The Vireya Venture.

THE VIREYA VENTURE No.8 JULY 1992

Wollongong weather was at its worst in the second week of June when violent south westerly winds were gusting - in circles it seemed - for some days. Vireyas in the ground survived quite well although looking a little unhappy in such dry cold weather. The plants in pots suffered most, as even in reasonable shelter they blow over very readily. Maybe a heavier potting mix would help but there is a limit to that and if the pot is weighted down - as has been tried - the plant may blow out of the pot. So the only effective precaution is to tie up the plant - to a stake in the ground, a post, a fence, a tree, or even a rail between stakes!

It was pleasing to see last month that the Sydney Botanic Garden are extending their plantings of Vireyas very considerably and they promise to be very effective in a few years. Even now some of their earlier plantings are flowering well. It will be good to have at least one public place to see Vireyas in Sydney.

One advantage of garden societies is the opportunity to discuss problems or to boast of successes but unfortunately Vireya growers are not so numerous yet that this is always possible. The purpose of this newsletter is to try to fill that gap but it needs your contribution for it to be successful and to warrant continuation. The Australian Rhododendron Society are holding their annual general meeting at Wollongong on Oct.3rd and 4th when there will be garden visits in the district. Perchance there will be some news on the Vireya front from other states too and the next issue of this newsletter will include these. It may therefore be a little later than usual.

However do not let this deter you from writing - now - with your comments, enquiries or experiences to:-
The Editor, P.O.Box 8, Keiraville, N.S.W. 2500

PHOSPHOROUS ACID and PHYTOPHTHORA

Further to the note from Harold Lewis in the last issue, (#7) two other references have come to hand. 'Camellia News' in 1987 reported that the use of phosphorous acid by injection into the trunks of Avocado trees, was proving to be an effective cure for phytophthora and further more could also be effective on other plants. This was introduced in Queensland by U.I.M. Agrochemicals as M-dKP.

Then in 1991 'Camellia News' had a detailed description of the use of phosphites with particular reference to 'Aliette' which was also used for the control of phytophthora in New Zealand where it was patented. This patent was claimed to cover all forms of phosphite - and does so in New Zealand - but was challenged in Australia and not allowed.

Phosphorus burns in air to form P2 O3 which , dissolved in water becomes phosphorous acid. M-dKP is K2 H PO3, the potassium salt, while 'Aliette' is the aluminium salt of the ethyl ester of phosphorous acid with a formula best forgotten. In all cases it is the phosphite ion that is the active agent. Once in the plant it is very stable but eventually oxidizes to the plant nutrient, phosphate.

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DO VIREYAS GROW IN TASMANIA ?

A note from Barry Davidson of 15 Pascoe Avenue, Claremont, 7011, answers a question that will be of interest to other growers of Vireyas in colder climates.

The answer to this question is contingent on where one lives, but certainly they thrive in the suitable areas. I live near a broad section of the Derwent estuary ten kilometres north of Hobart, so we are getting inland from the coast a little. Further inland and higher up, Vireyas certainly could not be recommended. Launceston, being somewhat inland, is not suitable for growing Vireyas out of doors, as the frost tends to settle in the Tamar valley. Vireyas do very well along the north coast where the climate is very mild all year round.

The point is that Vireyas are much more tolerant of cool conditions than most people realise. We get a few frosts here, but those that we do get are very light.Ourfrosts frequently do not come until the end of June and we would be unlucky to get more than two or three a year. Hobart is on the same latitude as Rome. The lowest minimum on record is -1.7 degrees Celsius.

To the doubting Thomas' I can only say that my plants of R.zoelleri, R.laetum and six others, were brought from Graham Snell in September 1986 and are now about one metre tall. They flower prolifically in spring and autumn and are in bloom at the time of writing, 11/5/92.

These originals were planted under a Pittosporum for insurance, but since then I have got much bolder and have lost none from cold weather. We have a climate which is quite suited to horticulture. There are various species of magnolia and bulbs, including cyclamen and liliums, growing alongside conventional rhododendrons.Vireyas tone in quite well with autumn leaves!

Since the initial purchases I have obtained plants from Clyde Smith, Ray Brown, and Marj.Rickard in Wollongong and from Graham Snell and Barry Paget in Queensland. All plants have done well with the exception of 'Narnia', which I killed from over watering and 'Fireball', which I think I killed from over spraying with dimetheoate. It threw its leaves just like a Meyer lemon does when sprayed with this chemical. Unfortunately these are both very good plants. Clyde Smith will be pleased to know that 'Penrice', 'Penrose' and 'Pendragon' are shaping up into nice plants.

