VIREYA VINE
ISSUE # 22, AUGUST 1989

PUBLISHED BY THE EDUCATION COMMITTEE OF THE
RHODODENDRON SPECIES FOUNDATION

R. S. F. PO BOX 3798, FEDERAL WAY WA. 98063
E. White Smith, Editor

From Peter Sullivan San Francisco, Ca.
Dear VV, April 1989

Please let me say that I have been very pleased with the content of the Vireya Vine, and the consistency and fidelity of the editor.

Also thank you for reminding me of the hazards of the nitrate form of nitrogen. I had known it 10 or 20 years ago. I have a larger that ordinary miscellaneous file in my brain, and I am afraid that this very important data has been resting there to the hazard of this section of the Rhododendron genus.

My experience has been tutor to the fact that over-watering, poorly aerated planting mixes, and long periods of below 50 to 55'F soil temperatures can also be the cause..... if not the probable cause of much of what has been lumped together as chlorosis. This does not in any way alter the possibility of S.D.S. (sudden death syndrome) from the chemical assaults. This latter item is the most damnable thing; it takes so long to leach out of the container or planting area that I have advised those with this condition to toss out the plant. In raising the next plant try to remember the lessons learned. All new hands in the Vireya venture should accept the fact that many of the species and many of the genes of the hybrids, come to us from nature as pure epiphyt's. What nature teaches us about Vireya history is that they are camels, capable of protracted periods of a shortage of water. Also since they are epiphytic they go very far on very little nutrition. It would be my guess that they could do well on the nitrogen fixings that are available from the rains.

We are having an excellent Vireya spring in San Francisco, probably the best in my recollection. Many days of 70'F with nights of 48 to 50'F.

Peter Sullivan
221 Richland Ave.
San Francisco, California 94110

Thanks Pete, I am not to sure what "fidelity" means, but I have tried to keep the content of the Vine constant. (Remember that the VV is what you Vireya growers have to say with a bit if E. White thrown in for filler).

For other Viners information; Pete worked at Stribing Arboretum in San Francisco for many years and is one of the "Old Timers" in Vireya's. Pete grew lots of seed sent to him from the wild areas and was very generous in passing plants on to people interested in this group of Rhododendron's. I think that it is fair to say that many of the Vireyas introduced in the early days in the USA got their start with Pete Sullivan.

Pete's statement about rain water having fixed nitrogen is true. Have you ever wondered why your home lawn grows so well and fast in the early spring. Rain water picks up nitrogen from the atmosphere as it falls and this rain probably does furnish some of the nitrogen in tropical areas. The problem with this is that most of the Vireya Viner's do not live in very high rainfall areas. Here in Tacoma Washington we receive only 35 inches per year. We also keep the plants in a reenhouse and use tap water, not rain water. What I think Pete is trying to tell us is be careful about what fertilizers and quanity to use.

In VV21 I said to use the ammonia form of nitrogen and be careful about the nitrate form. I really expected to hear from lots of you Viner's about this but only received one answer. At times I may even put untrue statements in the VV just to check you out (can you find the untrue items?). Be careful because someday we might have a test (that will be the day--- Anyone want to write a test?). In my travels around the Vireya world I meet a lot of people who subscribe to the Vine. I always ask them to write a story, an article or a letter about what they are doing. I usually get the answer that they are just beginning or that they are just amateurs with these plants. We are all just beginning with these plants and we will be for a long time. Maybe some day we will learn how to communicate with plants, but until then we are all learning what we conceive to be true.

From Sheldon Ofshe North Bellmore, New York
Dear Vireya Vine, June 14, 1989

I am a new subscriber to your most enjoyable newsletter and I am some what of a novice in Vireya growing. I am full of questions such as;

Rhododendron Species Foundation and Garden. I would like more information about it.

Cuttings. I am lacking knowledge about cuttings, timing, and ways to send them by mail.

Supplies. Are there supply houses in the Eastern US that would be helpful and assist me in scrounging for materials that I need?

