

REQUIRED READING –

1. "The Peonies" by John C. Wister, \$3.50 from American Peony Society.
2. The Bulletins of the American Peony Society.

SUGGESTED READING –

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2. The Bulletins of the American Peony Society.

The PAEONIA is authorized by Miss Silvia Saunders.

Our leader and teacher in hybridizing is Roy Pehrson.

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

TABLE OF CONTENTS

Letter (1st) from Allan Rogers _____ pg 1
 Planning Peony Crosses to Make in 1977.
 (cont. from March,) Don Hollingsworth __ pg 2
 Letter from Rev. Joseph Syrový _____ pg 3
 Status of Hollingsworth Garden
 this Spring ____ pg 4
 Letter (2nd) from Allan Rogers _____ pg 5
 Breeding a Strain of Paeonia Mlokosewitschii
 for Garden Use. Don Hollingsworth _ pg 6
 Reply to Mr. Rogers' Letter
 Chris Laning ____ pg 9
 Cream Chris Laning ____ pg 9
 Chris' Garden Performance. _____pg 10

Suggested yearly contribution to cover
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Dear Lanings all:

May, 1977

You've furnished me with a number of interesting hours perusing "PAEONIA". The past issues were greatly appreciated. My original training was as a mouse geneticist but some of your genetic material is still beyond me — but I'll eventually catch up.

We got the last of the lactifloras from Walter Marx in Boring, Oregon. (Hope to have a small peony - daylily nursery set up by the time I retire.) Included are about 20 lots of seedlings (selections made in 1968 from over 4 acres planted as seeds about 1962.) Some very interesting singles and Japs.

You were kind enough to send me 6 groups of seeds last November. I put each group in moist Cornell mix in plastic bags atop the bookcase. Temperatures probably were from 65-72° F. Seven weeks later I checked them and those groups with roots (1/2 to 1-1/2") were then planted outdoors (where our wet winters range from 25 to 40° F night temperature). These were labeled,

Group A - Suffruticosa Tree Peonies
'Nippon Brilliant' x 'Roy Pehrson's Best Yellow'
 Michaud's lactiflora mixed.

The second group (either no roots or only tiny ones) were put in the crisper in the refrigerator for 12 weeks. At that time most had good roots and all were planted outside.

On May 10 — 26 weeks after first setting up -

Group A - most with 2 leaves about 1-1/2 to 3" high.

Group B - all lots peeking out of the ground.

Pehrson's Quad F2 x **'Moonrise'** F2 - open; Pehrson's tetraploid mixtures; and Giant Rushlight F2 open). This is certainly far better success than I had anticipated — thanks to your advice about temperature regulation.

Am I right in assuming that Quad F2 x **'Moonrise'** F2 would be F3 pod parents open pollinated? Would it be possible to find out what pollen fertile plants might have been open at the same time?

Yours for beauty,

Al Rogers
 15425 SW Pleasant Hill Road
 Sherwood, Oregon 97140
 (Editor's reply on Page 9)

PLANNING PEONY CROSSES TO MAKE IN 1977
(continued from March, 1977 issue of PAEONIA)

by Don Hollingsworth

Lacti x Garden Hybrids, back-crossed.

This is logically one of the most promising lines of effort. It should be possible to at least attain entirely full double flower forms among the offspring of double semi-double Lacti cvs. x '**Cytherea**', which is out of a double Lacti; or, by '**Red Red Rose**'. Bomb doubles should show up from the same back-crosses out of some of the single, Japanese, and bomb double flower forms. If, as I am "betting", '**Red Red Rose**' and '**Cytherea**' can themselves impart the genes for two-stage doubling, they may give doubles out of most any Lacti. Whether the nice color tones can go forward with their doubling genes depends on the nature of the genetic linkages that are present. I now have on hand young plants of the following pollinators on Lacti: '**Cytherea**'; '**Red Red Rose**', '**Claire de Lune**', '**Prairie Moon**', '**Laddie**', '**Echo**', and some unnamed early hybrids. When I have pollen, I'll continue some of those, plus '**Nova**', '**Roselette**', '**Chalice**', '**Archangel**', '**Moonrise**', and others. Not all of these are back-crosses, some would be outcrosses since Lacti is not now in their pedigree. Also, not all have the sort of pedigree that will let us expect doubling in the offspring. However, if they turn out to be fairly fertile on Lacti, we can enhance the prospects of doubling in the progeny by using the more double forms of Lacti on the pod side of the cross.

