

VIREYA VINE

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PUBLISHED BY THE EDUCATION COMMITTEE OF THE RHODODENDRON SPECIES
BOTANICAL GARDEN

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E. White Smith, Editor

I really like the policy we use with the Vireya Vine about not charging an annual fee. For over 10 years we have been able to get along fine with the funds people have sent in. It is my understanding that the VV fund at the RSF is down to about \$200. Fran Rutherford tells me that each Vine issue cost about \$175 to print and to mail. The only cost for putting out the Vireya Vine is; printing 200+ copies at a fast copy shop, envelopes for mailing out of the USA, and postage.

Here is what the VV mailed cost is: US subscriber - \$0.64 each for a total of \$104.32; Canada subscriber - \$0.75 each or \$2.25 total; Overseas subscriber - \$1.35 each for a total of \$71.55. = \$178 per issue.

We have had many Viners over the years who have given a lot more than their fair share both in money and sharing their experiences with Vireyas. I have always said to pay for the Vine once and we will let you know if we run out of money. Now is the time and I will start the fund replenishment effort with a substantial donation. We also are going to prune the list down. Although most people have paid, we have never heard from some of the people on the mailing list. I hate to think the Vireya Vine is being regarded as junk mail by some people.

Many people have asked me to list on their mailing label their expiration date but I have resisted this because it is just a lot more work doing the book keeping. I do the Vireya Vine for fun and entering data about paid memberships is not fun to me. SO, if the situation moves you, please send in what you think is right and help keep the VV going.

Send in what you think you can or should and we will keep the Vine going. We still get a few new subscribers. Some people are getting interested and some didn't know about the Vine.

My wife, Marlene and I had a good trip down the Oregon and California coast in late January. We spent a day with Jim and Janice Gerdemann at Yachats Oregon. Jim filled a plastic pot with peat and Perlite and I stuck a few Vireya cuttings in it for traveling. We stopped for two days in Fort Bragg California to visit with Pete Schick and to walk through the Mendocino Coast Botanical Garden. This garden is really becoming a Rhododendron display garden. There is a major planting of the Maddenii section, many large Arboretum Series plants and Pete has planted many of the big leave Rhododendron plants along the banks of streams. A very interesting garden that has room to grow for many years. I picked up a few cuttings from Pete Schick for the rooting container in the back of my Van. I spent two days with Bill Moyles in Oakland California. Bill took me to see his new collection location. He has acquired space in a Community College greenhouse for his Vireyas. Bill does not have a greenhouse at home and was getting too many plants to haul into the house and garage every time it got cold. Bill will also give some talks to students about growing Rhododendrons.

This Community College is different than ones I know about. I met the head grower for the greenhouse area and got a tour of the area. They are also beginning to install some hardy Rhododendrons in the area. Good deal, Bill, what a great place to grow your Vireyas. Bill and I went to see Don Selcer in Oakland who also has a lot of Vireyas growing in his back yard. The night before we got to Don's they had a big wind storm and Don lost a large pine tree over his neighborhoods back yard. The place was a mess with fresh fallen branches and limbs, but I just kept looking at his fine Rhodie plants.

Bill Moyles and I were over in Strybing Botanic Garden in San Francisco, up on the hill side, looking at the Vireya plantings when Pete Sullivan walked up. The garden staff is replanting the Vireyas in raised beds on a high spot that should be frost free. There has been a lot of work done and the plants look real good. This should be a real show place some day for Vireya fans. We met up with Karen Morebeck who is always at the Vireya area in the Strybing nursery. Karen made sure I got a few good things from the Vireya area. They really get a lot of volunteers working at the Strybing nursery. I had so many good cuttings by now that Bill had to make me up another rooting pot.

We spent a day down in the Palo Alto area south of San Francisco. I called Stan Eversole and we went to his home to check out his Vireyas. Stan had a large tree from across the creek/drainage ditch fall and break part of his greenhouse. Stan has some nice plants and shared a few cuttings with me. He builds wooden boxes with screen on the bottoms and screened holes in the sides for his plants. He says that the plants don't blow over and get real good drainage with his containers.

The folks that we were with in the Palo Alto worked at the U.S Geological Survey office in Menlo Park and they took us there to look at the Rhododendron plantings. Howard Oliver who is a Geophysicist there has planted the campus with many fine Rhodie plants. It must be a quite a show in the spring. Even though this was a Sunday afternoon, Howard was working in his office and we banged on his window. We went to his home to see the Vireyas he has and I signed Howard up as a new Viner. A Good Trip and Lots of Fun. We are going back down to Fort Bragg in early March to see the Maddenii's in bloom.

