PAEONIA

Volume 6, No. 3 September, 1975

REQUIRED READING –	TABLE OF CONTENTS
 "The Peonies" by John C. Wister, \$3.50 from American Peony Society. The Bulletins of the American Peony Society. SUGGESTED READING – "The Peonies" by John C. Wister, \$3.50 from 	Seeds available for distributions, as well as plants pg 1 A Correction, Roy Pehrson pg 2 Plant Propagation in Vitro, a Techniques Course_ pg 3
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	Notes from Don Hollingsworth pg 4 Report on Seedlings, Roy Pehrson pg 6 About 'Moonrise', Roy Pehrson pg 7 Correspondence between Don
Pehrson.	Hollingsworth and Harry Kuesel_pg 8
Editors are Chris and Lois Laning, 553 West F Avenue, Kalamazoo, MI 49007.	From the Editor, Chris Laning pg 10 Note from Roy Pehrson pg 10

CHRIS: I'm sending the rest of the tet 2 year olds. Parentages are unknown on account of that vandalisms but there should be plants from several groups here and they should be very fertile for the most part. – ROY

ED: Anyone! — Do you need some of these plants? Let me know. - CHRIS

These seeds are available for distribution! A card stating your choices is all that is needed.

'Sanctus' x 'Silver Dawn'

'Silver Dawn' F3 'Sanctus' x 'Rushlight' F3 Quad F3 'Archangel' x 'Silver Dawn' 'Little Dorrit' Roselette's Child F3 'Archangel' Moonlight 'Rushlight' F3 P. Mloko Lobatas 'Scarlet Tanager' 'Roy Pehrson's Best Yellow' Quad F2 x 'Moonrise' F2 'Archangel' 'Moonrise' x Giant Rushlight F4 'Moonrise' x 'Archangel' Roy's Second Best Yellow 'Moonrise' x 8969

A CORRECTION

by Roy Pehrson

Last year a severe spring freeze made the developing bloom stems of my Ito seedlings go limp for some hours. Then when these buds reached the stage of development where they should have opened, they were seen to have no petals or only some tiny ribbons of color. There was only one exception to this pattern. A flower on a seedling of Petite Rene x Thunderbolt seemed to be disfigured hardly at all. I brought this bloom to the show, in Hamilton in 1974 and some of our hybridizers saw it there. This is a single flower of a rather good dark red color.

Until this summer I had assumed that the crippled form of bloom was the direct result of the severe freeze. It is now clear that this happening was just a coincidence. This summer there were 14 plants large enough to try to bloom. The pattern of crippled bloom was repeated. This time the Petite Rene seedling had three well formed flowers but all others were malformed. Some of those which had made a try at blooming last year were a bit better this time, but they still did not inspire the feeling that they would "surely make it" by another year.

One could easily become completely discouraged over this were it not that the Smirnow account of the original four hybrids makes it appear that these must have behaved in an unusual way before they bloomed. It is stated that they did not bloom until 1963, or 7 years after they had first miade buds. I shall just have to be content with waiting yet a little longer to see how it will work out.

None of these were yellows. Could this be significant? We have that nice color picture of Don Hollingsworth's first-blooming yellow Ito seedling and it looks easily comparable to those first four introduced by Smirnow. All of mine are some light or medium shade of lilac or of dark red. The plant with the darkest foliage has stems with one or two laterals. These made somewhat better flowers than the very poor ones from the terminal buds. Another seedling had flower parts transformed in a very peculiar manner that I have never seen before. There were an unusual number of smallish carpels but also a funny looking transformation of the stamens. Each of what were probably intended as stamens consisted of a filament of fair length on the tip of which was poised what looked like a well formed ovule. I certainly shall not expect a silly thing like this to "shape up" any time. *

That Petite Rene seedling brought to Hamilton last year had a very few stamens and these appeared to have just a tiny bit of pollen in them. Bill Seidl took these stamens home with him. This year the three blooms on this plant were much better than in '74. They had quite a large number of stamens and these looked quite well filled with pollen. I gathered the anthers from two of the blooms and got enough pollen out of them to liberally pollinate about 65 lacti blossoms. The "second best" bloom — a black red — looked like it might have some pollen if the flower improves just a little. The "third best" bloom — a light violet — did surely have a little pollen, and should have more next year. I don't think any of the others will ever have any. Each of you may speculate in your own way on the possible importance of this discovery.

