PAEONIA

Volume 4, No. 1 March, 1973

REQUIRED READING –
1. "The Peonies" by John C. Wister, $3.50 from American Peony Society.
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, A'9007. Suggested yearly contribution to cover expenses of printing and mailing is $2.00.

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LETTER FROM ROY G. KLEHM, President, American Peony Society.

TO: Chris Laning December 6, 1972

Dear Chris,

I have been told by some of the old-timers of our Society, many of whom are now gone, that years ago peony varieties appeared in this country under numerous names. It was confusion supreme when it was found that a variety like '**M. Jules Elie**' actually was in the trade and in peoples' gardens in this country under 32 different names. This was one of the main reasons why the American Peony Society was formed and organized in 1904 — to straighten out and put some orderly semblance to the nomenclature and registration of past, present and future peony varieties.

Through the years since the inception of the Society the members have carefully corrected misnomers and diligently registered new varieties. We now have in our Society a very welcome enthusiastic response toward intelligent scientific breeding to improve our favorite flower. This is good — this is how we will create enthusiasm for the peony. This also has prompted me to again ask for the continued diligence and response for intelligent development and naming of new varieties.

The American Peony Society, through its Secretary-Treasurer, Miss Greta Kessenich, operates a very intensive nomenclature department. Before a new variety is named the name should be cleared with our Secretary to make sure it has never been previously used. After the name is cleared and if the originator wants to introduce the variety to the public this name should be registered and the registration fee paid to the American Peony Society — American Peony Society Secretary's Office, 250 Interlachen Road, Hopkins, Minnesota, 55343. Without this cooperation from our fine breeders, we will regress and the situation will again become chaotic and we will have failed in one of our main objectives and responsibilities to the horticultural world.

Sincerely yours,
/s/ Roy Klehm

P. MLOKOSEWITSCHI

Roy Pehrson

This, the only yellow herbaceous species is described in "The Peonies". In my garden it appears to be dependable, but it has always been much shorter in growth than the 40" given in the description. Mloko is a real gem which you may want to grow, even though it may not be really needed as a breeder plant.

Not so very long ago it seemed that the only way to get yellow color into herbaceous peonies would be through the use of mloko bloodlines in one way or another. Saunders had provided a tremendously time-saving boost to this effort with several series of fertile hybrids containing mloko blood. In these, the rather pale yellow of mloko is diluted or may not be evident at all. Logically the way to restore more of the yellow color would be to cross them again with mloko pollen. Unfortunately there are serious obstacles to rapid progress using this approach.

1. Mloko pollen "takes" poorly on those hybrids on which it has been tried.
2. The most fertile, most available hybrids of this, kind are tetraploids. Even if seeds could be had more easily, the seedlings would be quite sterile triploids.

All this would be tolerable if there were no other possibilities, but recent findings show that we may be able to get what we want without further direct infusions of mloko blood.

1. Further advanced generations of the Saunders hybrids, intercrossed, and crossings with other promising material may restore full mloko color values.
2. *P. lobata* has been found to contain the very same yellow dye as the one found in mloko. Hopefully the enzymes which provide for the synthesis of yellow dye is controlled by identical gene action in both species. If so the two strains might be usefully intercrossed, reinforcing each other.
3. A breeding result obtained by the late Sam Wissing seems to show that a factor for this kind of yellow exists in *P. macrophylla* too. If this is true it may be fortunate that some of Saunders hybrids with mloko blood also have macro in them.

I have bloomed considerably less than 200 seedlings containing mloko blood. One of these (Quad F2 x Moonrise F2) is about as yellow as a pale clone of mloko. It will be seen that this cross has in it all three of the species listed above. Obviously there is no way to determine which species, or combination of species, is responsible for the yellow color. It is enough just to know that further use of mloko itself is not necessary.

I have no competence at all in the field of chemistry, but something Fred Cooper, our expert on this subject, once wrote to me raises some interesting speculations. Unless I misunderstood, the sense of it goes like this; the white color in peonies is produced by compounds which differ but very little from that which makes mloko yellow. That yellow indeed, is only an intermediate stage in the biosynthesis of "white".

