioning the lower 10.2 ha (25 acres) of the old nursery into a public reserve. Named the WAG Walker Rhododendron Reserve in recognition of William's contribution to horticulture, the property provided the public a place to enjoy picnics amongst significant plantings of aged rhododendrons and exotic trees, just a short drive from Launceston. Initially the Reserve attracted thousands of visitors annually but later became run down due to a lack of maintenance funding, and again entered a time of sleepy quiet before closing completely in 2007.

The property was sold to us in 2007 in a sadly neglected condition. We were local amateur gardeners with very little knowledge of rhododendrons, but we were aware of its historical and cultural significance and its importance to the local area in which we lived, and we rather naively dreamed of restoring it.

We thought we were buying 10.2 ha (25 acres) of rhododendron parkland and 32.4 ha (80 acres) of native forest. Little did we know at the time that we were actually embarking on a herculean task of broad scale garden restoration, akin to that of Cornwall, England's, Lost Gardens of Helligan! We often remark that if we had known what we were in for, we would never have embarked on it, but fortunately ignorance was a blessing, and the land itself seemed content to reveal its secrets to us gently and slowly, so that we rarely felt overwhelmed.

We began restoring the "Reserve" area by removing the weed trees that had taken over the rhododendron beds, i.e., wattles, holly and cotoneaster. We removed the large trees that had self-sown amongst the century old rhododendrons. Holly in particular formed an impenetrable prickly wall in the beds that took four years to eradicate.

The feature trees in this part of the property included some grafted ones, such as two very large "horizontal" elms and unusual ash. Most of the trees needed pruning, so we engaged local arborists for this daunting task.

One of the rhododendron “tunnels” at the time of camellia flowering.

Chris standing in front of an 8 m (26 ft) bank of ‘Sir John Waterer’.

We bought the property at the end of a 10-year dry period so our first priority was to restore the dam whose pond had become filled with aspen, and to add another larger dam from which we would be able to irrigate newer plantings. At the end of four years, we congratulated ourselves on the successful restoration of 10.2 ha (25 acres) of exotic plants. We thought the balance of the property was native forest, which we could leave quietly alone. In this we were naïve!

Our work in the gardens was encouraged by the late Harold Walker, who had taken over management of the nursery from his father after WW2. Harold informed us that there were many other areas of rhododendrons hidden and overgrown by the bush. We duly discovered several old trails, and cut away half a century of fallen timber and regrowth covering them. These old trails led to a further four large areas of massed plantings of rhododendrons, plus large tracts of closely planted rows of towering exotic trees - nursery stock that had grown in situ, competing for light. As we cleared blackberries and other weeds, we introduced new plants along the trails under the canopy of trees that had grown since the nursery's closure. This gradually became an extensive woodland garden, and we improved the existing collection of rhododendrons by introducing many new varieties.

In the sheltered moist and steep sided gully, we planted vireyas, scented maddenia and many big leaf rhododendron varieties, as well as new deciduous, evergreen and ornamental trees. We created a camellia and luculia garden (*Luculia pinceana, Rubiaceae*) for winter blooms, and for added summer interest we planted many hydrangeas. One of the benefits of clearing along the trails was the discovery of massed bulb plantings, survivors from the old nursery days, which were now able to flower and multiply during the spring, as they now experienced much more sunlight for the first time in half a century.

The property was really an arboretum with rhododendrons in it, and by planting so many more trees, we hope to ensure the garden's arboreal character into the next century of its life. To this end, we have converted a large paddock into an oak lawn, planted Wollemi pines (*Wollemia, Araucariaceae*), which was only known through fossil records until *Wollemia nobilis* was discovered in 1994 in a remote temperate rainforest in Australia's New South Wales (NSW)) and many other araucaria varieties, established a pineteum (arboretum of pine trees) across another grassed hill-side, and underplanted the pioneering but aged silver wattles (*Acacia dealbata*) with hundreds of Tasmanian black-woods (*Acacia melanoxylon*).

The stream running through the woodland gardens was cleared of weeds and revegetated with abundant native ferns (the tree fern *Dicksonia antarctica* and common ground ferns) and other endemic rainforest species.

We have been inspired by the major botanic gardens in Sydney and Melbourne, as well as the National Rhododendron Garden at Olinda in the Dandenong Range in Victoria; the Mt. Tomah botanic garden in the Blue Mountains, NSW; and the many private gardens around Australia. We have also been blessed with advice and

encouragement from both Maurie Kupsch at the Emu Valley Rhododendron Garden in Burnie, Tasmania, and Andrew Lockett from our neighbouring Red Dragon Nursery where we have sourced many of our rhododendrons.

