

VIREYA VINE

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FOUNDATION

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E. White Smith, Editor

Fifteen new Vireya hybrids were registered with the International Rhododendron Register from July 1999 to October 2000. Thanks to Dr. Alan Leslie for sending this information on to us. He is the International Rhododendron Registrar for the RHS. I am only listing the plant name, the cross and the person who made the cross. Anything more is just too much.

***African Queen**, 'Dr. H. Sleumer' x (laetum x aurigeranum), Brian Clancy, Australia; **Alpha Dawn**, 'Arthur's Choice' x 'Gardenia Odyssey', Brian Clancy, Australia; **Anika Jane**, 'Channon Marie' x superbum, Brian Clancy, Australia; **Brindabella**, (laetum x (zoelleri x polyanthemum)) x 'Sunny', Brian Clancy, Australia; **Byron Bay**, 'Arthur's Choice' x 'Gardenia Odyssey', Brian Clancy, Australia; **Cailen Thomas**, 'Dr. H. Sleumer' x 'Zoe Elloise', Brian Clancy, Australia; **Corazon**, konori x leucogigas, John Rouse, Australia; **Great Coat**, zoelleri x (christianae x konori), Brian Clancy, Australia; **Happy Memories**, 'Arthur's Choice' x carringtoniae, Brian Clancy, Australia; **Karen Morebeck**, leucogigas 'Hunstein's Secret' x konori, John Rouse, Australia, registered by Strybing Arboretum, San Francisco; **My Friend**, laetum x 'Gardenia Odyssey', Graham Snell, Australia; **Natasha Joy**, (konori x zoelleri) x javanicum, Brian Clancy, Australia; **Our Margaret**, (christianae x lochia) x zoelleri, Brian Clancy, Australia; **Our Mary**, zoelleri (Michael Black form) x 'Dr. H. Sleumer', Brian Clancy, Australia; **Strawberry Delight**, zoelleri 'Island Sunset' x ('Dr. H. Sleumer' x javanicum), Brian Clancy, Australia.*

Most of Brian Clancy's crosses were registered by his daughter. Good for her for getting it done. It can be a time consuming job that we all like to put off.

***And here is a problem.** You really should register your new plant names. There is a Vireya hybrid in New Zealand called 'Just Peachy' (it's here in the US also), but there has been a hybrid rhododendron named that by Mrs. Weldon Delp (a Tom Ring hybrid of 'Weldy' x 'Oh-too'). Once a name is registered in genus rhododendron, no one else can register that name (it's gone forever i.e. you can't have a Vireya and an Azalea or a Rhododendron with the same registered name. EWS*

Boy-O-Boy. Keep the letters coming. I even have one letter left over for the next issue. Thanks people and keep them coming. EWS

From Graham Price

Melbourne, Australia

Dear VV,

February 2002

I am writing this letter partly in response to E White's plea in Issue #64 for material to publish in VV, but also partly to share some information that I have learned and hopefully to get some information back. I will do the 'giving' this time and in a subsequent letter ask for some help. Also, I apologize if this letter is rather long.

I live in Melbourne, Australia, and have a collection of Vireyas, some species but mostly my own hybrids. I live in a city apartment so I have to keep all my plants in pots (mostly black plastic) in several shadehouses (metal frames covered in 50% shade cloth) out at La Trobe University, about 15 km north of the city.

My vireyas get lots of sun and infrequent rain (30 inches or 76cm p.a.) predominantly in winter and spring (i.e. June through to November) so I have to hand water quite a bit in summer. Temperatures can be very high, 42-45C (107 to 113F) last summer for a few days but cooler this year, around 37-39 C as the maximum. Winter temperatures can get down to 1 to 3C (33 to 37F) at night but occasionally we get frosts as well, which so far has only done minor damage to new shoots.