Plant Labels!!! Surely, one of the most important scientific investigations ongoing in the plant world is the question of good plant labels. When I was walking through Howard Oliver's garden I commented about his labels and said that I did not like that type because the writing would fade away too soon. He said that his didn't fade and gave me one of the pens that he uses. First, the plant label is the type made out of a wire loop about 12 inches long on each leg. Attached to the loop at the top is a piece of anodized tin about 2 inches wide by 1 inch high. These labels look like they would work real well but the writing soon fades away. I have tried a grease pencil, lead pencil and even one of the permanent ink markers. Howard gave me one of the marking pens that he uses and says that it doesn't fade or wash off. It is a "Opaque Paint Marker" called "DecoColor" by the Uchida Corp. and is made in Japan. Howard said that you get them at art supply stores.

I got a Christmas letter from our friend Bill Jenkins from Los Angeles. In May of 92 Bill spent a month in Indonesia. His letter sounds like he had a great time. At one place he stayed, Lake Toba, he describes "I stayed for a week in a native hut with private all-tile bath on the lake (\$2.50 per day including breakfast). The lake lies in the caldera of an extinct volcano and is too big to see across. Warmed by hot volcanic springs, it is a heavenly place to swim. I hiked around Samosir Island. ---"

— This part of Sumatra is where the cannibals were. The batak did it. I met quite a few, and they all seemed friendly and gentle. "Not hungry". Bill made a point of trekking in the rain forest of Java and Sumatra looking for *Vireya*, with no luck. He made a special trip to Java's largest Botanical Garden in Bogor and they had none. He asked the manager about *Rhododendrons* and was directed to the Ci Bodas Botanical garden, 50 miles away, up, near the summit of the mountains. He went there and says that the place is the wettest spot in Indonesia and is well kept. A large *R. javanicum* was growing in front of the administration building without flowers and looking pretty scrubby. Back by the greenhouse there were about 100 smaller *Vireyas* in gallon pots. No blooms and lots of weeds, and no one around to care for them. Bill thinks this could be a wonderful place for *Vireyas* if only someone cared about them.

From Leslie Riggall
Dear VV,

South Africa
December 14, 1992

I sympathize with Luurt Nieuwenhuis, and anyone else who suffers from "Phytophera" (correctly named *Phytophthora cinnamomi*). I have lost *Rhododendrons*, camellias, and even mature Avacado Pear trees from the deadly attack of this fungus.

The optimum conditions for the fungus are warmth, combined with plentiful moisture, conditions which are desirable for *Vireyas*. In my subtropical climate we have heavy rain when we need it the most, in the summers and autumn. The rainfall is heavy in summer and the fungus spreads easily through the soil at this time.

I grow about a hundred species and varieties of *Vireyas*, plus at least a thousand seedlings from my own seedlings, it is impractical for me to attempt to treat the soil with fungicide, even if they were effective, which would be doubtful in my conditions.

When I collected *Vireyas* in Borneo, the natural seedlings were always found in moss at the top of a vertical bank. The plants grew on rocky slopes, and in many cases grew epiphytically on trees. Once we saw flowers on the ground from *Vireyas* which were so high up in the tree canopy that the plants could not be seen. From these observations I deduced that *Vireyas* require little nourishment but perfect drainage. And here lies the secret of growing them in the ground.

To protect my *Vireyas* from *Phytophthora*, I grow them whenever possible on a slope to improve drainage, and above ground level. I lay four short logs on the ground to form a square, and fill this enclosure with a mixture of shredded pine bark (which is said to repel *Phytophthora*), coarse garden compost, and soil. As the *Rhododendron* is above ground level it never gets it's feet too wet. Of course the enclosures could be made of other materials, such as blocks of peat or of stone.

They can be grown quite successfully on chunks cut out of dead tree fern trunks, as these satisfy the requirements of good drainage, and the fungus would be very unlikely to reach them from the soil.

Where *Vireyas* are grown in containers there are other options. A compost can be created without any soil at all, to avoid infection.

Alternatively soil treatments can be used to sterilize the soil. These include formaldehyde-drench, fumigation, or steam-sterilization. But in all cases a very free draining mixture must be used, to minimize the risk of trouble in the future.