The Lalla Flower Farm is now a major rhododendron garden in Australia due to its size and horticultural history.

The age and scale of its rhododendrons (some of which are 8 m (26 ft) high) makes it significant both historically and horticulturally, as many of the other major public and private rhododen-dron gardens in Australia sourced their first rhododendrons from this property. The heritage rhododendrons planted en masse have formed many linked tunnels through which people can walk, creating a unique experience in Australia.

Century-old rhododendrons, grafted on to *R. ponticum* that has grown from below the grafts. These are now too large and old to bother pruning it out.

Daffodils naturalised with early flowering rhododendrons.

The upper third of the property is native forest with a large stand of mature *Eucalyptus viminalis* (White gum). The "bush", as we call it, is dominated by eucalypts with an understory of evergreen trees and shrubs (many flowering in spring, including the acacias) and ferns. This area adjoins a further 202 ha (500 acres) of forest, including a stand of old growth *Eucalyptus obliqua*, and a

reserved area for endangered nesting Wedge-tailed eagles (*Aquila audax*), the largest bird of prey in Australia. Our plan for the future is to establish walking trails up into some of this forest.

In 2016 we built a beautiful chapel and established gardens around it. We designed it with open sides in order to blur the boundaries between garden and building, and it is a place of quiet prayer and peace where nature meets spirit. The chapel is now a highlight of the woodland gardens, with many visitors coming specifically to experience its beauty and peacefulness.

There are lovely views along the many walks and trails across the whole property and a walk to the lookout is well worth the steep climb through the native forest. Tasmania's unique birdlife and fauna is abundant, including a resident platypus (*Ornithorhynchus anatinus*). Our gardening is done alongside the native wildlife, so we guard our young trees from the browsers and we favour shrubs that are not eaten by them. Wildlife is a great asset to this garden and we set aside large areas as habitat for the marsupials, birds and reptiles endemic to Tasmania. A walk along any of the trails will usually be rewarded with wildlife encounters. In 2017, we were granted membership to "Gardens for Wildlife" and "Land for Wildlife" programs run by the Tasmanian government to recognise property owners actively involved in wildlife habitat preservation.

Deciduous azaleas, originally in a bush hut, and planted under shade cloth in the 1980s.

Our climate is mild with good rainfall and our garden is very sheltered. We are blessed that we can grow a traditional cool climate garden with glorious autumn colour right alongside the tropical vireyas and frost sensitive luculias. Kenneth Cox in his recent book "Woodland Gardening" describes northern Tasmania as "an exceptional gardening

Inside the azalea enclosure.

climate, with cool summers and mild winters, which al-lows virtually all the 900 rhododendron species to be grown outdoors….perhaps the only place that can do this", and so it is for us.

Notwithstanding the work we have done, this garden is set apart from other grand gardens because of its wildness and past neglect. The trees and rhododendrons are not all in the usual well ordered shapes typical of purposely planted gardens. The old plants that now flourish here have fought for survival, competed with others and grown naturally where they could, which has left many of them with an artistic shape seldom seen in other gardens. Only an old nursery of this scale would have the massed plantings that provide the feature "bones" for the newer garden plantings here. Our lack of expertise has actually been an asset in that we have not always conformed to educated rules in our choices for plants and their placement. We have gardened by instinct, with an eye for beauty and intrigue, and sensual pleasure. We have taken risks through ignorance and the desire to simply get stuff happening across such large areas, that no expert would likely have done.

The deep loamy soils, reliable water, freedom from frost and extreme heat have done wonders to forgive our mistakes, and

Inside the azalea enclosure.

Along one of the woodland trails the spring flowering native snow-daisy bush *Olearia lirata* provides a back drop to a newer area planted out to maddenia rhododendrons and vireyas.

R. dalhousiae var. *rhabdotum*.

ensure the gardens are well on their way to fulfilling their latest iteration, and I believe destiny, asa uniquely beautiful broad scale garden on the world stage.

Although privately owned, we welcome visitors during the spring and autumn, and at other times by appointment.

Margy and Chris Dockray are the owners of the Lalla Flower Farm (also known as the WAG Walker Rhododendron Gardens), and more information can be found at: Facebook W.A.G Walker Rhododendron Gardens or www.walkerrhododendron.com.

