



VIREYA VINE

ISSUE #91, July 2010



PUBLISHED BY THE EDUCATION COMMITTEE OF THE RHODODENDRON SPECIES FOUNDATION

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E. White Smith, Editor

From Brian Oldham
Dear Vireya Vine,

April 2010
Auckland, New Zealand

MEMOIRS OF AN AMATEUR VIREYA HYBRIDIST

Reprinted from the New Zealand Rhododendron Association 2009 Bulletin and with permission from Dr Brian Oldham

Our interest in vireyas started in 1986 at the New Plymouth Rhododendron Conference of that year. As utterly ignorant beginners, and from Auckland “where rhododendrons don’t grow”, we were seeking information. The late Michael Cullinane was in attendance having recently returned from his explorations in New Guinea. He strongly urged us to consider those “quite different plants” (vireyas) he had found.

We holidayed in Northland in those times and visited Michael at Russell, and later Os Blumhardt outside Whangarei, building up a small collection of the hybrids that were available in those early days. Jan subsequently experimented and worked out a greatly improved planting technique.

The urge to hybridise began with a workshop at the Palmerston North Conference of 1988. On our return, full of enthusiasm, I found two of our small vireya collection in flower. Using the new-found information I put pollen from R. “Cameo Spice” (*R. laetum* x *R. konori*) onto R. “Rob’s Favourite” (*R. laetum* x *R. macgregoriae*) and carefully nursed a miserable six or so seedlings to the flowering stage by 1994.

The first to flower was a good plant but was similar to a hybrid already in cultivation (from different parentage) and having no advantage over the original was discarded. The second to flower was that serendipitous miracle, a plant with very different and attractive foliage from its parents, then beautiful lolly-pink trumpet blooms in profusion, very similar to the much admired but difficult to grow species called *R. orbiculatum*. I named it R. “Larissa” after our daughter. It caused quite a stir in vireya circles and was later imported into the USA as well as being commercially propagated in New Zealand. The rest of the grex were worthless. The incredible luck was in getting such a treasure from such a small number of siblings, and at the first attempt at the art of hybridization.

Encouraged by this early success in getting seedlings to grow I tried hybridizing again in 1991, once more without any specific plan to develop a special type. I put *R. herzogii* onto R. “Haloed Gold” (*R. christiana* x *R. “Tropic Glow”*). Some 15 plants were brought to flower from this crossing, four of which appeared to have some merit. The problem then arose as to what to save. We had only the average 8700 square metres of suburban section in Remuera covered with house, exhibition garden and a boutique sales nursery that Jan set up to help fill the growing demand for vireyas in general.

Decision making is not easy. What appeals to you often fails to impress others. One must rely on visitors’ comments plus your own assessment, the latter including vigour, bush form, frequency of repeat flowering etc. This difficulty continues to crop up.

The R. “Haloed Gold x *R. herzogii* grex produced a wide variety of flower and bush forms all with a particular strong spicy scent. The best, in my opinion at that time, was registered as R. “Blushed Spice” and has subsequently been used in my hybridization programme.

However, as time and growth has gone by, the runner-up has proved to be the better garden plant. The differences are small so is it worth registering? Probably not as it has been outshone by the glories of more modern hybrids from all sources. This is another difficulty for the hybridist. The pace of improvement in vireya hybrids is fast. Yesterday's beauties are quickly superseded.

Following the above successes I did what most amateurs do, namely put everything onto everything without regard to the outcome. Also there was the theory that the F2 generation (i.e. selfing a hybrid) would improve the original, so I tried that too. The results of this indiscrimination were most unsatisfactory. Weird deformed aberrations appeared and took up valuable space in my miniscule nursery. This led to a more focused and objective programme.

The first success was to create a small trumpet-shaped yellow flower as none had previously existed. I put *R. laetum* (the purest yellow of all the species generally in cultivation) onto the small leaved, small flowered *R. "Popcorn"* (*R. macgregoriae* x *R. loranthiflorum*) and got the desired yellow out of the small batch of five. As it grew on it looked pretty insignificant and I was not overly impressed. One's sole opinion can be faulty. It was seen by that guru of vireyas, E. White Smith of Washington State, USA, who admired it and took it back to his Bovee's Nursery in Portland, Oregon, where it remains on sale. I don't think it is any longer in New Zealand.

