PAEONIA

Volume 23b, No.3 October 1993

Editors: Chris and Lois Laning
553 West F Avenue
Kalamazoo, MI.

Suggested yearly contribution:
$2.50 in the U.S.
$3.00 in Canada
$4.00 in Europe, New Zealand, and Australia.

Seed Distribution, · · · · · · · · · · · · · · · · · · · page 1
Information re. Chinese visitor, · · · · · · · · · page 2
Dwarfism at Nichols Arboretum Peony Garden, Nancy Ann Halas' · · · · · · · · page 5
Letter from Donna Linsley, New York, · · · · page 6
Letter from Gale Whitsett, 0hio, · · · · · · · · · page 7
Letter from Galen Burrell, Washington, · · · page 9
Letter from Anne Oveson, Oregon, · · · · · · page 10

SEED DISTRIBUTION:

Seeds that are available at present:

Lactiflora –

Bute
Krinkled White
Minnie Shaylor
mixed colors

Tetraploid –

Roy's Best Yellow (Cream)
macrophylla hybrids
tetraploid mix + yellow, also red
Sable x Super "D"

Tree peony -

suffruticosa
delavayi - species
a few lutea - species

Seeds available from: Chris Laning,
553 West F Avenue,
Kalamazoo, MI 49004

Please send $2.00 to cover costs of mailing.

A Chinese botanist, Professor Hong Tao, a dendrologist at the Chinese Academy in Beijing, on his world tour spent four days at my home during the peony blooming season, a stop-over that was of great interest to me and offered a most delightful time for me!

While here we discussed the possibilities, or rather the probabilities, of there existing four species (or maybe sub-species) of the tree peony (shrub peony) that we may lump together in the suffruticosa group. The four that he proposes as species are:

1. *P. rockii*
2. *P. joshanensis*
3. *P. ostii*
4. *P. yananensis*

The photographs of the various species impressed me greatly, especially since he pointed out the various differences each species displayed as shown in his beautiful photographs. Being a hybridist and not a botanist, I could not appreciate distinctions that set apart one species from another.

The proposed species *P. ostii* as he suggests will be named for his good friend. Dr. Lupo Osti, who will be his companion on this expedition in quest for more information on tree peonies.

Because of the wildness of the interior of China, much is likely to be discovered on this trip.

Why does China have such an enormous variety of plant life? It has been suggested that this country, China, was not subjected to the glaciers that brought on the various ice ages that had covered most of North America. This suggests that our continent lost a host of species of plant and animal life.

Professor Hong Tao is a big man, at least he is bigger than am I! —and his wife is small, a dainty lovely lady (as shown in the picture of her that Tao sent me). She works in her laboratory from early morning 'til late at night at her research work in tissue culture and embryology. She is having some success in this endeavor and as he says, "God Bless Her"!

We wish both Professor Tao and his wife success on their ventures especially so since we too can profit from their accomplishments.

NOTE: Nothing has been written here about *P. lutea*, *P. delavayi*, *P. potanini* species and sub-species —but maybe additional light can be offered on these too.

中国林业科学研究院
THE CHINESE ACADEMY OF FORESTRY

Mr. Peter C. Laning
553 West F. Avenue
Kalamazoo, Michigan
U.S.A.

Dear elder brother and Sister Laning,

I have the pleasure to tell you that I got home safe and sound after my Paeonia expedition in Europe and U.S.A. Please accept my sincere apologies for the terrible delay to write to you because I had a very busy time to deal with some urgent affairs in recent months. Now I'm writing these few lines to express my sincere thanks, not only to yourself but also to your son's family for the hospitality and kindness shown me. I shall ever remember the visit I have paid you as one of the most pleasant days in my life.

My wife, Prof. Li Wen-dian, specialized on plant embryology and sexual plant reproduction biology. She had got great success on the production of tissue culture plantlets ("mini-seedling") from the seeds of Cathaya argyrophylla and from immature seeds of hybrid Populus. Now she is very interested on the study of the production of tissue culture plantlets from the leaf-buds of tree peony cultivars. She already got tube (flask) plantlets with leafy shoot and root from the leaf-bud of tree peony but still failed to transplant them

Postal address: Wan Shou Shan, Beijing, The People's Republic of China
Cable number: 0161

中 国 林 业 科 学 研 究 院
THE CHINESE ACADEMY OF FORESTRY

into the field.
Now she is persistently striving against difficulties in her Lab. on research work of tree peony tissue culture. God bless her!

