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The American Peony Society Bulletin



SAUNDERS AND GRATWICK FRIENDSHIP IN ITS EARLY YEARS

by Silvia Saunders

I seem to recall that in the dim and distant past an elderly woman living in Geneseo, New York, invited her neighbor, William Gratwick, and my father to meet at her house. Bill lived nearby, but my father had to motor one hundred miles, more or less. She felt that the two men, both being so interested in plants, would have a good deal in common, even though a generation apart. It must have been in the late 1930's, well before my father's stroke in 1945 which left him much less sparkly and animated than he had been. As Gratwick described the scene later on, my father rather ignored him all afternoon, conversing on every topic *except* plants or flowers. Finally toward the end of the day Father said, "And what are you up to these days, Mr. Gratwick?" "Well, right now I'm trying to do some hybridizing of boxwood to raise a hardy box, Professor Saunders." At that my father pricked up his ears, and the two men fell to talking together. In the end, Father said, "Well, when you get through with the boxwood, turn your attention to tree peonies, for we are going to need your help."

The day came all too soon when my father was no longer able to do his own grafting. Bill Gratwick used to visit our house in Clinton every year in late summer, pick up a bundle of hybrid scions to be grafted, carry them home the one hundred or more miles to his place in Pavilion, and do all Father's grafting for him. Then when the little new grafted plants were one year old (or perhaps they waited two) Bill would bring them back to us, and my father would fill the many orders he had on hand for his tree peony hybrids, then still very new on the market.

Bill took as his pay some fraction of the finished grafts—one fourth or one fifth, I forget which. In this way it wasn't too long before he had accumulated a good collection of the Saunders hybrids. They were beginning to be old enough to bloom, and he was making crosses himself. The "normal" cross is to put tree peony pollen onto blooms of *P. lutea* or *P. delavayi*, both of which bloom profusely and set numerous large seeds the size of chick peas. Bill immediately started making the cross in the reverse direction, putting *lutea* pollen onto the tree peonies, which also set seed but not as profusely as does *lutea*. He saw also that the big problem was the high degree of sterility in the hybrids. How could we ever go further if the F-1 (first) generation was going to be so very sterile? He correctly felt the importance of breaking through into the second generation, for even fairly sterile hybrids will set an occasional seed. If these can be grown on into mature plants, they will often be found to have a much higher fertility. Father had given Bill two F-2 plants that were in our nursery but were being rather ignored, and Bill found after several years' work on them that while they were self-sterile, they proved to be fertile when crossed with

one another or with the F-1 hybrids. It was also possible to cross them back onto their grandparent *P. lutea*.

Bill then got a brand new idea: Maybe a hybrid that combined 75 percent Japanese tree peony genes and only 25 percent *lutea* genes might combine the best qualities of both strains. Consequently he worked on this for several years. As can be seen, Bill has an amazingly fertile brain; new ideas keep crowding into it. They wait only to be acted upon, and they don't wait long.

Bill and his long-time partner Nassos Daphnis have introduced a good number of hybrids of their own originating called the Daphnis hybrids. Notable among them, for example, is Tria, which bears three blooms on each stem, graceful and well-held. New colors have been introduced. Some among them are much more fertile than any previously known. Definite advances in the hybrid peony were made.

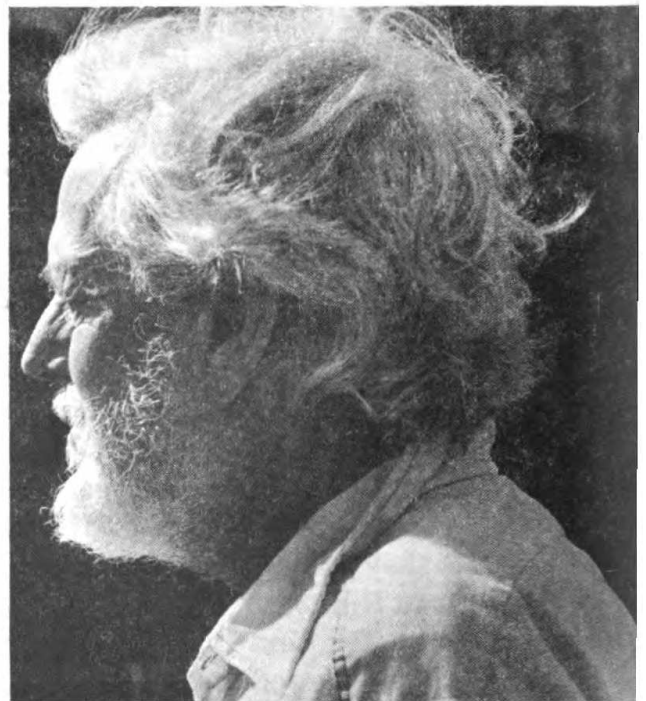
The rest is history. Breeders now saw that there is literally an infinite number of combinations that can be made with a flower, once you get past the sterility of the first-generation hybrids. Your original crosses may become the ancestors of yet undreamed-of beauties. Or they may not. To find out you have to try them. Gratwick and Daphnis have tried crossing in almost every direction. Remember, every new try takes a long time to show what, if anything, it will produce. Years go by, especially with the peony, which is a slow-growing, long-lived plant. Some men feel it is a comfortably slow-paced plant to work on, a good antidote against our too fast-paced world, where we seem always to be running in order to stay in the same place. As the old fellow said, "The hurrieder I go, the behinder I get."

