

P A E O N I A

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THE HYBRID IS MADE -- THE FLOWER IS LOVELY BUT NOT OUTSTANDING -- THE PLANT IS

DISCARDED -- ALL IS LOST!

This is standard procedure that the hybridist takes with 97% of his seedlings with the remaining 3% entering his breeding program. The full potential of any hybrid can not be known in the first generation; the F₂ (children), the F₃ (grandchildren), and so on, give rise to unexpected results, sometimes sensational! So, why the hesitation on the hybridizer's part? Well, he lacks the acreage, energy, and time to follow through so the seed distribution program takes over --

Seeds available for distribution:

1. Lactiflora - from select plants
2. Hybrids - advanced generation tetraploids
3. Suffruticosa - tree peony
4. Peony seed mix

A large supply of seeds was obtained from two Paeonians with the following notes:

9-14-88 -

Plenty of bees, plenty of pods, but few seeds this year. Mixed Jap seedlings from Japanese form of seedlings, mostly from Gay Paree, Lotus Queen, Kate Barry, Bu'te and Westerner. Mix Japs were White Cap, Gay Paree, Roberta (few) Bu'te, Westerner, (few) Madame Butterfly, Do Tell, and Lotus Queen. We separated but grandson (3½) helped "put all the peanuts in the same dish".

- Marion DeReamer
5360 W. 73rd Ave.
Merrillville, IN 46410

9-12-88 -

The contents enclosed are a random collection of seeds from open pollination of specie hybrid seedlings, and lactiflora seedlings. Due to illness and several hospital stays, I have done no garden work this year. If you receive any tree peony seeds, I would appreciate receiving a few.

- Robert J. Geller
504 S. Collinwood Blvd.
Fremont, Ohio 43420



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Mr. Chris Laning
553, West F Avenue
Kalamazoo
Michigan **49007**

U. S. A.

Alphen aan den Rijn, March 28, 1988

My dear Chris,

Thank you very much for your wonderful letter, dated March 16th, inst. that I have just received.

I am sending you under separate cover, whatever seed of Pæonia emodii I have at hand. Please distribute it to worthy parties. Also I enclose a few wild collected seeds of Pæonia officinalis. And perhaps even another wild collected one if I can find the seed in time.

Dr. Vassiliou, the new President of Cyprus, is the husband of the sister of Elisabeth.

Again, I will do my utmost, to get to the National Peony Convention. Is it in Kalamazoo? If so it also would be a good opportunity to come and see your Peonies in bloom.

The source for the Dakota form, or Idaho form of Cornus nuttallii is: Lawyer Nursery, 950, Highway 200 West, Plains, Monatana 59859. Tel. (406) 826-3881.

Your garden must be quite spectacular in the spring, with all the Dogwoods and Trilliums. Do you have Cornus kousa var. chinensis? That should also be hardy for you and is very spactacular as an ornamental.

I have asked my friend in Japan to prvide me with some complex hybrid seed of Magnolias next season. Thse could give rise to something special. Do you have the membership already of the American Magnolia Society? This should be worth your while.

I hope that you can convince Mr. Hollingsworth to provide me with the plants of the 'Garden Treasure' Peony. There is nobody in Europe, who is capable or interested to propagate any Tree or Itoh Peonies and it is also impossible to Papent this anywhere in Europe, apart from England, in which case I can help him. But I want it very much for my collection.

Of course I am also very keen to obtain your 'Sunny Boy' and 'Sunny Girl' so please let me have pro-forma invoice for autumn delivery sothat I can reserve my plants in time.

I read the story of the Pæonia tenuifolia var. rosea. in 'Pæonia' and it already has put me to work for you again. You will have a plant in the autumn and perhaps I can even smuggle it in sothat it will be disturbed to the minimum.

With warmest regards, from home to home,

Yours sincerely,
K. SAHIN, Zaden B.V.

Kees Sahin

Via AIRMAIL

C H R I S L A N I N G

Editor, PAEONIA

553 West F Avenue
Kalamazoo, Michigan 49007



March 16, 1988

Dear Kees:

Your letter is very informative and interesting to read! Being a world traveler must be a mighty interesting life. And being a brother-in-law to the President of Cyprus puts you in the top of the class. Is your brother-in-law Elizabeth's brother or her sister's husband?

Our National Peony Convention will be held June 3, 4 and 5. This is right in the middle of season in Michigan for herbaceous but a little late for the tree peonies. When you come, be sure to bring your wife'.

Cornus Kousa is not a very well known tree in this area of Michigan so naturally the public is regaled with its beauty when in full bloom. The three mature trees in my yard drop their strawberry sized seed filled berries in the fall. In spring, hundreds of seedlings germinate, providing all the plants I can use.