In 1993 we had a collection of those giants of the vireya hybrids bred by the late Os Blumhardt, viz his "*R. Dr Hermann Sleumer*" x *leucogigas* crosses in flower. Being much impressed with the gorgeous (but once flowering) species *R. tuba*, I put our own Blumhardt seedling named *R. "Rangitoto Rose"* onto it. That has produced heavily flowering, highly scented trumpets repeatedly flowering through the year. Now some 12 years since their first flowering they are magnificent in their garden setting. I call them "*tuba on steroids*" much to the amusement (and appreciation) of the Auckland Rhododendron Group. I have recently applied to register two of them under the names of *R. "Rowena Knight"* and *R. "Olivia"*, our daughter-in-law and granddaughter respectively.

Amongst a number of failed crossings, or of sub-standard results, another great success occurred. In 1993 I attempted to produce a big scented yellow by putting the scentless but strong yellow *R. laetum* onto the well-known robust, variably coloured *R. Gardenia Odyssey*" (the origins of which are lost). The offspring were numerous and vigorous and produced a wide array of exceedingly varied (and variable) coloured blooms on tall narrow fastigiated bushes, some 27 surviving to maturity. Eight of these are worth ongoing propagation and will be registered or are already in the registration pipe-line. The best of these is the brilliant much admired *R. "Brazen Beauty"*, vivid but still more subtle than the ubiquitous *R. "Tropic Glow"*, and on a much better bush. This collection has been planted in "*Brian's Brazen Garden*" by Jan, who finds it difficult to incorporate these bold oranges and yellows in her garden!

In 1993 I also did another spate of crossings. To get even bigger blooms I crossed various *R. "Sleumer"* x *R. leucogigas* hybrids with *R. "Gardenia Odyssey"*. With such complex parents the results were hugely variable. By far the best of these and possibly the best of all my hybridization is a *R. "Gardenia Odyssey"* x *R. "Rangitoto Rose"* which I have now registered under the name of *R. "Pastel Splendour"*. This highly scented subtle apricot through peach colouring is on a compact grey-green narrow leaved bush, a throwback to a hidden *R. konori* ancestor. Yet another great parent for hybridization was the Borneo species *R. suaveolens*, a big trussed small flowerer with unusual pale yellow-green leaves. Unfortunately the New Zealand clone is unscented. In 1993 I had the idea to improve the good but once flowering *R. jasminiflorum* (of equally small white tubes) by crossing various similar white flowering species thus exploiting the common characteristic of repeat flowering in hybrids. To this end I put *R. goodenoughii* and *R. majus* (aka *mius*) onto *R. suaveolens* and got a good take.

Twin hazards then occurred. We moved house. The punnets of 5 or 6mm seedlings were put out on stands under the shelter of a plum tree. Overnight there was a cat fight and the morning revealed a mix of all the seedlings on the ground. They were largely recoverable but irretrievably mixed and have been grown on nameless for ongoing evaluation.

However, my meticulous technique in pollination was obviously awry. While there were some excellent white tubular flowerings, a few plants blossomed into vivid red/purples of various intensities all with a very strong scent. The hybrid *R. "Great Scentsation"* (*R. konori* x *R. lochiaie*) was flowering adjacent at the time and the bumble bees must have beaten me to the draw. The results of that fortuitous union have been excellent, the pick of the bunch being *R. Theresa*" (being registered) another of our daughters-in-law who is particularly fond on it.

It has wonderful foliage, coloured new growth, and uniquely bicoloured flowers on a dense bush. Other spectacular outcomes from this mix-up are in the trial process, one with up to 21 pink and white tubes to the truss plus strong scent.

Trials of hybridizing the gorgeous large flowering R. “Gardenia Odyssey” has resulted in a very mixed bag. The parentage on both sides is so mixed. R. “Dr Herman Sleumer” is a natural hybrid of *R. konori* var. *phaeopeplum* and *R. zolleri* while R. “Gardenia Odyssey” is of unknown parentage, probably *R. Konori* and *R. aurigeranum*. Trials of this motley brood are still ongoing with varied opinions as to the merit of each progeny. They remain in pots, never a good indication of their ultimate potential.

The odd sole survivors of other crossings are also of merit and in the evaluation process.

