The Vireya Venture

Issue No. 59 January 2006

Editorial

Well, we said in the last issue of T V V that we would try and do better and get this issue out on time, in December 2005. But, things happened that were beyond our control. Sorry for the delay folks. It might be that the months we chose for release of each issue (Mar-Jun-Sept-Dec) were just busy months for us. So, we will try a different schedule. From now on the issues of T V V will be distributed in January, April, July and October.

The Xmas and New Year period is now over and we hope that everyone had a happy and joyous time and have a prosperous 2006. In Australia the period from Xmas to end January is called the "silly season" and it can be difficult to get much done because many people take their annual holiday. Numerous companies close down or have only a skeleton staff.

Even those people who remain at work seem to adopt a more relaxed attitude and spend hours sitting quietly with a background radio tuned to the cricket or music (or are they just comatose from all those parties?). Generally people are reluctant to do much that requires physical effort so they don't get overheated. Summers can be very hot in Australia – we were trapped in Sydney this past New Years Day with a maximum daytime temperature of 45.2°C (114.6°F). Gee it was hot!

These sorts of temperatures present problems for vireya growers in Australia that those in other parts of the world might not encounter. Vireyas that are exposed to direct sunlight when the temperature is over 40°C can suffer badly from leaf sunburn if they do not have enough soil moisture to keep their leaves turgid. Also, the soil can get hot, especially if your vireyas are in small pots in direct sunlight. The roots can literally cook.

If there is no natural shade then shadecloth is often used to reduce light intensity. There are

Another first flowering for us. This time R. hellwigii x R. zoelleri. We think this cross was made by Graham Snell or John Rouse.

many grades of shadecloth available, even up to 90% shade. Of course, this is too much during winter when maximum sunlight and warmth is desirable. So, to avoid having to put the shadecloth on in Spring and take it off again in Autumn the compromise is to use only the minimum shade rating to protect from burn , 50-60%. We often also use a thick mulch over the soil to help retain soil moisture and reduce soil temperatures.

In addition to light intensity and heat our garden soils can suffer from "water repulsion" where they dry out and become difficult to re-wet. To overcome this problem we use surfactants to reduce surface tension around soil grains. These can be either granules sprinkled on the soil or spray on liquids.

Another option is to use "water crystals" in the soil. These crystals are actually granulated gels that when desiccated are mixed into the soil. When the soil is watered the granules absorb water and swell up into clear blobs of 'jelly' which subsequently dries out more slowly than normal soil. Plant roots can draw water from these gel blobs when it is needed.

Another common problem in Australia comes with the use of "slow release" fertilizers. These are small balls of fertilizer coated in a porous resin that allow water to pass into and out of

the ball carrying a small amount of the nutrient out into the soil. They allow plants to get an almost constant feed of nutrients over a long time – 3, 6 or 9 months. The problem is that the rate of nutrient release is temperature dependent, with more nutrients being released in hot weather. Watering plants in very hot weather can result in an overdose of nutrients just when plant leaves are suffering from heat stress and the roots are over heated.

Vireya collectors in other countries can have similar or opposite problems – see the letter from Hendrik Van Oost in Belgium which follows. Managing these issues, and many others including treating or warding off insects and diseases, regular watering, weeding etc, is the job of a gardener and plant enthusiast . Depending on the size of our garden, or the number of plants we have in pots, this job can be quite onerous . Why do we do it?

I believe that gardeners get more than the simple pleasure of seeing beautiful flowers, catching a lovely scent or enjoying serenity in a peaceful environment. They also get satisfaction from seeing what they produced, of knowing their plants are dependent on them for survival or, if they breed their plants, knowing that they have produced something that wouldn't exist without them. It's a bit like having children – but you don't have to wait as long for them to grow up.

Now – back to the home front. Buster and YumYum are continuing to develop their gardening skills. Every morning we see the results of their nightly endeavours scattered across our bedroom carpet – chewed up leaves, sticks, flowers and pine bark chips. They have even taken to plucking tomatoes directly off the bush and eating them on the lounge room floor. We thought of trying to teach them a lesson by growing chillies – the very hot little green ones – but we know that won't work because they like them too! I guess more things have to go up out of reach.

