# The Vireya Venture

Issue No. 60 April 2006

## Editorial

Here in Melbourne, Australia, the climate is well-suited to growing rhododendrons. The majority of the public are familiar with the temperate climate rhododendrons from Asia, Europe and North America, with azaleas being particularly popular. These *"other rhododendrons"* are generally considered as garden plants for in-ground planting and many older homes have azalea hedges and large rhododendron bushes that are covered in flowers during Spring. Like rhododendrons everywhere they are quite spectacular.

However, interest in vireyas is steadily increasing and the local Vireya Group of the Victorian Branch of the Australian Rhododendron Society is very active. They meet on Saturdays once a month to discuss all aspects of growing, propagating and sourcing species and hybrids not available locally.

A particular interest of this Vireya Group is to expand the plantings of vireyas throughout the National Rhododendron Garden at Olinda, which is a mountain-top suburb about an hour east of Melbourne city. For the first 20 years of its existence the NRG was filled with temperate rhododendrons and azaleas, together with many beautiful tress and smaller areas of specialist interest. Vireyas were generally considered as pot plants and restricted to a single glasshouse.

For the next ten years, under a different garden director, vireyas moved outdoors and were planted along the banks of a creek under the shelter of large trees. The concern was for frosts and occasional snow falls in winter and for sun damage on very hot days in summer. The vireyas grew and flowered nicely but because of the amount of shade they have become a little straggly – there is one *R. tuba* plant along the creek that is over 3 metres tall as it reaches for the light between the overarching trees.



This photo is of the cross (R. konori x R Gardenia Odessey) x (R. christianae x R. laetum). Initially we thought it might be a nice hanging basket, but its growth habit is too open and the leaves too large. Surprisingly, it turned out to be a useful ground cover under larger, more upright, vireyas with its pink-yellow flowers shining like bright candles close to the ground.

Over the last ten years the Vireya Group has had a strong influence over the garden and, among other things, has been putting in concentrated vireya beds along sunny open banks and as wide borders around clumps of large temperate rhododendrons. The focus is on open positions in full sun so that the plants can clump up and form dense thickets.

From what I saw at the group's last meeting on Saturday April 8, they must have planted several thousand vireyas. Already the older plantings are putting on a great display and over the next few years the new plantings will settle in, become bushier, and will provide wonderful displays of colour at times when the there is little else in flower in the garden.

Another of this Vireya Group's activities is its annual Vireya Show, which was on 22-23 April. The period from March to May is our Autumn season in Australia and the time when many vireyas tend to flower. The show is a good source of new plants for collectors. A favourite of ours are new hybrids on display for the first time. They provide an opportunity to see what hybridists are doing and what strategies are being used to produce new varieties. At this year's show we saw the first release of a new commercial hybrid called *Dixie*, produce by Andrew Raper of Rhodo Glen Nurseries. Flowers are deep yellow and orange and the plant has dark green leaves and strong compact growth. A sure winner!



Also on display at the show were two plants of one of Australia's own vireya species, R. viriosum, which had been grown as standards – a really attractive presentation.



Again the contributions to T V V are very light so we have produced another article ourselves, this time on what we are doing about a home for our vireyas. Sorry if these personal articles tend to dominate the newsletter. We would prefer to have articles by you, the subscribers, so please send us something.

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## From Neil Puddey in NSW

The following is a transcript/precis of a presentation delivered by Neil Puddey at the 2006 International Vireya Seminar held in February by the Hawaii Chapter of the American Rhododendron Society. Thanks go to Murray McAlister who prepared this record.

This article will also appear in the newsletter of the Victorian Branch of the Australian Rhododendron Society. Sorry if any of you get this twice. Here's Neil's Presentation:

### **Assessing Vireya Hybrids**

Neil presented a set of criteria he uses to assist in deciding whether a Vireya is a 'performer' in his environment, and hence a commercial proposition. They are:

- (i) Resistance to disease.
- (ii) Does it flower early, and/or often?
- (iii) (a) Does it produce beautiful flowers?(b) Is it perfumed? Perfume is regarded as a bonus.
- (iv) Does it develop into a nice bushy plant?