Leslie Riggall
Fern Valley Botanic Garden
Igwebaba Road, Kloof 3610
South Africa

Thanks for the info, Leslie. I surely would like to see your place some day. Sounds exciting. EWS
 In VV #34 I made a comment about a public planting of Vireyas in Auckland NZ. Our good friend Joyce Waters who lives in Wellington NZ writes with more information about the subject. "In Issue #34, January 1993. Really - "I must take issue with the statement," "It was probably a gardener who really cared about plants and wanted to try something new and different". The Parks and Recreation Department of the Wellington Botanic Gardens has planted 35 Vireya Rhododendrons. Michael Cullinane, his wife Mary-Lynn, and myself selected a site for the plants. Ray Mole, the Curator at the time chose the plants. The Vireyas included are R. 'Tango Time', 'Golden Bells', jasminiflorum, macgregoriae, 'Pendance', 'Saint Valentine', and what I think is laetum x zoelleri. The planting was on a very steep part of the garden, shaded by trees and other Rhododendrons. All in all, the Wellington Botanic Gardens and particularly Ray Mole, are to be congratulated."

From Bob Murray,
 Dear VV,

New Jersey USA
 December 6, 1992

Recently there was a conversation between Peter Sullivan and the American Rhododendron Society Plant Registrar (Jay Murray). Peter raised the question as to what Vireya plant names had not been registered. This is a reasonable question, but it is all but impossible to answer, since there is no way to list names that have not been registered and hence are unknown. However it seemed that if Peter had a list of what had been registered, plus those unregistered names which we have a listing, then he could answer his own question.

In order to provide a suitable list to satisfy Peter's question, I have extracted the Vireya data from the plant name database for Rhododendrons, and have compiled it into a booklet. In the course of handling the data several things seemed apparent and begged for a closer look. It occurred to me that what I found may be of interest to readers of the Vireya Vine.

The first observation is that while Vireya listings in the International Plant Registrar go back into the 1860's, they represent a very tiny fraction of the Register. Next I noted that the instances of unknown parentage is remarkably few as compared to the rest of the names in the register. This is a big plus for serious Vireya breeders.

Another big plus is the potential for plant breeders. In checking about 300 hybrids it turned out that about 81% had four or fewer species in their background; 67% had three or fewer species; 41% had only two species; and 37% were primary crosses. There are 11 selected clones of species which have had their names registered. These should be prime candidates to be used as parents. While 11 may not be very many, consider that in the present list of hybrids, 86% of the ancestors consist of a group of only 10 species out of the hundred and some which are listed.

In examining parentage it was found that on the average the ancestral makeup of Vireya hybrids is as follows

Name of species	Percent
javanicum	18
jasminiflorum	13
laetum	11
zoelleri	11
brookeanum	7
lochae	7
konorii	6

macgregoriae	5
aurigeranum	3
all others	14

The impressive thing for hybridizers is that this plant family is relatively unexplored with respect to its potential for new and exciting hybrids. There are species listed for which not even one hybrid appears on record. Most species have not gone beyond a primary cross. This in spite of the fact that a primary cross is not an end in itself, but is usually considered to be the initial step toward a desired goal. F2 crosses, selfing, backcrossing, and beyond are required to get the genetic segregation that leads to advances in hybridizing.

One worrisome thing is that the database is not complete. When plant names do not get registered, aside from the potential name confusion, there is the difficulty in knowing what has or what has not been done. The true list of Vireyas may be much larger than the list from which I have gleaned this information. Even so, the potential is very impressive.

Let me make a pitch to encourage hybridizers to get their breeding data into the public record. One way might be to write articles for publication; however, a relatively painless way is to use the International Plant Name Register. When a plant is selected out and named, register it. Also, when registering the name, give information on the parents. If the parents are unregistered or unnamed, include code numbers and plant descriptions for them too. The object should be to achieve an unbroken genealogy back to the species.

Everyone interested in plants gains when breeding records are available. It is a tragedy when a lifetime is spent developing new and better plants, only to have the work lost because the records were lost. There are many ways in which private records can and do get lost. Public records are much more secure! The Plant Registry is a public record which will survive, insuring that the plant information will not be lost and that it will be available.

These public records may seem remote and academic, but they are quite accessible and useful. A computer database is available to anyone who has the interest, also the information is published from time to time in book form. However, even close reading will not reveal much of the information that is embedded in the pages. By contrast, the computerized records can be searched quickly and easily to extract data that may not otherwise be apparent. For example, a computer search can easily locate all of the names which have one or more things in common. Flower color, hybridizer, parentage, and other characteristics can be used as criteria for the search. One could ask for all of the plants with yellow flowers which have a certain plant as a parent. Or the question might be, list all the plants with yellow flowers which do not have a certain plant as a parent. A different type of search will produce the family tree showing all of the ancestors of a given named plant. Another search will construct a list of the plants which have a given plant as a seed or pollen parent.