Accepting this explanation, it then seems reasonable to think that "white" results from "epistasis" or "multigenic action". Then if a final gene responsible for changing "yellow" to "white" should be absent, the color synthesis process will be halted at the "yellow" stage.

I can't think of any way to make practical use of information of this kind. We shall have to be content with knowing that if we grow enough seedlings from suitable crosses we will get some yellows. "Experts" have no advantage here.
Here is how I would rate the hybrids containing mloko blood for potential for producing yellows.

1. The most promising perhaps -
    a. The mloko-maco hybrids such as 4710 F2, 9037 F2 and the '**Nova**' strain,
    b. The Quads. Actually their F2, F3 descendants.
    c. The '**Roselette**' and '**Rushlight**' group. Again, the advanced generation plants.
    d. '**Nancy**'.
2. A bit less useful — again "Perhaps"
    a. The '**Nosegay**' and '**Gwenda**' group
3. More difficult — I think.
    a. emodi-mloko and vietchi-mloko
    b. P. mloko itself
    c. '**Belinda**'

Progress toward the goal of yellow peonies may seem rather slow, but nothing, once gained can be lost. There are no steps backward. The change in prospects from only a few years ago is very encouraging. The pale yellow of mloko will yet provide us with very nice peonies, including blended colors. But this is not all. When the big breaks start to come through the use of the two other, and very different yellows in *P. lutea* and *P. ludlowi*, the final outcome may exceed our wildest imaginings.

Don Hollingsworth reported in the December Bulletin that he made a number of crosses using '**Nova**' pollen and got no seeds. He concludes that his pollen may not have been viable.

My '**Nova**' bloomed for the first time last summer. I too used it in a number of different crosses. About half of these failed too, but five of these crosses made perhaps 80-90 seeds altogether. All these were much undersize, but I thought some might grow. Well, one seed has germinated thus far but the others remained small and hard, and many now are rotting in the bags.

There is obviously something "funny" about '**Nova**' pollen, but I can't explain it. Saunders appears to have produced 7 hybrids of mloko x macro — a difficult cross. From these came no less than 111 F2 plants, one of them '**Nova**'. Eventually there were 9 F3 plants also. It seems that all these plants were much alike. He now used two of the Fl plants in crosses onto '**Otto Froebel**' and Officinalis rosea plena to produce a line of hybrids used in further breeding. Two hybrids from the '**Otto Froebel** ' cross and one from the other were used to cross onto lactiflora. One hundred sixty seven seedlings were obtained. It is from these that the Quads were selected. The record I have does not show it, but since 111 of these seedlings came from pollen from the officinalis parent it is likely that most of the named Quads contain officinalis rather than '**Otto Froebel**'.

White's '**Nancy**' came from crossing Officinalis rubra plena with one of Saunders Fl plants, No. 4710. I find that its pollen too tends to make some poor seeds. However, I have bloomed 2 seedlings of '**Archangel**' x '**Nancy**' and one of these was worth saving.

The mloko-macro hybrids clearly have a potential for producing good hybrids. It would be more fun to work with them if some cross should be found to produce a more gratifying seed crop. Reports are wanted from anyone who has had some experience with them — either good or bad.

PEONY HYBRIDIZING: GETTING STARTED

Bill Seidl

In the way of introduction, let me say that my first peony seed was harvested in 1960 from hand-pollinated lactifloras. From these I eventually flowered about a dozen plants. I had not recorded the parentage, knew nothing about peony species and hybrids, and considered the experience a rather frivolous experiment. Although it was satisfying to point to so-and-so peony plant in bloom and say that it was raised x years ago, I did not intend to pursue the subject further.