Over the past few years I have made numerous crosses and raised about 600 seedlings using a hot box and misting system. Last autumn (March 2001) I noticed that several of these small plants were infected with rust which appeared as orange-yellow powdery "pustules" on the undersides of leaves with chlorotic spots visible on the upper surfaces. Several of my larger hybrids and species plants (up to 1.5m tall) were also infected, though not as badly as the small seedlings. Over a few weeks many more spots appeared on the infected plants and spread to other plants. The spots turn dark brown and grow larger and the "orange-yellow" pustules become more numerous, occurring on the margins of the dead tissue.

From reference material I found, mostly about rust on roses, I understand there are many species of rust (which is a form of fungus) and that the disease spreads throughout the entire plant tissue. Apparently there are fungus fibers or tendrils that spread throughout the plant so it is not just a surface effect. The dust-like spores that are released from the "pustules" are readily spread to other plants by air movement and splashing water.

Apparently there has not been anything written about rust on vireyas and only a little about rust on azaleas. What published material I could find revealed that there are preventative fungicides such as Bordeaux Mixture (0.5% CuSO₄ + CaO) and recommendations for Mancozeb, which I also think is a preventative treatment. However, I had so many plants infected that I was too late for prevention, I needed a cure. Two systemic fungicides were recommended for roses, Triadimefon (Bayleton) and Triforine, so I tried them without any obvious beneficial effect.

I sent out a plea for help over the internet, to the vireya@yahoo.com website. I got lucky. Michael Barclay of Kensington California responded that his heritage rose group uses a product called PlantVax for rust, which it eliminates permanently in just a few sprays. Tom Hughes, again from the USA somewhere, chipped in to say the active ingredient in PlantVax is oxycarboxin and that PlantVax was marketed by Uniroyal Chemicals of Middlebury, Connecticut.

After quite a bit more searching on the Web and many phone calls I eventually found some PlantVax here in Melbourne - \$76Aus for 0.5 kg. It comes as a light brown-gray powder that has to be mixed with water.

I made up a mix according to the instructions (13g per 10 litres of water) and sprayed all my vireyas three times, about 8-10 days apart.

The spray has to go onto all surfaces, tops and bottom of leaves and on stems as well. I even sprayed a little onto the soil in the pots.

On inspection in the days following the first spraying I noticed there was some reduction in the number of orange-yellow "pustules" on the undersides of the leaves. After the second spray the number of "pustules" again decreased and many had appeared to have dried up and darkened. As far as I could tell no new pustules had appeared. After the third spray all signs of active "pustules" and spores had gone, though the large brown patches remained on many leaves.

About a month after the last spray with PlantVax I also sprayed once with Bayleton and once with Triforine. I am not sure that these treatments had any significant effect - I just wanted to make sure.

This rust is an insidious thing as once a leaf has been badly infected it invariably falls off and severe defoliation can occur. Even after the rust has been treated with PlantVax infected leaves are left with large dark brown patches of dead tissue and if very bad (covering over 50% of the leaf area) the leaf will soon fall off. One can only really tell if the treatment has been effective when new growth occurs and looking to see if there are any new signs of infection.

Well, it's now 11 months later and the rust had not reappeared on any of my plants. My seedlings have continued to grow and there is no longer any sign of damage caused by the rust (the damaged leaves eventually fell off) or of infection on the new growth. I have just today completed repotting them all into 10cm and 15cm pots and they all have strong root systems. My intention is to again spray them all with PlantVax in March, just to get in early if there is any re-infection when the weather turns cooler in autumn.

In all I lost only about ten small seedlings out of about 800 small and larger plants, so I consider that I had a great victory. I would recommend PlantVax to anyone who has a problem with rust on their vireyas.

Graham Price
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Bayleton is sometimes sold in the US as "Fungi-Fighter". It is 1-(Chlorophenoxy)-3,3-dimethyl-1-(H-1,2,4-triazol-1-yl)-2-butanone 25%.