Highly rated plants do not have to satisfy all of the above criteria, but must have at least three of those four qualities. Here are a few of those, which do very well in Woolgoolga (1) for Neil: Aravir, Blondi, Coral Seas, Fireplum, Haloed Gold, Inferno, Kisses, Pink Swan, Princess Alexandra, Saxon Glow, Strawberry Parfait, The Trophy, Toff, Uluru, and species *javanicum* and *loranthiflorum*.

1. Woolgoola is a small town on the coast of New South Wales about 400 km north of Sydney. Neil's place is almost on the beach. Neil concedes that environmental factors will result in some variation of performance, for instance other plants may perform better in cool temperate regions than in the subtropical conditions which his nursery experiences. Nevertheless, key attributes of plants will continue unabated; for example, the exquisite perfume of **Strawberry Parfait**, the compact habit of **Kisses** and also of **Saxon Glow**.

#### **Plants for the Collector**

The avid collector of Vireyas will see desirable traits in plants that retail nurseries may not. Here are a few examples:

**Gardenia Odyssey** is slow to produce laterals, has poor juvenile appearance and is not particularly resistant to leaf diseases. Nurseries may be reluctant to stock it for these reasons. We all know that this ugly duckling produces the most beautiful trusse!

The species *zoelleri* will eventually qualify as a performer, but perhaps not till 8 years old! The collector knows that this species is stunning in the morning sun.

The Veitch hybrid **Princess Alexandra** has survived in cultivation since the 1800's. It has a bushy habit, shiny elongated leaves and a tendency to flower often. How sad it would be if it had been lost from cultivation simply because of commercial pressure for Vireyas with large colourful blooms.

**Desert Song** is a beautiful deep yellow flowered hybrid that is the equal of any flower. The growth habit is poor however and it does suffer some leaf disease. The collector will balance these opposing forces.

Here are some other Vireyas that Neil lists in his collector section: **Peach Dream**, **Pink Dream**, **Brilliantine**, **Gold Bullion**, **Tira-Mi-Su**, **The Star**, **Pretty Lady**, **Highland Pink Cloud**, and **Zircon**.

#### The Development of New Vireya Hybrids

The development of new hybrids and the growing on of seedlings is, as suggested by Mitch Mitchell in his presentation at this Seminar, fun, stimulating and also important. If vireyas are to compete in the commercial nursery market, then they must not only have beautiful flowers, but be gardener/retail friendly as well. The groundwork has been done, and much has been achieved, but there is still huge potential for this sub-genus of the rhododendron family, such as:

- (i) There are many species that have not been tested as hybrid parents.
- (ii) Many hybrids have not been taken to the **F2** generation.
- (iii) What stunning lilac hybrids are yet to originate from species like R *praetervissum*.
- (iv) Could anyone have guessed that selfing Saint Valentine would produce Charming Valentino, with foliage and flowers two to three times the size of the parent?

As an example, Neil has a number of plants of **Kisses**, F2. Some with pale yellow, blushed pink flowers and others with a bright orange flower with yellow throat. A plant of **Saxon Glow** crossed with **Inferno** holds promise and Neil is eagerly waiting for the first flowers!

Neil also observes that crossing two performers does not necessarily guarantee success. Equally, sometimes the best come from average parents - perhaps there is a similarity here with the human gene pool? He suggests some crosses worth considering:

- (1) Lavender Cloud x *R. praetervissum* (hoping for that elusive lavender/purple bloom). The former has excellent growth habit, and pale lavender flowers.
- (2) **Highland Fair** x **Fireplum** (a perfumed rose red with pale centre crossed with a deep cherry red with nice growth habit may produce a perfumed red)

Neil discards *R. aurigeranum* (pale orange form) as a suitable parent, because it is vulnerable to leaf fungus. *R. loranthiflorum*, on the other hand, seems to be more disease resistant and therefore of more value.