My chief gardening interest, since 1958, is the hybridizing of gladiolus for fragrance, but it is a disappointing business as the most promising seedlings quickly fall victim to disease. (Roy Pehrson will say "Amen" to that.) And so the apparent good health of other plant genera seemed to promise more durable rewards to the hybridizer. Because daylilies (hemerocallis) seemed especially attractive, I obtained various daylily catalogs, Wild's among them, to learn about the different cultivars available and hybridizing trends. However, it was the hybrid-peony section in the Wild catalog that attracted my attention. The descriptions therein — with their references to different ancestral species, to triples and quads, to sterility, fertility, and polyploidy — made me aware of challenges and potentialities here that did not exist for the breeder working within the limited gene pool of the single lactiflora species. I subsequently purchased some of these hybrids and joined the APS to find out what to do with them.

The experiences described above convince me that the APS could obtain some new members by "raiding" the membership of other specialty-plant societies by advertising the news that NEW peony cultivars are available, MORE are in the making, and MANY MORE await development because the doors to many different untapped gene pools have been unlocked. This is the theme that Roy has voiced so many times before.

My first less-frivolous crosses were made in 1969 between various tetraploid herbaceous hybrids. This seed, along with some from Silvia Saunders, was germinated "quickly" and produced two flowering plants last summer, three years from seed. The most trying part of breeding is those first four or five years when one plants successive seed crops without seeing any bloom. Once this "dry" period is over, the constant parade of fresh-blooming crops and the better performance of older seedlings will renew the hybridizer's interest and spur him to further efforts.

Being still pretty much in the dry period and having few seedling blooms to study, I do the next best thing—— look a lot at the foliage. Spring, summer, or fall, each plant exhibits foliage characteristics and plant habits that invite comparison and already mark some seedlings as more desirable than others. Can anybody foresee all the different foliage types obtainable from the various combinations of the distinctive foliage of tenuifolia, officinalis, the lutea hybrids, the Windflowers, and the glaucous-gray of The Lavenders or Russi-Major, not to mention the already fine foliage of lactiflora? Since peonies remain out of bloom for so long a time, it is essential that, as foliage plants, they be attractive and remain so well into fall.

Although the relatively long time from seed-harvest to characteristic bloom discourages many a would-be peony hybridist from ever beginning the task, it is also a blessing-in-disguise for, to survive that length of time, a seedling must already possess a good measure of health and disease-resistance. This in turn is passed on to the next generation. By contrast, in gladiolus, hemerocallis, etc. the new seedlings bloom so quickly from seed (two years with adequate care, one year in southern climes) that the hybridizer, impatient to reach his goals, tends to use

these seedlings, unproven and untested for disease-resistance, to father the next generation, with a subsequent accumulation of hidden weaknesses in admittedly beautiful-flowering plants.

In describing some of the successful crosses I've made, the reader should realize most of these seeds are as yet un-germinated — they are "successful" in that the seed seemed firm and fully developed. I'll not dwell on crosses that are known to be readily accomplished. The "landscape gardener's cross" was aptly described by Don Hollingsworth (Vol. 3, #3); it works. "Sterile" varieties are more apt to set seed when pollinated with fertile pollen rather than left to their own devices. The blooms on one clump of '**Sprite**' produced two seeds and one seed in the last two years of pollinations by fertile tet pollen ('**Moonrise**', Saunders 16450-F2). Similarly, for '**Halcyon**', one seed and one seed; '**Rose Noble**', three and three; '**Chalice**', four and six. This past season '**Early Windflower**' by '**Sparkling Windflower**' and 16350-F2, mixed pollen, produced two seeds. '**Rushlight**' and '**Nancy**' are dependable if not generous seed setters. I'm not aware of anybody describing '**Pageant**' as fertile but its listed parentage in The Peonies, Officinalis rosea plena x lacti-macro F2, would indicate tetraploidy. A division obtained from Top O' The Ridge has produced 14 seeds by '**Moonrise**' and '**Archangel**' and 40 (yes, forty) seeds by 16350-F2. Two blooms of '**Sparkling Windflower**' set no seed last season but its pollen proved quite fertile on several tets. Two recent introductions, '**Fayette**' and '**Coral Fay**', are listed as being from '**Laddie**' selfed; so I pollinated '**Laddie**' with tet pollen and harvested eight seeds. '**Thunderbolt**', delavayi hybrid, by fertile tet pollen, produces large black almost-firm seed but so far all have turned out bad; '**Age of Gold**', lutea hybrid, produces similar seed but one (by '**Moonrise**') does appear quite large and firm. In Ito-type crosses, '**Mystery**', '**Heart of Darkness**', '**Canary**', '**Chinese Dragon**', '**Amber Moon**', '**Thunderbolt**', Daphnis 222, and '**High Noon**' were used for the good quantities of pollen they produced but it is too early to say which ones, if any, were effective. '**Alice Harding**' x POTANINI TALL YELLOW produced up to 15 near-firm seeds in two pollinations but their fertility is doubtful. The pollen came from David Reath's specimen exhibited at Mansfield and had probably lost its fertility.

