



lochae x solitarium

The Vireya Venture.

THE VIREYA VENTURE

No.1

SEPTEMBER 1990

Welcome "Venturers" to the first official issue of THE VIREYA VENTURE! It has been most encouraging to receive your letters and good wishes for the future success of T.V.V. As it is and always will be, YOUR medium to express your ideas, points of view, questions, answers, successes and/or failures, it was wonderful to receive, so quickly, the contributions printed in this issue. I am sure you will all enjoy reading them, but don't forget we want to hear more from you as well!

Thank you also, to those who have contacted T.V.V. with important information on articles about Vireyas, overseas visitors with an interest in Vireyas and talks that are to be given on Vireyas. Please continue this as one of the important functions of T.V.V. should be to keep Venturers (and their Vireya friends) up to date with all the possible sources of information and get-togethers available to Vireya growers. Our numbers (ie. Vireya growers) are increasing rapidly and we can well use all the help and knowledge we can share, to ensure the healthy continuation of these beautiful plants and our enjoyment of them. So, keep that 'grapevine' open, please.

Editor.

THE VIREYA VENTURE MOTIF

The motif above, for those who may be interested, depicts an early flowering of *R. lochae* crossed with *R. solitarium* and has developed into a softly perfumed, somewhat tubular bloom of gentle rose pink hue. The leaves of this hybrid are quite close in structure to those of *R. solitarium*, being dark green with a distinct 'quilted' surface (rugose, to be technical). *R. solitarium* was collected, in 1982, from Mt. Kaindi in P.N.G. and, I believe, is being grown and has flowered, in New Zealand. However, unfortunately I do not think *R. solitarium* itself has survived here in Australia. It would be great to hear to the contrary. Nevertheless, it would appear to make quite an interesting parent.

G. Snell Maleny.

STOP PRESS NEWS

DR. GEORGE ARGENT, Botanist and Taxonomist from the Royal Botanic Gardens, Edinburgh, is coming to Brisbane!

This visit, arranged in conjunction with the Royal Horticultural Society, Brisbane, has been organised so that Dr. Argent can give a lecture on Vireyas, both growing wild in Sabah and on the collection at the Edinburgh Botanic Gardens. Dr. Argent is a leading authority on Vireyas and is one of the authors of the book 'Rhododendrons of Sabah'. Thus Queensland enthusiasts are particularly fortunate to have such a unique opportunity to hear Dr. Argent speak.

The lecture will be held on 15th Oct. and at the time of this being written (12th Sept.) it already looks as though there will be a capacity audience.

Another visitor of interest coming to Australia in the near future will be the Rev. Canon Norman Cruttwell. Norman is the Curator of a Flora and Fauna Park in Papua New Guinea and a very knowledgeable authority on and collector of Vireyas. He is visiting Wollongong in late September for the Australian Orchid Conference, orchids being another of Norman's passions. Norman's Park, the LIPIZAUGA BOTANICAL SANCTUARY, MT. GAHAVISUKA PROVINCIAL PARK, GOROKA, boasts of having 52 Vireya species established, as well as 25 hybrids, both natural and artificial. ✓

The Sept. issue of 'Your Garden' magazine has a very colourful four page article on Vireyas, entitled 'Versatile Vireyas' (pages 8-11). However please note a misprint in the Index.... 'Pink Light' should read 'Pink Delight'! ✓

Malcolm of Pymble, N.S.W. has kindly advised us that the Spring issue of LIFESYLE MAGAZINE includes a brief two page article on Vireyas, (pages 52-53), sponsored by Parkers Nursery, Turramurra. Thank you, Malcolm.