In bloom at the moment there are R.laetum, 'Lady Di' ('La-de-da'), Wattle Bird, 'Penny Whistle', 'Just Peachy'(N°10), R.laetum x R.christianae, R.aurigeranum x R.macgregoriae and R.Laetum x 'Pink Creeper'.

Plants which have recently been in flower include 'Lomac', R.lochiae x R.loranthiflorum, ''Orange Wax', 'Carillon Bells', 'Sunny and 'Nancy Miller Adler'.

There are many with buds on, including R.macgregoriae x R.stenophyllum, 'Sweet Wendy', 'Cristo Rey', 'Scarlet Beauty' and R.laetum 'Arthur Headlam'. Two others, 'Cherry Liqueur' and 'Joie d'Esprit', budded up at under two years old, but the buds failed to mature. The problem was not bud blast, as no evidence of spore cases was found, and it was more likely to be an environmental factor, or a characteristic of the plants.

Vireyas do well here and I will certainly be planting more. Some members of the local branch of the Australian Rhododendron Society are coming around to the idea of planting them. There are a few quite good collections in members' gardens and these are on the increase. Fortunately a local nursery, 'Harmony Nursery', is stocking them now and given the fact that they propagate from cuttings so easily, the future looks good.

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BORON DEFICIENCY

On a recent visit to Canberra Lyn Craven mentioned briefly his trouble with some Vireyas from lack of boron. He has detaied his experience in the following notes:-

During a period in which my Vireyas were neglected for several years (Shame, Shame!), a growth abnormality occurred which caused some concern. On many plants ,and of a variety of species, the terminal bud would die; this occurred to both vegetative and reproductive buds. Nothing daunted, the plants would push new growth out from the buds in the leaf axils below the dead bud.

These shoots at first would be perfectly healthy but ultimately their terminal bud would die also. This pattern was repeated and the result was something very like a witch's broom.

The problem did not seem to be due to a fungus; no mycelium or fruiting bodies were evident. So the possibility of a nutritional disorder was considered. Leaves from my unhealthy plants, and leaves from healthy plants of the same species belonging to Dr.John Rouse in Melbourne were analysed for the major elements and a few of the minor, but no trace elements. There was no significant difference between the samples. A few years later, while talking to some of the plant nutrition group, the possibility of boron deficiency was raised.

Boron apparently is important in cell division and is especially necessary in the apical meristem and in seed development. To a considerable degree it could be said to be the forgotten element. Boron deficiency causes problems for researchers in pot culture, affecting seed yields in crops such as rape seed (or Canola if you're a Canadianophile) and linseed. There are patches of boron deficient soils scattered around Australia which cause problems for some crops. To test for boron is a difficult procedure and I could not find anyone willing to do it at my price. I could have had it done at one physics lab for around $1000.00 per sample - this price may well have been more but the shock was so great that I have been trying to forget about it.

I have started to use a soluble fertilser (Aquasol) which includes the trace elements on a much more regular basis and over the past two years have seen very satisfying growth. Because of the short growing season in Canberra, I like to slow down on the feeding over winter and I have obtained some boric acid which has been made up in distilled water to allow boron at the same concentration as in Aquasol to be applied. This I will use in mid to late winter on those plants which have been requiring a lot of water over the winter (high water usage = more frequent watering = more leaching of boron). The boron solution was made up as a stock with 1.03gm of boric acid per 1000ml; this stock solution to be applied at the rate of 1ml per 1000ml. Be careful making it up - an excess of boron causes trouble too!

Note: Lyn Craven's Vireyas are all grown in containers in a glasshouse that can be heated in winter - Canberra can be very cold! However if your Vireyas show the above symptons whether growing in the ground or in pots, try some Aquasol.

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VIREYA SPECIES

Further to Lyn Craven's offer in the last newsletter to supply rooted cuttings of Vireya species, he is in need of a few species to cover all those thought to be growing in Australia now. If you can assist, please first contact him at 26 Saville Close, Melba , ACT 2615.