In Woolgoolga, Neil is seeing natural seedlings appear in the pots of older plants and in moss growing on logs. He occasionally pots these on, since natural selection has ensured the survival of those with most vigour.

Could it be that we are all being reminded that it is preferable to grow hybrids that have well reasoned aims as their raison d'etre? We are all guilty of crossing two plants simply because they are in flower simultaneously. It would be pure luck if the resulting hybrid has any value. Would a pollen bank better meet our needs?

#### **Propagation Techniques**

The techniques that Neil has adopted have evolved in response to his unique market. His plants have been sent to Thailand, Taiwan, Tahiti, New Caledonia, Belgium and Hawaii, with some plants being forwarded to mainland USA. He has also had recent enquiries from Spain, Columbia, Laos and China. Neil joked that he never though he would be cash cropping in Columbia! He is interested in spreading this section of the genus Rhododendron around the globe, and particularly within Australia.

Neil takes a special interest in species because of the unique possibilities they hold. He also observes that the natural habitat of Vireyas is declining, largely as a result of continued population growth and climate change in their counties of origin.

He has adapted to his markets by producing small plants in 90 mm pots which can be sold straight off the bench - packed and posted domestically within Australia, or sent overseas; still in their original pots in many cases.

His process for cuttings is as follows:

- Choose new growth, just hardened off, with terminal bud swelling. Leave only 4 – 6 leaves on the cutting. Reduce these leaves by half.
- (2) Wound the cutting and then dip it in a root-stimulating hormone. The wound into the cambium layer is approx. 1 inch long, scored down one side. Recent batches were left with whole leaves and were not wounded. He observed that cut leaves or tissue is often the entry point for Botrytis fungus.
- (3) Place each cutting in a 90 mm pot containing only perlite. Perlite makes the job of bare rooting for export easier. This growing medium will also be more sterile than alternatives.
- (4) On top of the perlite, place a small amount of slow release fertilizer, perhaps 1/3 of a teaspoon of seedling Osmocote or Nutricote. Keep this to the side of the pot and not close to the stem of the cutting. This helps give 3 or 4 shoots right from the start. The perlite by itself, of course, has little or no nutriment. (Seedling Osmocote is available from Fertool in 10 kg packs).
- (5) Place on a bench under mist.

- (6) Plants retained for growing on are repotted into 140mm (6 inch) pots. The mix he uses at this stage is : 2/3 large pinebark (approx. 1 inch), 1/3 small pinebark, or "fines", which are approx. 1/4 of an inch in size. This gives a well-drained medium, with lots of air space for those water sensitive roots and is reported to have anti pathogenic properties. Try not to 'overpot', (put into a pot that is too large) and always ensure that you can see the top of the root ball from the previous pot. Covering these delicate air-loving surface roots too deeply can result in losses. N.B. Some of the very large leaved hybrids can be potted into larger pots; missing a stage in their progression to 300 mm (12 inch) tubs as they tend to be able to cope with the additional moist mix around their roots. Perhaps transpiration rates are higher from these large leaves?
- (7) At all stages of potting-on Neil adds a slow release fertilizer and then supplements this with monthly foliar feeds of macro and micronutrients. In the sub-tropics Vireyas grow throughout the year and therefore benefit from a regular supply of nutrients. Pine bark alone offers little nutrient, particularly if it is un-composted, so a regular foliar feed is essential. If some hybrids develop inter-veinal yellowing, Iron Sulphate is added to the mix.
- (8) Tip pruning is used to limit those hybrids which appear to be heading straight up. If a foliar feed is timed to coincide with pruning, more lateral buds can be encouraged to provide a better, bushier framework.
- (9) To rejuvenate older leggy plants, break a tall branch just above a swelling or node. This is not a cut, but a break, and the stem is left dangling in the breeze. About 3 weeks later you will notice a break of new shoots below and around the node. When these are about 2 inches long, remove the broken branch.
- (10) Plants are grown on in a shade house covered with 50% cloth, which allows sufficient light, but protects from excessive heat. Haloed Gold, and Summer Glow are two that are suitable for growing in full sun and no doubt there are others.