Experimental Efforts

Actually, some of the efforts just previously described belong here in the sense that the questions of whether or how they will produce seeds are not yet tested (in my own experience, that is).

'**Oriental Gold**' has demonstrated some fertility for me and for others, but has often been an unreliable grower. I am now assembling some of its offspring in hopes that by interbreeding them it will be possible to recover the '**Oriental Gold**' yellow in breeding clones also having a stronger constitution.

The '**Lavender**' strain, made up of several clones, has intrigued me due to the descriptions of the petal color. I'm trying to put together enough different ones to find some that can be interbred. Also, I am trying to establish '**Eclipse**', (a half sibling that is out of officinalis "rubra plena" instead of Lacti as are the 'Lavenders') to interbreed with them. This also is an effort to preserve the color potential in breeding clones that can also be reliably propagated.

There are a lot more experimental possibilities in my collection, but this should suffice to expose how I am oriented on the subject of planning peony breeding programs.

Perhaps one further general principle should be stated here. This has to do with the importance of breeding the best to the best. Particularly we should be using the finest quality Lacti cvs. available that will work in the programs we are pursuing. Seeds can be produced in the greatest quantities from some of the most mediocre of garden peonies. Row space is too valuable to give it to the progeny of less than the better stock of that available. When we use something that is mediocre on a lot of characteristics it should have at least some unique virtue, if the use is to be justifiable, for it will possibly take two or three generations to breed the undesirable part out again.

LETTER FROM: Rev. Joseph A. Syrovy (Father-Joe) - Vining, Iowa
TO: Chris Laning

DATE: May 3, 1977

Dear Chris:

Enclosed find my dues for 1977. I'm making a report of the serious drouth and the severe winters we've had the last few years in the Midwest. Damage was especially severe to tree peonies, especially the Lutea Hybrids, both with temperatures which broke all records for record lows, and the chill factors. Also damage due to botrytis and also borer infestation - not only were the tree peonies affected, but herbaceous as well, failing to set bloom. Other plants such as my flowering dogwood, over 15 years old, froze; buds frozen also on Exbury hybrid azaleas, which have been hardy up to this time.

When I saw some of my herbaceous and tree peonies wilting, I watered, which I should not have probably done. This caused botrytis to set in especially in the tree peonies. I cut out and sprayed with Bordeaux but the damage had been done. I did the same this spring. As I said before, I had a lot of borer damage too, due to the long warm spell in the fall, and I also have lilacs, elderberry, Rugosa roses, bird-sown raspberries, etc. around and these harbor the borer. The tree peonies that were not damaged failed to set blooms. This also happened to some of the herbaceous.

If these severe winters continue, we will have to do more mulching and use rose-cones or other protection for the tree peonies.

On the other hand, my two Itohs, '**Yellow Dream**' and '**Yellow Heaven**', are better than ever. I have mulched and mounded them up with sawdust the past few years. I have been propagating them the past couple of years by my layering method and sent Don one of each and also to Louis Smirnow who lost his in the hurricane and flooding last spring. I felt we owed them to him as he introduced them and we would probably never have had Itohs except for him. I hope other members of PAEONIA who have the others, '**Yellow Emperor**' and '**Yellow Crown**', and the others Louis has introduced, will share them with him. I also sent him '**Oriental Gold**' which he had lost.

Don't know whether I have any Itohs yet. Don was good to share pollen with me last year and I have some seedlings planted out, so we are hoping for some Itohs! We will hybridize again this year and hope again!