I'm planning to leave Beijing for 10 provinces of ~~West~~ North-, Central and Southern China to continue my Chinese Peony Expedition.

I will send you Paeonia and Syringa seeds before the end of this year.

Enclosed herewith 6 photos, I hope you like them.

With best regards, from your young brother,

Hong Tao

Postal address: Wan Shou Shan, Beijing, The People's Republic of China
Cable number: 0161

Chris Laning
553 West F. Avenue
Kalamazoo, MI 49004

June 24, 1992

Subject: Dwarfism at Nichols Arboretum Peony Garden

Dear Chris:

From what you describe, it appears that the sawdust and wood chip mulching is not beneficial to the Peony beds. As you remember, Peonies like their feet dry and this is what we mostly recommend for most Peonies and it is essential.
In the spring the ground is wet, and this induces suckering to take place on some roots that have been severed when the plant is removed. There are always trace roots left without any eyes at all, and yet in time these will develop into small plants and grow into large ones.

Light is composed of many frequencies, and each frequency has a different depth of penetration in water. The lower frequencies seem to penetrate the deepest. In water, ultraviolet will penetrate to at least 18 inches, infra-red does not have that depth of penetration because it is absorbed and progresses less quickly. Actually I would think that when you see this condition occurring that it happens in the valleys of the garden where the water stays longer and not so much on the hills.

The ultraviolet seems to induce suckering, but this places a strain on the roots of the plant that provide the initial nutrient for the plant to grow. The immature stems never do return any food to the roots, and when there are a large number of immature stems, then the plant seems to literally starve to death since it is missing certain nutrients that the remainder of the stems used up.

However there are certain peonies that thrive in moisture and need moisture over a longer period of time and in fact like wet feet. I rather think that the Peony 'Oriental Gold' must be one of these because the leaves always look like they are withered and need more moisture. It may be that mulching would be beneficial for Oriental Gold which does not sucker that well, in fact it has very few stems at any time that come up in dry ground.

When we do get some species into hybridizing, not all of them acclimatize to the regular conditions and Oriental Gold seems to have been one of them.

My best guess is that the peonies at the Arboretum will recover when the soil is returned to its normal condition for Peonies, namely dry feet.

However you did bring up an interesting phenomenon, that can in fact be induced if you provide the wet conditions for the Peony roots.

The list of peonies mentioned is unfamiliar and nobody really knows much about them. Perhaps there may be some good flowering plants there, but , which ones?

Sincerely,
Nancy Ann Halas.

109 Benedict Road
Pittsford, New York 14534

Dear Chris, March 15, 1993

Thank you so much for the back issues of Paeonia and for editing this publication for twenty two years. What a wonderful gift to the rest of us who are struggling to understand this complicated genus.

Your material arrived just before the Blizzard of '93, so I have spent three snowbound days taking notes and going through the back issues, in between bouts of shoveling four feet of snow off my driveway.

I am a librarian by profession and it occurs to me that it might be helpful to have an index to Paeonia. What do you think? It would take a lot of time and effort, but if it would help a lot of hybridizers, I would be willing to tackle the project. The only problem would be that I don't have a complete sequence of issues. Perhaps, if this project were deemed worthwhile, members would send me copies of issues they hold to fill in the blanks. We could send a sign up sheet around and people could volunteer for the ones they wanted to send.

Please be assured that if the reaction to this project is "Ho, hum, what a complete waste of time. Wouldn't be in the least useful so far as I'm concerned.", my feelings would not be hurt in the least. In fact I might even give a sigh of relief at not having to tackle it after all.

Also from the seed distribution list please send me:

Lactiflora - from Minnie Shaylor
Tetraploid- from Roy's Best Yellow *
Nosegay F_4 's

* you had mentioned sending me some in a previous message so I wanted to warn you in case of possible duplication.

There is an idea I would like to suggest for a future issue. An article on all the procedures for collecting and saving pollen for hybridizing. When do you collect it? How should it be stored? Do you freeze it over the winter to use late blooming pollen on an early species? These things are all old hat for the experts , but to a beginner it would be very helpful.

Thank you very much for all the help and encouragement.

Sincerely yours,

Donna Linsley

p.s. One printed letter per member per decade is plenty. O.K.?

970 E. Mound
Columbus OH 43205
5/27/93

Dear Mr. Laning:

In 1983 or early 1984 I requested seed from the exchange —see copy of page 13, Bulletin 248, attached. These were planted August 1984, germination 1985, first bloom (pink seedling) 1989.