In the latter cross above, most readers will recognize '**Kakoden**' as the white herbaceous lactiflora seed parent of the Ito hybrids ('**Kakoden**' x T.P. '**Alice Harding**'). Much has been said about Mr. Ito's famous cross and the chromosomal make-up of '**Alice Harding**', but perhaps there is something special about the lacti seed parent that made the cross so successful. Having originated, presumably, in Japan, '**Kakoden**'s ancestry, I suppose, is as mysterious as the Orient.

Concerning this subject, I cannot help but recall a rather startling remark at the Mansfield Hybridizing Workshop — by Father Fiala, I believe. He was passing on information that had appeared in some Japanese gardening publication to the effect that Mr. Ito's assistant (who made the actual cross) brought back — was it one (?) bloom of '**Alice Harding**' from another prefecture and pollinated only the blooms on one, or two (?) clumps of '**Kakoden**'. The story is at least consistent in that a single bloom of '**Alice Harding**' would hardly supply enough pollen for 1200 pollinations, as is told in the "other" version of this story. On the other hand, it contradicts Roy Pehrson's estimated that 1 in 100 pollinations is the success ratio of obtaining true hybrids. These contradictions can be resolved quite simply. The answer will appear in my next contribution ... (if I'm asked to make one).

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But it begins like this! —— and then some Japanese letters or words, but how shall we reproduce them? Editor

LOBATA

Many years from now, when much more hybridizing has been done, it may well be that this species will have proven itself the most valuable herbaceous species of all except for lactiflora. There are presently far more hybrids of lacti. x officinalis than any other cross. If this near relative of officinalis was much less used by the early hybridizers it must have been because then as now, plants of officinalis were more commonly grown and available.

There may be another contributing factor. I have seen only my own plant of lobata, but it is clear that there are a number of different color phases in the species. One type which contains a color factor for yellow produces far more novel colors in its hybrids than the others. This type may also be a much more effective pollinator of lactiflora than the others.

Saunders used several kinds. His records refer to these by numbers which he gave them. These produced little of importance, though a deep crimson, No. 5267 is the pollen parent of '**Heritage**', '**Your Majesty**' and '**Montezuma**'. His big break came when he used one which he obtained from Amos Perry in England. This one he described as a bright vermilion color. When it first bloomed he used it in many crosses on lactiflora and bloomed some 1200 seedlings from them. All were attractive in color and the best constitute his great "lobatas".

Obviously every hybridizer ought to obtain a plant which would be equivalent to the one Saunders called "lobata (Perry)". Unfortunately I don't know how this can be done. Silvia has told us that the original "Perry" clone no longer exists. I do think that some at least of the plants she used to offer may have been descendants of it. My own plant, obtained from her, is a bright "scarlet"-red with a yellow content - as confirmed by a paper chromatograph test run on petals sent to Cooper. Its pollen, just as with lobata (Perry) sets seed profusely on lacti. It seems reasonable to suppose that some, maybe all, of the plants she turned over to David Reath were of this kind. Whether or not Dave may soon offer these for sale, I don't know.