An other product is "Spectracide Immunox" and it's active ingredient is Myclobutanil oc-butyl-oc-(4-chlorophenyl)-1H-1,2,4-triazole-1-propanenitrile 1.55%.

Another I like is "Ortho RosePride Funginex" active ingredient is Triforine

PlantVax was available in the US. Is it still?

These are all registered in the US for rust control. EWS

From Chip Lima
Dear Vireya Vine,

San Francisco, California
February 2002

It all started from a simple gift of 'Saint Valentine' from Dick Cavender at Red's Rhododendrons, near Portland, Oregon on Valentines day in 1986. From then on I have been hooked, growing vireya rhododendrons as indoor/outdoor plants in Portland, greenhouse plants in Rhode Island, and now I am organizing a tour to West Papua and forming a new chapter (or study club) of the ARS in San Francisco mostly for vireyas.

I've spent this dreary February afternoon organizing my new greenhouse space graciously offered to me by Pete Sullivan.

He likes to describe himself as the mythical Pete Sullivan, but he does exist. His experience in breeding and raising vireyas is unparalleled in the US and I am fortunate to have his instruction.

Like many compulsive collectors, I have nearly filled the space and have more than enough larger plants to fill the garden wall to wall. What I have to learn now is how to cull inferior plants, less important souvenirs, and eliminate those which will not contribute to my breeding program. I also need to limit my obsessive collection of orchids for cool climates.

I'm setting up a mist bed for propagation and a nursery for the small plants inside the greenhouse. In the basement I am setting up grow lights where the seedlings can germinate and begin life safely from disease and slugs. Outside I'll have some nursery style growing of pots on plastic with drip irrigation and some field grown larger specimens in the ground. I plan to shade the vireyas with larger pots of bamboo, *Phyllostachys vivax aureocaulis*, *Phyllostachys tutsig variegata*, and *Himalyacalamus hookerianum* and banana 'Rajah Puri'.

Working in Pete Sullivan's Church Garden has shown me how to use vireyas as landscape plants in the most protected locations in San Francisco. Now I have landscapes including 'Lawrence', 'Cristo Rey', and 'Sunny's Brother'.

Two years ago the plants at the Church Garden were moved for church maintenance, but now they have settled back in and are growing and blooming like crazy. The 'Lawrence', 'Peter Valder II the leucogigas hybrids like 'John Henry' and 'Cyril of Alexandria' are getting close to eight feet high. Winter seems like the time for everything orange to blossom, 'George Budgen F2', 'Cristo Rey', 'Peter Valder', 'Athanasius', and *brookeanum x lochae*. There is also a beautiful seedling of *laetum x lowii* about ready to bloom. Last year it had 14 yellow light bulb shaped flowers in a truss. The *R. superbum* from PNG Forestry Dept. continues to bloom most of the time. The leaves are sub-obovate elliptic (rounded), and not acuminate, (pointed with a drip tip). The winter show stopper is 'Leonore Francis' when grown in cool shade. Nothing else is that color of raspberries and white and yellow, there is even a light scent. When grown warm or in sun it is watermelon and white.

Please come visit, but bring a coat, it's always cold and windy.

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From Ron Kessler
Dear VV,

Delray Beach, Florida
February 2002

For several years in South Florida, I spent time at all of the Botanical Gardens I could find. I was planning for the tropical garden that I would plant around the small piece of property I was building on.

At various times I would see a solitary shrub, in poor condition, but with beautiful clusters of pink and yellow flowers. No one seemed to know what they were. Finally one person said he thought they were a kind of Rhododendron.

This clue led me to call Bovees Nursery, a nursery that I had purchased rhododendrons from when I lived in New Jersey. While in NJ I had a large greenhouse for over 30 years and was familiar with growing tropicals. I spoke to White Smith and he solved my question about those pretty flowers. I made calls all over South Florida to find Vireyas, but no one ever heard of them. One fellow said he might have one or two of them, but they were in poor condition. This led me back to White. He was very patient with me and suggested a few plants that I could try to see if I could grow them. I ordered the plants and a book on growing vireyas, from White.