YumYum and Buster apologizing to Janet for eating the tomatoes – and for eating one of her earrings.

As you will be able to tell, we received very few letters/articles for this issue of T V V so, as forecast, we have had to resort to republishing articles from previous issues or other newsletters. So, please send your snippets, letters and articles to:

Graham and Janet Price
208/283 Spring St
Melbourne Victoria 3000 Australia
Ph: +61 (0)3 9639 4493 Fax: +61 (0)3 9639 5480
Email: *lithic01@bigpond.net.au*

Notices about Upcoming Rhododendron Conferences

Tasmania

Emu Valley Rhododendron Garden is hosting the 2006 Pacific Region International Rhododendron Conference in Burnie, Tasmania, Australia from 20th October 2006.

This event provides a great opportunity to visit Tasmania in spring during the peak of its rhododendron flowering season and to visit the incredible Emu Valley Rhododendron Garden on its Silver Anniversary. This is a serious conference in a real rhododendron paradise without the big city stress.

For details and bookings contact the Conference Convenor Neil Jordan on: www.jobfuturestas.com/rhodoconf2006

Hawai'i

The 2006 International Vireya Seminar will be held February 17-19 by the Hawai'I Chapter of the American Rhododendron Society. The program includes speakers from New Zealand, Australia, Scotland & USA plus garden tours, lunches and dinners.

Details are available from Veryl Ann Grace, PO Box 1330, Kea'au Hawaii 96749-1330, Email: peleshair@verizon.net , ph: 808-982-9926 or Sherla Bertelmann ph: 808-966-9925

A letter from Belgium

Hendrik Van Oost

My Vireya Story

I don't know where to start, so the easiest is to start from the beginning of our commercial azalea nursery. I'm the fourth generation of azalea growers in the neighborhood of Ghent in Belgium. In 1981 my wife Martine and I started a new azalea nursery in Kruishoutem about 12 km from Gent. Our climate is very moderate, normally rainy winters and temperatures between -7 to +8°C, rarely we have temperatures to – 15°C. In summer temperatures are from 18 to 30°C° with rain from time to time and often cloudy weather.

My great-grandfather started hybridizing azaleas in about 1910, but most of the crossbreeding was done by my grandfather between 1930 to 1940. In the years 1980 to 1990 about 65% of the commercial azalea varieties where sports of one plant, Helmut Vogel. I thought this was a danger for the future. So in 1984 I started crossbreeding azaleas. It was for me very important to bring new blood into the azaleas.

From our Scientific Department of Horticulture, I received some new *R. tsutsusi* species and it was also there that I saw the first Vireya (*R. laetum*) in bloom. The information that was told to me by Dr. Heursel was very negative for the vireyas, so that I didn't have any interest for many years.

In 1995 I came across 3 vireyas in a flower market. I had never seen these plants offered here so I bought all 3 even though they did not look very healthy. I tried to keep them alive in our azalea greenhouse, planted in peat. Watering and feeding was done along with our azaleas. Off course it was just the right way to kill them, slowly but surely.

More and more I got interested in crossbreeding Rhododendron with azalea (*R. tsutsusi*) but on the other hand it was almost impossible to receive new species to explore the possibilities of these crosses. For me the opportunity to surf the net (WWW) opened a new world of possibilities. I was surprised and excited about the vireya flowers I found on the net, and particularly I am very grateful to those people who shared with me so much information, seeds and plants.

Because of the fact that almost all the plants came from tropical or subtropical climates, I had to find out how to keep them alive. I also had to create a commercial value for them. I knew that otherwise it would be impossible to create and enlarge a collection needed for my hybridization program.

An image from Hendrik's website with Hendrik (we think) holding a beautiful red vireya.

At present we grow about 100 different vireya varieties in very small quantities. The substrate we use is a mixture of 10 % lava (size 8/18mm.), 20 % pine bark, 30 % pine needles, 40% coconut chunks, and they seem to be happy in it. During the winter in the greenhouse the vireyas are standing together with our azalea just frost free and they get water once every three or four weeks. Coming into bloom we try them out in our living room and than we have to water them a little about every 3 days. Every flower is blooming about 2 weeks.

