

The Vireya Venture

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+Vireya - C D ROM

Readers may be interested to know of a new CD ROM that is now available covering many aspects of Vireya culture and illustrated with 250 photographs with accompanying descriptions. Outlining the history, distribution cultivation and classification of Vireya, as well as detailing places to see and buy plants, the disc also contains a listing of over 700 named hybrid varieties and known parentage's, together with an up to date list of all Vireya species.

Produced by Chris Callard in England, copies of the CD-ROM are available to order either by credit card through Chris's Vireya WEBSITE AT WWW.VIREYA.CO.UK PRICED AT us\$20.00 plus \$2.50 postage and packing, or by sending a cheque for Aust\$37.00 inclusive to: 26 Colwood Gardens, London, SW19 2DT, England

CD-ROM
250
photographs
with
descriptions

Rhododendrons and drought tolerance

There is a whole tribe of tropical rhododendrons called Vireya or Male-sians that can be grown for weeks without any water at all. Native to New Guinea and adjoining tropical areas, many of the plants grow as epiphytes. In trees, high above the ground, growing in sparse pockets of organic debris, they are exposed to frequent periods of extreme drought. At the Nursery in Strybing Arboretum, nurseryman Peter Sullivan has grown plants in gallon cans so dry for so long that the main danger was the cans became feather



THE HYBRID - PEACH DREAM
SHADES FROM APRICOT TO PINK

light and would tip over from the weight of the plant. In my own garden outdoors, a selection of these plants was given no water for three months, other than a light sprinkling, a total of less than one gallon over the period. The only notable change was more flowers.

* extract from Pacific Horticulture
Vol 38 1977 written by Hadley Osborne
What of your experience with drought?

Dry Spells & Vireya

The norm for the sub-tropical east coast of Australia is a dry spring. Here we consider ourselves in drought if we have not had rain for 6 weeks. Vireya that are newly planted out, using an on the ground, rather than in the ground technique, certainly suffer during these periods and require regular watering but the established plants cope very well. I have plants that have not received any water over and

above our natural rainfall during this current dry spell and as yet show little sign of stress, other than smaller blooms. I guess Vireya have adapted over time to the prolonged dry periods, periodically experienced in their native tropical high country. The great barrier reef shows evidence of dry periods, with no tropical wet, lasting many years. How did R. Lochae survive?? Editor

Growing *R. Lochae* - H.M.Hewett

The Root System

Firstly, it should be realised that the species, which occurs naturally on a few high mountain tops in North Queensland (and in New Guinea), is a lithophyte i.e., it grows on rocks. I believe failure to appreciate this characteristic leads to most failures, where it either languishes, with little growth and few flowers, or actually declines, having been positioned in normal garden soils or left in containers.

While it can be readily propagated from tip cuttings in coarse sand and the early roots have the fleshy appearance of many proteaceae species, the mature root system has a papery nodular appearance resembling that of a cymbidium orchid and accordingly, requires very open conditions.

Planting

My specimen is growing in approximately 600mm depth of sandstone ballast (maximum dimension about 120 mm), heavily interspersed with Casuarina mulch. Absolutely no soil at all is used. The section was selected along the southern edge of an elevated rockery, so that rapid drying out would be avoided.

Exposure

On the advice of the late Charles Taylor, Past President of N.S.W. Region, who gave me the original plant, a position was selected below a Eucalypt to afford some protection from climatic extremes, while still providing adequate warmth and

light. (Some people may not appreciate that Eucalyptus spp. maintain their leaves edge-ways to the sun's rays and so shadow effect is minimal).

Fertilising

As with most species of their close relatives Epacridaceae, *R. Lochae* (Ericaceae), responds favourably to frequent applications of fertiliser. I apply three months Osmocote several times yearly to maintain new growth.

Watering

Planted as above, I don't believe it would be possible to over water this species in Sydney, although it does seem to have the ability to withstand long dry periods. Frequent watering, however, combined with fertilising will produce continued new leaf development and a succession of flowers.

Pruning and Flowering

Although in its natural habitat it reportedly grows to a small tree or tall shrub, my specimen is now of hemispherical shape a little over 1 metre in diameter, and about 600mm high. As leaves are maintained mainly at the end of the tangled stem formation, I find it unnecessary and undesirable to prune or cut for flowers. New growth springs from the base of a flower similar to a waratah and the plant does not make regrowth from the nude stems when end leaves are removed. As well as spoiling the appearance pruning reduces flowering. To help maintain vigour and flowering I remove seed pods. Reprinted from 'The Rhododendron'

Rhododendrons Down Under

The Melbourne Conference was very inspiring, well organised, had great speakers and loads of interesting discussions.

