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American Rhododendron Society
A GUIDE TO THE 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
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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 Executive Director 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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ARS Digital

Website: http://www.rhododendron.org

Office: http://www.arsoffice.org

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

***JARS* back issues**: http://scholar.lib.vt.edu/ejournals/JARS [to Vol. 52, 1998]

Archives: http://www.lib.virginia.edu/small

ARSStore: http://www.ARSStore.org

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

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

Rhododendron & Azalea News: http://www.rhododendron.org/news/newsindex.htm

From the President

Bob MacIntyre
Bandon, Oregon

Is the ARS Alive and Well?

Alive, yes, but well, I'm not sure. Our membership has greatly declined over the past 10-15 years. With declining membership, we have a reduced income coming at a time of rising operational costs. This is a bad combination, as we do not have a large enough membership to financially support our current level of activities.

The one constant of any group is change. With change comes new leadership, new ideas and new activities. One problem with change and new direction is trying to find funds to pay for them, and the challenge now is to get these new funds. Since childhood each of us has learned that change is going to happen. We are all growing older and changing. We meet new people, participate in new events, and maybe move to different places, each of which brings new opportunities to our lives. The important thing with change is how we respond to that change. Do we accept it as the normal process of things, or do we hope it won't affect us.

Meeting and accepting change can be invigorating and very stimulating. It can be an opportunity to learn new ways, new ideas and meet new people, many of whom may become new friends.

All of our members are volunteers. Without the efforts of our volunteers we would cease to exist. Every member who has volunteered to serve our chapters by taking positions on committees, as chapter officers and as members who serve our districts and the ARS Board and its officers, contributes to the continuation of this organization.

Our members have a common interest and/or desire to learn more about the genus *Rhododendron*. Our membership is diverse in age (although this is getting less so), culture, level of education and geopolitical location.

Many members are currently involved in the organization of the ARS, and some of these members are ready to pass the baton on to new people with new ideas. This is true at both the chapter level and up to the ARS Board of Directors.

I would like to ask members to step up and become the new leaders to carry our organization forward. Take the challenge—become a more active participant and work towards increasing our membership. Ask yourselves "How can I as an individual member help the ARS move forward."

I would like to open this up to all ARS members who may have an idea or suggestion here. Specifically, your thoughts re the following questions are welcome:

1. How might the ARS get more funding for operations, and can members with experience in fund-raising please consider assisting here?
2. What successes have individual chapters had in recently increasing their memberships?

The ARS is presently in a position where the only means to increase funding is to increase membership. In the past, increasing dues has shown to be self-defeating, as it has resulted in fewer memberships! Purchasing items through our ARS Amazon store is adding to our income, but not enough to make up the deficit. And speaking of volunteers who step up, let's give a BIG THANK YOU to those chapters who sponsor conferences. This year District 1 is organizing a conference in May in Sidney, BC, to celebrate the 70th anniversary of the ARS. I'm looking forward to attending a wonderful gathering with a great group of people and enjoying every minute of the weekend. I hope to see you in Sidney, as its guaranteed to be a special convention!

From the Editor

Glen Jamieson
Parksville, BC
Canada

It is mid-February when I am writing this editorial, and the weather across North America is crazy! We in the Pacific Northwest have been experiencing one of the warmest winters ever, with above average temperatures for the past two months. All the coastal ski areas are closed because of a lack of snow, daffodils and early flowering plums are now in bloom, and a number of early rhodo species and hybrids are in full flower! East of the Rockies the situation is the opposite, with extreme cold and heavy snow in many places and many new weather records being set. Today, Miami experienced a low of 6 C (43 F), the same as we had on Vancouver Island, Canada! For gardeners in these latter areas, the coming of spring may be delayed and some plants will no doubt be harmed, if not indeed killed. It will be interesting to see how the spring and summer now unfold, as western coastal areas may have greater summer drought problems because of a reduced snow pack and less runoff, while in eastern areas, the overall forecast is that severe weather will be greater when compared to the past three years, as more widespread warm air will prompt unstable conditions (http://www.accuweather.com/en/weather-news/accuweather-spring-forecast-2015/41636471). Let's all hope that neither forecast comes true!

With respect to *JARS*, I would welcome articles or notes from ARS members that are experiencing exceptional weather, either too warm, too cold, too dry or with too much snow, describing how your gardens fared and what you may have done to protect your plants. Such insight might prove beneficial to others, and with more and more extreme weather projected over the next decades, it seems timely. Of course, I always welcome any contributions from other members on any topic they would like to discuss, and in particular would welcome articles from members outside of North America (Europe, New Zealand, etc.), both describing your gardens and the rhodos that you successfully grow in them.

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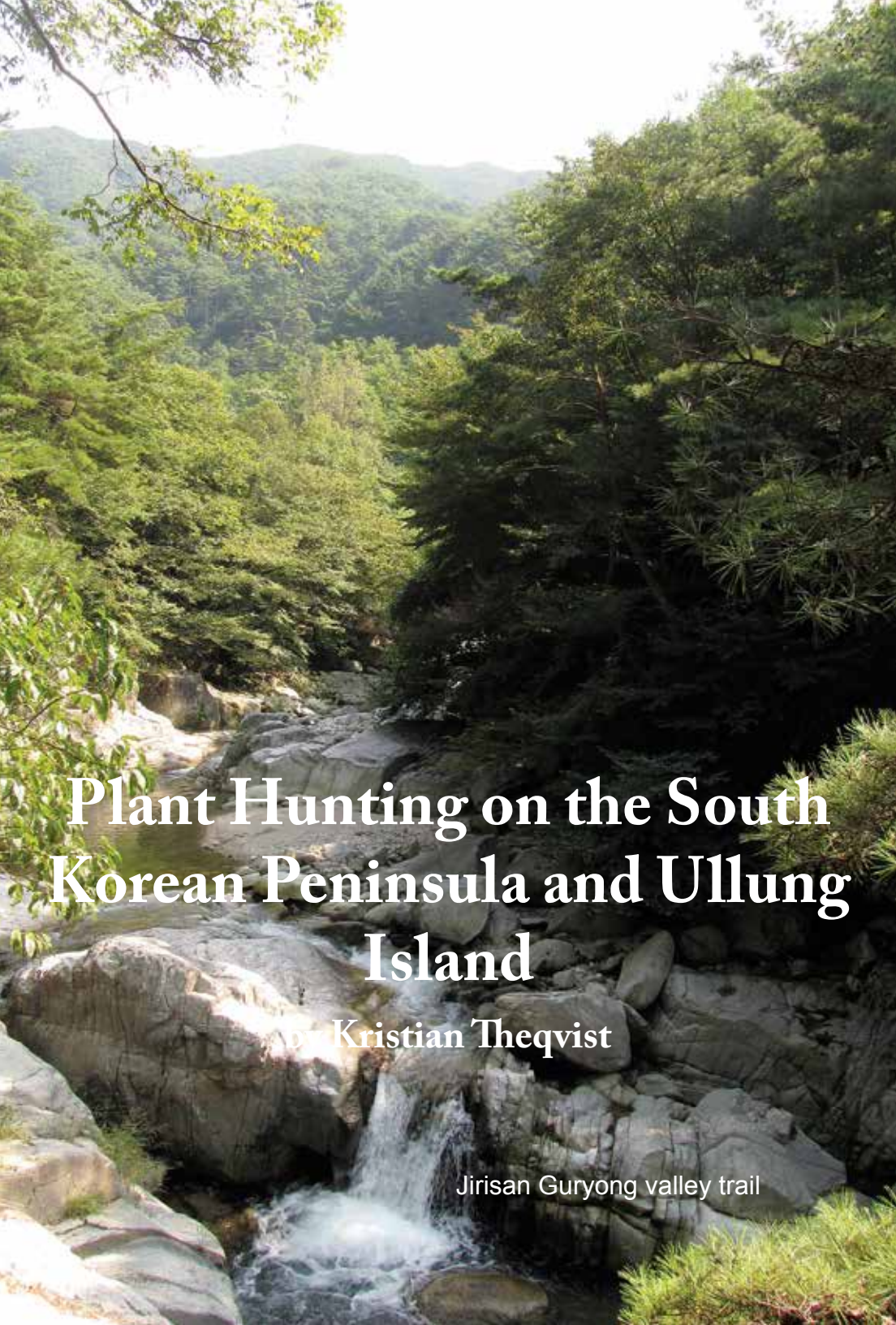

Plant Hunting on the South Korean Peninsula and Ullung Island

by Kristian Theqvist

Jirisan Guryong valley trail

Kristian Theqvist
Turku, Finland

Thirty-five members of the the Finnish Dendrological Society explored mainland South Korea and Ullung Island (Fig. 1) in September 2013, with Professor Kunso Kim from the Morton Arboretum, Lisle, IL (now residing in South Korea). Our objective was to explore the mountain flora in different parts of the country, with particular interest in *Rhododendron* species. Fifteen participants were members of the Finnish Rhododendron Society, a section of the Finnish Dendrological Society, and

Fig. 1. Map of South Korea. (A) Namsan Park, Seoul. (B) Korea National Arboretum. (C) Chollipo Arboretum. (D) Hanok Village, Jeonju. (E) Nogodan, Jiri-san. (F) Busan. (G) Pohang, ferry to Ullung. (H) Dodong, Ullung Island. (I) Mukho, ferry from Ullung. (J) Hangye-ryeong, Seorak-san.

five were also members of the Finnish Chapter of the ARS (Kristian Theqvist, Osmo Jussila, Jaakko Saarinen, Jussi Lähteenmäki and Kari Venho).

This article focuses on the rhododendrons and azaleas that we saw during our explorations. Jaakko Saarinen and Henry Väre have published an extensive three part article series (Saarinen and Väre 2013, 2014a, b) covering the area's dendroflora in *Sorbifolia*, the Journal of the Finnish Dendrological Society.

We arrived in Seoul, the capital of South Korea, on September 6, 2013, after a long direct flight from Finland. The first day was easy sightseeing, adjusting ourselves to the time zone change, and visiting the famous Namsan Tower, also known as the Seoul Tower, a communication and observation tower located on Namsan Mountain in central Seoul. It is the highest point in Seoul and the view over the city is spectacular. We got our first glimpse of native flora when we walked up the hill to the Tower, as along the roadside were trees (*Aesculus turbinata*, *Quercus mongolica*, *Acer palmatum* and *A. pseudosieboldianum*) but no rhododendrons.

Korea National Arboretum

The next day we travelled by bus to northeast of Seoul to the Korea National Arboretum (KNA), located in Gwangneung forest (also transliterated as Kwangnung) (B, Fig. 1). The arboretum is not very old, being established only in 1987 as the Gwangneung Arboretum before becoming in 1999 the Korea National Arboretum. However, the place has a long history as a royal forest, since from 1468 it has surrounded the mausoleum of King Sejo of the Chosun dynasty to minimize human disturbance. The arboretum covers an area of 1157 ha (2859 acres) and contains 15 specialized plant gardens and a forest museum.

The collection of plants was vast and you could easily spend a whole day in the arboretum exploring the native plants of South Korea. However, with regard to rhododendrons, the arboretum was insignificant. On a newly established area were planted 20 to 30 common rhododendron hybrids, and it seemed strange that 'Nova Zembla' and other similar western hybrids were planted in a Korean National Arboretum. The young rhododendrons appeared stressed, with leaves rolled because of too much heat and only leaves from the current year's growth alive.

About ten small *Rhododendron brachycarpum* plants had recently been planted in sheltered shade. The plants were dense with healthy looking leaves, but I noticed that the variation in leaf shape was surprisingly large, with some plants having wide and strongly cordate leaves. I wonder whether the large variation was within a seed batch that came from wild or could the plants have originated from a collection with possibile open-pollination. Our guide did not know the origin of the plants.

Chollipo Arboretum

The Chollipo Arboretum (C, Fig. 1) is the great achievement of a single man. The

founder, Carl Ferris Miller (1921–2002), was an American-born South Korean banker and arborist. In 1962 he bought a barren plot of land near the fishing village of Chollipo in Taean Peninsula on the west coast of South Korea. In 1970 he moved from Seoul to his seaside retreat, began planting trees and other plants, and ultimately created a world-class arboretum. Today the arboretum has a collection of more than 7000 different trees and plants that Miller spent 40 years collecting, growing and cultivating. On the 56 ha (140 acres) arboretum, there are, for example, collections of 190 *Magnolia* and 400 *Ilex* taxa, along with many other interesting plants.

On the day of our visit, September 8, the weather was sweltering hot for us Finns, who are accustomed to colder climates, but shade from trees and a breeze from the sea gave occasional relief. The arboretum was magnificent, and I walked the trails several times around and enjoyed what I saw.

Rhododendrons had been planted on the northeast side of a small lake, but the hot climate did not seem to be suitable for rhododendrons. In general they looked miserable and some were even dead. *R. degronianum* subsp. *yakushimanum*, planted in 1978, was not that typical dense and roundish shrub but a four foot (1.2 m) suffering plant with only a few leaves. *R. fortunei* was a runty shrub, not a good sight, and the hybrid 'Fanfare' reminded me of "death fanfares," as the plant was leafless. However, in spite of these negative observations on rhododendrons, the Chollipo Arboretum was worth visiting because of the other plants.

The first days of our travel had not thus been very promising regarding rhododendrons, but the best was still ahead.

Jiri-san Mountains, Guryong Valley Trail

On the afternoon of our fifth day we made our first trek in the Jiri-san Mountains (E, Fig. 1). The mountains are in the southern part of South Korea and the highest peak is at 1915 meters (6283 ft). We started at about 300 m (984 ft) and trekked on a trail in the Guryong Valley following a stream up to about 400 m (1312 ft). The diversity of tree species was bewildering. *Magnolia sieboldii* was growing very commonly on the slopes of the mountain, and we identified many interesting species, such as *Quercus aliena*, *Q. mongolica*, *Acer pseudosieboldianum*, *Fraxinus sieboldii*, *Styrax japonica*, *Stewartia koreana*, *Corylopsis coreana* and *Cornus controversa*.

I also observed on the side of the trail on the rocky slope a familiar looking plant. Clearly it was an azalea, and evergreen! But what was it? I tried to remember what evergreen azaleas grew in South Korea and then Kunso Kim helped me by telling me it was *Rhododendron yedoense* var. *poukhanense* (Fig. 2). I am growing it in Finland and to find it here in the wild in South Korea was a fine experience. I later found another specimen of this beautiful, quite hardy azalea.

A bit farther along the trail we saw the first *R. schlippenbachii*. We could not miss the peculiar obovate leaves, a very typical characteristic of this magnificent azalea that

Fig. 2. *Rhododendron yedoense* var. *poukhanense* in the Guryong Valley, the Jiri-san Mountains. Photo by Kristian Theqvist.

is hardy in Finland. *R. schlippenbachii* grew everywhere, even as several meter (yard) high brushes or small trees. One of us saw *R. mucronulatum,* but I personally did not. However, I did see this lepidote the next day on our trek to higher elevations.

Our first day of trekking in the mountains was a good start, as the weather was humid and warm and walking on the rocky trails up and down at a good pace for several hours was quite an exertion for many of us. Before turning around and returning to tour bus, a few of us enjoyed taking a cold dip in the river.

Jiri-san Mountains, Nogodan Peak 1507 m (4944 ft)

Our target the next day was to trek up to Nogodan Peak in the Jiri-san Mountains. The bus took us to 1000 m (3281 ft) where we started our walk on wide paths in good condition. This trek seemed to be popular among Koreans and we saw even a group of school girls walking at a lower elevation. Closer to the mountain top, there were less trekkers as the trail became steeper.

Along the way up we identified several trees and brushes. *Magnolia sieboldii* was common, having large leaves and growing as large bushes at lower elevations. The most common of the larger trees were *Quercus mongolica* and *Cornus controversa*, the latter bearing abundant black fruit. Other species we saw were *Fraxinus rhynchophylla*, *F.*

Fig. 3. Kristian Theqvist among *R. schlippenbachii* azaleas close to the Nogodan peak in the Jiri-san Mountains, 1480 m (4856 ft). Photo Kristian Theqvist, taken by Kunso Kim.

sieboldii, *F. chiisanensis*, *Lindera obtusiloba*, *Stewartia koreana*, and *Symplocos paniculata*. As we walked higher, the trees got smaller and we saw *Acer pseudosieboldianum*, *Salix hallaisanensis*, *Sorbus commixta* and *Pinus koraiensis*.

R. schlippenbachii was abundant on the slopes and became smaller with increasing altitude. Above 1450 m (4757 ft), there were no more trees and the landscape was largely just *R. schlippenbachii* (Fig. 3), growing as dense and roundish one meter (three ft) high brushes.

Close to the Nogodan Peak, Kunso Kim pointed out a small leaved brush and said it was "ciliatum." I wondered what that could be as I had never heard of that species. To me it looked like a lepidote and then Kunso more specifically stated that it was *R. mucronulatum* var. *ciliatum* (Fig. 4). This plant is distinguished from other *R. mucronulatum* by the long hairs on the edges of its small leaves (Fig. 11). This lepidote species grew commonly among *R. schlippenbachii* to the top of Nogodan.

I had earlier at 1000 m (3281 ft) taken a photo of a *Rhododendron* bush and in a rush marked it as an azalea because the leaves were covered densely with hairs. I thought it might be *R. yedoense* var. *poukhanense*! However, the wide shape of leaves did not match and Jaakko Saarinen from the Arboretum Mustila later told me that it must be

Fig. 4. *R. mucronulatum* var. *ciliatum* close to the Nogodan peak in the Jiri-san Mountains, 1470 m (4823 ft). Photo by Kristian Theqvist.

R. mucronulatum. Sure, that was it, but a lot larger than the bushes at a higher altitude. The *R. mucronulatum* plants on Jiri-san and the ones I later saw on Seorak-san looked quite different from plants that I have gotten from various locations in East Russia.

Ullung Island

The most intriguing destination on our visit to South Korea was definitely the remote Ullung Island (also known as Ulleung-Do or Dagelet or Takeshima), located 120 km (75 miles) east of the Korean Peninsula in the East Sea (H, Fig 1; Fig. 6). It takes three to four hours in good weather to get to the island by boat from Pohang harbor, and if it is stormy the boats may stay in harbor for several days. The weather was perfect and only in the morning on the day of departure from the island was it windy, but in the afternoon we got safely back to the mainland.

Ullung Island is volcanic in origin and has an unique ecosystem, isolated from the mainland Korea and from Japan. The isolation has allowed anagenetic evolution [**Ed. Note:** in contrast to adaptive radiation, the classical model of evolution of closely related species each with strikingly different morphological and ecological features and with low levels of genetic divergence, an alternative (anagenetic) model of evolution is

Fig. 5. Trekking on the ridge towards the Seonginbong Peak on Ullung Island. Photo by Kristian Theqvist.

Fig. 6. Map of Ullung Island. (A) Dodong harbor, Ullung. (B) Daea Ullung Resort Hotel. (C) Seonginbong peak. (D) Nari-Dong village. (E) Taeha-ryong.

Fig. 7. *Sorbus commixta* on Ullung Island. Photo by Kristian Theqvist.

where a single island endemic evolves from a progenitor and slowly builds up genetic variation through time (Stuessy et al. 2006).] of plant species to occur. There are about 40 endemic taxa on the island differing in variable degrees from their relatives on mainland Korea or Japan. Many of the species are surprisingly hardy, much hardier than you would expect from the climate on Ullung today. This could be because the climate has been a lot colder in the past or because some plants may have come the island during ice ages and the species still have good cold hardiness in their genes. Because of this, we can grow in Finland several tree species that came from Ullung Island.