I tried to count my Itos again today and I came up with about 122 but this can be quite wide of the mark as I did not have the opportunity of observing the differences in foliage cover earlier this summer.

* This may well be the Great Find of the 1970's! What a gem for the flower arranger! If a plant that produces flowers such as ?;Lois Kelsey" which is included in one list of 25 favorites can make the grade, what will be the response to this "Flower from Mars"? Take good care of this one, Roy!!

BOTH DARA EMERY AND ROY KLEHM SENT THE FOLLOWING INFORMATION ——

PLANT PROPAGATION IN VITRO

Tissue culture techniques for rapid plant propagation and recovery of virus free plants.

A Techniques Course

October 8-9 and again October 10-11, 1975

NOTE: PLEASE INDICATE ON APPLICATION FORM MUCH DATES YOU WOULD PREFER TO ATTEND

Offered by the Tissue Culture Association's

W. ALTON JONES CELL SCIENCE CENTER PLACID, NEW YORK

Co-directors:
Dr. TOSHIO MURASHIGE
Dept. of Plant Sciences
University of California
Riverside, California

Dr. DONALD K. DOUGALL W. Alton Jones Cell Science Center

PROGRAM: Plant tissue culture is becoming increasingly important as a tool in several aspects of agriculture. These include the propagation of desirable individual plants and the recovery of plants free of specific diseases. The last ten years of development of the uses of plant tissue culture have brought the techniques to a point where they can be easily applied to specific plants without great effort or intensive training. In order to bring these techniques into a wider use, the W. Alton Jones Cell Science Center is offering a two-day workshop covering plant tissue culture as applied to plant propagation and recovery of specific-disease-free plants. The course will cover the principles of and the methods for plant tissue culture, from the point of view of their application to plant propagation and preparation of specific-disease-free plants. There will be a limited number of lectures. The majority of the time will be spent in the laboratory making media, performing aseptic dissection of plant parts to initiate cultures, growing tissue and other aspects related to the practical applications of plant tissue culture. Participants are encouraged to bring to the course material in which they are especially interested. In this way participants can begin their experience of plant tissue culture with the material in which they are interested. The resident staff will be available to help and advise each participant in his own particular area of interest.

Who should attend: This Techniques Course is designed for practicing agriculturalists and others actively interested in applying the tissue culture techniques used for rapid plant propagation and recovery of virus free plants.

COST: \$165 (including Registration Fee of \$25.) for members of the Tissue Culture Association of at least three months standing at the start of the course.

\$215 (including Registration Fee of \$25.) for non-members.

The registration Fee is required prior to attendance. The balance of the cost is payable on or before the date of the first session.

NOTE: The W. Alton Jones Cell Science Center and the Tissue Culture Association reserve the right to modify or cancel any course or workshop.

For further information on this course, please write or phone the Course Secretary at: W. Alton Jones Cell Science Center, PO Box 631, Lake Placid, N.Y. Phone: 518-523-2427

NOTES FROM DON HOLLINGSWORTH - June 12, 1975

ITO CROSS: THE SPELLING ISSUE (ITOH VS. ITO). Suppose the APS adopted a policy of taking formal action to establish names for distinctive hybrid peony strains that come into importance. The Ito group would then be eligible for such action. A consequence of the process could be the presentation of a written resolution to an official meeting, necessitating a spelling of the word. The spelling used would afford an official standard. Those of us who are committed to abiding by the Society's actions will then follow the formal standard. Others will continue to do whatever they want to. I personally would appreciate having an official position, for I don't care to spend a lot of time thinking about who is being offended when I am trying to write about this important hybrid group.