For me this is the end of the road for my creative endeavour. We now garden with vireyas rather than produce them. I am at an age when I may well not see any new creations to fruition.

It has been a great and satisfying hobby, albeit an exercise in patience. I have never had any sophisticated equipment, bottom heat, misting or lamps, only a very cluttered suburban section. Time out from a busy medical practice with its frequent after-hours commitments meant only the more robust survived their upbringing. There was no ability to trial the large numbers of each grex that is usual with commercial propagators. Nonetheless the success rate has been phenomenal and my pleasure with the results continues.

Lessons learnt would include the variability and unpredictability of outcomes. Rogue aberrations of colouring and form are common, so much that I have at times doubted the veracity of Mendelian laws of inheritance. I guess these abnormal outcomes are due to hidden recessive genes in the confluent wild populations of the so-called species. Although planned results do occur the lottery chance of the jackpot out of the box is still there with any crossing. A chance nursery volunteer seedling of mine has turned out to be the most intense yellow vireya of the lot.

The downside of hybridization as a hobby is the time taken between concept and fruition, a minimum of four years but more likely to be seven plus some years trialling thereafter. The first flowering is never true to the final result. Then there is the problem of getting recognition for one’s treasures, this more so these days when gardening and horticulture are very much on the wane. Commercial propagators are now a rare breed and still in decline.

Nonetheless the joy of witnessing your own creative marvel at its first flowering is indescribable.

Give it a try. Brian

From Craig Morell,

Miami, Florida

Dear VV,

June 14, 2010

For better than 25 years, I’ve seen pictures of, read of, and dreamed of growing Vireyas in SE Florida, which isn’t known for its Vireya flora by any means. They pop up at rare plant sales, and dwindle away over a few years, rarely setting flowers. 2 decades ago, I visited Dr. John Swisher in Coconut Grove, (a coastal Miami suburb) and marveled at his small Vireya **trees**, growing in calcined clay and peat moss, in enormous clay pots. I recall they were *R. zoelleri*, *R. aurigeranum*, and a few primary hybrids. It was quite a sight, but a rare sight. Many local growers here have tried them, almost all have largely failed. We are puzzled that these seemingly tropical species fail in our nearly-tropical climate.

But, over the years, I’ve discerned a few reasons why we fail here, and with a few visits to a local connoisseur who grows very difficult plants superbly, I believe I found the primary reason for failure in many tropical plants in this area. Let me first illuminate the readers a bit about my climate. It can easily be 24-26 C (78-80 F) at night here, and 32-34 C (92-94F) in the daytime here, with 80% or more relative humidity. This scheme eliminates a great many Vireyas !

Second, we have a really amazing array of diseases here, some native, some exotic. This area of the state is well know for its extraordinary gatherings of plant collectors, exotic plant nurseries, and cut flower / cut foliage imports. It’s inevitable that we have an extraordinary array of diseases, and Vireyas are quite adept at catching them.

Third, we have high-pH water, since our aquifer / bedrock material is almost pure limestone or coral, yielding an irrigation water pH of 8.7 to over 9, with very high calcium carbonate content. It is here that I believe the primary problem exists.

these occur in abundance in Borneo. This trip takes you into the areas where all these are to be found.

The peoples and cultures of Borneo are fascinating, the Kadazan and Dyak, the Penan rainforest people. The cities of Kuching (below) and Kota Kinabalu are thriving capitals and as they stand, reflect the fabled island's history and peopling in this equatorial environment

From Peter Adams,

Hawaii, Hawaii

Dear Yahoo Vireya Group

July 15, 2010

I am just starting to practice collecting pollen for future hybridizing efforts. However, when I was facing Anacapa's anthers I fully realized (though I knew all along) that I really did not know how to judge the maturity of the pollen in front of me. Will it be good for pollenating later on?

I took several samples, stamens from a mostly open truss, a truss that had been open a couple of days and a truss on its way out. All anthers seemed to have a white area near their tops, but the older anthers seemed to be "more brown" than the younger ones.

Are there any guidelines for selecting anthers from vireyas in particular? For instance, what do "good" (mature pollen) stamens look like? Is a more mature truss preferred to a younger one or will the pollen continue to develop once the stamen is collected? Should the stamens be held at room temperature for a day or two for maturity or chilled quickly? For longer term storage is the freezer better than the refrigerator? Also, since we are at an early stage and probably not going to buy a 1000 glassine envelopes, are there recommendations for materials to store divisions of the collection? It would seem that plain, folded and taped paper may be sufficient, but I'm not sure.