Make these records a resource for your benefit. If you have a question which might be answered by researching records, call or write. We may be able to give you the answer.

Robert A. Murray
21 Squire Terrace
Colts Neck, NJ 07722
Phone (908)946-8627

Bob and his wife Jay have published a small booklet (34 pages) called "Vireya Names". It contains names of species and hybrids, both registered and unregistered, with information about the plant. Very nice start for an ongoing project. This booklet should be in a Viner's library. Cost \$5.00 + postage, I think a \$1.00. Get one!

It is reported that in the small country of Sarawak in Northern Borneo, 7 1/2 Square Kilometers of tropical rain forest is being cut down per day.

From Marie Nyman
Dear Vireya Vine

Kalama, Washington
December 31, 1992

I am enclosing seed from my *R. phaeocephalum* x *R. leucogigas* hybrid. Would you please send it along to Bill Moyles who runs the Vireya Seed Exchange. Also enclosed is a slide showing the blossom and leaf of this plant. The blossoms are very fragrant.

I bought this plant about 10 years ago at a Portland Rhody Club Species Auction. Dr. Mossman brought the plant in for sale. It is an easy keeper, and thrived in potting soil and a plastic pot. In the summertime I put it outside in the shade and spray it's leaves like it is raining. It looks supremely happy getting this treatment. The leaves reach up and the plant is trying to be a large grower, but I keep it pruned. It could be magnificent if allowed to grow in a warmer climate.

For the last year I have watered all of my Vireyas by spraying their leaves. I also transferred them all to clay pots. They look happy. Of course they are planted in a loose mixture. My latest mix is, bark, peat moss, sandy loam, leaf mold, Perlite, moss, and "Soil Moist" polymer.

I'm really interested in Tom Tatum's Vireya Rhododendron book, when will it be done? It snowed all day to day with fine flakes. It's truly a winter wonderland outside. The Vireyas are all in the greenhouse which is kept at 50°F. Would you add me to the Vireya Seed Exchange. I have seed at times. I use the technique taught at the Longview Rhododendron Club; little plastic containers, No Damp Off peat moss, lots of light and warm temperatures (in the house).

Marie Nyman
PO Box 214
Kalama, Wa 98625

Thanks Marie and I sent your seed on to Bill Moyles. There is probably some of it growing well by now. Tatum's book: This is May 5th and I have talked to Tom twice this last week. He says he will have it done by September. How long will it take to edit and print I don't know, but he is working on it now.

From Walt Mills
Dear Vireya Vine

Chappaqua, NY
January 18, 1993

For a person who is supposed to have a 'green thumb' I am really a first class 'klutz' when it comes to growing Vireyas from seed. However I really enjoy reading about other people's efforts, and I am still hoping that one day I may see some fruit from my efforts.

I was planning on writing this letter before receiving the current issue (VV34) which had mentions of seed growing -- both pros and cons. So I feel like I am in good company, at least among those who find it difficult.

Just briefly, I have grown a lot of plants -- up to 1 inch tall. I started getting Vireya seed from Esther Berry when she was running the exchange. And then I have had many packets from Bill Moyles, who was so kind at one time to send me some of his surplus seedlings -- there must have been about 100 of them about 1 1/2 inch tall and as healthy as could be. Three months later they were all gone.

Dr. Chaikin (who I am quite sure is the owner of Cape Cod Vireyas), made a most generous offer to send people cuttings several years ago, came through last summer with three very nice and very sturdy, healthy cuttings. One each of three different varieties which were tagged with names that had nothing to do with normal Vireya scientific names. Anyway, one plant was small with quite small leaves, another was tall with medium size leaves, and the other was in between the two in size but with quite large leaves.

The tall one is a picture of robust health. It has grown nicely, and has probably doubled in size from when I got it. The middle sized plant has had a struggle, has lost several of the large leaves, and just today I had to remove the lowest leaf that was about 50% brown (from fungus I assume). I sprayed the entire plant with a mild solution of Safer Soap and a fungicide (Benomyl). I don't know if that will stop the fungal aggression, but I had to take some action or it was going to go the way of the smallest of the three which gave up the ghost about a month ago. Every leaf suddenly went brown -- curtains.

And that is what has happened to all of my plants, Vireyas that is.