Endemic tree species include *Acer okamotoanum* (*A. pictum* subsp. *okamotoanum*), *A. pseudosieboldianum* var. *takeshimense*, *Fagus multinervis*, *Tilia insularis* and *Phellodendron insulare*. The most interesting ones to me were *Sorbus commixta* and *Rhododendron brachycarpum* Ullung form.

S. commixta grows very commonly on the island and it differs from how the species is normally described, having larger leaflets, longer growth buds and larger, often pear- or teardrop-shaped fruits (Fig. 7). Tor Nitzelius from Sweden visited Ullung in 1976, probably the first botanist from the western world to visit Ullung since E.H. Wilson and T. Nakai travelled to Ullung in 1917. Tor Nitzelius brought seed from *S. commixta*

to Sweden, chose one of the seedlings and named it *S.* 'Dodong'; Dodong is the main village and harbor on the island. *S.* 'Dodong' (also known by its trade name OLYMPIC FLAME) is very popular in Scandinavia and we can grow it in Finland even in a climate zone corresponding to USDA Zone 4a.

R. brachycarpum did not seem to be very common on the island as only some of us spotted the species on a steep mountain slope (Fig. 12), too difficult to reach. However, we saw in Nari-dong village a handsome potted *R. brachycarpum*, and at Dodong harbor small seedlings could be bought from a tiny shop. The Ullung form of *R. brachycarpum* has markedly convex leaves (as on *R. degronianum* subsp. *yakushimanum*), leaves are nearly cordate and veins are sunken, and there is thin light brown indumentum on the underside of the leaves. The growth starts early in the spring. On the island there is no fear of spring frosts that could damage the early growth and flowering is rather late; buds open rose pink and change to white flowers.

On the evening of the first day we hiked on good paths along shore cliffs from Dodong harbor towards the northeast to the Haengnam Lighthouse. We were pleased to see an interesting variety of plant species, such as *Elaeagnus macrophylla*, *Euonymus japonicus*, *Lonicera japonica*, *Machilus thunbergii* and *Neolitsea sericea*. There were not that many conifers, but on rugged terrain grew several handsome *Juniperus chinense* and farther up in the forest we saw *Pinus thunbergii* trees. Further along the path we saw *Zanthoxylum ailanthoides* and *Acer pseudosieboldianum* var. *takeshimense*. The path was easy to walk on but there was some danger of rocks falling from above. When we walked back, we noticed rocks had fallen on the path since we had earlier passed by.

Seonginbong, 984 m (3228 ft), Ullung

The target on the next day was to trek to the 984 m (3228 ft) high Seonginbong (C, Fig. 6) and find as many species as possible. We divided into two groups, in the first group were the ones with good hiking stamina and in the second group were the ones that wanted to take it easier. The first group trekked on paths from the south coast of the island up to the highest peak and then descended down on the north side of the island to the crater (or caldera) of the volcano and to Nari-dong village. This was a long trek upwards, but very rewarding and once on top, it was less demanding to descend the steep stairs on the northern side of the mountain. The second group came by small bus to Nari-dong village and started their trek there up the mountain. This latter route was at the beginning an easy walk on a wide forest road but the climb soon became very steep on stairs and was quite exhausting. A rope handrail helped in dragging oneself up the stairs. Seven persons from the second group reached the peak an hour earlier than the first group and were possibly the first Finns ever to reach Seonginbong Peak.

I was with the first group and we started our walk from the hotel up on winding roads until after half an hour, the road ended and we saw a signpost "Seonginbong Climbing." The path in the woods was well marked and quite easy to trek (Fig. 5).

It took almost four hours of trekking to reach the peak but we were not in any hurry as we wanted to have stops along the way to see plants. And we saw many interesting ones, both on the way up and more when descending down to the crater on the north side of the mountain. *Fagus multinervis* and *Acer okamotoanum* seemed to be the most common trees on the slopes, and the red fruit of *Sorbus commixta* could be seen on the ground. Less abundant were trees like *Prunus takesimense*, *Alnus maximowiczii*, *Cornus controversa* and *Tilia insularis*. We saw alongside the trail climbers such as *Ampelopsis brevipedunculata*, *Hedera rhombea*, *Hydrangea anomala* subsp. *petiolaris* and *Schizophragma hydrangeoides*. The ground was covered in many places by the fern *Rumohra standishii*, and bamboo *Sasa kurilensis* was common closer to the top. It was a delight to find the endemic *Arisaema takesimense* with large red fruit cones; some of these plants had variegated leaves. Other plants covering the ground were the endemic *Hepatica maxima* with large leaves, *Disporum sessile* with blue fruits and the endemic *Lilium hansonii* with large seed pods.

It took four hours to get down to Nari-dong village and there we were delighted to find a local bar where we got cold Korean beer! We were pretty exhausted after trekking the whole day, but the day fulfilled our expectations. I would like to do it again some time! I personally missed seeing *R. brachycarpum* but as I mentioned previously, some of us did close to the place where I had tried to locate them. That annoyed me a bit but at least I could later see photos and as a small comfort, I spotted a potted *R. brachycarpum* outside the bar at Nari-dong.

Taeha-ryong, Ullung

On our third and last day on Ullung Island, we drove by bus along the coast southwest to Taeha-ryong (E, Fig. 6) where we started to walk on a winding road from 300 m (984 ft) up to 500 m (1640 ft). The objective was to look for *Tsuga sieboldii* and *Pinus parviflora* trees. We did find them and also other interesting plants, such as *Celtis sinensis*, the tall growing bamboo *Phyllostachys bambusoides*, *Camellia japonica*, *Actinidia arguta* and several other plants that we had seen the day before. Later, the weather started to get foggy and rainy, and we felt it best to turn back and then drive to the harbor, to wait anxiously and see whether the weather would permit our boat to leave. Luckily, the wind calmed and after some hours we were on mainland in Mukho. Our bus was waiting for us and we drove north towards the Seorak-san Mountains.

Seorak-san Mountains

The Seorak-san Mountains (J, Fig. 1) are located in the northeast of South Korea close to the North Korean border and is the coldest region in South Korea, corresponding maybe to USDA Zone 5. The highest peak reaches 1708 m (5604 ft) but our time was limited and we could not get to the top during this visit. However, we were satisfied to reach 1300 m (4265 ft) during an afternoon trek.

Gweongeum-seong in the Seorak-san Mountains

In the morning we drove first from our hotel to Gweongeum-seong, a popular tourist place for Koreans. A lot of buses were in the parking lot and the place was crowded with Koreans. We went up the mountain by a cable car and then walked some minutes to enjoy the magnificent views of surrounding mountains. Along the short path you could see a surprisingly large number of species, such as *Acer pseudosieboldianum*, *A. tschonoskii* subsp. *koreanum*, *A. ukurunduense*, *Fraxinus rhynchophylla*, *Betula chinensis*, *Carpinus cordata*, *Kalopanax septemlobus*, *Lindera obtusiloba*, *Magnolia sieboldii*, *Sorbus alnifolia*, *Juniperus sibirica*, *Pinus densiflora* and *P. koraiensis*, and to our delight, *R. schlippenbachii* and *R. mucronulatum*. Despite the many species we saw, I would rather have trekked up the mountain than to use a cable car in a tourist attraction.

Seorak-san, trekking up to 1300 m (4265 ft)

From Gweongeum-seong we drove to the Hangye-ryeong Pass at 1000 m (3281 ft), where we started our trek up Seorak-san Mountain. The place was about 6 km (3.7 miles) southwest from the highest peak Daecheongbong, at 1708 m (5604 ft). We had been warned that the terrain was very difficult and the trails were not good. That was true; the trails were slippery, covered with large stones and occasionally you needed to take hold of tree branches or roots on the ground (Fig. 9). The trek was clearly more difficult than previous treks and we had agreed that everyone should go at their own pace but return at a set time.

Most of us reached the mountain peak at 1300 m (4265 ft) and some continued a bit further, descending on the other side of the peak to a valley. Kunso Kim, Stefan Knopman and I continued even further and we trekked up towards a higher mountain ridge. However, the time limit struck when we again reached 1300 m (4265 ft) and regretfully we had to turn back. Kunso Kim told me that not far away from where we turned grew many *R. brachycarpum* subsp. *tigerstedtii* (now included in subsp. *brachycarpum*) and I was a bit disappointed not to see them. However, some of us saw this super hardy rhododendron (Fig. 8) on a steep slope of the previous peak at 1300 m (4265 ft), and a member of our group even daringly descended the slope on his knees, keeping hold of branches and roots so as not to fall, just to be able to touch this rhododendron! Luckily he was able to climb back up and we did not lose him. There was an almost straight drop down close to the trail and I had difficulty even peeking over the edge of the cliff.

The vegetation on Seorak-san was amazing, like a dream for us. *Magnolia sieboldii* was very common, and so were *R. schlippenbachii* and *R. mucronulatum* var. *ciliatum* (Fig. 10). I found one plant flowering, but with only one flower, but anyway an experience to see it in the wild.

Other trees not yet mentioned that we saw on Seorak-san were *Acer pictum* subsp. *mono*, *Betula costata*, *B. ermanii*, *Cornus controversa*, *Quercus mongolica*, *Syringa reticu-*

lata subsp. *amurensis* and *Tilia amurensis* subsp. *taquetii*; and conifers *Abies nephrolepis*, *Pinus koraiensis*, *Taxus caespitosa* and *Thuja koraiensis*. Smaller bushes were *Aralia elata*, *Euonymus macropterus* with hanging red fruits, *Ilex macropoda* with red berries, *Rhamnus davurica*, *Stephandra incisa*, *Weigela* sp., *Symplocos paniculata*, *Tripterygium regelii*, *Vaccinium hirtum* var. *koreanum* with red berries and *Viburnum dilatatum*. These are in no way complete lists and are only listed to give readers an idea on the dendroflora growing on Seorak-san Mountain.

Fig. 8. *R. brachycarpum* subsp. *tigerstedtii* (now included in subsp. *brachycarpum*), *R. schlippenbachii, R. mucronulatum* var. *ciliatum, Abies nephrolepis* and *Thuja koraiensis*, all caught in one photo in the Seorak-san Mountains at 1300 m (4265 ft). Photo by Henry Väre.

Back to Seoul - afterthoughts

After a night's rest in a hotel, we drove straight back to Seoul, had a good time in a large bookstore where we bought a number of Korean books on plants. We wanted to learn more about what we had seen in the mountains and what we had missed. After having some time for shopping in Seoul, we flew back to Finland with good memories and a lot of photos.

What *Rhododendron* species did we not see? We could have seen *R. aureum* on the highest peaks in Seorak-san Mountain, where it should grow. The white flowered *R. micranthum* is a rare lepidote in the Worak-

Fig. 9. Kunso Kim and Stefan Knopman on a trail in the Seorak-san Mountains. Photo by Kristian Theqvist.

Fig. 10. *R. mucronulatum* var. *ciliatum* growing among *Abies nephrolepis* and *Thuja koraiensis* at 1300 m (4265 ft) in the Seorak-san Mountains. Photo Kristian Theqvist, taken by Kunso Kim.

Fig. 11. *R. mucronulatum* var. *ciliatum* in the Jiri-san Mountains, 1000 m (3280 ft). Note the hairs on the leaves. Photo by Kristian Theqvist.

san National Park and from there towards the east coast. We could have seen the evergreen *R. tschonoskii* azalea in the Jiri-san Mountains at around 1400 m (4593 ft). I tried to find it but failed. To find *R. weyrichii,* we would have needed to travel to Jeju Island.

Fig. 12. *R. brachycarpum* Ullung form on a mountain slope on Ullung Island. Photo by Stefan Knopman.

Our visit to South Korea was memorable, physically quite exhausting but worth every pain. It would be possible to write a book about everything we saw and encountered. The most memorable for me were the unique dendroflora on Ullung Island, the *R. schlippenbachii* and *R. mucronulatum* var. *ciliatum* bushes that grew above the tree line at Jiri-san and the physically demanding trek on the trails of Seorak-san enjoying the scenery and the diverse nature. I would love to travel again to South Korea, possibly with a smaller group, and with more time to explore.

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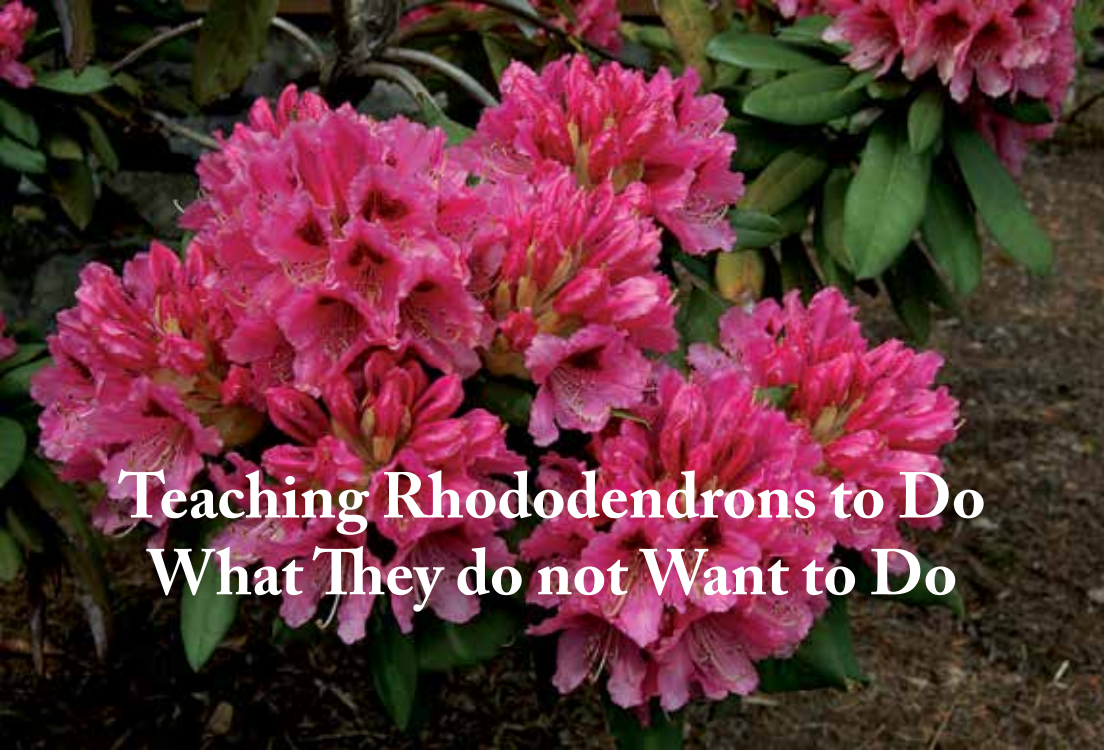

Teaching Rhododendrons to Do What They do not Want to Do

Fig. 1. 'Chevalier Félix de Sauvage'.

Irving G. Snyder, Jr.
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Photos by the author

I always thought it would be nice to have a couple of rhododendrons standardized on top of a trunk at either side of the entrance to my garden. Ideally they would be shaped like a palm tree, and they would be topped by gorgeous blooms each spring. I had a number of starts with 'Chevalier Félix de Sauvage', which is a robust, hardy hybrid with coral rose trusses with a splash of dark red coral in the center of each flower (Fig.1). This is a tried and true hybrid that has been around since it was hybridized by Mr. Sauvage about 1870. The only problem is it is a bushy rhododendron that likes to grow out as well as up.

I started with three year old plants and cut off all the growth leaders except the most vigorous leader in the center of the plant. The plant soon objected and started putting

Fig. 2. After an initial pruning all kinds of growth resulted.

forth all kinds of new growth (Fig. 2). Every branch on this plant was cut off except the leader growing up out of the middle of the plant. Every time new growth came out, it was cut off. The one remaining leader grew vigorously, sometimes as much as 12 to 18 inches (31-46 cm) in a year. This caused a problem, as this vigorous growth was very tender and could easily snap off in the wind (Fig. 3). This happened to one of my test plants, and I let this plant go back to its normal growth pattern. This plant is nice and bushy now and growing normally in my garden. With the other two plants, I carefully braced up the growth leader with several supports (Fig. 4 with author).

One of the pleasures of this experiment was the incredible truss that would form on the top of this leader. I was tempted to enter this truss in a flower show, but that would

Fig. 4. The growth leader braced with several supports.

Fig. 5. A resulting truss!

Fig. 6.The resulting standardized rhododendron!

have destroyed my experiment so I resisted (Fig. 5).

When the trunk of my plant reached eight feet (2.4 m), I allowed the plant to naturally branch out. There are six branches at the top of one of my plants and 13 branches extending out from the top of the other plant (Fig. 6). These flowers do provide standards for the entrance to the new rhododendron garden. It is still necessary to brace up the trunks, but I feel in time the trunks will enlarge to where the plant can support its top without external supports.

Irving G. Snyder, Jr. is a member of the Portland Chapter.

Fig. 1. Our Sakonnet Garden's azalea hedge is usually an unnoticed green, and the fun is seeing May's unexpected color transformation.

Twenty Favorite Rhodies in an Eastern Coastal Garden

John A. Gwynne
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Photos by the author

After decades of growing hundreds of rhodies, both species and hybrids, in a coastal Rhode Island garden, we like most of them but honestly count a "short list" of about twenty favorites. These finalists all share some subjective combination of being "good-doers" including a degree of winter-hardiness, having notably beautiful flowers (mostly in pure colors), and creating "garden presence." Our acre-sized (0.5 ha) garden is crowded with plants, so the arrival of a new one means that something else has to go. This "trading up" might be considered as a kind of enforced connoisseurship for the garden to get better and better. Usually the orphan is dragged out to the public road with a "take me" tag attached. Someone usually will give it a good home.

Our family garden, called Sakonnet Garden (www.sakonnetgarden.com), is located two miles (3.2 km) inland from the sea on a peninsula in coastal Rhode Island facing the Gulf-stream, usually considered Zone 7. Relatively balmy coastal growing conditions are not typical of the East but enable us to abandon sensible Eastern ironclads long ago. More sumptuous plants are possible. Decades ago winter minimum temperatures were circa -5° F (-21° C), but recently have been typically above 5° F (-15° C). However, the recent 2013-14 winter has been terribly tough, down to 1° F (-17° C) with cold for long periods, but so far, not a leveling factor. For the first time in years, Reemay-covered *Trachycarpus* palms fronds look unhappy, but most rhodies here seem okay. Wind, voles and heavy soil, not cold, have usually been our main challenges. A high solid fence, with evergreen hedgerows built to soften winter winds, is undoubtedly providing a more benign microclimate and it doubles as a deer excluder.

In the following list you will note a preference for collecting just a few types of rhodies: large flowered elepidote giants, a few species with handsome foliage or uniqueness, plus pure colored hybrids which we grow in color masses—reds, pinks, yellows, etc., that are grouped separately. Much effort goes into color combining and to working rhodies into a strong garden design which has many spaces, all separated by high stonewalls or hedges that differentiate colors and experiences. Our neighbor notes that we tend to plant many rhodies in "unusual" ways—trying to create high walls of color, or as overhead trees that drop flower petals on the moss below, or even sheared as tapestry hedges. For example, we like evergreen azaleas too, but think their "artificial" pure magentas, scarlets and whites visually outcompete the subtle milky tones of most elepidotes if interplanted. As clipped azaleas are a local tradition in foundation plantings ("boxwoods covered with red tablecloths"), we adapted the clipped vernacular to create a sheared hedge of azaleas, intertwining branches so individual plants are of less importance than the whole (Fig. 1).

