VIREYA VINE ISSUE # 27,

DECEMBER 1990

From Leslie Riggall Kloof, South Africa
Dear VV, August 15, 1990

I was very surprised to see a letter from Peter Cox in the Vireya Vine, because Scotland seems to be an unlikely place to grow Vireyas. It has been many years since I visited Peter and his father, when I was kindly invited to lunch, and it is remarkable how the VV links people together who are so far apart.

It is clear that Peter has lost none of his boundless enthusiasm, but I fear that even he will not succeed with Vireyas. I do not see how he can make money with these tropical plants at a latitude of around 56 degrees (that of Canada). The plants surely need too much artificial heat and light. I remember Sir James Horlick telling me that he could not flower japonica camellias because the light was so poor in his Scottish garden on the island of Gigha. The south of England would be a better venue in the British Isles, for commercial production of Vireyas. They would need less heat and the natural light would be stronger.

It is interesting that the symptoms of sickness Peter Cox lists are the same as those I found, when I tried to grow hundreds of species and hybrids of cool and temperate climate Rhododendrons in my subtropical climate here in South Africa. Only 3 varieties have survived and flowered here, "President Roosevelt", "Grenadier" (which has a tender parent, R. elliottii), and that marvelously adaptable and indestructible very hardy Victorian hybrid "Roseum Elegans". In my Portuguese garden, plants of "Roseum Elegans" has survived well through 30 dry summers without being given a drop of water.

The similarity of symptoms of sickness suggest that Peter is battling against an unfavorable climate, as I was here in Fern Valley, and I have given up trying.

Because newly germinated Vireya seedlings are so susceptible to fungal attack, I use pure finely sifted pine bark for them. I am sure that potting or planting out in pure pine bark is a mistake, and I would not give them magnesium lime or any other chemical fertilizer. Even those which grow in the crotch of trees receive some organic nutriment from dead leaves, fallen flowers, tree pollen, bird droppings, dead insects, etc. I consider organic food in the form of compost to be a necessary ingredient of the mix.

Vireyas grow epiphytically only where there is insufficient light at ground level. Where space and light are available the plants grow better on the ground. In most cases there is a high content of compost or humus in tropical soils. Trying to imitate nature, I use compost and soil, with shredded pine bark to improve drainage and to inhibit Phytophthora cinnamomi (root-rot fungus), which is always present here during our warm wet summers.

The Vireya roots grow laterally, very close to the surface, so we mulch with dead leaves, etc. to keep them moist and cool. Apart from water in dry weather, they need nothing else.

Good drainage seems to be much more important than nutrition. There are various indications of this. Epiphytes obviously enjoy excellent drainage, but obtain hardly any nourishment. Natural seedlings are found almost invariably growing in moss at the top of steep banks. There is evidence that they flower better when the roots are restricted. At Kew, Vireyas grew well when planted in ground beds in the greenhouse, but never flowered. When they were grown in containers they flowered well. Those species which do not have large fleshy leaves which may burn in the sun, such a R. aurigeranum and christianae, grew well on steep stony hillsides.

The suggestion that day length is a factor is probably true. Our day length here in South Africa never varies as drastically as in Britain, which has short days in winter and long days in the summer. No doubt controlling the day length to 12 hours would help, but again this would raise the cost. I feel that growing Vireyas in Scotland is never going to be a commercial proposition.

Leslie Riggall
Fern Valley Botanic Garden
Igwababa Road
Kloof 3610, South Africa]
Telephone, Durban (031) 741882

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From Keith Adams New Plymouth, New Zealand
Dear VV, August 1990

I have recently visited Sarawak and Peninsular Malaysia for the fifth time on yet another quest for Vireya Rhododendrons. Every time I go I try to explore at least one new region. In June of this year, I once more found myself in the Kelabit Highlands in northern Sarawak with the intention of exploring a peak called Batu Lawei. I was there at the village of Bario in March last year, but the military refused me permission to climb Batu Lawei. This year I was successful.

Batu Lawei is 3 days hard jungle trek from Bario and like all jungle routes, you go up and down a dozen times, before reaching your final objective. The rivers were low so that crossings were not too difficult. This was the June dry season, drier than they had ever experienced - and hotter. Even the natives were complaining about the heat of this Borneon jungle.

The first rhodo's I encountered were on a high point (1,600m) adjacent to the Tamu Abu cliffs. Just two species, Rs. stapfianum and crassifolium, the latter growing either terestially or as a epiphyte. I marked these for collection on the way back. We climbed on down (my guide porter and I) over huge moss covered boulders which would be the bed of a raging torrent in the rainy season, to a place where we could camp near a large stream. This stream strangely flowed north to join the Limbang river, which joins the sea north of Brunei. On the way down, I noticed what looked like a Rhododendron but by then we were in deep jungle again. A second look convinced me that it was a Rhododendron and that this species continued right down to our camp. For me this was a rarity, because normally Vireyas need light and only start appearing when the jungle thins to light mossy forest. I later identified this species as R. lanceolatum. It is not in cultivation as far as I know. We were off early the next day for another rigorous climb and at the top of a clear section of the trail, I found more species. These were Rs. stenophyllum, himantodes, fallacinum, pneumonanthum, crassifolium, one that I think could be cuneifolium and one that I don't know. The later two are very small leafed species and none were in flower, and no seed!
I collected cuttings of all of these. That night, we camped near the base of Batu Lawei. The next day it was to Batu Lawei and back, but nothing new, just more of the same. Batu Lawei itself is unclimable for the last 250m - a great pinnacle of vertical sandstone.