Editor note; I shall answer some of these questions before going on with Sheldon's letter. The Rhododendron Species Foundation is a non profit organization located between Seattle and Tacoma, Washington State. It is located just off the Interstate I-5 freeway which is the major North South highway on the West Coast. There are about 24 acres in the landscape of the garden. We have a large greenhouse, a cool house, a large lath area and three 100 foot long plastic hoop houses. The garden is located on the campus of the "Weyerhaeuser Corporate Headquarters". The Weyerhaeuser Company is one of the major timber companies in the world with operations throughout the USA and many over-seas holdings. We (the RSF) have a long term lease on the property. Weyerhaeuser has been very helpful in getting this garden going and continues to be a active partner in the Foundation. The Garden is planted with species Rhododendron's organized more or less botanically by series or subsection. We like to say to people that we will have the best Rhododendron collection in the world some day. A few more years of growth and planting will show in a more mature garden. The Rhododendron collection contains hardy species as well as the tender plants. I should think that the RSF now has the largest number of Vireya species in the USA. We sell plants either at the garden or by mail. Membership is $25 per year and you get newsletters, free admission and a very nice plant catalog to buy from. The garden is open most of the year especially from March to October. One of the main reasons for starting the Vireya Vine was to stimulate interest in the Species Foundation and hopefully to get some more members. If you happen to be in the area you can call and tell the office that you are coming. (206) 838-4646

Sheldon asks about cuttings and I am not sure what he wants to know. Vireya Rhododendron's are very easy to root (almost all of them). Cuttings need to be firm new wood. I do not use any hormones on cuttings. I have mailed many cuttings in the past and small rooted plants also. Just pick good firm wood and try to put them into a small gift card box. A wet tissue might help around the cut stem. I am going to leave the rest of this subject for other readers to answer.

Supplies. That is a real good question. How about you people in other areas tell about your suppliers. I had a good source of pumice and when I went there a few days ago I was told that they do not sell it in bags anymore. I looked all over and could find no bagged pumice and instead had to buy a bag of perlite instead. (E. White) And back to Sheldons letter;

I have been working with Vireyas for 2 years and include about 25 varieties in my collection. I have just started on my own cuttings (including St. Valentine) and I am waiting for results (how long do I wait?).

Thirty years ago, when I moved from crowded New York City to a house in the suburb's, I sent away for plans of a greenhouse. For 25 years the plans sat on my desk until I retired. Then I got my greenhouse. The time since has been very fulfilling and enjoyable. At first it I tried anything and everything that would grow. Now, more sensibly I am concentrating on Vireyas, Orchids, and Cacti which seen to be compatible.

I am using "Rapid Feed Micronized Iron" from Luster Leaf Products, Inc. P.O. Box 1067, Crystal Lake Illinois, 60014

The analysis is Iron (FE) 25% by weight, Iron equivalent to Fe_2O_3 not less than 35%. This product claims to be "timed released". I have no conclusions as yet but will write again to the Vine.

Sheldon Ofshe
1989 Wilson Ave.
North Bellmore NY 11710

Here is an other letter from Red Cavender (Red's Rhodies). He has sent a list of the Vireya plants that he has for sale. I am not going to retype the whole list with descriptions as Red has sent but only the plant names and his prices. Write to him for the whole list and his shipping/pricing schedule.

From Richard Cavender Sherwood, Oregon (just SW of Portland)
Dear Vireya Lovers, June 1898

