VIREYA VINE

May-June, 1983 Issue

AN INTERNATIONAL GROUP OF "VIREYA BUFFS" - PUBLISHED WITH THE AID OF THE EDUCATION COMMITTEE OF THE RHODODENDRON SPECIES FOUNDATION

Since Vireya Vine Issue #3, I have been a bit busy with the Seattle Rhododendron Society's Early Competition in April and its Main Rhododendron Show in May--not to mention an American Rhododendron Society Annual Convention in Portland, Oregon in between times. (I am President of the Seattle Rhododendron Society). It is May, spring was early and the weather continues warmer than usual for us here. It gladens the hearts of retail Nurserymen, like we are.

Our Vireyas all got moved out to the polyethelene plastic house this spring, in March, an end of which was opened halfways for ventilation. The North plastic covered wall was removed full length in late April after danger of our last 32°F frost had passed (April 10-20).

The Vireyas received several sprayings of "Peters" brand 20-20-20 ($N\text{-}P_2O_5\text{-}K_2O$) solubilized (crystals) fertilizer. Also they received a dry granular fertilizer at the rate of 2 teaspoons per 1 gallon (US) container size. (2 gallon container got 4 teaspoons, etc.) It was a "Mount Baker" brand, 10-6-4 ($N\text{-}P_2O_5\text{-}K_2O$) made here in Western Washington State (U.S.A.). Most of the Nitrogen is termed a slow release form requiring 3 to 4 months or so to become available to the Vireyas.

Remarkable growth has occured on both species and hybrids. Multiple shoot breaks from dormant eyes (two, three, four or so previous growths ago) are frequent. Much flower bud formation is occuring as these new shoots reach maturity. The plants were watered every 5 to 10 days.

I recorded temperatures daily on a maximum/minimum thermometer (in degrees Fahrenheit) in this poly-plastic house.

BADGER'S PLASTIC HOUSE - VIREYAS

	March				April				May				June
Week of	27/5	6/12	20/26	27/2	3/9	10/16	17/23	24/30	1/7	8/14	15/21	22/28	29/4
Temp. °F.-Highest	83°	90°	94°	89°	91°	106°	102°	89°	86°	95°	98°	100°	99°
Week Average	58.6°	64.3°	64.7°	60.6°	65.6°	66.3°	67.7°	64.4°	64.7°	64.9°	65.8°	72.8°	67.4°
°F.-Lowest	39°	45°	36°	43°	38°	34°	40°	39°	42°	43°	45°	47°	51°

↑ 2 Vents Cut In West End

↑ 2 N Wall Panels removed 8'x10'

↑ 2/3 of roof & S Wall covered w/50% shadecloth

↑ All N Wall removed

↑ (new mist system in to cool the air)

After observing such fine growth, I wonder if these temperature ranges and averages bear any actual resemblance to those in New Guinea, Borneo, Java or Sumatra? Perhaps one of you out there knows. 100°F = 38°C. 65°F = 18°C. 40°F = 4.5°C.

Small seedling plants and rooted cuttings of Vireya species and hybrids were made available for purchase by the host Portland, Oregon A.R.S. Chapter at a plant sale held during the American Rhododendron Society Annual Meeting in early May.

The Vireyas were almost all sold.

Interestingly enough, about 15 to 20 Vireya Viners were in attendance. Hmmmmm!

Bob Badger, Editor
Kent, WA U.S.A. Latitude 47.3° N

* *

Must get on with the many letters from you Viners out there about our favorites--the Vireya Rhododendrons. First, will be that letter from Arthur Headlam I spoke about in Vireya Vine #3.

FROM: Arthur W. Headlam February 11, 1983

Brian Clancy, who lives near me in Bentleigh, a suburb of Melbourne, Latitude 38° S., has kindly loaned me his copy of VIREYA VINE, Issue No. 2, and I find the information contained in it very interesting.

I have been growing Vireyas now for some 16 years and early in the piece I decided to keep records of each new species, the date of the first flower and color as per the R.H.S. Color Chart, and similarly the same information with hybrids as they eventually flowered, however, over recent years it has been almost impossible to keep pace with the numerous hybrids, so I decided to list only the new hybrids as they were registered, and a photocopy of the list to January 1983 shows 30 registrations.

Re the enquiry about 'Triumphans' and a possible hybrid 'Triumph'. I am sure the latter is only an abbreviation of 'Triumphans', likewise 'J.H. Mangles' V.V. p. 6, is no doubt short for 'Souvenir de J. H. Mangles'.

As a matter of interest I also enclose a photostat (3 p.) of a list of mainly Veitch Hybrids produced from 1863 to 1900, but few of these are presently in cultivation, also enclosed are some notes on some of the early hybrids which may be of some help.

1982 was one of the driest years ever recorded in Melbourne (rainfall at Bentleigh 20 inches against the long term average of 35 inches), and winter 1982 was a record for low temperatures, bright sunny days with minimums going as low as 27° F., Melbourne's normal winter temperatures rarely goes below freezing point.

The odd 27°F., would not be of much consequence, but the cold persisted continually and many Vireyas were defoliated and the flower buds frosted and in the Spring instead of producing the usual profusion of flowers, the buds browned and dropped off.

Some plants which I brought under shelter of the back porch, open to the weather on 2 sides, had the flower buds affected, but received sufficient protection to prevent defoliation. The previous comparable cold spell in Melbourne occurred 13 years ago, so newcomers to Vireyas generally had fairly substantial losses, defoliation and bud damage.

The nurseryman mentioned in my letter to Dick Cavender, lost 2,000 Vireyas, his nursery is in a 'frost pocket' amd probably recorded lower than 5 degrees of frost.

Damage by bark split also occurred in extreme cases, but many plants, after severe cutting back eventually sent out new growth.

If I can be of any help with information about Vireyas in Australia please do not hesitate to let me know.

with best wishes, sincerely, Arthur

Arthur W. Headlam
8 Malacca St., Bentleigh, 3204
Melbourne, Australia

Latitude 38° S

LIST OF REGISTRATIONS OF VIREYA RHODODENDRONS TO JANUARY '83

'Aravir'	*R. konori* x ('Pink Delight' x *R. jasminiflorum*). Cross by Peter Sullivan, introduced and registered by Wm. A. Moynier, Los Angeles. RHS Year Book 1980/1981
'Calavar'	*R. konori* x *R. zoelleri*. Cross made by P. Sullivan 1977, raised and registered by Wm. A. Moynier. RHS Year Book, 1980/1981
'Cair Paraval'	('Triumphans' x *R. javanicum*) x *R. leucogigas*. Cross by P. Sullivan, Strybing, raised and registered by W. A. Moynier, 1979. For full description see ARS Quarterly Bulletin, Vol. 35, No. 2, p. 110.
'Clipsie'	'Dr. H. Sleumer' x ('Pink Delight' x *R. jasminiflorum*). Cross by P. Sullivan, raised and registered by W. A. Moynier. ARS Quarterly Bulletin, Volume 34, No. 3.
'Donald Stanton'	*R. lochae* x *R. laetum*. Cross made by Don Stanton. Registered by Director, Royal Botanic Garden, Kew. A.M. 1978. RHS Year Book, 1978
'Dr. Herman Sleumer'	*R. phaeopeplum* x *R. zoelleri*, a natural hybrid. Seed raised by Brian Clancy. Registered by T. Lelliott. RHS Year Book, 1972
'Decimus'	A form of *R. zoelleri* collected in New Guinea by Professor C. J. Van Steen. RHS Year Book, 1973
'Elsie Louisa'	Form of *R. macgregoriae* collected by Michael Black, raised, introduced and registered by Geoffrey Gorer. RHS Year Book, 1979
'Eleanor Black'	Form of *R. konori* collected in New Guinea by Michael Black. RHS Year Book, 1970
'Felinda'	(*R. phaeopeplum* x *R. lochae*) x *R. leucogigas*, cross by Peter Sullivan, introduced and registered by Wm. A. Moynier, ARS Quarterly Bulletin, Vol. 35, No 2, p. 111
'George Budgen'	*R. laetum* x *R. zoelleri* - cross by T. Lelliott. Raised by P. Sullivan. Registered by Bill Pollard. RHS Year Book, 1977
'Golden Gate'	Form of W.I. *R. zoelleri* from seed sent to Strybing by T. Lelliott, raised by Peter Sullivan
'Island Sunset'	Form of *R. zoelleri* collected on Goodenough Island by Don Stanton. Registered by D. B. Stanton. RHS Year Book, 1973
'Kurt Herbert Adler'	*R. lochae* x *R. phaeopeplum*, seed from T. Lelliott. Raised and introduced by Strybing. RHS Year Book, 1974
'Moonwind'	*R. konori* x ('Pink Delight' x *R. jasminiflorum*) cross by P. Sullivan, raised and introduced by Wm. A. Moynier, RHS Year Book, 1980-81
'Narnia'	*R. konori* x ('Pink Delight' x *R. jasminiflorum*). Cross by T. Lelliott, 1968, raised by P. Sullivan, introduced by W. A. Moynier. RHS Year Book, 1978
'Petra'	*R. christianae* x *R. jasminiflorum*. Cross by T. Lelliott, registered by E. F. Allen, Copdock, England. RHS Year Book, 1979-80
'Shasta'	*R. konori* x ('Pink Delight' x *R. jasminiflorum*) Cross by P. Sullivan, raised and introduced by W. A. Moynier. ARS Quarterly Bulletin, Vol. 34, No 3
'Sirunke Orange'	Seedling of *R. macgregoriae* collected in New Guinea by Michael Black
'Kinabalu Mandarin'	Form of *R. brookeanum*, collected, grown and exhibited by E. F. Allen, Copdock, England. RHS formerly *R. brookeanum* var. 'Mandarin'
'Bulolo Gold'	*R. macgregoriae* x *R. aurigeranum*, truss 16 flowered, Orange group 25 C with yellow group 15 C in throat. Crossed and raised by T. Lelliott, introduced and registered by Ron Cutten.

'Don Stanton'	R. laetum x R. macgregoriae, Truss 10/11 flowers, corolla Yellow/Orange 17B, rim flushed orange/red 30 D. Raised and registered by E.F. Allen from seed supplied by late Don Stanton.
'Lochmin'	R. lochae x R. jasminiflorum. Truss 7 flowered. Corolla Red Group 55 C with darker tube. Crossed and raised by T. Lelliott, introduced and registered by Ron Cutten
'Pindi Peach'	R. laetum x R. phaeopeplum, truss 4 flowered. Corolla Yellow Orange Group 19 B. Crossed and raised by T. Lelliott, introduced and registered by Ron Cutten
'Pindi Pearl'	R. laetum x R. phaeopeplum, truss 6 flowered. Corolla Yellow Orange Group 38 C. Crossed and raised by T. Lelliott and registered by Ron Cutten
'Mount Pire'	R. laetum x R. javanicum. Cross by Don Stanton, Orange group 25 B. Full description see ARS Bulletin, Vol. 35 No 2, p. 113
'Belisar'	R. laetum x R. zoelleri x (R. macgregoriae x R. zoelleri) Cross [1972] and raised by Pete Sullivan. Full description see ARS Bulletin, Vol. 35 No 3, page 176
'Tashbaan'	['Sir George Holford' x R. leucogigas] x R. aurigeranum. Raised by Peter Sullivan, for full description see ARS Bulletin, Vol. 35 No 3, page 178
'Tereginthia'	'Dr. Herman Sleumer' x 'Pink Delight'. Cross by T. Lelliott, raised from seed by Peter Sullivan For full description see ARS Bulletin, Vol. 35 No 3, page 178
'Thomas Becket'	(R. zoelleri x R. lochae) x R. zoelleri x (R. aurigeranum x R. zoelleri) Cross 1975. Raised and named by Peter Sullivan. For full description see ARS Bulletin, Vol. 35 No 4, page 235

VEITCH HYBRIDS AND OTHERS PRODUCED 1863/1900

From: R. javanicum - R. jasminiflorum - R. brookeanum var. gracile - R. lobbii - R. multicolor