Some of the roots you sent from Roy's garden where "the kids" had pulled up the stakes are going to bloom this year, so we are looking forward to see what they are like. They will be useful for hybridizing. I have six seedlings of '**Roy Pehrson's Best Yellow**' from seeds you sent me, also some seedlings of Roy's Second Best Yellow. Had a number of plants from the other seeds you sent me. It was so dry last fall I thought I'd lose the plants. I transplanted the one year seedlings of Roy's Best Yellow and they did very well. Wish I had moved the others too, as they are not as stocky as the ones I moved.

All the Hybrids are doing extremely well, and I'm not going to lop off a piece for everyone that sees them! As soon as they see '**Red Charm**', or '**Flame**' or '**Cardinal's Robe**', etc., they all exclaim, "give me a plant of that!"

I've cut most of the Lutea Hybrids down to the ground and they are sending up new growth from below so that will help rejuvenate them. We need more rain — and some warm weather!

Regards, Father Joe

LETTER FROM: Don Hollingsworth, 5831 N. Colrain, Kansas City, MO 64151
Date: March 30, 1977

Dear Chris:

Peonies are in growth in Kansas City and I'm hoping for a stable weather pattern with no late freezes. The well adapted peonies are moving cautiously — some lacti cultivars haven't broken the soil yet and the various officinalis hybrids are mostly up but still comfortably slow. The early hybrids are not nearly so well programmed and, as usual, some are risking serious damage.

The seedlings of 1975 crosses are still short enough for the lids to be put back on the frames if severe weather threatens. There are some interesting groups among last year's germinations. 1975 was a big year of crossing for me, as plantings of prior years converged in their development toward productive maturity. Adding to the seed supply from home crosses were several windfalls from outside sources, so that more than 900 "transplants" went into the seedbeds in Spring, 1976. (About 500 are now surviving.)

The Itoh Hybrids from that group have now emerged sufficiently to estimate their survival rate — about 60%. Twenty-eight was the inventory of these last Spring after planting. Now there are apparently 16 worth mentioning. One is very strong, 15 are of satisfactory vigor— satisfactory for the time being — and 2 "punies" have survived. If the latter do not soon succumb to natural events, they'll no doubt disappear due to an unnatural event next fall at transplanting time.

This is by far the highest yield of Itoh Hybrids from my efforts in a single year. In six previous years combined the total of second year survivors was seven. Whatever combination of causal factors contributed to the great difference, I believe now that the predominant factor was that in 1975 I used a great deal more of good Lutea Hybrid pollen in making crosses than in previous years.

Making the crosses requires not only good pollen but a supply of suitable lacti flowers as well. The latter are easy to come by and should not for long limit one's ability to make the Itoh cross. For me, however, it has not been easy to establish a dependable supply of suitable pollen. In the first place, I was reluctant to spend my limited annual amount of peony dollars on a few Lutea Hybrids, when these dollars would go a lot further on the rare herbaceous hybrids then available. In the second place, I already knew that some of the Lutea Hybrids having excellent garden value also produced no pollen at all -- which ones should I select? I'm past that now and can speak to the question of what cvs. in which one might invest Lutea Hybrid dollars in preparing to make the Itoh cross.

First, '**Alice Harding**' is comparatively less costly, but is an uncertain producer of pollen, though sometimes the pollen is quite effective.

Secondly, I can now list several additional F1 Lutea Hybrids that have given not only pollen, but have also sired Itoh Hybrids here. These are '**Banquet**', '**Demetra**', '**Gauguin**', '**Renown**' and '**Tria**'.

Thirdly, I can report that at least some of the F2 Lutea Hybrids are much better producers of good pollen than are even those F1's that have given Itoh Hybrids from my crosses. In 1975 I had pollen from two Gratwick-Daphnis F2's that were acquired the previous Fall. These were responsible for 8 of the 16 hybrids that have been established from that year's pollinations. Both of these plants, D-105 and D-106, are from '**Amber Moon**' x Saunders F2A. I will not have flowers of these again this year. Due to my inexperience, mostly, I've handled poorly the divisions of tree peonies brought into the planting in

previous years and it is taking much too long to get them re-established. I hope I'm past that now, but that's another tale.