Melbourne weather was kind enough, though a little cold for the warm climate people. A dull day allowed the Rhododendrons at the National Gardens to really shine only being upstaged by the wonderful show of blooms put on inside the display room at these gardens.

Talks and slides on Vireya by George Argent and Graham Smith and an introduction to new Vireya Hybrids by Graham Snell and Sylvia Saperstein really had the Vireya enthusiasts excited. More on the conference next issue.

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Clyde's Corner

October was a sad month when we were told of the death of Lou Searl on October 4th at Port Macquarie Hospital. Lou was an old time friend and although we did not see him often these days he was always forthcoming with Vireya news and history from his time in New Guinea to his small nursery at Crabbes Creek and later his rather unusual and impressive garden at Morton Creek.

Here we had weather as described at this time last year but much drier and brighter so I presume that was the factor that gave us our best display ever of Vireya and all the other flowering shrubs and perennials.

Not quite all the Vireya responded,

there was still some powdery mildew around and our plants of *R. Lochiae* were disappointing again with poor growth and few flowers. By chance two relevant articles emerged; see above Growing *R. Lochiae* and Rhododendrons and drought tolerance. Any comments would be interesting.

A failing memory has made good labels very important in our garden, Plastic become brittle and break while trying to read faded writing. Suggestion - use offcuts of colourbond and black enamel paint or old venetian blind strips and artline permanent marker pen. This can be removed with meth. spirits. Holes are best drilled through a batch of twenty or more held in a vice.

Goodbye to Lou Searl

Sylvia Saperstein

Lou's daughter Debbie and his son Mark told me that before he died he was mulling over how to improve Tangellos by hybridising. Until he was hospitalised he was tending his garden on a converted ride-on mower because his joints were too painful to walk. His deep love of plants kept his mind sharp and his body kept up as best it could.

As a young man Lou went to PNG to run a cacao and coconut plantation not long before the 2nd world war broke out. His knowledge of PNG qualified him for what became known as "Coast Watchers". This group was landed by submarine to monitor the movements of the Japanese and harass them where possible. He told me of an incident where he was on sniper duty in thick bush when a Japanese soldier suddenly stood up silhouetted against the light just metres away. He opened fire. When I asked how he felt about it he said in his usual pragmatic way "Well, it was him or me". Another time he came upon two Japanese soldiers who were dying from the poison of the Black Bean seeds they had eaten. I didn't let him finish that story, so instead he went on to describe the orchids he saw.

When Lou died his family picked big bunches of Vireyas and everyone laid them on his coffin and marvelled at their beauty. He was still making vireya converts! I think I was his most dedicated convert and I learned so much from him. There is something special about listening to a plant collector remembering his discoveries. He was still full of wonder at his first glimpse of searleanum and often lamented that he could never find that spot in the bush again. He would speak of flying over a whole hillside of macgregoriae in flower and of the Papuans who decorated the truck he drove with branches of christii.

As "The man on the spot" on the New Guinea highlands after the war Lou made a huge contribution to the collection and distribution of Vireya material from the wild. I hope that I or some other Vireya grower can bring Searleanum to the attention of the gardening public for its very distinctive beauty and as a permanent memorial to a man who gave so much.

New research project on Vireyas

The evolutionary relationships of the different groupings within section Vireya is the primary focus of a new research project that has recently commenced in Australia. Data sets derived from morphology (leaf and flower form, scale types, etc) and molecular chemistry (DNA sequences) will be analysed to give us a greater understanding as to which groupings the various species belong and the sequence in which the groupings evolved. The project will also help us understand how section Vireya is related to the other sections of subgenus Rhododendron (i.e. sections pogonanthum and Rhododendron).

Once we have established the likely phylogeny of section Vireya, it will be possible to test the Sleumer classification of the section to see how well it accommodates the very diverse array of extant species.

