THE VIREYA VENTURE NO.27 APRIL 1997

Sydney's weather has been erratic this summer with good rain - 196mm here at Keiraville - in the last week of January, then a fortnight later a further 196mm put the whole garden, and the countryside, into very lush growth. Unfortunately in the eight weeks since there has only been some very light drizzle and some very hot days.

However we did better than Melbourne who had their dryest summer for 53 years and the hottest this century, as detailed later.

The Victorian Branch of the Australian Rhododendron Society had an interesting talk on micropropagation given by Mrs Natalie Peat from Plant Growers Australia to their Discussion Group at Olinda. The meeting concluded with this comment:- "During the discussion, it was agreed that due to the current quarantine difficulties, importing of new varieties in tissue-culture flasks say 20 rooted cultures per flask, which then don't need methyl-bromide treatment or any quarantine restrictions will be the way of the future."
This will be followed up on behalf of the Society. It could be a major advance in the exchange of material with overseas growers.

The Wollongong Horticultural Society's Autumn Flower Show was held on March 1st. at Figtree where the accent was on Dahlias and Roses. However there was still a section for Vireyas although only three entrants participated. As far as I know this is the only competitive display in N.S.W. for Vireyas?

We all need your comments and suggestions, please send them to: The Editor, P.O.Box 8, Keiraville N.S.W. 2500

J.Clyde Smith.

From Dr.Geoff Atherton, Anzac Square Medical Centre, 280 Ann Street, Brisbane, Queensland :-
"I would like to add a few words to follow up Barry Paget's description of Mt. Kinabalu in the January issue of 'Vireya Venture.

We visited Mt.Kinabalu in mid December 1995. I note Mr.Paget's comment about which time of the year is best to see Rhododendrons in flower. We were very lucky to see many specimens of R.lowii in flower, which on its own even, made the trip well worth while. It is possible to stay at the guest house called 'Laban Rata' for more than one night. this is infinitely better than the standard program of staying at the guest house after a long walk, waking up in the early hours and then walking to the summit to see the dawn and then descending to the rest house at 5,000 feet altitude.

We were lucky enough to stay for two nights which gave plenty of time for enjoying the higher country after a longer rest and then a leisurely walk back down to 5,000 feet on the third day.

We were fortunate also to have a tour guide called 'Joseph'. His service was booked through 'Borneo Eco Tours' in Kota Kinabalu. We had specially requested a guide with botanical knowledge, and his botanical knowledge was very wide, in that he was able to show us and name all the Rhododendrons, Nepenthes, as well as the Conifers and other tree species. If any one is planning a trip it might be worthwhile trying to book him as your guide if he is still working.

Overall, it's a wonderful place and well worth the effort!"

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From Christopher Fairweather, The Garden Centre, High Street, Beaulieu, Brokenhurst, Hampshire S042 7YB.

"Here are a few notes for the 'Vireya Venture'. I would be glad to have details of any hybrids I should be trialling.

For the past few years I have been quietly collecting Vireyas from around the world. It is strange to think that here in Britain at the turn of the century there were around 300 different species and hybrids on offer. Sadly with the exception of one or two such as 'Ne Plus Ultra' and 'Princess Alexandra' these have all disappeared.

My trips to Malaysia seeing Vireyas in the wild, followed by visits to various gardens and nurseries in Australia and New Zealand convinced me that these lovely plants would grow and be popular here. At the Olinda Flower Show about two years ago, I was amazed by the most stunning plant of 'St. Valentine'. I decided that this plant I must grow!

Now with over 40 diferent species and hybrids my collection has grown. placed in a heated glasshouse over winter to protect the plants from sub zero temperatures, the majority of Vireyas

are happy at around 50 to 55°F (10-13°C). A few suffer, the really tender ones I usually discard.

My potting mix consists of coarse peat, bark, sharp sand and composted bracken. This latter material ensures really good roots and is readily available in this part of the country. I add a little slow release fertilizer and liquid feed during the flowering/growing season.
Potting and pruning is done in our Spring.
When the danger of frost is passed, usually late May to early June I bring the larger plants, which are growing in slatted wooden baskets, into a sheltered part of the Garden. Last year they excelled with flowers for weeks on end.