'Acidalia'	'Amabile' x R. teysmannii. V. 1891 - pale primrose
'Acia'	'Duchess of Edinburgh' x 'Princess Alexandra' V. 1891 - salmon
'Ajax'	'Crown Prince of Germany' x R. javanicum V. A.M. 1891 - yellow to red/orange
'Amabile'	R. javanicum x 'Princess Alexandra' F.C.C. 1886 - pink and yellow to salmon
'Ambient'	R. javanicum x 'Princess Alexandra' V. 1891 - pink/yellow
'Ariel'	indo-javanicum A.M. 1893 - light yellow
'Aspasia'	'Maiden's Blush' x R. teysmannii (form of R. javanicum) A.M. 1881 - yellow
'Aurora'	'Crown Princess of Germany' x R. javanicum. Veitch 1891 - yellow to red/orange
'Boule d'Or'	'Lord Wolseley' x R. teysmannii V. 1891
'Brilliant'	'Duchess of Edinburgh' x R. javanicum F.C.C. 1881 - crimson
'Brunette'	R. javanicum x 'Princess Frederica' V. 1891 - yellow/orange
'Cardinale'	'Duchess of Edinburgh' x R. javanicum F.C.C. 1885 - scarlet crimson
* 'Clorinda'	R. jasminiflorum Car. x 'Minerva' A.M. 1912 - rose pink
'Conqueror'	'Duchess of Connaught' x R. javanicum F.C.C. 1888 - scarlet
'Crown'	'Princess of Germany' x R. brookeanum var. gracile V. 1891 - yellow
'Curtisii'	form of R. multicolor from Sumatra, F.C.C. 1883 - crimson
'Czarina'	'Princess Royal' x R. teysmannii V. 1891 - yellow to orange
'Dante'	'Crown Princess of Germany' x R. javanicum V. 1891
'Diadem'	'Duchess of Edinburgh' x R. javanicum F.C.C. 1896 - crimson
'Duchess of Edinburgh'	R. brookeanum var gracile x R. lobbii. Waterer F.C.C. 1874
'Duchess of Fife'	'Princess Royal' x R. teysmannii A.M. 1889 - Waterer - cream
'Duchess of Teck'	R. brookeanum var. gracile x 'Princess Royal' W. 1870
'Eos'	clone of four generations of R. javanicum, R. jasminiflorum, R. lobbii and R. malayanum Wm. Heale of Veitch, 1900
'Excelsior'	R. javanicum x 'Princess Royal' V. F.C.C.
'Flame'	R. javanicum x - scented F.C.C. 1931
'Hercules'	R. javanicum x - before 1890 - yellow to rose/pink
R. jasminiflorum carminatum	R. jasminiflorum x R. javanicum - crimson
R. jasminiflorum superbum	R. jasminiflorum x R. lobbii F.C.C. 1876 - white
'Juliet'	'Taylori' x R. teysmannii V. 1891 - primrose yellow
'King Edward'	R. javanicum x R. teysmannii A.M. 1901 - deep yellow
'Londonense'	Standish & Noble 1880 - see 'Ne Plus Ultra'
'Lord Wolseley'	'Duchess of Teck' x R. javanicum (Noble) Orange/red
'Luteo-roseum'	R. javanicum x 'Princess Alexandra' F.C.C. 1886 - yellow

'Maiden's Blush' *R. brookeanum var. gracile* x 'Princess Alexandra' - cream/pink
'Minerva' *R. javanicum* x 'Princess Alexandra' F.C.C. 1885 - light rose, orange spots
'Monarch'. 'Duchess of Edinburgh' x 'Princess Alexandra' F.C.C. 1888
'Mrs. Heal' *R. multicolor* x 'Princess Beatrice' V. - white/pink
'Ne Plus Ultra' Standish & Noble 1880 - same as 'Londonensis'
*'Pink Delight' origin unknown
*'Pink Seedling' origin unknown
'Portia' 'Taylori' x *R. teysmannii* V. 1891 - primrose yellow
'Primrose' 'Maiden's Blush' x *R. teysmannii* F.C.C. 1888
'Prince Leopold' *R. brookeanum var. gracile x R. lobbii* Dav. F.C.C. 1876
*'Princess Alexandra' *R. jasminiflorum* x 'Princess Royal' V. F.C.C. 1883
'Princess Beatrice' 'Duchess of Edinburgh x 'Princess Alexandra' F.C.C. 1884
'Princess Christian' *R. javanicum* x 'Princess Frederica' Waterer - yellow
'Princess Frederica' *R. brookeanum var. gracile* x 'Princess Royal V. 1881
'Princess Helena' *R. jasminiflorum* x F.C.C. 1865
'Princess Royal' *R. jasminiflorum x R. javanicum* 1863 - pale yellow
'Purity' 'Taylori' x *R. teysmannii* V. 1891 A.M. 1894
'Queen of the Roses' *R. javanicum* x 'Princess Alexander' V. 1891 - yellow to salmon
'Queen of the Yellows' *R. javanicum* x 'Princess Frederica' F.C.C. 1886
'Queen Victoria' *R. brookeanum var. gracile x R. lobbii* 1891 - yellow to salmon
*'Red Prince' origin unknown
'Rose' *R. javanicum* x 'Princess Alice' - yellow/salmon
'Rose Perfection' *R. javanicum* x 'Princess Alice 1886 - Rose
'Ruby' *R. jasminiflorum var. Carminatum x R. multicolor* F.C.C. 1888
'Scarlet Crown' 'Duchess of Edinburgh' x *R. javanicum* F.C.C. 1883
*'Souv. de J.H. Mangles' 'Crown Princess of Germany' x *R. javanicum* F.C.C. 1888
'Sybil' *R. javanicum* x Rothschild 1938 - rose pink
'Taylorii' *R. brookeanum var. gracile* x 'Princess Alexandra' V. 1891
'Thalia' *R. javanicum* x 'Princess Royal' V. 1891
'Thetis' *R. javanicum* x 'Princess Frederica' F.C.C. 1893
'Triton' *R. javanicum x R. multicolor* A.M. 1900
*'Triumphans' 'Duchess of Edinburgh' x *R. javanicum* 1871 F.C.C. 1881
'Virgil' 'Duchess of Edinburgh' x 'Princess Alexandra' A.M. 1888
'Crown Princess of Germany' *R. brookeanum var. gracile* x 'Princess Royal'
'Duchess of Connaught' *R. brookeanum var. gracile x R. lobbii* F.C.C. 1881
'Empress' 'Crown Princess of Germany' x *R. javanicum*
'Exquisite' *R. javanicum x R. teysmannii* A.M. 1899
'Imogene' 'Taylori' x *R. teysmannii* F.C.C. 1888
'Indian Yellow' 'Crown Princess of Germany' x *R. javanicum*
'Little Beauty' *R. malayanum* x 'Monarch' A.M. 1896
'Ophelia' *R. javanicum* x 'Princess Alexandra'
'Pink Perfection' 'Duchess of Edinburgh' x 'Princess Alexandra'
*'Sir George Holford' *R. javanicum* x orange-yellow shaded red on margin A.M. 1930

* Presently In Cultivation

Some notes on Hybrid Rhododendrons by the Rev. Prof. G. Henslow, M.A., F.L.S., & c. Read May 12, 1891

East Indian Species of Rhododendron

The following species, of which the majority have been introduced by Messrs Veitch & Sons are the origins of the hybrids and crosses described in this paper:

R. brookeanum (Low) var. *gracile*-a lax shrub epiphytal, or growing on mossy limestone, yellow and a rich red

R. jasminiflorum (Hook). A small shrub about 1½ feet high of compact habit. Tubes 2 inches long, straight, lobes small, color white, anthers pink. Mt. Ophir, Malacca

R. javanicum (Blume?) Corolla large, tube 3/4 inches long, fl. 2½ inches diam. Color yellow/orange, anthers crimson. A native of Java, 4/8,000 feet on a volcanic range, introduced by Mr. Rolleson.

R. lobbii (Veitch), *R. longiflorum* (Lindl). Corolla large, tube curved and ascending, 2¼ to 3¼ inches long. Color bright glossy crimson. Native Sarawak jungles, Borneo

R. malayanum (Veitch). Small shrub, compact habit, corolla very small, tube straight, about ¼ inch long. Color cerise crimson. Native of Sumatra. Introduced by Veitch.

R. multicolor (Oliver). Small shrub, compact habit, leaves small. Corolla small, tube funnel shaped, ¼ inch long. Color lemon. Var. Curtisii: this only differs in having a rich crimson corolla. Native of Sumatra. Introduced by Mr. Veitch.

R. teysmannii (?). A lax shrub. Corolla large, tube 3/4" long. Color golden yellow. A native of Sumatra. Introduced by Mr. Veitch.

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GENEALOGIES

'Duchess of Edinburgh'	*R. lobbii* x *R. brookeanum var. gracile*
'Crown Princess of Germany'	'Princess Royal' x *R. brookeanum var. gracile*
'Ne Plus Ultra'	*R. javanicum* x Duchess of Edinburgh'
'Triumphans'	'Duchess of Edinburgh' x *R. javanicum*
'Souv. de J.H. Mangles'	'Crown Prince (Princess) of Germany' x *R. javanicum*
'Ne Plus Ultra'	*R. javanicum* x 'Duchess of Edinburgh' - N.B. These being reciprocal hybrids with 'Brilliant', 'Scarlet Crown' and 'Triumphans', there is no difference of importance between them, beyond slight shades of color
'Princess Alexandra'	'Princess Royal' x *R. jasmiflorum*

'Princess Alexandra'	White
'Pink Delight'	Pink
'Pink Seedling'	Pink
'Red Prince'	Salmon Pink
'Triumphans'	Red
'Clorinda'	Rose Pink
'Souv. de J.H. Mangles	Orange red

Genealogies of 'Pink Delight', 'Pink Seedling', 'Clorinda', and 'Red Prince' cannot be traced, and the origin of 'Ne Plus Ultra' is said to be the same as for 'Triumphans', but a reciprocal cross.

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'Souvenir de J. H. Mangles' - F.C.C. 1888

Another of the famous Veitch hybrids, and one of the few of which the parents are known. Grown and flowered by Brian Clancy, producing a profusion of attractive flowers. R.H.S. Red Group 41 D. Reproduced in color. American Rhododendron Society's Bulletin, Vol. 32, No. 3

Genealogy:

R. jasmiflorum × *R. javanicum*
→ 'Princess Royal' × *R. brookeanum var. gracile*
→ 'Crown Prince of Germany' × *R. javanicum*
→ Souvenir de J. H. Mangles

Notes: Has the advantage of striking readily from cuttings and producing flowers at an early age.

VEITCH HYBRIDS IN CULTIVATION IN AUSTRALIA

'TRIUMPHANS'

Triumphans' was found growing in a run down nursery in a country town in New South Wales by the late Don Stanton, who obtained propagating material resulting in this hybrid being re-introduced to cultivation in Australia.
Flowered for me mid-April and continued well into July. Flowers 2 inches across the lobes x 1½ inches long.
Flowers to truss, 7, 9, and up to 11.
Color - R.H.S. Color Chart - Orange/Red 34 A.
Reproduced in color: Photos by A. W. Headlam
K. Wada's Handbook No. 9
Japanese Rhododendron Society's Handbook
American Rhododendron Society Bulletin, Vol. 32, No. 2 (Fasciation)
Reproduced in B & W
American Rhododendron Society's Bulletin, Vol. 32, No. 2 (Fasciation)

Genealogy:

R. lobbii × *R. brookeanum var. gracile*
→ 'Duchess of Edinburgh' × *R. javanicum*
→ 'Triumphans'

Editor's Note: Arthur, thank you for sharing your lists of newer registered Vireya hybrids and the older Veitch hybrids. The newer sorts and the older Veitch hybrids are difficult to find listed in one place and these lists--with parentages listed--will be invaluable to Vireya hybridizers worldwide. Particularly, as some have elected to use both newer species and hybrids as parents together with older Veitch ones.

Since the date of your letter about the lack of rainfall, I have read about the fires in Victoria. I hope that all our Vireya growers were spared.

Your comments about 27°F temperatures (-2.7°C) defoliating Vireyas and frosting flower buds parallels Dick Cavender's notes--which follow in the "Vine"--about his plastic house in Sherwood, Oregon. Arthur, if you raise

e small-leafed species or their hybrids, were they as damaged by the frosts? Also, was there any indication that me certain species or hybrids containing certain species as one or more parents were "more hardy" than others? at would certainly be valuable information for all of us Viners!

I note your comment about their ability to regenerate after severe damage. Please send along comments about ur observations of regrowth and any other Vireya comment that comes to mind. That is what the Vireya Vine is all out--sharing experiences with other Vireya growers worldwide!