The biogeography of the section will be considered too because the most likely dispersal routes through the islands of the Malesian region can be worked out once the phylogeny is known. Almost certainly the section had its origins in mainland southeast Asia but questions about the direction of dispersal remain speculative until we understand more about the phylogeny. Perhaps dispersal was primarily southwards through the Malay Peninsula to Sumatra and Java and then eastwards through Borneo and Sulawesi to New Guinea and the Solomon Islands and Australia, or maybe it was through a northern route from Asia to the Philippines thence Borneo-Sulawesi and thence westwards and eastwards. And maybe dispersal back towards Asia has occurred too. This will be an exciting part of the research.

The project is based in the Australian National Herbarium at the CSIRO laboratories in Canberra, and the project team includes researchers from CSIRO, the University of Melbourne and the Melbourne Botanic Gardens. There are also collaborative links with scientists in Edinburgh and the USA. The results of the project are expected to have broad significance. The most obvious benefit to horticulture is that it will show the likely relationships of the subsections to each other; this will assist hybridists in planning their species crosses. It may even help in obtaining successful crosses to sections Pogonanthum and Rhododendron. The project results will show which major lineages are widespread and potentially less at risk from extinction and which have small ranges and hence are more vulnerable; this will assist biodiversity managers in Malesian region determine their conservation priorities. It will help us work out if the several different major flower forms and colourations, which are such an important part of the appeal of these plants, have evolved a few or many times in response to the selection pressures of the different major pollinator groups (butterflies, night-flying moths, birds, etc). It will contribute to our knowledge of the different dispersal routes taken by plants as they have spread through the Malesian region. And for many people, the results will satisfy their initial curiosity about the origins of Vireyas and then stimulate them into seeking answers to the further questions that will arise as to the genetic and geographic origins of this fascinating group of plants.

Lyn Craven, Australian National Herbarium, CSIRO, Canberra (craven@pi.csiro.au)

Vireyas Are Tough

Glenn Grace

When I first came to Hawaii and was introduced to Vireyas I thought they needed shade and coddling. Now it's a year or two later and I find that the majority of vireyas need neither. Oops! You disagree, oh well read on and let me develop my ideas and give you some details and pictures to go along with my wild statements.

First I live in a rain forest on the windward side of the Big Island of Hawaii at about 500 feet elevation. I get lots of rain and humidity and lots of sun for short times. Some plants can fry rather quickly and even Vireya cuttings grown into plants will blister when moved out into the sun too fast. But although they lose some leaves they recover quickly. Many of your big hybrids will grow nicely in full sun here. Come see my yard and contrast those which I planted in about 50% shade with those in the sun. This is not 100 % true for all varieties however. There are a few which really do need shade. So check with a knowledgeable person first.

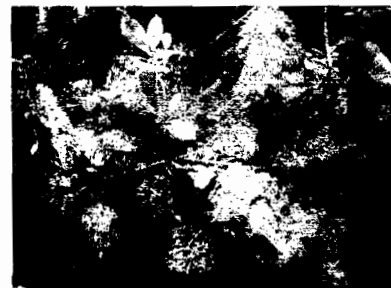
Now about water. They like a lot of it. But it must drain as well as a kitchen sink or they will die. My soil (much laughter here) is made up of worm castings and does not drain rapidly enough for really good growth although they will survive in it. I have found that Mitch's method of putting the unpotted plant on the ground and adding two buckets of cinder around it works well. Besides it is fast and I am lazy. I have an old rock wall out front and I stuffed a small Vireya (Littlest Angel) into a small hole on top with two handfuls of cinder and it is growing well now 2 years later. I did have to water it during the drought by hand as it would wilt every 2 days.

Now you will get cuttings from our meetings and maybe your friends too. I plant some of these directly into the ground. You should choose a spot where the soil is damp and there is some shade. You can move it later or if you plant it under some plants that are going to be cleared any way you can leave it. Don't trim the leaves just leave it. Leaves make more food and the plant seems to grow more quickly. Heresy, well maybe but it works for me. Now if

you are lucky enough to be around someone who trims off a whole branch and gives it to you, thank them profusely, then take it and plant it just under the surface or put leaf mulch on top of it with a rock to hold it where you want it. This yields a mature shrub in one season (check out the pictures).

Another thing that works is to sharpen a cutting and then poke your knife in to a live Hapu'u fern and insert the cutting there. It will often grow, again check out the pictures. This interesting technique can add interest to your garden, also it is a way to get some of your the plants up off the ground so they can hang down. Remember these things grow in the jungles of Indonesia 80 feet up. You can also use trees for some plants although I have not personally tried that yet. But I plan to do so in the near future.