Now how about lobata "**Sunbeam**" which also made good seedlings? Did its pollen also set big seed crops on lacti? We don't know. Is that lobata "**Sunbeam**" now offered for sale the very same? We don't know that either. Unnamed clones of lobata are offered in the trade too. Are any of these of the right kind? Obviously there can be no certainty that a plant obtained by mail order would be the wanted kind. If plants were obtained from several sources the chances would probably be better. Some of you live close enough to the few sources of supply so that you could visit them and see the plants in bloom before purchasing.

The outer skin of most red tomatoes is yellow. The red flesh seen through this skin produces a color effect about as close as anything I know in nature to the wanted color on lobata. There should be no hint of blue as is so universal in all other "red" herbaceous peonies. Saunders produced his four "little reds" by the use of lobata (Perry) on four different forms of double officinalis. The wanted color genes should be present in each of them. These might produce even more interesting seedlings than lobata itself, because in addition to the chance of getting those good colors, they might also have more doubleness.

The use of these four would be a very fine alternative to the use of lobata itself, but here too there are some problems. First of all, plants have probably never been plentiful. Secondly, Father Fiala's fine article describing the breeding responsible for the Cousins' "Inner Glow Hybrids" and the part which '**Good Cheer**' played in their development, may already have created a considerable demand for '**Good Cheer**' and for the other three as well. Late comers may have trouble finding a source of plants. But try anyway! Finally there may be yet another obstacle. Both David Reath and I were fooled for some years by a misnamed plant which we obtained from the same grower as, supposedly, '**Scarlet Tanager**'. After much use of pollen from this plant I belatedly concluded that it must have been one of the lacti-officinalis hybrids. I finally destroyed it and obtained a genuine plant which should bloom this season. I feel sure there was no deliberate deception on the part of this grower, but as I did not complain to him I don't know whether he may have done anything about his misnamed stock.

Saunders' "big notebooks" do not indicate whether he may have crossed lobata with anything other than lacti and officinalis. It's possible that he did not.

The "Little Reds" are seed-fertile tetraploids. The lacti-lobatas are triploids and very seed-sterile though there will be a seed occasionally. '**Moonrise**' came from such a seed and Saunders had others too, but they are not described in his "big notebooks".

Where do we go from here? Evidence from trials made up to now is too small to permit making strong recommendations. I will make some suggestions at another time. Meanwhile hybridizers should try whatever comes to mind and see what happens. Certainly lobata has marvellous potential. It's up to all of us to discover the best uses for it.

The following Table lists parentages of Saunders' named Lacti-Lobata seedlings.

SAUNDERS LACTI-LOBATAS

Pod Parent	Pollen Parent	No. of Seedlings	Named Selections
1302	lobata (Perry)	70	'**Coralie**'
2011	lobata (Perry)	124	'**Alert**', '**Bravura**', '**Cardinal's Robe**'
'**Primevère**' [1]	lobata (Perry)	188	'**Rose Diamond**', '**Fortune**', '**Lovely Rose**'
441	lobata (Perry)	214	'**Skylark**', '**Claudia**'
'**Adolphe Rousseau**' [2]	lobata (Perry)	5	'**Lustrous**', '**Red Red Rose**'
1952	lobata (Perry)	60	'**Olivia Saunders**', '**Great Lady**'
'**Venus**'	lobata (Perry)	66	'**Rose Tulip**'
1875	lobata (Perry)	58	'**Ludovica**', '**Jean Cowley**', '**Paladin**', '**Cytherea**'
3500	lobata (Perry)	18	'**Elizabeth Foster**'
2635	lobata (Perry)	15	'**Julia Grant**', '**Queen Rose**'
2529	lobata (Perry)	21	'**Cecilia**'