Perhaps the best 'doers' so far, have been R.lochiae itself and some resulting hybrids. 'Rob's Favourite',Arthur's Choice' and a superb specimen of 'St.Valentine' that could win a prize at the Olinda Flower Show! R.jasminiflorum grows well. Leggy I know, despite this drawback, the vibrant orange flowers of 'Java Light' created a sensation in flower during our dark days of November. 'Littlest Angel' has potential as a hanging basket plant, this could be popular here. I would like to have more Vireyas suitable for baskets. Any offers gladly received.

Many of my new plants have yet to flower. Every new bud is an excitement. I hope in a year or so to have specimens to show and young plants to sell. With a growing market for conservatory plants maybe once again we will be able to make the Vireya popular in Britain.

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What a diference the climate can make! Our very changeable weather this summer has cost me two Vireyas, seemingly because of the sudden changes from cool cloudy weather to hot and brilliant sunshine with very high humidity. The others flowered very well, the most outstanding show coming from an old bush of 'Clorinda', one of the later Veitch hybrids- R.jasminiflorum x (R.javanicum x Princess Alexandra).

There are others from the days of Veitch that are surviving here and are as tough as any hybrids - or they would not have survived. In addition to Clorinda I have, for example, Triumphans, Ne Plus Ultra, Pink Delight, Pink Seedling, Red Prince, Souvenir of J.H.Mangles, Princess Alexandra, and Taylori. There are also now some modern hybrids with these oldtimers, such as Chayya, Tiffany Rose, Cyprian, etc.

Co-incidentally Mr Paul de Jager of Pinetown, South Africa, has sent a copy of an old article on "Greenhouse Rhododendrons" which said 'These beautiful Spring flowering plants will be most useful where Conservatories have to be kept gay' but the plants named there after are a mixture of Vireyas and Rhododendrons like R.ciliatum and R.veitchianum that are not cold hardy. Editor.

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New Registrations

From the International Rhododendron Register, 1995/1996, but not including those that were previously recorded in issue #25.

FRAGRANTEM R.leucogigas x R.phaeopeplum
Hybridized by F.D.Mossman, grown, named and registered by B.Sligh, N.Z. Flowers 7-8 open flat truss, tubular-campanulate, 80 x110mm, with 7 wavy-edged lobes, buds chartreuse green (663/3) flushed spinel pink (0625/2) at lobe apices, opening inside white with a spot of spinel pink (0625/2)at lobe apices, outside white flushed spinel pink (0625/1) at lobe apices, strong sweet scent. Leaves 160x70mm, margins upcurved, dark matt green above, rounded at base, pointed at apex, hairless Shrub 0.7x0.7m in 10 years, withe deep red dormant growth buds.
Repeat flowering (in warm climate).

LUCIE SORENSEN probably R.macgregoriae x R.bagobonum
Hybridized by J.L.Rouse grown by F.Rutherford, Registered by E.White Smith, U.S.A. Flowers 4-6 flat truss, tubular funnel-shaped, 20x20mm with 5 smooth edged lobes,reddish green in bud, opening vivid yellowish pink(60C);stamens 10,straight, equal. Calyx very short, light green. Pedicels 13mm long,dark red. Leaves elliptic,22x10mm,concave,acute at apex,cuneate at base, glossy above; petioles 3mm long,light green.Shrub 0.35x0.35m in 8 years. Mainly spring and autumn.