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OM: Emma Bowhan March 24, 1983

I was thrilled with the abundance of information in the recent issue of the Vireya Vine. The printing was very adable. I commend you for the time and effort you are putting into this very educational letter. Enclosed is a eck to help defray the costs.

Tom and I have been growing Rhododendrons and Azaleas since 1968. Our collection consists of approx. 1,000 rieties of species & hybrids, 500 varieties of evergreen azaleas and 114 varieties of Vireyas exclusive of the ny trays of seedlings.

I have not bloomed many of my Vireyas as I cut them heavily the first couple of years to increase my stock. I have bloomed more rooted cuttings than I have larger plants). Most of my Vireyas are growing in wire baskets ined with moss. Our planting mix consists of 1/3 equal parts of peat, perlite, bark or sawdust. Gypsum and 0-15-11-10 granular fertilizer with trace elements (nitrogen is 65% blue chip) is mixed in our planting medium. he basket is top dressed with a small amount of Osmacote. My baskets are never allowed to completely dry out. ireyas that have a tendency to cascade are nice for hanging. Our green house is kept about 40° at night in the inter months, and in the summer it is air conditioned. A tube in the peak keeps the air moving at all time.

I have always heard that Vireyas do not have a very large root system. My experience has been that young lants promote their top growth and as the plant matures they grow larger root systems. They may survive in small ontainers but they are happier if they are transplanted as they outgrow their containers.

I have been growing Vireyas about three years. I received my first rooted cuttings from F.E.M. Robinson. fter seeing his plants in full bloom and so beautifully grown I was hooked. Since then we met Peter Schick and e has been most gernerous with sharing cuttings, plants, seed and knowledge. I have picked his brain on more than ne occasion. Thank you Peter and others like you for making our little part of this world so much brighter.

Fellow Rhodoholics are always welcome to visit us. Our home is always open to overnight guests except during showtime. Please add to your mailing list: Gordon W. Severe, Delaware.

Sincerely, Emma Bowhan

Emma Bowhan
27194 Huey Lane, Eugene, OR 97402 Latitude 44° N

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Editor's Note: Thank you Emma for your planting mix blend. It describes a well drained mix that does hold some water. I wish to call attention to the fact that you--as many other American nurseries do--blend a granular fertilizer into your planting media. I note that you add Gypsum. I add dolomite limestone for the same reason. Rhododendrons need a certain amount of calcium--below the toxic level. Also, my experience is that a planting media that is too acid--below pH 5.5--requires excessive fertilizer use, so by raising (neutralizing) the pH level closer to pH 7 (with the calcium ions or magnesium ions) the quantity of added fertilizer needed will be less. Most available phosphorus is "locked up" below pH 5.5 and most available nitrogen is 'locked up' below pH 5.0. In other words, a supposedly "rich" mix of natural ingredients becomes a "poorer and poorer" source of nutrients to rhododendrons as the pH becomes more acid. I personally prefer--from my years of experimentation--a root area pH of 6.5. What do you other Vireya Buffs observe?

I also call attention to your observations about root systems of Vireyas. I hope others out there will write about their observations of Vireya root systems.

Write again soon, Emma, with a list of some of the Vireya species and hybrids that you have bloomed. Which do you like best?

FROM: Stan Eversole March 28, 1983

While I am delaying writing you of my Vireya collection, I do not want to delay sending you a small check to help defray expenses of your marvelous publication.

With all kind regards, I am, Sincerely yours Stan Eversole

Stanton L. Eversole, M.D.
1485 Edgewood Dr., Palo Alto, CA 94301 Latitude 37.25° N

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Editor's Note: Thank you Stan--but do not forget to write us about your Vireya collection soon.

FROM: Dick Cavender March 29, 1983

As I mentioned in my first letter I am a poor letter writter. I have just received V. V. #3 and enjoyed it very much so thought I had better get to work. Enclosed is a check to help with costs. V. V. #3 answered the question about 'Pasquel Witness'. I have not bloomed R. saxafragoides and have lost my large plant since my last letter. I still have a rooted cutting however. When we visited Pete Sullivan in December he had either R. ericoides or R. saxafragoides in bloom but I don't remember which. The list of USDA numbers in V. V. #3 was helpful but did not answer some of my questions. The enclosed list contains three numbers I would like to know more about. It is my understanding that the 2,000 plants lost by the Australian nursery were Vircyas.

Tom Tatum who has been ill for the last year received a kidney transplant in early March and was released from the hospital on March 26. He is working on a project to help all of us Vireya nuts and will be asking many for information.

My heat system failed one cold night and the temperature was down to 27° or 28° in the greenhouse. Lots of leaf burn but no loss of plants. I have since installed an alarm that will awaken the dead if the problem occurs again.

I have recently acquired a Vaccinium grown by Cy Ward (Vancouver, Washington) from seed collected by Frank Mossman on Mt. Kinabalu. It has lovely red new growth.

I took several cuttings from my R. ericoides and the plant has since gone into decline. I may be growing it too dry. I have heard that R. stenophyllum tends to die after blooming. If this is true I am not eager for mine to bloom.

Included with letter is a list of plants I have bloomed. One notable exception is R. zoelleri. R. zoelleri does poorly for me and although I have grown it for a long time, it has never bloomed. Crosses containing R. zoelleri bloom well however.

By the way, I think Tom Tatum had the tissue culture done on the R. leucogigas now offered by Harold Greer. Harold is having others done I have heard. I hope he and Bruce Briggs don't take the fun out of collecting with their tissue culture. There will be a number of Vireyas at the plant sale at the National Convention in Portland in May. I hope to see some of you there.

Yours truly, Dick Cavender

P.S. I found the print in the last issue just fine.

Species and hybrids that have bloomed. I have about 60 species and hybrids.

SPECIES

R. alticolum
R. arfakianum
R. brookeanum var. gracile
R. christianae
R. commonae
R. dielsianum
R. internervatum
R. jasminiflorum
R. javanicum
R. laetum
R. leptanthum
R. lochae
R. loranthiflorum
R. phaeochitum #25
R. wrightianum
WN 354363
WN 354375
WN 354376

HYBRIDS

'Ne Plus Ultra'
'Red Princc'
'Sir George Holford'
'Taylori'
'Triumphans'
'Valentine'
R. wrighteanum x R. rarum
R. christianae x R. macgregoriae F_2
R. christianae x R. laetum
R. christianae x R. jasminiflorum
R. herzogii x R. aurigeranum
R. javanicum x R. lochae
((R. javanicum x 'Triumphans')x R. zoelleri)x (R. aurigeranum x R. zoelleri)
R. konori x R. zoelleri
R. laetum x R. phaeopeplum
R. lochae x R. macgregoriae
R. phaeopeplum x R. leucogigas

I may have left off one or two but this is most of them.

Dick Cavender
15920 S.W. Oberst Ln., Sherwood, OR 97140 Latitude 45.2° N

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Editor's Note: Thank you for sharing that information with us Dick. Again, I note the problems many are having with the dwarfer high altitude Vireya species. Maybe some Viner out there who has been to the high altitudes 10,000 to 14,000 feet (3,100-4,300 meters) where these specially adapted Vireya species grow would care to venture a planting and growing proceedure for cultivation of these plants. More watering as Dick observes? Colder growing conditions? More shading? or more light?

Again I note, Dick, that 27° or 28°F, 4°to 5°F of frost(-2.7°C or -2.2°C, 2° to 3°C of frost) produces a great deal of leaf burn of Vireyas, but does not kill the plants. Much the same is true for other "woody" tropical plants that we grow as "House Plants".

I certainly hope that you keep that Vaccinum growing. And what do you say Viners, does R. stenophyllum die after flowering? Thank you also for the list of species and hybrids that you have bloomed. How about another note listing, after seeing their flowers, of your favorite Vireya species and hybrids?

FROM: Brian Clancy March 30, 1983

Thank you kindly for issues 2 and 3. I was sorely tempted to put pen to paper on many issues but there are just not enough hours in the day. I put temptation out of the way by handing issue 2 to my good friend Arthur Headlam. I just do not know how you will cope with the response. Airmail to overseas members just has to cost more.

About myself, I am only a backyard gardener who has been growing rhododendrons for 31 years and Vireyas for 25 years which is all too short for the magnificient genus rhododendron.

As I write I am sitting in sunshine in front of R. laetum with eight sumptuous flowers. I won the Award of Merit with R. laetum at our annual show in 1966 and it was one of the happiest days of my life. This was appropriate as R. laetum derives from the latin word laetare which means rejoice. The R. laetum was the most photographed rhododendron in the show. Two of the judges, both hardened by periods in the Antartic, wars and much pure whiskey came back after the judging and stood in front of R. laetum for about three hours contemplating the beauty and magnificense.

It is probably hard to believe, but a different Vireya plant in flower sits on my kitchen table every week of the year. I recently flowered R. zoelleri x R. javanicum for the first time on a 3 year old plant. The flower was a beautiful shade of orange and too good to go to the F_2. Last week I flowered 'Dr. Sleumer'x R. javanicum for the first time and the 8 flowers were like a bright sunset. In bloom this week is a 3 year old seedling of R. christianae x (R. macgregoriae x R. javanicum) and the first flower has 21 florets of orange colour. Next week I will be flowering one of Pete Sullivan's crosses (R. zoelleri/R. lochae/R. zoellerix R. aurigeranum/R. zoelleri) for the first time. The seed came through several hands and I only germinated 5 seedlings. However, cuttings from this cross strike like weeds and grow.

Currently I am preparing to give a lecture on Vireyas to be delivered on 15 April. The slides will be Arthur Headlam's classics excepting for one of my daughter Geraldine as a radiant bride carrying a bouquet of the happy rhododendron (R. laetum). At the lecture I will be providing 50 vireyas as door prizes including R. superbum, a selected R. leucogigas hybrid and seedlings from my current stock which should all flower for the first time next year.

Regards, Brian Clancy

Brian Clancy
39 Renown Street, Bentleigh
3204 Australia Latitude 38° S

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Editor's Note: Brian, anyone who has grown rhododendrons for 31 years and Vireya rhododendrons may be a "backyard gardener" as you describe yourself--but he also is priviledged to express opinions based on years of observation. You must be, now, a "backyard rhododendron horticulturist". Around this area it takes some folks 20 years to learn how to grow grass.

I am really pleased--but envious--that you have now the privilege of enjoying a different flowering Vireya plant on your kitchen table each week. What else could a Vireya Buff enjoy more!

I note that you must frequently flower 3 year old seedlings. How do you do it so soon from seed? Please write again and share your successful method.

Also, I note the large numbers of flowers per truss listed (21 in one of yours) in yours and other recent letters, about Vireya hybrids. Where does the gene come from? Which species or species forms have been selected that have large numbers of flowers to the trusses? Please send a note Brian, and you other Viners, so that newer Vireya hybridizers will know where to look to get that desirable quality for their hybridizing work in the future. Do you have particular favorite Vireya species or hybrids Brian? Please send a note. "Laetare Vireyas"!

FROM: Dr. Arne Jensen April 1, 1983

Just a note this time, with a couple of names and a small monetary contribution.

Barbara Egerman, Albany, Oregon is doing a fine job with Vireyas. She has a large R. zoelleri in full bloom that is a beauty!

Also, I wonder if you have Tom Tatum of Portland on your list. He has been hospitalized for some weeks but is doing ok and has contributed much to my Vireya collection.

See you in Portland in May.

Sincerely, Arne

Dr. Arne Jensen
P. O. Box 986, Waldport, OR 97394 Latitude 44.2° N

Editor's Note: Thank you Arne. We will add Barbara's name to our Vireya Vine list. Tom Tatum has been on the list from the start.

Now I want you to write me a note about our rather quick conversation we had at the A.R.S. Convention in Portland. What I remember is that you said something about putting a truss of blooms from a Vireya hybrid seedling into the Oregon Coast's Chapter Show in late April. I think you said it was the "Best Truss in Show"--over all other rhododendron trusses entered in the Show. And, that it was raised from seed you got from Peter Schick.

Now here is why you must write a note. I think you said it had R. konori shaped flowers, of a like size, rich pink in color--and 28 flowers per truss. WOW! It is hard to believe! Are you serious? Write soon Arne.

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FROM: Barbara Crick April 2, 1983

Thank you for the Vireya Vine. I have about 6 large plants and numerous seedlings. If you have a copy of issue #1, could you send me one?