(ED: See Mr. Smirnow's comments on this subject in the Sept. '75 Peony Bulletin)

POLLEN INCOMPATIBILITY EXPERIMENTS:

- 1. Temperature, 1974. Results were entirely negative in my attempts last year to augment temperatures for making the Ito cross through the use of clear plastic bags over pollinated flower heads. All seeds produced of these crosses which germinated proved to be non hybrid by foliage appearance. (At this time I am accepting foliage appearance as entirely conclusive in differentiating hybrids of the Ito class).
- 2. Injection of pollen into the ovaries, 1975. Most of the injected carpels have atrophied, I found that upon first opening of the flower the P. lactiflora carpels have little or no internal space for receiving the pollen and carrier. Next time I will delay the injection of the pollen to see if carpels of some varieties may grow enough to develop the needed space. I had the best luck making the injection directly through the wound (stump) left upon removal of the style. This no doubt resulted in needle damage to a maximum number of the ovules. Use of petroleum jelly to cover wounds also seemed negative. A foil wrap for a few days seemed to be the best protection.
- 3. Stump pollination, 1975. When injection proved to be a problem, I applied pollen to the stumps left by removal of the stigma and style, placing a drop of culture medium on some of them. Some of the carpels so treated have not atrophied, but it appears now to be unlikely there will be any seeds, based on the outward appearance of the oldest so handled.
- 4. High temperature, 1975. I had a lucky break for testing the temperature hypothesis in the form of a week-long heat wave, daytime highs into the 90s °F which came just as I was commencing to experiment with pollen germinating mediums (preparatory to the injection experiments). The heat brought out the first useable P. lactiflora flowers on May 19. Using the kinds of Lutea Hybrid pollen of which I had the most on hand— Daphnis 105 ('Amber Moon' x F2A) and 'Tria'— I made several pollinations and took extra care with my control techniques. A substantial portion of the resulting pods show promising bulges. A head of 'Gertrude Allen', which was accidentally broken after 2 weeks held 12 developing seeds in 4 carpels. After that date no additional normal pollinations were made for a week, until I was able to be confident that the pollen was fertile. My concern in this respect developed while still experimenting with culture mediums to be used as a carrier for the injection experiments, see details in Item 5, below. The "mini" plastic greenhouse idea I mentioned previously was not tried since the weather cooperated. The following week we had a weather period during which daytime highs in the low 80's occurred. Again I pollinated with Lutea Hybrid pollens, some of which were the same ones used May 19. These later pollinations may afford another comparison of temperature effect. Unfortunately, we have to wait until seedlings grow to decide what results there are to compare.

- 5. Late in the season, I have also used some 1- and 2-day-old stigmas for pollination. Possibly due to high humidity, these had remained in good condition. Bagging or foil wrap might be tried to help hold stigma condition, should it be found desirable to use delayed pollination as a technique for combating incompatibility.
- 6. Pollen Testing. I followed Professor Saunders' instructions as reprinted in the March issue of PAEONIA, except that I at first left out the agar because I wanted the culture medium to be liquid at ordinary temperatures, to be used as the carrier for pollen injection. However, I was unable to get satisfactory microscope readings of the germination when using the liquid medium. It seemed that without a cover slip I couldn't bring a large enough portion of a pollen tube into focus to clearly distinguish it. When a cover slip was added to flatten the drop of culture medium, the pollen grains with tubes seem to have washed off to the sides of the slide, out of the viewing range of my equipment. It may be possible to overcome this problem, but I didn't this season and resorted to the agar preparation, abandoning any further injection efforts for this year. Since adding agar to the culture medium, I have been getting microscope readings in which I have much more confidence, I am using a "toy" microscope from Sears which, mechanically, is a mess, but has proven adequate for the job. 200 to 300X is quite adequate magnification. However, I am not yet getting the test samples prepared in a way that lends to counting the percentage of germination, so have resorted to general terms for classifying the results.