Next day we were lucky enough to shoot a barking deer, so we had fresh meat in camp that evening. The tropical rain forest of Sarawak consists of both hard woods (sinkers) and soft woods (floaters) and includes the Bornean Kauri - Agathis alba (Damar) which does not attain the girth of the New Zealand Kauri, but makes a clear bole reaching 30 meters before the first branch. Vast concessions of Borneon jungle are now being cut over, with big timber companies taking every millable tree out. In the process they are causing enormous erosion and silting up of the rivers.

I have hitched rides over company logging roads and flown over huge tracts of jungle with red clay roads cut into every accessible area. No wonder people are concerned about the annihilation of one of the few remaining tropical rain forest of the world.

I returned to Bario, minus a bit of blood that the leaches had gotten and with only a few days delay, flew out to Miri. Then on to Kuching where I obtained the necessary phyto - sanitary certificates for my cuttings from the agriculture department and airmailed them home. The cuttings arrived within 5 days and with the exception of R. himantodes (notoriously difficult) a good percentage appear to be doing well at Pukeiti.

After a weeks rest with friends in Kuching, I flew on to Kuala Lumpur where I stayed with more friends. While in Malaysia I had sufficient time to make two more collecting trips - easy ones this time, to places I had previously visited. One day we drove to the old Genting road in the Genting Highlands and climbed a small peak called Bunga Bua. I knew what to expect and wasn't disappointed. Only one Vireya was in flower, R. malayanum, but some others collected were Rs. micromalayanum, jasminiflorum, and what I suspect is R. scortechinii - also the only Irroratum species in Malaysia, R. wrayii.

I stored the cuttings in the fridge and took off the next day by bus for the Cameron Highlands. I know my way around pretty well, so at much expense I hired a taxi to take me to the top of Gunong Brinchang, 2,000m, where there is a telecom station, hence the road. I walked back to the town of Brinchang, collecting all the way down. On the summit I collected another form of R. malayanum, a much larger leafed form and a species that I had previously missed, R. perakense. I saw only 2 plants of the latter and as far as I know it is not in cultivation. In sequence as I went down were Rs. wrayii, more malayanum, pauciflorum, jasminiflorum, and finally 2 cuttings of R. robinsonii. I have pauciflorum and jasminiflorum flowering in my own garden, collected in 1984 and what I hadn't realized before, there are 2 forms of R. wrayii. The Genting one has no indumentum while the Brinchang one has a light fawn indumentum.

Cameron Highlands is the great vegetable garden of Malaysia and is also an area of huge tea plantations. But what is happening there is that the vegetable farmers are gradually pushing higher and in the process of clearing the jungle are burning everything in sight. One colony of R. jasminiflorum I remember from previous visits no longer exists - all burnt. The one plant of R. robinsonii that I saw there, I'll warrant won't be there the next time I go, which I hope will be in 1992.

Vireya species collected:

Rs. crassifolium, cuneifolium, durionifolium, fallacinum, himantodes, lanceolatum, jasminiflorum, malayanum, micromalayanum, pauciflorum, perakense, pneumonanthum, stapfianum, scortechinii, stenophyllum, and one other

Irroratum series:

R. wrayii (two forms)

Keith Adams
12 Sequoia Grove
New Plymouth, New Zealand

Thanks for the wonderful story Keith. You are one of the very few people in the world caring enough to do this labor of love collecting. Keith's story was first published in the Pukeiti newsletter of September 1990. The Pukeiti Rhododendron Trust [inc.] grows many Vireyas. Graham Smith, the garden director and has collected Vireyas in New Guinea. The Vireyas do pretty well at Pukeiti and Graham is putting some plants outdoors in the garden with some natural protection. If you are ever in the South Pacific you must put Pukeiti on your agenda. It is really a wonderful place.

Many of us here in the North West of the USA do not consider ourselves conservationist, but are getting very upset about our own logging industry. They would cut every last tree in the world if we let them and claim it was OK because they will just regrow again. NO Way! The old growth trees will never be seen on this earth again once they are gone. Here in the North West we just are not going to let them cut the very last tree. Keith, --- does anyone care about the jungles in the Malaysian area. Or does anyone care that has enough power to slow it down or stop it? Do the people that live in the areas know or understand what is happening to their forest and jungles? Last night I watched a TV program on Public Television about the greenhouse effect. They predict that by the year 2075 the last jungle tree will be gone. These trees will be GONE FOREVER, but then again it might not happen because we might be gone before that time if we don't wise up.