Vireyas now available from Red's Rhodies.
'Calavar' (konori X zoelleri), a show stopper, 1 year $9.00; dielsianum, 2 year $13.00; ('Dr. Sleumer' X 'Pink Delight') X ('Pink Delight' X jasminiflorum), easy grower, 2 year $8.00; goodenoughii, pure white, fragrant, up to 6" curved trumpets, 1 year $7.00; herzogii, blooms young, 2 year $8.00; javanicum, 2 year $9.00; laetum, bright yellow, 2 year $9.00; lochae X culminicolum, easy, 3 year growing in a basket $15.00; loranthiflorum pink form, easy, 1 year $6.00; macgregoriae (natural hybrid), small orange flowers, rooted cutting $4.00; 'Ne Plus Ultra', 1 year $6.00; pauciflorum, waxy red bells, 2 year $9.00; phaeochitum, slow but blooms freely, 1 year $14.00; phaeopeplum X leucogigas, blooms young, easy, 1 year $12.00; quadrasianum var. rosamariniflorum, 2 year $9.00; rarum, deep pink flowers, good foliage plant that can be difficult, 2 year $9.00; rhodoleucum, 2 year $12.00; rugosum var. corifolium, 2 year $10; 'Souvenir of J.H. Mangles', easy, 2 year $9.00; suaveolens, 1 year $7.00; superbum, CW seed, 1 year $10.00 & 2 year $13.00; 'Valentine F2', larger than Valentine, 3 year $11.00; wrightianum X 'Balasar', 3 year in baskets $15.00; wrightianum X lochae, 1 year $7.00 & 2 year $10.00; wrightianum var. wrightianum X jasminiflorum, 2 year $10.00; wrightianum X rarum, steady bloomer, easy, rotted cuttings $4.00; (zoelleri X macgregoriae) X stenophyllum, long very narrow foliage, 1 year $4.00;:

Richard Cavender "Red's Rhodies"
15920 S.W. Oberst Lane
Sherwood, Or 97140
Phone (503) 625-6331

Red goes on to say that he ships plants by U.P.S (United Parcel Service) in the USA but cautions about shipping plants when it is cold. They will be killed by freezing. Red had the heater go out in one of his poly houses last winter and the temperature got down to +20'F. Most of the Vireyas did not survive but R. kawakamii was not hurt at all. Some of the other plants are coming back to life from the bottom.

While in Australia last October I was invited to visit Lyn Craven at his home in Camberra. Lyn has written me a letter and I am going to excerpt the section about Vireyas and believe he will approve.

From Lyn Craven — Melba (Canberra) Australia
Dear White, — 12 April, 1989

The Rhodo conference in Wollongong was very stimulating to me. It came at a good time in my Vireya growing. Trying to keep a healthy batch of plants in a glasshouse in Canberra climate is not easy and I must admit that I had been getting a little discouraged. For reasons of economy the glasshouse has minimal heating and the plants certainly go into a state of suspended animation in the winter. They take some time to pick up and make new vegetative growth, although the flower buds seem to be unaffected. The other problem seems to be due to the maintenance of plants in essentially the one container in an indoors environment. My plants go from 2" tapered tubes to 4" pots to 6", and for the larger species to 8" and 10" pots. And there they stay, some of them have been in their containers for 10 years I would guess. There are difficulties with the potting medium after this length of time as presumably the peat and (in particular?) the pine bark changes as it decomposes. There are also nutritional problems which I have not fully resolved. The fact that I only have 2 or 3 plants of a clone does not make things any easier. Controlled experimentation is just not possible with such a small number of plants. These subjects are for another time though. Let me just say that I have firmly resolved to survive until, and hopefully well past retirement, when I well pick up the contents of the glasshouse and the house and head for the coast where Vireyas should thrive. As I prefer the lower middle South Coast (of NSW) Maddeniis and Vireyas should do well.

Lyn Craven
26 Saville Close
Melba, ACT 2615
Australia

From Keith Adams — New Plymouth, New Zealand
Dear VV, — June 6, 1989

PLANT HUNTING IN BORNEO

I visited Malaysia in March-April of this year, the main purpose being, naturally to collect Vireya Rhododendron in the wild. The area was specifically in Sarawak (Malaysian Borneo). 'This was the forth time I had been on a solo collecting venture, and as it turned out, in many ways, to be the most frustrating. The two highest mountains in north Sarawak are Gunong (Mount) Mulu and G. Murud, both are 8,000 ft. peaks.

In 1980 I had collected with reasonable success on G.Mulu and also on G. Kinabalu in Sabah (previously British North Borneo), and in 1984 on G. Murud, a much more difficult prospect than either of the former. G. Murud has some Vireyas not found on Mulu, and I collected several species, but the cuttings that I sent back to New Zealand were delayed in the post and only a few survived. I made another attempt in 1986, but access was very difficult, situated as it is in the Kelabit Highlands, about 4 days march from Bario where there is an airstrip.