The culture medium currently being used has approximately 15% table sugar in distilled water with 1% agar and I have added a trace of boron in the form of boric acid, perhaps 0.01%. (The other sugar percentages - 5% and 10% - seem to give poorer results). I am incubating test samples at near 75° for 24 hours. When pollen tubes develop, they generally do well and are quite long after that much time.

Significantly, I believe, in light of possible results set forth in Item 4 above, D-105 gave much the best germination test of any yellow Lutea Hybrid so far evaluated. D-106, a sibling, got a "quite good" rating and D-63 (F2B x CHONI), a nice clear pink, was almost as good as D-105. A higher percentage of viable pollen in a particular Lutea Hybrid sample may in fact predict better results in the Itoh Cross. Roy Pehrson had previously suggested this possible.

Samples of 'Cytherea' pollen from two different plants gave "no germination" and "quite a few" respectively. Curiously, 'Cardinal's Robe' and 'Moonrise', which I've come to view as generally satisfactory pollinators, were rated "trace" and "weak", respectively. In other instances there were additional indications of unexpectedly low germination, P. lactiflora as well as hybrids. These will be tried again, for I'm now a little more confident of my technique.

Most of this testing took place after the pollinating was done, so that my choice of crosses generally did not have benefit of the results. However, I now perceive the significance of Dr. Saunders' advocacy of the procedure and expect to make good use of it in the future. Later, I will tabulate my test results to see what there is in the results that might be generally helpful. When this is ready I will send it along to Chris for possible publication.

FROM OUR TEACHER, ROY PEHRSON:

The First-Blooming Seedlings of 1975

Circumstances make this a rather useless report, but as some hybridizers have come to expect it each year, I will go through the motions.

After a medical emergency on April 12, I did not get home again until about May 19 when I had about a ten minute look at my front garden only. I was pretty wobbly at this point, and with a suprapubic catheter in place through my belly wall, so I just couldn't stay longer than this. Corrective surgery was undertaken on May 29. During the whole intervening period they had been trying to build up my strength, but as I continued to lose ground instead I later learned that the decision to operate when they did was a "'now or never" thing. This was a dual operation; a large diverticulum (bulge) in the bladder and a bad prostate gland. This had a small cancer in it. The doctors were fearful of using a general anesthetic so a spinal was used. Not a really pleasant experience, but I was happy it had happened that way later on because of the reassurance that I gained from listening in to what went on during those 2½hours. It seems that this urologist must have the habit of talking and mumbling to himself continuously while he is working. Often I could hear snatches of this. After a while I began to realize that this man was "cool as a cucumber", supremely confident of his ability and skills. Then came the clincher. He spoke to my doctor (a woman) saying, "That's it. Now doctor, you can sew. Sew, sew, sew, sew!" If he could be that jaunty, I reasoned, things must have gone very well. So it was that just a little later, when my sister, together with her husband, tip-toed into the recovery room and asked in a little voice, "How are you?", I answered very solemnly — "Oh, I'm a goner". They still get a chuckle out of this. The operation was a perfect success. I am very shortwinded, but this is unrelated. I'm physically weak still but seem to be getting a little stronger each week.

That May 19th visit was very early season, when less than a handful of plants were in bloom. The late Sam Wissing had once sent me a few seeds of Mloko, and one of the two plants had three blooms. This was a very much deeper, better yellow than my old plant. These blooms each had two carpels instead of only one on the other. It will now be possible to produce Mloko seeds to give away. Mloko is quite self-incompatible. One other plant was putting on a very colorful display. Fifteen or more blooms on my lone true hybrid of Emodi-Mloko x 'Laura Dessert'. (Sorry, it's the reverse of this cross.) It is a bright red-purple and with very "different" foliage. It is fertile, so it might be an interesting plant to work with.