Thanks! Pete Adams, *White Cloud Nursery*
15-89 South Rd., P.O. Box 1387

Pahoa, HI 96778, (808) 345-3345, www.whitecloudnursery.com

From Lyn Craven

Australia

Dear Vireya Vine ,

July 2010-

Firstly, with collecting pollen, wait until the anther dehisces and the pollen starts being shed. Collecting unopened anthers is not advisable as the pollen most likely will not be mature. [Use a pair of fine forceps (tweezers) to detach the dehiscing anthers from the filaments.]

Secondly, there are various techniques for storage. I obtained some gelatine capsules from a pharmacy (drugstore); pharmacies stock these for use when doing a special order (e.g. weighing out small doses from a kilogram bottle, etc) and either have them in stock or could order them in. I think I have heard of people using homemade paper packets/envelopes also.

As to drying down the anthers, and then storing them, there are several techniques. I just dried down over silica gel (in a sealed glass jar), and stored over silica gel in a sealed jar in a domestic - 14 C freezer.

I think John Rouse may have written something on his techniques (John stored a lot of pollen), and also there used to be (still is??) a pollen bank run by someone in the American Rhodo Soc (who lived in New York??). Suggest you have a look through the list of John Rouse's publications on Chris Callard's site to see if pollen storage, etc is mentioned in a title.

I think John's son, Andrew Rouse, may store pollen and I am sending this to him in case he is not on the list already. You might also like to send your query to the rhodo list [rhodo@yahoogroups.com] as there is more chance that subscribers to that list are into pollen storage, or can give a reference to published (or other) information.

Pollen storage is the way to go because some plants do not flower each year, and in any event different plants flower at different seasons. So having pollen of a potentially good parent up one's sleeve is a very good practice. Good luck with your hybridisations. Lyn

Hi ... Yes, Lyn said it! (Thank you) I would estimate that at least 80% of folks follow this procedure: gel caps, silica gel, freezer, etc. Uncomplicated. I would only add that I found the med or larger sized caps are easier to handle and label (indelible ink on surface or tiny label insterted inside). I keep a jar of silca gel in the freezer and caps go directly into it ... perhaps wise to dry pollen in a cap over silica in the frig before going into the freezer, but I don't bother. And to follow Lyn's warning: make sure the pollen is apparent and ""mature"" before storing! Rule #1 is always store the pollen you are sure you won't need! You will need it and wish you had it later. The RSF also has a nice pollen program and are very responsive . I have used it.

Bill Moyles, Oakland, California

From Larry Wallace on Vireya@yahoogroups.com July 2010

First I must say I collect tetraploid pollen. There are not yet tet Vireyas. Give me time. I collect nearly opened buds in coffee filters. This insures sanitary pollen. Where sanitary pollen is not needed film canisters and diabetic strip canisters are easier to use for those with poor coordination. Larry Wallace, Cincinnati, Ohio (from vireya@yahoogroups.com)

From Dee Daneri, Fortuna, Caalifornia
Dear Vireya Vine July 2010

In the autumn of 2004 I retired as Executive Director of the American Rhododendron Society. Just over a year later, in February, 2006, I found myself visiting the newly opened Vallarta Botanical Garden at Puerto Vallarta, Mexico Our tour host was the very enthusiastic owner of the garden, Bob Price. Having a passion for botanical gardens, and especially fledgling gardens, I found myself constantly asking questions about this beautiful choice of location. I learned that the latitude of the garden is 19 degrees North, and a flash of déjà-vous passed through my mind, as I recalled that Hilo, Hawaii, and the Panawea Zoo and Botanical Gardens near Hilo are also at this latitude. What that meant to me was that I was standing on the very latitude at which the rhododendron garden of the tropics is thriving in Hilo – the vireya rhododendrons were there, but generally unknown to Mexico.

Having just retired, my plan was to spend the rest of my days visiting all of the great gardens of the world, but my professional days of work with the plant world was finished, over, capute! Still, there was that haunting realization about this latitude in the tropics, devoid of vireya rhododendrons.