We have managed to establish many big leaf species among the native acacias and ferns along the woodland trails, includ-ing *R. arizelum, R. falconeri, R. macabeanum, R. sinogrande, R. kesangiae, R. magnificum*, and *R. sidereum*.

The “vireya trail” has vireyas blooming most of the year, and in spring has many bulbs and deciduous azaleas. Initially an old nursery trail, it had 50 years of fallen trees and was overgrown with bracken and blackberries, and has now been resurrected and planted with new varieties of rhododendrons and companion plants.

The short beaked Echidna (*Tachyglossus aculeatus*) which is commonly seen because it is not nocturnal, unlike most other Tasmanian marsupials. It lays eggs, carries the young in its pouch, and suckles its young on milk. It feeds on ants which it will dig for in their nests which often causes damage to our garden as it will use great strength to pull away logs that we place in front of our young plants to help with mulch and water retention on the steep slopes.

There are several trails along which we can grow *maddenia* species such as *R. nuttallii*, *R. lindleyi*, *R. ciliatum*, and their many hybrids.

One of three beautiful luculia varieties in bloom along the “vireya trail”.

Rhododendron jasminiflorum Hook. subsp. *heusseri* (J.J.SM.) Argent. from Samosir Island, North Sumatra, Indonesia

Yasper Michael Mambrasar
and
I Putu Gede P. Damayanto

Cibinong, Bogor, Indonesia.

Y.M. Mambrasar

I P.G.P. Damayanto

Samosir Island is one of the volcanic islands located in the middle of Lake Toba, North Sumatra. Geographically, Samosir Island is located at 2°37'06.9"N 98° 47'44.1"E on a plateau region, with an altitude of 700-1700 m (2300-5575 ft). Administratively, Samosir Island is in the Samosir Regency, North Sumatera Province. Recently, the Research Center for Biology–LIPI has been exploring the floral biodiversity there, with one of the main objectives to find and collect the *Rhododendron* species reported by both Sleumer (1966) and Argent (2006, 2015), and especially the multicolored forms of *R. jasminiflorum* Hook. subsp. *heusseri* (J.J.Sm.) Argent. Sleumer (1966) did not clearly specify the colours of *R. jasminiflorum* subsp. *heusseri* in the Samosir Peninsula, and suggested this subspecies could be a hybrid with *R. longiflorum*. Argent (2006) stated that he failed to find multicolored forms of *R. jasminiflorum* subsp. *heusseri* in the Samosir Peninsula, but Argent (2015) reported that Decky Indrawan Junaedi had found both red and pink forms of *R. jasminiflorum* subsp. *heusseri* on the Samosir Peninsula. Unfortunately, none were collected as herbarium specimens. However, during our survey of Samosir Island, we collected four flower color variations of *R. jasminiflorum* subsp. *heusseri* there.

METHODS

Surveys were conducted from March 25-27, 2018, starting from the highest point on Samosir Island, the area around Mual Silau Raja Sioma (Fig. 1), using the random sampling method of Rugayah et al. (2004). Flowering or fruiting rhododendrons were collected and then identified in the Herbarium Bogoriense