WILLIAM GRATWICK — BULLETIN COVER

John Simkins, Oakville, Ontario, Canada

Along the north edge of the ridge overlooking the Genesee Valley one of the great tree peony nurseries of the world was born. Here lives the custodian of the best Japanese tree peonies from the Chungai Nurseries, the complete list of Professor Saunder's *luteas*, and the repository of the Daphnis-Gratwick hybrids and breeding stock. The man who put together this storehouse of treasures is William Gratwick, an engineer, author, artist, breeder, and farmer all in one.

Bill is a breeder of horses and sheep as well as tree peonies, so he has the prac-



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ticed eye and genetic knowledge to select the best characteristics for the offspring and locate the parents to provide it.

His eye is unerring. Many seedlings I would have discarded he kept because he saw a required characteristic that could prove to be useful. His ruthless culling of the "dogs" from his breeding programme I'm sure made them try harder. Last year we looked over some plants that were planted alongside the road after being sent in disgrace from the favoured few. Some had over the years improved so much that he is now considering planting them back in the breeding ground.

The eye and hand of the artist are best experienced by watching Bill in the trial rows. The loving touch as the flowers are caressed and admired, their good points elucidated and the poor ones mentioned, is an education in itself. The other way is to watch the care and design of the picture when peony photos are made. Many of these pictures were used in a one-man show in Rochester in 1978.

Bill Gratwick's contribution to tree peonies is four-fold. His care in locating and by re-ordering and testing and selecting he obtained many correctly named Japanese tree peonies. These he reduced to a stock of the best fifty varieties. He also grew seed from Chungai Nurseries and introduced four magnificent single peonies: Garden of the Monastery, Dark of the Moon, Companion of Serenity, and Captain's Concubine.

He brought a complete selection of Saunder's tree peonies to Gratwick's. These were planted against a four-foot-high circular mound about one hundred feet in diameter. The peonies were planted in alphabetical order around the edge. In the centre is the Saunders Chair, where the professor was led to be honoured on his visits. Another group was planted around the fountain pool and others in the formal water garden.

He has done much to publicize the tree peony with the great peony "open houses" at his nursery. Thousands visited the acres of peonies in bloom. Japanese type structures, gates, and other ornaments built along the route lent even more beauty to the show. He also contributed many collections to public areas. The best one I know is at the Eastman Kodak museum in Rochester.

Bill's fourth contribution is his partnership with Nassos Daphnis in the production of the Daphnis-Gratwick hybrids. Many of these were registered in 1979 and are now in production at the Charles Klehm Nurseries in Arlington Heights, Illinois. They will in the future handle the sales of Gratwick peonies.

Bill Gratwick and tree peonies are a symbiotic pair. The tree peony is large, flamboyant, and majestic, and Bill is all of these with a great sense of humour.

AMERICAN PEONY SOCIETY

250 Interlachen Road (612) 938-4706 Hopkins, Minn. 55343

President.....Irvin Ewing Secretary-Treasurer.....Greta M. Kessenich
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 2334 West 110 Street 304 Short Street
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DEPT. OF REGISTRATION

The department was formed to properly supervise the nomenclature of the different varieties and kinds of peonies. All new varieties should be registered to avoid duplication of names.

Greta M. Kessenich, Secretary

OBJECTIVES

The Articles of Incorporation state: Section (2) That the particular objects for which the corporation is to be formed are as follows: To increase the general interest in the cultivation and use of the Peony; to improve the methods of its cultivation and methods of placing it upon the market; to increase its use as a decorative flower; to bring about a more thorough understanding between those interested in its culture; to properly supervise the nomenclature of the different varieties and kinds of peonies; to stimulate the growing and introduction of improved seedlings and crosses of such flower; and to promote any kind of the general objects herein specified by holding or causing to be held exhibitions, and awarding or causing or procuring to be awarded, prizes therefor or in any other manner.