The fatal, or perhaps fateful turn came after our tour, when my friend and I stopped for lunch in the wonderful plantation house at the Garden (now known as the Hacienda de Oro). Within minutes Bob Price appeared on the scene, suspicious about the questions I had been asking, and, as anyone who knows Bob would understand, he was actually interrogating me to determine whether or not there was anything here that could be used. The killer moment came when Price told me about his interest in vireya rhododendrons and his experiments with them in his former life in San Francisco.

The following February, 2007, I was back. Knowledge of a few essential ingredients Price would need to succeed with this gargantuan vision, was mine, but going back to work was far from my plan. Maybe just a little volunteer work wouldn't hurt. Almost immediately I was working on the much needed not-for-profit 501 (c) 3. Then I contacted Dr. George Argent, Curator of Edinburgh Botanical Gardens, and celebrated expert on tropical plants, to tell of our dream of having vireyas in Puerto Vallarta. George generously shared seed for the project. Sadly, there was not enough experience with growing seed, and this valuable seed ultimately failed. However, undaunted, Price pursued other ways the plants might be introduced. We networked with some of the best vireya growers in the world, and ultimately, cuttings would come from Pacific Island Nursery and Sherla Bertelmann of Hilo for the newly created garden for Mexico. While the plants are thriving outside, somewhat challenged by a few of Mexico's jungle ants unknown in Hawaii, as funds become available, a vireya house is on the wish list.

As the vireya garden grows and flourishes, the garden will be able to offer information on growing these beautiful plants in the home garden – a wonderful opportunity for the hobbyist to enjoy the beauty of a new plant for the tropical garden in Mexico.

The vireya garden at Vallarta Botanical Gardens demonstrates the epitome of the mission of botanical gardens everywhere. Public gardens are there to teach us about the plant world, disseminating information for growing plants aesthetically, for use in industry, medicine, and of course, for the air we breath and the food we eat. The stewards of these gardens are the voice for the Plant Kingdom, and the significant work of Robert Price and the Vallarta Botanical Gardens promises to bring a new dimension of quality of life through education, not only for the region but throughout tropical Mexico. Viva vireya and the Vallarta Botanical Gardens mission to spread the beauty.

Dee Daneri, Executive Director Retired
American Rhododendron Society

From Peter Cox

Scotland, UK

Dear VV,

July 2010

I enjoyed the Vireya Vine description of the important people in Vireya over the years. At the moment I can think of only two people that were not included who were involved many years back.

Michael Black of Greenmere NW England was a vet who made at least one trip to Papua New Guinea including 1965. He brought back quite a few plants which he grew successfully until a hard winter when there was a power cut, his plants froze and he lost the lot. He died quite young. He wrote an article in the Rhododendron and Camellia Year Book of the Royal Horticultural Society in 1966.

Paddy Woods was a botanist at the Royal Botanic Garden, Edinburgh who also collected in PNG at about the same time and introduced several Vireyas. Some of his plants are still cultivated at the RBGE. He suffered from MS for many years before he passed away. Peter Cox peter@glendoick.com

Thanks, Peter. Yes, Michael Black and Paddy Woods were important early Vireya people. I never met either of them. I think that I remember that they went to PNG together looking for plants. We have a plant of the wonderful species R. laetum with the Black and Wood name tacked on. Our R. laetum B&W is not pure yellow but has a orange tinge to the flowers. Some people have said that "that can not be" because Black and Wood were not in the area where R. laetum grows and also that laetum is pure yellow. Well ok, BUT, Lucie and I have three color 8 x 10inch photos in our bath room and two of them show a native with a hand full of both pure yellow and yellow with a orange tinge, R. laetum flowers. These photos were taken in the area where R. laetum is native. EWS

Outside patio and water fall inside of the new Rutherford conservatory at the Rhododendron Species Foundation. July 2010. Not much colour yet but it is coming along.



Maybe by the next Vireya Vine there will be some serious planting going on in this conservatory. And more color for people getting the Vine by e-mail.

R. blackii at the RSF, named after the Michael Black that Peter Cox was talking about. And another photo of the water fall inside the Rutherford conservatory.



REMEMBER, if you are getting this newsletter by paper mail and want to get it in color by e-mail -- just send me your e-mail address at info@bovees.com

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