

REQUIRED READING –

1. "The Peonies" by John C. Wister, \$3.50 from American Peony Society.  
250 Interlachen Rd., Hopkins, MN 55343
2. The Bulletins of the American Peony Society.

The PAEONIA is authorized by Miss Silvia Saunders.

Editors are Chris and Lois Laning,  
553 West F Avenue, Kalamazoo,  
Michigan, 49007.

Suggested yearly contribution to cover expenses of printing and mailing is \$2.50

TABLE OF CONTENTS

Page 1, Editor's Remarks, Chris Laning  
 Page 2, Save the Clones, ..... Allan Rogers  
 Page 4, Letter from L.J. Dewey  
 Page 5, Reprint from PAEONIA, June 1973,  
 with added comments, ... Chris Laning  
 Page 6, Double Flowered Early Hybrid  
 Peonies, A Breeding Achievement,  
 ..... Don Hollingsworth  
 Page 7, Comments on Some Results in  
 Popular Lines of Breeding,  
 ..... Don Hollingsworth  
 Page 9, Reath's Special List of Peonies for  
 Hybridizing

OUR NATIONAL PEONY SHOW

Peony Shows are for people, so plan to attend next year.  
 Peonies are for people, so enjoy them!  
 People are for people, so enjoy them!  
 Sad to say, many of our old-timers turned up missing.  
 The "advanced generation" people,  
 unlike advanced generation peonies, lack stamina.

FIRST AID TO SICK PLANTS:

Try this: Remove soil from around the sick plant (remove down to the roots), pour weak solution of 12-12-12 fertilizer and Benlate over area, throw a small handful of scratch-food, or bird seed, or just plain wheat around the root area, cover the seed lightly with soil — the wheat or bird seed will germinate and form a thicket of plantlets which adds humus to the soil and improves its texture. Regular feeding and regular application of Benlate should give beautiful results!

Benlate is expensive — \$20.00 for two pounds — but think of it as a medicine which seldom is cheap. Besides, what is a sick plant worth?

Oh sure, cut the green stuff down from around the plant any time you may wish, since the roots of this miniature hay-field have done their job by the time the wheat is half grown. Should you choose to let it all grow to full maturity, I won't object.

- Chris

The following article by Allan Rogers is the beginning of a program of "Saving the Clones". Whether by sharing, selling, or swapping, if we all cooperate, this venture can be a success.

- Chris

### SAVE THE CLONES

Hope the following notes will make some sense to you. The ones growing but too small to divide are the planting pieces I got from Goldsmith. Surprisingly we lost only one this past winter — mulched heavily with pine needles.

Our peony season has started. '**Daystar**' in bloom for a week (April 29) and '**Seraphim**' opened yesterday as did '**Audrey**' (one of my favorites).

The first tree peony open is Teikan and Yachiyo Jishi will open tomorrow. Won't be able to make the peony show. My daughter is getting married in August. Will be back in Champaign then but can't afford two trips.

I haven't forgotten the questionnaire. When do you want it?

AVAILABLE THIS FALL (S-for sale 5 EX-exchange)

#### HERBACEOUS:

S-EX Volcano  
S-EX Imperial Princess  
S-EX Mandarins Coat  
S-EX Imperial Divinity  
S-EX Ann Cousins  
S-EX Big Ben  
S-EX Kansas  
S-EX Moonstone  
S-EX Mrs. FDR  
S-EX Westerner  
S-EX Gay Paree  
S-EX Dorothy J.  
S-EX Martha Bulloch  
S-EX. (9 Marx Seedlings to be introduced)  
S-EX Philippe Reviore  
S-EX Jules Reviore  
S-EX Lady of the Snows  
EX Princess Margaret

#### HYBRIDS:

S Red Charm  
S Golden Glow  
S Dainty Lass  
S Flame  
EX Zori  
S Cherry Red  
EX Buccaneer  
EX Daystar  
EX Starlight  
EX Nova  
EX Dakota  
EX Starlight  
EX Picotee  
S-EX Campagna  
S-EX Chalice  
S-EX Horigon  
S-EX Seraphim  
S-EX Sanctus  
EX White Innocence  
S-EX Athena  
S-EX Cytherea  
S-EX Great Lady  
S-EX Echo  
S-EX Ludovicia  
EX Diana Parks  
EX Laddie  
EX Requiem

GROWING — but nothing available yet:

Sprite	Elizabeth Foster	Patriot
Halcyon	Fidelity	Paladin
Pageant	Fortune	Rose Diamond
Papilio	Frances	Red Glory
Laura Magnuson	Foundling	Rose Noble
Sunlight	Firelight	Red Red Rose
Amity	Good Cheer	Rose Garland
Angelo Cobb Freeborn	Good Will	Rosy Cheek
Archangel	Gillian	Roselette
Anniversary	Hope	Rose Tulip
Birthday	Horizon	Rushlight
Bordeaux	Honor	Rosy Wreath
Cavatina	Grace Root	Rose Crystal
Constance Spry	Illini Bell	Salmon Glow
Coralie	Janice	Scarlet Tanager
Claudia	Julia Grant	Sweet May
Cecelia	Little Cream Starlight	Shell Pink
Chocolate Soldier	Little Cream Star	Skylark
Center Point	Legion of Honor	Tenuifolia - single
Challenger	Lotus Bloom	Your Majesty
Bright Diadem	Mercy	179
Defender	Lovely Rose	8277
Elizabeth Cahn	Mid May	Magnolia Flower
Emblem	Nadia	Early Windflower
Ellen Cowley	Officinalis Ophelia	Lavender

TREE PEONIES -3-5 year. 1-10 of each available

Alice Harding	Godaishu
Hana-kiso	Renkaku
Shima Daigin	Yachio Sobaki
Kamada Nishiki	Howki
Taiyow	Jitsu-getsu-nishiki
Rimpo	Haru-No-Akatsuki
Kamada-fuji	Yachiyo Jishi
Cromatella	

Plus about 30 stock plants for eventual grafting.

Allan Rogers  
Caprice Farm Nursery  
15425 SW Pleasant Hill Rd.  
Sherwood, Oregon 97140  
503-625-7241

TO: Chris and Lois Laning

FROM: L. J. Dewey, 2617 Wyndham Drive, Richmond, VA 23235

DATE: April 5, 1979.

When the March issue of PAEONIA arrived, I realized I hadn't made my yearly contribution. I am, therefore, enclosing \$3 for this purpose.

We had a mild winter until February arrived with some bitter cold (for us) and lots of snow. Before that I had hoped the aerial buds on the Itohs you sent might survive. Now in April it is clear they did not. However, all three plants are sending up new shoots from the ground, and I am looking forward to my first Itoh blooms.

My *ludlowii* plant from Hollingsworth (a seedling approaching 9 years of age without ever having bloomed) went into the winter with 3 healthy stems. The terminal bud on one stem survived the winter and is now leafing out. Could it be that I will finally have some *ludlowii* pollen this spring? I have about 15 other *ludlowii* seedlings of my own but this will only be their 2nd season. About 3 of these were treated with colchicine and I am watching them anxiously.

I have potted some *delavayi* seedlings this spring and they seem to be doing nicely. These came from seed from Thompson and Morgan and from Far North Gardens.

I now have *potaninii* seeds from Far North Gardens and if I can get seedlings from them I will have the four main species in the T.P. group.

The two specimens of *lutea* you sent last fall along with a Fay selection of *P. lutea* from Reath, which I also received last fall, should supply me with good breeding stock of this species.

I also have specimens of *P. potaninii trollioides* (from Smirnow) and *P. potaninii* "Stern's Tall Yellow" (Reath) as breeding stock. Stern's Tall Yellow bloomed last spring. It has a small (about 3") bright yellow, cup-shaped flower which is fragrant. It's a charming plant with fern-like foliage. I think it should make good breeding stock. However, none of the crosses I made last spring produced viable seed. The seed I did get were hollow. The *trollioides* has not bloomed for me yet. It is not a very vigorous plant in my garden so its breeding potential is a question mark.

Last fall I got a specimen of Rock's variety from Reath. It is showing about 4 flower buds as of this writing so I should have pollen for hybridizing this spring. I think crosses with this variety should be well worth making.

I cannot give you a definitive report on Dr. Hare's rooting technique. Although I had about 4 TP shoots (out of 6 attempted) which rooted last fall, they have not shown any signs of life yet this spring. I will make more attempts a little earlier this year — perhaps in May. Last year I started the girdles in June and the cuttings may have not had time to get established before winter. I plan to keep you informed of any progress in this project.

I trust all is well with both of you and that you will have an exceptionally good peony season. If all goes well, I hope to see you at the national meeting. It's a long way from Virginia, but having attended last year's, I know it's well worth the trip.

Best regards,  
L. J.

ED: We missed you at the meeting, L.J.