Also please add Mary Durnell of Seattle, Washington if she is not already on your list.

I won my first Vireya at a Seattle Rhododendron Society meeting when Dr. Sleumer spoke, for being the youngest member present.

Barbara Crick

Barbara Crick
2845-140th Ave. NE, Bellevue, WA 98005 Latitude 47.9° N

Editor's Note: Thank you for the note. Yes, I remember a few years ago when Dr. Sleumer spoke to the Seattle Rhododendron Society, A.R.S. Chapter. I believe Frank Doleshy brought in the Vireya plants that were given away.

Keep those seedlings going. We added Mary's name to our Vireya Vine list.

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FROM: John Rouse April 3, 1983

I was surprised at the size of "VV 3", I had not expected so many contributions nor as much interesting information. Thanks for your comments on my contribution to "VV 2"; with an Editor's insight, you suggested that Section Vireya x Section Choniastrum might well be a possible cross. Attempts here with Section Vireya excluding Subsection Pseudovireya have, to date, produced no seed but the cross R. retusum x R. ellipticum results in seed which was sown in January 1982. It germinated with a percentage germination of about 1% resulting in some 10 seedlings whose hybridity was confirmed and of which the most vigorous is now nearly 5 inches tall and doing fairly well. They look evergreen, unlike Section Vireya x Section Pentanthera seedlings which don't quite look to be truly evergreen or deciduous so that I am uncertain how to treat them.

After writing to you in January regarding pollen storage, I thought I would try some of my own old pollen. I emasculated R. lochae and applied R. javanicum, R. laetum, R. phaeopeplum and R. konori pollen which had been in store for 2½ to 3 years. By the size of the capsules, the pollen was viable except for that of R. konori, where the pistils abscised as was the case for all the unpollinated control pistils. When seed is obtained, I will check its germination and the resulting seedling vigour.

Compatibility experiments with Dr. Elizabeth Williams and Prof. Bruce Knox of the Plant Cell Biology Research Centre at the University of Melbourne, resulted in the pollination of R. kawakamii var flaviflorum x R. santapauiion Dec. 7, 1982. Two capsules of seed ripened and were sown March 5, 1983. The seed germinated in 21-23 days with the present percentage germination of about 20%. The seedlings, now ventilated, appear normal and with vigour similar to seed of R. kawakamii var. flaviflorum selfed, sown at the same time and which germinated in

13-14 days. If these seedlings develop, will they be the first recorded cross of R. kawakamii with any Rhododendron other than itself? The crosses mentioned in "VV 3", R. retusum x R. kawakamii var. flaviflorum and R. kawakamii var. flaviflorum x Kalmia latifolia, resulted in well formed seed none of which contained embryos. It looks as if "Nosucheanum II" has not come this time! Previous attempts at obtaining seed from the reciprocal cross R.santapauii x R. kawakamii var. flaviflorum, with the seed parent on loan from Dr. R. M. Withers, have so far resulted in no seed or seed with no embryos, however the next attempt may be successful.

Suggestions for additions to the Vireya Buffs are--Dr. David M. Churchill, Australia and Mr. Peter Phipps, Tasmania.

I look forward to receiving "VV 4". With best wishes,

Yours sincerely, John

P.S. Crosses within theAzalea Complex are hardly a topic for "VV" but you did introduce the subject yourself in "VV 3" so here goes--

1. Section Pentanthera x Section Tsutsusi
   I have one seedling of R. occidentale x R. indicum from seed sown in June 1981. So far it is evergreen. It has one flower bud on it!
2. Section Choniastrum x Section Pentanthera
   Seed of R. ellipticum x R. japonicum (Azalea) sown in June 1982 produced many partially chlorotic seedlings with great vigour. With age they are losing their chlorosis.
3. Section Pentanthera x Section Choniastrum
   Seed of R. occidentale x R. ellipticum was sown in June 1982. Two lots of seed were sown, one lot collected green 2 months early, the other lot ripe. Both lots germinated well and healthy seedlings have resulted.

P.P.S. 4-4-83 - The enclosed seed is so fresh that I haven't yet sowed it myself, but I expect I will later today. The pollinations were made Jan. 21, 1983.

(a) R. herzogii LS4 x R. pruinifolium - ARS 347/8-71
    The seed parent was collected by Lou Searle, the pollen parent came to me as seed in 1971 from the American Rhododendron Society, CW Georgia. Only about 10% of the above seed contains embryos.
(b) R. herzogii Selfed
(c) R. herzogii x R. lochae

Good luck with it, Bob.

Dr. John L. Rouse
House 8, Stonehaven Court
Toorak, Victoria 3142, Australia Latitude 37.7° S

Editor's Note: Thank you for another interesting contribution John. Keep that Section Vireya x Section Choniastrum (R. retusum x R. ellipticum) alive and growing, it is unique.

Your method of storing Vireya pollen is very helpful and 2½ to 3 year old pollen being still viable is quite interesting (see John's letter in V.V. #3).

You must tell us more about the "compatibility experiments" run by Dr. Williams and Prof. Knox at the University of Melbourne, "that resulted in the pollination of (R. kawakamii var. flaviflorum ♀ x R. santapauii)". By what secret incantation, chemical solvent, or neutralizer, or other such potion was this incompatibility overcome? Please write! With a germination rate of 20% it might be a successful cross.

We have added the two names you suggested to our mailing list.

I think that the descriptions of Inter-Section crossing attempts in Genus Rhododendron is very important from two separate viewpoints. Firstly, it helps to confirm--or deny--any classification systems being worked out by the Botanists. They might wish to know the results of such hybrid crossings--but they do not have access to the species or the time to attempt such things as keenly interested rhododendron horticulturists have. We can contribute to their botanical knowledge. Secondly, from a horticulturist's viewpoint, someone of us Vireya Buffs might just find a way to transmit the intensity and purity of Vireya colors to the more mundane hybrids of the temperate zone that most folks in Europe, North America, Australia, New Zealand and Japan plant in their landscapes at present.

In your P.S., #3 (R. occidentale ♀ x R. ellipticum)I note "good germination". I have a plant of R. ovatum that blooms freely. Looking at those trusses and at the color photographs of R. leptothrium and R. oxyphyllum in the Japanese published "Rhododendrons of Yunnan", it would seem to me that Section Choniastrum contains the modern day representatives of the early tropical, evergreen, proto-species that evolved--through complete or semi-deciduous adaptation and the coalesence of the axillary flower buds into a terminal flower bud--into the azalea species of today. I would, therefore, expect you to get the fine germination rates you reported.

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FROM: Peter Schick April 4, 1983

The seed is a cross of ((R. phaeopeplum x R. lochae) x R. leucogigas) x (67-469) Solenovireya, identical to Crutwell #1410, considered to be georgraphic form of R. goodenoughii.

I've wanted to send you a check for postage for a couple of months but my usual procrastinating habits delay until there is another reason for a letter.

You opened up a can of worms with the 'Vine', I've had some excellent comments regarding it. Met Dr. Withers March 12 at the luncheon meeting of the California Chapters in San Mateo. He had some excellent slides of (Vireya x Azalea) crosses, which clearly shows a method of determining if the cross was true. A 30 power magnifier will clearly show it.

Someday I will get around to getting an inventory completed. In the meantime enquiries are welcome. I have a lot of material in the selection stage.

Regards, Peter

Peter Schick
17455 Ocean Dr., Fort Bragg, CA 95437 Latitude 39.4° N

Editor's Note: Thanks, Peter, for the seed of a very interesting cross. What an inventory that should be when you get it done. It was nice seeing you again at the A.R.S. Convention in Portland. I wonder if we can plan on some sort of a meeting of Vireya Buffs at the next Western Regional Conference of the A.R.S. members from California, Oregon, Washington and British Columbia in California on the Monterey Peninsula. I believe it will be held November 5th and 6th, 1983 at the Monterey Holiday Inn. Write again soon.

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FROM: Leslie G. Slater April 5, 1983

In reference to your article in the R.S.F. (Rhododendron Species Foundation) April Newsletter: I am a member of R.S.F. and have 21 different Vireya rhododendrons in our greenhouse. I would appreciate receiving your publication, "Vireya Vine" and have enclosed a self addressed stamped envelope for your convenience.

Sincerely, L. G. Slater

Leslie G. Slater
P.O. Box 700, Quilcene, WA 98376 Latitude 47.5° N

Editor's Note: Your name is on the list for "Vireya Vine" #4. Have any of your 21 different Vireyas bloomed? Send me a list. The Vireya Vine exists because Vireya Buffs are sharing their successes and failures with others. Together, we will make growing and collecting them an enjoyable horticultural pursuit.

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FROM: Alan C. Leslie April 5, 1983

As I am sure you know this Society is the International Registration Authority for the genus Rhododendron. I have recently taken over the job of Registrar and have begun work on a new edition of the International Rhododendron Register. I am concerned to find on reading No. 3 of your 'Vireya Vine' that many of the cultivar names listed by J. Clyde Smith are not registered. Could I use your columns to appeal to all raisers of Vireya hybrids to register any new name they may coin. I notice that there are already several new Vireya hybrids with names that have previously been given to other Rhododendrons, as well as other plants whose names in some respect contravene the internationally agreed rules for naming cultivated plants, as laid down in the International Code of Nomenclature for Cultivated Plants (ICNCP). These regulations apply to selected clones of species as well.

It is clearly in everyones interest that the nomenclature of this group of Rhododendron should not become confused or muddled. It is particularly important now, as the interest in these species and hybrids is beginning to increase, that the correct procedure is known and operated by all involved. The Rhodo growers of subsequent generations will be grateful to us for not passing on legions of duplicated or muddled names, and as International Registration Authority we do our best to ensure consistency and stability.

If you have a new plant that you wish to name please obtain and complete a registration form and send it to the International Registrar at the address given above. The name will be checked and if it is accepted for registration a Certificate of International Registration will be returned to the registrant. A registration fee of £ 1. per name is charged to contribute towards administrative and postal expenses.

Anyone who has not registered the name of a plant already in circulation may still do so, although of course only acceptable names will be registered. In the common interest unacceptable names should be discarded and the plants renamed - a nuisance in the short term but of value to everyone eventually. The moral is always to check with the Registrar before disseminating a name or allowing it to appear in print.

If your plants are not to be omitted from the new Register the time to act is NOW!

Yours sincerely, Alan C. Leslie

Dr. A. C. Leslie, Registration Officer
for Director - The Royal Horticultural
Society's Garden, Wisley, Woking, Surrey Latitude 51.2 N

Editor's Note: Thank you for the concern that you will be able to publish all the named Vireya hybrids and named Vireya species forms in your new, upcoming issue of the International Rhodcdendron Register. I am sure all the VireyaVine hybridizers will either use the U.S., Australian or your fine Registry services to properly register their new named clones. Such is in line with the principle of sharing. I do hope Chris Brickell had the person in charge of the Glasshouses read "V.V. #3 as I expect a letter from him concerning the size and extent of Wisley's Vircya collection.

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FROM: R. E. Holttum April 7, 1983

Thank you for sending a copy of Vireya Vine no. 3. You sent this at the suggestion of John Rouse of Melbourne.

But pleasc do not send any more copies to me, as I am no longer able to take an active interest in these plants, and at the age of 87 have many other matters needing my attention (my principal study is ferns of the Malayan Region).

I did take an interest in the Vireya Rhododendrons when I was in Singapore and also raised some hybrids in the 1930's, but they were lost in the war.

So I have handed the Vireya Vine to the Curator, R.B.G. Kew, asking him to pass it on to the person in charge of the Vireya plants in the renovated Temperate House; there are quite a number of species and a few modern hybrids. I took John Rouse to see them when he called here last year.

I hope you will have some response from the man in the Temperate House. Good wishes from

yours sincerely, Eric Holttum

R. E. Holttum, c/o Royal Botanic Gardens
Kew, Richmond, Surrey, U.K. Latitude 51.4° N

Editor's Note: Thank you for the note Eric. I am changing the address as you suggested and I hope a reply will be forthcoming.

FROM: H. W. Lewis April 8, 1983

I am in receipt of the second and third issues of the Vireya Vine, and at this stage I must congratulate you Bob, and others whose interest and enthusiasm conceived and lauched the Vine.