I don't know if anyone ever writes you in appreciation of this service, but that is my intent, along with some description and some questions.

The tree peony seeds germinated very erratically. I would guess, judging from my own seed from my own plants, that the seed was not very fresh. However, I have saved a very tall, very elegant clear pink with neither yellow nor blue in it —flower form reminiscent of '**M. Jules Elie**' before it grows grotesque, very double but no flopping. Flowers are long lasting and medium size for TP, all at the top of the plant. I will graft it this fall. I could wish it a bit shorter but growth habit is like '**Yachiyo-Tsubaki**'. Entire plant and blooms give an impression of order and clarity, neatness and precision. I have also saved a very large semi-double white which may not be so outstandingly different, but is beautiful. I shall grow it on for further appraisal. The pink, however, is unique. I have about 30-40 tree peony vars. and many seedlings and the pink color — in bloom so far — is unlike any other.

From the herbaceous seeds I have saved an outstanding pink single, cup-shaped, very heavy (this was from a small batch of seeds) substance. The flowers are large. It opens a deep pink near rose, then very slowly fades to ivory, but is beautiful in all stages. Remarkably, the substance is so heavy that it outlasts the other hybrids I have; the petals fall still stiff and insignificant - small, mainly. I simply let it grow on, and each year it improved. I suppose it compares with other hybrid pinks — I have '**Cytherea**', '**Friendship**', '**Paula Fay**', '**Victoria Lincoln**'. Color is nearest '**Friendship**' after fading of both it and '**Friendship**'. I am very pleased with it. I dug and divided it last fall and had 11 divisions. All bloomed but two; one was a very small division, and the other had no apparent eyes when planted. Most bloomed on two stems and the blooms were up to its standard.

I also saved all seedlings from another group. These (about 30 seedlings) were mostly white, but one double yellow and one double pink (pale) appeared. The yellow is very double, very near the color of Reath's '**Cream Delight**'; like it, it fades to ivory before falling. Both the pink (described above) and these seedlings appear to be about normal lacti height, with good green foliage at first glance indistinguishable from lacti. Interestingly, I thought for most of these years that the large group must have macrophylla behind it because the juvenile foliage was so large. This characteristic has lessened with time, and now only the unbloomed clones show it. The seeds were all spaced several inches apart, so I let them bloom (those that made it) without moving them. Again, the first flowers were very insignificant but have increased in size and beauty with time. They are mostly singles, large, a glistening white. All are lined out and I shall let them stand until I feel they are mature before any further selection. The double pink is interesting. I marked it on first bloom

because it showed some extra petals. It is less double than the yellow, but the cut of the petals seems neater to me. I lined it out entire (none of this group was large enough to divide). It bloomed on 2 stems this year ?one stem single, the other double! I am quite certain that this is not a case of two seedlings together, though. (About 19 this group are still unbloomed).

Now my questions. From information on the seed list, parentages, and other information, I assume that this group of seeds was hybridized with tetraploids in mind in yellow and pink. Unfortunately, I cannot find my planting list for the seeds. (I have ransacked my records, and I still may have it, though where I can't imagine.) One group of seeds (large group) turned out to be straight lacti, tall and skinny, in ugly purplish shades. I assume they were from '**Vista**' x '**Archangel**', either self-pollinated or contaminated. I discarded all but one — the only red, but it still seems unacceptable.

Since I can't find the planting list, I am totally uncertain about the background of those I saved, and with your knowledge as their hybridizer, you may be able to give me an educated guess. I might add that only 2 groups of seeds were any great quantity (the lacti types, and the group of 30). Some (as usual) did not germinate.

Additional on the yellow double. Color and size are very good, but the flower has a rather untidy ragged appearance. Since the plant is not matured, I believe this will take care of itself.

Also additional: the group of 30 sets seeds (I saved 85 seeds and they germinated about 70% in 1992 - open pollinated) and interestingly, '**Archangel**' growing about 10 feet away also produced a good number of seeds for the first time (open pollinated). I have used the pollen of the two doubles this year and will know more about it later. The first - small batch - deep color on opening - pink also set seeds 2 different years to open pollination but they were few and none has germinated so far. Pollen used this year first time.

So — if you can help me with some clues on the parentage of these herbaceous selections I will certainly appreciate it. Thanks very much for your interest and your time.

