The Vireya Venture

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Finally I have found time to put together a Venture Newsletter. It has been a very hot and dry summer here in the sub-tropics on the East Coast of Australia, our Vireya have really been put to the test. I read requests from our Friends in Europe and North America for cold tolerant types and of E White's photo of Vireya in the snow and it brings home just how much we are asking of these Tropical Highland Plants with their specific adaptations to fit their niche.

Little Bo Peep, an anagalliflorum Hybrid shows no

Temperatures reached 43 degrees centigrade on two consecutive days backed up by a 40 a few days later, these temperatures were accompanied by hot winds from the west that bring very low humidity. I probably do not need to describe the leaf burn and losses but some observations may be of interest.

Haloed Gold did not blink and one planting receives full sun from 10am to 3pm. This is a chritianae *laetum hybrid, all other medium and large leafed hybrids showed leaf burn to a greater or lesser extent depending on exposure and, dare I say, development of their root system. I have about 200 different hybrids so it is a reasonable sample.

On root systems, my thoughts are; those with well-developed healthy roots were able to transpire more moisture helping to cool their system. Minitures also showed variability in tolerance. A beautiful rubineiflorum hybrid burnt and within a week was dead, Little Bo Peep, an anagalliflorum hybrid shows no ill effect.

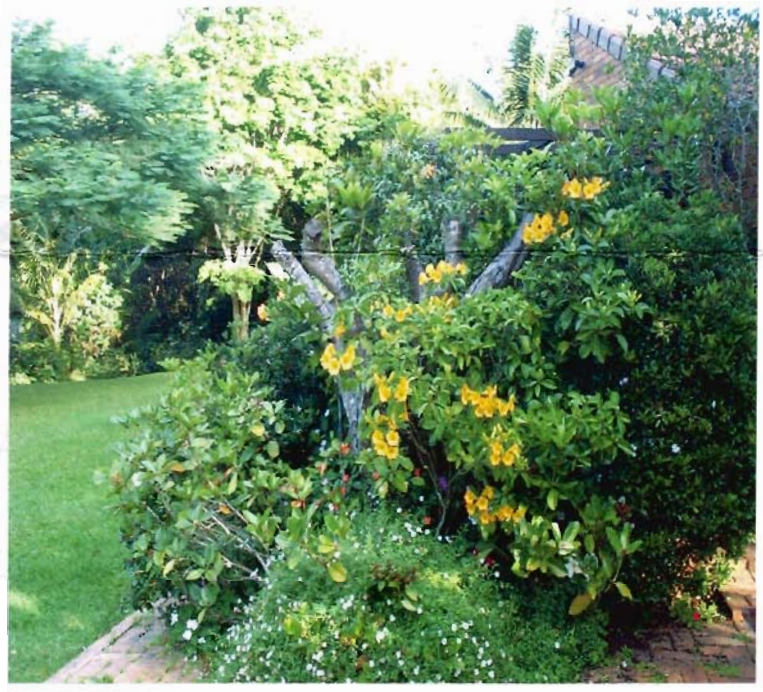
Tolerance to heat from some genetic traits passed on or simply a good root system that may be an inherited feature or an environmental/management response??

Your thoughts please.

There are often requests for parentage of new hybrids, if you have developed any new ones that may be registered or become commercial, send me your list and if you are willing I could publish them in the next Venture.

The photo above shows Haloed Gold in the garden.

Editor.



Natural environments for potted vireyas

A couple of months ago I got a call from a woman wanting help with her vireya. She lost several plants despite all the tender love and care she provided daily. We talked about vireya care, the media, drainage, pruning, and lace wing bugs. I thought all was well until recently the phone rang and there she was again. "I just lost another one! It is not supposed to be this hard. I paid good money and I don't want to try any more vireya!"

I found out she had bought her last vireya from us and it was the only one that seemed to be okay. The only difference between the one from us and the others was the media. "It's time for a visit to see your plants", I said. Then I grabbed my bale of coconut chunks, a couple coffee cans of perlite, my potting bin, a jar of fertilizer and, with my girlfriend, headed to Hilo.

We arrived to find 7 vireya in 3 gallon pots. They were alive but lacked vigor. We pulled first one then another out of the pots to look at their roots. Each one had a big tight root ball that also felt heavy. she shared her media mixture with us; one part orchid bark (fine), one part cinder (fine) , and one part peat moss. The vireya were suffocating. We decided to repot all 7 of her vireya using my media of coconut chunks and perlite. A small amount of top dressing with the fertilizer and we left. The next day I received a call saying she already could see a difference.