The AMERICAN PEONY SOCIETY BULLETIN is the official Society publication. It is mailed postpaid quarterly to all members in good standing.

MEMBERSHIP

The By-Laws state: All reputable persons, professional or amateur, who are interested in the Peony, its propagation, culture, sale and development are eligible for membership. Dues are as follows:

| | | | |
|-----------------------|---------|------------------------------|---------|
| Single Annual..... | \$ 7.50 | Junior or member family..... | \$ 2.50 |
| Single Triennial..... | 20.00 | Life..... | 150.00 |
| Family Annual..... | 10.00 | Commercial membership..... | 25.00 |
| Family Triennial..... | 27.50 | | |

Family membership, any two related members in same household.....One Bulletin
 Junior membership, any age through completion of high school.....Separate Bulletin

For those who wish to further support the Society, the following special memberships are available.

| | | | |
|-------------------|---------|-----------------|----------|
| Contributing..... | \$25.00 | Supporting..... | \$100.00 |
| Sustaining..... | 50.00 | Patron..... | 250.00 |



AMERICAN Peony Society Bulletin



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FROM YOUR PRESIDENT

With the coming of March comes the pink eye of the herbaceous peony through the soil in the north. In the southern areas the tree peony will be blooming in April and early May. This is the time to begin the care of your peonies. Cultivate or hoe around each plant and give them a little fertilizer. The result will be better and larger blooms, also a stronger plant. It is time to start your spray program and continue for six or eight weeks. By so doing you should eliminate botrytis, which comes when the season is wet and cold.

There are so many new peonies now with a wide range of color. New hybrids are very popular as well as the Japanese and singles. What a wonderful opportunity we have now to select peonies that lengthen the blooming season with a variation of color, this due to the advancement in hybridizing skill. And this work continues!

More and more tree peonies are being planted, and we see them in many home gardens. It was only a short time ago that this flower was really unknown except to those in a more temperate zone. We have learned that the tree peony is one of the hardy plants that can be enjoyed by everyone. Just give them a little extra attention where winters are very severe. When fall comes, plant a tree peony and enjoy the early bloom of the peony season.

As I write about the newer varieties, I keep remembering the huge plants of those great peonies *Mons. Jules Elie* and *Festiva Maxima* loaded with bloom as well as *Sarah Bernhardt*, *Ella Christiansen*, and the fragrance of *Edulis Supreme*. A peony lives on for years and continues to bring forth beauty every spring. Let us not lose to the age any of the peony varieties that have stood the test of time, given us by the great peony breeders of the past.

One of the interesting places to see peonies is at the National Exhibition. There you will see all colors and many varieties expertly selected and placed on the show tables in their color class. The blooms of the peonies fill the vast area in the show room.

This is the sight you will see at Kingwood Center, Mansfield, Ohio, on June 12-14. See you there!

Irvin Ewing

NATIONAL CONVENTION OF THE AMERICAN PEONY SOCIETY

June 12, 13, and 14, 1981

**The 78th Annual Meeting
and the 76th Annual Peony Exhibition**

Kingwood Center, 900 West Park Avenue, Mansfield, Ohio

MANSFIELD WELCOMES YOU!

For the benefit of those wishing to attend the Convention, Mansfield, Ohio is located on U.S. Highway 42, about halfway between Cleveland and Columbus. It lies just west on Interstate 71 and just south of U.S. 30. By air, Mansfield is served by U.S. Air Airlines, with connections to other major airlines at Cleveland.

SCHEDULE OF EVENTS

Friday, June 12:

Center opens at 8:00 a.m. — prepare show entries. Work area will be opened as needed Friday evening. Limited refrigerated storage space.

8:00 p.m. — Board of Directors' meeting

Saturday, June 13:

1:00 p.m. — Exhibition open to the public. Closes 7:00 p.m.

7:00 a.m. - 11:30 a.m. — Set up and enter exhibits

8:00 a.m. — Registration

11:30 a.m. - 1:30 p.m. — Judging

1:30 p.m. — Luncheon at main house, service hall

3:00 p.m. — Seminar, Kingwood Hall; see Chris Laning.