#### **Control of Disease**

Neil is interested in using products that are environmentally sensitive and less likely to impact on his own health.

- (i) For leaf fungus, he uses Ecocarb. This is essentially Potassium Bicarbonate. It is low in toxicity and alkaline in nature, which therefore inhibits spore germination on the leaves. If it is applied with Eco-oil, a canola oil product, the Carbonate is more easily fixed to the leaf and therefore more effective. Local gardeners make their own brew using bicarbonate of soda, vegetable oil and a small amount of detergent. This is cheaper but is effective on leaf fungus.
- (ii) *Eco-oil* also assists in aphid and lace bug However, since this works by control. smothering, remember to spray the underside of the leaves too.
- In the event of an outbreak of (iii) phytophthera in a period of very warm and wet weather, he uses a product called Agri-fos, which is phosphorous acid. This should not be confused with phosphoric acid. This product is used extensively in the avocado industry to control root disease and is safe to use.
- (iv) Mealy Bugs appear occasionally in low Neil uses the cryptolemus infestations. lady-bugs, which feed on them. Having introduced these to his nursery in 1999, they still exist in sufficient numbers.
- (v) Some growers spray with a 10% milk solution for mildews. A strong coffee solution made from the leftovers of plunger brews will deter slugs and snails.
- (vi) E. White, in Vireya Vine, also suggests that aspirin can be used to good effect. (See No. 78 March 2006.)

Neil will happily deliver Vireya plants to you through the mail. They usually arrive in A1 order. He has been growing Vireyas for about 15 years and now has a collection of approximately 200 hybrids and 43 species. His nursery is at Woolgoolga, N.S.W., which is close to the border of Queensland, on the coast so that he can still take time to pursue his second love, surfing! You can contact him at: 1 Creek Road, Woolgoolga NSW.

Telephone: 61 2 66541612

Visit his Vireya gallery and select from there: vireyaworldwide.net.au,

#### Thanks go to Neil for this wonderful

information of interest to us all, and to Murray McAlister for preparing this record of Neil's presentation. I hope that one day I will be able to visit Neil's nursery and see all his hybrids. Ed

#### From Hansjörg Brentel in Austria March 2006

Dear Graham and Janet.

Thank you for your last newsletter. I send you a picture of a vireya I have found a few years ago in the Baliem Valley in Irian Jaya. Now it was the first time in flower and I cannot make an identification of this plant. So I sent it to Dr.George Argent (RBGE). It was identified as an unusual colour form of R. zoelleri. I will have seed in a few weeks. Are you interested?



The unusual colour form of R. zorlleri found by Hansjörg Brentel in Irian Jaya.

Also in flower now is a very nice kind of *R*. renschianum that I collected a few years ago on Gq. Kelimutu in Flores, which I also send a picture of.

We have in Austria a very long and cold winter and I hope the spring is coming.

Best wishes Hansjörg

Hansjörg, the photos are wonderful. Thank you. You certainly lead an interesting life with the plant collecting in New Guinea and Flores. Yes please, I would love some seed from the *R*. zoelleri. Again, thank you. Ed.



*Photo of R. renschianum* found by Hansjörg on Gg. Kelimutu in Flores.

## An Email from Brian Savage in the UK February 2006

Dear Graham,

My grateful thanks for Issue No 59 of T V V which I today received here in the UK.