No look at the garden again until mid-June when I finally obtained my parole. Lactis were then coming into full bloom. Most hybrids were finished. There WAS one more little seedling of 'Mikado' x 'Good Cheer' which could possibly make the grade. A loose double of glorious scarlet color. Time will tell!

About 'MOONRISE'

Most of the hybrid peonies named and introduced to the trade by A.P. Saunders and others are very sterile triploids and of very limited use by aspiring hybridizers. A good share of those others, not triploids, are also sterile for one reason or another. So it was that from the beginning 'Moonrise' seemed to possess properties which were almost ideal. It was big and fine, it was fertile, it was tetraploid, and most important of all, it was an F2 seedling of a plant from the famous Saunders "lobata hybrids" strain. Because of this last fact it seemed logical to believe that some of its seedlings would revert in color to those wonderfully fine red colors found in the F1s. In these one would then have a fertile free breeding strain which could be raised in the numbers which might be needed to greatly improve the strain.

This was bad reasoning. There simply were no reds of any shade among the advanced generation seedlings. Instead all were light in color; mostly white, cream, palest yellow, but also a few pale cool pinks with no suggestion of a lobata heritage. Foliage too has been of the broader, rounder form of 'Moonrise' itself, without the more divided form of lobata or of the F1 lobata hybrids.

While it was disappointing to realize at last that 'Moonrise' was not to be the direct vehicle for the production of improved "lobatas" there were compensations too. The seedlings from such crosses as (Quad F2 x 'Moonrise' F2), ('Archangel' x 'Moonrise') and others, have produced strong growing, extremely fertile, tetraploid plants which should prove useful to anyone who does not now have enough such plants. I am now compelled to discard two year old plants because people don't ask for them. Some seeds will be sent to Chris again and I'm pretty sure he would be glad to send a few to those who request them.

If my original guess concerning the genetic make-up of 'Moonrise' was incorrect, what do we really have there? Here's what I now think:

- 1. The parent plant of 'Moonrise' had color-inheritance factors or genes from both its parents; "lobata red" from its lobata parent, and the opposite allele or "not lobata red" from lacti.
- 2. That inbred seed could have had one of three possible combinations of these color genes. It could have had both as the parent plant did. It could have had a double dose of "lobata red" or a doubled dose of the "not lobata red". In both of the last two situations the seedling would have become "homozygous" for that particular inheritable trait (color) and the opposite color gene would have been dropped out. It would not be found again in any future inbred generation.
- 3. The red gene has dropped out from the 'Moonrise' chromosomes. This particular red will not reappear in any of its future descendants unless re-introduced through the other parent.

If 'Moonrise' is not suitable for this line of experiment, then perhaps one of the other lacti - lobata F3s would be all right. There are 'Paula Fay', 'May Delight' and perhaps several others. The sort of breeding which Don Hollingsworth is doing, and describes in the September Bulletin is sure to give a very good start in the right direction. That fertile strain of "lobatas" will still be realized.

LETTER TO: Harry B. Kuesel 10 S. Franklin Circle Littleton, Colorado, 80121 FROM: Don Hollingsworth 5831 Colrain (N,) Kansas City, Mo. 64151

DATE: July 9, 1975

Dear Mr. Kuesel:

I was very interested by seeing your account of bringing your varied peony collection to Colorado. I hope you will share with us (through Paeonia or the American Peony Society Bulletin) how these different varieties perform in the Colorado climate. I am finding late freeze damage to be a problem on most of the early hybrids which I grow, as well as several of the tree peonies. Also, too many of the tree peonies seem to be poor "rooters" in the conditions I give them. If we can identify those cultivars which do well and then breed from them, I think we can make a group of tree peonies that is better adapted to the midwest's dry summers, as well as the late spring freezes. I have a late flowering Japanese tree peony (only about one week later, but that can make all the difference some years). May have your observations on which tree peony cultivars seem to be strongest growers under your conditions.