Although I have been growing Vireyas for the last twelve or so years, and have had a certain amount of success, I feel that I have yet a lot to learn. Basically the problem consists of getting seedlings and small cuttings to keep moving, although I foliar feed them with fish emulsion every fortnight or so. It is the same problem that Peter Schick mentioned in the second issue of the Vine, and I would like to have the formula of the high phosphorous liquid fertilizer which he uses, and also the dosage and regimen (not the proprietary name of the fertilizer as it is probably not available under that name here). For some reason or other, some seedlings and cuttings go ahead well, whilst others remain stationary, and after twelve months or so, some just give up.

At present, in my potting mixes, I have been including Alfalfa hay finely chopped up (see A.R.S. Journal, Summer 1982); I have only just started to use it and it is too soon to come to any conclusion about any benefit, in addition, I have settled on which may be the correct amount to use.

If this is any assistance to anybody; my plants have been growing in filtered light outdoors during the last summer which has been one of the hottest on record, and with fairly severe water restrictions. The temperature reaching 109°F (43°C) on one day, with several others round the 100°F mark. I did not lose one single plant from the battering they received. I grow plants in both fern logs and in containers, with the latter the mixture must be coarse, otherwise I find that the roots will die.

Wishing your venture every success, I am,

Yours sincerely, H.W. Lewis

P.S. I have enclosed $10.00 U.S. to defray costs of postage and production of the Vine.

Mr. H. W. Lewis
7 Burroughs Rd., Balwyn, Victoria,
Australia 3103 Latitude 37.7° S

Editor's Note: Growing vireyas for twelve years automatically, Mr. Lewis, makes you a Vireya expert. I am sure Peter Schick will be glad to write about the high phosphorus liquid fertilizer he uses--and the method of use. Your comments about how some Vireya sorts grow well and how others remain stationary and dic has been mentioned so many times by others in conversations with me. It certainly is frustrating!

I am also very pleased to read that you are putting the chopped up alfalfa hay into your potting mixes. Please write again with more descriptions about how you are doing it and your results. Dr. August Kehr spoke about 1-Triacontanol (the active ingredient) in Sunday's program at the A.R.S. Portland meeting, briefly. He remarked that chemists in the U.S. had been able to concentrate and purify it and that "a little would go a long way" and that still nobody knew exactly how it worked--but it does stimulate growth--even in the absence of light.

Your comments on high temperatures--near 100°F (43°C)--not hurting your Vireyas parallels other comments I have heard. These Vireyas must have a "built-in" mechanism to decrease water needs during heat waves. The large "tuberous" roots some have spoke of? Photosynthesis downturn as temperatures elevate and humidity decreases? Someone of you "Viners" might have a suggestion out there.

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FROM: Tom Tatum April 6, 1983

Thanks very much for putting me on the Vireya Vine list right from the start. WOW! Has this thing ever took hold.

From now on you'll find me a lot more responsive. Last summer when you came by I was suffering from end stage renal disease (both kidneys quit). After a spell of dialysis and just getting barely around, finally got a kidney transplant. Wakes you right up!

Last summer I may have made a comment about Timber Press asking me to put together a book on Vireyas. Big but now really going at it, just about full time.

I don't want anybody helping me with things I can get out of a library, but outside that you know I need all the help and inputs I can get. Practical, interesting things about how they do in different areas, pictures, bits and pieces--you know. So I probably will be getting in touch with some of the people on the Vireya Vine list (as many as possible) over the next year or so.

Also of great interest now is anything to do with breeding. Especially with non-vireyas--something very interesting for speculation.

This book is the perfect project for someone who can't lift over 20 pounds for a long time!

My vireyas are all safe over at Dick Cavender's and looking much better. Will be adding to the list pretty soon.

By the way--change the label on that R. orbiculatum you got at my place last summer. That is R. suaveolens CW Mossman & Goheen, Mt. Kinabalu. Was getting dark and we had trouble reading the label.

Before I get through just a little note on hardiness. Winter of '81-'82--we left a few stray flats of Vireya and maddenii seedlings in an unheated greenhouse. Got to 14°F (-10°C) outside one night we know of. Now those flats were very dry since the area was neglected. Yet these small plants were still alive by end of winter and came right back with water. Will have another residence address before too long, but lets stick to the old one for current mailing.

Hope to see you at the Convention. And heres $10.00 toward the publication.

Best wishes, Tom Tatum

Tom Tatum
6450 SW Richey Lane, Portland, OR 97223 Latitude 45.3° N

Editor's Note: Thank you Tom for the letter. I hope your recovery will be complete. I am pleased to hear from you that you are continuing to work on the book about Vireya Rhododendrons. From a previous conversation with you I understand that it is to be published by Timber Press at Forest Grove, Oregon. I am sure all the Vireya Viners

will respond to your requests for assistance. Imagine, the first really modern book to bring Vireyas into their deserved prominance (out of the woodshed into the limelight). Marvelous!

Tom, thanks for the notes about seedlings of vireyas and maddeniis surviving--unwatered--in an unheated greenhouse (near Portland) while a typical Pacific Northwest cold spell occured. Our cold spells last from 4 to 8 days or so. The coldest morning is usually about the 3rd or 4th day. Tom says it got down to 14°F (-10°C) outside. The first night was probably 25°F, the second 18°F to 20°F, then 14°F, then back to 20°-25°F, etc. Our low temperatures are usually accompanied by a strong flow of cold, dry continental air from the interior. Winds 30 to 40 MPH out of the Northeast and relative humidity readings of 20%-15%. Straight chilling, dessication that burns leaves and causes bark split.

Could someone of you Viners out there explain why Tom's "dried up" vireya and maddenii seedlings could survive? I remember reading once about a "great chill" in the Central Highlands of Papua, New Guinea that occured 30 or so years ago and frosted out the vegetable crops of the natives. How cold was it? Was it a "dry cold"? Should I withold water from my Vireyas as cold weather occurs to prevent damage to them? Someplace here, there might be a special key about the culture of Vireyas that has not been properly addressed. I am sure our Australian "Viners" have just gone through a trying winter from their letters. Write about your personal experiences with Vireyas and frost. Perhaps we can determine if this tropical plant has an unusual characteristic. Thank you for your contribution to the Vireya Vine Tom.

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FROM: Graham Snell — April 12, 1983

Many thanks for Issue No. 3, the contents of which has been read by several friends as well as myself. I have no doubt that you will gain more "Viners" in consequence. The new format with the small print is fine for me, and seems especially suitable for an overseas recipiant.

I am enclosing a Bank Cheque for $50.00 U.S. to cover costs of the Vireya Vine for myself and the following "Viners" also: Mr. G. Langdon, Mr. M. Baldwin, Mr. F. Waghorn and Mr. S. Begg.

For the past few years I have been in charge of the "Seed Bank" for the Australian Rhododendron Society (I am now retiring from that position), and in consequence had contact with several overseas enthusiasts. You may like to add the following to your list of recipiants: Brother Vincent of North Wales and Mrs. A. McLeod of Natal, South Africa. You might also like to send a copy to the following: Mr. Ivan Menzies of Australia.

Best wishes for the continued expansion of the Vireya Vine.

Your sincerely, Graham L.S. Snell

Graham L.S. Snell
970 Mountain Highway, Boronia,
Victoria, Australia, 3155 — Latitude 37.4° S

Editor's Note: Graham, thank you for your kind words about the Vireya Vine and for the cost support from the five of you. I have added the new names you suggested to the "Vine's" mailing list.

You note that you were in charge of the "Seed Bank" for the Australian Rhododendron Society for some time. Perhaps you might be able--from your knowledge--to help respond to a question that is raised in the U.S.

Who introduced seeds of Vireya Species since 1948? And, what species were actually germinated and grown, to the best of your knowledge. We, in the U.S., ask each other Vireya Buff where did you get such and such a species? We are guessing now that some species were introduced many times and that other species may have been found only once or twice--R. hellwigii, R. leucogigas, as possible examples. Have we seen the natural variation within these species as yet under horticultural conditions?

Such a list, even if partially complete, would certainly be an invaluable aid to future Vireya Buffs as I do not believe one is in existance for all to use. Maybe some of you others might also have such lists. Also, plants of species--or cuttings--that survived could be included.

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FROM: Jane Gates — April 13, 1983

Pete Sullivan tells us that you are involved in the publication of a new periodical, "Vireya Vine", and that it's very important for all of us interested in rhododendrons.

We'd like to subscribe, please add our name to your list and send information as to cost, back issues, etc.

Thank you for your assistance.

Jane Gates, Librarian

Jane Gates, Librarian
Helen Crocker Russell Library
Strybing Arboretum Society, 9th Ave. at
Lincoln Way, San Francisco, CA 94122 — Latitude 37.45° N

Editor's Note: Jane, we "Vireya Viners" are certainly privileged that Strybing Arboretum's Helen Crocker Russell Library would wish to subscribe to the Vireya Vine. We hope it will become an important information source for other people.

At the moment $10.00 per year worldwide seems sufficient--unless the number of letters greatly increase. Photocopies of Vireya Vine #1 are 50 cents, including postage each, Vireya Vine #2 are 80 cents, and Vireya Vine #3 are $1.15 each, including postage. Strybing Arboretum's Library is now on our mailing list.

> NOTE: The above costs for overseas would increase to 75 cents for Issue #1, $1.40 for Issue #2, and $2.15 for Issue #3, all including postage-Air Mail Outside the Continental U.S. would be 55 cents for Issue #1, 85 cents for Issue #2 and $1.35 for Issue #3. All funds U.S.

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FROM: Mark A.E. Nixon — April 15, 1983

I see from this month's copy of the RSF Newsletter that you make available a publication called "Vireya Vine".

I should be very interested to subscribe to this, if possible. Perhaps you would let me know the cost of subscription?

We both enjoyed your talk on new species for hybridiztion at Sea Tac in October (2nd Western Regional Rhododendron Conference of the A.R.S.). Most stimulating.

Best wishes and many thanks, Dr. Mark A.E. Nixon

Dr. Mark A. E. Nixon
Box 1, Garry Oaks Dr., R.R. 2
Nanouse Bay, B.C. V0R 2R0, Canada Latitude 49.2° N

Editor's Note: Mark, your name is on the list for Vireya Vine #4. As you see $10.00 U.S. should be sufficient this first year. How many Vireyas do you raise? Have you grown Vireya seeds?

Many places on Vancouver Island near the Strait of Georgia enjoy a mild climate. I hope you have such a location.

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FROM: Iris Gaddis April 14, 1983

I am grateful to whoever sent in my name to be a part of this great endeavor. I have read and reread the two issues of the Vireya Vine and am quite eager to get back to growing these lovely plants.

As a result of rather incapacitating injuries in an automobile accident I felt I should give into someone else's care most of my little seedlings. Those I still have are:

(R. koneri x R. laetum) x (R. aurigeranum x R. laetum x 'Dr. Sleumer')
(R. laetum x R. phaeopeplum)
(R. aurigeranum x 'Dr. Sleumer') x R. leucogigas F^2 Selfed
(R. koneri x R. laetum) x (R. aurigeranum x 'Dr. Sleumer')
R. lochae
R. brooksanum
R. wrightianum cyclopense

The wrightianum cyclopense is the only one that has bloomed for me. After it started it never stopped. Sometimes it is just covered with blossoms. Right now it has 3 buds that seem almost ready to open. It has been on the west deck where it is under a canopy out of direct sun, but high light intensity. It is quite windy where it is. It is about 12" tall, quite full and is in a 6" plastic pot.

I am now quite involved in growing ferns, which I start from spores, but I'm sure I can find time and energy to take on the growing of Vireyas again.

I look forward to more issues of the Vireya Vine and am enclosing a check to help cover postage.

Sincerely, Iris E. Gaddis

Iris E. Gaddis, 52 Lakeview Ave.
Piedmont, CA 94611 Latitude 37.4° N

Editor's Note: Did you raise your Vireyas from seed, Iris, or did you start with rooted cuttings. Your comment about the nearly continuous blooming of R. wrightianum var. cyclopense is interesting. How many months has it been in bloom? There is nothing like the therapy of watching that first bloom bud form on a plant you have raised yourself. Write again soon, Iris!

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FROM: Dr. R. M. Withers April 15, 1983

Many thanks indeed for including me on your mailing list and sending me issues No. 2 & 3 of Vireya Vine. I am grateful to Peter Schick for putting my name on the list and sending me a photocopy of the first issue, but I do not quite agree with Peter's comment in his last letter to me that he put my name on the list because he was sure I needed more correspondents. In fact correspondents come without looking for them, and I am finding it is harder as each year goes by, to find enough time to keep up with all my correspondence.