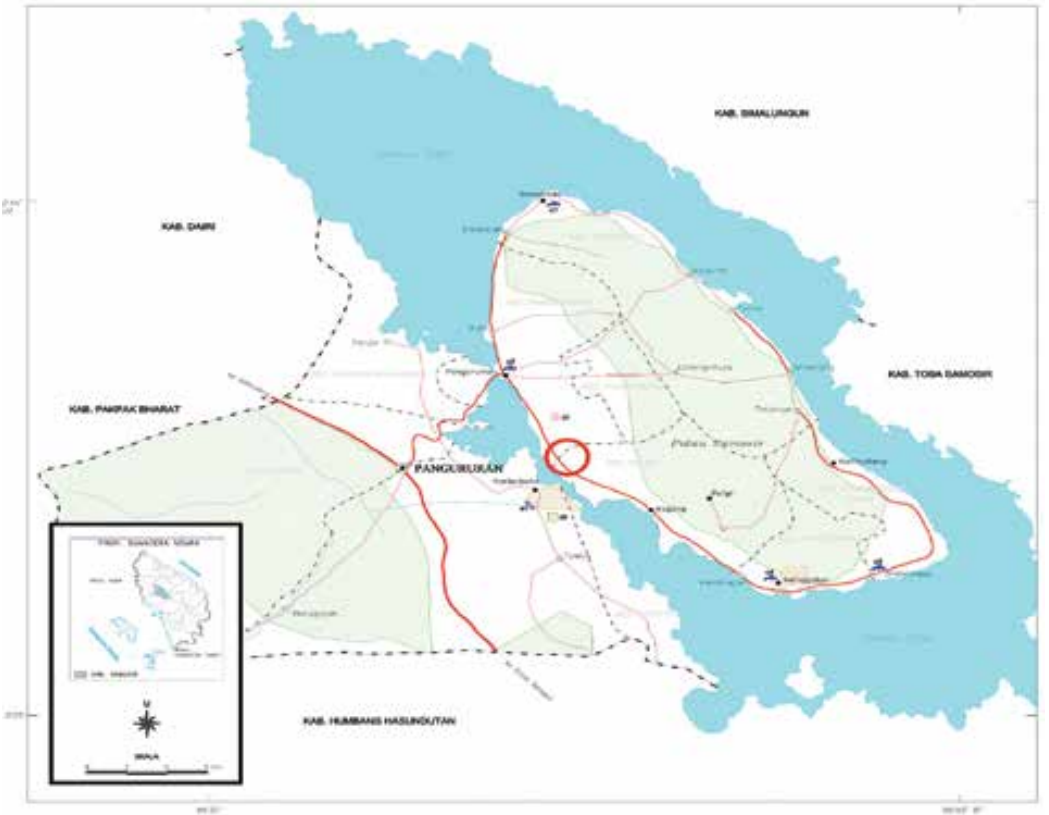


Fig. 1. Research location (red circle) on Samosir Island (Modified from KPU, 2011).

(BO), where photographs of each fresh specimen were taken.

OBSERVATIONS

We collected four different flower colours, namely white, red, pink and cream, of *Rhododendron jasminiflorum* Hook. subsp. *heusseri* (J.J.Sm.) Argent on Samosir Island. Argent (2015), stated populations of *R. jasminiflorum* subsp. *heusseri* elsewhere have uniformly white flowers, and Sleumer (1960, 1966) stated that this subspecies is possibly a hybrid between *R. jasminiflorum* and the red flowered *R. longiflorum* Lindl, but it most closely resembles the first.

Rhododendron jasminiflorum was first described by Hooker in 1850, while Smith (1935) first described *R. jasminiflorum* Hook. var. *heusser*i, this combination being taken up by Sleumer in his Flora Malesiana account (Sleumer 1966). The type specimen is Heusser 9a, collected on 10 August 1916 in Sumatera, Tapanuli, Lake Toba, Samosir, solfataras, 950 m (BO). In 2006, Argent raised this form to subspecific status. This subspecies is named after Dr. Carl Heusser, the collector, who worked for some years in Medan, Sumatra (Argent 2006, 2015). The vernacular name of this subspecies is "bunga batu" (Sleumer 1966), which translates as "rock flower".

Rhododendron jasminiflorum subsp. *heusseri* is an endemic plant of only northern Sumatra with a distribution ranging from Aceh (Mt. Kemiri, Tanah Gayo ('Gayoland')); NE Sibayak, Bandarbaru; Sibolangit; Aek Nauli, near Pematang Siantar; Simalungun; and around Lake Toba, especially the Samosir "Peninsula" (Sleumer 1960; Argent 2006, 2015). We are skeptical of the "Samosir Peninsula" location because in our survey, we did not fine this subspecies in the peninsula area, although both were found on Samosir Island. Precisely, this subspecies was only found in Kampung Pintu Batu, Kianate Village, Pangururan District, Samosir Regency, Samosir Island; it was not found at Aek Nauli and Simalungun.

Sleumer (1966) mentioned that *R. jasminiflorum* subsp. *heusseri* always grew near solfataras [a natural volcanic steam vent in which sulfur gases are a dominant constituent], while our observation on Samosir Island indicated that white loam is a suitable habitat for *R. jasminiflorum* subsp. *heusseri*. White loam has a high sulfur content because it is located near hot springs. This subspecies was growing in association with *Vaccinium* spp. (*Ericaceae*) and terrestrial *Dendrobium* spp. (*Orchidaceae*), with a habitat range of about one hectare (2.5 acres) very close to the main outer ring road on Samosir Island. This habitat is currently threatened since in some part there has been damage due to widening of the road, and the area is owned by local residents, so is not protected. The newy established Samosir Botanic Gardens might be able to assist in the conservation of the various forms of R. jasminiflorum subsp. heusseri on Samosir Island.