BOOK REVIEW - "Create New Flowers and Plants" (REPRINT FROM JUNE, 1973, ISSUE OF "Paeonia")

If you are looking for a book that is easy to read and full of practical suggestions, obtain a copy of the book by John James, "Create New Flowers and Plants" from your public library. I bought this book about seven years ago, at a time when I was thinking about trying my hand at hybridizing peonies. Information from the book's jacket --- "Whether through discovery, selection, hybridization, or mutation, the creation of a new flower or plant is for many the greatest thrill a gardener can experience.

"Chance, the author points out in his introduction, is the great leveler; the odds of creating or discovering (even in one's own back yard) a new variety are as much in favor of the layman as the professional. There are no secret processes involved, no special skills necessary. The only prerequisites are a deep interest in flowers and plants, patience, and a plot or pot — indoors or out.

"With vigorous — and infectious — enthusiasm, and with the aid of exceptionally fine photographs (including many by the author, who is also an expert photographer), Mr. James introduces the reader to the flowering process, the mystery of the living cell, and the fascinating world of genetics, demonstrating how to discover, create, and even merchandise brand-new varieties of flowers and plants, This book is the definitive, non-technical work in the field of creative gardening.

"ABOUT THE AUTHOR — John James (who has been referred to as the "Frankenstein of the flowers" for his advanced experiments with radioactive plant mutation), has created hundreds of interesting new plant varieties on two test farms in northern Ohio — among them a plum-sized sweet cherry and a rose whose scent seems to repulse Japanese beetles. In addition, he has written for radio, television, and motion pictures; contributed to the development of color photography; pioneered in both radio and TV production; and patented several mechanical inventions. Mr. James was born and educated in Cleveland, Ohio."

PROGRESS TOWARD THESE GOALS:

Discoveries abound when hand weeding, cultivating, and feeding the seedling peony patch. Very much of what is good is discovered by close observation and working with your plants. We can never know the great amount of valuable material that has been discarded due to impatience or lack of space or time. I feel quite confident in saying that if Roy Pehrson had been able to save and/or propagate all the plants and seeds he had produced, the peony world would be at an advanced stage of hybridizing development. Here is what has happened. Roy gave me many of his best Pehrson plants; also hundreds of one and two year old seedlings. Along with all of this he provided a steady flow of seeds (hybrid) of the most advanced kind available!

Because of the raising of all these plants and most of the seeds, the peony hobby has been taking more and more of my time, and absorbed more and more of my enthusiasm. Success is coming as a surge, not by the way of a plant or two, but by a trend!

I would be remiss if I didn't include Silvia Saunders, Don Hollingsworth, David Reath, and C. Graham Jones of England, in the creation of this new surge.

Maybe you get the picture; like starting at the top and working still higher. And you know where you fit in, don't you? Yup! in sowing peony seeds and raising a hundred or a thousand "advanced generation" seedlings.

- Chris Laning

## DOUBLE FLOWERED EARLY HYBRID PEONIES — A BREEDING ACHIEVEMENT

Don Hollingsworth

At the recently held 1979 American Peony Society National Convention, Chris Laning exhibited several early hybrids having genuine doubling. By "genuine" I mean the types of doubling required for a Chinese peony to be classified for show purposes. For all too long there has been a tendency for wishful thinking to show up in describing the flowers of interspecies hybrids. Since most are single, having only one row of petals, as little as two rows of petals have sometimes been used as justification for calling a flower "semi-double". Several rows of petals coupled with a tendency to stay partly closed have sometimes been called "doubles". However, it has been typical that the hybrids have retained a fully formed center ball of stamens that is clearly separate from the petals. The exceptions have been largely in these midseason hybrids which involve in their ancestry the double flowered forms of the officinalis peony, wherein the stamens are all transformed into petalodes of approximately equal dimensions, making anemone and bomb type flowers.

The season of the officinalis peony is just before that of the Chinese peonies (*Paeonia lactiflora*), leading to hybrids that come midway in the overall calendar of flowering. When I speak of Chris' early hybrid doubles I am referring to peonies which flower with "'Archangel' (a Macrophylla Hybrid) and earlier, entirely ahead of the Officinalis Hybrids and their close kin. Chris not only has bomb type flowers of early hybrids but also types that are directly comparable to the Chinese peony full doubles and semi-doubles.