The area where I live is almost pure sand, which provides great drainage, but almost nothing else. After reading the book, I decided to prepare my own soil mix. It consisted of two parts of a peat, perlite, nutrients, mix, one part crushed dolomite limestone, and one part fir bark chips. I dug a hole about one foot in diameter and filled it with the mix that I prepared. Then I scooped out enough to place the 1 yr plant, pot and all, into the hole and filled in the spaces. I had expected to wait six months and then lift the pot, remove it and replace the plant in its hole. I gave each site a dose of Bovees Vireya fertilizer.

After six months, the plants were growing like weeds. The roots had left the pots and were firmly in the soil. Several of them had already flowered. I decided to leave them as they were and hope for the best. If all goes well, I'll wait another year and then try to cut the pots away. I have been growing orchids for almost 40 years and I think I have found my next challenge.

Ron Kessler
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Thanks for the nice words Ron. EWS

From Reg Pohlmann
Dear Vireya Vine,

Devon, England
March 3, 2002

We all keep trying to find the ideal growing medium for our plants, and with Mitch Mitchell's help I have found the best I have ever tried. A few years ago Mitch sent me a piece of tree fern (bone dry), about 5 inches thick and 9 inches in diameter.

In February 1998 John Bodenham gave me three 'Hunstein's Secret' seedlings that were about 1 1/2 inch tall. Two of these I planted in small clay pots.

After soaking the tree fern for several day in rainwater (pH 5.7), I placed it in a 10 inch by 4 inch tray with drain holes and about a inch of course grit under the fern. Then I drilled a small hole into the top of the fern fiber, big enough to contain the third small seedling.

Whenever I watered the rest of my Vireyas (with a weak ericaceaeous feed), I pored about a cup over the seedling.

Four years later, the seedling in the tree fern is a fine bushy plant, about 12 x 7 inch spread and 7 inches tall. About 6 times as much growth as the ones in the clay pots.

Another success story concerned my plant of R. 'San Raphael' which had been in a 5 inch clay pot for several years and was showing very little new growth. I decided to repot it. It was so pot bound that the only way I could remove it was to smash the pot. The contents were just one solid lump. I turned to Mitch's parcel again. The tree fern piece had come packed around with 1/2 inch coconut chips. I took a 7 inch clay pot and added an equal amount of coconut chips well soaked in rain water, and a similar grade of composted pine bark. Then I put about an inch in the bottom of the pot, placed the 'San Raphael' on this and packed more mixture around it. After only a few months, the plant has put on several five inch shoots of new growth.

Reg Pohlmann
Dolphins, Vicarage Close
Stoke Gabriel, Devon
UK TQ9 6QT

Can't find tree fern? Look up your friendly Orchid supply person. They have it. EWS

From Brian and Jan Oldham,
Dear Vireya Vine,

Auckland, New Zealand
January 2002

Jan and I have been most interested in the recent discussions about petal blight in Azaleas and Rhododendrons that have appeared in various newsletters and bulletins. These problems have also cropped up in our personal discussions.

We, too, have been badly hit by a virulent form of petal blight on our Vireyas and temperate Rhododendrons and Azaleas. It strikes the plants at the height of their blooming display and soon reduces the flowers to a soggy mess -- all very disappointing and seemingly unable to be controlled by any practical means.

For two years now we have had a senior plant pathologist friend investigate our outbreaks. His detailed examination and culture have revealed exactly the same results each year, namely that the disease is entirely due to the Botrytis fungus (of which I am told there is only one species, viz. B. griseus).

We have camellia petal blight onsite too, and examination with culture shows this to be the well-known Ciborina fungus, which is genus-specific and does not cross over to the Rhododendron genus.

The pathologist says that the true rhododendron petal blight has never been reported in New Zealand. Long may it remain so.