The trouble is that the airstrip is closed for a great part of the year and this was so in March of 1986. I finally had to give the idea away, and went back to West Malaysia and collected in the Cameron Highlands, a comparatively easy exercise.

This year I was determined to have another go, and with a permit to visit the Bario area for 10 days. I flew out from Miri near the Border with Brunei, having had to wait only 1 day for the weather to clear. I arrived at Bario in a DH Twin Otter with the airstrip barely visible, only to be told by the officer in charge of a small Malaysian military detachment that I couldn't climb G. Murud; my permit didn't specifically say so, and they were concerned about the CT's (communist terrorists) in the area. I argued that G. Murud was in the Bario area; he was equally adamant that the Bario area meant only the airstrip, the village and long houses nearby. So I said "What about Batu Lawei?" - a smaller 6,500 ft. peak not quite as far as Murud. "No, you can't go there either".

So - there I was cast in Bario for a week - it was 7 days before another aircraft landed. Seven days in a long house was quite an experience. Long houses are unique to Borneo, with a whole community living under one long roof - this one was over 200 yards long. I knew from my '84 trip that there were 2 species of Vireya not far along one of the tracks, and I collected both. I had time to sort out several good forms of Rhododendron fallacinum, ranging from deep red to good pink. This form differs from ones on Mulu and also Kinabalu. I also collected R. pneumonanthum - a very good white with small flowers in a perfectly circular truss. This was one of the few that survived from my 1984 collection, and Graham Smith, Curator of Pukeiti, thinks that we have the only ones in cultivation in the world. I have one very small plant growing in my garden. I didn't collect seed of either of these species - it just wasn't ripe, or the old capsules had long since spread their seed. Incidentally, all of my Vireyas are grown outdoors on a gently north facing slope with a very free draining volcanic loam. No manure or mineral additives are ever applied. I must have the near perfect environment.

I'd a notion to try another area in central Sarawak, but much more difficult access than even Bario in the north. I had noted on my large scale map a 6,500 ft. peak, Bukit Batu (Bukit = Mount) and with some difficulty made my way up the Rejang River and tributaries to Ulu Mujong and thence by hitching a ride on a logging company's Land Cruiser to Tunu, the nearest settlement to B. Batu. After a long discussion in the long house with my Iban (tribal) friends and with my limited Bahasa (national language) the guide whom I had hoped to employ said (in Iban) "O.K. - if you really want to go to B. Batu it will take 14 days there and back, through the dense jungle, and you will need 5 porters plus a guide". I realized very quickly that it would cost me the better part of $2,000 and no guarantee that 65 year old like me would make it! It just wasn't on!

After further lengthy discussion (with all the long house people grouped around us on the floor (chairs are unheard of), Lega, my guide, thought he knew of a place, B. Lumut, where we might find what I was looking for. I always take photographs with me of Rhodos found on previous trips, because the natives, except for people like Lega, know nothing about them. They have no commercial significance - can't be sold or eaten or used for building - so why worry? It would take us 4 days, plus 2 porters and a guide, Lega said. Lega would be one of the loveliest men I've ever met - absolutely on English but we communicated well and finally parted the closest of friends.

The first day I thought I'd die! I've done a lot of tramping and hunting in my life over pretty rough country, but this day was the hardest I've ever experienced. Temperature 36'C+ and humidity of about 95% - even my shorts were wringing with sweat! Never had that before! The second day was a little better, and we made our second jungle camp not long after mid-day. We headed off up one ridge but it was not high enough. It's only when you get into the low growing damp mossy jungle that Vireya starts appearing in Sarawak. Bario was one exception though, because as we were making camp, one of my porters showed me a flower that he had picked up at the base of a very tall tree. No doubt about its being a rhodo - but where from?

An epiphyte growing 120 feet up in the top branches? Or dropped by a passing monkey? A complete mystery in thick jungle, this quite large compact orange-pink truss. So I pressed it and it's now on it's way to George Argent in Edinburgh for identification.