"Laning's Best Yellow", as his previously exhibited full double seedling is still called, is from the cross of an advanced generation plant of the Saunders Quadruple Hybrids with 'Moonrise'. The flower is of good full double form. Although it has anthers (as do many of the full double Chinese peonies), the flower-in-flower form is fully elaborated as is necessary to get past the semi-double form — the inner flower being substantial. Upon opening, the petals are relatively short, enabling one to clearly see the flower-in-flower configuration. There are several rows of petals at the outside, then a row of stamens, inside of which are several more rows of petals (carpels of the outer portion are either absent or transformed so that they merge nicely with the inner petals). Another band of stamens and inner carpels (more or less distorted) make up the center of the flower. After the petals grow, the flower takes on a domed, ball form as is often seen in Chinese peonies. In the fully developed flower, the sexual parts are obscured by the petals.

The lesser flowers (side buds and those on smaller stems) are likely to be more semi-double and will frequently give normally formed carpels, suitable for pollinization and seed production.

Flower color is a muted light yellow that is more intense than that of 'Moonrise'. An extra bonus is the pink flare at the base of each petal, which, though obscured in the fully developed flower, contribute a bright spot in lesser flowers and at petal fall.

The plant is of medium height, 30 inches or so in a second year division, and the flower is carried a little above the main mass of foliage. Leaflets are clear green and somewhat rounded, reminiscent of that of 'Moonrise'.

The flowers appear along with those of Archangel, ten days or so after the very earliest peonies come on, but still ahead of the prevalent midseason, red flowered hybrids.

This peony promises to become a great influence upon the quality and variety of flower form in the early hybrid peonies.

Chris also displayed a fine group of early hybrid semi-doubles and bomb doubles which have as pollen parent an F<sub>3</sub> of '**Silver Dawn**' and are from pods of the advanced generation quads. The colors here ranged to peachy and apricot tones, always with the pastel effect from a yellow or creamy undertone.

The colors seen on the seedling table predominantly reflected the pastel hues of the early hybrids, accented by a few flowers of '**Good Cheer**' Hybrids, Itoh Hybrids and of the more traditional Officinalis Hybrids and Chinese peonies. To spectators, the colors were sometimes unbelievable. One was overheard telling a companion that "they color them up for the show, presumably finding an answer to the question of "how in the knowledge that carnations and daisies will take up colored dyes through their stems.

Real doubles are showing up among the early herbaceous hybrid peonies. Fine pastel colors are also present. This makes it possible to foresee outstanding show table flowers in fine new colors and fully double form. Therefore, attention to flower quality — substance, petal form and all the other dimensions of beauty — is now of more critical importance in selecting clones to be retained for further breeding.

+++++

#### COMMENTS ON SOME RESULTS IN POPULAR LINES OF BREEDING

As seedlings grow out and come into mature plant form and flower one continuously expands the range of observations. Eventually one's conclusions may settle down with respect to a particular line of breeding effort. However, my conclusions have not yet reached such a plateau in their advancement in respect to the following lines of breeding. Thus the following is in the nature of a progress report.

Itoh Hybrids: As I see additional new F<sub>1</sub> seedlings come into flower, I am surprised at the high proportion which have more or less distorted petals. Conversely, I am beginning to appreciate more and more the desirability of having a great number of different clones made in order to gain some assurance that the better flower forms of those possible have been attained.

Good yellow colors, free of red pigments, are being obtained from white and blush flowered Chinese peonies (*Paeonia lactiflora*) when yellow-flowered Lutea Hybrids are chosen for pollinators.

Longer and more upright stems are evident in some of the new seedlings than among the original Itohs that I have seen. This must be due partly, of course, to the variations in height seen among the Lutea Hybrid clones now being used as Itoh Cross pollinators. However, I have a couple of '**Alice Harding**' seedlings (from '**Miss America**' and '**Gertrude Allen**') having 30-34 inch stems.

Itoh Hybrid flowers always face outward, more or less, apparently a legacy of the *lutea* species. Unlike the *lutea* species, however (or the *emodi* hybrids which also have out-facing flowers), the Itoh flowers tend to be slightly or more so out of symmetry. Whereas other out-facing peonies have anthers and petals that are equal all the way around the flower and facing with the center axis, the Itohs are sometimes soon to have less developed petals on the lower side of the flower. Also, petals

and anthers tend to be gravity oriented (called geotaxis) rather than center axis oriented. On a fresh flower the anthers and sometimes the petals at the lower side may be clearly seen to be standing up in relation to gravity while the flower axis points across the line of gravity. Perhaps the upward facing Chinese peonies do so due to a geotactic response mechanism. What there is to do about this is to raise advanced generation Itoh Hybrids, either as F<sub>2</sub> (and so on, by intercrossing Itohs) or backcross to the Chinese peonies.