For several decades our ARS Massachusetts Chapter's laudable "Plants for Members" program has enabled many of us to obtain rooted cuttings at modest prices. This wonderful volunteer program has enabled test growing of plants we never would have heard of, including rarely available Dexters, Wister, and Gable rhododendrons, along with many other obscure Eastern hybrids. Many of our "top 20" rhodos came

from this source, and these are: **'Babylon':** A rhody-indifferent local nurseryman cites 'Babylon' as a favorite plant. Progeny of some now long-gone amazing *R. praevernum* or *calophytum*, 'Babylon' is an old UK hybrid with amazing garden presence, so much better than its parents. Like a dignified grand dowager, this small tree has every branch covered with waxy, burgundy-centered pink flowers in early May while filling the zone around her with fragrance, a rare phenomenon. Exhausted by so much effort by blooming, 'Babylon' seems to take a year off in flowering to build up stamina for another heavy bloom year. It's well worth the wait!

***R. fortunei**:* The Chinese species *R. fortunei*, for which the subsection *Fortunea* is named, is a wonderful garden plant. Rhody guru David Leach (1961) in *Rhododendrons of the World* glowingly praises *R. fortunei*'s "tumbling cascade of color" but says most *R. fortunei* in gardens are the closely related *R. decorum*, or hybrids. We are growing several reputed *R. fortunei* (MacDonald-Walker form) supposedly from reliable sources, but true *R. fortunei* or not, they are all keepers. Ours want to be imposing big-trunked small trees, their branches sagging under masses of pearly pale pink trusses and their flowers so waxy that they can tolerate days of coastal drizzle without deflating. Some clones impart a strong whiff of clove, especially in the sun. The soft pink flowers look great dropping like confetti upon pink and brown flower spikes of Japanese ground-orchids (*Calanthe*), a posh combination.

I have particular fondness for the subsection *Fortunea's* sumptuous, heavy textured flowers, so different from New England's commonly seen ironclads with flowers handicapped by *R. catawbiense* genes—distinctive awkward blotches, thin petals, and tight trusses. To me in New England, *R. catawbiense* carries connotations of the rigid puritanism of my ancestors. Gardeners are supposed to be opinioned, right? Anyway, there are much better plants than ironclads, including various *Fortunea*. Out of curiosity, we have been collecting multiple species in the Subsection too, some being better then others.

Gable's Hardy *R. decorum:* For an unexplained reason, my spouse Mikel really likes a plant obtained as Gable's hardy *R. decorum*. Its identity is incorrect, but it grows well. It grows well in sun, annually covering itself with a highly fragrant froth. It is hardy enough, but when we planted it I wish we'd known that it really wants to be a huge sprawling two foot (0.6 m) tall groundcover! It does look super crawling over a low stonewall, so it makes this list.

'Dexter's Spice': This old hybrid from Cape Cod is an amazingly huge flowered, fragrant white hybrid, opening from pale pink buds. To date we've been unable to grow the tender highly reputed 'Loderi King George' from England, but I imagine (fantasize?) that this old Dexter hybrid from the 1930s breeding programs of Charles O. Dexter on Cape Cod, Massachusetts, is its hardier cousin. Usually cited as Dexter's "best white," "Spice's" massive waxy ultra-fragrant white flowers and red ribbons on unfurling buds must have had an amazing *R. fortunei*-on-steroids parent. Was Mr.

Fig. 2. The challenge was in assembling "the punchbowl's" rows of low, medium and tall rhodies to bloom all at once.

Dexter able to get some *R. griffithianum* or "Loderi" pollen? "Spice" is hard to find and not easy to establish but worth tracking down. It appears to have a weak, rambling root system, best not to move it.

Other *R. fortunei* that interest us are *R. fortunei* subsp. *discolor* (Houlstonii Group) with orangy new foliage and a beautifully foliaged, apparently hardy, *R. hemsleyanum* aff. collected by Dan Hinkley almost makes this favorites list too due to its luxurious dark shiny clean foliage. It is young and has yet to flower, so "favorite" status is premature.

Many, perhaps most Dexter and other early 20th century big flowered hybrids, inherit *R. fortunei* genes, including big, terrific flat faced flowers. Dozens and dozens of wonderful pinks are very worth growing (including 'Dexter's Brandy-green', 'Scintillation', etc.), but there are just so many that this list cops out in attempting to select between them. We grow most of them close planted in a circle nicknamed "the punchbowl" for an overall ice cream sundae effect (Fig. 2).

R. oreodoxa* var. *fargesii: In defiance of April's blasts and freezing nights, the happy raspberry flowers of *R. oreodoxa* var. *fargesii*, Rhododendron Species Botanic Garden (RSBG) form, manages to be the reliable rhody starting gun that launches spring in our garden. This small-leafed shrubby *R. fortunei* relative seems more reliable than its

slightly earlier *R. fortunei* cousins *R. sutchuenense* and *praevernum*, as in an exposed spot, the former's flower buds are not fully hardy for us.

'Naomi Stella Maris' and **'Exbury Naomi':** About 20 years ago we received some "Naomis" from the West Coast that didn't resemble descriptions of plants we coveted in Philips and Barber's (1979) *The Rothschild Rhododendrons*. They were certainly "Naomis"—oversized *R. fortunei* with 'Naomi's distinctive plump buds, huge flowers and a certain oval look to thick leaves, but our plants didn't quite match flower colors in this book. A letter to Lord Rothschild himself resulted in his kindly sending us named cuttings, of which 'Naomi Stella Maris' and 'Exbury Naomi' were our favorites. "Stella Maris" has big, wonderful, soft ivory-yellow, ultra waxy flowers with a lavender pinkish edge. "Exbury's" flowers were even larger, a pale pink. We unfortunately lost a tree that protected them with overhead shade, so they have been stressed both from exhaustion from over-flowering in the sun and lacewing bugs in dry Augusts. [**Note:** don't confuse

Fig. 3. 'Aladdin" salutes the Fourth of July with big pure pink bell-shaped flowers.

Fig. 4. Annual pruning keeps "*yakusimanums*" low and tight growing.

the azalea (*Stephanitis pyrioides*) and rhododendron (*S. rhododendri*) lacewing bug pests with the green and brown lacewings in the large family Chrysopidae, order Neuroptera, which are voracious beneficial insect predators, attacking most insects of suitable size, especially soft-bodied ones (aphids, caterpillars and other insect larvae and eggs).] They sure hit the top 20 list. We are replanting their cuttings in more shade.

'Aladdin': Why isn't every hard-core rhodophile growing this old British *R. auriculatum* cross? 'Aladdin's flowering every 4th of July surprises everyone here with its huge pure schapparelli-pink bells. The plant becomes huge, so give it plenty of space in a wind free location and light shade, as well as water in July when it has the bad luck to try to begin annual new growth after summer droughts begin. Its late growth seems tied to its July flowering (Fig. 3).

We may have "a future in the 19th century," but we love huge tree rhodies. Compact low growers have been in vogue (for good reason) for decades, but we have an out-of-fashion penchant for giant leaves and big growers that want to be trees. We imagine trekking in Nepal some day among 60' (18 m) walls of crimson or pink tree rhodies and exploring gnarled groves of immense mossy trunks, with unseen trusses overhead dropping red or yellow confetti on our path. So far our future giants are only a quarter of that height, but we manure them and they keep heading upward. And in the meantime the tree forms provide us with planting space beneath them for *Trillium*, *Arisaema*, Chinese mayapples (*Podophyllum*), and other woodland favorites that take a little shade.

R. degronianum* subsp. *yakusimanum: The adage that rhody collectors are "first baited in by flashy hybrids and evolve with time to species" is true for us too. We'll always love mountains of hybrid's colored froth, but "there is something about species" that appeals. Among them it is hard not to love a tight growing straight species *R. yakushimanum* (often referred to as a "yak"). Sometimes in the East, one sees a yellowish-leafed, scrawny unhappy yak in too much sun exposure, but if in good soil in bright shade, this mountain species really looks superb. Its glossy dark leaves, held for many years, are perfect foils for the silver bunny ears of new growth.

Mikel loves shaping plants, teasing that "there isn't a plant that can't be improved by the hand of man." He has worked out a pruning regimen that keeps our 30-year old yaks (mostly Exbury or FCC (First Class Certificate) forms) growing extra tight and low, even in light shade. He snips off all the first flush of silver growth as it is half unfurling, especially all terminals with just one growth bud. This hard cutting forces the plant to attempt another growth spurt for the season, but now with shorter stems and slightly smaller leaves. Maybe the unfortunate plant is tired for the second attempt or the weather drier but the result of this dwarfing is a beautiful dome. (Fig. 4, a 30-year-old plant only 18" (46 cm) tall). **Note:** Prune early, since if postponed too late in June/July, it may be too late and dry for the plant to produce a full flush of new growth. In any case, *never* let anyone cut it back below a ruff of green leaves as such hard pruning will kill that branch.

We have a good-sized old *R. bureauvii* and a *R. degronianum* ssp. *yakusimanum* × *R. bureavii* hybrid that also are getting hard-pruned to create dark and glossy foliaged domes and to keep them in bounds. Some say *R. bureavii's* rusty indumented leaf undersides are even better than a yak's buffy bottoms, but we like them all, maybe the yaks for their lowness. No fancy yak hybrid that we have grown ('Yaku Prince', 'Ken Janek', etc.) is remotely as good as the tight forms of the parent yak. We've not yet tried low 'Golfer' and *R. pachysanthum*, but a friend informs us these will be favorite domes too. If we had more space we would try planting many low *R. taliense* on low mounds in the dappled shade of pines to create an undulant landscape (next garden).

R. yuefengense: Plantlets that are only 3-4 years old may be too young for real love, but we have great hope for this recently described Chinese species to make the list. We obtained some from the Rhododendron Species Botanic Garden (RSBG) in Washington State, apparently closely related to *R. orbiculare* but seeming better. We love R. *yuefengense's* incredibly thick and rubbery round leaves reminiscent of some tropical *Ficus.* It seems to want to develop as a low spreading mound. Hopefully, it will stay dense foliaged, and not get thin centered.

***R. viscosum*:** We don't have room for many deciduous azaleas, but the swamp azalea that grows abundantly in damp woods nearby is a wonderful plant. In nature it is a subtle plant and is often overlooked as it rarely flowers in the woodland understory. In brighter garden conditions, it shows off elegant tiers of foliage and an amazing

clove scent on summer evenings, perfuming the zone around it. We now have some *R. quinquefolium* too and like its elegant red-rimmed foliage (more red in a sunny location) but these individuals are too small for trunks with character.

'Blaney's Blue': Similarly, we don't grow many lepidotes but can't resist some with nearly blue flowers. We have had good luck to date with blue clones of *R. augustinii* from the RSBG plant program, but its chest-high offspring 'Blaney's Blue' is a more impactful plant for us so far. I reserve the right to change my mind in 20 years if our *R. augustinii* are a mass of blue 15' (4.6 m) tall, but 'Blaney's Blue' gets the gold star between them so far. ARS member Bruce Feller agrees. This floriferous shrub with near-blue flowers and reddish stamens looks superb with *Pulmonaria,* having the same blue/pink combination. The color theorist would urge a mixing in chartreuse—greenish yellow *R. keiskei*, perhaps.

I am trying to include a purple elepidote or two on this list but none really stand out yet. *R. niveum* isn't hardy and its hardier progeny 'Whidbey Island' hasn't bloomed yet. 'Purple Spendour' has a wonderful dark purple color, but isn't really hardy enough and has small flowers. We probably have overlooked growing a wonderful hardy pure violet purple elepidote, but lets move on to our favorite reds.

Fig. 5. SW 281-M ("Postcard") is a wonderful Eastern hybrid with rich salmon-colored blooms.

Fig. 6. Plants of 'Golden Star' become flowering towers of greenish yellow.

'Taurus'/'Grace Seabrook': We have winnowed down reds to four we like best so far, having pure color without muddy purple tones or golden centers. 'Taurus' and 'Grace Seabrook' are apparently similar sister seedlings, blooming ten days apart fairly early in the season. Both bloom with a penetratingly pure red color juxtaposed against rich dark green foliage. Most of our early spring garden is filled with softer pinks and yellows but we'd not want to be without either of these classy plants.

'Vulcan's Flame': This plant blooms a burning scarlet. We planted it in mass in the center of our garden to create undulating domed masses of screaming orange red in early June. Like the former two reds, we recommend planting 'Vulcan's Flame' on the south or southwest of the viewer for their reds burn hottest when back-lit.

'Francesca': This local Rhode Island hybrid derived from Dexter seed is a wonderful dark cranberry red. Our favorite aspect of 'Francesca' happens when its flower buds are just opening almost synchronously to create a dark orb of burgundy buds, nearly black in color.

"Postcard": Hardy salmon flowered rhodies were hard to find in the Northeast. We have loved and lost quite a few candidates. One of our best good doers has flowers of a rich salmon tone and burgundy center (Fig. 5). Tags may have been lost plus identities confused but it came to us as SW 281-M from Swarthmore Arboretum and was called

"Dr. Wister" or 'John Wister', the latter name being a synonym of 'Janet Blair'. As we are not certain of its real name but were later given a postcard of it, we call it "Postcard." We wish we could get more.

Another salmon flower that we like a lot was called 'Evie Baalsrude'*, a strong pale salmon. We also just got a rooted cutting of 'Bea MacDonald' which is supposedly terrific. Bea herself was a lady of determination in the Massachusetts Chapter who was a fiend for yellows and oranges, so hopefully this is a good tribute to her. 'Old Copper' has beautiful soft salmon bells in June. Ours has great promise but ours will need to be well over head height to properly show off its bells.

***R. vernicosum* 18139 #1 'Mount Siga':** Mikel and I rate highly this handsome wide growing plant with peach-colored flowers emerging from salmon toned buds. It looks so fancy that one presumes it is a complex hybrid. Others have thought the same and grew out its selfed seeds to find them fairly uniform, so this is recognized as a selection of species *R. vernicosum*. Whatever its parentage, 'Mount Siga' is wonderful background for early orange tulips. Two near favorite (not perfectly leaf-hardy) oranges for us are 'Whitney's Tan'* with an amazing unicolored pale salmon color and 'September Song', which has proven to have the strongest orange flowers for us.

'Golden Star': Is the creation of a hardy yellow still the Eastern hybridizers' holy grail? We love our old plants of 'Golden Star' that form towers of chartreuse-yellow. When it was registered by Hardgrove on Long Island in the 1960s, it was considered the bright new generation that eclipsed the previous ivory 'Goldfort'. Now, 'Golden Star' may be superseded by brighter new yellows but these greenish yellows are able to carry their own, getting better with time as they climb upward (Fig. 6). 'Bud's Yellow' is also starting to make our favorites list, with a rounder truss than 'Golden Star' and subtle orange stigma.

'Kristie Lynn': This flashy new yellow hybridized by George Woodard at Long Island's renowned Phipps estate looks like a strong candidate for new hardy yellow. It has great dark foliage too, the result of a long-term determined breeding program that merits great credit. We attempt to love 'Hotei' with stronger banana yellow colors, but true to its reputation this hybrid is miffy. 'Hotei' usually blooms, but branches die back and the result is hardly a beautiful result.

'Belleringer II'*: We didn't expect to admire "Belleringers" as garden plants. A 'Belleringer II'* truss isn't much, a small ivory orb with yellow eye, but it is a handsome durable garden plant, covered with soft yellow flowers. Ours is 12' (3.7 m) tall and getting taller, a wonderful backdrop.

'Sakonnet Soufflé'*: We proudly grew this ivory-flowered hybrid from the ARS seed-exchange circa 1980, a cross between shiny foliaged Dexter hybrid 'Scintillation' and huge-leafed *R. macabeanum*. One best seedling is a small open tree with rugose textured rounded foliage one-third the scale of *R. macabeanum*, and with large soft yellow pineapple shaped flowers with dark red centers. We call it 'Sakonnet Soufflé'*. *R. ma-*

cabeanum parentage makes it a bit leggy, but some day we'd like to back cross it with *R. macabeanum* to attempt a version with larger, dinner plate sized leaves. Another date could be another elegant new Phipps hybrid by Long Islander George Woodard, a new cross of superhardy *R. brachycarpum* subsp. *brachycarpum* (formerly called *R. brachycarpum* subsp. *tigerstedii*) with *R. macabeanum.* It has paler flowers than 'Sakonnet Soufflé'* but amazingly silvered leaves (Fig. 7).

Fig. 7. Grown from a packet from the ARS seed exchange, 'Sakonnet Soufflé'* reveals its *R. macabeanum* parentage.

We are already over our twenty (not unexpected with too many beautiful plants). This is not a systematic list, revealing an unintended bias against many other undoubtedly super plants that unfortunately may not have been given as good a chance to grow in our garden, or are still too small to present themselves well. Hopefully our tale can be helpful to fellow members, as this list reflects a lot of weeding out.

In a decade this list may include hardier giant leafed *Falconera* and *Grandia* subsections plants that the RSBG has recently been tempting us with. We are experimenting with small new plants of alpine *R. macabeanum, praestans, hodgsonii* aff. *rex,* and *falconeri* subsp. *eximium* from the RSBG, growing them with winter shade. Some are okay for us, and the more tender look a little funky but seem alright after 1° F (-17° C) in January. The experiments, the happy surprises plus occasional tears and weeding outs certainly provide us with great satisfaction.

* = not registered.

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John Gwynne is a member of the Massachusetts chapter.

A Note on *Rhododendron mekongense* – A New Species Record from Sikkim Himalaya, India

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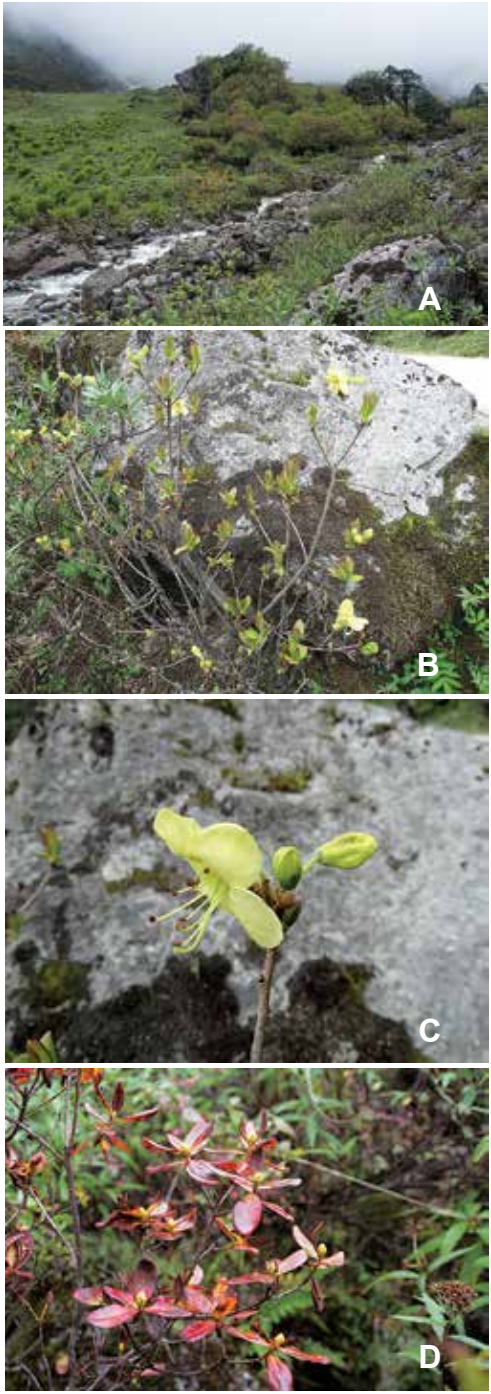
Introduction

Rhododendron has the greatest number of species in the family *Ericaceae*. The highest rhododendron diversity is found in the Northern Hemisphere along the southern Himalayas east into SW China, i.e., in Nepal, Bhutan, NE India, NE Burma, southeast Tibet, W Szechuan and NW Yunan. The total number of *Rhododendron* species worldwide is estimated to be approximately 1200 (Paul et al. 2005); China has the highest number of species (571) in the world, of which about 409 are endemic (www.eFloras.org).