In summer we fertilize about once every two weeks with liquid fertilizers 8/6/8+ Mg. The best results for keeping the vireyas in good condition throughout the summer was by planting them outside (in full sun) in a mixture of pine-needles and peat. Lots of varieties had some leave-burn the first week through the dry and hot weather, but after adapting they recovered well and they flowered again in October, much richer in colour than those that stayed in the greenhouse.

With lots of the varieties we have some difficulties to set buds at a young age, but this also exists in other Rhododendron species. So

we just wait another year and flowers always come (some extra light can help in winter).

Flowering season is very, very unpredictable, it differs from variety to variety. The last two years we always had some plants in flower with the best periods around the end of spring and end of autumn. The first year we always pinch out the young twigs to form better plants. Our favourites during the last year where: Apassionata, Thai Gold, First Light, Toff and Strawberry Parfait, all easy to grow and flowering at a young age.

There are some difficulties to take good care about such as: (i) low air humidity in the living room during winter; (ii) how to water them in there locker medium; and (iii) the short days with lack of light in winter. But I may hope that there are varieties which tolerate all those difficulties or with the enlarged numbers of new varieties that they will be found soon.

I think (as a collector) that there is a good possibility to keep vireyas in good condition for several years and to enjoy the beauty of the flower in our climate, with of course some green fingers for taking care of these magnificent tropical Rhododendrons.

Hendrik Van Oost, Belgium
For those who understand Dutch or French try my website : www.azaleatuin.be

Ed. A wonderful letter Hendrik – thanks very much for your "Story". Do any other readers have a story to tell us? How and where did you get your introduction to vireyas?

Another Way to Raise Vireya Seedlings

Graham Price

The common saying is that there are many ways to skin a cat – though I'm sure that the cat would not appreciate this. The meaning is that there are always different ways of doing something and they all achieve much the same result even if some ways are easier than others. This also applies to raising vireya seedlings.

The 'standard' and probably the best way of raising vireya seedlings for the home gardener has been described many times. A précis of this 'standard' method, which I described in a note for The Vireya Vine newsletter in 2000, goes as follows.

(i) Put your selected seed raising mix in a shallow pot or tray and insert a label.

(ii) Wet the soil mix thoroughly and allow it to drain. Use boiling water as it helps wet the soil mix and also sterilises it – but be sure to let it cool.

(iii) Sprinkle the seed lightly on the top of the wet soil mix. Do not put soil on top of the seed. Spray the seed lightly with water, possibly mixed with a fungicide.

(iv) Place the pot or tray in a well-lit and warm position but no direct sunlight. A small plant germination box is ideal as it includes bottom heat, a clear plastic cover and vents to allow in some fresh air. Place a light above the cover, either incandescent or fluorescent, and give 12-14 hrs light per day.

(v) Keep the pot or tray moist by regular water sprays, but not too wet. If not using a germination box cover the pot with a clear lid or seal it inside a clear plastic bag.

(vi) Keep watching for the seeds to germinate and the first true leaves to appear. Then uncover them a little each day to allow fresh air to get to the seedlings. Continue to spray regularly with plain water to keep the soil mix moist, but not overly saturated.

(vii) Once the second pair of true leaves appear you can begin to introduce a small amount of soluble fertiliser dissolved in the spray water - maybe once a week at 1/5 -1/4 strength.

(viii) When the seedlings are 2 cm high they can be picked out and individually planted into separate small pots or tubes (be careful not to damage too many roots). Application of a fertiliser at this stage (half strength) will help the small plants put on additional leaves and grow taller and sturdier.

There are many variations on this basic method that have been developed by individual growers. The most important thing is to keep an eye on the small seedlings and tend to their needs.