These plants in trees don't get much fertilizer and they dry out quickly, but they survive. They also get lots of light up there. So quit coddling these things and start treating them more like nature does. The results may surprise you and your garden will be more interesting.



Upper Left—Branch Stuck In Ground
Middle—Cutting Stuck In Hapu'u Fern
Upper Right—Branch Stuck In Ground
Lower Right—Cuttings Stuck In Ground

Vireyaholics Arise!

By Sherla Bertelmann, Treasurer-Hawaii Chapter ARS

Viva Vireya!!!

In January of 1997 a handful of Vireya Rhododendron enthusiasts gathered in Volcano Village on the Big Island of Hawaii to lay the foundation of establishing a chapter in Hawaii for the American Rhododendron Society (ARS). In October of 1997 the Hawaii Chapter was formally granted ARS Chapter status. Over the past 3 years membership and interest has steadily increased. Little did the new members know they, too, would soon become "Vireyaholics".

First comes the fascination for the many varieties one sees at the monthly meetings. This leads to the challenge of learning how to root them. Oh, the sense of accomplishment when more cuttings take root than don't. This leads to wanting to try more.

The Hawaii Chapter fully supported this need by putting on demonstrations by some of the more successful growers. There was much sharing about what worked and what didn't among the members. Advice from others (i.e. Bill Moyles, George Argent, E.W. Smith to mention a few) was sought and ideas incorporated. As each member learned about his or her particular microclimate and what was needed for success in his or her area, the success rate of propagation rose.

Once a vireyaholic's confidence is up they are ready to try more things, such as new varieties, species, seed sowing, and growing out seedlings. Now new territories start to open up as talk turns to fertilizer, lacewing bugs, and potting media. The craving for more strengthens as they look for articles, books, and newsletters whose main topic is "Vireya".

Once again the Hawaii Chapter rose to support the members needs. New plants were brought in from Australia, seedlings grown by Mitch were distributed, books from America, England & Australia were bought and copies of articles on Vireya put into the small but growing library. Speakers from Scotland & New Zealand presented slide shows of far away places and more exotic Vireya.

The need for more continues to grow and along with it comes the realization that vireyaholics are worldwide.

The thirst for more and the awareness it brings opens up more worlds. Communication by way of email & snail mail has greatly led to help satisfy some of the burning questions. Sites on the web like Chris Callard's with Vireya photos have been invaluable. The Hawaii Chapter sponsored a Vireya Seminar in March of 2000 with participants coming from around the world all with one thing in common, a fascination for the Vireya.

Now comes the desire to share the beauty and joy of growing Vireya with everyone-encouraging others, offering advice, or hand's on help.

This is a true attribute of a vireyaholic...the sharing. Cuttings, plants, advice and help are given with a free and loving spirit. For two years the Hawaii Chapter has participated in our annual Orchid Show with an education/demonstration booth. Members man the booth and give openly of their experience to all interested persons.

The need to share, to encourage growing, to increase the awareness & interest in Vireya has led the Hawaii Chapter to their next big challenge, a Vireya educational/demonstration garden. It started about a year ago as a small outdoor planting of 50+ Vireya at the Rainforest Zoo in Panaewa, Hilo. It didn't take long to realize that we wanted more than a casual planting of a few Vireya. We had a bigger vision, one with several beds that could house not only hybrids but also species. Raised beds lined with hapuu ferns, filled with organic material, with a rain sensitive irrigation system that would go on only if there was no rain and with proper plant identification signs...that was more in line with the vision.

A landscape architect has drawn such a vision in his preliminary sketch consisting of a 6000 sq. ft. area. A memorandum of agreement has already been signed between the Hawaii Chapter and the Zoo Director. Everything is in line to start...except, the funds. It has been estimated to cost about \$25,000 to clear the land, prep it, put in the irrigation and the bedding material for the first completely public outdoor Vireya garden in the United States.

The Hawaii Chapter wants to avoid a financial burden upon the zoo or the County of Hawaii and is seeking private funding in the form of grants or direct donations. I am appealing to all Vireyaholics for help. The help can come in many forms...such as, money, plants or advice & leads. Please, if you have anything to share contact me at tropical@greensand.net or write to me, Sherla Bertelmann, at HCR-1 - Box 4641 - Keaau, HI - 96749. Monetary donations/checks should be made out to Hawaii Chapter-ARS.

Vireyaholics Arise!!!

Viva Vireyas