I was over visiting with Fran Rutherford the other day and we spent some time looking at the Vireyas in his greenhouse. Fran has a plant of R. robinsonii coming into bloom. I had never seen this plant before and was struck by how the leaves and the plant looked like R. brookeanum. The leaves had the distinctive shiny upper surface and the same upward curving that I know as brookeanum. I don't remember if Frans robinsonii had the reddish tinge on the leaves that my plants of brookeanum have. Frans plant only had one flower open and it was butter yellow, not the bright or golden yellow of R. aurigeranum or laetum. BUT, the one flower that was open was split. What makes the flowers split? Fran will keep his eye on this plant and see if more flowers split. Also, could the species robinsonii be just another variety of R. javanicum? Look in the "Rhododendrons of Sabah" book at the section about javanicum and wonder some more.

The 2 cuttings of R. fallacinum that I had finely gotten rooted have died now. But the main plant put on good growth this summer and I now have 3 fresh new cuttings in the propagating bed. On some species I think that a person needs to get the cuttings in just after they harden off. Many Vireyas will root easily but some are very slow. I remember when the hardy Rhododendron "Lems Cameo" was first available, many people found it hard to root. Most people had success if they took the cuttings on very soft new wood.

From Leslie Riggall Kloof, South Africa
Dear VV, October 2, 1990

Having experienced "Windy Wellington", the fact that Vireyas are growing there successfully by Joyce Waters surprises me. It is another indication that these tropical plants are much more tolerant of unfavorable climates than one could expect.

Apart from cold damage in the winter, I would expect the strong winds of Wellington NZ, to flatten many Vireyas, or even uproot them, as so many are top-heavy on long stems. Even in my mild conditions I find Vireyas to be unstable plants with weak and shallow root systems. It seems to me that one of the most important goals for Vireya hybridizers would be to produce compact hybrids, which would have the advantage of being attractive when not in bloom.

This means that leggy and untidy species like R. aurigeranum and zoelleri would need to be crossed with compact and low growing species and never with each other. Fortunately we have so many different species to choose from, that hybridizers will certainly attain whatever goals they set for themselves, in due course.

Clarice Clark made a good point about avoiding too much potting mix for Vireyas in containers, and the advantage of wood flats or benches over ordinary plant pots. The problem is that the average pot is entirely the wrong shape for a Rhododendron. It should be only half as deep as is usual, that is, the depth should be only half as much as the width. Those clever gardeners in Japan use containers of those proportions for many shallow rooted plants, fitting the pot to the plant, instead of requiring the plant to adapt to the wrong kind of pot. Another advantage of low, wide pots is that they never fall or blow over.

I have always been doubtful of claims made for commercial proprietary rooting powders or solutions such as Rootone, and Seradix, having at times observed adverse results, and I have had good results with out them. Thus I was keenly interested in the report of controlled experiments carried out by John Harrington, detailed in the summer 1990 edition of the Journal of the American Rhododendron Society. Viners who do not belong to the American RS should make a point of borrowing this edition from someone who is a member.

The experiments demonstrated that 85% of the Rhododendron cuttings rooted without any chemicals and that indole-3-acetic acid, indole-3 butyric acid (Seradix), and Rootone all reduced the percentage of success. On the other hand the percentage of rooting success was improved by 11.7% when he used, naphthalene acetic acid, which is a paste smeared onto the wound of the cutting. This 11 + % increase added to the normal 85% of success gives a percentage of close to 100%.

I hope viners will try this substance, and let us all know the results they achieve. Please give all of the other details of your treatment of cuttings, so that we can, between us discover what is the optimum method of rooting Vireya Rhododendron cuttings.

Leslie Riggall
Fern Valley Botanic Garden
Igwababa Road
Kloof 3610, South Africa]
Telephone, Durban (031) 741882

I dug out the Summer issue of the American RS Journal and read the Harrington article again. I am not sure what it all means, but it has some very interesting data that needs to be considered. I, E. White Smith, have never used rooting hormones on Vireya Rhododendrons as a steady habit. Sometimes I have used Rootone but do not think that it did any good. I have never had any trouble rooting Vireyas. I do remove some leaves and do trim some to half size but not always. I remove and trim only to provide more space in the cutting box. I have been rooting Rhododendrons for over 30 years in the same cutting bed in my greenhouse. I have rebuilt the wooden box 3 times and change the rooting media about every 4 years. I do use heat cables and a plastic cover over the top. I have noticed that some areas in the cutting bed always give better results than others. Near the sides is the poorest areas and close to the back of the bed is not very good. If I have something that I think is hard to root or I only have a few cuttings I put them into a good spot, but when I put the cuttings of R. Valentine in the poor spots near the sides or back they root anyway. I would like to know where to get the hormone "naphthalene acetic acid" from. Does it have a trade name. Is it always in a paste form?

VIREYA BOOKS

'An Account of Rhododendron in Malesia'. It is a partly reprint from 'Flora Malesiana' ser. I, vol. 6, part 4. The author is H. Sleumer, Rijksherbarium, Leyden, Netherlands.

This book contains very detailed descriptions of 276 species. It has line drawings of maps, scales, and some plants. There are also a few photographs of some species included. This book has been out of print for many years and is not available without much searching.

'New Species and Noteworthy Records of Rhododendron in Malesia (Ericaceae)'. By H. Sleumer. A reprint from Blumea 21 (1973). A 20 page booklet describing new species and adding information about other ones.

'The Rhododendron Handbook 1980 Rhododendron Species in Cultivation'. From the Royal Horticultural Society, London. Very good reference book which list most of the species recognized as of the printing date. There are brief descriptions of many Vireya species.