MARGARET of SCOTLAND R.javanicumxR.javanicum subsp R.brookeanum var.kinabaluense. Hybridized and named by M.D.Cullinane. N.Z. Flowers 15/21 ball truss, funnel shaped,55x80mm, with 5-6 wavy edged lobes, strong reddish purple (72C) in bud, opening inside strong reddish orange (31B),edged with a very fine line of vivid reddish orange (34A),throat light orange yellow (22D) flushed strong reddish purple (72C)at edges and at base, outside paler;unspotted; filaments and style light orange yellow at base (22D),strong purplish red (72A) at apex. Calyx 1.5-2mm long,pale green. Pedicils vivid reddish orange(34B). Leaves lanceolate, 160x60mm, flat,glossy attenuate at base,acute at apex, with fawn scales on young growth;petioles strong purplish red(72A). Shrub 1.0x0.5m in 5years. Repeat flowering.

MARY BUCHANAN (R.herzogii x R.laetum) x R.aurigeranum
Hybridized and named by M.D.Cullinane, N.Z. Flowers 10-12/truss tubular funnel-shaped 65x50mm with 5 smooth edged and retuse lobes,'Granny Smith'apple green in bud, opening inside paler than pale yellow (11D), the throat pale yellow (11C); outside light yellow green (154D) at base, mid part of corolla pale yellow (11C), lobes paler than pale yellow (11D); unspotted;scented;stamens and styles brilliant yellow (11A); stigma strong yellow green (141D). Leaves elliptic, 110x45mm, flat, cuneate at base,acute at apex,matt green above, with brown scales. Shrub 1.0x0.6m in 4 years, flowering 3-4 times/year.

OK TEDI GOLD 'Tropic Glow' x R.laetum
Hybridized and named by M.D.Cullinane. Flowers 7-9 flat truss, broadly funnel shaped, 55x75-80mm, with 5 flat-edged lobes, greenish cream in bud, opening vivid yellow (17B) inside and out; unspotted; stamens and styles green; spread of stigma

stigma lobes 40-45mm wide at widest point. Calyx 1.5mm long,green. Leaves elliptic,100x40mm,flat,attenuate at base, aristate at apex, with light brown scales when young. Shrub 1.5x1.0m in 5 years. Repeat flowering.

RIO RITA 'Doctor Herman Sleumer' x R.leucogigas
Hybridized by O.Blumhardt,registered by R.Watson N.Z. Flowers 8-9 large loose truss,funnel-campanulate,110x110mm,7-lobed, inside with limb pale purplish pink (65C),throat suffused and stained pale to moderate purplish pink (65C/66D),tube yellowish white (158D); outside with a pale purplish pink (65C) limb, margins and junctions of lobes and tubes moderate purplish pink (66D), apical part of tube pale purplish pink (65D),basal part of tube strong purplish red (58B); unspotted; apex of filaments vivid purplish red (66B), anthers moderate purplish pink (74D); apex of style purplish and style puberulous; carnation scented. Calyx disc-like,light yellow green (145B) with moderate purplish pink (66D) margins,pubescent . Leaves ovate, 110-125x60-70mm, flat,glossy,slightly attenuate at base,rounded at apex,with rusty brown stellate scales on young growth (absent when mature). Shrub 1.2x1.0m in 5 years. Repeat flowering.

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The Proceedings of the 1994 Pacific Region International Rhododendron Conference at Burnie have now been sent to those who attended. They have some very interesting articles on vireyas as well as other plant groups and rhododendrons. One of the most interesting papers was by Dr.John Rouse detailing his results of very many vireya grafts. One recommendation is to graft the more difficult ones to grow on to a hardy hybrid - 'particularly if they are vigorous and at least one parent grows terrestrially in its natural habitat (e.g.R.lochiae, R.laetum).

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A note from Mrs M.Carver, Woodside, 7162 Tasmania, has news of a new species of Vireya, R.rushforthii, detailed in an article in 'The Garden' Dec.96, that was an extract from the Dec.96 issue of 'The New Plantsman' by George Argent and David Chamberlain.

This Vireya, sub-section Pseudovireya, is one of a group of distinctive yellow flowered species mostly found on the Asian mainland where its closest relation appears to be R.kawakamii. It is distinguished in the field by long bluish-green leaves and attractive bright yellow flowers. R.emarginatum is a close relative too.