The concept of having a Vireya Vine is a wonderful idea and you are to be congratulated for your efforts. The contents of the first three issues have made excellent reading for those enthusiasts interested in growing Vireya Rhododendrons, and the Vine will certainly bring closer together all these enthusiasts, help solve some of their problems and result in a much greater success in cultivation.

My idea of the title 'Vireya Vine' is that of a network of growers of Vireya Rhododendrons, not as my good friend Canon Norman Cruttwell suggests, a 'Vireya Rhododendron growing as a Vine'.

I have been growing Vireyas since 1961 and I think in that time have grown almost every Vireya species that has been introduced into cultivation in Australia and America from Papua, New Guinea, together with some of the introduced species, from Borneo, Sumatra and Malaya. However, a time came when I could not cope with the quantity I was growing, and as a result had to be selective. Nowadays I only grow those species of special interest, and a selection of hybrids the majority of which are as yet unflowered. The remainder of my collection I have passed over to my friend Graham Snell, who has a Vireya Rhododendron Nursery and far more space at his disposal than I.

I am enclosing a couple of issues of the Australian Rhododendron Society publication, 'The Rhododendron', containing articles on Vireyas which you may like to have. Also enclosed is my cheque for $10.00 towards the cost of publication. I should mention that for many years I have looked after imports and exports of plant material for The Australian Rhododendron Society, and to date I have sent 13 collections of Vireya cuttings to growers of Vireya Rhododendrons in America and to Botanical Institutions in America, and in 4 visits to your country in the past 5 years have visited a number of your Vireya correspondents.

Do many of your correspondents receive the Rhododendron and Camellia Yearbook of the R.H.S. in London? For the next issue which will be published at the end of the year, I have been asked to write an article on "Environment of Vireya Rhododendrons in nature", in the hope that readers may try to copy growing conditions as found in the wild, and improve the cultivation of Vireyas in their own gardens. If you do not receive the Yearbook, I will be happy to send you a copy of the article after it is published. The article is based on my experiences in Papua, New Guinea in 1981 with help from John Womersley and Canon Cruttwell.

There are a few points arising from the first three issues of Vireya Vine that I would like to comment on.

1. After a lot of failures, Dr. John Rouse has finally succeeded in making a cross on his plant of R. kawakamii var. flaviflorum with pollen I supplied him of R. santapauii.

2. R. lochae x R. christianae results in a very floriferous hybrid but Brian Clancy has found that when it is selfed the F2 flowers are far superior to the Parent, being more than twice as big. Two selected clones of the F2 are R. 'Overflow' and 'Arthur's Choice'.
3. Peter Schick in his letter mentions that I informed him that R. gardenia is a geographical form of R. leucogigas. This is not quite correct. In 1966 Lyn Craven was collecting on Mount Hunstein in Papua, New Guinea when he found a small seedling growing as an epiphyte on a fallen tree. He did not see the parent. I flowered this introduction for the first and only time in 1974. My plant is still alive but struggling. Dr. John Rouse had a plant which grew much larger than mine, and flowered for the first time last year, then promptly died. In 1974 I sent a leaf and floret to Dr. Sleumer and he suggested it was typical of R. konori. The perfume of the enormous white flowers (slide enclosed) was typical of Gardenia thumbergia from South Africa and we thought that it may be R. gardenia. However, Lyn Craven, John Womersley and I now consider it to be the New Guinea form of R. leucogigas although Dr. Rouse still has doubts and prefers to give it the name of R. gardenia affin. to distinguish it as a distinct clone. In 1974 I sent seed from my plant, and Dr. Rouse sent seed of hybrids he made using it as the pollen parent, to everyone we knew of around the world who was interested in Vireyas. Many of those seedlings should have now flowered. I do not think that true R. gardenia has been introduced into cultivation, so that any reference to R. gardenia in cultivated plants should be altered to read R. leucogigas (Mt. Hunstein form) which is by far the finest Vireya species I have seen, but certainly the hardest to grow and propagate. It will be ideal to grow by tissue culture when I have time to arrange it.

The best Vireya hybrid I have flowered is a cross between R. lochae and the Mt. Hunstein form of R. leucogigas (slide enclosed). The truss has numerous large florets with a beautiful reddish-pink colour. Once again it will be difficult to get propagating material from it quickly. This hybrid also illustrates another point, which is the value of R. lochae as a parent.

Peter Schick in his letter also writes that R. multinervium is another form of R. konori. There is actually no comparison between the two species. R. multinervium has quite distinct leaves and long tubular flowers similar to those in the subsection Solenovireya.

I would like to comment on Peter's remarks regarding Vireya species growing in the wild as epiphytes. In the wild Vireyas are found growing as terrestrial shrubs or as epiphytes. Many species will grow in either situation, but it is true that although all species found growing as epiphytes have been found growing as terrestrial plants, the reverse is not the case. A number of species found growing as terrestrial plants have never been found growing as epiphytes. It would appear that Vireyas prefer to grow as terrestrial plants, but when growing in dense forests in competition with other trees, they grow as epiphytes in an attempt to obtain more light and better drainage.

One point that has not been mentioned in any of the letters is the fact that some Vireya species may be found in the wild with both red and yellow variants. I realised this when I was in Papua, New Guinea with the Australian Rhododendron Society Tour in 1981. At Laiagam we were to see R. commonae plants with bright red flowers, and other plants with bright yellow flowers. A second species with red and yellow forms was one collected by Paul Kores and close to R. hooglandii. R. phaeochitum is another species with plants having red flowers or yellow flowers. There may be others.

Donald Paden writes about the good yellow species from Wau Ecology Institute. Yes it is R. aurigeranum. We saw a number of large plants growing happily in the garden of the Institute on our visit in 1981. The flowers were a beautiful buttercup yellow. A couple of days later we saw the type of R. aurigeranum growing at Zenag. This had bicolour flowers and looked like a small version of R. zoelleri.

Enough for now. I've written too much. Keep up the good work and best wishes for the future of Vireya Vine.

Yours sincerely, Bob Withers

Dr. R.M. Withers, 10 Urquhart St.
Hawthorn, Victoria 3122, Australia

Latitude 37° S approximately

Editor's Note: Thank you, Bob, for your kind comments about the Vireya Vine, and the two copies of "The Rhododendron". You remark "Nowadays I only grow those species of special interest". This always raises my level of curiosity. Have you acquired a liking of certain species because some are more floriferous than others? Or because the cultural needs of some are "easier to satisfy" than others?

Your article to appear in the R.H.S. Rhododendron and Camellia Yearbook this year will be eagerly looked forward to. The title "Enviornment of Vireya Rhododendrons in Nature" is really one of the things the Vireya Vine is all about. The better we understand the Vireyas' needs, the easier it will be to culture them to their fullest possibilities.

On your special comments:
#1 is attended to in John Rouse's letters in this issue.
#2 is especially interesting. (R. lochae x R. christianae) F2. You say the flowers are twice as big as the parent. Do you mean that the flowers were--in the primary hybrid--only as big as the flowers of the smaller flowered parent and that in the F2 the flowers of some of the progeny were as big as the flowers of the larger flowered parent? Or do you mean the flowers of the F2 were bigger than either original parent? Do F2 Hybrid seedlings frequently show this flower increase characteristic? What gene controls it? Should hybridizers utilize this more frequently?
#3-R. gardenia, affinity-or-R. leucogigas. Was the seed you sent out in 1974 sent as R. gardenia, affin. or some other name? Have you ever received word that anyone grew and flowered that seed? What about it "Viners"? It sure would be interesting to hear about success with that seed from Dr. Withers.

Oh my, "Viners", that color slide of (R. lochae x R. leucogigas) Mt. Hunstein form, shows a superb pink hybrid Vireya. Bob, does it have fragrance?

Sometime, I hope you or someone else, would jot down an easy way to tell R. leucogigas from R. konori, from R. phaeopeplum and from R. superbum--both in and out of flower.

I would certainly like to share with the "Viners", a list of those Vireyas that, to date, have always been found as epiphytes. Maybe you will have it in your R.H.S. article.

And Bob, thank you for the comments about some Vireya species being found in the wild with both bright red and

bright yellow flowered variants. Paul Kores and Pieter van Royen mention this in their new book, "The Ericaceae of the High Mountains of New Guinea". I wonder though, if the pollinator--a bird?-- would pollinate the yellow variant or would it die out "never reproducing its kind" while the "normal" red flowers produce seeds by the millions? Have any of these yellow forms come into cultivation? Have hybridizers used them?

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FROM: R. L. Frasier — April 15, 1983

I just learned from Bill Moynier of Los Angeles that you were publishing a sort of news letter dealing with the Vireyas. I have been growing them for over 2 years and have been able to get very little information on them. I would like to buy a subscription from you and any back issues you might still have.

Please let me know what I owe you and send me what you've got--I feel like the only person in Texas who grows these damn things, not having anybody to exchange info with.

Does anybody ever go collecting these things?

Thanks for your time, R. L. (Bob) Frasier

R. L. Frasier, W. 34th St.
Austin, TX 78703 — Latitude 30.15° N

Editor's Note: Thank you, Bob, for your note. Yes, we have a little "Vireya Vine" going and your name is on the mailing list. Even closer to you--mileagewise--are John Swisher and Hugh Caldwell over in Florida. The purpose of the "Vireya Vine" is to bring all of us Vireya collectors closer together and share our successes and failures. Don Paden up in Urbana, Illinois can give you some help too. Their addresses are listed in the previous "Vines". With your nice warm climate, I prefer to refer to you not as "the only person in Texas who grows these damn things", but as the first pioneer Vireya Rhododendron horticulturist in the Lone Star State. Write and tell us of your growing and flowering successes.

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FROM: Richard Pearson — April 24, 1983

Thanks for sending me Vireya Vine. I hope that I will be able to participate in exchanges of plants and information in the future. My permanent address remains: 1890 West 17th Ave., Vancouver V6J 2M9, BC Canada.

Sincerely, Richard Pearson (Visiting Prof.)

Richard Pearson — Latitude 49.16° N

Editor's Note: Thank you for the note, Richard and I shall look forward to your comments about growing Vireyas in Vancouver.

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FROM: Norman Cruttwell — April 25, 1983

Since receiving your greatly enlarged (in content) though reduced (in printing) March issue of 'Vitis vireyifera' I have been meaning to write back in answer to your comments and requests on my first letter. First let me congratulate you on how your vine is growing, you must have the green fingers. I see so many names of people I know on the growing list. If the print last time was a bit microscopic I can't think what it will be next time! I'll need a microscope to read it. But it's certainly packed with interesting information. What a galaxy of Rhododendron experts you now have. The vine is indeed bearing fruit. I do hope you don't have to prune it.

Anyway here go some answers to your queries. Very vague I'm afraid.

Climate. We are about 6°S of the equator and therefore in the equatorial tropics. But the centre of the Park is 7500 ft. (2250m) above sea level. We have not taken any weather observations (as no one is living up there yet). But I would say that the maximum day temperatures would be in the 80's F (27° C) and night temperatures in the 50's (10° C). However, in June, July and August these could drop into the 40's (4½° C) and sometimes even into the 30's (0° C), perhaps occasionally freezing. This is a "guesstimate".

Rainfall at Goroka is about 80 inches (2032mm) average but up there would be considerably higher (perhaps 120? inches) (3048mm). The area is often enveloped in cloud at night and early morning and the night humidity must often be 100%.

The basic soil is a heavy yellow clay, sometimes admixed with fine sand or gravel, over igneous dark granitic type rock, (with some mica and occasional veins of quartz). Humus stains it down to about 1 ft. and it is completely lime free and probably acidic. On the top is a layer of leafmould and decaying moss, in many places covered by a cushion of living mosses in which orchids and Lycopodiums wander and in which the seedling Rhododendrons root. When they are older or on exposed banks their roots enter shallowly but widely into the soil.

In the forest many of the Rhododendrons are epiphytes and have swollen ligno-tuberous roots. This enables them to survive on almost nothing and attain heights of 10 to 15 ft.

Yes we certainly do need more assistance. The funds for the completion and upgrading of the road are quite inadequate. I also need to build a house up there so that I can be on the spot to guard and care for the plants instead of wasting time and money having to commute up there nearly every day from Goroka.