'The Ericaceae of the High Mountains of New Guinea', by P. Van Royen & Paul Kores. Printed in 1982. This book is a reprint of 'The Alpine Flora of New Guinea' and includes Rhododendrons and Gaultheria, Vaccinium, Agapetes, and other Ericaceae from the area. This book only contains the High Mountain species. It has good descriptions with line drawings and photographs.

'Vireya Rhododendrons', 1989. by Mr. J. Clyde Smith who lives in Keiravile (near Wollongong) Australia, has in conjunction with the Australian Rhododendron Society printed this book. has 76 pages, 45 color pictures, a beautiful photo of a R. macgregoriae hybrid on the cover, and a complete text about growing these plants. Clyde has included sections on "Introduction to the Section Vireya", a good coverage of Vireya history, native habitat, the flower, the leaf, a list of species in cultivation in Australia, propagation, growing in containers, in the garden, under cover, pest and diseases, a list of hybrids that have been registered that has 122 names and descriptions, and much more. Many of the color photos are from the wild and I am particularity taken with a picture of R. superbum being held up by a native New Guinean. What a sight R. superbum must be in bloom. I am still waiting after 10 years from cuttings.

'Rhododendrons of Sabah'. 1988 The Massachusetts Chapter of the American Rhododendron Society is selling this Vireya book, 'Rhododendrons of Sabah' by George Argent. The cost is $14 + $2.00 postage($16.00). $5.00 of this cost will be sent back to Sabah, Malaysia to support a garden there. Send check payable to;

"ARS Massachusetts Chapter".
Mrs. Henry Wrightington
571 State St. Tel # (617)826-6898
Hanson, MA 02341

This is a very nice book. There are 90 color plates with drawings and maps. There is a picture of R. javanicum ssp. brookeanum var. kinabaluense that will just make your mouth water. Note that Rhododendron brookeanum is now a subspecies of R. javanicum. In Vireya Vine (VV22), when Keith Adams was writing about a Rhododendron called R. borneense and you could not find it in any book? Borneense is shown in a color photo in this book.

Out side of the USA the Address is;
Sabah Parks Trustees
P.O. Box 10626
88806 Kota Kinabalu
SABAH, MALAYSIA

Other Vireya Rhododendron Publications;

The 'Journal' of The American Rhododendron Society. Executive Director - Barbara Hall, P. O. Box 1380, Gloucester Virginia 23061. This journal has had many articles and photographs. Published four times per year for the membership.

'The Rhododendron', the Official Journal of the Australian Rhododendron Society. Correspondence to Mrs. L. Eaton, P.O. Box 21, Olinda Vict. 3788, Australia. This Journal has had many articles and photographs over the years about Vireyas. Published for the membership once per year.

'Rhododendron and Azaleas in Australia', by Graham P. Price (1988). This booklet includes information about Vireyas in Australia. It was printed with the cooperation of the Victorian Branch of the Australian Rhododendron Society.

'Vireya Vine', from the Rhododendron Species Foundation. Edited by E. White Smith, 4317 No. 18th, Tacoma Washington, USA 98406. RFS, P. O. Box 3798, Federal Way Washington, USA, 98063. Started in 1982. Published four times per year.

'Vireya News', Edited by Michael Cullinane, Rose Tree Gardens, P. O. Box 631, Levin 5500 New Zealand. Newsletter started in 1987. Published four times per year.

List of Vireya Rhododendron Species; Alphabetized on the left side of the page and listed by Dr. Sleumer's numbers on the right side. The Sleumer numbering system is a helpful reference and seems to add some order to a very large list of species names (303 in all).

abietifolium	166
acrophilum	177
acuminatum	82
adinophyllum	17
aequabile	90
agathodaemonis	30
album	89
alternans	172
alticolum	180
amabile	124
anagalliflorum	137
angulatum	208
apoanum	79
archboldianum	115
arenicolum	100
arfakianum	261
armitii	119
asperrimum	46
asperulum	A2
asperum	62
atropurpureum	191
aurigeranum	254
baenitzianum	229
bagobonum	162
banghamiorum	178
beccarii	222
beyerinckianum	51
blackii	268A
bloembergenii	241
brachygynum	265
brachypodarium	128
brassii	188
brevipes	253
brevitubum	220
brookeanum = javanicum	276
bryophilum	44
bullifolium	65
burttii	155A
buruense	240
buxifolium	192
buxoides	13A
caespitosum	140
caliginis	41A
calosanthes	196
capellae	9A
carrii	118
carringtoniae	110
carstensense	111
cernuum	98
celebicum	205
chamaepitys	108
vaccinioides	A1
asperulum	A2
retusum	1
taxoides	2
insculptum	2A
emarginatum	2B
santapaui	2C
pulleanum	3
nummatum	4
gaultheriifolium	5
oreites	6
erosipetalum	7
detzneranum	7A
hameliiflorum	8
lindaueanum	9
capellae	9A
spathulatum	10
saruwagedicum	11
invasorium = inconspicuum	12
perakense	13
buxoides	13A
vanderbiltianum	14
kawakamii	14A
seimundii	15
scortechinii	16
sororium	16A
adinophyllum	17
cyrtophyllum	18
ericoides	19
nanophyton	20
schizostigma	21
meliphagidum	22
vankii	23
ciliilobum	24
quadrasianum	25
habbemae	26
cinchoniflorum	27
protandrum	28
inundatum	29
agathodaemonis	30
herzogii	31
incommodum	32
eymae	33
revoltum	34
extrorsum	35
hellwigii	36
superbum	37
prainianum	38
stelligerum	39
neriifolium	40
hooglandii	41