Shortly after receiving the previous issue I attempted to e-mail you, attaching a photo of *R. lochae* taken many years ago when I managed to grow this plant very successfully (sourced from Peter Cox's nursery). I hope this e-mail will reach you with the attached photo. It is rather faded and not up to the standard I set myself these days.



Brian's photo of R. lochae (now R. viriosum).

Sadly this *R lochae* perished when we had an exceptionally severe winter here and my greenhouse heater failed at the same time. I gave up trying to heat my greenhouse as the cost of fuel became prohibitive. I am now trying to grow only a couple of vireya plants, keeping them in the living room during the

winter. They are still quite small but one produced a small truss of flowers last autumn. They are still producing new growth so I think the room temperature may be too high. I shall have to experiment.

Twenty five years ago, I attended the Rhodo Convention of the American Rhodo Soc held in San Francisco and visited the Golden Gate Park. I found a vireya growing out in the open with a seed pod spilling out seed. I collected some of these and back home sowed them on peat moss. They came up like the proverbial mustard and cress. I manage to grow about twenty of these onto eight or ten inches high using my usual rhodo potting compost. Sadly they became more and more chlorotic and despite intensive care measures they gradually died out.

I have just ordered the new book on Vireyas to be published by the Royal Edinburgh Botanical Garden and the Royal Horticultural Soc. We could do with some tips on growing these plants in cooler climates.

I greatly enjoy receiving issues of The Vireya Venture. Keep up the good work.

Kind regards to you all. Brian Savage.

Thanks for the email Brian. Several times we have received comments about wanting advice on growing vireyas in cool/cold climates and which varieties will do best. Canadian and northern USA enthusiasts have the same interests. It will be interesting to see if George Argent's new book includes such advice. Ed.

## At Last - A Home for our Vireyas

By Graham Price

April 2006

This is a follow-up of an article written for The Vireya Venture Issue #55 in December 2004.

For the past eight years I kept all our vireya plants, and a few orchids, in pots held in shadehouses at La Trobe University, which is located in a northern suburb of Melbourne. This meant the vireyas were over half an hour's drive away from where we live in the city. I was always concerned about this arrangement because the vireyas were all in pots and I simply couldn't spend enough time out there to satisfactorily look after them - and certainly couldn't properly enjoy them.

We live in an apartment and the only space for plants is a moderate-sized balcony. The conditions on that balcony are very aggressive for any type of plant, especially so for vireyas. At times we get very strong winds (up to 120km/hour) before a weather change and in summer we get high temperatures (>40°C) without any relief from shade. Winter is milder because of the heat-island effect of the city so it doesn't get too cold. Melbourne has experienced drought conditions since 1998 so rainfall has been irregular and light. The balcony doesn't have a fixed water supply so all watering has to be done by watering cans carried out from the laundry.

I tried bringing plants home when they were in flower (otherwise nobody would see them) and taking them back to the shadehouse when flowering finished. But it was difficult to bring 1.5m high plants home in a small car, up to the apartment via a lift and in through normal doorways. They got bashed about quite a bit.

I decided to try leaving a few of the nicer plants permanently on the balcony, tied to the rail or sheltered behind other plants. However they slowly deteriorated, produced infrequent and patchy flowering and their leaf density decreased.

Although our apartment block has a series of formal garden beds maintained by a contract gardener I didn't consider these for our vireyas because they were too exposed – plants might be stolen if planted into such 'public' areas. I needed to protect them – didn't I? I slowly came to realise that being overly protective of our vireyas was the wrong attitude. There are many reasons that a plant can be lost - it might die from disease, a tree might fall on it, even a wind could blow it away (see Dick Chaikin's article in T V V Issue # 56); or it just might not thrive. If a hybrid is any good the only real way to protect it is to give it away. Yes, that's right, give it away!

What I mean is that plants such as vireya hybrids, for which there is no natural reservoir, only survive if they are popular and are distributed widely in the gardens of a human community. If there is only one plant in existence its survival is precarious and is intimately linked to the survival of its owner and we all know how fragile we are.