Fig. 2. *Rhododendron jasminiflorum* subsp. *heusseri* "white flower". A. Habitat, B. Terminal bud, C. Flower (Photos: Y. M. Mambrasar).

Taxonomic Account

1. *Rhododendron jasminiflorum* subsp. *heusseri* "white flower" (Fig. 2).

Shrub, 1.5–2 m high. Leaves in dense pseudo-whorls 4–6 together; blade broadly elliptic, 2–5 × 1–2.5 cm; young blade with scales becoming glabrescent when mature. Flower bud to 15 x 8 mm, ovoid, green, bract tips red and spreading. Inflorescence mostly 8–10-flowered; the flowers horizontal to half-hanging; corolla trumpet-shaped, c. 6 cm, white, scaly outside; filaments white, anthers brown; style white, stigma greenish yellow.

Specimen examined. North Sumatra, Samosir Island, Pangururan District, Kianate Village, Kampung Pintu Batu, 2°31.851'N, 98°44.058'E, 953 m, 27 III 2018, Y. M. Mambrasar 503 (BO).

2. *Rhododendron jasminiflorum* subsp. *heusseri* "red flower" (Fig. 3).

Shrub, c. 1 m high. Leaves in dense pseudo-whorls 5–7 together; blade broadly elliptic, 2.5–5 × 0.7–2 cm, young blade with scales becoming glabrescent when mature. Flower bud to 15 x 10 mm, ovoid, light green, bract tips dark red and spreading. Inflorescence mostly 5–7-flowered; the flowers horizontal to half-hanging; corolla trumpet-shaped, c. 4 cm, red, caly outside; filaments red, anthers maroon or dark red; style and stigma red.

Specimen examined. North Sumatra, Samosir Island, Pangururan District, Kianate Village, Kampung Pintu Batu, 2°31.851'N, 98°44.058'E, 953 m, 27 III 2018, Y. M. Mambrasar 500 (BO).

Fig. 3. *Rhododendron jasminiflorum* subsp. *heusseri* "red flower". A. Habitat, B. Terminal bud, C. Flower (Photos: Y. M. Mambrasar).

3. *Rhododendron jasminiflorum* subsp. *heusseri* "pink flower" (Fig. 4).

Shrub, 1–1.5 m high. Leaves in dense pseudo-whorls 5–6 together; blade broadly elliptic, 2–4.5 × 1–2 cm, young blade with scales becoming glabrescent when mature. Flower bud to 15 x 8 mm, ovoid, green, bract tips red and spreading. Inflorescence mostly 7–8-flowered; the flowers horizontal to half-hanging; corolla trumpet-shaped, c. 4 cm, pink, scaly outside; filament of stamens pink, anthers brown; stylus pink, stigma yellow.

Specimen examined. North Sumatra, Samosir Island, Pangururan District, Kianate Village, Kampung Pintu Batu, 2°31.851'N, 98°44.058'E, 953 m, 27 III 2018, Y. M. Mambrasar 504 (BO).

Fig. 4. *Rhododendron jasminiflorum* subsp. *heusseri* "pink flower". A. Habitat, B. Terminal bud, C. Flower (Photos: Y. M. Mambrasar).

***4. Rhododendron jasminiflorum* subsp. *heusseri* "cream flower" (Fig. 5).**

Shrub, c. 1 m high. Leaves in dense pseudo-whorls 7–8 together; blade broadly elliptic, 2–4.5 × 1.1–2 cm, young blade with scales becoming glabrescent when mature. Flower bud to 13 x 6 mm, ovoid, green, bract tips red and spreading. Inflorescence mostly 9–10-flowered; the flowers horizontal to half-hanging; corolla trumpet-shaped, c. 5 cm, cream, scaly outside; filaments pale yellow, anthers pinkish; style pale yellow, stigma brown.

Specimen examined. North Sumatra, Samosir Island, Pangururan District, Kianate Village, Kampung Pintu Batu, 2°31.851'N, 98°44.058'E, 953 m, 27 III 2018, Y. M. Mambrasar 505 (BO).