**'Good Cheer' Hybrids:** As the hybrids of Chinese peonies x '**Good Cheer**' attain mature dimensions, they are seen to sometimes have huge flowers and, also, are often rather tall, up to 42 inches or more in the tallest. This suggests that one might be well advised to use some of the more refined and shorter stemmed Chinese peonies for the cross.

Those hybrids almost invariably give good colors, the clearest hues coming from the more sharply pigmented Chinese peonies such as '**Karl Rosenfield**' and '**Sword Dance**' or from white flowered clones. However, even the dullest of reddish flowers and red-purple pinks give good flower colors by '**Good Cheer**', though sometimes muted in tone.

Full petalled centers (all-over stamen transformation) are obtained from certain of the Japanese flower type clones of the Chinese peonies. Some of these are '**Mikado**', '**Nippon Gold**' and '**Nippon Splendor**', all of which are rather late flowering. Earlier flowering Chinese peonies have not so far given full centers in this cross, Whether there is some indication here of variance among Chinese peonies in the inheritance of all-over stamen transformation is a relevant question.

Out of full double Chinese peonies, '**Good Cheer**' sometimes allows multiple petal flowers in the progeny, also a limited degree of progressive stamen transformation and flower-in-flower form, much like that seen in the Saunders hybrid, '**Heritage**'.

**'Moonrise' Pollen on F<sub>1</sub> Triploid Hybrids:** as in "Landscape Gardener's Cross".

Several of these have flowered, giving flower colors ranging from pale salmon and pink to reds, but almost always with a certain opaqueness and muting of the red, quite unlike the hues seen in the F<sub>1</sub> Saunders Lobata of Perry Hybrids and Officinalis Hybrids. The implication is that there is something in '**Moonrise**' that does not occur in the SLP Hybrids of which it has been said to be an F<sub>2</sub>.

I am inclined to believe that '**Moonrise**' is not a true F<sub>2</sub> (meaning both parents are from the same F<sub>1</sub> family) but the result of an out cross, probably involving a clone representing "early yellow" ancestry. This belief is supported also by the appearance of its foliage and of the shoots as they emerge and grow in the spring. The shoots look much like those of '**Cream Delight**' which came from a cross of one of the '**Roselette**' group with '**Sunglint**' (Saunders 14400).

Incidentally, the emerging shoots of '**Cream Delight**' and '**Moonrise**' are unlike those of the '**Roselette**'/ '**Rushlight**' complex, all of which have upturned (clasped leaflets carrying light red pigmentation, whereas the former have clear yellowish green leaflets that turn outward almost as soon as the shoots emerge. This suggests that the light green color, spread leaflet effect, is inherited as a dominant over that of the light red pigmentation, clasped leaflet type of shoot.

'**Moonrise**' crossed with '**Paula Fay**' gives progeny having gorgeous pastel tints of pink and cream, in petal, having extraordinary substance. Their plant habit is in the range of that seen in the parent, sturdy and of landscape-suitable proportion.



REATH SPECIAL LIST  
May, 1979  
Peonies for Hybridizing

New Lobata Hybrids –

This past summer many seedlings bloomed for the first time, the most interesting were those derived from crosses of the induced tetraploid lactifloras x *Peregrina* var. **Otto Froebel**'.

This cross was made several years ago shortly after the tetraploid lactifloras came into being. The first generation tetraploids from colchicine treated seedlings are somewhat reluctant seed setters but by making several crosses some seeds were obtained, the fertility of tetraploid lactifloras will increase with each generation. Seedlings are being produced by intercrossing the various tetraploid lactifloras. These will be very useful for future hybridization.

The new lobata hybrids contain two sets of lactiflora chromosomes and two sets of lobata chromosomes and are highly fertile tetraploids. The plants grow to about three feet in height — a little taller than but perhaps they will have their place in gardens as well as the shorter growing hybrids. The plant habit shows the in-crossed lactiflora chromosome effect in its leaves and stems. Also, the roots are more lactiflora in appearance than are the triploid lobata hybrids which normally have but one set of lactiflora chromosomes from the diploid lactiflora parents.

The blooms are especially long lasting on the plants. The petal texture is heavier than that of the triploid forms of lobata hybrids.

Pollen of several improved tetraploid hybrids of various parentage were used on these new lobata hybrids, each cross produced seeds which are being germinated at present. Perhaps some of the advanced generation lobata hybrids contain more than one set of lactiflora chromosomes and these have been found to be fertile with the new lobata hybrids. Seedlings of **'Paula Fay'** x **'Moonrise'** are especially useful in this type of hybridizing. Doubleness is appearing among the **'Paula Fay'** seedlings in a high percentage of the plants.

