## <u>PAEONIA</u>

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Volume 2	20, No.3	September 1989
\$2.50 \$3.00 \$4.00	Chris and Lois Laning 553 West F Avenue Kalamazoo, MI. d yearly contribution: in the U.S. in Canada in Europe, New Zealand, and Australia.	Seed Distribution Program,
SEED DISTRIBUTION		
The following named seeds are available from the Seed Distribution Program. Write to Chris requesting the varieties you prefer. (\$1.50 in the U.S. and \$1.50 plus postage overseas.)  Lotus Queen F2 - from japs or anemones lactiflora - from unidentified white creamy pink tetraploid  Lotus Queen  Miss America  White Cap  Bo Peep  Walter Marx		
P. peregrina tetraploids, also a lot of lactifloras		
Ludlowii - from Mrs. Julie Allan, New Zealand. The tetraploids and lactiflora are in abundant supply!!		
		- Chris

# NOTICE:

The New Zealand folk have organized a peony society with Mr. Elsworthy as president. They want to be affiliated with the American Peony Society. A peony society is also being organized in England.

#### CORRESPONDENCE

## FROM IRENE TOLOMEO (August 29) -

The enclosed seed are the product of unselected open pollination - the parent plants seedlings grown from your H.H. seed. Parent plants are pastels, vigorous, and obviously very fertile, growing well in coastal California (San Anselmo).

#### FROM JULIE ALLAN, New Zealand (March 16)

Enclosed are seeds of *P. lutea* "Ludlowii" which I understand is hard to come by in U.S.A. As a paid up subscription member of the American Peony Society I wondered what would be suitable to send your society. However, back in January Roy Klehm visited us here and indicated he'd appreciate some seed sent to him. I have done likewise to Bill Seidl who had sent me seed these past two years as I am on the seed list. Presumably, the drought has affected your seed sources for this year as I hadn't received any for 1989 yet? We are also in a drought. Since last autumn it has been disastrous for our farming communities - the worst one in 100 years - no consolation but economically it couldn't have occurred at a worse time for our country. The peony season was the best ever for flower production but artificial watering has been a necessity. At next season's flowering it will be interesting to observe whether there have been any ill effects from the heat and dry.

We all really felt very privileged to meet the Klehm family and hope that they will return one day. Occasionally I have delavayi seed - is it of use to your society? Wishing you a successful year ahead.

P.S. In the past two years I have been sowing tree peony seed - moutan - but would appreciate some "fresh blood", as we have very few varieties of tree peonies to cross with -- very few are named either. It does seem pointless to duplicate breeding already done in the past in your country.

## FROM ELAINE PECK, Alberta Canada (January 26).

I understand from writing to Mrs. Kessenich that you are the best person to advise one on seed for *P. tenuifolia* and *P. mlokosewitschii*.

There are plants available from a couple of sources in Canada (commercial) but the price!! So I thought I would see if there is seed available for these two in particular and any other species which might be hardy in Zone 2. (*P. tenuifolia* - is I don't know about *P. mlokosewitschii*).

If you can put me onto any sources I would be very grateful.

## FROM LAWRENCE ELLERY, Smyrna, Delaware (April 7)

I notice in the APS Bulletin you are custodian of the Peony Seeds. I am interested in starting some and would like to participate. I have at present between 70-80 varieties and am expanding as rapidly as I can find stock in commercial quantities and prices for resale of plants. I have been growing peonies for over 60 years and now in retirement I want to build up a collection again. I can use most anything you may have that can be spared or surplus. I hope to start collecting seed this coming year as plants become better established. If you know of anyone with collections or quantities of plants for sale, I am interested.

# PEONY BREEDING Some Questions Answered

Edward Auten, Jr. Princeville, Illinois

From A.P.S. Bulletin No. 132 March. 1954

A member of the Society wrote and asked me the following questions, saying he could not find the answers In the Bulletins. Thinking they might possibly be of interest to some other persons, I am giving here my reply.

1. In breeding for color, what are the tendencies? Is red a dominant color? Is pink the result of a red x white cross? I would judge that white is a recessive and will breed true. Does it?

#### Answer:

Peonies are already so badly mixed up, genetically, that it is almost impossible to follow any definite lines, such as Mendel's law. Not only do we have wide variations in all properties in the pure lactiflora (albiflora) species, but I believe the Japs injected some other species blood into their introductions. What it was, I do not know. But most of the Jap kinds, sent from Japan, will, if planted blind, without any eyes or crown material, in time throw out new shoots from the side of a plain root. This factor can easily be transmitted to new kinds. 'El Capitan', a semi-double of mine, will send out these side shoots. It probably is a seedling of 'Mikado'.