Ruth Funder, one of our inaugural 'Venturers' is indeed venturing at this very moment (12th Sept.). She is with a party of Friends of the Melbourne Botanic Gardens on a tour of Malaysia. This will include Sabah and a two or three day visit to the National Park on Mt. Kinabalu. Ruth is an experienced Vireya 'hunter', having already visited P.N.G. with other members of the Australian Rhododendron Society and we look forward to your comments and comparisons, Ruth, on your return. Perhaps we may all hear about it in our December issue. ✓

The Wollongong Horticultural Society holds two very comprehensive flower shows each year. This year the Autumn flower show, held on March 3rd and 4th, included for the first time, a section for Vireya-Rhododendrons. This occasioned some very favourable comments and quite a lot of interest, so the section for Vireyas will certainly be included in the Spring Show to be held on Sat. and Sun. 3rd and 4th November. ✓

The show is held in the Figtree High School, entries close at 6.00pm on Friday 2nd, and exhibits must be staged by 9.30 am on Saturday. The Show Secretary is Mrs. Hazel Boyle, 16 Mailer Avenue, Wollongong, phone (042) 28 9203.

Here is an interesting quotation from Harold Caulfield's 'Weekend Gardening' column in the COURIER MAIL, Brisbane, Saturday 8th Sept. 1990:

"Vireya Rhododendrons offer an exciting challenge to gardeners in warm climates and, when growth requirements have been mastered, they could become more popular than azaleas, camellias and roses"

Many thanks to John Graham of Taigum, Qld. for forwarding this article.

NOTES on a SELECTION of RHODODENDRONS which have FLOWERED DURING
the PAST YEAR

J.L.ROUSE

Our feature article for this first issue has been written by Dr. John Rouse from Toorak, Victoria. John's keen and detailed observations never cease to intrigue and enlighten all who read and hear about them. So settle down and enjoy the following:

SEPTEMBER 1989. Seeds of *R.wrayi* were sent to me by Kenichi Arisumi in January 1980 and the first flower buds appeared in 1989. *R.wrayi* is in subgen. *Hymenanthus* subsect. *Irrorata* so it is not a *Vireya* and not even scaly. It is included in this report to T.V.V. because it comes from the Malay Peninsula so like the *Vireyas* it is tropical. Its flowers are white and my plants had 6-lobed corollas and 12 stamens per flower. When budded up and while flowering the phyllotaxis of the upper pseudowhorls of leaves and the inflorescences was examined and found to be Fibonacci. While in its native habitat *R.wrayi* is tree-like and grows to 10m tall, my plants are as yet only 1m. Two further seedlings have budded up this year and shortly they will flower.

OCTOBER 1989. *R.orbiculatum* x *R.konori* is a robust attractive hybrid with large pink flowers. The female parent is male sterile, the pollen tetrads being shrivelled and empty. This characteristic is also present in the hybrid offspring which is advantageous horticulturally as the plant is unable to set selfed seed so the corollas do not abscise early and deadheading is unlikely to be necessary.

R.saxifragoides is a compact, low, tussock-like shrub endemic to New Guinea where it grows in alpine bogs or open grasslands at 3000 to 4000 m. Unlike *R. commonae*, which is also a New Guinea alpine, it does not appreciate Melbourne's climate. It is shy to flower, difficult to cultivate and every year there are problems, which this year seem more serious than usual. After flowering last October most of my plants went into decline - small seedlings, rooted cuttings, large plants on their own roots and grafted plants. The stems and leaves die back as senile leaves abscise. The cause of the trouble is unknown, but fortunately it does not spread to other rhododendrons. Fungicide applications to soil or foliage do not appear helpful. My treatment is to remove dead material and to hope that some living tissue finally remains.

NOVEMBER 1989. I made the pollination *R.lochae* x *R.virgatum* in November 1988 and sowed the seeds in March 1989. By November 1989 it was apparent that at the most three seedlings would survive. I expect that the largest one will flower in 1995 or 1996. This cross spans the *Rhododendron* - *Vireya* breeding barrier and is a repeat of the cross made by Os Blumhardt that resulted in *R.'Little Pioneer'* which he has been flowering for the past 20 years. Watch for further details in the *J.American Rhododendron Society*.

DECEMBER 1989. *R.aurigeranum* grown from seed ANRS 32 in 1981 produced 4 flowers with orange corollas in the one truss that developed. This plant is difficult to grow in Melbourne and unless there is improvement when it next flowers, it will be composted.