I asked that question of Leo Armatyrs, Central City, Nebraska (now deceased) last year and he listed Tama fuyow, Shin Kagami, Flora, Godaishu, Yachiyo tsubaki, Impumon, Horakumon, and Rock's Variety. Of these the first seems surest to have flower buds frozen for me, assuming I have it correctly labeled. Do you know which ones of these may be relatively later flowering among tree peonies?

I'll appreciate having your comments. -Don Hollingsworth.

LETTER TO: Don Hollingsworth

FROM: Harry B. Kuesel DATE: July 119 1975

Dear Don,

Enjoyed your letter of July 9. I will answer your inquiry and you can pass it on to PAEONIA if you wish. I grew many tree peonies back on Long Island as I was a near neighbor of Louis Smirnow and visited his garden often. Back there the Japanese tree peonies were sensational and Jufi No Akebono, Haru No Akebono, Hana Kisoi, and Gessekai were perhaps the best performers. I also had a good collection of Sylvia Saunders' Lutea Hybrids. I met Sylvia at one of the famous New York Flower Shows where she used to exhibit more than 15 years ago. She got me interested in trying the luteas and I added several each year over a period of time.

When I moved to Colorado, the soil was very heavy clay, without a pebble in it and I immediately tilled in a hay field, planted a cover drop, tilled that in and was not ready to bring out my peonies till the fall of 1972 -- almost a year after we moved here. We live about ten miles south of Denver in a village called Greenwood at 5400 ft. elevation. The garden slopes gently to the north and has good

drainage (no standing water). There are no trees of any size so the plants are in full sun except for shade from a post and two-rail fence around three sides of the garden. I have my tree peonies spaced 6 to 8 ft. apart along the fence row. The first year, 1973, I had mostly foliage and many were sparse as far as leaves were concerned. We had a very heavy snow cover that winter and the temperature went down to about 25 or 30°F below zero which may have delayed their recovery from transplanting shock. My soil is very alkaline and I add a slow acting dimonium (ammonium? D.H.) phosphate fertilizer at the rate of one handful per plant in late May or mid-June, right after the bloom season. I have 17 tree peonies growing here since the fall of '72 but the lutea hybrids from Sylvia are the ones that give the best bloom and the Japanese varieties are not as vigorous. I have the following Saunders lutea hybrids: 'Age of Gold' - put up three blooms in '74 and 5 blooms in '75. It seems to be the best. 'Argosy' with three blooms in '74 and 4 blooms in '75 is a close second. 'Roman Gold' had only one bloom last year but had 3 in 197. 'Black Pirate' had three blooms this year but none before that. 'Harvest' had 2 blooms this year but none before that. 'Banquet' barely survived the transplanting from New York, and was slow to recover but is now growing well and should bloom next year. 'Chromatella' — the European variety — has had two blooms on it the past two years. It is not quite as, vigorous as the Saunders hybrids.

Of the Japanese varieties, none of which has been as vigorous, the Smirnow introduction, 'Fairy Tale', is doing the best. It has been here one year longer than the other tree peonies as Louis sent it to me as a "Good Luck in Your New Home Present" back in '71. It had 3 blooms this year. 'Black Sea' performed not quite as well, and 'Stolen Heaven' had its maiden bloom in Colorado only a month ago. Both 'Orihime' and 'Hanadaijin' had their first blooms at the same time. 'Ubatama', 'Hana Kisoi', 'Jitsu Gatsu Nishiki', 'Gessekai', and 'Haru no Akebono' have yet to bloom, and may not even make it next year. Their foliage is still much less plentiful compared with the other plants.