As to tendencies in color, the general one is for like to produce like; for a red, crossed on a white to split the difference and produce some pinks. In the officinalis x lactiflora cross, where red officinalis is used, the red is strongly dominant. But these are not unvarying rules. My blush white double, 'Northland', not a hybrid, is supposedly a seedling of the black-red 'Adolphe Rousseau', pollen parent unknown. Whether that came from a recessive tendency or from the push of the unknown pollen parent, we cannot tell.

White crossed on white will probably give all whites, but not always and I do not know that such a white color should be called recessive. My most outstanding results of crossing white on white were, first, 98 seedlings of white 'Duchesse de Nemours', chance pollenized, but close to several plants each of the old white single, 'Albiflora, The Bride', and the white, loose, semi-double, 'La Rosiere', which has a weak stem, blooms lie on the ground. From these 98 seedlings, I named at least 16 kinds and could have named more, except for similarity. There were about sixty doubles and semi-doubles and three pink doubles, 'Naomi', 'Pathfinder' and 'Julia'. The last was so full petalled that it would not open well when full grown, so I discarded it, but it was a beautiful thing when perfect.

Some of these white doubles were discarded because of weak stems; a most unusual susceptibility to late frost damage of buds and one, 'Silver King', plant, stem and bloom of absolutely highest quality, but so very full and late, it does not open every year, this in contrast to most of the kinds being early. An especial refinement undoubtedly came from 'La Rosiere'. Other pollen may have landed on the 'Duchesse de Nemours' blooms than from 'Albiflora, The Bride', and 'La Rosiere'.

My other successful use of white on white was as follows. 'Isani Gidui' is a fine enough bloom for anybody, but stem and plant habit are not very good, so I took a lot of pollen from my white originations and raised 420 plants from this seed. Of these, 60 white Japs were good enough to advance to second trial. From these, after many years, I named five. I imagine I threw away some singles that would equal any single on the market today.

### 2. How do you get doubles? Japs? Singles?

#### Answer:

You get doubles when the Lord gives them to you. Nature is not concerned with perpetuating fancy kinds, but the species, so there is a strong tendency for reversion to the single type. You will get all the singles you need in your striving for Japs and doubles.

To get Japs, pollenize Japs with single pollen. When I finally got 'Nippon Brilliant', it was a second attempt. First plants where I expected Japs, yielded only 3% of Japs and no good ones. I had used pollen from semi-doubles, evidently, for I started all over again and used pollen from singles on Japs and got 25% Japs, including 'Nippon Brilliant'. 'Moon of Nippon' came from pollen split out of a narrow petal of double white, 'Marie Lemoine', which had a yellow swelling on its edge. But Jap types can pop out any time and you cannot be sure what you will get from any lot of seeds.

## 3. What about early and late blooming, which is dominant? Also height of plant?

#### Answer:

Time of blooming and height of plant are variable in offspring. I did, however, get 'Peggy', a dwarf, from 'Octavie Demay', a dwarf. I now have a nice, unusual single pink, I could name, from 'Octavie Demay'. It is also dwarf.

If I were seeking new doubles, I would use pollen from semi-doubles on doubles that had seed pods, but no pollen; on semi-doubles and on the best Japs.

If I wanted new whites, I would cross white on white. If new reds were desired, red on red. If pinks were the goal, red on pink, since there is greater need for deep pinks than light ones.

But I say, first of all, work with kinds that are vigorous, have good stems and above all a strong root system and roots that are resistant to decay. If working with reds, use only those kinds which are a clear red and which do not fade an ugly shade as the bloom ages. In double whites, rose fragrance is a must with me now and also refinement of petalage.

Line breeding is not really important with peonies. If you get a good one, you have it for all time by root division. If one lived to be 300 years old, it might be interesting to breed true hereditary strains and start new. Even so, what one got might not be a bit better than some we now have.

#### HYBRIDIZING - ITS APPEAL AND IMPORTANCE

L. W. Cousins, London, Ontario

From APS Bulletin No. 132, March, 1954.

It is generally understood that the majority of our Garden varieties of the peony are descended from one species, the albiflora, which has recently been re-named the lactiflora, and are selections from generations of seedlings. It is remarkable that one species could be so greatly improved by this method, without the admixture of another species. I presume that it may be taken for granted that enthusiasts would like to see more new improved varieties but it seems to be the consensus of opinion that this is a long and arduous task which may indicate that the resources of the lactiflora species are about exhausted.