In our conversations I stressed a well draining media. she had that. What she did not have was the air...the airy part of the mix.

(I suspect her mix may have worked if not for the peat moss.)

This experience got me thinking about growing vireya in pots. I have heard from the beginning "Vireya like being pot bound". I have given this much thought and I would rephrase it to "Vireya will tolerate being pot bound". I don't think they "like" it, if given a choice. I did believe it until the plant rescue and my own observations changed my mind.

In the wild the vireya roots often do not have beds of soil to sink their roots into but rather must grow where ever they can get a foothold.

Most vireya are also air plants. Pot bound plants do a couple of things, first they wilt quickly, needing water more frequently. This need for water can also cause stress leading to leaf drop or spots. Second, they often will not be full especially at the bottom of the plant. A pot bound Mt.Pire is a good example.

It has been my experience that putting a vireya into the ground where its roots have more room than in a tight pot will often lead to new growth breaking from the bottom. The same thing can be accomplished by sinking your pot into the ground or just moving it up a couple of pot sizes. This will cause the plant to break out with new branches at the bottom of the plant as well as lessen the stress from needing water.

I have plants sitting in 4" pots that are of very good size but not as big as the ones from the same group that I moved into 6" pots a couple of months ago. I believe the difference in the plants sizes has to do with the grow space. The roots were given room to continue to grow and with it so did the plants.

I use carry trays to hold my vireya. These are trays with a few small side holes that allow drainage and the trays also help to keep the pots upright as the plants get bigger. The vireya roots will fill the pot and then come out from the drainage holes of the pot. they will then continue to grow in the small area between the pot and the tray. It is like a vireya in the wild that is growing between a bunch of rocks, confining it and it finds a crevice from which the roots and, therefore, the plant can continue to grow.

The same thing can be accomplished by using two pots. It can be the same size pot. The second pot will keep the roots cool and create a small moist area on the bottom, just like the crevice in the wild.

Another way to create a natural environment for potted vireya and their roots is to put media about 1/3 full in a larger pot than your vireya pot size.

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Place your potted vireya inside the larger container. The larger pot will help to cool the roots and the media the vireya sits on provides moisture the vireya can wick up. This is a good method to help conserve water and energy.

Potted vireya respond well in raised gravel and mulch beds in the garden. Prepare your bed by filling in with at least 6" to 8" gravel. Sink your pots into the gravel at least 4". Top off the gravel with a couple of inches of mulch.
The vireya will think it is actually planted in the ground and will respond often by branching from the bottom.

Remember, it's all in the roots. By creating an environment that provides drainage, air, moisture and coolness vireya can be grown in pots and kept in pots for a long time.
Viva Vireya!

Article by Sherla Bertlemann

Hawaiian Chapter of American Rhododendron Society. "Viva Vireya"

'Clumping'

That is the word I use to describe the policy Wendy and I employ when we are planting Vireyas in our garden. By "Clumping" I simply mean that when establishing Vireyas we do not, as a rule, plant them singly, but in groups or clumps, usually three at a time of the same variety and in a triangle about 45cm. apart.

I prefer to use young plants, from 140mm. pots, as they establish more quickly than older plants that may have been growing in larger pots for some period of time, often years, and have lost their youthful vigour. These groups grow together rapidly to form a compact clump, creating a bushy appearance, and a much better showing than single plants.

The policy also has the advantage that if one plant does happen to die, it does not leave a gap. If the area involves a number of varieties, we would space each 'Clump' at least 1 m. apart, to ensure that each group retain their own identity.

This same policy can be extended to actually planting in drifts of say 20 or 30 plants together, all of the one variety, as in the Kurume Bowl at the Olinda Rhododendron Garden, and would certainly be useful in a public garden, but regrettably few of us have the space in our gardens to do that.

Best regards, Graham Snell

The Future for Vireyas

by Sylvia Saperstein

Let's face it; Vireya species are not easy to grow in a garden even for the seasoned enthusiast. There are the so-called easy species which we can grow - these are mainly from fairly low altitudes and have a wide distribution in the wild. But there are also all the others which have adapted to extremely specialised habitats, ranging from sea level to 4,000 metres. For many of these it is impossible to manipulate our garden environment to ensure their survival.

According to collectors like David Binney from NZ, it really is zero hour for the species. In Sulawesi where he has collected several times the destruction of habitat is rampant, this as new species are still being found. So it looks as though only well-endowed public gardens and enthusiasts of independent means will be able to ensure their survival. I think there is enough proof of the fact that there needs to be a critical mass of growers in any given country, whatever plant it might be, to ensure the survival of a species. Take, for instance, the fate of the Foxtail Palm in north Queensland. It has been plundered in the wild for seed and its habitat is shrinking fast, but one can now buy the seed even in the USA, so there is little chance of it being lost forever.