In 1975 we had a comparatively mild winter with no snow cover, but had quite a bit of snow in April and again several snowstorms in May, one of 2 to 3" came on June 1st. This seems to have delayed bloom by about 2 weeks but it has been my best tree peony bloom season so far. I believe the lack of deep winter cold spells helped this year. In the two previous years when we had late winter temperatures below zero, many of the tree peonies acted like they were in a deep freeze and were very slow to snap out of it. The herbaceous hybrids which have no foliage above ground all winter seem to be less affected by the cold weather.

I grew 'Tama Fuyo', 'Godaishu', 'Yachiyo Tsubaki', 'Impumon', and 'Shin Kagami' back east but did not move them here. I have ordered Rock's variety from David Reath and think it might be hardier because of its reported ability to withstand colder winter temperatures.

I do not know any other tree peony growers in Colorado and would be most appreciative if you can refer any others' names and addresses to me. Maybe we can give you a more comprehensive report next year.

- Harry

FROM the EDITOR ———

Sometime in June when conditions are right, visit a "Peony Show" — and pray tell, just what will a hybridizer find at such a place?? Perfect flowers which had been protected from the elements, bagged, and finally groomed to a final state of beauty which is only to be found under artificial conditions enhanced by artificial lighting? Or else maybe, just maybe, a pluperfect posy? Oh, come on now, you know that isn't it at all! People, real hybridizers, people that can talk the hybridizer's language is what we are looking for. Also nuances of color new to the peony, and forms and shapes that are not common are sought after.

This kind of thinking is not what a successful peony show finds to be the great strength in the staging of these conventions and shows. Should the hybridizer stay home there would be no great loss, and let me say, most of you did stay home! How are the people that stage the shows to know that they are important to us? — do we ever tell them? This lamentation is generated by the results brought forth by the American Peony Society Board of Directors. They (I should say "we") did not lend much strength and but little support to the new interest in research on tissue culture. Dr. Meyer presented a working view of his program on this subject both at the June Board Meeting and again at the Peony Workshop. Interesting, mighty interesting!

- Chris

Report of the American Peony Society Board Meeting, June, 1975 -----

The Society board members met on a Friday evening in June at the site of the Peony Show in Mansfield, Ohio. The business on hand was a talk by Dr. Martin Meyer on tissue culture, followed by a lengthy discussion. The hybridizers in this directors' group were very interested in Meyer's activities in this line, but the other members showed only a little interest. Again in the hybridizers' workshop, Dr. Meyer gave the talk and held Saturday afternoon discussion with lively participation by us, the listeners. All this was very interesting — at least for me it was — but the letdown came Sunday morning at the board meeting. Opposition was registered to the proposition of backing this tissue culture project of Dr. Meyer! The majority present felt that any money provided by the Peony Society would be a poor investment though they were willing to lend their moral support to the project. Involvement would have never come to pass had it not been for Ed Michau. By offering to contribute \$150 in the name of the Society, they reconsidered. Also, I gave \$150 to the cause to help it along. Then, and only then, did the Society decide to use \$100 of its own to make things look entirely proper. I'm satisfied!

- Chris

NOTE FROM ROY PEHRSON DATED SEPTEMBER 7, 1975

Chris, I must tell you about this right away. One of those 13 Itos which bloomed with only rudimentary petals produced three seeds. These are not good plump seeds which can germinate, but I believe they indicate that at some time in the future there will be good viable seeds. In some other difficult crosses there have been mostly poorly formed seeds, but a few nice plump ones too.

This plant has suddenly become the most interesting one in my whole planting. It is one of those in the group which has very nice clean foliage. Only one bloom stem this year. I don't remember the "flower" but, of course, it is not yellow as I have not yet had any of those.

We DO make progress though it may seem slow at times. Surely a fertile line of hybrids in this strain would make very interesting material for hybridizers to work with. Obtaining the first F2 has to be the 1st step towards that goal. If it is possible with these red and violet types it seems that yellows are also equally possible.