Many of our varieties have come down to us from the Victorian era and are the product of those times when doubleness was one of the main objectives of the seedling raiser. Today, we hear many objections to doubleness and I suppose that it is really a freak of nature and of no great virtue in itself. The large double cabbage type of flower is also inclined to drag in the dirt unless they are supported on exceptional stems. The lactiflora species did not provide seedlings with a wide range of color nor were the colors very enduring in the garden; the pinks faded to white and the reds to a magenta pink. The exhibition flowers that were bagged and protected from the weather, revealed a lovely quality in such contrast to those not so protected that it was quite evident that the peony was not a garden flower.

Twenty-five years ago, I grew and exhibited at our local shows many of the highest rated varieties then available, but because the peony excelled only as a cut flower and the blossoms were only a repetition of those of previous years, I discarded the lot and became an Iris fan for the Iris seemed more at home in the garden and was more amenable to the hybridist persuasion. The Iris Society now has possibly a couple of thousand members, some of which were no doubt good prospects for membership in the American Peony Society. It would be of interest to know if their objections to growing peonies and joining the Society were the same as mine.

Ten years ago, and with my usual good fortune, I purchased my first hybrid peony roots from Prof. A. P. Saunders. They have been added to from time-to-time and there is now a nice collection of them in the garden. The Saunders' Hybrids were a revelation of beauty. They have satisfied every requirement we demand for both a garden and a show flower. I will not rhapsodize further. If I lavish more praise on them, the more I feel that the praise will be discounted.

Prof. A. P. Saunders spent the last thirty years of his life working with the peony. He approached his task with a scientific and comprehensive attitude never attempted by any hybridist. A most complete collection of species and variants was assembled and used in crossing between the species and with garden varieties of the lactiflora. Some of his seedlings were quadruple hybrids. I have no exact figures but between one and two dozen species and variants were used.

As mentioned before, the great majority of our named varieties grown in gardens, are descended from only one species and have only those attributes or qualities that can be obtained from that species, the lactiflora. It needs little imagination to understand that the many fertile hybrids of Prof. Saunders must contain a wealth of attributes that are now available to the hybridist. The importance of these new, inheritable qualities cannot easily be overestimated.

Let me mention some of these qualities that are so important and what they should provide.

## 1. A greatly extended season of bloom.

— My earliest hybrid blooms here in Ontario about the 24th of May, which is three to four weeks before the lactiflora varieties.

#### 2. Hardiness.

— In the garden, I have seen a bed of one hundred hybrid seedlings with flower buds bent over and touching the ground from the effects of a late, severe frost; by noon these plants were erect and at no time was any damage observed to plant or flower.

## 3. Gorgeous new and unfading colors.

— The hybrids bring to the peony many new colors that range from self-yellows to apricots, warm pinks, scarlets and even lilac. Many of these hybrids hold their colors very well indeed and those that fade are often improved in color.

## 4. Easy propagation.

— Not all, but many hybrids can be increased even faster than the lactifloras.

#### 5. Long-lasting as cut flowers.

— Tests were made with a local florist and showed that the hybrid blooms lasted longer than the other flowers in the container and also received much favorable comment. I have also noted that some of the seedlings refuse to drop their petals until the blooms have turned brown.

## 6. Vigor.

— This quality seems common to most hybrids and many are exceptionally vigorous. The species Mlokosewitschii seldom lasts more than three or four years in my garden, but the Mlokosewitschii hybrids appear to be as vigorous and as long-lived as other plants.

## 7. Hybrids are good garden plants.

— The light airy blooms are supported on good stalks that stand up in bad weather and the colors show remarkable resistance to fading.

#### 8. Good seedlings of real merit not hard to obtain.

— It has been my experience that at least 5 to 10 percent of the seedlings are worth keeping and possibly naming. The proportion can vary according to the parentage of the seedlings. In some cases I have done much better than this.

There is no longer any necessity to raise thousands of seedlings to select a few improvements. The quality of the average seedling is surprisingly high. It is easy to visualize a future when many happy and enthusiastic hybridists will have the time of their lives raising grand things.

With the passing of Prof. Saunders there are a few projects that should be undertaken by the A.P.S.

Since hybridizing and the production of new varieties are vital to the future of the peony and the prosperity of the Society; and as the hybrids are the only real source of improvement; the A.P.S. should use every means to bring home to the membership a clear understanding of the importance of the work of Prof. Saunders and the great influence it will undoubtedly have on the future development of the peony. Every effort should be made to encourage hybridizing and use of the Saunders hybrids in this work.