India has in total 121 taxa (73 species, 22 subspecies, and 25 varieties) and three natural hybrids, with 98% (117 taxa) of these distributed in north-east India (Mao 2010). The eastern Indian Himalayan states have the most taxa: Arunachal Pradesh (106) has the highest number of taxa followed by Sikkim (41), Manipur and Nagaland (ten), Mizoram (four) and Meghalaya (three) (Mao 2010), and the western Himalayas has seven rhododendron species including the recently recognised *R. rawatii* (Rai and Adhikari 2012).



Sikkim and its Rhododendrons

Sikkim is well known for its rhododendron diversity and is an explorer's paradise. Historically, Sikkim rhododendrons were first rewcognised when J.D. Hooker, during his two years of extensive travel (1848-49) to Sikkim Himalaya, documented 45 rhododendron species (Sikkim and Darjeeling States together), of which 34 were new species (Hooker 1849). He was the first to introduce many Sikkim rhododendron species to European countries during the middle of the 19th century. Pradhan and Lachungpa (1990) provided key field characters for all the known rhododendron species from Sikkim and recently, Sastry and Hajra (2010) also described most of the species found in Sikkim.

Sikkim is a part of the Eastern Himalaya biodiversity hotspot and a large area in Sikkim is included in a protected area network

Fig. 1. *R. mekongense* var. *mekongense*: A. Habitat. Photo by Johan Nilson. B. Habitat. Photo by Sabita Dahal. C. Inflorescence. Photo by Sabita Dahal. D. Winter bud. Photo by Johan Nilson.

(PAN), with seven Sanctuaries and one National Park covering approximately 31% of its total geographical area (7096 km^2; 2740 mi^2) (Pradhan et al. 2013). Rhododendrons are found in all the protected areas, as they are uniformly distributed throughout Sikkim except in its southern district, which has only a few rhododendron species. Rhododendrons have been given special priority for conservation by the Government of Sikkim and it is the only place in the whole world to have two designated Sanctuaries exclusively for their *in situ* conservation, i.e., the Shingba Rhododendron Sanctuary (43 km^2; 16.6 mi^2) and the Barsey Rhododendron Sanctuary (104 km^2; 40.2 mi^2) in in the northern and western parts of Sikkim, respectively. *R. niveum* has acquired special conservation measure as this species has been declared as the State Tree of Sikkim.

Rhododendrons in Sikkim include 37 species, eleven subspecies, seven varieties and two natural hybrids, i.e., *R.* × *decipens* (*R. hodgsonii* × *R. falconeri*) and *R.* × *sikkimense (R. thomsonii* subsp. *thomsonii* × *R. arboreum*) (Table 1). *R. argipeplum* and *R. keysii* var. *unicolor* are included in the list of Sikkim (*www.eFloras.org*; Mao 2010; Sastry and Hajra 2010), but there is no documented collection of these species from any part of Sikkim to date. However, B.K. Pradhan believes he has seen *R. argipeplum* in the Shingba Rhododendron Sanctuary in northern Sikkim. *R. dalhousie* var. *tashii* is the only taxa that is endemic to Sikkim; earlier, *R.* × *sikkimense* was also considered to be endemic to the state but its recording from Arunachal Pradesh means its now simply endemic to north-east India. Pradhan and Lachungpa (1990) supported Hooker's recognition of *R. aeruginosum* but Chamberlain et al. (1996) consider it a subspecies of *R. campanulatum*.

***R. mekongense* – New Species Record from Sikkim**

During our recent field trip (May–June 2014) on a rapid biodiversity survey under Japan International Cooperation Agency (JICA), assisted by Sikkim Biodiversity Conservation and Forest Management Project in Lachung Valley (Shingba Rhododendron Sanctuary (SRS), Yumthang Valley up to Shiv Mandir) in northern Sikkim, we came across a rhododendron species inside the SRS (about 3300 m elevation) which was completely different from other species encountered and described earlier from Sikkim. A few individuals of a small shrub, barely exceeding one m (three feet) in height with yellow flowers, were observed growing with other rhododendron species along the roadside. Plants were found in flower bud formation or flowering phenophase. At first, we considered it to be *R. triflorum*, but it had a setose (hairy) pedicel and petiole. The inflorescence was 3-4 flowers but the corolla was campanulate as compared to funnelform-campanulate in the latter species, and the leaf shape and size were different. A feature comparison of this plant with *R. triflorum*, based on the literature, is in Table 2.

Table1.SikkimRhododendrons.

Species	Distribution	
	India	**World**
R. anthopogon subsp. *anthopogon*	Sikkim, Darjeeling, Arunachal Pradesh, Uttaranchal	Bhutan, China
R. arboreum subsp. *arboreum*	Kashmir to Sikkim	Bhutan, Nepal
R. arboreum subsp. *cinnamomeum* var. *cinnamomeum*	Sikkim, Darjeeling, Arunachal Pradesh	Nepal
R. arboreum subsp. *cinnamomeum* var. *roseum*	Sikkim, Darjeeling, Arunachal Pradesh	Bhutan, Nepal, China
R. argipeplum	Sikkim, Arunachal Pradesh	Bhutan, China
R. baileyi	Sikkim	Bhutan, China
R. barbatum	Sikkim, Darjeeling, Arunachal Pradesh, Uttaranchal	Bhutan, Nepal, China
R. camelliiflorum	Sikkim, Arunachal Pradesh	Bhutan, Nepal
R. campanuatum subsp. *aeruginosum*	Sikkim, Arunachal Pradesh	Bhutan
R. campanulatum subsp. *campanulatum*	Kashmir to Sikkim, Arunachal Pradesh	Bhutan, Nepal
R. campylocarpum subsp. *campylocarpum*	Sikkim, Arunachal Pradesh	Bhutan, Nepal, China
R. ciliatum	Sikkim, Arunachal Pradesh	Bhutan, Nepal, China
R. cinnabarinum subsp. *cinnabarinum*	Sikkim, Darjeeling, Arunachal Pradesh	Bhutan, Nepal, China
R. dalhousiae subsp. dalhousiae var. dalhousiae	Sikkim, Darjeeling, Arunachal Pradesh	Bhutan, Nepal, China
R. dalhousiae subsp. *dalhousiae* var. *tashii*	Sikkim (Endemic)	----
R. decipiens		
R. edgeworthii	Sikkim, Darjeeling, Arunachal Pradesh	Bhutan, Myanmar, China
R. falconeri subsp. *falconeri*	Sikkim, Darjeeling, Arunachal Pradesh	Bhutan, Nepal
R. fulgens	Sikkim, Darjeeling, Arunachal Pradesh	Bhutan, Nepal, China
R. glaucophyllum var. *glaucophyllum*	Sikkim	Bhutan, Nepal, China
R. grande	Sikkim, Darjeeling, Arunachal Pradesh	Bhutan, Nepal, China
R. griffithianum	Sikkim, Darjeeling, Arunachal Pradesh	Bhutan, Nepal
R. hodgsonii	Sikkim, Darjeeling, Arunachal Pradesh	Bhutan, Nepal, China
R. keysii	Sikkim, Arunachal Pradesh	Bhutan, China
R. lanatum	Sikkim, Arunachal Pradesh	Bhutan, China
R. lepidotum	Throughout the Himalayas from Kashmir to Arunachal Pradesh	Nepal, Bhutan, Myanmar, China
R. leptocarpum	Sikkim, Arunachal Pradesh	Bhutan, Myanmar, China
R. lindleyi	Sikkim, Darjeeling, Arunachal Pradesh, Manipur	Bhutan, Nepal, China
R. maddenii subsp. *maddenii*	Sikkim, Arunachal Pradesh	Bhutan
R. nivale subsp. *nivale*	Sikkim, Arunachal Pradesh	Bhutan, Nepal, China
R. niveum	Sikkim, Arunachal Pradesh	Bhutan
R. pendulum	Sikkim, Arunachal Pradesh	Bhutan, Nepal, China
R. pumilum	Sikkim, Darjeeling, Arunachal Pradesh	Nepal, Bhutan, Myanmar, China
R. setosum	Sikkim, Darjeeling, Arunachal Pradesh	Bhutan, China
R. sikkimense	Sikkim, Arunachal Pradesh	-----
R. thomsosnii subsp. *thomsonii*	Sikkim, Arunachal Pradesh	Bhutan, Nepal, China
R. triflorum var. *triflorum*	Sikkim, Arunachal Pradesh	Nepal, Bhutan, Myanmar, China
R. vaccinioides	Sikkim, Manipur, Nagaland, Arunachal Pradesh, Darjeeling	Nepal, Bhutan, China, Myanmar
R. virgatum	Sikkim, Arunachal Pradesh	Bhutan, China
R. wallichii	Sikkim, Arunachal Pradesh	Bhutan, Nepal, China
R. wightii	Sikkim, Arunachal Pradesh	Myanmar, China

Table 2. Comparison of *R. mekongense* var. *mekongense* with *R. triflorum* var. *triflorum* following Flora of China (www.eFloras.org) and Sastry and Hajra (2010).

Character	*R. mekongense* var. *mekongense*	*R. triflorum* subsp. *triflorum*
Habitat	Shrub, deciduous, semi-evergreen or evergreen, 1–2 m tall; branchlets setose scaly	Shrubs or rarely small trees, evergreen or semi-evergreen, 1–4 m tall; young shoots
Elevation	Subalpine – alpine (3300 – 4300 m)	Temperate – subalpine (2500 – 3700 m)
Leaf	Blade leathery, obovate or oblanceolate to obovate-elliptic, 2.5–5(–6.5) × 0.8–2(–2.7) cm; base cuneate; margin usually setose; apex rounded, mucronate; adaxially glabrous, abaxial surface slightly glaucous, scales 1–4 × their own diameter apart, unequal, pale or dark brown; midrib usually sparsely setose	Blade ovate, oblong, ovate-lanceolate, or oblong-lanceolate, 2.5–6.5 × 1.5–2.5 cm; base rounded or cordate; apex acuminate, acute or obtuse, apiculate; abaxial surface gray white or pale green, scales to 1 × their own diameter apart, all similar, ± rimless; adaxial surface without scales
Petiole	1–2(–5) mm, sparsely scaly, long-setose	4-9 mm, scaly
Inflorescence	Terminal, 3–4 flowered.	Terminal, 2–4 flowered
Pedicel	1–2.5 cm, scaly, usually sparsely long-setose	0.6–1.6 cm, erect, scaly
Calyx	Lobes rounded, ovate, oblong to lanceolate, persistent in fruit, scaly, glabrous	Lobes rounded, ovate or triangular, 0.5–1 mm, densely scaly
Corolla	Broadly campanulate, yellow, 1.5–2(–2.3) cm inside with brown spots on upper side, lobes 5	Broadly funnelform-campanulate, pale yellow, 2–3.3 cm inside with brown spots on the upper surface, outer surface scaly, pubescent or without hairs, lobes 5
Stamens	10; unequal, filaments villous or pubescent towards base	10; unequal, longer than corolla, filaments villous
Ovary	Scaly	5-locular, densely scaly
Style	Thick, sharply bent	Long, glabrous
Capsule	Cylindric, 7–11 mm, densely scaly	Cylindric, 7–12 mm
Flowering	May - June	May - June
Fruiting	July - August	July - August

We were sure that the species was new to Sikkim and because 90% of the rhododendron species from Sikkim are also found in Arunachal Pradesh, we concentrated our literature review to identify it to Arunachal Pradesh and the other north-eastern states. *R. mekongense*'s characters closely resembled with our species. There was little about this species in any scientific publications except in a few species lists (Mao et al 2002, Paul et al. 2005, Mao 2010, Seker and Srivastava 2010). However, Sastry and Hajra (2010) noted the rare occurrence of *R. mekongense* var. *rubrolineatum* in Arunachal Pradesh. Nevertheless, from the little published information available we identified our new species as *R. mekongense* var. *mekongense* Franchet (Fig. 1).

The first written record about *R. mekongense* was by Franchet (1898); however, R.P. Soulie was the first person to record the species from the Mekong Valley in China in 28 June 1895 *http://www.biodiversitylibrary.org/item/18758#page/281/mode/1up)*. It is in the subgenus *Rhododendron*, section *Rhododendron* and subsection *Trichoclada*. The species is distributed along forest margins, thickets, scrub, open pastures, cliffs, valleys, rocks between 3000–4300 m elevation. It has since been found in China (S Tibet, NW Yunan), India (Arunachal Pradesh), NE Myanmar and Nepal. Of the three recognised varieties of *R. mekongense*, var. *longipilosum* is found in NE Myanmar, var. *rubrolineatum* in China (S Tibet, NW Yunnan) and India (Arunachal Pradesh); and var. *mekongense* in China (S Tibet, NW Yunnan), NE Myanmar and Nepal.

In Sikkim, the species was observed to be growing in small scattered patches on rocky, highly disturbed habitat on an open slope in association with other rhododendron species such as *R. campylocarpum, R. thomsonii, R. campanulatum,* and *R. lepidotum*. In 2014, it was discovered that the same species had been recorded earlier by Johan Nilson in May 2009 inside the same Sanctuary. Through his photographs, it was determineded that he had recorded the species in a different location, about 500 m (1640 ft) away from our location, again in an open, rocky slope along a stream, and in association with shrub species such as *R. thomsonii, R. lepidotum, Viburnum nervosum, Salix* spp.; herbs such as *Meconopsis paniculata*, *Rheum acuminatum, Polygonum* spp., *Aster* spp., and ferns; with climbers like *Clematis montana* also prevalent in the area.

Existing Threats to Rhododendrons, with Special Reference to the Shingba Rhododendron Sanctuary

Rhododendrons are important aesthetically, economically, medicinally and culturally in the Himalayas, but they are facing tremendous threats due to both natural and anthropogenic factors. Avalanches and flash floods due to heavy snowfalls and torrential rains are common natural events in the SRS. As an example, the areas were *R. mekongense* occur are affected by avalanches bringing

down boulders and by recent flash floods. The problem was augmented after the September 2011 earthquake, which has highly disturbed the fragile alpine and subalpine ecosystems in north Sikkim. Rhododendrons are a highly preferred fuel wood by the local inhabitants and the migrant labourers in high altitude areas in north Sikkim because it burns well even when green and wet. In addition, local people from in and around Sikkim visit the Yumthang Valley, situated at one end of the SRS, to enjoy the hot springs and during their stay, many rampantly cut down rhododendrons and other species for fire wood. The uncontrolled, indiscriminate and unsustainable harvesting for fire wood has resulted in some rhododendron species being listed as rare, threatened and endangered (Menon et al. 2012) throughout the Himalayas.

North Sikkim is a major tourist destination and every year this directly impacts rhododendrons, as they are also collected by the local hoteliers for use in cooking, heating, boiling water, etc., for visitors. Species with more specific habitat requirement may also be impacted if their habitat is disturbed by any means.

Summary

The discovery of a new species, *R. mekongense* var. *mekongense,* from Sikkim suggests that extensive exploration in the unexplored areas of Sikkim may result in more species of rhododendrons and other plants being identified. While earlier explorers have found many species of rhododendrons through limited field suveys, it has recently become easier to identify suggested locations of new populations of all species by using both GIS and habitat niche modelling before undertaking field studies.

With the discovery of *R. mekongense* var. *mekongense*, Sikkim now has 38 species, eleven subspecies, eight varieties and two natural hybrids of rhododendrons. Nonetheless, the newly discovered populations of *R. mekongense* var. *mekongense* are very limited in the area and immediate conservation measures are suggested. We declare this species to be critically rare until a new gregarious population is discovered somewhere else in Sikkim.

Acknowledgements

We would like to thank The Honourable Forest Minister, Shri Tshering Wangdi Lepcha, for his consistent support. We also would like to thank Dr. Thomas Chandy (Principal Secretary cum Principal Chief Conservator of Forest cum Project Director, SBFP) and Shri SBS Bhadauria (former Addl. Principal Chief Conservator of Forest cum Project Director, SBFP) for guidance and providing time to time suggestions. The assistance provided by Suraj, Dorjee and Meena in the field are highly acknowledged.

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The Word: Endemic

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The word for this issue of JARS offers six for the price of one. All six words are related and describe the distribution of organisms.

The first word is **ENDEMIC** (Greek, *endemia*, a dwelling in). In botany it means that a plant species is found naturally in a restricted geographic area and was not introduced by humans. *Rhododendron* species on the West Coast do not fit this category, but *Kalmiopsis leachiana,* like *Rhododendron* a member of the family *Ericaceae*, does. *Kalmiopsis* is found only in Southwest Oregon in a small area of the Klamath mountain complex. A large wilderness area encompassing the range of *Kalmiopsis* was set aside by congress in 1964 and named the Kalmiopsis Wilderness. The plant is sufficiently famous that the Oregon Native Plant Society titles its publication *Kalmiopsis*.

A closely related word is **INDIGENOUS** (Latin, *in + gignere,* to be born). Indigenous means that a plant species is found in a few different places but is not widespread and was not introduced by humans. Our Pacific rhododendron, *Rhododendron macrophyllum*, and the western azalea, *Rhododendron occidentale,* would be considered indigenous, as would the coast redwood, *Sequoia sempervirens*.

The third and fourth words, **NATIVE** (Latin, *nativus*, born) and **NATURALIZED** (Latin, *naturalis*, by birth or according to nature) overlap. Native covers both endemic and indigenous and we use it regularly, especially if we belong to a Native Plant Society. It refers to a species that has established itself in a given area, usually without direct local human intervention. It does not necessarily indicate anything about where it grew originally, even though we often use it to indicate origin. Naturalized means that a species has established itself and is reproducing naturally in a given area. A naturalized species was originally brought from another area by human activity, either directly or indirectly.

All naturalized species are **EXOTIC** (Greek, *exotikos*, outside), which brings us to our next word. The term means that a plant came from somewhere else, typically having been introduced by humans. Nearly all of the rhododendron species and hybrids we prize so highly fit under this category. All too often when an exotic plant is introduced into a new environment, if it becomes naturalized, it becomes a serious pest. Himalayan

blackberries (*Rubus armeniacus*), English Ivy (*Hedera helix*) and Sudan grass (*Sorghum* × *drummondii*) are all examples in our part of Northwestern California. Rhododendrons in general have not become pests, but there is one infamous example, *Rhododendron ponticum* and its hybrids. *R. ponticum* was introduced from the Caucuses to the United Kingdom in the mid-eighteenth century. It took more than one hundred years, but it and its hybrids have become serious invasive pests in many parts of England and Scotland.

The final word is **UBIQUITOUS** (Latin, *ubique*, everywhere). The Latin derivation says it all. A plant is ubiquitous if it is widely distributed, whether or not it was introduced by humans. It's a great word but another fuzzy one used regularly in biology and elsewhere. The term probably applies loosely to the rhododendrons in most of our gardens and it certainly does to *R. ponticum* in the United Kingdom.

The rhododendrons in your garden are descended from plants that are either indigenous or endemic species somewhere. When they got to you they were exotic and at this time of year the magnificent displays certainly fit one of the non-biological definitions of exotic, strangely beautiful in a fascinating manner. When the rhododendrons are in bloom in our gardens there are few plants to rival them. It has certainly been worth the wait since last year when we deadheaded and fertilized to ensure this spring's display.

Society News

Awards

Bronze Medal: Rosalie Stanley

The Noyo Chapter is proud to present the ARS Bronze Medal to Rosalie Stanley for ongoing commitment to the Noyo Chapter.

Very little in the operation of the Chapter has not been influenced by you. You've served as President, Past President, Secretary, Board member, and Show Chair. In all of these functions you've served multiple terms. You helped organize and construct the garden scene at the Show several times. You've encouraged other members to be involved by being on the Nominating Committee. Our potlucks have been hosted by you several times.