JANUARY 1990. *R.intranervatum* flowered well in my glasshouse, and fixed and embedded pistils were sent to Barbara Palser in North America for SEM investigations into pollen tube pathways in *Rhododendron* pistils. Selfed control pistils produced seed which has now been sown. This species comes from Borneo at 500 to 1000m and it reacts adversely to the cold in Melbourne's winter and the dry heat of summer. The six or so plants which I have tried to grow outside in containers have all eventually died.

Rotation and bending of the pedicel frequently rotates the plane of symmetry away from the vertical. Examination of 12 trusses gave 22 flowers Right Handed, 26 Left Handed and 2 indeterminate, suggesting that the two forms occur at random. This handedness occurs because the overlapping of the lobes does not vary from flower to flower except for the bottom two lobes. If the right hand bottom lobe is in front of the left hand bottom lobe the flower is Right Handed, and conversely.

AUGUST 1990. My *R.suaveolens* first flowered when 40cm tall after being kept for a year in a glasshouse with minimum temperature 10°C. Its pollen tetrads were empty like those of *R.orbiculatum* with which it was originally combined by Hermann Sleumer. To what degree environmental conditions might affect the quality of the pollen of these two species I do not as yet know.

The pollination *R.quadrasiatum* var. *rosmarinifolium* x *R.retusum* was made in Feb. 1981 as part of an investigation into sexual compatibility within subsect. *Pseudovireya*. A plant 60cm tall has just produced one truss of 6 flowers for the first time. The flowers look very similar to those of the male parent, which often seems to be the case with an F1 hybrid.

COMING 1990. The pollination *R.kawakamii* x *R.santapau* was made in Dec. 1982 and the resulting seeds sown in March 1983. As yet this cross has not flowered though the reciprocal cross made more recently has, and its flowers look like *R. santapau* selfed so it is unlikely to be a true hybrid. Currently, a plant grafted onto *R. 'Frarantissima'* and a rooted cutting propagated in 1985 are budded up for the first time and their flowering is eagerly awaited.

Dr. John Rouse is a keen *Vireya* grower, with an extensive collection of species. He has also made a vast number of crosses and involved the Botany Department in some fascinating research into pollination and fertilization of *Vireyas*. Many hybrids resulting from his experimentation have been most beautiful, others quite intriguing and John's name has frequently appeared and will no doubt continue to appear, as the 'hybridist' in the lists of new *Vireya* hybrid registrations for many years to come.

Many thanks John, for your most interesting and valuable contribution to T.V.V.

A BEGINNER'S GUIDE to THREE SPECIES

When I first started growing *Vireyas* I was more successful with the hybrids. They flowered earlier and grew more vigorously, so I put the species in the 'too hard' basket. Now that I have become more familiar with their peculiarities I find them more rewarding so I'll share a few of my lurks with you.

R.macgregoriae, *R.lochae*, and *R.javanicum* were among my first species. *R.macgregoriae* grew quite vigorously until its first flowering, which was quite spectacular. The whole bush disappeared under the orange and yellow pompoms and when the petals dropped every flower produced a fat seed pod. This explained to me why they are the most common species in P.N.G., covering whole hillsides, making a breathtaking sight for anyone flying by, according to my friend Lou Searle. As the pods developed the plant looked weaker and weaker until quite a few branches died back. Finally the penny dropped and I pulled off every pod straight after flowering and applied a general fertilizer. I also found that regular feeding made the difference between a suicidal shrub flowering itself to death and a glossy, handsome one.