- Gale Whitsett

p.s. Sorry — I haven't had time to get the copy I intended, so I'm writing the page 13 inf. from Bulletin 248. Since I will be 70 next January, I no longer like to spend any more time than necessary. I requested ?

from Toichi Domoto	Suffruticosa - TP seeds
from Laning	1. Vista x Archangel
	2. Quad F3 x Moonrise
	3. Serenade
	4. Quad F3 x Silver Dawn F3
	5. Tetra from pink & yellow clones
	6. Sanctus x Silver Dawn F3

I don't remember if I requested all of 1 thru 5 or only some. I believe I requested seed from each category. I remember there were a good number of envelopes but quantities of seed in some were small. As noted earlier, 2 quantities of seed in some were liberal - probably #1 (gave ratty lacti) * but the other I can't guess unless maybe #5, which was probably open pollinated (?).

Since the pink coloring was rare in the 30 plant group (and pale) and only 1 or 2 showed enough yellow to mention **, I'll depend on your guess as to probability for the seedlings described.
I note that of the vars mentioned in 1-5, all were tetra except '**Vista**' - I assume the quads are mixed diploid and tetraploid. I also note that the only colors involved are pink and yellow in all.
* Guess - since I can't find planting list.
** except the yellow described.

ED. NOTE: The yellows probably come from Quad F_3 x Silver Dawn F_3. This is a cross that produces many excellent clones — and happily, a few good yellows.

- Chris

- -

October 13, 1992

Dear Chris and Lois,

I just received my copy of PAEONIA. A lot of interesting letters and comments about species.

I hope to figure out how to grow Paeonia brownii in the next 2-3 years. I have roots and seeds planted in 3 different growing situations. I also have sent seed to botanic gardens and individuals in England, Russia, France, Germany, Australia, and the. U.S. As brownii grows in places that reach 20-30 degrees below zero I feel that it should be easier to grow than californica.

If someone has a serious interest in hybridizing brownii I will try to collect pollen next spring. This year it began to bloom on May 1. I am going to try and hybridize brownii with delavayi this next year.

So far I have seeds and/or plants of 39 species, subspecies, varieties of peonies. Hopefully in 2-3 years I will be offering small plants for sale and in 3-5 years I hope to offer hand-pollinated seeds for sale. If it is possible to grow large quantities of species peonies I suspect that the Northwest is the best place to try.

Good luck with your seeds, seedlings and plants.

All the very best,

GALEN BURRELL
P.O. Box 754
Ridgefield, Washington 98642

71735 Dougherty Loop
Wallowa, OR 97885
October 12, 1993

Dear Mr. Laning:

I brought a brownii peony home in 1991. It bloomed the first time this year. I pollinated that bloom quite thoroughly and then saved some pollen. '**Early Windflower**' was the only thing that was near to blooming, except '**Rose Crystal**'. I pollinated both, following instructions as to unbloomed flower -removing all stamens and covering with an envelope. A week or two later, I took off the envelopes - not even empty pods on '**Rose Crystal**', but '**Early Windflower**' set quite a few pods. I had then read that E.W. didn't seed - I was popping the pods and discovered a seed in the pod that I'm certain was the one I'd pollinated. Found another seed in a different pod. Neither was broken loose from the casing. Tied old nylon hose around them and when they came loose I planted both seeds - also 2 seeds from '**Windchimes**' which isn't supposed to set seeds. They matured far earlier than any of my other peonies. I'm not optimistic about germination, but am hoping. I've put bricks around them to prevent any mishaps. Anyway, just getting the seeds was lots of fun. I'll try again next year if we don't have killing frosts like year before this.

'**Minnie Shaylor**' had around 350 seeds - pods split early but seeds hung on. Have around 90 seedlings from seed I planted in spring of '92. Also had a seedling from seed I bought from Wm. Seidl's ad several years ago. One plant had 2 lovely pinkish ivory single blossoms ('**Salmon Dream**' x '**Good Cheer**'). Had only 3 plants survive from 11 seeds - they came up and died. Had 8 plants from (lobata x '**Good Cheer**') - 12 seeds. Two of those plants had small red single blossoms. I planted the seed the spring of 1989. There's something very fascinating about raising plants from seeds. I planted 3 brownii seeds by the wild plant - pushing them into the ground an inch or less. There was a large rock nearby and I piled brush on the rock, so I think I can find it again (400A hill pasture). I planted around a dozen seeds around the one here at home.

Got my first peonies in 1987 and now have around 125 —no more room. I bought from everyone who had ads in the 1988 Journal. I was at Caprice this spring, but your peony wasn't in bloom.

Yours truly,

Anne Oveson