vanvuurenii	235	sumatranum	260
variolosum	86	arfakianum	261
versteegii	102	fuchsii	262
verticillatum	197	impositum	263
vidalii	157	leytense	264
villosulum	202	brachygynum	265
vinicolor	76	mindanaense	266
vitis-idaea	170	renschianum	267
warianum	53	culminicolum	268
wentianum	231	blackii	268A
whiteheadii	157A	praetervisum	268B
wilhelminae	87	mollianum	269
williamsii	216	poremense	270
womersleyi	138	stresemannii	271
wrightianum	193	retivenium	272
xanthopetalum	211	lowii	273
yelliotii	94	intranervatum	274
yongii	199A	toxopei	275
zoelleri	255	triumphans	275A
zollingeri	92	brookeanum = javanicum	276

These three species listed below have been added to the list from the book "Rhododendrons of Sabah" by G. Argent, A. Lamb, A. Phillipps, and S. Collenette. These plants are described by Dr. Argent in the book. He also describes seven hybrids some of which are listed as species in the forgoing list, ie. R. x corilifolium, x fuchsii, x keditii, x liewianum, x planecostatum, x sheilae, and x silvicolum.

baconii closely resembles R. praetervisum
borneense kind of like R. bagobonum but very different scale type
meijeri has very hairy leaves

PAID VIREYA VINE MEMBERS AS OF JANUARY 1, 1991

Longwood Gardens			Kennet Square, Pa 19348
Living Collect's,	National Tropical Botanical	G.P.O. Box 340	Lawai, Kauai, HI 96765
De Anza Chapter	% O'Neill	1338 Rossway Ct.	Los Altos, Ca 94022
Dorathy	Adams	4960 Mabals Dr.	Eugene, Or 97405
Mr. Allen	Anderson	220 Mulberry Way	Franklin Lakes, NJ 07417
Robert J.	Barry	345 Mississippi St.	San Francisco, Ca 94107
Chris	Blom	P. O. Box 6512	Tahoe City, Ca 95730
SUNAM FARMS	Bruce McManus	11691 SW 93rd ST.	Miami, Fl 33176
Mr. Hugh	Caldwell	187 Brickyard Rd.	Doctors Inlet, Fl 32030
Barbara	Campbell	527 Ashbury Ave.	El Cerrito, Ca 94530
Mr. Richard	Cavender	15920 Oberst Lane	Sherwood, Or 97140
Dr. Richard W.	Chaikin	7 Whittier Place	Boston, Ma 02114
onard W.	Charvet	32109 Forest Lane	Fort Bragg, Ca 95437
Mr. John	Cing-Mars	12 Narragansett St.	No. Kingstown, RI 02852
Clifford E.	Desch	Mathews Road	CONWAY, MA 01341
Ian	Donovan	22 Charles St.	Newton, Ma 02166
Mr. Don	Dulac	936 B Street	Petaluma, Ca 94952
Mr. Keith	Elliott	1449 Home Road	Woodside, Ca 94062
Mrs. John P.	Evans	70 Lincolnshire	Oakland, Ca 94618
Dr. Stanton L.	Eversole	1485 Edgewood Dr.	Palo Alto, Ca 94301
Mrs. Everett	Farwell	13040 Skyline Blvd	Woodside, Ca 94062
Jerry	Fickes	6688 Bonny Doon Rd.	Santa Cruz, Ca 95060
So. Cal. ARS	G.D. Sarkisian	11558 Rochester Ave. #202	Los Angeles, Ca 90025
Mrs. Norris M.	Gaddis	52 Lakeview Ave.	Piedmont, Ca 94611
Jim	Gears	R.D. 6, 2065 Parkersville Rd	West Chester, PA 19382
Mr. Jim	Gerdemann	P.O. Box 391	Yachats, Or 97498
Mr. Mathew A.	Gordon	R.D. #1	Chester Springs, PA 19425
Mrs. Betty B.	Gould	P.O. Box 746	Pebble Beach, Ca 93953
Mr. Robert W.	Grant, EXOTICus II	197 North Street	Hingham, Ma 02043
John A.	Gray	16867 Walnut Creek	Strongsville, Ohio 44136
Jeanne K.	Gustafson	28 Wood Hollow Road	Lawrenceville, NJ 08648
arbara J.	Hansen	880 Kirkham Road	Cove Junction, Or 97523
Mr. Robert	Hirano	Lyon Arb, 3860 Mona Rd.	Honolula, Hi 96822
Willard P.	Hunnewell	855 Washington St.	Wellesley, Ma 02181
Yoder Brothers,	Inc.	PO Box 68	Alva, Florida 33920
Carl	Jacobson	SR Box 7A	Haiku, Hawaii 96708
Mr. Bill	Jenkins	12311 Texas Ave.	Los Angeles, Ca 90025
Don M.	Jenkins	P. O. Box 1009	Brevard, NC 28712
Adele & Joe	Jones	17701 S.W. West View Rd.	Lake Oswego, Or 97034
Clarke V.	Keller	49 Bruiswick Rd.	Montclair, NJ 07042
Mr. Marvin	Larsen	45 Hazel Rd.	Berkeley, Ca 94705
Dr. David	Leach	1894 Hubbard Rd.	North Madison, OH 44057
Mr. Ralph	Love	74 Lloyden Dr.	Atherton, Ca 94025
Mr. Richard	Lynch	26363 Silver Spur Rd.	Palos Verdes Pen, Ca 90505
Dr. Mack	McCormick	2361 22nd St. N. Court	Florence, Or 97436
Mr. Bill	Miller	3974 SW Wapato	Portland, Or 97201
Mr. Walter	Mills	Box 52	Chappaqua, NY 10514
Mr. R.A.	Mitchell Jr.	P.O. Box 298	Valcano, Hawaii 96785
Paul	Molinari	1890 Joy Ridge Road	Occidental, CA 95465
Chris Ellen	Montgomery	4239 25th St.	San Francisco, Ca 94114
Karen	Morebeck	195 Jersey Street	San Francisco, Ca 94114
Mr. Brion	Morley	3916 Wyandotte Apt. 1N	Kansas City, Mo 64111
Mr. Bill	Moyles	4243 Norton Ave.	Oakland, Ca 94602
Mr. William	Moynier	2701 Malcolm Ave.	Los Angeles, Ca 90068