R.lochae, our one and only native species of *Vireya*, was another early disappointment. I potted my specimen in the same open mix that I use for all *Vireyas* but it sulked for years. Then I read an article on *R.lochae*'s original habitat and

R. lochae, our one and only native species of *Vireya*, was another early disappointment. I potted my specimen in the same open mix that I use for all *Vireyas* but it sulked for years. Then I read an article on *R. lochae*'s original habitat and the light dawned. In the wild it grows on rocks, sometimes in the company of rock lilies ('lithophytic' being the learned name for this habit). Apparently the roots travel down cracks in the rocks to reach moisture and nutrients, obviously not a situation easily reproduced in a garden. I guessed that the easiest way to provide the necessary aeration would be in a fibre hanging basket, or by adding extra bark to the mix. Both of these tricks proved successful.

R. javanicum, a stunning native of Java with an unusually elaborate orange flower for a *Vireya*, grows quite well for me. But the large fleshy leaves often had an ugly red discolouration on the tips of the leaves and yellow flecks on the rest of it. This proved to be common rust. I could not understand why other *Vireyas* growing close by were unaffected by the disease. Then I heard that New Zealand growers in their cooler climate are plagued by rust on most of their *Vireyas*. About the same time I read that *R. javanicum* occurs naturally from sea level to under 2000ft. suggesting that it is indeed a tropical plant, whereas most other *Vireyas* need the cold provided by greater altitudes. Putting two and two together I moved *R. javanicum* to the warmest position in the garden and cured its rust problem. Friends in Brisbane report rust free *javanicum*. Rust by the way, can be defeated by any of the commercial anti-rust fungicides. So despite the fact that *Vireya* species are slower to flower than their hybrids I have proved, at least to myself, that they need not be difficult - and I am hooked!

From our Mullumbimby Correspondent.

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 a 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 forms 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.

From Harold Lewis, Melbourne, Victoria.

It is great to see a local news sheet emerge after all these years, for Vireya growers (and fans) to share their experiences in growing these very lovely and colourful flowers (in fact the spectrum of colour far exceeds that of the 'Asiatic' rhododendrons) and who, like myself, have for the last four or five years had a collection of colour all the year around.

I shall start the ball rolling in making a request for Vireya seed of the following (if available) : *R.fallicinum*, *R.suavolens*, and *R.armitii* - I put the last in as I see it is mentioned in Clyde Smith's book on Vireyas. I do not know if it is proposed to exchange Vireya cuttings or not, but I could do that within reason as I have several lovely flowers out at the moment which would be worth while. I would like one cutting of *R.goodenoughii*, which unfortunately I lost eighteen months ago, due to phytophthora.

Speaking of phytophthora, that has been one of the main problems over the last two years (but no longer), I have lost about 20 or so plants. I used to use Lesan DX as a soil fumigant, but I ran out of it after 15 years and can no longer get it. Ridomil is fairly expensive to obtain, however I was recommended a preparation - MDPK (mono-di-potassium-phosphite) - which is used by the avocado growers in Northern N.S.W. and Queensland as a counter to phytophthora. It is a foliar spray which is required to be used every six weeks. As far as I understand it causes the roots to develop before the phytophthora can damage them.

I have been using it for eighteen months and one bonus appears to be emerging - it has stimulated the leaf growth, but not at the expense of flowers, on my Vireyas. In Victoria MDPK can be obtained from E.E.Muir and Sons who are situated at 1. Wholesale Fruit and Vegetable Market, Footscray Road, Footscray and at 2. South Gippsland Highway, Cranbourne.

Wishing all other Vireya growers every success,

Harold Lewis

Thank you Harold. If anyone wishes to exchange material with Harold, his full address is:- 7 Burroughs Road, Balwyn, Victoria, 3103.

LARGEST LEAF ?

The leaves on one of our hybrids 'Hari's Choice' are reaching 246mm in length and 115mm in width. By contrast the largest leaves on my *R.ericoides* are about 7mm long and hardly 1mm wide.

G.Snell, Maleny.

NOCTURNAL VISITORS

We observed one evening several quite large moths of unknown type, hovering from the mouth of one flower to another, around our *R.loranthiflorum* out in the garden. One outside light was not good enough to observe too closely, but one must assume from their deliberate actions that the moths were collecting nectar from the base of the tubular flower, without having to alight, ie. humming bird style. I've seen bees visiting Vireya flowers in the past and frequently ants also, but this was my first sighting of moths on the job. I wonder if hovering insects can act as pollinators also ?