5:30 p.m. — Cocktails

7:00 p.m. — Buffet banquet, main drawing room, Kingwood Hall

Welcome address: Mr. Frederick Roberts

Annual meeting

Root Auction (we ask for peony root donations)

Sunday, June 14

9:30 a.m. — Board of Directors' meeting, Kingwood

10:00 a.m. — Show opens to the public

5:00 p.m. — Show closes to the public

Advance registration is urged. Fee will be \$18.00 per person. This includes registration, Saturday luncheon and banquet. Taxes, gratuities, and incidentals are included. Children, half price.

Separate reservations may be made for the luncheon at \$6.00 and the banquet at \$12.00.

Send reservations and information about peony root donations directly to Greta M. Kessenich, Secretary, 250 Interlachen Road, Hopkins, Minnesota 55343.

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MOTEL — Quality Inn Park Place, 191 Park Ave. W., Mansfield, Ohio. Phone: (419) 522-3662. Do make reservations immediately, as all rooms are in demand because of the Miss Ohio Pageant the same dates, June 12, 13, and 14.

Single room, double bed, one person: \$30-\$32 plus 7% tax. Second person, additional \$5.

**Two double beds, four people, \$35-\$41 plus 7% tax.
\$25 deposit required with reservation.**

—Sheila M. York, Sales Director



RULES FOR SPECIMEN EXHIBITS

1. All entries must be completed and in place by 11:30 a.m. on opening day.
2. All entries must have been grown by exhibitors.
3. Entry tags supplied by the Society must be filled out completely as to class, variety, and name and address of exhibitor. In addition, each variety must be identified with a small wood or plastic tag with the variety name legibly printed thereon. Entry tags may be obtained in advance from the secretary of the American Peony Society. The exhibitor or his agent shall be responsible for proper completion of the entry tags.
4. Stems should be approximately 12" long (tree peonies excepted).
5. Exhibitors are limited to one entry each in classes 101, 102, 103, 104, 105, 106, 201, and 301. In all other classes up to two entries of each variety are permitted; however, any number of different varieties may be entered.
6. The show committee may combine or divide classes if the number of entries warrants it.
7. Correct varietal labeling is mandatory in the Open and the Amateur classes. It is recommended in the Novice classes, but no entry shall be disqualified for failure to identify.
8. Standard containers will be furnished by the show committee and must be in all classes.
9. The American Peony Society Handbook will govern bloom types and color.
10. Anemone types such as Gay Paree shall be shown as Japanese.
11. Awards need not be given to unworthy exhibits.
12. Flowers are to remain as placed on the show tables by the exhibitor, moved only when necessary, and then the exhibits must be kept in the same position.
13. The decision of the judges is final.

NOTE: See Page 13, Division VI —

COURT OF HONOR CANDIDATE CLASS

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DIVISION 1. Open to all Exhibitors.

- Class** **101** American Peony Society Award
Twenty-five varieties, any color or type.
One bloom each in separate containers.
- 102** American Peony Society Award
Fifteen varieties, herbaceous only, any type or
color
One bloom each in separate containers.
- 103** American Peony Society Award
Ten varieties, herbaceous hybrid only, any type
or color
One bloom each in separate containers.
- 104** American Peony Society Award
Ten varieties, Tree peonies only, any type or color
One bloom each in separate containers.
- 105** Five varieties, Japanese Type lactiflora only, any
color
One bloom each in separate containers.
- 106** Five varieties, single type lactiflora only, any color
One bloom each in separate containers.

Three Blooms, one variety lactiflora only, in one container.

- | | |
|--|------------------------------------|
| Class | 117 Semi-double red |
| 110 Double white | 118 Bomb any color |
| 111 Double blush | 119 Japanese white or blush |
| 112 Double light pink | 120 Japanese pink |
| 113 Double dark pink | 121 Japanese red |
| 114 Double red | 122 Single white or blush |
| 115 Semi-double white or blush | 123 Single pink |
| 116 Semi-double pink | 124 Single red |

One Bloom Lactiflora Only

- | | |
|--|------------------------------------|
| Class | 138 Bomb white or blush |
| 130 Double white | 139 Bomb pink |
| 131 Double blush | 140 Bomb red |
| 132 Double light pink | 141 Japanese white or blush |
| 133 Double dark pink | 142 Japanese pink |
| 134 Double red | 143 Japanese red |
| 135 Semi-double white or blush | 144 Single white or blush |
| 136 Semi-double pink | 145 Single pink |
| 137 Semi-double red | 146 Single red |

Three blooms one variety Herbaceous Hybrids or Species in one container.