Cornus Florida grows wild in our woods and while beloved, are so common that they are taken for granted. These, along with red buds, Cercis, line the edges of our woods while the trilliums cover the ground! As for propagating Cornus Florida, I have plenty of them already.

Many years ago I bought Cornus Nuttallii from a firm in Oregon knowing full well that it is too tender for our area. But I was hoping that a suitable micro-climate along with winter protection might permit this plant to bloom. It does grow and it does set flower buds in the fall but they are winter-killed every year. I have not heard of Dakota Form of Cornus Nuttallii so I would appreciate finding a source for it!

Seedlings of Dr. Merrill, stellata, soulangeana, and virginians are being transplanted in my flowering tree plot and if new varieties become available in small size, I'd like them too. So if you can get some seeds from your Japanese friend, it will make me happy!

Don Hollingsworth patented his #205 (Garden Treasure) Itoh and wants to protect his rights to this extraordinary treasure. This he can do in the U.S.A. but not in foreign countries since the patent is not of international scope. Therefore, you are not dealing with the plant but with the patent. But, I'll talk to him about it. Maybe you'll have to buy propagation rights for your Holland area before getting Garden Treasure.

Maybe while building up stock of Sunny Boy, Sunny Girl, etc., I should offer them for \$100.00 each. The select advanced generation clones are of more value in the hybridists' hands than in the general collectors' gardens. In the same vein, I feel that we have advanced beyond Claire DeLune and Oriental Gold so these two are not on my wish list.

Pink Giant and P. officinalis 'Alba Flena' had gotten off to a very poor start but I expect them to bloom for the first time this year. Each plant was kept in a pot for two years and it seems they resented that. Later I'll inform you as to their progress.

A number of us hybridizers are interested in the P. emodii species so seeds would be most welcome.

In the March issue which is being mailed in a day or two, there is an article by Betty Halas about P. tenuifolia 'Rosea'. It seems that she feels that she discovered this plant and regards it as a special find! I'll enjoy getting this one from you.

There must be some locations in Cyprus where climate and conditions are similar to California, Washington, and Oregon where both P. californica and P. Brownii would flourish or at least establish themselves! These two species will not grow in Michigan, not even in a green house (glass house). Try them!

Our regards to your wife and family, and hoping to see you this spring.

- Chris

LETTER FROM: Ed Halas, P.O. Box 2682, Detroit, MI 48231
DATE: August 23, 1988

Dear Chris:

I would wish to purchase a division of the cross you have made by Roy Pehrson, Lactiflora x Suffruticosa. I have not seen the plant, but I would guess that the leaves resemble suffruticosa. I would feel that out of respect we should call this hybrid a "Pehrson" hybrid. I would recommend that you test the pollen by mixing some sugar solution with it and see if it expands under a microscope. This will at least tell you if the pollen is viable. Most likely it is. You should have better success using pollen from the "Pehrson" hybrid on a receptive Albiflora. Possibly the "Pehrson" should be registered since it is a very distinctive cross in its own right. Somehow I don't feel that using your present techniques that you will be readily successful with the pollination of the "Pehrson". One trick that seems to stimulate pod formation sometimes is to apply honey to the pistil about three days after you apply the pollen. The honey seems to act as a hormone, but if you place it too soon then the pollen expands and gets stuck in the pistil and simply doesn't work its way down.

In every respect the "Pehrson" should do everything that the Itoh does except to develop red flowers, which are very pretty anyway. Someday you may be lucky and actually pollinate a "Pehrson", but you will need to develop a very good technique to do so.

I'm glad that you saved the Pehrson collection since at the time of his death it would have only disappeared and the work of his many years would have just died out. Could you supply one "Pehrson" for me this fall?

REPORT FROM ROGER ANDERSON

I don't imagine there are too many gardening articles being written in '88 that haven't started out by mentioning the drought and the effects it has had on the plants. So who am I to change things.

The whole year in general has been bad for my seedlings with heavy losses. Not only with the Itohs, but with tree peonies and herbaceous alike.

In January, around 85 tree peony crosses were lost to the 20 below zero weather, around 100 sprouted Itohs seeds were lost and several herbaceous crosses. Once sprouted these seeds are potted and kept in my unheated shop. Other years this has worked fine, but last year the weather was extremely cold for a long period of time.

Spring arrived and the Itoh seedlings in the garden started to grow. These seedlings would have been two year seedlings this year. However, late frosts claimed a lot of them. Then came the drought and it managed to get its share. So all in all I lost about 230 young Itohs, and the 85 tree and herbaceous seedlings mentioned earlier. Not really a good year.