With you as one of its linchpins, the Noyo Chapter has remained viable for its members. With your calm and pleasant manner both new and longtime members have benefitted from your chapter involvement and knowledge of rhododendrons and azaleas. It is with gratitude and honor the Noyo Chapter of the ARS bestows on you its highest honor, a Bronze Medal.

In Memoriam

Edward "Ed" William Collins

Edward "Ed" William Collins died July 20, 2014, at Hobe Sound, FL.

Ed was chairman of the ARS Annual Convention in 1976 when it was held in Valley Forge, PA. He served as president of the Philadelphia Chapter beginning in 1977. Ed founded the Pine Barrens Chapter in 1980 and was president for five years. He served as District 8 Director for six years.

Ed propagated and distributed Tyler Arboretum Wister Hybrids and was considered to be the regional authority on hybrids produced by Jack Cowles at the former Dexter Estate. Ed was awarded the President's Award in the Pine Barrens Chapter and also the Bronze Medal in both the Philadelphia and Pine Barrens chapters. Ed was awarded the ARS Silver Medal in May of 1994. He was active in the North Carolina Arboretum, the Botanic Club and was a member of the Rock Garden Society. Ed was speaker at both ARS and ASA Conventions and Regional Meetings.

Ed and Mary lived in Hendersonville since his retirement in 1990 from RCA in Camden, NJ., and were members of the Southeastern Chapter of the ARS since they moved there. He was presented with the Bronze Medal in 2000. He recruited many members for our Chapter. He served as president and vice president as well as the District 10 Director and served on the Board of Directors. He started the Southeastern ARS Native Azalea Study Group and led many field trips to "The Balds." He started a rhododendron and azaleas display garden at Blue Ridge Community College. He chaired our annual plant sale many times. Ed and Mary hosted many of our meetings. He was also instrumental in organizing the Vaseyi Chapter of the Azalea Society of America. He was awarded the ASA Distinguished Service Award in 2008 and the

(Continued on next page)

In Memoriam contined

Vaseyi Chapter's Augie Kehr Award in 2009. He served as president, served on the Board of Directors, managed the drawings for the gift plants and, most important of all, he always brought his famous German Potato Salad to our yearly luncheons. He grew one of the largest collections of Cowles Hybrid Rhododendrons in existence. He also loved dwarf conifers, Japanese maples, wildflowers and native azaleas. He was always sharing plants with friends.

He was preceded in death by his daughter Mary in 1996. He is survived by Mary, his wife of 62 years; two sons, Edward "Rusty" Collins, Timothy Collins; daughter, Eileen Collins; five grandchildren, Collin, Logan, Ryan, Meaghan, and Bailey.

Jean Pace
Southeastern Chapter

Election of District Directors

DISTRICT 8
District Director Alternate
Linda Fowler Hartnett

I have been involved in the Philadelphia Chapter of the ARS for more the 15 years. I have been on the Board of Directors as well as past President from 2007 - 2012. I am involved with our Chapter's Committee for Plant Propagation, chairing the Flower Show committee, and our Plant Sale Committee. I was honored with the Chapter's Bronze Medal in 2011. My love for the genus *Rhododendron* pours over into my garden and my inability to say "no" when I see a rhododendron for sale!

[Nominees for District Directors and Alternates for Districts 4, 5, 8 and 9 were listed in the Winter 2015 ARS Journal.]

Rhododendron Calendar

2015	ARS Annual Convention, 70th Anniversary, Sidney, BC, May 6-10, Board Meeting
2015	ARS Fall Regional Conference, Long Island, NY, Oct. 16-18, Board Meeting
2015	New Zealand Rhododendron Association Annual Conference, Oct. 16-19, Wellington, New Zealand
2016	ARS/ASA Annual Convention, Williamsburg, VA, April 20-24, Board Meeting

Society News

ARS Photo Contest 2015

Note: The duration in which photos must have been taken has been extended to be a calendar year, from Aug 1, 2014 to July 31, 2015. This allows Southern hemisphere members to enter photos taken in their spring.

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 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 required, and for submissions in category 6, include a brief explanation of how the image was created; 5) all photos submitted must have been taken between August 1, 2014, to July 31, 2015; and 6) the number of entries by any individual per category is restricted to two.

Society News

Chapter Shows

Most early shows were reported in the winter issue. No admission charge unless noted.

MIDWEST CHAPTER – Midwest Chapter 2015 Show and Plant Sale; 9:30 a.m. to 5 p.m., Sat. & Sun., May 9 & 10; Regenstein Center, Chicago Botanic Garden, Glencoe, Illinois; Roger Dunlap.

NEW YORK – Early Flower Show; 1 to 5 p.m., Sun., April 26; Hicks Nursery, 100 Jericho Turnpike Westbury, NY; no fee for show.

NEW YORK – Flower Show; 1 to 3:30 p.m., Sat., May 16; Planting Fields Arboretum, Oyster Bay, NY; no fee for Show; admission fee to Arboretum for non-members; Bruce Feller.

NOYO CHAPTER - 38th Annual John Druecker Memorial Rhododendron Show and Plant Sale; judging 3 p.m., Fri., May 1; open to public 9 a.m. to 5 p.m., Sat. & Sun., May 2 & 3; Mendocino Coast Botanical Gardens, Ft. Bragg, CA. Those wishing to enter their rhododendrons in the show may bring them to the show tent 5 to 7 p.m., Thurs., April 30, or 9 a.m. to 5 p.m., Fri., May 1.

SIUSLAW CHAPTER – Early Rhododendron and Azalea Flower Show and Plant Sale; open to public 1 to 5 p.m. after judging, Sat., April 11, and 10 a.m. to 5 p.m., Sun., April 12; Florence Events Center, 715 Quince, Florence, OR 97439. Bonsai display is located inside the building, with the flower show. Plant Sale, open to the public, on Saturday and Sunday, is located outside, south side of building from 10 a.m. to 5 p.m. The public may bring flower trusses for judging on Saturday from 7 to 9 a.m. Ribbons and Trophies will be awarded. It's a great time to ask questions, find books and information and enjoy azalea and rhododendron blooms. Sandra Jensen.

SIUSLAW CHAPTER – May Rhododendron Festival Flower Show and Plant Sale with Rhododendron Leaf Display; open to the public, no charge, 1 to 5 p.m., Sat., after judging, May 16, and 10 a.m. to 5 p.m., Sun., May 17; Florence Events Center, 715 Quince, Florence, OR 97439. Plant Sales, open to the public, are outside the south wall of the Events Center on Sat. and Sun. from 10 a.m. to 5 p.m. The public is welcome to bring flower trusses on Sat. from 7 to 9 a.m. to be judged. The truss must come from a plant the owner has grown for at least 6 months. Ribbons, trophies and raffle prizes will be awarded. It's a great time to ask questions about rhododendrons. Larry Jensen.

Note to Chapter Show Organisers

We are happy to publish up-coming chapter show details in *JARS* issues preceding them, but it is up to individual chapter show organisers to send appropriate details (date, time, location, cost if any, etc.) to the *JARS* editor beforehand at the appropriate time for inclusion. For planning purposes, please note the following:

Winter issue (Early Show info: April and early May): will be received by most members in late January. For info to be included, it must be sent to the editor by Nov 21 of the preceding year.

Spring issue (Later Show info: May and June): will be received by most members in late April. For info to be included, it must be sent to the editor by Feb 21.

Society News

Individual Donations 1/1/14 through 12/31/14

Donations to the ARS General Fund

$1000+

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Keun-Sam Lee
Robert MacIntyre
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(Contined on next page)

Society News

Donations to the ARS General Fund continued

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Rhododendron metternichii: An Illegitimate Love Affair

Donald H. Voss
Vienna, Virginia

Some ardent rhododendron fanciers are in love—no other word fully conveys the strength of their attachment—with the name *Rhododendron metternichii.* The Japanese plant first so named deserves our admiration, but the name is illegitimate and thus is not a correct name for the plant. For those still attached to *R. metternichii,* understanding the reasons for its illegitimacy and inconsistent application may ease transition to use of the correct name.

The first description of the plant by a European observer was published by Kaempfer (1712). Based on his 1690-1692 experience on Japan's Deshima Island in Nagasaki Bay, he identified the plant as "Saku Nange" (his rendition of a Japanese common name) and noted that the flowers were seven-lobed. The first attempt to provide a Latin botanical name for the plant was the adoption of Linnaeus's *Rhododendron maximum* by Thunberg (1784), but this effort failed. Thunberg misapplied the Linnaean name for a different, North American plant, leaving the Japanese plant without a Latin name.

Forty-two years later, the Japanese plant received its first correct name; viz., *Hymenanthes japonica* Blume (1826). In the protologue, Blume stated that the corolla was seven-lobed, the stamen count 14, and the capsule seven-locular. He also noted that the plant described had been received from Japan under the name *Rhododendron maximum.*

In their *Flora Japonica*, Siebold and Zuccarini (1835) named the plant *Rhododendron metternichii.* They des-cribed the flower as having a seven-lobed corolla and 14 stamens, and they listed as synonyms the names published by Kaempfer, Thunberg (excluding the Linnaean synonym), and Blume. By including *Hymenanthes japonica,* from which the epithet should have been adopted, Siebold and Zuccarini created a superfluous, hence illegitimate, name. Kaempfer's Saku Nange thus had the legitimate but rarely accepted name *Hymenanthes japonica* and the illegitimate name *Rhododendron metternichii,* which gained wide acceptance.

The French horticulturalist Carrière (1869) published *Rhododendron degro-nianum*

in *Revue Horticole.* The name honored a French official stationed in Yokohama, Degron, who had introduced the plant into France. Carrière described only the leaves, and the accompanying illustration showed only foliage. The protologue was minimally adequate for valid publication of the name but lacked details (such as flowers five-lobed) that would have definitively distinguished the species from *R. metternichii*. Carrière stated that previously only one species of Japanese rhododendron, *R. metternichii,* was known, although the Japanese *R. brachycarpum* had been published in England by G. Don in 1834. Carrière's leaf descriptions for *R. degronianum* foreclose confusion with *R. brachycarpum*. In the horticultural community, acceptance of the five-lobed Degron plant as the species *R. degronianum* may have resulted from subsequent observation of the plant or from Carrière's stating that there were two Japanese rhododendrons and that, implicitly, his was not the seven-lobed *R. metternichii.*

The Russian botanist Maximowicz was in Japan during 1860-1864. In his *Rhododendreae Asiae orientalis* (Maximowicz 1870), the entry for *Rhododendron metternichii* described the corolla as five- to seven-lobed and the number of stamens as 10-14. Maximowicz defined the species as comprising two unranked infraspecific taxa (usually considered to be varieties): α. *heptamerum* with seven-lobed flowers and β. *pentamerum* with five-lobed flowers. Later authors adopted Maximowicz's infraspecific taxa; e.g., Makino (1902) published the illegitimate *R. hymenanthes* with α. *heptamerum* and β. *pentamerum.* Since 1870, these taxa have been recognized botanically as belonging to the same species.

Schneider (1909) attempted to provide a correct name in *Rhododendron* based on Blume's *Hymenanthes japonica. Rhododendron japonicum* (Blume) C. K. Schneider would have been the correct name in the genus *Rhododendron* for Kaempfer's Saku Nange and its five-lobed relative except for the inconvenient fact that in 1908 Suringar had published *Rhododendron japonicum* (A. Gray) Suringar for a deciduous azalea. Thus, unless the publication of the Suringar name was not valid, the Schneider name was an illegitimate later homonym. In publishing *Rhododendron japonicum*, Schneider indicated, by stating stamens 10-14, that he was including both the five- and seven-lobed varieties published by Maximowicz in *Rhododendron metternichii*, but he did not make new combinations for them in *R. japonicum.* By citing the illegitimate *R. hymenanthes* Makino—which included α. *heptamerum* and β. *pentamerum*—as a synonym of his *R. japonicum,* Schneider also implicitly recognized the seven-lobed and five-lobed forms.

Hutchinson (1911) published *Rhododendron japonicum* var. *pentamerum*, apparently believing that Suringar's *Rhododendron japonicum* was not validly published. Hutchinson cited the basionym for var. *pentamerum* (*R. metternichii* var. *pentamerum* Maxim.), but his discussion muddied the waters and may have influenced horticulturists's later treatment of the five- and seven-lobed varieties:

> The handsome rhododendron which forms the subject of our figure [var. *pentamerum*] has been known for some time in collections under the name *R. Metternichii,* Sieb. & Zucc. It is not, however, the same as the plant so named by Siebold and Zuccarini, which differs from that here depicted in having a corolla with seven lobes . . . The form in question is, however, the one that was originally described by Blume under the name *Hymenanthes japonica*; to the use of this earlier specific name Schneider has recently reverted, though it is remarkable that in doing so he has not alluded to the existence of the variety now figured.

Hutchinson was correct in one of his three assertions: Siebold and Zuccarini described the seven-lobed plant. But Blume, in describing the monotypic genus *Hymenanthes*, stated the corolla to be seven-lobed. As noted, Schneider in 1909 included implicit references to both the five- and seven-lobed varieties. Schneider (1912) subsequently accepted the publication of *R. japonicum* Suringar as valid and accepted *R. metternichii* with the two varieties published by Maximowicz. Schneider again cited Makino but erred in stating the five-lobed variety to be the typical *Hymenanthes* of Blume. Little wonder that confusion reigned in the horticultural community!

A point that has contributed to confusion is the statement by Siebold and Zuccarini that the habitat of *R. metternichii* was "*in Japoniae borealis alpibus*" (in high mountains of northern Japan). During most of his time in Japan, Siebold was restricted to Deshima Island in Nagasaki Bay and areas nearby on the southern island of Kyushu. He relied heavily on Japanese collectors for specimens and information about plant habitats. To these collectors, "northern" might have meant northern Kyushu or, perhaps, might have included Shikoku and southern Honshu. Modern studies place the habitat of the seven-lobed variety in Kyushu, Shikoku, and southern Honshu; the five-lobed variety, in north-central Honshu (Chamberlain 1982).

In vade mecums of rhododendron fanciers in the mid-1900s, the authors accepted *R. metternichii* for Kaempfer's seven-lobed Saku Nange and *R. degronianum* for Degron's five-lobed plant (Tagg in Stevenson 1930,1947; Bowers 1936,1960; Leach 1961)—ignoring the judgment of Maximowicz, Makino, Schneider, and E. H. Wilson (1923) that these plants constitute a single species. The treatment of *R. metternichii* (seven-lobed) and *R. degronianum* (five-lobed) as separate species has persisted in horticultural circles.

One hundred and fifty years after Kaempfer's Saku Nange received its first legitimate botanical name (*Hymenanthes japonica*), another attempt was made to place it in the genus *Rhododendron.* The English botanist Sealy published a new combination for the seven-lobed plant; viz., *R. degronianum* var. *heptamerum* (Maxim.) Sealy in Bean (1976). This name was, however, not validly published, because Sealy omitted a full and direct reference to the place of publication of the basionym (i.e., var. *heptamerum*). In 1992, Davidian provided the necessary reference to validate Sealy's combination, and the plant finally received a legitimate varietal name in *Rhododendron*; viz., *R. degronianum* var. *heptamerum* (Maxim.) Sealy ex Davidian (1992).

The question "does *Rhododendron japonicum* apply to the rhododendron or the

azalea" was resurrected in 1981 by the Swedish botanist Aldén in a proposal to reject the name *Rhododendron japonicum* (Blume) Schneider. Aldén (1981) interpreted Suringar's protologue as failing to accept *R. japonicum* (A.Gray) Suringar (1908), meaning that this name for a Japanese deciduous azalea was not validly published. Aldén sought rejection of Schneider's *R. japonicum* to avoid displacing the epithet *japonica* [*-um*] widely used for the Japanese deciduous azalea since A. Gray's *Azalea japonica* (1858). In the Edinburgh revision of *R.* subgenus *Hymenanthes*, Chamberlain (1982) also considered the Suringar name as not validly published and accepted Schneider's *R. japonicum.*

The Committee for Spermatophyta reached a final decision on the Aldén proposal (Eichler 1987). The American Association of Nurserymen and the American Rhododendron Society had objected to acceptance of *R. japonicum* as the correct name for the rhododendron known as *R. metternichii*, and a letter from Dr. Henry T. Skinner "noted that the cost of such a name change to the American horticultural trade could be around 1 million dollars." The Committee found that Suringar did accept the name *R. japonicum* (A. Gray) Suringar (1908) for the Japanese deciduous azalea—and that *R. japonicum* (Blume) Schneider should be treated as an illegitimate later homonym.

The nomenclatural illegitimacy of *R. metternichii* is ample reason to avoid its use. A very practical reason is that application of that name has been thoroughly confused. Siebold and Zuccarini (1835) described the seven-lobed plant; Maximowicz (1870) expanded the circumscription of the species to include the five-lobed variety. Hutchinson (1911) noted that the five-lobed plant "has been known for some time in collections under the name *R. Metternichii*"; some such plants may still be found in gardens. A reference to *R. metternichii* raises the question "which one?"

Kaempfer's seven-lobed Saku Nange is correctly placed in *Rhododendron degronianum* Carriere. H. Hara (1986) published *R. degronianum* subsp. *heptamerum* (Maxim.) H. Hara, listing as synonyms earlier names for the seven-lobed plant by Blume, Siebold and Zuccarini, Maximowicz, and Sealy. Apparently not realizing that Sealy's var. *heptamerum* was not validly published, he created only the varieties *hondoense* and *kyomaruense* under the new subspecies. Later, Davidian (1992) validated the Sealy variety. Today, the Saku Nange may be correctly cited as *R. degronianum* subsp. *heptamerum* (Maxim.) H. Hara var. *heptamerum* (Maxim.) Sealy ex Davidian, or simply as *R. degronianum* var. *heptamerum* (Maxim.) Sealy ex Davidian. *Rhododendron degro-nianum* subsp. *heptamerum* alone does not uniquely identify the Kaempfer plant, because it also includes the varieties *hondoense* and *kyomaruense.*

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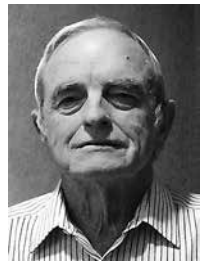
The author is indebted to Dr. Joseph H. Kirkbride, Jr., U.S. National Arboretum, for guidance in the application of nomenclatural rules. Dr. Alan Whittemore, U. S. National Arboretum, also provided advice on the rules relating to autonyms and basionyms.

Soil Fertility Where Rhododendrons Grow in the Wild

John Thornton
Franklinton,
Lousiana



In college I worked in a soil testing laboratory. When I became interested in growing rhododendrons, I thought it would be helpful to know soil fertility levels where rhododendrons grew in the wild.

In 1970 I took soil samples from around the roots of *R. chapmanii* growing in the wild in northwest Florida. The white sand tested a pH of 4.7 and was low in available phosphorus, potassium and calcium, but very high in magnesium. I thought this high magnesium test was a mistake since sand is supposedly just silicon dioxide. I later learned that *R. occidentale,* the west coast azalea, often grows on serpentine (magnesium silicate) soil. These serpentine soils are often alkaline in pH and most other plants have difficulty growing on them. *R. makinoi* in Japan also grows on serpentine soils.

In 1980, Lloyd Cotton, Buddy Lee and I received a research grant from the Rhododendron Research Foundation to study the *R. minus* growing along the tributaries of the Chattahoochee River in southern Alabama and Georgia. We compared this *R. minus* to other *R. minus* in the South and noted other rhododendron species and other plants growing in the area. We also took soil samples. Over the years I took perhaps one hundred soil samples from places where rhododendron species grow in the sedimentary soil of the Coastal Plains and Lower Piedmont of the southeastern United States.