Unfortunately this can't happen with vireyas. One has only to look at little R. saxafragoides from the alpine areas of PNG, with its intense UV light and frosty nights, a species that has been shaped in every detail by its environment. It looks so terribly vulnerable and far from home in the collections I have seen, yet so enchanting with its bright single blooms held horizontally on rigidly upright little stalks and a trunkless bush. Hybridisers have tinkered with it and now there are quite a few very robust but rather lacklustre hybrids around. Those in the know can only just discern its presence and soon they will be forgotten in favour of something else with more pizzaz.

Might I hazard a guess that, unless hybridisers sit up and take notice, little charmers like saxafragoides will drown in the genetic soup that we are making with our random hybridising. I make it quite clear that I have no quarrel with the random approach - it has produced some stunning hybrids that deserve the attention they receive. But what about all the fascinating adaptations that vireyas have made over the centuries, the zygomorphic flowers, the taxus-like foliage? Are they to lose out to hybrids that are as big, beautiful and as bland as 'Miss Universe"?

When I was recently in NZ, everywhere I went I saw a hybrid made by Os Blumhardt of Whangarei from (laetum x zoelleri) x saxafragoides. The plants were extremely compact and totally covered in flowers, in trusses of two to three glowing flowers held horizontally on their vertical stalks. Quite breathtaking in its unique style. Everything about this fascinating hybrid spoke of its pollen parent, but the vigor and the size of the other two species that combined to make the seed parent infused vigor and increased size. When I asked Os about his intentions in making this hybrid he answered candidly that when he received the saxafragoides pollen he simply headed for the ripest stigma around. I asked him if he would have liked a different outcome and he replied that he would have liked his hybrid to be more like the target species, or to be more precise; he was implying that saxafragoides could have been treated with more respect.

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You might think that I am suggesting that we should be making pseudo species by invigorating a species without changing its personality in any radical way, and maybe I am. I have tried to control the results of my own hybridising by keeping the species involved as parents of a hybrid to two. I have found that if the two are too divergent in their characteristics the results can be pleasing, but they do nothing for the preservation of diversity, they simply add to the thousands already out there. For instance I crossed loranthiflorum with lochiae and produced a very floriferous, dense plant with hot pink tubes and a good perfume, but it tells you neither of lochiae nor loranthiflorum. R.loranthiflorum has drawbacks as a garden plant in that it takes too long to flower and then does only one flush a year. So in hindsight it could have been combined with another scented tubular white, of which there are a number.

It might sound as though I am advocating some kind of stuffy elitist rules for hybridising, but when you look at a photo gallery of species and compare it with the same number of hybrids, you might be inclined to agree that the adrenalin rush you get from the species is far greater.

This must be because genuine, radical diversity is always more exciting. One has only to see Os Blumhardt's "Saxon Glow' to be convinced. So the desire for variety and the desire to preserve as purely as possible what's out there in the bush are not necessarily conflicting aims. Wouldn't we all love to grow *lowii* in our back yard? - but few will succeed, so why not at least grow a domesticated version of it?

Sylvia was introduced to vireyas in the early 1980's by Lou Searle, after he retired to live not far from the farm on the NSW North Coast where she lives. Sylvia was operating a fern propagation nursery and decided to take up vireyas, buying her start-up stock from Graham Snell.

With experience, she came to the idea of breeding vireyas specifically for a subtropical climate and started a breeding program in 1991, with gardener-friendliness as its aim. The scope of the project is modest but it's been quite successful. Aside from the sales of her plants in Queensland and NSW, large numbers of her hybrids are now growing in a garden in northern Thailand, which has a comparable climate to northern NSW. In 1997 John Kenyon at Te Puna in NZ also imported some of her hybrids, and these appear to be holding their own quite well amongst their NZ cousins.

Mildew, Phytophthora & Mealy Bug

To control mildew on Vireya I have been using a spray mix of Pest Oil and Agri-Fos 400. Pest Oil, a white oil type product at 30ml/litre mixed with 5ml/litre of Agri-fos 400. This latter product is used by Avocado growers to control phytophthora root fungus and so should also benefit Vireya in their fight with this curse. Pest Oil has given me excellent control of mealy bug an additional benefit of the mix. Both products are relatively low toxicity. Editor