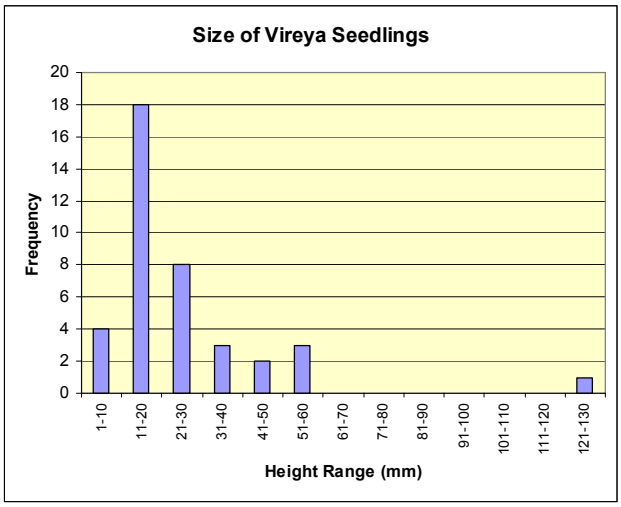
Because I am a vireya enthusiast I often put down far too many pots and trays of seed and eventually produce too many seedlings. The problem is I have quite limited space available to hold and manage plants in pots, especially as they get bigger, and I don't have a garden to plant them in the ground. I have given

away many pots of seedlings but still I often have too many to manage. I don't have enough time to look after the larger plants let alone small seedlings.

So, one day the inevitable thing happened - a batch of seedlings missed being repotted into individual tubes. A busy life and not enough space conspired to cause me to overlook them. The seed parent was *R. tuba* and the pollen parent was *{R. javanicum x R. rarelepidotum}* which was produced by Graham Snell. I made the cross in May 2001 and the seed was sown in November 2001 in a 75mm (3") square pot that had been placed under an automatic watering spray in a hot bottom box. Somebody else occasionally gave them some liquid fertiliser when they attended to other plants, but I had forgotten them.

The pot of seedlings from cross X01/03 photographed in November 2005

Well, the seedlings remained in that small pot until November 2005 – 4 years after they were sown! The photo here shows how they looked at this stage and the graph below shows their sizes (heights). There remained 39 plants in the 75mm pot with the tallest plant 127mm, 5 plants over 40mm and the majority between 10 and 20mm high. Four plants were under 10mm high and were severely shaded out by the taller plants.



The range of plant sizes in this small pot probably reflects the combined effects of genetics and competition. Genetics - some plants just naturally grow faster than others and some plants are weak and easily catch diseases, even though they all came from the one cross. Competition – taller plants overshadow smaller plants and they have larger root systems while smaller plants don't get as much light and have thin short roots.

I have now repotted these seedlings into separate tubes and I will monitor progress until I can get them into the ground. The interesting thing about this "experiment" is many of the seedlings came through the ordeal without any assistance from me. I am not advocating this "neglectful method" of raising seedlings because the "standard" method produces mature plants much sooner. But, sometimes we don't have a choice and if, like me, you don't have enough time or space to manage them properly then just leave them alone with an adequate water supply. Its amazing what can happen.

Cheers Graham Price

Rhododendrons of Subgenus Vireya,

by Dr George Argent, R B Garden Edinburgh

The first full monograph on Vireyas will be published in May 2006 by the Royal Horticultural Society. Order now at a special pre-publication price of £44 ($79). Free postage and packing in UK and Europe only. Add £11 ($19) p&p for orders outside Europe. **This special offer is only available until 15/4/06** To order your copy contact Simon Maughan, RHS Publications,

Email: *simonmaughan@rhs.org.uk*

Follow-up Letter from Allan Kerr Grant in South Australia

24 October 2005

Dear Graham & Janet,

I was very, very happy and pleased today to receive your letter Graham, for returning the photographs that I sent you and for reproducing my earlier letter of 3 August in your latest Issue #58 of The Vireya Venture of September 2005. I can assure you that I will do my best to encourage my friends to get onto your newsletter mailing list.

I should have informed you in that earlier letter that I am a retied medical physician who spent over 50 years looking after those who were unwell. It is said that most people who are doctors are very bad writers. Therefore, please excuse any problems you have in reading this letter.

Also, thanks for the information regarding the fact that the vireyas in the photos were planted fairly far apart. The reason, in part, was that this our first planting venture was in a Zoo Garden. That Zoo is often full of many children who, understandably for obvious reasons of excitement, tend to rush everywhere through the gardens.

I agree that the vireya plants are fairly far apart. That was done in the hope that we, and the staff of the Zoo, would be able to protect them from being damaged. This proved to be a wise decision in the early days since several plants were destroyed by excited youngsters!

I cannot wait to see if those first plants are now growing stronger and taller and if children have stopped running through them. If they are getting stronger and bigger there should be little chance of more deaths.