In spite of the drought about 50 new Itohs bloomed. Many were smaller in flower than I would expect and some were rather ragged and slightly incomplete. This I lay to the dry conditions. There were, however, some very nice blooms on some of the seedlings, but they were on the early flowering ones before the drought really became a drought. The last two Itohs to bloom are the two I'll be waiting for next year. Both were complete doubles but had small flowers. One was a bicolor of yellow and red, and from a distance it looked very orange. When I first spotted this flower, I really thought I had hit the jackpot, but as I got closer I could see there were two colors. It is nice anyway. The other is a straw colored yellow, much like Age of Gold or Harvest. I personally think that in a normal year and with a little age it will be at least as good as my Bartzella.

1988 seed crop: It has always been thought that the Itoh cross takes much better on hot days than it does on the cooler ones. This I have not found to be true. However, if this were so, '88 was the year to be crossing for Itohs. My seed crop this year was about the same as the other years with a higher percent of ruptured seeds in the Itoh cross and smaller seeds in all crosses. Seeds were gathered three weeks earlier than normal and should have been gathered earlier yet. Many of the seeds appear to be very dark with a hard coat, much like they are when dormant.

Seeds from the Itoh Hybrids themselves numbered 8. In order to get these 8 seeds I had to open over 1500 pods, which were taken from 80 adult plants, all of which had been hybridized in the spring. If just one of these seeds grows into planthood, I'll be happy. Sometimes, when I look back at all the time spent hybridizing and caring for seeds, I can't help thinking hybridizers have to be nuts. If this is the case, sane people can't be having any fun.

(R 4, W6658 Sunset Lane
Fort Atkinson, WI 53538)

TO KEEP RECORDS . . .

It is a big plant with small or medium size bright yellow double (well, maybe pale yellow) flowers growing in the seedling patch. Parentage is Silver Dawn F3 by Quad F3 seedling. Now, Bill Seidl, what can that mean to a hybridizer since the cross is far removed from the original Saunders (The F₁'s) crosses?

All that amounts to is the species that enter its genetic make-up: Silver Dawn F3 is probably willmottiae (also known as obovata) by macrophylla. Quad F3 is composed of lacti. x (officinalis x (mloko x macro.)). And anything beyond Saunders F₁ crosses is probably open pollinated. Not too scientific, hey what!

All my suffrutocosas derive from Domoto's T.P. seeds, their lineage not included! I don't know how to keep records.

- Chris

NOW -- information from someone who does keep records - Bill Seidl. . .

To keep records, or not to keep records, that is the question. For many hobbyists, the question is easily answered in favor of the first option. If you don't know the parents of a seedling, how will you know if it is an improvement in the traits prompting the cross in the first place? If you make a controlled cross with difficult parents, say lactifloras ROSE SHAYLOR x MOTHER'S CHOICE, one will look with great anticipation to first bloom. Prior to that, even the foliage characteristics may be seen to be an improvement (more likely in hybrid crosses). But if the seeds are mixed with other more easily obtained seed, the plants will be regarded with relative indifference, eliciting little excitement. In fact, you will not know whether the more valued seed even germinated.

However, labeling and record-keeping require additional time-consuming tasks. In the past, many breeders, esp. of lactifloras, raised seedlings in very large numbers and in a great variety of crosses (often open pollinated), planting them as one lot and dispensing with the proportionately large labeling task. Perhaps it was their philosophy that such a technique would be more likely to produce a superior or different seedling. In other genera (daylilies, gladiolus, iris...) first-flowering occurs relatively soon, and thus some very extensive family trees can be "quickly" assembled. I once bred gladiolus and in ten years had 4-5 generations of seedling in some lines (esp. for fragrance). Including