During this same period of time I have grown hundreds of perennials, including hard to grow lilies from seed. I propagate and grow African violets from seed and have so many plants I can't even give them away. But Vireya Rhododendrons -- zilch, kaput, ???

So what have I done during these years of trying? I first started by going out into the woods behind my house and getting some old rotted logs. I sterilized them -- cooked it in the oven wrapped in foil. The seeds germinated just great and grew nicely up to about 1 inch and then a brownout! I won't go through all of the other mixes I have tried, most of which have been suggested to me either through the VV or by direct correspondence, and most germinated just fine and then the dreaded brownout.

Right now I have some seeds that were sent to me by Brian Clancy, a wonderful gentleman in Australia. The plants from these seeds must be a year old. Brian told me the secret was to plant "fresh seed", and to get them planted immediately upon receipt. And I did that with this current batch, but I held a few aside in the freezer. Those that I planted grew nicely and then went the way of all the others. The ones that are germinating now are the ones from the freezer and are planted in a mix of sterile fir bark, ground fine and mixed with Perlite. I just noticed today that there are little tiny specks of green showing which shows that the seed is germinating, but I have no faith that they won't go the way of the rest.

Now I see in the current issue of the Vine that Roland Perry is raising seedlings and having "excellent results", and he keeps his seed not sown in the freezer. Next we get a letter in the Vine from Fred Renich who sort of indicates that growing Vireyas from seed is a breeze. Oh yes, he does say it takes a little patience, but apparently he doesn't have a fungal problem. Of course he does indicate that the salt content of water can be a problem. Could that be my brownout problem that I think is fungus?

It seems like I have taken a long time to get to the point of this letter, but here it is. My thought is to offer my services to prepare a small booklet on "Successful Germination and Propagation of Vireyas from Seed." To do this it would be necessary to have detailed guidelines from everyone who is successful at growing Vireyas from seed. This booklet would cover the seed itself -- fresh, stored, etc. -- the planting medium, heating and how much, light and how much and where, and so on up to getting a viable plant to flower. And if fungicides or any other pesticides are used, which ones and how much. It looks like now that water and its salt content needs better understanding. I have never thought of using rain water, but I sure could put a container under the down spout of the house.

I have virtually all of the VV's from the last five years, so I could start by going through and culling out excerpts that pertain to the subject, then contact the people for more details. I hope that when the Viners read this letter that they will sit down and write to me about their methods. Remember we need both the pros and the cons to learn from.

Which fungicides are indicated for Vireyas? I have used Benomyl, Captan, Zinex, and Daconil 2787. I also have used Safers Soap. I have noticed tiny little mite-like flying insects that seem to appear out of nowhere just as soon as the seeds start to germinate. Perhaps the seed its self should be soaked in a fungicide before planting. I just don't know but I sure would like to find out some answers. Maybe Roland Perry is a good source because he says that he has excellent results.

Walter S. Mills Jr.

Box 52

Chappaqua, NY 10514

Phone 914-238-3665

You got it Walt. Get going on a little booklet, and lets all pitch in and send Walt information. I have only one thing to say about Walt's letter. Please use fungicides or other pesticides only when necessary. I doubt that Walt's problems are a fungus attack but I don't know what it could be. I use the fungicides Subdue and Allett twice per year on my Vireyas and haven't lost a plant in years from root rot but I use very small amounts. Be careful with Benomyl (Benlate). It is quite powerful and can kill small plants or burn cuttings. Normally you should need nothing.

We just finished hosting the Annual Convention of the American Rhododendron Society here in Tacoma Washington. One evening I had most of the Vireya nuts to a dinner and we got to meet each other and had a good talk. Over 40 people showed up from all over the world. Joyce Walters from NZ, Noel Sullivan from Tasmania Australia, Jack Willson from Australia, people from Canada, and many Americans. I had a table 4 x 12 feet long covered with Vireyas in the plant display area which people seemed to enjoy. My big plant of R. stenophyllum in bloom got most of the attention and had its photo taken many times.

PLEASE NOTE THE NEW NAME OF THE RSF. Rhododendron Species Botanical Garden

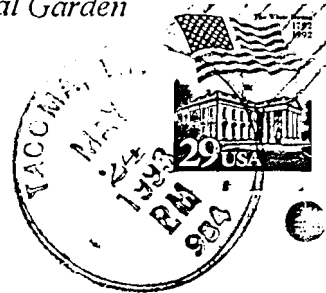
VIREYA VINE

RHODODENDRON SPECIES BOTANICAL GARDEN

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