Mr. Michael	O'Hara	8375 Carson Rd.	Gladstone, Or 97027
Sheldon	Ofshe	1989 Wilson Ave	No. Bellmore, NY 11710
A. Hadley	Osborn	P.O. Box 223128	Carmel, Ca 93922-3128
Mr. Don	Paden	2112 So. Race St.	Urbana, IL 61801
Joane P.	Paine	1502 Eddings St.	Carbondale, IL 62901
Mr. Roland	Perry	161 Prospect Ave.	Los Gatos, Ca 95032
Thomas H.	Pigford	1 Garden Drive	Kensington, Ca 94708
Frances T.	Plunkett	1117 G St. SE	Washington, D.C. 20003
Mr. Brian	Pocock	1955 W. 28th	Eugene, Or 97405
Mr. John	Randall	Rt. 2, Box 238	Glenwood, Iowa 51534
Mr. Charles	Ransome	P.O. Box 4631	Davis, Ca 95617
D. M.	Reamer MD	104 Woodland Drive	Oil City, PA 16301
Mr. Russell A.	Redler	304 Jefferson Hights	Jefferson, La 70121
Mr. Fred	Renich	P.O. Box 852	Somis, Ca 93066-0852
Mr. Ramon	Reyes	1216 Palisades Ave.	Union City, NJ 07087
Newton Y.	Robinson	P.O. Box 824	Alfred, NY 14802
Jack	Rosenthal	86-52 Pinto St.	Hollis Woods, NY 11423
Helen Crocker	Russell Library	9th Ave at Lincoln Way	San Francisco, Ca 94122
Glenn	Sahara	P.O. Box 520	Keaau, Hi 96749
Sue	Sanders, University of California	Dept of Botany & Plant Sci.	Riverside, Ca 92521-1024
Mr. Peter	Schick	17455 Ocean Drive	Fort Bragg, Ca 95437
Irving	Schynert	1553 Queensbury Ave.	Los Altos, Ca 94022
Donald	Selcer	928 Alma Place	Oakland, Ca 94610
Theo C.	Smid	1150 West Winton Ave. #466	Hayward, Ca 94545
Mr. E. Parker	Smith	12500 Elliott Lane	Sabastopol, Ca 95472
Mrs. Lucy	Sorenson	1737 SW Coronado	Portland, Or 97219
Dr. Herbert	Spady	9460 Sunnyview Rd. NE	Salem, Or 97301
John	Spring	312 Serrano Drive	San Francisco, Ca 94132
Dr.Peter	Stevens	166 Vassal Lane	Cambridge, Ma 02138
Mr. Peter	Sullivan	221 Richland Ave.	San Francisco, Ca 94110
Mr. Maurice H.	Sumner	350 Edgehill Way	San Francisco, Ca 94127
Harold	Sweetman	631 Berwyn Baptist Road	Devon, Pa 19333
Mr. John	Swisher	3656 Palmetto Ave.	Miami, Fl 33133
Loraine D.	Towle	Box 348	West Falmouth, Mass 02574
Charles R.	Trommer	P.O. Box 118	Ninole, Hawaii 96773
Steven N.	Trout	89 Yosemite Ave.	Oakland, Ca 94611
Dr. Philip	Waldman, Roslyn Nursery	505 Motts Cave Rd. South	Roslyn, NY 11576
Steven	Whiteman	566 28th Street	San Francisco, Ca 94131
Mary	Wildavsky	4400 Sequoyah Road	Oakland, Ca 94605
Gloria F.	Wildharber	7956 Ramsgate Ave.	Los Angeles, Ca 90045
Mr. Ralph	Williams	157 Yale Ave.	Lewisville, Tx 75067
Mr. Joseph F.	Williamson, Lane Publishing Co.	80 Willow Road	Menio Park, Ca 94025