Acknowledgements

We thank the curators of Herbarium Bogoriense (BO) and the Head of Research Center for Biology – LIPI for allowing us to work with BO specimens and using

Fig. 5. *Rhododendron jasminiflorum* subsp. *heusseri* "cream flower". A. Habitat, B. Terminal bud, C. Flower (Photos: Y. M. Mambrasar).

research facilities. The Research Center for Biology - LIPI through Dana DIPA is gratefully acknowledged for funding the fieldwork to North Sumatra. Dr. George Argent is gratefully acknowledged for critically reading the manuscript before it was submitted.

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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 July 25, 2018, 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
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

'24 Karat'. Photo by Don Hyatt.

(r) '24 Karat'

Lepidote rhododendron: *R. keiskei* (s) X *R. cinnabarinum* subsp. *xanthocodon* (Nearing form). H, G, N (dates unknown): Russ and Velma Haag,Brevard, NC;

REG (2018): Michael Martin Mills, Philadelphia PA. Flrs 8-10/flat truss (3-5 per bud, 1-3 buds per truss), funnel, 1.25 inches (32mm) long x 1.5 inches (38mm) wide with 5 acute, reflexed, pinched lobes, minutely frilly margins. Bud: brilliant yellow green (149B). Inside and outside: pale greenish yellow (1D) with interior deep greenish yellow (153A) spots and throat below dorsal lobe. Pale greenish yellow (2D) style and filaments; strong yellowish pink (32C) stigma; light yellow (12C) anthers; style becoming pink after pollination. Truss 1.75 inches (44mm) high x 2.75 inches (70mm) wide. Lvs 1.9 x 0.6 inches (47 x 16mm), elliptic, rounded base, acute apex, flat margins, slightly convex, depressed midrib, moderate yellow green (137C). Indumentum: scales, underside; minute hairs, underside and petiole. Shrub 1-1.2 feet (0.3-0.4m) high x 2 feet (0.6m) wide in 8-10 years; intermediate habit, lvs held 2 growing seasons. Hardy to at least -1°F (-18°C). Flowering early season (early April in Philadelphia). Synonym: '24 Caret'.

(r) 'Absolute Citron

Elepidote rhododendron: 'Ada Lohr'
(s) X 'Goldkrone'. H (1996), G (1999), N (2006), REG (2018): Ronald R. Rabideau, Camden, NJ; I (2008): RareFind Nursery, Jackson, NJ. Flrs 13/dome truss, funnel, 2 inches (51mm) long x 3 inches (76mm) wide with 5 rounded lobes, wavy margins; some lobes emarginate, others pinched to give emarginate appearance. Bud: brilliant greenish yellow (3B). Inside: light greenish yellow (3C), brilliant greenish yellow (3B) in center of dorsal lobes and on midveins; strong red (46A) speckled dorsal blotch. Outside: light greenish yellow (3C), interior speckles visible. Calyx: 0.1 inch (3mm) long, light yellow green (145C). Yellowish style and filaments. Truss 4 inches (102mm) high x 6 inches (152mm) wide. Lvs 4 x 1.75 inches (102 x 44mm), elliptic, rounded base, obtuse apex, flat margins, deep yellowish green (darker than 141A), matte. Indumentum: stalked glands, red, dense on ovary, scattered on calyx. Shrub 3 feet (0.9m) high x 5 feet (1.5m) wide in 12 years; leaves held 2 growing seasons. Plant hardy to -20°F (-29° C), buds to -10°F (-23°C). Flowering midseason (mid-May in central New Jersey).


'Absolute Citron'. Photo by Ron Rabideau.

(a) 'Dene Mathews'

'Dene Mathews' Photo by Mike Gibson.

Deciduous azalea: *R. flammeum* (s) open-pollinated (likely x *R. canescens*). Seed harvested (2006), G (2010), S (2010): Vernon Bush, Huntsville, AL; I (2015): Earl Sommerville, Marietta, GA; N (2017), REG (2018): Huntsville Madison County Botanical Garden Society Inc., Huntsville, AL. Flrs 7-9/truss, tubular funnel, 2.1 inches (53mm) long x 2 inches (51mm) wide with 5 or 6 broadly acute lobes, wavy margins. Bud: strong purplish red (58C). Inside: strong purplish pink (67D) with modest vivid yellow (16A) blotch in dorsal lobe. Outside: light purplish pink (63D). Calyx: 0.1 inch (2mm) long, moderate greenish blue (114B). Reddish style and filaments, significantly exserted. Fragrance: moderate. Truss 3.5 inches (90mm) high x 6.2 inches (157mm) wide. Lvs 2.9 x 1.4 inches (74 x 36mm), obovate, cuneate base, broadly acute apex, flat margins, moderate olive green (137A). Indumentum: hairs, colorless to white, predominantly along underside veins. Shrub 7.8 feet (2.1m) high x 4.8 feet (1.2m) wide in 9 years; intermediate habit. Hardy to 4°F (-16°C), heat tolerant to 94°F (35°C). Flowering midseason (mid-April in central Alabama). Etymology of name: for a volunteer at Huntsville Madison County Botanical Garden, Dene Mathews, of Cherokee, AL.