A soil sample from southeastern Louisiana where *R. canescens* and *R. serralatum* grow side by side showed a grey sandy soil with a pH of 3.9 and the sample was very high in magnesium, calcium and potassium, but low in phosphorus. Soil samples from central Louisiana and southeast Texas where *R. viscosum* and *R. canescens* grow showed an acid soil low in calcium, potassium and phosphorus, but high in magnesium. Soil samples from Dooley County in southwest Georgia along the lower Flint River where *R. flammeum* grows showed an acid soil low in calcium, potassium, phosphorus and low in magnesium. It might be significant that neither *R. canescens, R. minus* nor *Kalmia latifolia* grow there. *R. flammeum* grows along the upper Flint River in north Georgia along with *R. canescens, R. minus* and *Kalmia latifolia* in mica soil high in magnesium.

Perhaps *R. flammeum* grows in both high and low magnesium soil.

Soil samples from Van Buren County, Arkansas and from Cumberland County, Tennessee (Hinch Mountain) where *R. prinophyllum* grows showed a soil low in all the macronutrients including magnesium. *R. prinophyllum* commonly grows where other rhododendron species and mountain laurel (*Kalmia latifolia*) are absent. *R. catawbiense* grows in Orange County, North Carolina, near a talc (magnesium silicate) deposit. *R. eastmanii* in South Carolina grows in a limestone area. Soil samples from around the roots of *R. eastmanii* showed a pH of 5.5 - 6.0. The samples were high in magnesium and calcium, but low in potassium and phosphorus.

R. eastmanii grows in areas where other rhododendron species, *Kalmia latifolia* and other ericeaous plants are absent. *R. eastmanii* has proved to be difficult to grow for most people. Mike Creel has found that adding limestone or oyster shell seems to improve its performance. *R. viscosum* [previously *R. serrulatum*] typically grows in a highly acid, high magnesium soil. It sometimes grows in salt water marshes with a soil sodium content of 2000 ppm and a chloride content of 2000 ppm.

Other rhododendrons and azaleas are very sensitive to salt. In north Louisiana and eastern Texas rhododendrons, azaleas and blueberries are often difficult to grow because of the salt in shallow wells. It is my experience that irrigation water higher than 50 ppm sodium or 100 ppm chloride may be detrimental to rhododendron species. Gypsum (calcium sulfate) used at one lb/yd^2 (0.54 kg/m^2) around plants may help counteract salt.

I have no soil tests from locations with *R. atlanticum, R. prunifolium* or *R. "Smokianum." R. prunifolium* sometimes grows with *K. latifolia* and *R. minus* but often grows alone with no other rhododendron species or *K. latifolia. K. latifolia* seems always to grow in high magnesium soils.

In my first forty years of testing, I tested only sedimentary soil from the Lower Piedmont and Coastal Plains. These tests all showed a low phosphorus level. I came to the conclusion that rhododendrons in the wild grew only on low phosphorus soil. This observation was proved wrong when Ron Miller collected several soil samples where rhododendrons grow in the igneous soils of the Upper Piedmont and Appalachian Mountains. These tests proved to be very high in available magnesium, potassium, phosphorus, calcium and sulfur. Included in these tests of igneous soils from the Appalachian Mountains were soils where *R. minus* var. *minus* [previously *R. carolinianum*] *alba, R. minus, R. arborescens, R. maximum, R. catawbiense, R. calendulaceum, R. cumberlandense, R. vaseyi* and mountain pieris (*Pieris floribunda*) grew.

Through the years I have used both private labs and the Louisiana State University (LSU) lab to test the samples. Recently, the LSU lab tests routinely for sulfur, and I have tested perhaps twenty to thirty samples for sulfur; all have been high.

During this soil testing period it was noted that certain other plants seemed to almost

always grow on high magnesium soils. *K. latifolia* seems almost always to grow on high magnesium soil in association with rhododendron species. Other plants that seem to have an affinity for high magnesium soil include red star anise (*Illicium floridanum*), coast leucothoe (*Leucothae axillaris*), rabbiteye blueberry (*Vaccinum ashei*) and sphagnum moss. Plants that apparently do not require high magnesium soil include hairy mountain laurel (*K. hirsuta*), Elliott's blueberry (*V. elliotti*), sparkleberry (*V. arboreum*), loblolly bay *(Gordonia lasianthus*), fetterbush (*Lyonia lucida*) and tarflower (*Befaria racemosa*).

Leach (1961) stated that rhododendrons are more likely to show magnesium deficiency on heavy clay soils.

Cox (1985) stated that spraying rhododendrons in the fall with epsom salts (magnesium sulfate) at the rate of two tbsp/gal (O.8 cc/l) seemed to help prevent bud blast.

In southeast Louisiana, *K. latifolia* grows along the Pushepetappa Creek, the most southwest limit of its distribution. Plants collected there have often proved to be difficult to grow in the garden, but gardeners have solved this problem by collecting soil from around the plants and putting it around the collected plant.

Many fertilizers formulated for rhododendrons and azaleas do not contain magnesium, the one nutrient most likely to be deficient. Pine bark in the south USA is widely used to grow rhododendrons in built-up beds. It should be noted that pine bark is deficient in all the macronutrients—calcium, magnesium, potassium, phosphorus, nitrogen and sulfur.

References

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John Thornton is a longtime rhododendron grower and breeder in southeast Louisiana.

Trilliums: The Perfect Companion Plant for Rhododendrons

Susie Egan
Woodinville,
Washington

Photos by the author

Rhododendron enthusiasts are always on the lookout for wonderful companion plants for their rhododendron collection. They especially desire plants that are interesting and unusual that will pique the interest of the keenest of gardeners. They like plants that complement their rhododendrons, and whose individual beauty actually draws attention to their rhododendrons rather than compete with them. And just as important, this companion plant must share the rhododendron's same cultural needs of light, moisture, soil and temperature.

So what better plant to fit the bill than the trillium!

Rhododendrons and trilliums are great companions, enjoying one another's company with the rhododendrons graciously providing protection and shade for its smaller floral ally. Even when rhododendrons are not yet in bloom, their green leaves provide the perfect backdrop for a trillium's flowers of glowing white, lemon yellow, viride green, clear pink, lava red, burgundy-brown, or even some gorgeous bi-colors.

Trilliums are "spring ephemerals," a group of plants that bloom only for a short period of time in early spring, some as early as February, before the deciduous trees unfurl their leaves and the early spring sunlight begins to warm the forest floor. Spring ephemerals signify the end of winter and herald the return of spring, paying glory to life anew. When trilliums awaken each spring beside rhododendrons, they reunite once again in a beautiful natural way, a win-win combination.

I'm a lover of rhododendrons myself and have been collecting them for over twenty years. But about seven years ago I discovered the wonderful genus of *Trillium* and found them to be the perfect pairing for my rhododendrons. Compared to the roughly 1,000 species of rhododendrons, *Trillium* has only about fifty species, so I could conceivablly collect them all, which I accomplished several years ago. My garden (Cottage Lake Gardens) in Woodinville, Washington, is one of the only gardens in the world that grows all 50 *Trillium* species in one location. Every spring we host our annual Trillium Tea, Talk and Tours, and most visitors book a year in advance.

But let me share more about this wonderful flower so you too can enjoy their beauty and grow them successfully in your own garden.

Trillium Botany (plant structure and flower)

Fig. 1. *T. catesbaei*.

Carl Linnaeus identified *Trillium* as a genus in 1753 and it has recently been reclassified to be in the *Melanthiaceae* family. The genus of around fifty species has several possibly new species currently under evaluation. The genus is further divided into two subgenera: *Trillium* which includes the pedicillate trilliums (those that have a flower pedicel) and which generally have flowers that are open and lily-like with solid green foliage, and *Phyllantherum,* which includes the sessile trilliums (those without flower pedicels) which generally have V-shaped flowers that don't fully open and a more mottled foliage.

The genus name *Trillium* comes from the Latin prefix "tres," meaning three, which is appropriate since so many of the trillium parts come in threes: three leaves, which are technically modified bracts, three stigma and a three-chambered ovary (Fig. 1). "Lilium" refers to its lily-like flower.

The plant consists of a vertical stem, a peduncle (technically a flowering branch) with a whorl of three leaves above where there may or may not be a flower stem (pedicel), and then the flower itself. The flower has its characteristic three petals, along with three sepals, a pistil (ovary and three stigmas) and six stamens, each of which have two rows of pollen (Fig. 1).

The underground rhizomatous root structure is technically a modified horizontal stem with a large horn-shaped terminal bud at one end, from which the stem, leaves and flower emerge. The rhizome also has a series of scale-like rings with inactive buds, at least initially.

The leaves, stem and flower only actively grow above ground for about five months of the year, coming up in early spring and then going dormant by mid-summer. The rhizome continues to grow underground during the rest of the year, although its growth slows down greatly during the really cold winter months.

Trillium Growth Cycle

Once a trillium flower is pollinated, the flower begins to die back, sometimes changing color, and the ovary begins to swell as the seeds inside ripen. This fruit (berry)

takes several months to ripen, often till the end of summer, and finally bursts at its seams and drops its packet of seeds onto the ground. Like cyclamens, each seed has a fruity appendage (eliasome) attached to it that serves as a food source for ants and wasps. They carry the seeds away from the mother plant and after consuming the eliasome, the insects discard the hard seed and thereby disburse seeds away from the mother plant so its progeny are less likely to compete with it for light, water or nutrients.

During its first fall and winter, a seedling generally does not show a leaf above ground but instead spends its energy developing a root underground. The next spring it produces a single strap-like leaf that looks nothing like the typical trillium leaf. In its second spring, the leaf emerges in a heart-shape and it's not until the third spring that the leaves appears as the classic three trillium leaves. As the plant slowly grows larger over five to seven or so years, it builds up starch reserves within the rhizome until it has enough energy to produce a flower, usually from seed after about the seventh year.

Because it is such a long process from seed to flower, most nurseries are not able to carry the plant for that long and recoup their investment, so trilliums are mostly grown by hobby trillium enthusiasts like myself.

Trillium Origins and Distribution

Trilliums are sweet little woodland treasures with an interesting origin. Trilliums are believed to have first developed in North America millions of years ago, when the continents were not located where they are today. They then slowly migrated, seed by seed, westward and northward up through North America, eventually moving across the Bering Strait into northeast Asia before the Bering Strait land bridge disappeared behind them. New species evolved throughout this time period and as climate changes occurred and habitat characteristics changed, some populations became disjunct and isolated. Today, trillium populations remain mostly in the northern, eastern and western parts of North America, with eight species from eastern Asia: Himalayas, Tibet, Pakistan, Afghanistan, Japan, Korea, northeast China, and eastern Russia. They never became established in Europe, although they have been imported to many countries by plant collectors.

Trillium Cultural Needs, Proper Siting and Planting and Dividing

In general trilliums like full to part shade. They particularly like being planted in dappled shade under deciduous trees that give them the sunlight they need in the spring but shade in the summer, once their leaves have unfurled. Western North American species grow well under the coniferous trees that are common there.

In general, trilliums enjoy a rich, moist, well-drained soil with a neutral to acidic pH. I mix compost in the planting area when initially planting them in the garden.

Their hardiness varies by species but generally they do well in USDA Hardiness Zones 4-9. Southern species may get late winter/early spring frost damage when grown

in more northerly locations, so they may require some protection there at that time of year.

Trilliums can be transplanted easily, but care must be taken to make sure to dig deep enough so that the rhizome is not cut near its growing tip. Mature trillium rhizomes can be over a foot below the soil surface, so dig with a long, narrow shovel suited for deep digging. Dig a circle straight down around the plant, then get down on your knees, and using both arms, gently lifting out the clump of soil surrounding the plant (Fig. 2).

Trillium Maintenance

Trilliums do not require fertilizing and generally the best nourishment is a top dressing of compost each year.

Trilliums generally go dormant once they no longer receive moisture from spring rains. However, they can be kept in leaf longer if given supplemental watering. The longer they are allowed to stay in leaf, the longer they can photosynthesize and the more starch and energy will go to the rhizome.

Trillium Pests and Diseases

The biggest trillium predators are deer, which love eating both flowers and foliage. They thus may need protection either with deer fencing or spraying periodically with deer repellant. A trillium will probably survive one year of being defoliated, but repeated defoliation by deer will starve the rhizome and cause the demise of the plant. Unfortunately, entire trillium colonies have been eradicated by deer.

Slugs can occasionally damage the leaves or nip a notch out of the trillium stem, causing the stem and flower to collapse onto the ground. They can be protected from slugs by using a safe, non-toxic slug bait or slug traps filled with inexpensive beer.

Trillium Propagation

Trilliums can either be grown from seed or propagated by division. Growing from seed is a time-consuming proposition, as noted above, and most people do not want to wait that long. However you can produce quite a few trilliums by growing them by seed. Variability in flower color can occur with some trillium species when growing them by seed, which can result in beautiful flowers.

Division of the trillium rhizome produces much quicker results but usually only renders a handful of trilliums. If you wish to divide a mature clump of trilliums, dig it out as explained earlier, then wash away the surrounding soil with a hose and expose the cluster of rhizomes (Fig. 2, 3). With a sterile knife, divide the rhizome into segments no smaller than one inch (2.5 cm) each (Fig. 4); let them dry a bit, treat them with a fungicide and then replant. This can be done either in the fall during dormancy or mid-bloom when the cuttings will have a longer time to get re-established before winter.

Fig. 2. A clump of trilliums.

Fig. 3. Washing the soil off a trillium clump.

Popular Trillium Species

White trilliums:

White pedicillate: The most famous trillium is the one native to the NE United States and Canada, *T. grandiflorum.* It resembles a lovely lily whose petals splay outward showing off its bright yellow anthers. It is the provincial flower of Ontario, Canada, and the state wildflower of Ohio, and appears on many china dishware patterns and

Fig. 4. A divided clump of trilliums.

on way too many Canadian souvenir spoons. Its west coast cousin is *T. ovatum* (Fig. 5) which looks very similar but with narrower flower petals. *T. camschatcense* is the similar looking Asian relative. After the flower is pollinated, they all turn pink and then mauve before dying back.

White sessile: All white sessile flower trilliums are from the western coast of North America. They include *T. albidum* (southern Oregon and northern California), which often has pink at its petal base with a distinctive rose scent; the small-flowered *T. parviflorum* (from

Fig. 5. *T. ovatum* with sword fern.

Fig. 6. *T. sulcatum.*

Fig. 7. *T. cunetum.*

the Olympia, WA, area); and the white form of the tall-flowered *T. chloropetalum,* native to north and south of San Francisco.

Red trilliums:

Red pedicillate: These are native to the eastern United States and have lovely red lily-like flowers opening wide for easy pollination. *T. erectum* has flower petals that are almost a blood-red color and a somewhat unpleasant smell, but pollinators love it. *T. sulcatum* (Fig. 6), one of my favorites, has distinctive sulcate (boat-shaped) sepals whose flower petals are usually red, but there are also white and yellow forms and beautiful hybrids. *T. vaseyi* has the largest of all trillium flowers but is a "nodder"; its flower gets so big that its weight pulls the flower stem down beneath the leaves as it opens. To best appreciate it, it should be sited on a slope or embankment, unless you place mirrors beneath the flowers so they can be seen!

Red sessile: The red sessiles tend to generally be more mahogany colored and are stemless, V-shaped flowers that never fully open. The easterners include *T. cuneatum* (Fig. 7), the most widely distributed eastern red sessile, and the westeners include the tall-flowered *T. chloropetalum*, *T. kurabayashii*, and the long-petaled *T. angustipetalum*. They all have beautiful and variable leaf mottling.

Yellow trilliums:

The most common eastern yellow sessile trillium is *T. luteum* (Fig. 8), which is one of the most popular of the trilliums because of its clear bright yellow color, beautiful mottled leaves and wonderful lemon scent. *T. discolor* is more difficult to find and is

lower to the ground.

Many of the trillium species have yellow forms that present in small numbers within a population and which are fairly rare.

Pink trilliums: Everyone loves a pink trillium, although they are rare and hard to find.

Pink pedicillate: The most popular is *T. grandiflorum roseum,* which is showcased on the cover of the Case's (1997) book *Trilliums.* Unfortunately it is fairly rare and not easily obtainable. *T. catesbaei* (Fig. 1) is a nice pink trillium but the flower is fairly small and blooms underneath the leaves, making it somewhat difficult to see.

Pink sessile: *T. chloropetalum* has a pink form that I have seen in the wild. It is truly beautiful and occurs in different tints, from light to dark magenta, but it too is very hard to find. New Zealand's South Island climate is particularly amenable in the growing of *T. chloropetalum* hybrids.

Fig. 8. *T. luteum* and *Brunnera* 'Jack Frost'.

Fig. 9. *Pseudotrillium rivale*.

Dwarf trilliums

T. ovatum forma *hibbersonii* - a dwarf and rare form of *T. ovatum* discovered on Vancouver Island in British Columbia, Canada.

Pseudotrillium rivale. - semi-dwarf freckled pedicillate trillium from the Siskiyou Mountains in southern Oregon; flower color varies from almost white to deeper pink (Fig. 9, 10); and some with beautiful grey veining on the bluish-green leaves.

T. pusillum - a white eastern semi-dwarf pedicillate with wavy flower margins; several forms exist from different geographical areas.

T. nivale - the tiniest of all the trilliums; white, pedicillate only an inch or so (a few centimeters) off the ground; blooms so early that there is often still snow on the ground

Fig. 10. *Pseudotrillium rivale.*

Fig. 11. *T. grandiflorum* 'Snow Bunting'.

and hence its common name, the Snow Trillium.

Double Trilliums

The species that produces the most doubles is *T. grandiflorum*. They are quite rare and lack reproductive structures (ovary, stigmas and stamen) and are therefore sterile. They can only be propagated by division of the rhizome, which is a slow process and why they are so expensive to purchase (usually $80 to $125 each). [**Editor's note:** I see it's currently for sale at a nursery on Saltspring Island off Sidney, Vancouver Island, for $CDN 75, which with the current currency rate of exchange is only about $US 56. A bargain! http://www.thimblefarms.com/trillium.html] There are several named cultivars including 'Snow Bunting' (Fig. 11), 'Edith', 'Kenmore', 'Otis Bigelow', and 'Jenny Rhodes'.]

Novelty Trilliums

There are several trillium species I would put in the "novelty" category as they have quite unique characteristics. *T. recurvatum*, the prairie trillium, has mahogany brown petals that recurve sharply inward, almost like praying hands. *T. stamineum* (Fig. 12)**,** the propeller trillium, has twisted flower petals that truly look like an airplane propeller. *T. apetalon* is a petal-less trillium with only sepals and is native to NE Asia, a true novelty. *T. undulatum***,** also known as the painted trillium, is the holy grail of trilliums and the one most coveted by trillium enthusiasts. It's the only bi-colored trillium with solid white petals and a unique red triangle in the center. It is also the most difficult trillium to grow, requiring perfect drainage, acidic soil and cool summer nights.

Trillium Conservation and Protection

Unfortunately, trillium conservation is a real concern, as their native habitats are shrinking with some species now listed as threatened and one species, *T. persistens* from South Carolina and NE Georgia, was listed as Endangered by the U.S. Fish and Wildlife Service in 1978. Efforts are being made to protect them from being picked or dug up from the wild. Many wild populations have disappeared, never to return. Since very few nurseries grow trilliums, it is up to trillium lovers to grow them for culture as a true labor of love.

In summary, I hope I've inspired you to plant some trilliums in your garden alongside your rhododendrons. They'll welcome the wonderful company and so will you.

Fig. 12. *T. stamineum.*

Reference

Case, F.W. and R.B. Case. 1997. *Trilliums.* Timber Press, Portland: 285 pp.