The next day we headed up another ridge. As we got higher, the jungle started thinning and moss covered low growing trees started to appear. It wasn't long before we came across a form of R. fallacinum with long lanceolate leaves. No flowers or seed - in fact unless you're there at exactly the right time, seed is very difficult to find. Growing with R. fallacinum was R. orbiculatum and one other that I couldn't identify. The ridge petered out at about 5,000 feet, so there was no point in going on. I could see higher points but they were at least two days away. My porters were complaining about the cold (I thought it was beautiful) so back we went to camp with cuttings of all the plants I had seen. On the same ridge I saw the Borneon Kauri, 'Agathis Alba', and I brought back two large pieces of gum. The natives use the gum to light fires in the jungle. As far as they are concerned it has no other use. On this same ridge the leeches were the worst I have ever experienced. I had fitted myself with leech socks this time, and they worked. Back in camp I counted 45 in one boot and 27 in the other - 72 all told but none had penetrated the leech socks - per courtesy of the Malay Nature Society. We returned to the long house in one day by a shorter route, a very strenuous forced march because the porters were keen to get back home.

To get to Tunu I had gone up the mighty Rejang River as far as I could by launch and long boat to what is regarded as the biggest logging camp in Sarawak, at Ulu Mujong. It was enormous! I have never seen so many logs in my life. The floaters being made up into enormous rafts for floating down river. The sinkers were loaded onto barges for a similar destination - the mills and plywood factories at Sibu and Serikei. No wonder the conservationists are concerned. The Chinese logging company has a concession over a huge tract of very hilly jungle, and to extract the timber they had carved a road for 85 kilometers over some of the roughest country that I have ever seen. From the river you hitch a ride on a 4 wheel drive landrover carrying supplies to the interior camps. I sat in the back on a carton of vegetables - hung on for grim death all the way (2 1/2 hours) thinking "Keith, any moment now you are history". I'll swear that every driver of these landrovers has a death wish - or maybe they have an annual prize for whoever can get over these 85 K's in the shortest time. They drive like madmen! The most alarming thought was that you knew that you would need to repeat the journey going back out. The trip out was worse - in the early hours of morning - no moon and thick fog most of the way. Hair raising to put it mildly. But at least I have sussed out the area, and have enough information now for whoever might attempt Bukit Batu in the future.

The two consignments of cuttings look well in quarantine at Pukeiti. Eight weeks after collecting in the wild they are starting to root. From my observations, the Borneon Vireya are much more difficult to establish outside than the New Guinea ones. Even some of the Sabah ones from G. Kinabalu like R. ericoides and R. buxifolium growing at 11,000 feet give problems. They grow for a bit and then for no apparent reason, peter out. I've flowered in my garden R. orbiculatum (in my opinion one of the most beautiful of all) and R. yongii (I think that we have the only ones in cultivation) collected on G. Muli in Sarawak. The R. crassifolium has set seed (selfed) so with luck some of it might find it's way to other Viners. I am hoping to get back to Sarawak in 1990.

F. Keith Adams
12 Sequoia Grove
New Plymouth, New Zealand

Keith did send seed of R. crassifolium and I sent it on to Bill Moyles in Oakland California. He also said that he had a letter from George Argent saying that his collection of R. fallacinum is in fact R. durionifolium.

The unidentified flower has turned out to be R. borneoensie (sp?) but Keith said that the only way to have collected it would have been with a chain saw.

From Dr. J.L. Rouse, Melbourne, Australia
Dear VV, April 12, 1989

In Vireya Vine #6, 1985, Oz Blumhardt reported that he had made the pollination R. lochae X R. virgatum in 1984, applying pollen of both R. virgatum and R. lochae to the stigma, the self-pollination being included so that the capsules would not abscise. The cross resulted in seeds and he obtained a seedling which appeared to be a hybrid and which grew into a flowering plant that he named "Little Pioneer".