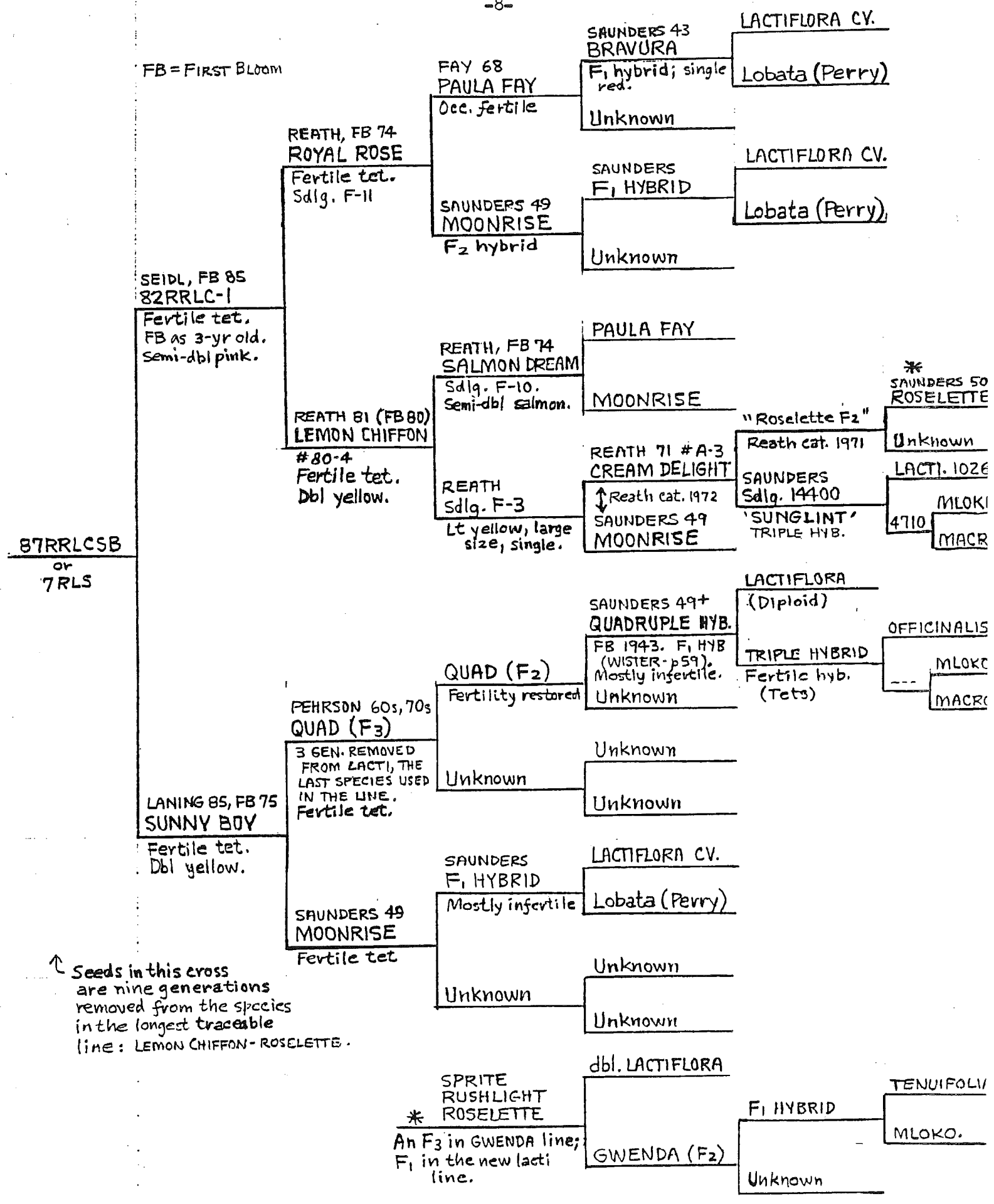
the pedigree of the original parents, this made for very complicated parentage charts. In the field I usually did not carry these voluminous stud books around, choosing instead parents for new crosses on the basis of the traits exhibited before me. Since no seedlings had been named, I was crossing meaningless numbers and finding the labeling task irksome and suffocating . . . esp. true for a crop that has to be dug every fall and replanted every spring. To lighten the labeling task but still maintain large numbers of seed in a great variety of crosses, I evolved "family" crosses.

In this procedure, each label represents a variety of crosses united by having in common (1) one parent, or (2) one goal, or (3) both a common parent and goal. Thus, in peonies, one might select the lacti MISS AMERICA as the seedparent pollinated by a wide variety of selected pollenparents. You would then be able to select seedlings on the basis of any improvements on MISS AMERICA. Since a little pollen can go a long way, one can use a new, rare, unestablished plant as the common parent on the pollen side. I did this last year with SUNNY BOY, Chris's double yellow herb's hybrid, using pollen from only one flower on 4-5 single yellow seedlings. Initially the seeds were kept separate but, for the Seed Counter, I took equal numbers from each batch to make a larger batch under one label: single yellow x SB This would be an example of (3) above. Growers of this seed could then look for yellow-flowered seedlings with some doubles anticipated.

SUNNY BOY on my one plant of seedling 82RRLC-1 produced so many seeds that I sent some out to SC customers, along with its parentage chart. The pedigree can be traced back nine generations (probably not possible for any lacti cultivar) because so many breeders of herb's hybrids kept records. I recall David Reath once saying he was at first surprised and mystified by the doubleness of LEMON CHIFFON until (after the fact) he checked and found a double lacti in its pedigree.

So . . . knowing the pedigree in advance can give you some clues to what to expect, look and select for in your seedlings.

FB = FIRST BLOOM



↑ Seeds in this cross are nine generations removed from the species in the longest traceable line: LEMON CHIFFON - ROSELETTE.

SPRITE RUSHLIGHT ROSELETTE *
 An F3 in GWENDA line; F1 in the new lacti line.
 GWENDA (F2)
 F1 HYBRID
 Unknown
 TENUIFOLIA
 MLOKO.