Just how to go about acquiring flowering age F2 Lutea Hybrids has been problematic. One just about had to know someone willing to share or be known as one interested in tree peonies for breeding. Two different years Gary Seaman offered advanced generation Lutea Hybrids that had been selected out from the Gratwick-Daphnis breeding program. Until now those were almost the only source of supply.

Last year, however, David Reath offered for the first time grafts of three F2 Lutea Hybrids of his own breeding. These are Reath A-197, A-198 and A-199. The latter two each proved to have a good supply of pollen that was highly active when I grew it in a test medium (from flowers brought to that A.P.S. National Show last June). Since David has North America's foremost tree peony propagating firm, I trust that we will now have a continuing ready source for dependable Lutea Hybrid pollen producers.

Inasmuch as the Itoh Hybrids have proven to be reluctant pollen producers so far, it is of key importance that a great many of these hybrids be produced — of key importance for future breeding in this line. Sooner or later, suitable pollen producers will appear, but they frequency is apparently low.

There is room for a great deal more work in breeding the Lutea Hybrids, as well. Once fertile clones are acquired, it becomes a logical stop to work matings among them as well as to make the Itoh Cross. Now is a good time to decide on some breeder plants to add this year.

* * * * *

CAPRICE FARM NURSERY, 15425 SW Pleasant Hill Road, Sherwood, Oregon, 97140

Dear Chris and Lois,

12-16-76

Many thanks for PAEONIA. I'm enclosing a donation. Perhaps if you have any extra old issues you could send them along.

The seeds have been in moist moss in the warm room along with 100 amaryllis being forced for Christmas. Checked them today (been in there 5 weeks) and many show roots (even the Pehrson Hybrids are breaking thru). I'll transfer them to cold conditions as soon after Christmas as I can.

Have raised and bred amaryllis for several years but you people are so far ahead of me, I'm ashamed of my ignorance. I feel like I'm walking into the third act of Shakespeare's King Henry the VI and trying to figure what's going on. My training 30 years ago as a mouse geneticist has been of little use yet.

I feel proud to be even on the edge of such an interested and forward looking group. Thanks for being willing to share your knowledge.

Sincerely, Al Rogers

NOTE FROM EDITOR: Dear Paeonians, did you notice — Allan placed his seeds in vermiculite about November 9, 1976. The results here, too, run counter to the accepted theory of peony seed dormancy!

BREEDING A STRAIN OF PAEONIA MLOKOSEWITCHII FOR GARDEN USE:
(A letter to Paeonia Editor from Don Hollingsworth)

In our exchange about your project in growing *Paeonia mlokosewitschii*, 'Mloko', you write, Chris, that there is "something sad about *P. mloko*, many clones produce merely off-white flowers -- not the yellow we are hoping for. The plants with the very good yellow color are the ones that seem least hearty. Good yellow flowered clones don't respond favorably to just ordinary gardening procedures, they need a lot of coddling." I see this as an especially significant observation. While you did not single out the particular coddling that is required, I suspect that both the exposure and the soil (fertility and structure) may be critical factors. Also, that the plants are simply slow to develop again to maturity after division. The importance of your observation, as I see it, is that it defines a breeding problem -- the question of how to go about the development of a strain of plants that is reliable and that is representative of mloko in color of the flowers.

For the sake of an argument, which might lead to a possible solution, I will take an optimistic position: Although it may take one to two peony generations (5 to 10 years?) to accomplish, we should be able to breed a mloko strain that is reliable and has desirable flower color. My adoption of this position is supported by my faith and confidence in the presently available knowledge of plant breeding and my observation of two of mloko's descendants (both are hybrids) which have a clear yellow color.