It took me several years to reach this understanding about my own hybrid vireyas. I also came to relax about putting vireyas in the garden beds around our apartment building.

My first action was to give the majority of the plants to the Australian Rhododendron Society for planting at the National Rhododendron garden at Olinda (see the Introductory editorial to this issue of T V V). At least up there they would be in the ground and in the long run would be better off. I could always keep an eye on them and if anything proved to be extra nice I could always take a cutting. I retained about 250 plants for the garden beds around our apartment building.

After asking the Body Corporate of our building (the group that has responsibility for all common areas throughout the building and grounds) I adopted a small garden bed in an out-of-the-way corner that receives good morning sun and is protected from winds.

Photo of my first vireya garden bed around our apartment block. Only one vireya is in flower. The white and pink flowers at the back are camellias. There is a small hedge of azaleas on the right.



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The first job was to remove an old tree stump, several shrubs and many roots and then to bring in fresh soil – mostly pine bark and compost. Eventually I made a selection of the vireyas from the shadehouse and began to plant them. There is a mixture of species and a selection of about 15 of the better hybrids that I had produced over the years.

As stated in an earlier issue of this newsletter I like vireyas planted close together and managed to fit 35 plants in an area about 4 x 1.5m in size. I put larger plants to the back and smaller ones to the front with only secondary thoughts as to colour and leaf style. The photo above shows how the bed looks now, about 8 months after planting.

We are very pleased with the result and how the garden bed looks, with all plants showing increased vigour and more frequent flowering after being confined in pots for 10+ years. Sure, I may have to remove a few plants as they all get bigger, but by then we will have a better idea of which ones we like.

A funny thing happened on the weekend following planting – three plants were stolen. Yes, just as I had imagined, the lack of security for such a "public" garden had resulted in the worst outcome. I was incensed !

I quickly wrote up, copied and distributed a notice to all the other residents in the block – "Dear Fellow Residents – We Have a Thief Among Us!" Janet thought it ridiculous of me to send out such a notice, but knew that at least I was releasing my anger.

Then, surprise, surprise, a few days later I got a phone call from some residents saying they were responsible and apologising. Apparently they were entertaining a visitor who was ill and this person went down to the new garden bed, pulled out the three plants and took them away. They were sincerely sorry.

I thanked them and said that what I wanted was for the plants to be returned. Two days later they turned up with the plants in plastic shopping bags! I really couldn't believe it. Ever since then we haven't had any problems with the garden and quite a few residents have commented on how nice it looks.

Having achieved a satisfactory outcome with this garden bed I decided to ask for another,

this time a larger bed about 7 x 3m. Again the Body Corporate agreed and I have spent several months improving the drainage, adding new soil and pine bark mulch. This time I will plant about 200 seedlings from one of my own crosses, a photo of one of which appeared in T V V #58 in September '05.

The idea is to plant the two parents in the back corners and all the "children" in front and filling the bed, obviously with the smaller growing plants at the front edge. I want to see how much variation occurs and hope to obtain something of a gradation, or at least a limited range in colours. It will be fascinating to see such a massed planting of vireya and to record their performance. You can see this means an opportunity for another article in a year or two from now.

Cheers for now, Graham Price

## Notice

It has recently been determined that the vireyas listed below at the NRG Olinda, which may have been distributed to enthusiasts around Australia and the World, are hybrids and not species.

R. bagabonum – probably a hybrid of bagabonum x saxifragoides

R. apoanum – probably a hybrid of malayanum Baconii – may be a derivative of viriosum Baenitzianum Currie – may be a hybrid

That's the end of another issue of The Vireya Venture. The next Issue of T.V.V., Issue # 61, is scheduled for production and distribution in July 2006.

So, its goodnight from Buster & YumYum.



Gardening Instruction - Buster showing YumYum a white vireya flower.