Dr. Gordon D.	Alcorn	3806 No. 24th	Tacoma, Wa 98406
Mr. Donald H.	Allen	3280 So. State Highway 525	Greenbank, Wa 98253
Mrs. William E.	Avery	724 No. Yakima	Tacoma, Wa 98403
Mr. & Mrs. Bob	Badger	P.O. Box 6486	Kent, Wa 98064
Mrs. John	Bender	4123 NE 186th	Seattle, Wa 98155
Mrs. Esther	Berry	617 Fairway Drive	Aberdeen, Wa 98520
Mr. Elwood	Budil	806 So. Proctor	Tacoma, Wa 98405
Clarice	Clark	901 16th St. SW	Puyallup, Wa 98371
Dr. Daniel	Coleman	7851 NE 112th	Kirkland, Wa 98033
Bob	Dearing	P. O. BOX 673	Graham, WA 98338
Mr. Frank	Doleshy	23324 Park Rd.	Edmonds, Wa 98020
Mr. Arthur P.	Dome	4832 54th South	Seattle, Wa 98188
Ralph W.	Eells	7030 NE Dolphin Drive	Bainbridge Island, Wa 98110
Anita	Ellison	1824 Drahem St. NE	Olympia, Wa 98506
Loura	Footer-Strehlau	7276 NE 122 nd	Kirkland, Wa 98034
Mr. Robert W.	Franz	4507 Dubois Dr.	Vancouver, Wa 98661-6039
Mr. Dale A.	Greer	1704 212th Ave. SE	Issaquah, Wa 98027
Mr. Robert	Gust	18555 92nd West	Edmonds, Wa 98020
Pat	Halligan	5837 W. Useless Bay Ave.	Langley, Wa 98260
Holly	Hedges	8310 234th S W	Edmonds, Wa 98020
Mr. Willam R.	Heller	6049 48th Ave S.W.	Seattle, Wa 98136
Jacquelyn D.	Helm	10674 NE Manor Ln.	Bainbridge Island, Wa 98110
Mrs. Nadine E.	Henry	30207 52nd Ave. East	Graham, Wa 98338
Mrs. John	Hill (Renee)	4777 119th SE	Bellevue, Wa 98006
Dr. David N.	Hunt	Allenmore 1901 So. Union	Tacoma, Wa 98405 S-A315
Mrs. Dolores J.	Krob	2027 Bobb Court, S.E.	Olympia, Wa 98503
Lavonia	Leo	8422 Fauntleroy Way SW	Seattle, Wa 98136
Mr. Bill	Lindeman	30 Bayclift Place-Kala Point	Port Townsend, Wa 98368
Patrick	Mansfield	28605 51st Pl. S.	Auburn, Wa 98002
Richard	Mathes	11428 - 51st Ave NE	Marysville, Wa 98270
Mr. Burt	Mendlin	1 Cedar Gates Place	Longview, Wa 98632
Mrs. Pendleton	Miller	The Highlands	Seattle, Wa 98117
Mrs. Helen	Moodie	3005 84th SE	Mercer Island, Wa 98040
Mr. Daniel	Morris	4815 96th Ave. West	Tacoma, Wa 98467
Dr. Frank	Mossman	1200 West 39th St.	Vancouver, WA 98660
Mr. George W.	Muller	P.O. Box 1407	Oak Harbor, Wa 98277
Mr. Robert V.	Nelson	P.O. Box C	Milton, Wa 98354
Dr.& Mrs. Eugene	Pflug	1411 151st Place NE	Bellevue, Wa 98007
Mr. George	Pinyuh	14205 SE 213	Kent, Wa 98031
Mrs. Eldean B.	Rempel	37301 28th Ave. S. #9	Federal Way, Wa 98003-7649
Jill	Riehl	703 Bellevue Ave. E	Seattle, Wa 98102
Mr. Fran	Rutherford	P.O. Box 531	Port Orchard, Wa 98366
Hans J.	Sauter	12544 - 9th Ave. N.W	Seattle, Wa 98177
Mr. Conrad	Selfors	8822 Fernclift Ave. N.	Bainbridge Island, Wa 98110
Mr. R.J.	Simons	13527 SE 240th	Kent, Wa 98031
Mr. E. White	Smith	4317 No. 18th	Tacoma, Wa 98406
Mr. Wes	Tarpley	5637 S. Ryan St.	Seattle, Wa 98178
Mr. Tom	Tatum	P.O. Box 206	Point Roberts, Wa 98281
Mrs. Skipp	Thomas	6107 So. Sheridan	Tacoma, Wa 98408
Scott Gregory	Vargara	P.O. Box 329	Burley, Wa 98322
Mr. Steve	Whitcher	9005 Riverside RD. East	Sumner, Wa 98390
Mrs. Judy	Young	2821 29th Ave West	Seattle, Wa 98199