First, I accept the following, based upon established knowledge as supported by observation: A plant derives its outward appearance through three general vehicles —

1. The array of genetic material received from its two parents is easily the greatest single influence on what the individual is and what are the boundaries that limit what its systems can do. This genetic material is subject to random division before recombining during the fertilization process. Thus it is especially amenable to manipulation through the practice of the breeder's arts — selection and controlled matings.
2. Then, there is the non-genetic, or extra-chromosomal cell material that is a part of the germ cells (egg and sperm) which pass from generation to generation. The chlorophyll generating mechanism is one example of plant systems that are transferred outside of the genetic complex. Systems transferred in this way are not very much subject to variation and therefore present only minimal prospect for manipulation by the breeder.
3. Environment is the remaining general category of influence on an individual's outward appearance. Soil has always been recognized as a very important factor in producing fine specimens of peony. Another factor is temperature -- the red and blue tones in flower colors are often seen to be enhanced when the weather is cool, perhaps mloko yellow is also enhanced.

My observation of two mloko descendants with clear yellow flowers further supports the optimistic view. One is 'Nova', a plant of it that came from Silvia Saunders, and the other is my seedling, Lot 7329 #10, '**Roselette's Child**' F2 x '**Cream Delight**'). The RCF2 here involved is a plant distributed by Silvia under that name. (There may have been other seedlings of '**Roselette's**

Child'.) This one is the big-leaved, sprawly plant with ivory colored flowers and purple pigment showing inside the roots. **Cream Delight'** is Reath's production, (**'Roselette'** F2 x Saunders 14400 (Lacti x 4710 mlo-mac)). The key consideration for my argument is that 7329-10 has a clear, greenish yellow, flower comparable in color to Nova's and it remained yellow, though lighter, at the end of the third day (yesterday). If **'Nova'** reflects a color comparable to "good yellow flowered clones" of mloko, as you classify them, then we have a basis for formulating a conjecture about the inheritance of mloko yellow. Given a logical conjecture (hypothesis) for guidance, we can proceed with an attempt to resolve the problem you have defined.

My conjecture on the mloko yellow mode of inheritance is as follows:

1. Mloko yellow is inherited as a recessive -- this does not rule out the possibility that it is inherited as a non-chromosomal element, but I think this is no more than a remote possibility. Genes which produce white pigments that either dominate or mask mloko yellow cause the "merely off white" flower color. I have suspected for some time that the *P. macrophylla* clones used by Saunders may be responsible for a dominant white gene. Or, perhaps, this is due to the suppression of red pigment producing genes as suggested by Reath in the March, 1977, edition of *PAEONIA*. Whether this supposed Macro gene is similar to what is operating in mloko is an interesting question.
2. When genes which give red and red-purple pigments are present as evidently is the case in many of the early hybrids, then pinks of varying depth, rosy ivory and other warm, muted color tones are produced. This development may require an infusion of Macro gene's, if that is what is involved in the suppression of red pigments in the early flowering hybrids of Saunders breeding. It was reported that his Mloko-Tenui F1 plants were all red flowered (demonstrating the red dominates mloko yellow) and that the tea rose colors showed up in subsequent generations, which were evidently the result of open pollination.
3. To recover the clear yellow in descendants of mloko, my conjecture goes on, it is necessary to breed out the red pigment genes and the white pigment genes (drop out, to draw on a term you coined recently). Al, the inheritance factors for mloko yellow must be fully present. I am assuming that is what we have in **'Nova'**, which is a mlo-mac F2, and in my 7329-10 seedling which descends through both parents from mloko. The former is counted tetraploid and the latter is almost certainly tetraploid, which indicates that the level of yellow color they share is achievable at the tetraploid level of chromosome count.
4. There is nothing about what I have seen in this, or that I recognize in reported evidence, to support an assumption that the yellow of peregrina - lobata pigments is the same as mloko yellow. I have a seedling of **'Good Cheer'** (which gets its yellow pigment undoubtedly from the Perry Lobata) that is minus red pigment. Its color is a thin yellow with minimum opacity — the petals are thin and translucent. This is not a satisfactory petal color, whereas the **'Nova'** and 7329-10 color is quite appealing by itself.
5. Breeding out the contaminating white genes could require two generations in mloko. If one starts with one parent that is pure for the offending gene and a parent that has the good yellow, it would take two generations for the good yellow to become isolated again by way of normal processes of

chromosome segregation. However, if the poorly colored parent had only a single dose of the offending dominant gene, then the good colors should appear in the first generation of the controlled mating program. In the latter case one would expect 50% of the seedlings to come good colored, provided the situation permits Mendelian ratios to show -- this would have to be free of complication as from partial dominance, mutations or complexes of genes, as the simple ratios might not be visible outwardly. In the former case, all first generation progeny would have a single dose of the offending gene. However, when these are interbred, 25% of the progeny should have the desired combination, if simple Mendelian dominance is what is involved.