Lyn Craven's Want List.

comptom
gaultheriifolium
invasorium
lochae : from localities other than Mt.Finnegan, Thornton Peak Mt.Lewis, Devil's Thumb, Bartle Frere, and Bellenden Ker.
lowii
nummatum
purpureiflorum
solitarium
truncicolum
versteegii
zoelleri: form from Bayer River and/or Mt.Hagen.
culminicolum var. angiense
guilianettii
lineare
luteosquamatum
pachycarpon
searleanum
suavolens
variolosum
yelliotii

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AN ELKHORN HABITAT

A note from Lou Searle, who says: "It just occurred to me one day, many years ago now, when we were living at Crabbes Creek, that the space behind the nest leaves of a large elkhorn I had growing on a tree might be a good place to put a Vireya. I had a nice young plant of what is now 'Pacific Shower' in a six inch pot so I soaked it for half an hour while I had the hose going on the elkhorn, then made a nice cosy nest and bedded the plant in and packed composted sawdust around it.

It never looked back and is still there growing very well. At times the nest was shared by a possum so the animal may have contributed to the plant's nutrition? Or do'nt possums foul their own nest?

I had the plant first as a small seedling from Don Stanton. When it was large enough to go out it was planted on the slope of the left bank of our creek along with 37 others, also from Don. After the drought (in the late eighties I think) and the eleven successive nights of heavy frost only five plants remained. That was later whittled down to one, Pacific Shower as it is now. That plant also is still there, having survived drought, frost,and now being covered by weeds. It has a ligno tuber as big as my fist and looks like it will be there for good unless it is hacked down in the clearing of rubbish. I can't recall ever having lost a plant of this hybrid and that says a lot for its hardiness, particularly bearing in mind the prevalence of phytophthora cinnamonii in the waters of S.E.Queensland and Northern N.S.W.

VIREYA REGISTRATION

From the American Rhododendron Society journal Spring 1992.

Cape Cod Sunshine. aurigeranum x laetum
Hybridizer unknown, raised by W.Hunnewell, named and registered by R.Chaikin. Tubular funnel-shaped flowers of heavy substance are 3"x3" with 5 lobes. Light yellow green buds open brilliant yellow (15C) shading to strong orange yellow (19A) in throat. The lax dome shaped truss of 8 to 15 flowers is 6" wide x 4.5" high. Leaves elliptic to narrowly obovate $3\frac{1}{4}$-$5\frac{1}{2}$" long x $1\frac{1}{2}$-3" wide. The free flowering plant is spreading with an open growth habit, $3\frac{1}{2}$' high x 4' wide in 10 years from seed, with pruning.

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Also from the Am.Rh.Scty and further to my reference to W.Moynier's article on Vireyas, one of his tables lists ten of the species more commonly used here as parents, viz: R.aurigeranum, R.jasmini florum, R.javanicum and var.brookeanum, R.konorii, R.laetum, R.leucogigas, R.lochiae, R.macgregoriae, R.phaeopeplum, and R.zoelleri. For each of these species he lists, e.g. for R.Zoelleri - species basic colour, orange yellow bi-colour, then the expected hybrid characteristics, number of flowers per truss 6 to 10, flower diam. 2" to $4\frac{1}{2}$", fragrance nil, height at maturity 2' to 4.5', habit upright.

Maturity is not defined, probably it could be 12 years from seed and the height could vary with the amount of pruning and shaping that the plant had.

On looking up some details on R.zoelleri the variations above are probably not extreme because it is itself a very variable plant in the wild and its other partner could well dominate - as R.lochae does with its colour. R.zoelleri grows in the Moluccas as well as in P.N.G. where it is widespread and has a range of the most brilliant colours from yellow to orange or salmon, or reddish - salmon, or the tube yellow and the lobes suffused with red - all according to Dr.H.Sleumer. The forms that have been brought to Australia total at least ten; two of these have been named, viz.'Island Sunset' by Don Stanton from seed from Goodenough Island and 'Golden Gate' by Pete Sullivan of Strybing Arboretum. This species is not easy to grow or to persuade to flower, the various forms vary in this respect but the form from seed collected by Michael Black(who visited us briefly on his way home to the English Lake's district) from near the village of Aregenan, has been recommended as the most amenable.

No wonder that every opportunity has been taken to produce hybrids from it and there are some magnificent ones amongst them, Simbu Sunset, Tropic Glow, Ravalac, Narnia, and many others.

Which is getting away a little from Mr.Moynier's table but may illustrate some of the complexities of breeding Vireyas.

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