Graham & Wendy Snell	7 Lawrence Place, M.S. 16	Maleny, Queensland 4552	AUSTRALIA
Mr. Howard Walker	24 John Street, Kew	Melbourne, Victoria 3101	AUSTRALIA
Mrs. Felice Blake	56 Ridge Road	Kallista, Vict. 3791	Australia
Mr. Brian Clancy	31 Renown St.	Bentleigh Vict. 3204	Australia
Mr. L.A. Craven	26 Saville Close	Melba, A.C.T. 2615	Australia
Mrs. Nancye Dryden	2 McArthur Road	Mangerton, N.S.W. 2500	Australia
Mr. Ivan Menzies	33 Anne Cresent	Blaxland, N.S.W. 2774	Australia
Mr. J. Clyde Smith	15 Cassian St.	Keiraville, N.S.W. 2500	Australia
Mr. Harold W. Lewis	7 Burroughs Rd.	Balwyn, Vict. 3103	Australia
Mr. H.R. Malone	R.D. 106 A	Lapoinya, Tasmania 7325	Australia
Mr. David Stanton	46 Parrish Ave.	Mt. Pleasant, N.S.W. 2519	Australia
Mr. S. Begg	37 Diosma Dr.	Glen Waverley, Vict. 3150	Australia
Dr. Graham P. Price	"Candlebark" Blythe Road	Mt. Dandenong, Victoria 3767	Australia
Mr. William Mearns	155 New Mt. Pleasant Rd.	Mount Pleasant, N.S.W. 2519	Australia
R.J. Cherry	RMB 2117 Greta Rd.	Kulnura, N.S.W. 2250	Australia
Ron Moodycliff	Clegg Road	Mt. Evelyn, Victoria 3796	Australia
Mr. John Wilson	P. O. Box 59	Forest Hill, Victoria 3131	Australia
Dr. R.M. (Bob) Withers	23 Melissa Street	Donvale, Vict. 3111	Australia
Mrs. Ruth Funder	7 Mary Street	Kew, Vict. 3101	Australia
Dr. John Rouse	House 8 Stonehaven Court	Toorak, Vict. 3142	Australia
Dr. Ben Wallace	Royal Botanic Garden	Mrs. Macquaries Rd., SYDNEY	Australia 2000
Mr. J.W. Lawrence, BAU Farm	Bruxner Highway	Wollongbar, Via Lismore, N.S.W.	Australia 2480
Dr. Mark A.E. Nixon	Box 1 Garry Oaks Dr. R.R. 2	Nanouse Bay, B.C. V0R 2R0	Canada
A. Grinevicius	76 Falcon St. #3	Toronto, Ontario M4S 2P5	Canada
Mr. Tom Tatum		Delta, B.C. V4M 1T8	Canada
Mr. Robert G. Wilson `Director'	San Vito de Java Coto Brus	Costa Rica	Centroamerica
Mr. Chris Brickell - % RHS	P.O. Box 313	Vincent Square SW1P 2PE	ENGLAND, LONDON
J. G. Inskip	9 Beech Close Court	Cobham, Surrey KT11 2HA	England
Christopher Fairweather	Hilltop Nursery, Beaulieu	Hants, SO42 7YR	England
The Library `R.G.B Kew'		Richmond Surrey TW9 3AE	England, UK
Derek Ratcliffe	15 Wellesley Close	Bagshot, Surrey GU19 5HB	England, UK
Frank Pohlandt	Funf - Baume - Weg 138/1	D-7900 ULM	F.R. Gremany
Nicholas Guyomarc'd	Keramaout - St. Jean	Riec-sur-Belon 29124	FRANCE
Mr. Hideo Suzuki	2-8-36 Sakura-cho Kumagaya	Saitama-Ken 360	Japan
Lindsay J. Davis	Staces Road, R.D. 1	Palmerston North	New Zealand
Mrs. Joyce Waters	24 Thane Road, Roseneath	Wellington, 3	New Zealand
Os Blumhardt	Koromika Nursery	R.D. 9 Whangarei	New Zealand
Mr. Graham Smith	P.O. Box 385	New Plymouth	New Zealand
Michael Cullinane (& Mary-Lynn)	P. O. Box 631 Rose Tree Gdns.	Levin 5500	New Zealand
D.L Clark C/ Decor Garden Ctr.	Moffats Road	RD 1, Tauranga	New Zealand
Mr. Bill Robinson	Thermal Nurseries	P.O. Box 819, Rotorua	New Zealand
Mr. Keith Adams	12 Sequoia Grove	New Plymouth	New Zealand
Prof W.R. & Dr. Malva Philipson	837 Cashmere Rd.	Christchurch 3	New Zealand
Dr. I.B. Wilson	Cartrefle, Holyhead Rd.	Menai Bridge, Anglesey	North Wales, U. K.
Rev. Norman Cruttwell `Curator'	Mt. Gahavisuka Bot Garden	P.O. Box961, Goroka, E.H.P.	PAPUA NEW GUINEA
Dr. George Argent	Royal Botanic Garden	Edinburgh E43 5LR	Scotland
Mr. Peter Cox	Glendoick	Perth PH2 7NS	Scotland
Mrs. A. McLeod	Box 461	Hilton, Natal 3245	South Africa
Leslie Riggal, Fern Vally BG	Igwababa Road	Kloof 3610	South Africa
Paul Schauenberg	Los Navarros 4	E-35140 Mogan / Las Palmas	Spain