It is some months since I have visited the Zoo, but my friends and I hope to plant some more vireyas in about two weeks from now. Certainly we will plant the next lot more closely together in our "Vireya Garden". If all goes well the whole bed may soon "look more like a jungle".

In answer to your final question about the vireyas that I have at my home, I do plant them closer together and prune them after

flowering. However, I allow each plant to be about 40cm apart, which is reasonable.

Thank you very much for delightful letter.

Allan Kerr Grant

Ed. Thanks Allan for this second letter concerning the vireyas at Adelaide Zoo. I admit I did rearrange this letter a little, but for editorial/layout reasons and not because the writing was bad – it actually was quite good and easy to read.

This is just an interesting photo thrown in to fill up the space. It is the first flowering of one of our own hybrids [(phaeopeplem/zoelleri) x superbum] X [{laetum/aurigeranum} x zoelleri Island Sunset F2]

REPRINTED ARTICLE

ED. The following is a reprint of Article that appeared in **The Vireya Venture – An Introduction**, produce by Wendy Snell as a lead in to the first T V V newsletter issue that appeared in September 1990. The article concerns the location and natural habitat where *R lochiae* (the name was spelt lochae at that time) is found in North Queensland, Australia.

Readers please note! Plants previously called *R lochiae* that have a straight corolla tube are now known as *R. viriosum*. Plants with a curved tube that were given the name *R. notiale* in 1996 now revert to the name R. lochiae. *R. notiale* is a synonym for *R lochiae*.

Since the article below was written in or before 1990 it refers only to *R. lochae* and does not distinguish between straight or curved corolla tubes.

Following is the reprinted article. Any errors or mistakes in reproducing the article are probably due to my bad typing.

"Rhododendron Lochae

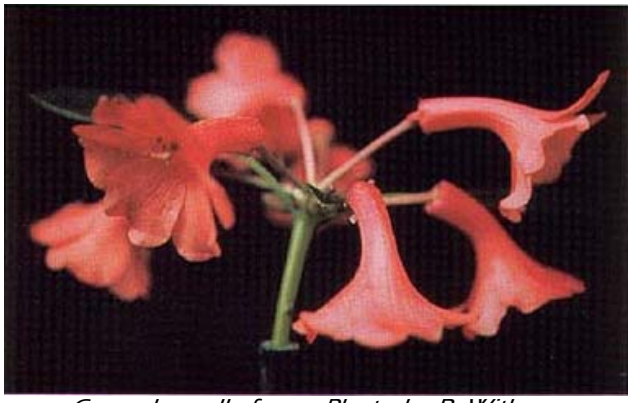
The following is a contribution written by Dr Geoff Atherton, an Australia native plant and rain forest enthusiast, who has made several trips to North Queensland with his wife Christine, in pursuit of his interests. Recently Geiff kindly gave us a plant of a form of R. lochae that he collected on Mt. Lewis which appears to have a larger and more rounded leaf than those we have seen before. Geoff writes:-

Australia's only rhododendron occurs on a number of tall mountain peaks in far north Queensland including Mount Bartle Frere, Bellenden Ker, Mount Lewis, Windsor Tablelands, Bell's Peak, Mount Peter Botti and Mount Finnegan.

In these areas it occurs on the very top of these peaks in small semi-exposed pockets where it is locally abundant. The altitude is from 1000 to 1500 metres, there is high rainfall and usually a dense mist so that the plants are almost always damp and often buffeted by high winds. The temperatures are often quite cool. These are all granite peaks and the soil is light and sandy. The surrounding rain forest is surprisingly low and dense, reflecting the cool and windy conditions. The trees of these areas are quite different from the tall larger leaf rain forests of low altitude and contain many other plants more characteristic of cool weather forests of New Zealand and Tasmania, e.g. Dracophyllum and the high altitude forests further north in the tropics, e.g. Agapetes.