(r) 'Harold Greer'

'Harold Greer', Photo by Harold Greer.

Elepidote rhododendron: 'Very Berry'* (s) X 'Horizon Monarch'. H (1997), G (2012): Harold Greer, Eugene OR; N (2017), REG (2018): Donna Manion, Eugene, OR; I (2020, anticipated): Greer Gardens, Eugene, OR. Flrs 10/ball truss, open funnel, 1.9 inches (47mm) long x 3.5 inches (90mm) wide with 5 rounded lobes, frilly margins. Bud: deep purplish pink (55A). Inside: pale yellow (18C), with deep purplish pink picotee margins and strong purplish red (54A) nectar pouches and small dorsal flare at base. Outside:

strong purplish red (54A). Calyx: 0.5-1.25 inches (13-32mm) long, pale yellow (11C) with deep purplish pink (55A) stripes. Whitish style and filaments. Truss 5 inches (127mm) high x 7 inches (178mm) wide. Lvs 6 x 2.75 inches (152 x 70mm), elliptic, rounded base, acute apex, slightly upcurved margins, moderate olive green (146A), matte. Shrub 5 x 5 feet (1.5 x 1.5m) in 15 years; intermediate habit. Hardy to 0°F (18°C). Flowering midseason (early May in western Oregon). Etymology of name: for the hybridizer, past president of the American Rhododendron Society and recipient of the ARS Gold Medal in 1989.

* 'Very Berry' – not registered. 'Trude Webster' X 'The Honourable Jean Marie de Montague', hybridized by Harold Greer.

(a) 'Mary's House

'Mary's House'. Photo by William Clagett.

Evergreen azalea: unknown parentage. H (1998), G (2007), N (2007), REG (2018): William Clagett, Derwood, MD; I (2015): White's Nursery, Germantown, MD. Flrs 3/terminal, saucer, double, 1.5 inches (38mm) long x 2 inches (51mm) wide with 15-18 rounded lobes, frilly margins. Bud: strong purplish pink (62A). Inside: moderate purplish pink (62B) in center of petals, shading to pale purplish pink (62D) at margins; bright green throat. Outside: strong purplish pink (62A). Stamens absent; bright orange-red stigma. Lvs 1.5 x 0.5 inches (38 x 13mm), elliptic, cuneate base, acute apex, slightly upcurved margins, moderate olive green (147A), semiglossy. Shrub 1.7 feet (0.5m) high x 1.25 feet (0.4m) wide in 10 years; dense habit, lvs held 2 growing seasons. Hardy to -6°F (-21°C), heat tolerant to 98°F (37°C). Flowering late season (late May in Maryland). Etymology of name: incorporating the hybridizer's daughter's name.

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 2015). 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. There is no fee.

All others: Please direct inquiries to Sharon McDonald.

New Members from 5/20/2018 through 9/1/2018

AZALEA
Robert/John Batts/Ottens
George Evans

CONNECTICUT
Carlo Borsarini
Lucina Nadeau
Owen & Coleen McLaughlin

COWICHAN VALLEY
Marilyn Day
Candice Feeney
Malcolm Ho-You
Garry Young

DANISH
Per W. Sørensen
Jeff Wagner

EUGENE
Mark & Dana Manion

EUREKA
Don & Peggy Bollinger

FINNISH
Olafur Sturla Njalsson

GREATER PHILADELPHIA
Douglas J & Javier D Koch
Susan P. Treadway

HAWAII
Herb & Ann Lum
Martin Monthofer

MASON DIXON
Mark & Anna Pridmore Geraghty
Richard Magin
John/Ginger Valliant/Cushing

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Elaine McGrath
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MIDDLE ATLANTIC
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Stefanie von Loh

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PILCHUCK
Michelle Bernson
Stacy Doyle

PORTLAND
Cid Blasé
Lori Delman
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William & Kathryn Holtby
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SCOTTISH
Christopher John Parsons
Logan Botanic Gardens

SOUTHEASTERN
Thornton W. Burnet Jr

SWEDISH
Per Soderberg

TACOMA
George W. Robertson

VALLEY FORGE
George Robertshaw

VANCOUVER
Stephen Shubert

Index

Index (online version)
Journal American Rhododendron Society, Volume 72, 2018.