Susie Egan and her husband, Kevin, own Cottage Lake Gardens, a two-acre (0.81 ha) private botanical garden in Woodinville, Washington. Susie is in the process of establishing a National Trillium Collection whose purpose will be to conserve, grow, propagate, and make available many species of trillium previously unavailable to the public. Every year they host dozens of garden tours including the popular Trillium Tea, Talk and Tours. For more information about these events or to purchase trilliums see their website at www.cottagelakegardens.com.

Our "Shangri-La": Part 1

Magnus Simonsen
Stavanger, Norway

Photos by the author, except for Fig. 1

We are three couples, two from Norway and one from Denmark: Esther Pedersen and Ruddi Perriard (Copenhagen, DK), Olga Nese and Oddbjørn Fosse (Bryne, NO) and Gunnbjørg and Magnus Simonsen (Stavanger, NO) (Fig.1). In June 2014, we traveled with great enthusiasm to Yunnan, China, for 16 days to collect rhododendron seed from rhododendron species that are either rare or possibly mislabeled in Scandinavia. This temperate species we were searching for grow in regions with high mountains, which meant heavy rain and cloud forest habitats.

Fig. 1. Participants: Gunnbjørg and Magnus Simonsen, Esther Pedersen, Olga Nese, Oddbjørn Fosse, Ruddi Perriard and our cook "Tom". Photo: He Zhi Jian.

Shangri-La

Shangri-La is a very real place in Yunnan, and is close to Yunnan's border with Tibet. The place is named in part to attract tourists who are familiar with the name from the literature, and partly to build up the myths surrounding the same name. In the book by James Hilton, *The Lost Horizon,* Shangri-La is described as a secluded earthly paradise, set in a deep valley among the mountains of Tibet where people hardly age.

There are probably many "shangri-las" in these mountainous areas, but for us being flora and notably rhododendron interested, our Shangi-La (Fig. 2, 3) is located somewhere in the mountains between the Salween (Nu) and Mekong (Lancang) Rivers, close to both Myanmar (Burma) and Tibet.

Fig. 2: We trekked west from Bading Village on the Mekong River up into the mountains to Camp 1 and Camp 2 (Majiwe).

Fig. 3. Our "Shangri-La."

Fig. 4. Shepherds with their livestock on the way up to the mountain pass.

Fig. 5. View of our highest camp, with the mountain pass located behind the mountains to the right.

Mountain Passes and Hill Farms

In early June, 2014, we flew via Copenhagen, Bangkok and Kunming to Lijiang in Yunnan Province, China. A minibus took us northwest via Weixi to the village of Yanwa on the Mekong River. After some days in this area we went by car a little bit north to Bading Village, from where we trekked west up into the mountains to Camp 1 and Camp 2 (Majiwa). The landscape here is far beyond anything we humans could create in our country's magnificent gardens and parks!

One day, we were sitting in a mountain pass 4000 m (13,123 ft) above sea level, waiting for shepherds to pass us by with their livestock: horses, cows, goats and sheep (Fig. 4). The animals were rapidly moving across the relatively narrow ridge we were on and then down the trail on the other side of the pass, with their goal being the lush valley that they now had in front of them.

The reason why the shepherds did not stay in the valley where they had come from is that there was an already established pasture with livestock there. Our tent camp was on a ledge on the outskirts of this hill farm. Soon, we thus had livestock grazing on the slopes below us on both sides. With colorful rhododendrons flowering as far our eyes could see, the vista formed a mostly pink-red carpet of flowers, with white, blue, yellow and bright red color patches intermingled.

Fig. 6. Nature's ultimate rhododendron garden!

A Strenuous Route from the Mekong River to the Mountain Camp

Our eight "horsemen," which with their horses and mules carried most of our luggage up the mountains, met us at the Mekong River at 2100 m (6890 ft)elevation. Our gear was packed in wicker baskets and large, waterproof bags, and all we carried was just what we needed for that day: water, some clothes and photo equipment.

Despite the fact that we always ate outside, our cook covered the ground with a "white" tablecloth and gave us a fine variety of food.

To get up to our upper camp location (Fig. 5), we had to climb nearly 2000 m (6562 ft) vertically on our own two feet.

In Norway, we are used to trails and tracks that lead to the mountain tops through valleys, along mountain slopes and in "zigzag" trails over mountain passes. But on this trip, the trail led us almost straight up the steep mountainside! It turns out that this is also the route that the farmers and locals prefer, presumably because it is the shortest distance.

Despite our struggles uphill, we noticed our beautiful surroundings (Fig. 6). Part way up the mountain, we entered a forest of big leaf rhododendron, *R. sinogrande* (Fig. 6). Impressive! We also saw magnolia trees, several types of orchids, honeysuckle, clematis, etc., all "manna" for gardening buffs!

Rhododendrons Habitats

In the lower elevation areas between the Nu and Mekong Rivers, the climate is

Fig. 7. Ruddi with *R. sinogrande*.

characterized by subtropical rain and cloud forests—relatively hot and humid. Nearer the tops of the mountains, the climate quickly becomes cooler and wetter, and saturated clouds engulfed us constantly. This moist alpine habitat is ideal for many rhododendrons (Figs. 8, 9).

Companion Plants for Rhododendrons

Looking more closely at the vegetation, we saw growing with the rhododendrons many other species of flowers and plants that we recognized from gardens in Scandinavia—so-called "companion plants." These were gentians (Fig. 10), many different primula species, meconopsis and several other erica species. While mostly conifer trees formed the upper level or "ceiling" of the forest, rhododendrons formed the middle level and smaller companion plants the ground floor. Together the three levels created a perfect ecosystem, and no garden architect or gardener could make a scene more harmonious than this!

Fig. 8. *R. roxieanum*.

Birds and Rhododendrons

In addition to the companion plants, we also saw native birds around the rhododendrons. The prettiest were the fork-tailed sunbird (*Aethopyga christinae*, Fig. 11), which we didn't see until above 3500 m (11,483 ft). [**Editor's note:** Sunbirds have a special brush-tipped tubular tongue that they use to absorb nectar in flowers, which is similar to the brush-tipped tongue of the lories (Loriinae), a group of nectar-feeding parrots, and to the tubular tongue of the hummingbirds. Sunbirds have a sharp decurved bill for foraging from flowers with deep nectaries, although they will pierce the nectary at the flower base to access the nectar that way. Sunbirds feed on insects and spiders, especially when rearing young, and some species also consume fruit. http://www.theguardian.com/science/grrlscientist/2012/jan/22/5].

It is a great experience for an amateur ornithologist to see birds that are adapted to coexist with rhododendrons! Other birds that we saw commonly with the rhododendrons were the insectivorus yellow-browed warbler (*Phylloscopus inornatus,* Fig. 12) and Hume's leaf warbler (*Phylloscopus humei*

Fig. 9. *R. neriiflorum.*

Fig. 10. *Gentiana* photographed at the upper camp.

Facts about the Trip

•The tour lasted from 30 May to 16 June 2014.

•The flight went via Copenhagen and Bangkok to Kunming and Lijiang in Yunnan Province, China.

•A minibus brought us north-west—via Weixi —to the village of Yanwa by the Mekong (Lancang) River.

•Tour 1: We went west from Yanwa—up in the mountains to Mageluo and Laqielie Camp.

•Tour 2: We went west from Bading Village—a little north of Yanwa—up in the mountains to Camp 1 and Camp 2 (Majiwe). **(It is this tour we describe in the article.)**

•Each move was for five days and on every trip we brought eight horses/mules to carry our supplies. Each horse was guarded by a "horseman". In addition, there was a guide, a cook and a mate along for the ride.

•The result of the purely botanical trip was exceptional! We found both common ones and rare, high and low species of rhododendron—not to mention colorful ones! Back home, we have gradually sorted and identified species from seeds collected from rhododendrons, gentians, primulas, etc.

•Now, in mid-November 2014, we can see in our greenhouses the first green seedlings from the China trip.

Part 2: In a future article we will describe the species of *Rhododendron* we found in China—all with photos—and tell you what happened in the greenhouses.

Fig. 11. Fork-tailed sunbird.

Fig. 12. Yellow-browed warbler.

Fig. 13. Wedding photography at 4000 m (13,123 ft) in a "bed" of *R. neriiflorum*.

mandelli). Throughout our stay in the Highlands, these tiny birds frequently darted around us!

Yunnan's Ethenic Minorities

Yunnan Province is special in China, as there are many minority cultures there, groups of people that originated from Tibet, Burma and other areas in the Himalayas and South East Asia. They all have different cultures, each with its own colorful national costumes. Everyone was proud of their special background, and cultures and religions were mixed together in a religious and cultural melting pot in Yunnan's northwestern valleys. We were pleased and surprised when high in the mountains, and in the middle of a giant "bed" of bright red-orange rhododendron, we encountered a wedding photo session, with rhododendrons the backdrop for a beautiful woman in her finest festive costume (Fig. 13)! What an effort they had made to come to this "studio" in the mountains!

Back to "Civilization"

The descent from the mountains was far from being a "downer," and although we had shaky thighs and sore knees, it was not hard to enjoy the trip back down to the Mekong River's shores. Our chatting was livelier between us and the horsemen, although mostly through sign language, and in the lower part of the descent, we saw the river from a "bird's eye" perspective: wide, amber and powerful, as it ran slowly toward its delta through Laos, Thailand, Cambodia and Vietnam into the South China Sea. High up in the hills we heard the cuckoo sing to us farewell and remind us that we were leaving our fairytale "Shangri-La" and that on the other side of the world, the Nordic summer was calling us.

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ARS Journal article on Lu Zhu in Vol. 51, No. 1. Visit: http://scholar.lib.vt.edu/ejournals/JARS

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 January 31, 2015, by the Royal Horticultural Society, which serves as the International Cultivar Registration Authority for the genus Rhododendron. (Information on the registration process follows the descriptions of cultivars.)

Key
(a) – deciduous or evergreen azalea
(r) – elepidote or lepidote rhododendron
(v) – vireya rhododendron
(z) – azaleodendron
X – primary cross
(s) – seed parent of cross, if known
x – cross of an unnamed parent
* – not registered
H – hybridized by
G – grown to first flower by
R – raised by
S – selected by
N – named by
I – introduced commercially by
REG – registered by
Royal Horticultural Society color numbers in parentheses, unless another system is noted

(r) **'Berg's Touch'**
Elepidote rhododendron: ('Fortune' x *R. proteoides*) (s) X (*R. proteoides* x *R. dichroanthum*). H (2000): Warren Berg, Ludlow, WA; G (2006), N (2014), REG (2014): Jim Barlup, Bellevue, WA. Flrs13/dome truss, funnel campanulate, 1 inch (25mm) long x 1.25 inches (32mm) wide with 5 emarginate (notched) lobes. Bud: deep yellowish pink (47C). Inside: pale


'Berg's Touch'. Photo by J. Barlup.

yellow (8D) shading through strong yellowish pink (36D) to strong pink (48C) at margins, each lobe bisected by a strong red (53D) vein from base to margin notch, with a 0.25-inch (7mm) strong red (53D) basal flare on the upper 3 lobes. Outside: pale yellow green (4D) shading through strong yellowish pink (36D) to strong pink (48C) at margins, each lobe bisected by a strong red (53D) vein from base to margin. Truss 3 inches (76mm) high x 3.5 inches (89mm) wide. Lvs 2.1 x 0.8 inches (55 x 22mm), elliptic, cuneate base, broadly acute apex, up-angled from central vein, downcurved at margin, moderate olive green (147A), semiglossy. Indumentum: hairs, leaf underside, pale orange-yellow (165D) maturing to brownish orange (165B). Shrub 1.5 feet (0.5m) high x 2 feet (0.6m) wide in 14 years; dense habit, lvs held 3 years. Hardy to 5°F (-15°C). Flowering early season (April in Seattle area). Etymology of name: Named for the hybridizer, who died in 2006.

(r) 'Fiesta Ribbons'

Elepidote rhododendron: 'White Fire' (s) X 'Snow Candle'. H (2002), G (2010), N (2014), REG (2014): Jim Barlup, Bellevue, WA. Flrs 12/dome truss, open funnel, 2 inches (51mm) long x 3 inches (76mm) wide with 5 narrow, mostly dissected lobes. Bud: strong purplish pink (67A). Inside: strong purplish pink (55B), deep purplish pink (55A) at margins,

'Fiesta Ribbons'. Photo by J. Barlup.

shading to pale yellow green (155A) at base and center of each lobe, with 0.75-inch (19mm) deep red (185A) flare at base of upper lobe. Outside: as inside, without red flare. Truss 5 inches (128mm) high x 5.5 inches (140mm) wide. Lvs 4.75 x 1.75 inches (120 x 44mm), elliptic, rounded base, broadly acute apex, flat margins, moderate olive green (147A), semiglossy. Shrub 3 x 3 feet (0.9 x 0.9m) in 12 years; intermediate habit, lvs held 2 years. Hardy to 5°F (-15°C). Flowering midseason (late April in Seattle area).

(r) 'Karen Bryant'

'Karen Bryant'. Photo by S. Southerland.

Elepidote rhododendron: 'Janet Blair' (s) X *R. hyperythrum*. H (1999), G (2003), N (2014), REG (2014): Stan B. Southerland, Chapel Hill, NC. Flrs 12/dome truss, broad funnel, 2 inches (51mm) long x 3.5 inches (90mm) wide with 5 or 6 wavy lobes. Bud: vivid reddish purple (N74B). Inside: very light purple (75C) with blotch of deep purplish red (71A) spots filling half of upper lobe. Outside: light reddish purple (N74C). Truss 5.5 inches (140mm) high x 6 inches (157mm) wide. Lvs 7.25 x 1.8 inches (184 x 46mm), elliptic, rounded base, broadly acute apex, downcurved margins, dark green (136A), semiglossy. Shrub 10 feet (3m) high x 8.5 feet (2.6m) wide in 14 years; dense habit, leaves held 2-3 years; collar of up-angled leaves surrounds truss. Plant and bud hardy to -10°F (-23°C). Flowering early (mid-April in central North Carolina). Etymology: named for the hybridizer's sister. Note: Pollen parent grown from ARS Seed Exchange lot 233-92.

(r) 'Luscious'

Elepidote rhododendron: 'Naselle' (s) X 'Mavis Davis'. H (1997), G (2003), N (2014), REG (2014): Catherine Weeks, Eureka, CA; I (2014): Westgate Garden Nursery, Eureka, CA. Flrs 18-20/ ball truss, open campanulate, with 6 frilly lobes; heavy substance. Bud, and inside and outside of corolla: strong red (47B), with moderate red (47A) spotted blotch on inside upper lobe extending into adjacent lobes. Calyx: 1.25 inches (32mm), strong red (47B). Truss 5 inches (127mm) high x 6 inches (152mm) wide. Lvs 4.25 x 1.75 inches (108 x 44mm), elliptic, downcurved margins; dark bluish green (131A), glossy. Shrub 2 feet (0.6m) high x 3 feet (0.9m) wide in 17 years; intermediate habit, lvs held 3 years, floriferous. Plant and bud hardy to 24°F (-4°C). Flowering early (late March in Coastal Northern California).

(r) 'Madeleine's Melody'

Elepidote rhododendron: 'Lemon Embers' (s) X ('Fairweather' x 'Jean Eleanor'). H (2002), G (2009), N (2014), REG (2014): Jim Barlup, Bellevue, WA. Flrs 19/ball truss, open funnel, 2.25 inches (57mm) long x 3 inches (76mm) wide with 5 wavy lobes. Bud: light yellow (20B). Inside and outside: light greenish yellow (blending from 5C to 5D). Calyx: 1.5 inches (38mm), light greenish yellow (blending from 5C to 5D). Truss 5 inches (127mm) high x 6 inches (154mm) wide. Lvs 4.4 x 2 inches (111 x 51mm), elliptic, rounded base,

'Madeleine's Melody'. Photo by J. Barlup

broadly acute apex, flat margins, moderate olive green (147A), semiglossy. Shrub 4 feet (1.2m) high x 5 feet (1.5m) wide in 11 years; intermediate habit, lvs held 2 years. Hardy to 5°F (-15°C). Flowering midseason (late April in Seattle area). Etymology of name: Named for Madeleine Webb, a friend of the hybridizer who lives in Victoria, British Columbia.

(r) 'Malina'


'Malina'. Photo by L. Lutz.

Elepidote rhododendron: parentage unknown. H (1920s), G (1920s): Charles O. Dexter, Sandwich, MA; N (2013): Lou Ricciardi, Lakeville, MA; REG (2014): Heritage Museums & Gardens, Sandwich, MA. Flrs 15-16/ball truss, funnel, 2 inches (51mm) long x 3 inches (76mm) wide with 5 wavy lobes. Bud: deep red (53A). Inside and outside of corolla: vivid purplish red (61C) with strong red (53C) speckles throughout inside. Calyx: 0.1 inch (2-3mm), dark yellowish pink (181D). Truss 4 inches (102mm) high x 6.5 inches (165mm) wide. Lvs 3.75 x 1.75 inches (95 x 45mm), elliptic, oblique base, broadly acute apex, flat margins; moderate olive green (137A), semiglossy. Shrub 10 feet (3m) high x 5 feet (1.5m) wide in 45 years; open habit, lvs held 2 years. Plant hardy to 0°F (-18°C), bud hardy to 5°F (-15°C). Flowering midseason. Etymology: named for Malina Feldberg Ricciardi, wife of Lou Ricciardi, a trustee and supporter of Heritage Museums & Gardens. Synonym: Heritage 52-74.

(r) 'Mary Alice'

'Mary Alice'. Photo by R. Praeger.

Elepidote rhododendron: parentage unknown. G (2005), S (2011), N (2011), REG (2014): Roy Praeger, Olympia, WA. Flrs 7/flat truss, narrow funnel, 2.3 inches (60mm) long x 2.5 inches (65mm) wide with 5 wavy lobes. Bud: strong yellowish pink (37A). Inside and outside corolla: brilliant greenish yellow (2A) with moderate pink (35D) marginal band. Calyx: 1.7 inches (45mm), brilliant greenish yellow (2A) with moderate pink (35D) at margins. Truss 3 inches (76mm) high x 6 inches (142mm) wide. Lvs 4 x 1.5 inches (102 x 38mm), elliptic, rounded base, broadly acute apex, flat margins; strong yellow green (143B), matte. Shrub 4 feet (1.2m) high x 5 feet (1.5m) wide in 13 years; intermediate habit, lvs held 3 years. Plant hardy to 0°F (-18°C), bud hardy to 25°F (-4°C). Flowering midseason (late May in the Seattle area). Etymology: named for the registrant's mother.

(r) 'Meerkerk Wonder'

'Meerkerk Wonder'. Photo by F. Fujioka.

Elepidote rhododendron: parentage unknown. G (c. 2000), I (2014), REG (2014): Meerkerk Gardens, Greenbank, Whidbey Island, WA; S (2010s), N (2014): Susie Reynolds, nursery manager, Meerkerk Gardens. Flrs 16/ball truss, open funnel, 3 inches (76mm) long x 4 inches (102mm) wide with 7 wavy, recurved lobes. Bud: pale yellowish pink (29D). Inside: pale

greenish yellow (10D) with 0.25 inch (6mm) light pink (50D) band at margins and slight spotting of light orange yellow (16B) on upper lobe. Outside: pale yellow (18C) with 0.25 inch (6mm) light pink (50D) band at margins. Calyx: 1 inch (25mm), light greenish yellow (8C). Truss 9 inches (229mm) high x 8 inches (203mm) wide. Lvs 6.5 x 2.5 inches (165 x 64mm), oblong, rounded base, obtuse apex, flat margins; moderate olive green (137B), matte. Shrub 7 x 7 feet (2.1 x 2.1m) in 15 years; intermediate habit, lvs held 2 years. Plant and bud hardy to 15°F (-9°C). Flowering midseason (mid-May in Puget Sound).