I continue to explore the Park and find new plants almost every day, most of them orchids, in which the area is extremely rich. We now have an orchid house, in which I shall also grow the smaller epiphytic Rhododendrons.

Recently I went to the Enga Province where I saw epiphytic R. blackii in gorgeous crimson bloom 50 ft. above my head. In a thigh-deep swamp, on peaty islands at 8500 ft. we found R. commonae in a range of colours from the normal crimson red through shades of pink and salmon to citron yellow and cream. I collected both of these for the Park.

Finally for your interest here is a list of the native species we have found (to date) within the confines of Mt. Gahavisuka Provincial Park (c. 200 acres). This excludes all planted specimens from outside the Park.

R. culminicolum
R. dielsianum
R. herzogii
R. inconspicuum
R. Macregoriae (yellow thru orange to scarlet)
R. multinervium
R. nummatum
R. phaeochitum (pink var)
R. rarum
R. scabriaibracteum
R. superbum (white and pink forms)
R. ? yelliottii
R. zoelleri

and 6 either new species or hybrids still to be identified.

Yours sincerely, Norman Cruttwell

The Rev. Canon Norman Cruttwell
Curator, Mt. Gahavisuka Botanical
Garden, P.O. Box 961, Goroka, E.H.P.
Papua, New Guinea Latitude 6° S

itor's Note: What a marvelously informative letter, Norman. I thank you on behalf of the other "Viners". These tes of yours about temperature, rainfall, humidity, clouds, soils and leafmoulds and living mosses are just the rt of things that help us Vireya Buffs culture our cherished Vireyas that much better. And the notes are for Mt. havisuka Botanical Garden at 7500 feet (2250 meters) altitude.

Why does the June, July, August period seem to have the low temperatures? I had been told that there were two lder periods a year. If you have only one period a year that might explain why many of my plants--as the winter ld, here, cools my plastic house--seem to enter a typical broadleaf evergreen dormancy state. I would like to ow more about this. Does your nighttime cloud cover dissapear during the cool months of June, July and August?

Your notes describe R. blackii as an epiphyte 50 feet up and describe R. commonae "on peaty islands". Both ses indicate a very well drained and aireated root zone--but with moisture present at all times. Interesting bout the many color shades of R. commonae.

Do you think that those swollen ligno-tuberous roots you mentioned are special adaptations by the species to tore water? Bob Withers said some species may be epiphytes only. Do you think it is those species only that ive this special adaptation ability?

At the Park you record as being indiginous, 13 species, several with differing color forms and 6 either new pecies or hybrids. Wow, all on just 200 acres. I certainly hope that your government will grant more aid to reserve them as well as help from interested people. Thank you--and please write again.

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ROM: Peter Cox April 27, 1983

I am delighted with your success with the Vireya Vine. $10.00 enclosed to help expenses. I would be pleased o receive a copy of the first issue if possible. You certainly seem to have got all the top names in the Vireya orld involved.

While I see a great future for Vireyas in countries where they can be grown out of doors, I see no spectacular uture for them here. From my experience, they do not make good house plants, not being able to open their flower uds satisfactorily and soon suffer from being in a house for more than a week or two. Maddeniis do better and in y opinion offer more to the general gardening public than Vireyas. Not that I do not enjoy growing the latter nd their bright colored flowers.

The failure to cross R. kawakamii and R. santapauii (which I discovered in N.E. India) with other Vireyas is of pecial interest to me. Dr. George Argent of Edinburgh is working on the classification of Vireyas and is beginning to doubt if R. kawakamii is a Vireya at all. Can any Mainland (including Taiwan) so called Vireyas be crossed with Vireyas proper? Maybe the old Vaccinioides Series should be retained as a Section on its own. With best wishes.

Yours sincerely, Peter

Peter A. Cox, Glendoick
Perth, PH2 7NS, Scotland Latitude 56.24° N

Editor's Note: Peter, an interesting letter. John Rouse may be the first one to successfully cross R. kawakamii with "any other Vireya" that is if R. santapauii is finally decided upon as being a Vireya. Still though, I have not yet read or heard any rumor about R. kawakamii being crossed with a "common Vireya". This is a very interesting subject for speculation. Any ideas you "Viners" out there? Write me a note!

Now about Vireyas as houseplants. That darn Brian Clancy at 37°S latitude (roughly Melbourne's area) has a "different one in every week". I had been telling newer Vireya Buffs to treat them indoors like we do African Violets--set them on a tray filled with small gravels or crushed rock. And keep the water level up in the saucer or tray--over the gravel--so the humidity will remain high near the plant. Norman Cruttwell's letter seems to point out a liking for high humidity. Peter, at your latitude, 56°N, do you give your Vireyas supplemental winter lighting to increase the winter day length to about 12 hours? It might help. What say "Viners" how photosensitive (day length sensitive) are these tropical plants?

Pleased to hear that Dr. George Argent is working on Vireya Classification. Heaven knows, that Subsection Euvireya needs considerable clarification. Maybe the question you closed with is correct: "maybe the old Vaccinioides Series should be maintained as a section on its own". I will be watching. Are you the farthest North (Latitude 56.24° N) Vireya grower? What Vireyas grow best for you?

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FROM: Fred Renich April 27, 1983

Thanks for the two copies of the Vireya Vine. What a great publication on a great subject--Vireyas.

Enclosed is a check for $5.00 to help costs. I have a new address.

Sincerely, Fred Renich

Fred Renich, 390 Foothill Dr.
Fillmore, CA 93015 Latitude 34.24° N

Editor's Note: Thanks, Fred. Write a note soon about your Vireya experiences up there near the Sespe Condor Sanctuary.

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FROM: Bill Jenkins April 29, 1983

Your Vireya Vine is the greatest thing that has happened to vireyas since Dr. Sleumer. Here is a check to defray postage. Also, two of my friends would like to get on your mailing list: William Paylen, Los Angeles, California and Richard Lynch, Rancho Palos Verdes, California.

Thanks, Bill Jenkins

Bill Jenkins, 12311 Texas Ave.
Los Angeles, CA 90025 Latitude 34.1° N

Editor's Note: Thanks for the nice comment about the Vireya Vine. I notice in the Southern California Chapter A.R.S. newsletter you sent that your group had a Vireya Sale at the March meeting--proves their rising importance. We added William Paylen and Richard Lynch to our mailing list.

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FROM: Pat Halligan — April 30, 1983

Lucie Sorensen of Bovee's suggested that I contact you for possible sources of R. saxifragoides. I thought it might be productive to hybridize it with some of the lankier vireyas. Do you know where I could obtain this species or its pollen? Do you know of any experiences with this species as a parent?

Thank you for your help!

Sincerely, Pat

Pat Halligan, 5837 W Useless Bay Ave.
Langley, WA 98260 — Latitude 48° N

Editor's Note: Well "Viners" I cannot guess where to tell Pat Halligan to write for pollen of R. saxifragoides. Can any of you respond? I have a small seedling from Dr. Frank Mossman's pollination. I believe he brought back pollen from his trip to New Guinea a year and a half ago with the Australian tour. The seedling we bought at the Portland Convention is labeled[R. lochae x R. saxifragoides]. It is growing--about 2" tall--and looks healthy.

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FROM: Allan Anderson — May 3, 1983

My wife and I grow a small collection of vireya species and hybrids in northern New Jersey about 25 miles northwest of New York City. They spend the winter in an attached greenhouse (night temperature 55°F) that they share with some orchids and a lot of other rhododendron seedlings and azalea cuttings. They are moved outside under partial shade in the summer. A few are brought indoors in front of south facing windows in winter where they bloom at random times during the winter.

We have noticed that plants rarely form flower buds in the greenhouse. Is it possible that vireyas are not (different to day length and that extended lights over seedlings on the other side of the greenhouse inhibit bud formation? Most flower buds occur in the fall after a summer outside and after a period of normal light and dark periods.

Summer heat in the New York area seems to be hard on vireyas in pots. We have lost most of our small-leafed varieties to phytophera such as R. multicolor, R. aequabile and R. pauciflorum. The large leaf varieties are more resistant. An occasional spraying with Truban seems to help.

We are delighted to be on your Vireya Vine list and enclose a check to help with mailing costs.

I hope that anyone with experience about day length and bud initiation will respond in future issues.

Best regards, Allan Anderson

Allan Anderson, 220 Mulberry Way
Franklin Lakes, N.J. 07417 — Latitude 40.55° N

Editor's Note: It is interesting to note in your letter that you grow your Vireyas in an attached greenhouse they share with orchids. I note you keep the greenhouse at 55°F (13°C) at night. Also, I note that you keep larger plants indoors in the winter in front of South facing windows where they bloom (other "Viners" have problems indoors, what is your secret?) at random times throughout the winter.

Your next comments about day length certainly merits a lot of letters from other "Viners" out there. Your question is, rephrased, "are Vireyas, growing at 40°N to 60°N latitude inhibited in the formation of flower buds in the Summer, because of the much longer day length"? The reasoning you use is because as the fall equinox nears with its 12 hour day--12 hour night periods you observe maximum flower bud formation. I think that that is also the observation of all of us here in the Pacific Northwest, U.S.A. who grow Vireyas.

Some research I did a year ago would indicate that the Vireyas' homelands have a yearly cycle of daylight varying in 3 month intervals from 12 hours of daylight to about 10½ hours of daylight — 3 3 3 3 — 12 hours / 10½ hours would suspect if this is so, then extended daylight (over 12 hours per day)would encourage vegetative growth--not flower bud formation. Well, now that I have stepped out on a limb, what do you other "Viners"suggest is the problem Allan has noted.

Your comments about losing the small-leafed species R. multicolor, R. aequabile, and R. pauciflorum to phytophora is equally interesting. Dr. Linderman, U.S.D.A. Research Station at Corvallis, Oregon has just recently identified a new fungus--Phytophora Syringae--that has been isolated from rhododendrons exhibiting "root rot" symptoms. It is serious, and no fungicides have yet been identified as usable for control of Phytophora Syringae. Could this be the cause of Allan's problem? Have any of you "Viners" any solutions for "root rots"--mixes, proceedures, fungicides?

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FROM: Bill Moynier — May 12, 1983

I enjoyed my visit to your nursery in January and was impressed with the vigor and general good health of your Vireyas. Am also thoroughly enjoying reading the Vireya Vine. Thanks to you and Marge for this labor of love. Enclosed is a check for $10.00 to cover mailing costs for awhile.

Another labor of love was the list of named vireyas computed by J. Clyde Smith, in your Issue #3. It is badly needed and should be helpful to many of us. The following is submitted to correct a few errors I spotted in going over the list.

1. 'Agnes' is a Pete Sullivan hybrid (I had nothing to do with it)
2. 'Aravir' should be Sullivan/Moynier (Pete made the cross; I raised the plant from a small seedling and named it)
3. 'Calaver' should be 'Calavar' (also note 2 applies)
4. 'Carmel' (same as #1)
5. 'Clipsie' (same as #2)
6. 'Ioane'--this is the name Pete Sullivan originally gave the plant (Polynesian for 'John'). When I tried to register the plant, I was told the name was too close to an already named clone 'Ione'. I therefore picked an alternate name and registered it as 'Belisar'(included in Mr. Smith's list). So 'Ioane' should

be deleted.
7. 'Moonwood' (same as #2)
8. 'Santa Lucia' is a Pete Sullivan hybrid: 'Kurt Adler' x R. leucogigas (and a beauty too!)
9. 'Sebastian' - another Pete Sullivan named plant. When I tried to register it, found that name had already been used. We recently registered it as 'Cyprian'. So delete 'Sebastian' from the list
10. 'Shasta' (same as 2) also is the same cross as 'Aravir', 'Moonwood' and 'Agnes' (a really outstanding cross!)

A general question for your other readers: Have you noticed significant color variations at various bloomings of the same plant? I have had several cases of this as follows: 'Felinda' (same cross as 'Santa Lucia') is sometimes almost pure white, sometimes a rich pink; and R. konori x R. laetum first bloomed as a good yellow-gold, the last two bloomings it has been a peachy orange color; even my 'Dr. H. Sleumer' bloomed (one truss) almost pure white this winter whereas normally it is a good pink-cream bi-color. Pete Sullivan also commented that his 'Jeanne Baptiste' which normally blooms almost pure white was a rich pink this winter (my 'Jeanne Baptiste' has bloomed pure white the two times it has bloomed thus far).

Keep up the good work and thanks for your efforts.