R.rushforthii first flowered in cultivation in 1995 in Keith Rushford's garden in Hampshire, after being planted out for the summer from an unheated East facing conservatory. A sister clone, left outside over winter, survived a recorded -8°C, so it should be a good plant to try for breeding some more hardy hybrids. As with many Vireyas the plants do not like higher temperatures and one plant partially died from staying too long in the conservatory in the heat of summer.

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From Dr.John Rouse, O.A.M. Toorak Victoria 3142 :-

This Melbourne Summer and its affect on Vireyas.

Melbourne has just recorded one of its hottest and driest summers. My records show that in my garden the rainfall was:-

	Dec.96	Jan.97	Feb.97
Rainfall	24mm	31mm	6mm
With maximum temperatures	39°C	41.5°C	41°C
And other hot days over35°	2	6	9

The longest hot spells were:

January	19th	20th	21st	22nd					
Max.temp.	38.5°	41.5°	40°	25°					
February	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
Max.temp.	30°	32°	35°	41°	35°	40°	34°	31°	24°
February	16th	17th	18th	19th	20th	21st	22nd		
Max.temp.	29°	32°	38.5°	41°	37.5°	29°	30°		

I keep no records of wind or relative humidity but apart from brief strong winds when the weather changed, I think the winds particularly from the North were less intense than usual and the RH was higher.

Lack of rain can be alleviated by watering and the garden was well watered once per week by hand, and the plants in containers in the garden, shadehouse and greenhouse were automatically watered every second or third day. In some areas, automatic misting occured when the temperature exceeded 30°C in order to provide evaporative cooling. Vireyas which had been recently planted out in the garden were given an extra soaking as the roots had not developed much since leaving the pot.

Previous summers have shown that with the above conditions vireyas will tolerate one or two days of high temperatures but this summer indicated that if the hot weather extends over a week or more some vireyas may suffer considerable damage or die. For some reason which I do not know, vireyas with small leaves (e.g.R.inconspicuum, R.womersleyi, R.perakense but not R.quadrasianum) tended to be killed even those in shady locations and in the case of R.perakense survival required dense shade and auto-misting. Vireyas in black plastic containers were more likely to be damaged than those in the ground possibly because the temperature of their roots became too high. The vireyas , species or hybrids, which came off best were well developed, with medium sized leaves growing with vigour in the garden bed and which by nature were terrestrial or if grafted the hybrid stock came from terrestrial parents. Such vireyas (e.g. R.loranthiflorum, R.laetum, 'Clare Rouse', R.javanicum on 'Fragrantissimum') stood up well to little misting and considerable periods of full sun with little or no burning of the leaves. Vireyas with large leaves (e.g. R.leucogigas and its hybrids) were undamaged with shading and misting but were severely burnt by short periods of full sun.

Comparison of other rhododendrons with those from sect.Vireya showed that in sect.Rhododendron: R.maddenii and R.ciliicalyx with some full sunlight and little misting had many leaves burnt. sect.Ponticum: R.sinogrande in full shade with auto-misting

suffered no damage (but has leaves about 25cm long and has never flowered: it does not like Melbourne's climate). R.arboreum (including the tropical species R.arboreum ssp zeylanicum) was unharmed with some full sun and little misting.
Azaleas: generally, both evergreen and deciduous azaleas were unharmed by the heat.

World wide climate changes have been predicted and there is now evidence that the world is warming up, but whether this is naturally occuring or due to man's activities is still uncertain except in cities where some warming up is due to heated buildings. At present in my region vireyas grow well out-of -doors with only relatively minor casualties even in an exceptionally hot summer and I expect the climate will remain suitable here for their out-of-doors cultivation, with appropriate shading, watering and misting, well into the next century.

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LUCERNE HAY

Lucerne is a well known stock feed that was, perhaps, first generally praised by the well known pre-war author Louis Bromfield, after he moved from France about 1940 to farm in Ohio, U.S.A. His books on Malabar Farm stressed the ability of the deep rooted 'Alfalfa' to extract minerals from below the depleted surface soil after being established for two to three years.