(r) 'Mishka'

'Mishka'. Photo by S. Southerland.

Elepidote rhododendron: ('Vulcan' x *R. hyperythrum*) (s) X 'The Honourable Jean Marie de Montague'. H (2001), G (2005), N (2014), REG (2014): Stan B. Southerland, Chapel Hill, NC. Flrs 11/ball truss, funnel, 2 inches (51mm) long x 2.25 inches (57mm) wide with 5 frilly lobes. Bud: vivid purplish red (61C). Inside: deep purplish pink (68A), with deep purplish red (71A) throat and spotted flare on upper lobe and less prominently on adjacent lobes, throat and spots fading to deep purplish pink (68A). Outside: deep purplish pink (68A). Truss 4.25 inches (110mm) high x 5.5 inches (140mm) wide. Lvs 6 x 1.6 inches (153 x 39mm), elliptic, cuneate base, acute apex, wavy margins, moderate olive green (137A), semiglossy. Shrub 4.2 feet (1.3m) high x 2.7 feet (0.8m) wide in

12 years; intermediate habit, leaves held 2 years. Plant and bud hardy to -5°F (-21°C). Flowering early (April in central North Carolina). Etymology of name: nickname of the hybridizer's nephew Max, who was adopted from Russia, where "Mishka" means little bear.

(r) 'Purple Skies'

'Purple Skies'. Photo by W. Stipe.

Elepidote rhododendron: *R. ponticum* (s) X 'Black Eye'. H (2007), G (2011), N (2014), REG (2014): Wilbert Stipe, Greenbank, Whidbey Island, WA; I (2014): Glynneden Gardens, Greenbank, WA. Flrs 15/conical truss, broad funnel, 3 inches (76mm) wide with 6 wavy lobes. Bud: vivid reddish purple (78A). Inside and outside of corolla: moderate violet (87A) with dark purple (79A) blotch centered on inside of upper lobe. Truss 4 inches (102mm) high x 4.5 inches (115mm) wide. Lvs 5.5 x 2 inches (140 x 51mm), elliptic, rounded base, acute apex, flat margins; moderate olive green (147A), glossy. Shrub 3 x 3 feet (0.9 x 0.9m) in 7 years; intermediate habit, lvs held 3 years. Plant and bud hardy to 12°F (-11°C). Flowering midseason (May in Puget Sound).

(r) 'Rippling Ruffles'

Elepidote rhododendron: *R. microgynum* Gymnocarpum Group (s), open-pollinated. G (2010), S, N (2014), REG (2014): Catherine Weeks, Eureka, CA; I (2014): Westgate

Garden Nursery, Eureka, CA. Flrs 10-12/dome truss, open funnel, 5 wavy lobes. Bud: strong red (53B). Inside: strong purplish pink (68B) at margins shading to moderate yellowish pink (38B) toward center with a deep purplish red (187D) central blotch. Outside: vivid purplish red (67B). Calyx: 0.75 inch (19mm), strong purplish pink (68B) shading to moderate yellowish pink (38B). Lvs 3.25 x 1.5 inches (83 x 38mm), obovate, cuneate base, broadly acute apex, flat margins; dark green (136A), semiglossy. Shrub 3 feet (0.9m) high x 8 feet (2.4m) wide in 9 years; intermediate habit, lvs held 2 years. Plant and bud hardy to 24°F (-4°C). Flowering early midseason (late April in northern coastal California).

(r) 'Silver Dust'

'Silver Dust'. Photo by F. Fujioja.

Elepidote rhododendron: 'Golfer' (s) X 'Chemainus'. H (2002), G (2007), N (2014), REG (2014): Frank Fujioka, Freeland, Whidbey Island, WA. Flrs 16/dome truss, funnel campanulate, 2 inches (51mm) long x 3 inches (76mm) wide with 5 wavy lobes. Bud: strong pink (50C). Inside: yellowish white (155D) with small strong red (46A) basal blotch and sparse spots on upper lobe. Outside: yellowish white (155B), pale yellowish pink (36D) at base. Truss 4 inches (102mm) high x 5 inches (127mm) wide. Lvs 4 x 1.5 inches (102 x 38mm), elliptic, rounded base, broadly acute apex, downcurved margins; dark green (136A), semiglossy. Indumentum: hairs, emerging light yellow (15D), aging to moderate orange yellow (164C) on underside and pale yellowish pink (159D) above, persisting on upper surface through

summer. Shrub feet (0.6m) high x 3 feet (0.9m) wide in 12 years; dense habit, lvs held 2 to 3 years. Blooms at a young age. Plant and bud hardy to 10°F (-12°C). Flowering midseason (April in Puget Sound).

(r) 'Silver Plum'


'Silver Plum'. Photo by J. Barlup

Elepidote rhododendron: 'Burgundy Mist' (s) X 'Black Widow'. H (2007), G (2013), N (2014), REG (2014): Jim Barlup, Bellevue, WA. Flrs 17/ball truss, broad funnel, 2.25 inches (57mm) long x 3.25 inches (83mm) wide with 5 frilly lobes. Bud: dark red (59A). Inside: very pale purple (69D), shading to a 0.3-inch (8mm) deep purplish red (61A) picotee band; 0.5-inch (13mm) diameter throat of strong purplish red (68B), with two deep red (60A) flares extending from throat into upper lobe, surmounted by a 0.8-inch (22mm) deep greenish yellow spotted blotch in center of upper lobe. Outside: solid deep purplish red (61A). Truss 5.5 inches (140mm) high x 6 inches (153mm) wide. Lvs 5 x 1.75 inches (127 x 44mm), elliptic, rounded base, broadly acute apex, wavy margins, moderate olive green (147A), semiglossy. Shrub 3 feet (0.9m) high x 4 feet (1.2m) wide in 7 years; intermediate habit, lvs held 2 years. Hardy to 5°F (-15°C). Flowering midseason (May in Seattle area).

(r) 'So Sweet'

Elepidote rhododendron: 'Recital' (s) X (*R. proteoides* x *R. pronum*). H (2002), G (2008), N (2014), REG (2014): Jim Barlup, Bellevue, WA. Flrs 11/dome truss, funnel campa-

nulate, 1.8 inches (48mm) long x 2.25 inches (57mm) wide with 5 wavy lobes. Bud: light purplish pink (62C). Inside: yellowish white (155D) blending on upper lobe to light pink (50D), with a blotch of strong red (53D) spots extending 1.5 inches (38mm) from base into upper lobe, spots more concentrated near base; light pink (50D) vein in center of upper three lobes. Outside: yellowish white (155D) blending on upper lobes to light pink (50D), with light pink (50D) vein in center of upper three lobes. Truss 4 inches (102mm) high x 4.75 inches (121mm) wide. Lvs 3.5 x 0.75 inches (89 x 19mm), elliptic, rounded base, broadly acute apex, flat margins, moderate olive green (147A), semiglossy. Indumentum: hairs, leaf underside, pale orange yellow (165D) maturing to moderate orange yellow (165C). Shrub 3 feet (0.9m) high x 2 feet (0.6m) wide in 12 years; dense habit, lvs held 2 years. Hardy to 5°F (-15°C). Flowering midseason (late April in Seattle area).

'So Sweet'. Photo by J. Barlup.

(r) 'Strawberry Sorbet'

Elepidote rhododendron: ('Pretty Baby'* x *R.* pachysanthum) (s) X 'Chemainus'. H (2000), G (2005), N (2014), REG (2014): Frank Fujioka, Freeland, Whidbey Island, WA. Flrs 24/dome truss, funnel campanulate, 2.5 inches (64mm) long x 3 inches (76mm) wide with 5 wavy lobes. Bud: vivid red (45B). Inside: pale purplish pink (56D) with 0.5-inch

'Strawberry Sorbet'. Photo by F. Fujioja.

(13mm) marginal band of strong purplish pink (55B) and light spotting of deep red (53A) on upper lobe. Outside: pale purplish pink (56D) extending 0.5 inch (13mm) from base, shading to deep purplish pink (55A) at margin. Calyx: insignificant. Truss 6 inches (152mm) high x 7 inches (178mm) wide. Lvs 6 x 2 inches (152 x 51mm), elliptic, rounded base, broadly acute apex, upcurved margins, dark yellowish green (139A), glossy. Indumentum: hairs, underside of leaf, brownish orange (165B) maturing to moderate orange-yellow (164B). Shrub 3 x 3 feet (0.9 x 0.9m) in 14 years; dense habit, lvs held 2-3 years. Hardy to 10°F (-12°C). Flowering early season (April in Puget Sound).

* 'Pretty Baby' is an unregistered hybrid by the late Allan Korth of Soquel, CA; it is 'Hydon Dawn' X 'Red Olympia', though 'Cornubia' X *R. degronianum* ssp. *yakushimanum* is also possible. The unnamed seed parent of this registration was hybridized by John Winberg of Fall City, WA.

(r) 'Trade Winds'

Elepidote rhododendron: 'Amber Waves' (s) X ('Bell Ringer' x 'Fashion Plate'*). H (2004), G (2011), N (2012), REG (2014): Jim Barlup, Bellevue, WA. Flrs 15/ball truss, broad funnel, 2 inches (51mm) long x 3.25 inches (83mm) wide with 6 wavy lobes. Bud: light yellow (12C). Inside: light greenish yellow (8B) shading pale yellow (8D); on upper lobes transition is close to margins, on lower lobes transition is close

'Trade Winds'. Photo by J. Barlup.

to base; moderate yellow green (147C) flares extending 0.3 inch (8mm) from base of upper lobes, changing to brilliant greenish yellow (151D) spots above flares. Outside: light greenish yellow (8B) shading pale yellow (8D). Truss 5.5 x 5.5 inches (140 x 140mm). Lvs 4.75 x 2.1 inches (121 x 54mm), elliptic, rounded base, broadly acute apex, downcurved margins, moderate olive green (147A), semiglossy. Shrub 3.25 x 3.25 feet (1 x 1m) wide in 10 years; intermediate habit, lvs held 2 years. Hardy to 0°F (-18°C). Flowering midseason (mid-May in Seattle area).

* 'Fashion Plate' is an unregistered cross by the late Joseph Becales of Glen Mills, PA. It is believed to be [('Fortunei Cream'* x *R. vernicosum*, aff., 18193) x 'Mary Belle'] X [('Dido' x 'Chlorops' x *R. lacteum*) x 'Golden Star']. 'Fortunei Cream' is an unregistered *R. fortunei* seedling selected and named by Joseph B. Gable.

(r) 'Velvet Dawn'

Elepidote rhododendron: 'Maverick' (s) X 'Velvet Dawn'. H (2007), G (2010), N (2014), REG (2014): Jim Barlup, Bellevue, WA. Flrs 20/ball truss, broad funnel, 2 inches (51mm) long x 3 inches (76mm) wide with 7 significantly dissected frilly lobes. Bud: strong purplish red (63B). Inside: yellowish white (155D), tinged pale purplish pink (56D) at margins on opening; with deep red (53D) nectar pouches and deep red (53A) flare extending 1 inch (25mm) from base into upper lobe, becoming spots superimposed on pale yellow green (4D) area in center of lobe. Outside: as inside, without flare. Truss 5.5 x 5.5 inches (140 x 140mm). Lvs 5 x 2 inches (127 x 51mm), elliptic, rounded base, broadly acute apex, flat margins, moderate olive green (147A), semiglossy. Shrub 2 feet (0.6m) high x 2.5 feet (0.8m) wide in 8 years; intermediate habit, lvs held 2 years. Hardy to °F (-15°C). Flowering midseason (early May in Seattle area).

'Velvet Dawn'. Photo by J. Barlup.

(r) 'Vivianna'

Elepidote rhododendron: 'Muncaster Mist' (s) X 'Purple Splendour'. H (2004), G (2009), N (2014), REG (2014): Catherine Weeks, Eureka, CA; I (2014): Westgate Garden Nursery, Eureka, CA. Flrs 14/ball truss, open funnel, 1.75 inches (44mm) long x 2 inches (51mm) wide with 5 wavy lobes. Bud: vivid reddish purple (78A).

Inside: light purple (85A) with dark red (59A) spotted blotch on upper lobe extending into adjacent lobes. Outside: dark purple (83A). Truss 4 inches (102mm) high x 5 inches (127mm) wide. Lvs 4.5-5 x 2 inches (114-127 x 51mm), elliptic, rounded base, broadly acute apex, downcurved margins; moderate yellow green (147B), matte. Shrub 4.5 x 4.5 feet (1.4 x 1.4m) in 10 years; intermediate habit. Plant and bud hardy to 25°F (-4°C). Flowering early (March in northern coastal California). Etymology: named for a newborn family member.

(r) 'Wendy's Way'

'Wendy's Way'. Photo by J. Barlup.

Elepidote rhododendron: 'Lemon Embers' (s) X ('Cream Glory' x 'Viennese Waltz'). H (2002), G (2006), N (2014), REG (2014): Jim Barlup, Bellevue, WA. Flrs 19/dome truss, funnel, 2 inches (51mm) long x 2.75 inches (70mm) wide with 5 wavy lobes. Bud: strong purplish red (54A). Inside: pale yellow green (4D) blending to pale purplish pink (56C) and on upper lobes to pale purplish pink (56A), with deep red (53A) flare extending 0.5 inch (13mm) from base into upper lobes, then becoming spots for 0.5 inch (13mm). Outside: pale yellow green (4D) blending to pale purplish pink (56C) on upper lobes. Calyx: 1.5 inches (38mm), pale yellow green (4D) blending to pale purplish pink (56C) with strong red (53B) flare and spots. Truss 5 inches (127mm) high x 6 inches (152mm) wide. Lvs 3.8 x 1.75 inches (98 x 44mm), elliptic, rounded base, broadly acute apex, flat margins, moderate olive green (147A), semiglossy. Shrub 4 feet (1.2m) high x 3 feet (0.9m) wide in 12 years; intermediate habit, lvs held 3 years. Hardy to 5°F (-15°C). Flowering midseason (early May in Seattle area). Etymology of name: Named for a friend of the hybridizer.

(r) 'Winter Mist'

'Winter Mist'. Photo by J. Barlup.

Elepidote rhododendron: 'Terra' (s) X 'Winter Spice'. H (2003), G (2008), N (2014), REG

(2014): Jim Barlup, Bellevue, WA. Flrs 19/ball truss, funnel, 1 inch (25mm) long x 1.5 inches (38mm) wide with 5 frilly lobes. Bud: deep purplish pink (54B). Inside: yellowish white (155D) blending to pale purplish pink (56D) at margins, with strong red (53C) twin flares extending 0.75 inch (19mm) from base into upper lobe, extended 0.5 inch (13mm) by strong red (56D) spots. Outside: yellowish white (155D) blending to pale purplish pink (56D) at margins of upper lobes. Calyx: variable, to 1 inch (25mm), yellowish white (155D). Truss 5 x 5 inches (127 x 127mm). Lvs 4.25 x 1.75 inches (108 x 44mm), elliptic, rounded base, broadly acute apex, flat margins, moderate olive green (147A), matte. Shrub 3 x 3 feet (0.9 x 0.9m) in 11 years; intermediate habit, lvs held 2 years. Hardy to 5°F (-15°C). Flowering midseason (early May in Seattle area).

Updated Registration Form

A fully revised and updated application for registration of a rhododendron or azalea name is now in effect and should be used for all future applications.

The goals in revising the form included clarification of certain elements that had confused some registrants; collection of a few additional points of information (such as fall foliage color); and a broader approach so that registrants of azaleas don't feel as if they are hampered by terminology focused on elepidotes. Michael Martin Mills, the North American registrar, consulted veteran registrants and the international registrar, Dr. Alan C. Leslie of the Royal Horticultural Society, in the revision process.

Veteran registrants may perceive the form as much longer, but the added questions are for the most part optional. Mostly, the form is longer because the previous versions originated in the pre-computer era and needed to fit o n o ne sheet of paper, front and back. This resulted in condensed wording and tight spaces to provide answers. Nowadays the great majority of applications are electronic, allowing room for clearer wording.

The n ew i nstructions a ccompanying t he a pplication f orm a re m uch m ore expansive, intended to comprehensively help registrants complete the form.

The new form also includes a photographic rights release, which will eliminate a step in the process.

The new application form and instructions—both electronic and printable—are found by going to the ARS home page, www.rhododendron.org and clicking on "Online plant name registration." For those without computer access, the quickest way to obtain a paper application form or copy of the instructions is to ask a friend with internet access to go to the website and print the forms. They may also be obtained from the North American registrar: Michael Martin Mills.

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*, R.D. Huse and K. L. Kelly; D. 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 Alan C. Leslie, International Rhododendron Registrar.

New Members from 11/21/2014 through 2/24/2015

AZALEA
Scott Dreffin
CALIFORNIA
Julie Boes
CASCADE
Paul Reimann
CONNECTICUT
Erik Christensen
COWICHAN VALLEY
Mary Lynn Boxem
Rosemary Branting
Peter Bray
Sandra Buchanan
Kathy Coster
Sheila Gallagher
Richard Kerr, Janice McLean
Valerie Parker
Karen Towne
DANISH
Margit & Sten Norkjaer Andersen
DE ANZA
Cathy Dilts
DUTCH
Stefan Peten
EUGENE
Friends of Hendricks Park
Candace Miller
FINNISH
Kaj Pettersson
FRASER SOUTH
Gerald & Rosemary Nemanishen
Robert Kotson
HAWAII
Armon V. Collman
Lee Meconi-Steiger & Storm Steiger
Ronald Toyama
JUAN DE FUCA
Mary Hood
Dick & Anne Storch
LEHIGH VALLEY
Ron & Beth Warren
MASON DIXON
Milt Taylor
MASSACHUSETTS
Michael Bliss
MONTEREY BAY
Jim Tucker
MT ARROWSMITH
Bryon Fischer, Chuck Morin
NANAIMO
Erna Murdoch
NEW YORK
Harold De Ropp
NON-CHAPTER
Chris Holland
Roberto Lesti
British Unit Library
Taiwan University Library
NORTH ISLAND
Cheryl & Brian Bennett
Patty & Phil Matthews
Connie & Dan Prain
Leslie & Phil Robertshaw
Joanne & Doug Williams
NOYO
Carla Markman
OZARK
Melba Dagy
PILCHUCK
Diane Bylund
PORTLAND
Theresia Hazen
Bruce Ito
RSC ATLANTIC REGION
Adam Gilmore
RSC NIAGARA REGION
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William & Marjorie Prieksaitis
SCOTTISH
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Felicity Peter-Hoblyn
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Bjorn Wessman
TACOMA
Kathy Johnson
Nancy K. Read
TENNESSEE VALLEY
Eleanor Goodson
TUALATIN VALLEY
John Easley
VANCOUVER
Everhard & Lyn van Lidth de Jeude
VICTORIA
Caren Cameron
Lynn Collicutt
Lynne Ferrie
Jackie Ralph
Roz Walls, Kathy Simas
WILLAMETTE
Greg Neitzel

Deceased Members from 11/21/2014 through 2/24/2015

Ehret, William
Emmerich, Bersy
Hershey, Laura
Hilt, Valerie
Steel, Nancy
Steil ,Bill
Tarpley, Hazel

Chapter/District/Special Donations 11/20/2014 through 2/24/2015

Donor	Amount	Source
Massachusetts Chapter	$160.00	
Great Lakes Chapter	$840.00	Convention

Errata

The photo on P.40 (*JARS* 69(1)) of Dominion Brook Park was by Glen Jamieson.

DEADLINES FOR AUTHORS/ PHOTOGRAPHERS

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

Send copy or inquiry to:
Dr. Glen Jamieson, Editor
Journal American Rhododendron Society