'**Kelway's Glorious**' [3]	lobata (Perry)	25	'**Laura Magnuson**', '**Ellen Cowley**', '**Sophie**', '**Carina**'
2449	lobata (Perry)	22	'**Alison**'
1833	lobata (Perry)	33	'**Red Cockade**'
'**James Kelway**'	lobata (Perry)	22	'**Nathalie**'
2402	lobata (Perry)	96	'**Gilliam**', '**Grace Root**'
'**Marie Jacquin**' [4]	lobata (Perry)	23	'**Alexander Woollcott**', '**Nadia**', '**Constance Spry**'
1918	lobata (Perry)	4	'**Masterpiece**'
3458	5267 (deep crimson)	43	'**Your Majesty**'
1195	5267 (deep crimson)	28	'**Montezuma**'
5267	white (Glenn)	8	'**Heritage**'
Parentage Unknown		1	'**Janice**'
lobata (Perry)	'**Lady Alexandra Duff**'	3	'**Jeanette**'
lobata (Perry)	albiflora	21	'**Rose Garland**'
F2 albi-lobata		2	'**Red Lacquer**'
F2 albi-lobata		14	'**Moonrise**'

Note 1. '**Primevère**' - medium size anemone, creamy white with short narrow petals of canary yellow. '**Primevère**' x lobata (Perry): from 188 seedlings of this cross, only three, '**Rose Diamond**', '**Fortune**', and '**Lovely Rose**' were introduced.

Note 2. '**Adolphe Rousseau**'— double type; very large; early midseason; dark lustrous red. From 5 seedlings, two — '**Lustrous**', and '**Red Red Rose**' were introduced.

Note 3. '**Kelway's Glorious**' — double type; very large; midseason. White with few crimson markings. From 25 seedlings of this cross, '**Laura Magnuson**', '**Ellen Cowley**', '**Sophie**', and '**Carina**' were introduced.

Note 4. '**Marie Jacquin**' — semi-double; large; midseason. Pale pink becoming white. This lacti x lobata (Perry) cross gave 23 seedlings, of which three were introduced. The names of these are: '**Alexander Woollcott**', '**Nadia**', and '**Constance Spry**'.

This should give some idea of what results can be expected using various lacti pod parents and a pollen parent similar to lobata (Perry).

- Roy Pehrson

'M. JULES ELIE'

'**M. Jules Elie**' just has to be one of the all-time greats in the peony world. Having been introduced almost 100 years ago, he still is being listed in present-day catalogs. As a contender for top honors in the cut-flower industry, he has been very durable.

What really puts him in an exalted position, though, comes as a surprise. He is the very good mother (useful as a pod parent) of some of our newer introductions. The American Peony Society Bulletin #198 (December 1970 issue) lists a number of C. G. Klehm introductions which he (Mr. Klehm) patented. These clones, or plants, had Mr. Elie for their seed parent. Murawska's '**Attar of Roses**' had '**M. Jules Elie**' for its mother. And Dr. Earle B. White must have thought this variety was something special since, for many years he made '**M. Jules Elie**' x mlokosewitchi crosses and finally succeeded in getting the hybrid plant, '**Claire de Lune**'.

'**M. Jules Elie**' is an early, very large double of nice rose pink color. Foliage is not very dark green, also the stems will not hold the great flowers above muddy ground when rain drenched.

Maybe I too will try to make a lady out of him this year.

- Chris

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A BIT OF BLACKMAIL

Our "Paeonia" needs diversity. No one who has sent $2.00 to Chris should feel that he is "subscribing" to a publication that he might like to receive. It's not like that at all! He should feel that he has committed himself to a cooperative venture which will not work at all well unless he provides his own input from time to time.

So here is what we'll do. Send in a little account of what you are doing, what you are trying to do — just anything at all — and you will receive from me one of the following:

1. Some sprouted seeds ready to plant out.
2. Some dormant seeds next fall.
3. Some one or two year old hybrid plants next fall.

Anything sent will be hybrid, most will be tetraploid, and most will also make fertile plants which could be useful. Those who would like some sprouted seeds will have to act quickly as planting time will be almost at hand when you receive this copy.