Class

- | | | |
|-----|--|---------------------------|
| 150 | Double or semi-double white, blush or yellow | |
| 151 | Double or semi-double pink | 153 Single yellow |
| 152 | Double or semi-double red | 154 Single white or blush |
| | | 155 Single pink |
| | | 156 Single red |
| | | 157 Itoh hybrid any color |

One bloom Herbaceous Hybrid or Species.

- | | |
|--------------|--|
| Class | 160 Double or semi-double yellow |
| | 161 Double or semi-double white or blush |
| | 162 Double or semi-double pink |
| | 163 Double or semi-double red |
| | 164 Single yellow |
| | 165 Single white or blush |
| | 166 Single pink |
| | 167 Single red |
| | 168 Itoh hybrid, any color. |

Three blooms, one variety, tree peonies only, in one container.**Class**

- | | | | |
|------|--|------|--------|
| 170a | Japanese (Moutan) White, Single | | |
| | 170b semi-double | 170c | double |
| 171a | Japanese (Moutan) Pink, Single | | |
| | 171b semi-double | 171c | double |
| 172a | Japanese (Moutan) Red, single | | |
| | 172b semi-double | 172c | double |
| 173a | Japanese (Moutan) Violet single (Really purple lavenders) | 173b | double |
| | 173b semi-double | 173c | double |
| 174a | Japanese (Moutan) Maroon single | | |
| | 174b semi-double | 174c | double |
| 175a | Lutea Hybrid, white to cream, single | | |
| | 175b semi-double | 175c | double |
| 176a | Lutea Hybrid, yellow, single | | |
| | 176b semi-double | 176c | double |
| 177a | Lutea Hybrid, blend, single | | |
| | 177b semi-double | 177c | double |
| 178a | Lutea Hybrid, pink, single | | |
| | 178b semi-double | 178c | double |
| 179a | Lutea Hybrid, red, single | | |
| | 179b semi-double | 179c | double |
| 180a | Lutea Hybrid, dark red, single | | |
| | 180b semi-double | 180c | double |

One bloom tree peony only.**Class**

- | | | |
|------|---------------------------------|-------------|
| 185a | Japanese (Moutan) white, single | |
| | 185b semi-double | 185c double |

| | | | | | |
|------|--------------------------------------|------|-------------|------|--------|
| 186a | Japanese (Moutan) pink, single | 186b | semi-double | 186c | double |
| 187a | Japanese (Moutan) red, single | 187b | semi-double | 187c | double |
| 188a | Japanese (Moutan) violet, single | 188b | semi-double | 188c | double |
| 189a | Japanese (Moutan) maroon, single | 189b | semi-double | 189c | double |
| 190a | Lutea Hybrid, white to cream, single | 190b | semi-double | 190c | double |
| 191a | Lutea Hybrid, yellow, single | 191b | semi-double | 191c | double |
| 192a | Lutea Hybrid, blend, single | 192b | semi-double | 192c | double |
| 193a | Lutea Hybrid, pink, single | 193b | semi-double | 193c | double |
| 194a | Lutea Hybrid, red, single | 194b | semi-double | 194c | double |
| 195a | Lutea Hybrid, dark red, single | 195b | semi-double | 195c | double |

DIVISION II AMATEUR: Open to exhibitors who raise peonies chiefly for pleasure, sell plants or cut flowers only casually, and do not grow more than 200 plants.

Class 201 American Peony Society Award
'Ten varieties, any type or color
One bloom each in separate containers.

Three blooms, one variety lactiflora only, unless otherwise stated, in one container.

Class 205 Double white or blush

| | | | |
|-----|-----------------------|-----|------------------------|
| 206 | Double pink | 210 | Japanese any color |
| 207 | Double red | 211 | Single any color |
| 208 | Semi-double any color | 212 | Hybrid any color |
| 209 | Bomb any color | 213 | Tree any type or color |

One bloom lactiflora unless stated otherwise.

Class

| | |
|-----|-----------------------|
| 220 | Double white |
| 221 | Double blush |
| 222 | Double light pink |
| 223 | Double dark pink |
| 224 | Double red |
| 225 | Semi-double any color |
| 226 | Bomb any color |
| 227 | Japanese any color |
| 228 | Single any color |

- 229 Hybrid any type or color
 230 Tree, any type or color

DIVISION III NOVICE: Open to all amateur gardeners who exhibit peonies only at local shows.

- Class** 301 American Peony Society Award
 Five varieties any type or color in separate containers.

Three blooms one variety lactiflora, unless otherwise stated, in one container.