The British Columbian suggestion that the current disease is a Botrytis x Ovulina hybrid was regarded as highly unlikely because our cultures showed pure classical Botrytis only, and it is doubtful whether fungi do hybridize anyhow. Nonetheless, I have long wondered about this outbreak being due to a new and exceedingly virulent strain of Botrytis. Apparently, plant pathologists, unlike human and animal microbiologists, can not identify strains.

For those not familiar with this disease, beware. It is coming to a Rhododendron Azalea or Vireya near you. It begins as a small, one to two millimeter spot, anywhere on a petal approaching, or at, maturity. Quickly, within an incredible couple of hours the long fingerlike veins of mycelium extend, reducing a rapidly-elongated area to slush. As the flower droops and dies it turns brown and dries to a thin paper. When on the ground the characteristic pinpoint sized white sporing bodies form and can be seen with a hand lens. These are not the only source of infection. Old plant material of any genus, leaves, flowers and stems are all sources of this ubiquitous fungus.

I am told the sequence of an attack is as follows. The flowers of the Genus Rhododendron are fragile. Even a very minor trauma, such as the bruising from a raindrop, will cause the petal to leak a little sugary sap. This microscopic amount is then invaded by a spore of the wind blown Botrytis. Once in the drop the fungal mycelium secretes an enzyme that breaks down the adhesive material, a poly saccharide (complex sugar) that holds the cells of the flower together thus destroying the petal structure and turning it into a slimy mess that eventually dries out to a thin brown paper.

Surficant sprays may help but are impractical as they lose their effect within a day or so. Systemic fungicides are useless because they do not transmit properly within the petal tissues. Even meticulous garden and nursery hygiene fails to control, so universal are the spores.

Aggravating factors are warmth and high humidity, both of which encourage spore formation and their survival. Auckland, New Zealand is renowned for both of these factors, especially the perpetually high humidity.

Under these circumstances, no easy control seems possible. One can only hope that the strain, if there is such a thing, loses its virulence with the passing of time. That does seem to happen with both plant and animal pathogens. Climate change is beyond our control and the future is that regard is not rosy.

Dr. Brian and Jan Oldham
102 Meadowbank Road, Meadowbank
Auckland, New Zealand 1005

Some interesting Internet sites www.vireya.net
www.groups.yahoo.com/group/vireya, www.tropicalgardner.com

The Bovees Nursery (Lucie Sorensen-Smith)
1737 SW Coronado (E. White Smith)
Portland, OR 97219 USA
(503)-244-9341 or 1-800-435-9250
E-mail - bovees@teleport.com www.bovees.com
Catalogue is \$2.00 (Mail Order)

Glendoick Gardens (Kenneth & Peter Cox)
Glendoick, Perth Mail Order
Scotland, U.K. PH2 7NS www.glendoick.com
Phone Nursery 073 886 205

D. & P.J. Brown
Vernon Road www.homepages.ihug.co.nz/~brownnz
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VIREYA NURSERIES

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Christopher Fairweather
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Beaulieu, Hampshire www.website.lineone/fairweather.com
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Te Puna Cottage Gardens (John Kenyon)
Te Puna Road, RD6 E-mail TePuna.Cott.Gdns@xtra.co.nz
Tauranga, New Zealand web site at www.vireya.co.nz
Mail Order NZ only Phone (07)552-5756

Pukeiti Rhododendron Trust
Carrington Rd. RD4
New Plymouth E-mail pukeiti@pukeiti.org.nz
New Zealand web site at www.pukeiti.org.nz

The Vireya Venue
2 Clifford Street
Maleny, Queensland 4552
Australia

Pacific Island Nursery (Sherla Bertelmann & Richard Marques)
P. O. Box 1953 E-mail tropical@greensand.net
Keaau, HI 96749 (808)966-9225
www.pacificislandnursery.com
They also handle the Vireya seed exchange. WorldWide.

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