Send your little account either to Chris or to me. Either way it will be taken care of.

Roy Pehrson
501 S. Victory
Mankato, Minnesota, 56001

SEED LIST

What can you expect to get from Roy if you comply with his suggestion? Well, here is a list of seeds that I have, many of which were gotten from Roy. Please note the extremely valuable parentage of these seeds. Anything he gives will probably be far more advanced than you or I can produce by ourselves.

'**Chalice**' x lobata	70
'**Rushlight**' F3 or F4	75
Quad F3 or F4	50
'**Archangel**' open	30
'**Archangel**' x '**Nancy**'	10
'**Shaylor's Sunburst**' (small root also sent)	175
Mauve bomb – open	35
Roy's yellow, second best	3
One T.P. seed and 1 '**Red Charm**' x '**Nancy**'	1
'**Christine**' x lobata	45
Quad F2 x '**Moonrise**' F2	25
'**Battle Flag**' x '**Red Red Rose**'	15
'**Sable**' & '**Sable**' x lobata	15
T.P. Saunders F2A	5
Ito '**Vesper**' x '**Alice Harding**'	50
Ito '**Largo**' x '**Argosy**'	2
S.S. Hybrids, mixed	20
Ito DeYoung's #l-3-4-6-8-9-10-11	90
'**Primevère**' x *californica*	70
'**May Lilac**' F2 plant #5	50

Ito Neighbor Miller's Plant - '**Vesper**' x F2A	80
Ito 1970 & 71 plants and Saunders F2A	75
'**Rushlight**' Plant #13	50
S.S. Plant #16 (12128)	50
'**Archangel**'	20
Ito Lanings x yellow T.P. pollen	125
Lacti x *californica*	30
'**Nosegay**', open	70
Windflower F2 x '**Nova**'	17
Windflower F2	3
'**Silver Dawn**' F3	3
'**Nancy**', open	2
'**Pageant**', open	7
'**Roselette's Grandchild**' (VanZandt's)	60
'**Roselette's Child**' (counted tet)	36
Windflower F2	1
'**Golden Dawn**'	11
'**Roselette's Child**' F2 x '**Nova**'	75
'**Rushlight**' F3 or F4	70

GARDENING NOTES

1. Roy's germination method is not good when applied to tree peony seedling propagation. They (the .T.P. seeds) give the impression that they consider this method on par with transplanting. They (the one and two year olds) will not very willingly tolerate transplanting. Maybe the "Ito type cross" also falls within this category.
2. For maximum seed production, a hungry plant will provide higher quality seeds. "Underprivileged" plants "— those getting insufficient nitrogen — seem to redouble their efforts with regards to seed production.
3. Roy's idea on Styrofoam boards (see Dec. 1972 issue of PAEONIA, page 10) needs further development. Suggestions:
    a. Styrofoam boards cause etiolation.
    b. Mold development is prevalent.
    c. Two inch layer of vermiculite insulation between soil and Styrofoam acts as a buffer — mollifying both problems A and B, if not preventing them completely,

NOTE: These notes are to be considered only as observations, not presented as facts.

- Chris

LETTER FROM A NEW MEMBER OF THE AMERICAN PEONY SOCIETY IN ENGLAND

C. Graham-Jones
"Redgarth", The Piece
Churchdown, Gloucester, England
February 4, 1973

Dear Mr. Laning,

Many thanks for your letter and back copies of "Paeonia" which are making very interesting reading.

With reference to the *P. suffruticosa* seed supplied, some very interesting observations have been recorded. When received, the canister containing the seed and vermiculite was tipped out and all the seeds examined, these were all dormant, they were put .back into the canister and stored for a further seven days in the dining room cupboard before time was available to plant (temperature of dining room 68/70 F.). To my amazement, when removed for planting 47 had rootlets over 1 inch long and a further 20 were showing white pips. The remainder to date, although planted in boxes are still dormant. My reaction to this could be the drop in temperature during flight plus the rise in room temperature has excited certain strains into growth.