Now, how does my conjecture explain away the threat of ending up with a bunch of weak-growing, good-colored mlokos much like the one we started with? I am hoping the weak constitution is more due to inbreeding than to unfortunate genetic linkages between the genes for good color and the genes associated with weak constitution. Inbreeding reduces heterosis (the proportion of gene pairs where the partners are unlike). Outcrossing increases heterosis. Increased vigor due to heterosis is maximized when, either separate inbred lines, or two different species are crossed, thus the term "hybrid vigor". Many of our peony hybrid seedlings benefit from heterosis in their good vigor. Part of my conjecture about the mloko problem is that the good yellows presently available have been grown, perhaps, from seeds produced in plant collections having only one or two representatives of the species, where there would not be a good opportunity for outcrossing as would be the case in a larger colony of plants. Perhaps then the comparative weakness of good colored mloko plants you have worked with is partly or wholly the result of inbreeding. However, having at hand some of the more vigorous clones of the species, as you report is this case, makes it possible to carry out a controlled program of matings in attempt to create a more satisfactory group of mloko plants. I think this would be an especially worthwhile effort. It's success would assure the continued availability of mloko in future years, another version of "Save the Clones", as you so aptly put it in March 1977 PAEONIA.

As for programs of breeding for mloko yellow in early flowering, garden hybrids, the currently available hybrids which contain mloko in their ancestry will probably allow much faster results than the species. This, however, depends partly on refining our knowledge of how mloko color is inherited. A project with the species such as this discussion envisions, is probably the best way to close in on the precise answers to this question. Perhaps your young mloko seedlings will shed some light even sooner on the worth of this conjecture. Meanwhile, all of us should remember that there is much to be learned, and progress that is needed, which involves no inter-species hybridizing at.

It is possible with the early herbaceous hybrids now available to envision a planting of singles in flower together with a variety of creamy whites, yellows and pinks in harmony owing to their ice cream color tones. What range of foliage form can be tolerated in such a group without destroying the harmony? Can something as distinctive as '**Archangel**' and '**Chalice**' be included and retain the harmony, or do those have to be promoted separately? Thinking here of landscape user appeal, of course. Are there some reds or lavenders, that will fit harmoniously in the "ice cream" series? etc., etc., etc.

The way the new peonies are going to be assured survival, I'm confident, is to get them into the hands of gardeners and before the general public. There will no doubt always be specialists, but not very many at any one time can be expected to take on the burden you carry, or even the lesser effort as some of the rest of us do, and there will be a limit to our individual tenures! Regards, DON

CREAM (by Chris Laning.)

'**Nosegay**' = mloko x tenui. An F2, very early, 30-36 inches tall, light pink, narrow leaves.

1. All 23 plants raised from seeds of '**Nosegay**' have light yellow to cream flowers
2. Foliage looks very much like P. mloko and plants all are short - about 20-26 inches high
3. No evidence of tenui in their genetic make-up.
4. Three plants of same type ('**Nosegay**' seedlings) from Roy Pehrson have given the same results.

'**Gwenda**' = tenui x mloko. An F2, very early, 30-36 inches tall, light pink, narrow leaves.

1. Seeds from this plant produce seedlings of light yellow to cream flowers, foliage is short -- 20-26 inches tall, with leaves very much like P. mloko.
2. '**Daystar**', a tetraploid says David Reath, is just such a seedling from '**Gwenda**' seeds.
3. All tenui characteristics have been eliminated, also color of blooms, foliage, and root appearance.