Rhododendron lochae occurs as a semi-epiphitic plant usually near where the low tree cover is interrupted by projecting granite boulders. It appears as a scrambling plant mainly over and around these boulders. In the joints of these boulders it takes root in the sandy leaf litter. If the boulders are covered with mosses and orchids then it will mix in with these plants. It is usually found in dappled light but will occur on the very exposed rocks. Here it will never be exposed to prolonged drying and sunlight as there is usually a dense mist cover on these peaks. The plant is never large and stems over1cm in diameter are unusual. I have never seen it grow as a distinct rounded bush but it is always scrambled in habit. Its branches take root readily in the leaf litter and moss cover. In fact the plants are always quite small and the extent of them is often apparent only when the plants are in flower in Spring and Summer."

Ed. The following photos of lochiae and virosum are taken from Chris Callard's Website: www.vireya.net



Curved corolla form. Photo by B. Withers

Straight corolla form. Photo by R Currie

Ed. A question arises – Do each of the various mountains around Cairns carry only one species or is there somewhere that both species occur together? It was reported by Lyn Craven and Bob Withers in "The Rhododendron" of The Australian Rhododendron Society Vol 36, 1996. that: *"The straight-flower plants all came from localities northwest and north of Cairns whilst the curved-flower plants came only from the Bellenden Ker Range which is south of Cairns."* However, elsewhere in that same article it states that the straight corolla form reportedly comes from Mt. Bartle Frere. So, are there two vireya species on top of Mt Bartle Frere or only one, and which one?

ANOTHER REPRINTED ARTICLE

ED. Following on from the article above, here is another reprinted article on *R. lochiae,* this time by Graham Snell, which appeared in Issue #1 of T V V in September 1990. This one sets a challenge for hybridisers and collectors.

"TOWARDS A MORE VIGOROUS R.LOCHAE

Dr Geoff Atherton's contribution on R.lochae, in its natural habitat, set me thinking. I believe most of us find R.lochae, in its various forms, quite difficult to grow well. It is prone to be twiggy and drop many of its leaves, resulting often in various degrees of dieback. No doubt there are exceptions, so I hope you will all rush off to fetch pen and paper and describe how best to grow R.lochae to make a beautiful plant of it, but the point I want to make is this one . . . .

R.lochae has now been collected from various peaks, often producing quite different forms, although so far, I believe, all the flowers have been in shades of red. I am wondering just how distinct some of these various forms are and, whether when crossed, some may produce a degree of hybrid vigour that might result in a bigger, better, or more easily grown R.lochae.

To my knowledge, we have collections from Mt. Bartle Frere, Belenden Ker, Thornton Peak, Mt. Finnegan, Windsor Tablelands, Devils Thumb and now Mt. Lewis. It would be an interesting project to learn the best combination, if any, of these and any other collections that may exist.

An example where this has worked is the cross made by Dr. John Rouse between the West Irian form of R.konori and a form collected in Papua New Guinea. To my mind no R.konori is particularly easy to grow, but the progeny of this cross has proved to be particularly vigorous and both leaves and flowers are considerably larger than either parent. This indicates to me that these two forms of R.konori are quite distinct, resulting in 'hybrid vigour' in the cross. However, the question arises, are any of the various of R.lochae sufficiently different in their genetic make-up to give such a desirable result when crossed with another form? Alternatively, are the separations of the various forms of R.lochae too recent an occurrence, genetically, for this to happen?

G. Snell, Maleny"

Ed. I think Graham Snell's question is a very good one. Has anyone out there done any crossings between different forms of *R. lochiae*, or between the now two species *R. lochiae* and *R. viriosum*, and if so what was the vigour of the seedlings? Does anyone have the two different forms/species so that the cross could be made?

Questions for Graham Snell: Did you get any responses to the challenge you raised in that article and did you ever find a suitable cross, or did you make the cross yourself? If yes, did you get any 'hybrid vigour'?

Well, that s the end of another issue of The Vireya Venture. It was a little 'thin' in terms of content, but to us the two reprinted articles on *R.lochiae* from the start of T V V are very interesting. We hope you too found them interesting.

To repeat our request (hopefully without becoming boring) we need letters and articles for the next newsletter issue. Anything will do and photos are particularly welcome.

The next Issue of T.V.V., Issue # 60, is scheduled for production and distribution in April 2006.

So, its goodnight from YumYum (hasn't she got a lovely smile) and Buster, and goodnight from Janet and Graham. See you in the next issue of The Vireya Venture.