Bill Moynier

Bill Moynier, 2701 Malcolm Ave.
Los Angeles, CA 90064 Latitude 37.3° N

Editor's Note: I am sure, Bill, that all "Viners" will be pleased to make the corrections to their named Vireya hybrids lists. We all thank you for your notes. Hope Dr. Alan C. Leslie, the R.H.S.'s Registration Officer picks up these changes and corrections.

Now, your other question is, "Have you noticed significant color variations at various bloomings of the same plant"? What would cause the changes you noted. Temperature? Humidity? Water shortages? Day length? Available fertilizing compounds? What?

We notice after a mild winter (in Western Washington), as this one was, that among our 'outdoor rhododendrons' R. augustinii was a distinct lighter "blue" in color and many pinks and red hybrids seemed lighter. Could it be that below average temperatures trigger a mechanism that makes "more anthocyanin pigments to be produced than normal? Just a guess by me. What say you "Viners" out there? What about your observations?

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FROM: John L. Rouse May 15, 1983

The enclosed seed of (R. zoelleri x R. leucogigas) F2 Selfed ripened the other day and I thought you might like to try it. The R. leucogigas component of this F2 is what we used to call R. gardinia aff. and looked like a very large R. konori . If all goes well some magnificent hybrids should result.

I did not have much success with the seed of R. herzogii x R. prunifolium. Only one chlorotic seedling appeared and I do not expect it to survive. At this late stage it is unlikely that any more of the seed will germinate. The two controls, R. herzogii ⓧ and R. herzogii x R. lochae germinated well. How did your seed fare?

Yours sincerely, John

Dr. J. L. Rouse, House 8, Stonehaven
Court, Toorak, Victoria 3142, Australia Latitude 37.7° S

Editor's Note: Thank you for the seed John, it is planted. What an interesting thing--an F2 cross of R. leucogigas x R. zoelleri.

The second part of your note is referring to (Section Vireya x Section Pentathera) crosses. Your new one (R. herzogii x R. prunifolium). The seed you sent me has had the following results:
A. R. herzogii ⓧ - slow germination
B. (R. herzogii x R. lochae) - good germination
C. (R. herzogii x R. prunifolium) - nothing germinated as yet

I hope you pursue this further, John. Could you try using similar flower shapes on a different (Section x Section) cross? May I suggest (Section Vireya x Section Rhododendron) especially (R. cinnabarinum x tubular flowered, reddish-colored Vireyas). I guess I mean to suggest to attempt crosses between Sections based on the assumed pollinator vector. Among other reasons would probably be that the styles would probably be more nearly the same length, due to adaptation to the vector. Write soon.

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FROM: Clarice Clark May 21, 1983

I understand you can direct me to a publication called "Vireya Vine". I am interested in subscribing and learning more about Vireya rhododendrons. Would you please send information to me?

Thank you, Clarice Clark

Clarice Clark, 901-16th St. SW
Puyallup, WA 98371 Latitude 47.12° N

Editor's Note: Your name has been added to the mailing list. The amounts are listed elsewhere in this issue of the Vireya Vine. This "Vireya Vine", like the IPPS, the rule is simple. Write me letters and share your Vireya growing experiences--your successes and your failures and your speculations. That is what horticulture of these new Vireyas is all about--trial, error and speculation. It's fun.

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FROM: Graham Smith May 23, 1983

Very many thanks for the surprise arrival of 'Vireya Vine' Issue 3. What a lot of work has gone in to get it off the ground, but now up and climbing vigorously I hope the 'Vine' is here to stay.

The history of Vireya cultivation at the Pukeiti Rhododendron Trust goes back about twenty years when John Womersley sent some material direct from Papua, New Guinea. Unfortunately the time and expertise were not available then and they all perished. When I came to Pukeiti early in 1969 no Vireyas existed and indeed there was little interest in them anywhere in New Zealand. Nobody really understood their cultivation at this time.

An enthusiastic member went into commercial rhododendron growing in the early 1970's and through contacts in

Australia began importing Vireyas and trying them under glass. Most of these were hybrids from Tom Lelliot and were amenable to the experimentation forced upon them. The survivors grew and spare plants began to arrive at Pukeiti for another round of 'trial and error'. At this stage we only had one small glasshouse and a similar sized shadehouse to house them in.

Here a note about Pukeiti's climate would be appropriate. We are on the west coast of the North Island at 1200 feet. To the west is the Tasman Sea some eight miles distance and to the east is Mt. Egmont, a dormant volcano over 8000 feet. We are classed as warm temperate rain forest which is not a bad description when you hear that we have over 130" (3300mm) of rain each year. Frosts vary over the 900 acres but in the open areas we can go as low as -6°C (+21°F) air temperature. Therefore Vireyas need some shelter from the cold and trials have shown that many can survive outside where the bush canopy provides a frost free enviornment. Of course with our high rainfall and mild summers, growing epiphytes is no problem and Vireyas respond to this treatment.

By 1975 the collection had grown to more than 100 plants and was becoming very overcrowded. 1976 was Pukeiti's 25th Jubilee year and we were looking for a major project to commemorate the occasion. I pushed for a display glasshouse to house the Vireya collection and to provide the first public display of these exciting plants in New Zealand. The idea was accepted and we found the ideal sponsor for the building in the Stanley Smith Horticultural Trust. The result was a fine 40 feet x 20 feet aluminium framed house, built on a natural slope which we landscaped with a series of terraces supported by tree fern logs. Water was introduced by a series of ponds, cascades and streams to give good humidity. The collection was planted out and looked rather thin and small in their new surroundings. Two years later I was cutting them down to keep the growth in check!

The plants in the display house have grown exceptionally well. For the majority they have been planted in the natural volcanic loam with little addition than a bucket full of peat. To make full use of the space in the house some plants have gone into the sides of the retaining walls, on the top of tree fern stumps and in baskets suspended from the roof. Watering is by overhead spray lines and the plants get a good soak once a fortnight in the summer but only once every six to eight weeks in winter. The flower display is continuous, but is stronger in the winter and early spring.

Naturally the collection did not stop there and in fact it increased even more rapidly. Through the Stanley Smith Trust we were put in touch with Paul Kores and he sent a fine collection of plants from New Guinea. Dr. John Rouse has sent a large number from Australia. More recently collections from the wild have come from New Guinea, Sabah and Sarawak. We now have about 150 different Vireyas and the room is running out again.

One area has been set aside in the bush for Vireya planting. Growth has been good and flowering acceptable, though in both cases not as prolific as in the drier, warmer atmosphere of the display house. A severe storm brought many trees down last year and the Vireyas outside had a lot of damage. However, they are recovering and seem to have great powers of rejuvenation even when frosted back to the main trunk.

Pukeiti has started to distribute Vireyas among its members in New Zealand because we feel that they have a great future in this country especially in the warmer regions.

A very recent visit from John Womersley confirmed that growing conditions at Pukeiti closely resemble Papua, New Guinea and that our collection ranked amongst the very best. I hope to be able to join him and other enthusiasts on their trip to Papua, New Guinea in August. More room needed!

Can I suggest a few names to add to the "Vine list" - Os Blumhardt, Whangarei, New Zealand, Ray Oliver, Nelson, New Zealand and Mark Jury, Taranaki, New Zealand. I will enclose something to help with expenses. $5.00 overseas Postal Note, should arrive soon!

Again, many thanks and best wishes

Graham Smith

Graham F. Smith, Curator
Pukeiti Rhododendron Trust, Inc.
R.D. 4, New Plymouth, New Zealand

Latitude 39° 12' S

Editor's Note: Graham, I certainly appreciate your letter describing the history of Vireyas at Pukeiti. Not having been there, Graham, I had no idea of your minimum temperatures each winter. I know that one Vireya grower in Seattle, overlooking Puget Sound, has put some Vireyas outside beneath the canopy of bushes and trees. Her lowest temperature is usually +21°F (-6°C) the same as yours. Her all-time low, as I remember, is +12°F (-11°C). It shall be an interesting experiment for her.

I note that your glasshouse for Vireyas has a stream and cascades to give it a high humidity. Your planting technique is easy. But, please write again about the ones in hanging baskets. Which species or hybrids? Little leafed ones? Any soil in the baskets or just moss? Does the house get "misted" every day between soakings? Does the house get a coating of shading compound each summer?

You also note, Graham, "The flower display is continuous, but stronger in the winter and early spring". Refer now to Norman Cruttwell's note about his "cool season" and Allan Anderson's notes from New Jersey about his observation of heavier budding in fall and early winter than in his summer, there seems to be a parallel among all three comments. Can some of you "Viners" offer some speculation?

I note your comments about the Vireyas planted out in the bush having "great powers of rejuvenation even when frosted back to the main trunk". Is this the same case with other "Viners"?

The names you suggested, Mr. Blumhardt, Mr. Oliver and Mr. Jury have been added to our list.

Write us again soon, Graham, especially of your reaction to New Guinea's growing conditions.

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FROM: Ralph Williams

May 31, 1983

I was loaned a copy of Vireya Vine recently and found it fascinating.

Through the good hearted generosity of Bill Moynier in Los Angeles, California, I was introduced to Vireyas with some of his seed, and feel I'm now hooked!

Your VINE should help me grow in knowledge that is greatly lacking at this point. You may need to go subscription before long judging from the mailing list mentioned in issue #2. By the way, if you have any #1 copies left,

appreciate one. $3.00 enclosed to help somewhat.

Best Regards, Ralph Williams

Ralph Williams, 1168 SW 9th
Albany, Oregon 97321 Latitude 44.38° N

itor's Note: Your name is added to our list. Judging from Graham Smith's letter, above, big Vireyas from little eds grow. Costs of subscription and the first three issues of the "Vireya Vine" are listed earlier in this sue.

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Here is a list again of our new "Viners": Mrs. A. McLeod; South Africa, Mr. Ivan Menzies, Dr. David M. Churill, Mr. Peter Phipps; Australia, Brother Vincent; North Wales, Os Blumhardt, Ray Oliver, Mark Jury; New aland, Curator, Royal Botanic Gardens, Kew; United Kingdom, Dr. Gordon D. Alcorn, Paul Dockendorff, R. J. Simons, hese last two Viners have visited your editor's nursery inquiring about Vireyas and have subscribed to the Vine] ry Dunnell, Leslie G. Slater, Pat Halligan, Clarice Clark; all from the State of Washington, Gordon W. Severe; elaware, Barbara Egerman; State of Oregon, and William Paylen, Richard Lynch; State of California. This brings r total mailing to 179 Viners. Quite a growth from Issue #1 which went out to 28 people in October 1982.

Added at the Rhododendron Species Foundation Annual Meeting in April were:. Hans T. Sauter and Lavonia Leo from eattle, Washington, Noel Kolak from Portola Valley, California, Daniel W. Morris from Tacoma, Washington, George . Muller from Oak Harbor, Washington, Bill Lindeman from Port Townsend, Washington, Janet Binford from Portland, regon, Dale A. Greer from Issaquah, Washington and Mr. & Mrs. Dave Jewell from Olympia, Washington.

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What an outstanding "Vine". I thank all of you letter writers once again for sharing your successes, failures nd speculations with all the rest of us Viners. We shall make Vireyas a necessary rhododendron in all gardens--r greenhouses--or homes--not just a shunted tropical stepchild--with no one to love them!

Please write all of you "Viners". Remember, NO Sharing--NO Receiving.

Total costs for this Vine were approximately $300.00 for printing and postage. If you feel that the "Vireya Vine"is a worthwhile publication to support and you wish to remain on the mailing list, please send $10.00 (U.S.) (more if you wish) to the address below.

Bob Badger, Editor Vireya Vine
405 N. Washington Ave.
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Thank you all,

Bob Badger

Bob Badger, Editor

'IREYA VINE
105 N. Washington Ave.
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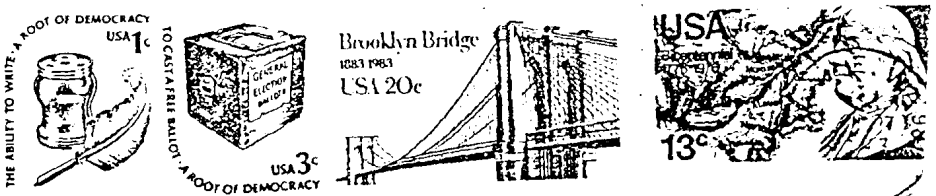

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