As part of a program to check the parentage of this hybrid which has flowers which look more like the male parent R. virgatum than R. lochae, I repeated the cross using a vigorous plant of R. lochae and pollen of R. virgatum collected in the Australian Rhododendron Society's garden at Olinda. I did not mix any R. lochae pollen with R. virgatum pollen to assist in keeping the capsules in place, although control pollinations of R. lochae selfed were made at the same time. A total of 7 small capsules of hybrid seeds were collected over a 14 day period, with about 5% of the seeds filled. 4 large capsules of selfed seeds, 95% filled, were collected at the end of this period as the pod skins started to peal back at the top. The hybrid capsules not only tended to abscise early but the seeds appeared immature compared to the R. lochae selfed seed. The hybrid seed showed viability and the first cotyledons appeared 14 days after sowing, whereas the selfed seed took 18 days. The hybrid seedlings are small, chlorotic, few in number and some are deformed with more than 2 cotyledons. Only time will tell whether any of the hybrid seedlings will develop into flowering plants, but with "Little Pioneer" as a guide, we might anticipate a few. As might be expected, some of the R. lochae selfed seeds have been sent to Bill Moyles for the American Rhododendron Society's seed exchange.

Investigations into "Barriers to Hybridization in Rhododendron" with Professors Elizabeth Williams and Bruce Knox, show that the production of filled seeds from a sect. Vireya X sect. Rhododendron pollination is unusual even though in many cases the pollen tubes do enter the ovary. In some 20 such pollinations the only filled seeds we obtained were from the cross R. retusum X R. burmanicum, which failed to geminate. Reciprocal crosses between species in these two sections appear unlikely to produce seed. Usually the pollen tubes were arrested in the style and so failed to enter the ovary.

Within sect. Rhododendron the closest relative to subsect. Euvereya is usually considered to be subsect. Maddenii. Both subsections contain many species that are epiphytic, have open trusses with large flowers and are cold tender. However these two groups do not appear capable of interbreeding, certainly not with out considerable difficulty. So had R. virgatum some visible characteristic that suggest it might make a compatible male parent when crossed with Vireya? The only one that springs to my mind is its seeds, which have two small "tails", rather similar to those of R. retusum, so that judged by its seed morphology alone, taxonomists might place it in sect. Vireya! Maybe this seed shape is an indicator of a relatively recent common ancestor, so that although divergent, R. lochae and R. virgatum have enough in common to marginally interbreed.

I am keen to hear from any Vireya hybridizers who have been successful in producing a hybrid which spans the Rhododendron-Vireya breeding barrier and whose flowers, and possibly foliage, look intermediate between those of its parents or more like the male parent. Information on what, if any, special techniques were used to obtain seeds would be also of interest.

John L. Rouse
House 8, Stonehaven Court
Toorak, Victoria, 3142, Australia

CAUCASICUM X JAPONICUM

VIREYA BOOKS

AND NOW WE HAVE ANOTHER VIREYA BOOK. Mr. J. Clyde Smith who lives in Keiravile (near Wollongong) Australia, has in conjunction with the Australian Rhododendron Society printed a book called "Vireya Rhododendrons". It has 76 pages, 45 color pictures, a beautiful photo of a R. macgregoriae on the cover, and a complete text about growing these plants. Clyde has included sections on "Introduction to the Section Vireya", a good coverage of Vireya history, native habitat, the flower, the leaf, a list of species in cultivation in Australia, propagation, growing in containers, in the garden, under cover, pest and diseases, a list of hybrids that have been registered that has 122 names and descriptions, and much more. Many of the color photos are from the wild and I am particularity taken with a picture of R. superbum being held up by a native New Guinean. What a sight R. superbum must be in bloom. I am still waiting after 10 years from cuttings.

I have ordered 20 copies from Australia (shipped by surface mail) and shall sell them to people in North America. Please don't ask us to mail this book back overseas. That would be a waste of our time and your money. The cost in North America should be $17.50 U.S. including postage to you.

I think that I have written before about a small book the George Argent, RBG Edinburgh, was doing on Borneo Rhododendrons. One person in the USA has a copy of this book and we trying to find out how to get some (how, how much, when?)

Vireya seed or request for seed should be sent to;
Bill Moyles
ARS Vireya Seed Exchange
4243 Norton Ave.
Oakland, Ca 94602 USA

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RHODODENDRON SPECIES FOUNDATION
P . O . BOX 3798
FEDERAL WAY, WASHINGTON 98063
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