Your reference and explanation of "Windflower" is very interesting, particularly the reference to "The Peonies" by John C. Wister. When I wrote previously I did not have this book but have now received copies of the two books listed as suggested reading, from the Secretary. The books at the moment will be used for reference, time being very short for reading. My program this year will be grafting. Talking about grafting with P. lactiflora, I was speaking to a representative of Kelway & Son from Somerset who specialize in herbaceous peonies, but carry a small stock of tree peonies under their own variety names, and they say they have never had a graft to take, so already I have a challenge. One point which interests me very much in some of the literature I have received is the suggestion that if each member produced one hybrid each year the Society and the Peony would be greatly improved. Unfortunately, being comparatively new, my stock, which I list, has not got to a stage where I can take part.

Stock:
1-3 year old P. lutea ludlowii.
1-3 year old P. suffruticosa var. Yachiyo Tsubaki.
5-2 year old P. suffruticosa, colour unknown.
1-2 year old and 1-1 year old seedling of P. suffruticosa obtained from the nursery of M. Harold Booth during a visit. This grower and hybridist gave up tree peonies in 1971.
6 - 2 year old plants which were obtained as self set seedlings from an old garden in Broadway Worcestershire and think they are P. lutea and delavayi, but this has to be proved.
1-8 year old P. mlokosewitchi which I raised from seed.

From this list you will see I have a long way to go unless I can cross P. mlokosewitchi x P. suffruticosa var. Yachiyo Tsubaki, and as this is a hybrid, this will have to be studied. There is very little stock held by nurserymen in this country and the stock they do hold in the main are imports from Japan. I would be interested to know if the Society has any trading agreements with

nurserymen which supply the Society at a cheaper rate and the Society make a small amount out of the transaction for themselves. This method on certain plants is quite popular in this country. One variety on my list is P. suffruticosa var. Dr. Rock. This was the first tree peony I tried to purchase, when seen in full bloom in the arboretum of M____ Hollier and Sons, Winchester Hunts, but unfortunately they have never propagated it. I notice from your literature it is scarce and expensive in the U.S.A. I submitted the article to the R.H.S. (Royal Horticultural Society) and although they thought it was excellent, they returned it saying they considered it would only have limited appeal. I am now rewriting it with more emphasis on the peony and will forward when complete.

Work is quickening up here as we have had no winter in this area, with only a few light frosts, and at the end of January my plant of P. suffruticosa var. Yachiyo Tsubaki has breaks from the stems three quarters long.

Yours sincerely,
/s/ C. Graham-Jones

NOTE FROM THE EDITORS:
Some of you are receiving this issue of PAEONIA for the first time since you have just recently joined the American Peony Society. If you would like to receive four issues per year, please send your contribution to the Lanings (address on page 1).

Those of you non-contributing members will be dropped after this issue unless you indicate interest in receiving PAEONIA.

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ANOTHER PICTURE
This one shows what a well-dressed peony seed parent should luck like near the close of the pollinating season.

When work was being done on this plant all buds which had opened enough to expose the center were pulled off. Others not yet opened were pollinated with tree peony pollens and bagged immediately. A close look at this picture will reveal some lateral buds almost overdue for pollination. Don't worry about them. It was taken care of.
I have three good plants of this lacti jap ('**Vesper**'). I like it because it makes nice seeds, because it stands up well, because it has strong laterals, and because I already have not less than 8 "Ito" type seedlings from it.

This picture should illustrate better than words can do, the sort of effort which is desirable when difficult crosses are attempted.
(Picture by P. Post)

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FLASH !!!!!!

O.K. team, this is what we must do. Each one of us (about 95 persons in all), send Roy a birthday card. Who is Roy? Don't be so dumb! He is our teacher, the writer who makes this PAEONIA possible.

Roy Pehrson is a bachelor. Age? Well, on May 17 he will be 68 years old. His address is 501 S. Victory, Mankato, Minnesota, 56001.

- ED.