Pollen of the new Lobata Hybrids is very fertile. All selected seedlings were dug and divided this past fall. The root pieces are being tested for their ability to form adventitious buds. This trait is very useful in propagating lobata hybrids. Those that fail to produce adventitious buds will be propagated by grafting to speed process.

Some of the new hybrids should be available to hybridizers in a year or two.

For several years we have intended to list a group of peonies considered of merit for hybridizing. The list was never compiled because of the scarcity of those valuable plants. The reason for this is that several are slow propagators, at least in this area of severe winter temperatures. After considerable thought on this matter, we've decided to issue a list offering small single eye divisions of the scarce items. Actually, a small single eye division, if carefully tended during the first year following planting, will result in a fine sturdy plant with a majority of new roots capable of supporting the plant.

Excellent results have been achieved by utilizing a so-called breeder bed for those rare plants. The roots are placed in beds similar to those used for growing our tree peony grafts. Even a light mulch of wood shavings to reduce weed competition and to conserve moisture is useful. A small handful of complete fertilizer such as 12-24-24 is applied each spring. The most important factor in preventing

losses in moving peonies is to be certain they do not lack moisture during the first summer. Our breeder beds are piped for water. During dry periods the plants are well watered at least once each week.

**TREE PEONY SPECIES**

*P. lutea* (Fay) A very good deep yellow form of the species obtained from Mr. Fay several years ago. It is very fertile with other forms of *P. lutea* as well as with cv. of Japanese Tree Peonies.

A sturdy division ..... \$12.50

*P. lutea* (Gratwick No. 14) An improved form of the species developed by Mr. Wm. Gratwick of Pavilion, N.Y. several years ago. Mr. Gratwick intercrossed the various forms of *P. lutea*, the better forms were numbered. This is one of the best. Its petioles hold the blooms well above the foliage. It has an excellent deep yellow color. Extremely useful to the hybridizer. Extremely fertile.

Two yr. grafted plants ..... \$25.00

*P. suffruticosa* var. Rock's. A beautiful white form with maroon flares. Extremely hardy and blooms well here each year. Extremely fertile by selfing; with other forms of *P. suffruticosa* (Japanese Tree Peonies) and as the pollen parent with forms of other tree peony species. Useful to add winter hardiness to its offspring.

2 or 3 yr. old plants ..... \$15.00

*P. potaninii* var. Tall Yellow (Stern) The most recently found variety of this species. Introduced by Sir Frederick of England. It grows to four or five feet tall here. Excellent yellow flowers well hold. Fertile by selfing and with other species of tree peonies.

Sturdy divisions ..... \$12.50

*P. potaninii* var. *trollioides*, a very short growing form of the species (8 inches tall here) that produces deep yellow single flowers. Extremely charming finely cut foliage. Should be useful in developing a new line of short growing tree peony hybrids in yellow and blended colors.

A few 2 year old grafts ..... \$20.00

*P. suffruticosa* The Japanese Tree Peonies. All are fertile, some more so than others. Listed below are plants that we may be able to supply in either the two or three year old grafted plant size. If not available this year we should have a limited number within a year or two, Shintenchu is hard to propagate but has proven to be very valuable as a brooder. It appears to brood like a tetraploid and has the appearance of a tot.

COMPANION OF SERENITY acts and breeds similar to Shintenchu.

YASO-NO-MINE is the most double of the Japanese tree peonies but does contain a few anthers hidden deeply among the petals. It is being used as a pollen parent here.

ROCK'S var. is the hardiest of all tree peonies and produces seeds easily. We have many seedlings from it in various stages of maturity.

Varieties of *P. suffruticosa* available as two or three year old grafted plants:

GESSEKAI	\$12.50
GODAISHU	12.50
COMPANION OF SERENITY	35.00
GUARDIAN OF THE MONASTERY	35.00
HANA KISOI	12.50
KAMADE FUJI	15.00
RENKAKU	12.50
SHINTENCHI	35.00
YASO-NO-MINE	20.00
YAE ZAKURA	12.50
TAMA FUYO	12.50
<i>P. suffruticosa</i> var. ROCK'S	15.00

NOTE: If you wish to obtain a complete list of these peonies for hybridizing, write to

Dr. David Reath  
Box 251  
Vulcan, MI 49892