W.Snell, Maleny.

Some comments from Peter Schick of Fort Bragg, California :

" Thank you for your thoughtfulness in sending the Vireya newsletter, I very much enjoy news from 'down under', I also get Michael's newsletter from New Zealand (Vireya News) and note their problems with rust.

We here have been mixing Bayleton with Orthene as we spray for insects. It is becoming evident that this normal application of Bayleton seems to act very well as a preventative as we've been almost free of both rust and mildew. Some plants, mostly through neglect have not been within range of the spray and mildew has developed on our native *R. occidentale*, whereas any plant that has been regularly sprayed is completely clear of mildew. Rust has not appeared on any plant as yet, using this method, although we have several well known susceptible varieties in the garden. It may be that Plantvax (Oxycarboxin) may be as effective, if so maybe a good policy to alternate the two.

COUNT THE PETALS

There are almost 300 species of Vireyas and it is usual for them to have five petals and ten stamens in a flower. However there are nine species that have up to eight petals - usually six to seven - and these include some of the best known and most frequently grown of the species. These are *Rhododendrons konori*, *phaeopeplum*, *hellwigii*, *superbum* and *dianthosmum* with six or seven petals, *leucogigas* with seven petals and *gardenia* with five to eight petals. Two others, *Rhododendrons pachystigma* and *thaumasianthum* are not in cultivation and have only been collected once.

One of the interesting things about crossing these with other Vireyas that have only five petals is that the hybrids, in my limited experience, always have some flowers with more than five petals. This may then be a check on the truth of the cross. Is this so ?

J.Clyde Smith Wollongong

A query from Jim Standard, of Launceston.

" As a keen beginner I find it impossible to get information on where I can get Vireyas. To my knowledge one cannot buy them here in Tasmania. One of the most important things that T.V.V. could do is to include a list - Name address and phone number - of all known growers, nurseries, persons, who are willing to sell and ship plants to other parts of Australia. Interested parties could then contact them direct for catalogues, prices etc.

Dr. J.C.Standard, 7 Beulah Gardens, Launceston, Tasmania 7250.

IN CONCLUSION

The next page is the first of the five that will list the names of registered Vireyas and their parentage etc.; they will be included in future issues.

The enclosed separate form is for you to pass on to anyone interested in receiving T.V.V. in future. A copy of this issue will be sent to them. Please keep your letters, articles, comments, criticism and queries coming in to the Editor:

Mrs. Wendy Snell
7 Lawrence Place MS 16
Maleny
Queensland 4552

REGISTERED VIREYA HYBRIDS and their PARENTAGE

The following tables summarize the registered names and parentage (where known) of Vireya hybrids. Some of the 19th Century hybrids that are still in cultivation are included.

The first column of Table 1 lists the names of the hybrids in alphabetical order while the second column lists the parents of each cross, the name of the seed parent being given first.

Table II is compiled from Table 1 and lists the names of all the parents, whether species or hybrids, with their progeny. The seed parent of the named cross is to be found in Table 1.