In Australia wide spread publicity was given to lucerne in 1977 by 'Esther Dean's Gardening Book' when she advocated 'no digging' gardening, using layers of paper,lucerne hay, compost and straw in that order,directly on top of the grass. Since then this procedure has become well known.

A report in the American Rhododendron Society Journal, vol3,1973 identified and named a growth factor in lucerne and described a test which resulted in increased growth from a number of potted rhododendrons when mulched with compost and lucerne hay, over a period of 12 months.

In 1985 another trial was reported in their journal, using Alfalfa tablets at five per gallon and fed at the rate of half a cup per 6½" pot weekly for five weeks. After repotting they were fed again about six months later - all had made exceptional growth and set flower buds. These were all rhododendrons and not Vireyas.

Using lucerne on a larger scale has not been easy as the hay from bales is not easy to separate and spread, shredding and composting for best results is time consuming also, but lucerne mulch is now available in a finely shredded form as detaied in the following advertisement.

Editor

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From Mr.J.F.Wilson, Forest Hill, Victoria 3131 :-
Last week I was shown a most unusual Vireya bloom with a completely spherical umbel 260mm in diam. with 35 individual creamy white scented flowers with 14 stamens. The owner had purchased it from the Illawarra Garden in 1987 labelled "konori West Irian x konori P.N.G. Are you familiar with this plant and what is its history? I could not help-can you? It was sold here and probably came from Melbourne,but local owners have lost theirs.

Editor

EXTRACTS

Lucerne is a legume crop grown for stock feed and also for the highly nutrious seed which is often sprouted for human consumption (alfalfa sprouts). Being a legume crop the lucerne fixes nitrogen for its own use. As such, the nitrogen content of lucerne foliage is amongst the highest in the plant kingdom and this nitrogen is in a slow release protein form. Mr Simon Leake of the Sydney Soil Testing Laboratories has been steering gardeners towards the benefits of lucerne mulch for many years after research into its qualities. Particularly recommended as a mulch for roses, it represents a nutrient balance which is ideal for roses. This table illustrates this point and as a comparison with pelletised poultry manure.

Nutrient element	% in lucerne	% for roses	% in pelletised chook poo
Nitrogen	3.5 - 5.0	3.0 - 4.0	2
Phosphorus	0.3 - 0.6	0.2 - 0.4	2.8
Potassium	2.0 - 4.0	2.0 - 3.0	1
Sulphur	0.2 - 0.4	0.2 - 0.5	2
Calcium	1.0 - 2.0	1.0 - 1.5	11

Note these nutrients are well balanced in the lucerne mulch, in addition:

- Lucerne is richer in nitrogen than chook poo and richer in potassium, essential for fruit and flowers.

- The nitrogen in lucerne is in a non-toxic form, whereas chook poo is highly ammonia toxic and can cause serious damage to plants.

- Calcium and phosphorus are in gross excess in chook poo materials and mushroom compost based products. These could cause serious imbalance in the soil with an excess of Calcium and Phosphorus where the levels of these elements are usually adequate and just need maintaining.

Lucerne hay is readily available in mulch forms. Lucerne mulch can be spread directly over the soil at a thickness of 50mm-100mm (2-4 inches). Repeat in mid-summer, allowing the beds to remain bare in winter to absorb extra heat. Lucerne mulch will maintain soil fertility but is not a replacement for regular feeding of plants. To feed plants or for peak productivity in the fruit and vegetable garden supplement the natural nutrient levels of lucerne mulch with a good quality plant food. It is recommended that this is applied a minimum of each spring and autumn. The addition of a layer of old pulverised cow manure under the lucerne mulch is an excellent combination. For mulching do not dig the lucerne mulch into the soil. For preparation of new garden beds a layer of lucerne mulch would be beneficial dug into the soil in combination with the cow manure several weeks prior to planting.

This information is supplied by the Sydney Soil Testing Laboratories for a better understanding of gardening and brought to you in conjunction with Beck's Mulching Products Australia and Cedric Bryant Horticultural Consultant (Canberra).