- Class** 305 Double any color
 306 Semi-double, any color 308 Single, any color
 307 Japanese, any color 309 Hybrid, any color

One bloom lactiflora, unless otherwise stated.

- Class** 315 Double white or blush
 316 Double pink
 317 Double red
 318 Semi-double any color
 319 Bomb any color
 320 Japanese any color
 321 Single any color
 322 Hybrid any color
 323 Tree any color

DIVISION IV: Seedlings and New Varieties.

- Class** 401 Seedlings.
 Three blooms, one variety in one container, not currently introduced.
 Variety must have been divided at least once.
 Must be shown under name or seedling number.
- 402 New Varieties:
 Three blooms, one variety in one container. Limited to varieties named and registered with the American Peony Society and introduced no earlier than five years prior to show date.
 Awards given in the two preceding classes may be Certificates of Merit or Honorable Mention at the discretion of the judges, but no ribbon awards. Varieties having won either award in previous competition may not be shown again in that class, except that varieties shown in class 401 may be shown again in class 402 regardless of awards.
- 403 Seedlings:
 One bloom. This class is for display only.

No awards will be given and any seedling entered in class 401 is ineligible.

DIVISION V: Special Entries.

Class 501 Commercial Exhibit.

No awards will be given and any seedling entered in class 401 is ineligible.

Collection by commercial grower of 25 to 50 varieties in separate containers. A placard approximately 9" × 14" may be furnished by the exhibitor to identify his display.

502 Visitor from greatest distance.

Five different varieties any type. Mileage verified on entry tag.

503 Multiple bloom.

Single stalk not disbudded. Must show at least three open blooms.

DIVISION VI: Court of Honor Candidate Class

Exhibitors should enter their best blooms in this class. The Court of Honor entries will come from all blue ribbon winners in this class. One bloom in separate container. One entry only of each type.

A. Double Lactiflora

White

Blush

Light Pink

Dark Pink

Red

B. Bomb Lactiflora

Any color.

C. Semi-double

Lactiflora only. Any color.

D. Japanese

Lactiflora only. Any color.

E. Single

Lactiflora only. Any color.

F. Hybrid or Species

Single

Semi-double

Double

Any type or color.

G. Tree peony

One entry of each in Japanese, European, or Lutea.

Grand Champion

The best flower in the Show will be selected from the Court

of Honor winners, plus one selection chosen by the Judges who judged Division VI. These judges will pass through all the classes of the show and select one bloom of any type or color and add it to the Court of Honor selections to compete for the Champion of the show. Ten minutes will be allowed for this additional selection.

DIVISION VII: Artistic Classes

Section A: Focus on Beauty

1. **Grandmother's Garden** — a mass arrangement
2. **June Wedding** — a predominantly white arrangement
3. **Vacation Time** — an arrangement using an accessory to depict a vacation (examples: seashore, mountains, sports)
4. **Sweet Sixteen: A Bud Blooms** — an arrangement featuring a peony bud with other plant material
5. **Peonies Are to Cherish** — a design of your choice
6. **Recycling Conserves Beauty** — a creative design; see rule 6
7. **Oriental Splendor** — an arrangement in an oriental manner
8. **Anniversary Dinner** — an exhibition table segment; off-white niche will be provided; 40 inches high by 32 inches wide by 30 inches maximum depth; all cloths must have an 8-inch drop; appointments and decorative units should be in proportion to the space allowed; an exhibition table segment is not related to the actual service of food; no flatware should be used.

ARTISTIC DIVISION RULES

1. An exhibitor may make only one entry per class. All must be the work of the exhibitor.
2. Peonies should be featured in all arrangements. Peonies need not be grown by exhibitor, and some will be available from the committee.
3. Accessories and/or bases may be used in all classes.
4. No artificial flowers or foliage are permitted.
5. A minimum of treated plant material is permissible.
6. A creative design (Class 6) is an original concept—the result of the exhibitor's creative idea—in the use of plant material and other components and in the organization of his design elements within the limits of the principles of design. It is not bound by rules, codes, styles, or conventional patterns. Creative designs are free-form or abstract.
7. Entries must be placed from 1:00 to 5:00 p.m. on Friday, June 12, and from 8:00 to 11:00 a.m. on Saturday, June 13, in the Kingwood Assembly Room.

8. While the show management will exercise due caution in safeguarding exhibits, it cannot assume responsibility for injury or loss.
9. Personally owned properties must be claimed immediately after the show closes at 5:00 p.m. on Sunday.
10. Reservations are requested for Class 8 only. Contact the Kingwood Center receptionist (900 Park Avenue West, Mansfield, Ohio 44906, or (419) 522-0211) by June 11.