TABLE 1

NAME	PARENTAGE
Alisa Nicole	lochae x gracilentum F2
Anatta Gold	(laetum x zoelleri) x (zoelleri x leucogigas)
Angi Gita	aurigeranum x phaeopeplum
Aravir	konori x (Pink Delight x jasminiflorum)
Arthur's Choice	christianae x lochae F2
Athanasius	(laetum x [lochae x macgregoriae]) x javanicum
Australia II	([phaeopeplum x lochae] x zoelleri) x Hunstein's Secret
Belisar	konori x lochae
Bellenden Coral	(laetum x zoelleri) x (macgregoriae x zoelleri)
Birat Red	natural hybrid maybe aff. zoelleri
Bold Janus	leucogigas x laetum
Brightly	Tropic Glow x (lochae x macgregoriae)
Bulolo Gold	macgregoriae x aurigeranum
Buttermilk	konori x aurigeranum
Cair Paravel	(Triumphans x javanicum) x leucogigas
Calavar	konori x zoelleri
Cameo Spice	laetum x zoelleri
Carillon Bells	gracilentum x laetum
Cheeky Mandarin	(lochae x macgregoriae) x macgregoriae
Clare Rouse	chistianae x laetum
Clipsie	Dr Herman Sleumer x (Pink Delight x jasminiflorum)
Clarion Firm	(aurigeranum x lochae) x retusum
Clorinda	(jasminiflorum x javanicum) x Minerva
Coral Chimes	macgregoriae x gracilentum
Coral Flare	lochae x laetum
Craig Faragher	gracilentum x jasminiflorum
Cristo Rey	(macgregoriae x zoelleri) x (laetum x zoelleri)
Crinolette	loranthiflorum x konori
Cyprian	zoelleri x Clorinda
Donald Stanton	lochae x laetum
Don Stanton	laetum x macgregoriae
Dr Herman Sleumer	phaeopeplum x zoelleri
Duchess Satin	konori x leucogigas
Emmanuel	(zoelleri x javanicum) x Dr Herman Sleumer
Elizabeth Ann Seton	(Dr H.Sleumer x Pink Delight) x (Pink Delight x jasminiflorum)
Esprit de Joie	konori x laetum

TABLE 1 continued

NAME	PARENTAGE
Felinda	(phaeopeplum x lochae) x leucogigas
First Light	unknown x jasminiflorum
Flaming Ball	laetum x javanicum
Flamenco Dancer	aurigeranum x macgregoriae
Ferdinand von Mueller	macgregoriae x lochae
Fire Plum	(phaeopeplum x lochae) x zoelleri
George Budgen	laetum x zoelleri
Gilded Sunrise	aurigeranum x laetum
Great Scent-sation	konori x lochae
Hari's Choice	(Triumphans x javanicum) x leucogigas
Highland White Jade	(Dr Herman Sleumer x herzogii) x (laetum x aurigeranum)
Hugh Redgrove	unknown
Hunstein's Secret	A form of leucogigas - once known as 'gardenia aff.'
Irian Jaya	lochae x Pink Delight
Java Light	laetum x javanicum
Janelle Marie	Carillon Bells x gracilentum
Jean Baptiste	Laetum x leucogigas) x phaeopeplum
Josephine Gordon	stenophyllum x commonae
Kisses	Tropic Glow x (lochae x macgregoriae)
Kurt Herbert Adler	phaeopeplum x lochae
Lady Clare	(phaeopeplum x lochae) x leucogigas
Lazarus	(aurigeranum x Dr Herman Sleumer) x konori
Lemon Minuet	(laetum x gracilentum) x gracilentum
Leonore Frances	macgregoriae x aurigeranum
Liberty Bar	lochae x aurigeranum
Little Pinkie	(lochae x macgregoriae) x loranthiflorum
Littlest Angel	lochae x pauciflorum
Lochmin	lochae x jasminiflorum
Marshall Pierce Madison	(Triumphans x javanicum) x leucogigas
Minerva	javanicum x Princess Alexandra
Minnie Mouse	christianae x dielsianum
Moonwood	konori x (Pink Delight x jasminiflorum)
Mount Pire	laetum x javanicum
Nan Cutten	aurigeranum x Dr Herman Sleumer
Narnia	aurigeranum x zoelleri
Ne Plus Ultra	javanicum Duchess of Edinburgh (brookeanum x longiflorum)
Nuigini Firebird	laetum x javanicum
Orange Wax	unknown
Oriental Wax	aurigeranum x unknown
Our Marcia	(Dr Herman Sleumer x herzogii) x (laetum x aurigeranum)
Pendance	jasminiflorum x christianae
Pendragon	(lochae x laetum) x macgregoriae
Penrice	aurigeranum x Pink Seedling
Penrose	lochae x aurigeranum
Petra	christianae x jasminiflorum