At the exhibitions that come under the auspices of the Society and in the classes that call for tabling many varieties, it should be required that a percentage of these varieties must be of hybrid origin; this percentage to be gradually increased from year to year. Lastly, the American Peony Society should create a Saunders Memorial Award for hybridizing. It will certainly become the most sought after and most valued award of the Society and will help keep green the memory of the man to whom we owe so much.

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ED:

After reading Mr. Cousins' evaluation of Saunders' hybrids way back in 1954, one realizes that there is something great and extraordinary in the hybrid peonies Dr. Saunders created. Now, twenty five years later, advances in these blood lines show a continuing of progress, especially with regard to fertility.

Probably during these last few years the Peony Seed Distribution program rates tops in services the American Peony Society provides. This service ensures that the Saunders Contribution (hybridizing) will not be lost. Seeds containing the "blood lines" he incorporated in his hybrids are being distributed all over the U.S. and some foreign countries.

We must realize that the clones that dominate our show tables provide only one aspect of our peony plantings. Beauty can be found in the ordinary flowers that can be displayed in our gardens and in our homes with variation that enhances any bouquet. A little patch of flowering lactifloras or advanced generation hybrid tetraploids provides joy above and beyond the general delights of gardening.

For those of us who don't have a batch of peony seedlings, now is the time to start this venture. Seeds of highest quality are available through our seed distribution program which makes possible great advances in the areas dear to us.

Seedlings are available from Chris - 12 one-year seedlings \$10.00 12 two-year seedlings \$15.00 12 three-year seedlings \$20.00

#### A DEFENSE OF THE "NEW" WORDS and A GLOSSARY THEREOF

Bill Seidl, 732 S. 19 St., Manitowoc, WI 54220

August, 1989

It has come to my attention that at the most recent board meeting (June 4, 1989, at the Roger Anderson home) there was some criticism aimed at the "new" words — as Greta Kessenich called them — that I've used in various Bulletin articles and most recent registrations. Greta said she was swamped by inquiries about their meaning. In the ensuing discussion it was apparently decided the "new" words were out, and that the power and authority of the APS was to be used in a discouragement and/or censoring of their usage.

First, although my address has appeared with most of my articles, I've not received a single letter protesting their usage or inquiring about their meaning. Secondly, their meaning has been explained numerous times and I believe they are more precise and more descriptive, even self-explanatory, than the "old" words they replace. That's why I use them and will continue to do so. No one else has to follow suit.

I do not know all the "new" words that came under fire (Board meetings appear to be closed to the general membership, and one seldom reads any published minutes of what subjects were discussed and what decisions were reached.) but will proceed nevertheless with a defense and explanation of which I perceive were these words.

The only truly "new" word, i.e., non-dictionary word, used has been "shrubaceous"; all the others are legitimate dictionary words.

- 1. I use "shrub" peonies in place of "tree" peonies. Never mind that the old word has been in wide usage for 200 years, the new word is obviously more precise and not as misleading. Adopting this usage is hardly more devastating than learning to say chairperson for chairman, or mail carrier for mailman, etc. As with the old word, it applies to all peonies of the shrub section of the genus: the species moutan (suffruticosa), delavayi, lutea, potanini, and any hybrids within this section (i.e. intrasectional).
- 2. I prefer to use "moutan" In place of "suffruticosa" because it's (a) shorter, (b) well established, pre-dating even the long established scientific name, and (c) more appropriate, originating in the language of China where the species originates and where most of its centuries-long development took place.
- 3. "Shrub hybrid" replaces "lutea hybrid". The lutea name suggests yellow and that P. lutea is the more important parent in the cross. But consider that many of these hybrids are not yellow, that the other parent, moutan, constitutes 50% of the parentage or more (as in the backcrosses to moutan that produced ZEPHYRUS and LEDA), and that the non-moutan parent might be delavayi instead of lutea. Alternative names might be "tree hybrids" (if you can't abide the switch to "shrub"), "moutan hybrids" or "suffruticosa hybrids".