Mrs. Joyce Tilus, Chairman
Kingwood Center
900 Park Avenue West
Mansfield, Ohio 44906

TREE PEONY TOPICS

Louis Smirnow, Brookville, L.I., New York

It should be noted that young grafted tree peonies, when purchased and received, will show the understock beginning to rot. The herbaceous understock begins to rot in young plants and will begin to disappear completely in the ground after two or three years because the scion will develop its own root system.

When I visited several local gardens I was surprised to learn that many gardeners are very careless when moving a tree peony from one place to another. They dig too near the root system near the stalk of the plant. When digging, be sure that the spade or the fork is not placed too near the plant; this will avoid breaking the stem below the ground level. Dig far enough away to avoid damaging the root system too.

We were truly amazed at the large root systems on the Chinese Conquests plants. The plants are not grafted but are on their own root system. Most Chinese growers start their young plants by cutting a piece off a larger plant at the roots. Each piece has a couple of roots on it. It is then planted, and a year or two later it has a larger root system than grafted plants.

The problem of when to plant peonies is always with us. Several gardeners have told me that when herbaceous peonies are received in early spring, they are severely set back because they show signs of growth. This is not the case with tree peonies, which appear to show very little sign of growth or, in most cases, none at all. Our own experience is that tree peonies can be purchased in early spring and planted at once. All peonies planted in the fall do well.

We are often asked to name some fragrant tree peonies in the full doubles. All Lutea hybrids are fragrant. Among the Japanese tree peonies, the following are fragrant: *Furomon*, *Kasane Jishi*, *Kintow*, *Koku How*, *Koko Tsuru*, *Seki Mori*, *Tomo Shiraga*, *Jinju Den*, *Fuji No Mori*, *Haku Un Kaku*, *Ko Zakura*, and *Hare Sugata*. The new group of Chinese Conquests are all fragrant.

Thank You, Fifth District

On November 2 at Lake Geneva, Wisconsin, the Fifth District of the American Peony Society had its annual meeting. It was a special day that had been designated as a tribute to me. There were a great many in attendance and many from afar. Flowers, tributes, gifts, letters, and long distance telephone calls were received.

My thanks and appreciation to President Karrels and all the members that made this such a memorable day.

For this very wonderful recognition, I thank you.

Greta Kessenich

RARE TREE PEONIES PRIZED FOR CRISP COLOR, SCENTS

by Jerry Williams, Times-Dispatch Garden Columnist

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Article first appeared August 31, 1980.

Tree peonies are rare in modern gardens, but their history goes back for decades. Unlike herbaceous peonies which die back to the ground each fall, tree peonies develop into good-sized, woody shrubs increasing in size and beauty with age.

Tree peonies fit well into perennial or shrub borders thriving in partial shade to full sun. They should be planted in neutral or slightly alkaline soil in a well-drained location.

Space plants at least three feet apart well away from roots of other trees and shrubs. Dig a hole about 12 to 18 inches deep and enrich with humus. Add a half cup of bonemeal or two handfuls of Mag-Amp and mix peatmoss into the soil.

Tamp the soil firmly in place in the bottom of the hole and put the root in covering it with about two inches of soil. Plants should be fed in the fall and again in the spring.

There are a handful of varieties on the market now. The European and Chinese varieties have been crossed and recrossed to achieve plants that will bear twenty to twenty-five blooms on a four- to five-year-old plant. A ten- to fifteen-year-old plant will bear more than a hundred blooms on a plant about four feet tall and five feet across.

One of the newest introductions in this exotic group is *Tria*, an extended bloomer that bears three crispy yellow flowers on each long stem. Flowers are held high above the foliage.

The flowers of *Tria* open in sequence, usually at four- to five-day intervals giving a longer blooming period to this variety than other tree peonies.

Although it has been some 30 years since Professor A. P. Saunders of Clinton, New York, first created his hybrid tree peonies, the supply

for these exciting plants has not kept up with the demand from discriminating gardeners.

The name Saunders is a hallmark of distinction in peonies. Some of his creations have blooms like magnolias, others like lotus flowers, and still others like anemones.

Some of the most desirable Saunders hybrids are

Age of Gold — a medium height plant with bushy habit of growth. This cultivar won a gold medal in the American Peony Society in 1973. It bears a profusion of bright yellow semi-double flowers with ruffled petals.