Now in these two cases along with all other crosses with P. mloko as one parent that have come to my knowledge, results are the same. All are short plants with pale yellow or cream flowers. Not one plant of this type has produced a good yellow bloom which does not fade.

The Saunders Quads seem to give results that are different. While bloom color is the same as the above mentioned plants, these are tall and robust. Leaves are not the same as P. mloko in appearance — look more like lactiflora. Examples: '**Roy Pehrson's Best Yellow**' which is '**Moonrise**' F2 x Quad F2. This plant is about as tall as '**Moonrise**' -- flowers larger and deeper cream or light yellow in color. Also, I have about 20 plants that could be put in this class.

Have we now attained our goal of pale yellow blooms on good plants (tall stiff stems)? But, of course, you haven't seen my group of yellows. Actually? deep yellow will be the final result of attaining our goal. I'm not at all sure that deepening the color is possible with these lines of breeding.

REPLY FROM EDITOR TO MR. AL ROGERS (*See Page 1*)

Dear Mr. Rogers:

In answering your query regarding the Quad F2 x '**Moonrise**' F2, you are correct. Now as to what neighboring plants might have been blooming at the same time, all would have been of early blooming varieties such as '**Nosegay**' F2, '**Battle Flag**' x '**Red Red Rose**' F3, '**Archangel**' x '**Moonrise**', '**Moonrise**' x '**Archangel**', '**Rushlight**' x '**Archangel**', '**Archangel**' x '**Nancy**', and a few Mloko hybrids. It is very doubtful that any of these would have been a pollen parent since Quad F2 x '**Moonrise**' F2 produces great quantities of pollen which is very, very fertile. There is that possibility, but it is small.

From this same cross I have produced several good light yellow flowering plants which blossomed for the first time this year. - Chris

CHRIS' GARDEN PERFORMANCE

'CYTHEREA': Flowers on the two well established plants really outdid themselves this year! Never have I seen such grand, great big, beautiful '**Cytherea**' flowers before. And the color was exactly what I had always been hoping for. As a cut flower, the bloom holds up for several days with no loss of beauty. Blooms that were left on the bushes were pollinated by '**Roy Pehrson's Best Yellow**'.

'LAURA MAGNUSON': The two plants of '**Laura Magnuson**' performed beautifully, producing flowers as large as those of '**Cytherea**' though not having the feathery look of '**Cytherea**'. These too were pollinated by '**Roy Pehrson's Best Yellow**'. A seed or two would be a happy reward!

'PAULA FAY': This one can stand right along side '**Cytherea**' and '**Laura Magnuson**' and not be ashamed of its color and performance; a good plant and truly beautiful blooms! This one too was pollinated by '**Roy Pehrson's Best Yellow**'.

SEEDLINGS: The lactiflora seedlings are blooming in all their glory right now. Which to keep and which to discard is a problem. The singles do make beautiful bouquets, some of which adorned the church sanctuary — reactions being "can't be peonies, peonies don't look like that! what are they?" And the Japs and semi-doubles while little known are loved by many people. A few doubles are so good that I plan to show them at the Peony Convention.

EARLY FLOWERING SORTS: Now I could cry. Early flowering types are seldom timed for the shows. This year would be different since the schedule called for "May Show" -- then the hail at the Klehm Estate changed plans. I've had these early varieties in the refrigerator already for three weeks and to show them, another three weeks wait would be necessary — can't hold them that long! Golly, and I did so want to have people see '**Roy Pehrson's Best Yellow**'. The white flower with red stripes is in the refrigerator now but will be falling apart long before the show.

TREE PEONIES: About 200 five-year old suffruticosa seedlings bloomed for the first time this year. They were absolutely gorgeous -- all singles and semi-doubles. The seeds had come from Domoto of California. Many of you readers received seeds from the same source last fall. Let me tell you that you folk are in for a pleasant surprise when yours bloom!

Mr. Domoto gave two pounds of tree peony seeds last fall, some of which are still available to you. These seeds should be planted by the end of June so you still have time to ask for them. Any that remain will be distributed at the American Peony Society Show in Milwaukee, June 17-19 of this year.

- Chris Laning