The names of species and hybrid rhododendrons and azaleas occurring within the text of articles are not listed in the index. Reference to plants with colour images is made for the following entries: (AZALEA HYBRIDS, AZALEA SPECIES, RHODODENDRON HYBRIDS, RHODODENDRON SPECIES, VIREYA HYBRIDS, VIREYA SPECIES, INSECTS, PLANTS OTHER THAN RHODODENDRONS, MAMMALS).

Rhododendron cultivar names not registered in the International Register of Plant names and Checklist are marked with an *.

RHODODENDRON SPECIES AND SELECTED SPECIES FORMS

Create a Legacy with the ARS Endowment Fund

You have great opportunity to give back to the rhododendron community and be part of the incredible difference that can be made through your support! A tax deductible gift will help strengthen the society by increasing the financial capacity of the Endowment Fund to support projects that broaden the interests, curiosity and knowledge of future generations attracted to rhododendrons and azaleas.

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A donation to the Endowment Fund can make that happen and help the Society. Please mail your gift to: ARS Endowment Fund. P.O. Box 214, Great River NY 11739.

Errata

A recent article on "Rhododendrons for Beginners – the deciduous azaleas of *Rhododendron* subgenus *Hymenanthes*" (Jamieson 2018) stated that R. *calendulaceum* was the only tetraploid deciduous azalea in section *Pentanthera*, based on web information that has been pointed out as being outdated.

Previous studies (Jones et al. 2007, Zhou et al. 2008) indicated that *R. atlanticum, R. austrinum, R. calendulaceum, R. colemanii* and *R. luteum* in *rhododendron* section *Pentanthera* are all in a tetraploid clade, while all the

other deciduous azalea species in section Pentanthera were diploids.

John and Sally Perkins have indicated to me that occasionally individual cultivars of a species will test at different ploidy levels. This is normally an indication of misidentification or possibly introgression with other species. *Rhododendron occidentale* 'Double Dig Twelve' is the only well documented instance of a tetraploid individual appearing in an otherwise naturally occurring diploid population. Triploids do occur in natural contact zones between diploid and tetraploid deciduous azalea species.

On another matter, Don Hyatt pointed out to me that the azalea distribution maps in the above azalea article were created by George McLellan, who hand colored the maps using Kron's herbarium data and took photos to use in a presentation given at an ARS Eastern Regional in Williamsburg in 1999. Don scanned all the slides from the talk, but did not attempt to say which ones came from which photographer since there were many contributors from people in his Species Study Group. That presentation became the foundation for his web pages.

Reference:

Jamieson, G. 2018. The deciduous azaleas of Rhododendron subgenus Hymenanthes. *J. American Rhodo. Soc*. 72: 155-163.

Jones, J.R., T.G. Ranney, N.P. Lynch, and S.L. Krebs. 2007. Ploidy levels and relative genome sizes of diverse species, hybrids and cultivars of Rhododendron. *J. American Rhodo. Soc*. 61(4): 220-227.

Zhou, W., T. Gibbons, L. Goetsch, B. Hall, T. Ranney and R. Miller. 2008. *Rhododendron colemanii*: A New Species of Deciduous Azalea from the Coastal Plain of Alabama and Georgia. *J. American Rhodo. Soc*. 62: 72-78.

Errata

In JARS 72-3, p. 114 and 136, Jens Hansen's name was incorrectly stated as Hans Jensen and Hans Jenson, respectively! This is totally my error as Editor, and is perhaps the result of too much fine Scottish whiskey, Jens' favourite drink, as I reminisced about the great job Jens did in planning and conducting the Danish/Swedish pretour at the 2018 ARS convention in Germany. Thanks again Jens for all your hard work, and my apology for the errors!

Errata: Missing Images accidentally not included.

The following 2 photos were not displayed in the Online Summer 2018 (72:3) issue:

From the article "Benefits of Designing Native Azalea Collections" by Michael Bamford and Pim Rust.

'My Mary'. Photo by Joe Coleman.

'Siskin'. Photo by Chris Wetmore.