- 4. I avoid terms using any name of national origin, especially the term "Japanese tree peony" .... for which I prefer "Japanese moutan". Too often the "JTP" is mistakenly applied to all moutans, including ROCK'S VARIETY and other cultivars not originating in Japan. Besides, the term "Japanese" is confused with the same name applied to flower forms of the anemone type.
- 5. "Intersectional hybrid" replaces "Ito hybrid". This seems to have stirred up the most controversy, and yet is the most justifiable. Its only disadvantage is its length. To remedy that, I use the term "I-hybrid" which can conveniently be interpreted either way by the reader. Consider these advantages:
  - (a) It is correct and accurate. To argue otherwise would require one to either rewrite the dictionary or reject Sir Frederick Stern's classification of the genus into two sections: the herbaceous and the shrub (woody, tree). (He actually has a third section for the two American species. See The Peonies, Wister, p15) The I-hybrids bridge these two sections and ARE, therefore, intersectional.
  - (b) It is self-explanatory. Any horticultural enthusiast, even though not familiar specifically with Paeonia, would realize that an intersectional hybrid in any genus is unusual and special.
  - (c) It is not confusing, unlike the old usage which suggests that the originator of such a hybrid is a person named Ito.
  - (d) It is convenient. One can speak of a "--- Intersectional Hybrid" (fill in the proper name) or an "Ito Intersectional Hybrid" .... instead of an "Ito Ito Hybrid". (Peter Hughes said the Japanese disliked the term "Ito-Smirnow Hybrid" because such a dual-name usage implies both had a hand in the development and selection process, not just in the introduction.)

The chief argument advanced in favor of "Ito hybrid" is that it is an established name. Good grief! It's not any more established than the plant itself! At \$55 to \$175 per division (the introducer's price 2-3 years ago), not many people in or out of the APS grow any I-hybrids. There was not a single entry in the 1989 APS national exhibition. It is not exactly a household name. For most of the years since Louis Smirnow first publicly advertised Ito's "New Race" Hybrids for sale (about 1967), only Ito's Itos have been commercially available. For convenience sake, hybridizers referred to each other's similar hybrid seedlings as "Itos", fully realizing the shortcomings of such a term when they would be ready to register and introduce them. Some English "expert" has been quoted as decreeing it to be an established name. Aren't these the same people who established the species name albiflora for 155 years, then threw it out in favor of lactiflora? Although we threw off the English political yoke 213 years ago, there are still some horticultural Tories among us.

To call GARDEN TREASURE, BARTZELLA, LAFAYETTE ESCADRILLE, and ROSE FANTASY "Ito Hybrids" is comparable to calling AGE OF GOLD, ZEPHYEUS, GOLDEN ERA, and ANNA MARIE "Lemoine Hybrids" because Mssr. Lemoine is credited as the first to produce a shrub hybrid. English authors of garden books refer to these shrub hybrids by the grex name (a name for a particular hybrid combination) paeonia x lemoinei. Even if this is an official name approved by some international nomenclature authority, such usage has not been followed by American writers or the APS. If Mr. Ito is given his due for his remarkable accomplishment and honored by giving the intersectional hybrids a Latinized grex name, Paeonia x Itoensis (or whatever), we are not obligated to register and continually call them by that name any more than we use the P. x lemoinei designation for the shrub hybrids.

6. "Shrubaceous" is used as a synonym for "intersectional". It combines shrub and herbaceous handily and is a pefectly descriptive, self-explanatory term. The word probably has been coined by others to describe the growth habit of such plants as Russian Sage (Perovskia atriplicifolia), Chaste-tree (Vitex agnus-castus), and Hybrid Bluebeard (Caryopteris x clandonensis) which produce woody stems but still often winterkill to basal buds. "Sub-shrubs" and "semi-shrubs" have been terms used to describe them.

Finally, it is regrettable that the leaders of our Society, huddled behind closed doors, but probably not a smoke-filled room, should agree to throttle the usage of these wondrous "new" words. Have they forgotten that Change is just as sure as Death and Taxes? It seems short-sighted to alienate some of the membership by efforts at word (i.e. thought) control. As long as the new usage is not intended to confuse, obfuscate, or deceive, it ought to be given free reign. Gradually a consensus will emerge and no one will feel their rights have been trampled in the process.

#### COMMENTS ON 1989 APS CONVENTION - Chris Laning

Our National Peony Convention at Janesville, WI, was a huge success. The quality of the displays was good, flowers beautiful, and attendance was all that could be expected. Though the blooming season was late, the Klehms came to our aid with truckloads of blooms in wonderfully fresh condition. This, of course, gave Dr. Klehm the opportunity to collect most of the blue ribbons and he deserved every one of them because along with the peonies came a group of his workers and family members.

It was exciting to watch the public admire the gala display and write down the names of the blooms of their choice.

The high point of the convention was the banquet which provided an opportunity to meet old friends and some new ones. And at this time Roy Klehm was honored with the Saunders Memorial Medal he so well deserved for his hybridizing and constant support of our Peony Society. Not soon to be forgotten was the trip to Fort Atkinson to see the gardens of Roger Anderson. He is an Itoh expert that has great success with his crosses. It was too early in the season to see the Itohs in bloom but the herbaceous hybrids were beautiful.

The trip home necessitated driving around Chicago; ugg!!