Thunderbolt — a tall leafy sturdy plant with semi-double blooms that are crimson with petals waved and of heavy texture.

Silver Sails — bears single blooms with about ten petals of pale clear yellow. The filaments are uneven lengths, fine and reddish.

Hesperus — another single with ten to sixteen petals of rosy red with deeper tones at the edges. Filaments are short, dull crimson, darker than the petals.

Banquet — gorgeous strawberry red blooms, fully double of deep crimson edges and ruffled petals.

Another name of note in peony hybrids is Toichi Domoto. His plants are being offered to the public for the first time this year although he began hybridizing in the late 1920's. Wayside Gardens is offering the Domoto Hybrids which include pinks, rose-reds, light lavenders, and whites.

Domoto began with named varieties from Japan but on Saunders' advice selected seeds for his parent plants from among his original Japanese imports by form, color, and scent and not by name.

Scent was especially important to Domoto. He wanted "a good rose fragrance" in his pinks, lavender, rose-red, and white tree peonies, all of which have large, ruffled flowers. —Article submitted by L.J. Dewey

THE PEONY PATCH

Ben Gilbertson, Kindred, North Dakota

The year 1980 proved to be an uninteresting year in the "Peony Patch." It started out with a very dry period through April and May, with a total amount of precipitation of .05 inches for the two months, plus two days in April when the temperature reached above 100 degrees Fahrenheit.

The peonies got off to a very poor start and were very short stemmed. Many mature plants failed to bloom at all. Our city water contains a good deal of alkali, and we do not use it for watering. No plants were lost, but they were certainly delayed.

Early June brought us good rains, and our moisture supply was ample for the rest of the summer. At freeze-up time we had a good supply of both topsoil and subsoil, so in the spring we should be in good

shape.

I did not dig or sell any peonies this year, as I dug and sold so close last year. In addition, I had such a poor growing season this year that my stock needed an extra season for growing. In this year of 1981 I expect to move out all of my stock except what I will want to keep for myself.

There was not much new this year. A medium pink double, a rather good near yellow, and a single red of a very brilliant dark red color could be of value for a pollinator and was so used this year. One could come up with some very fine dark reds.

The most interesting plant was missed altogether. We had a houseful of visitors from Canada, and the other peonies were through blooming and were neglected at that time. It was one of four tree peony seedlings from what my records say was *Hakuo Jishi* pod parent and single *tenuifolia* pollen. All four had tree peony foliage. Three had bloomed several years earlier—mere single light-to-medium pink flowers—but the fourth one was very slow to develop into a blooming plant and bloomed about a week after all other peonies were through. When I did get to see it, there was only a bunch of partly dried petals on the ground below where the bloom had been. The petals were pretty well dried out, but they showed color very much like an *Alice Harding* bloom. There were two rather good-looking carpels left on the flower stem base. I could not tell whether it had had any anthers or pollen.

My records also show that the flower that I pollinated in this case was not bagged. There were many *Alice Harding* plants nearby and some were in bloom, so pollen from that type could have been easily available to bees and other insects. It was noted that the flower, instead of facing downward as an *Alice Harding* usually does, faced about halfway between straight up and ninety degrees, or straight out. I am not going to miss out on this one next year. Its true parentage is without a doubt *Hakuo-Jishi* tree peony, a semi-double white, and *Alice Harding*, a lutea hybrid tree peony, a very good double yellow. I had hoped that this plant would turn out to be another Itoh-type hybrid, but I am pleased with what it seems to be. I have had six Itoh-type plants, and none of them is worthy of being called a peony. We shall just have to wait and see the plant next summer.

I ran a test on a very small scale this past season to see if cutting down plants completely and re-blooming would give me later blooming in certain types of crosses. I selected three two-year-old-plants, each of which had three stems growing. I cut down all stems below ground level, the first one as soon as the stems had reached full height, the second one ten days later just as soon as the leaves were fully developed, and the third one just as it started opening its bloom. The second one developed one bloom on one of its two stems. The other two regrew two stems but no bloom. This experiment was too limited to have any meaning. It did prove that some re-blooming does occur.

PEONIES AND THE ERUPTION OF MOUNT ST. HELENS

Oscar and Ruth Brandt, Portland, Oregon

The picture tells the story of the beauty of our peonies on June 9. On June 12 the beauty was gone because of the ash covering all from the eruption of Mount St. Helens.



Beauty destroyed by Mt. St. Helens

On May 18 Mount St. Helens had the first terrible eruption, but because she blew out of the northeast side of the mountain there was no drift of the ash over Portland, Oregon. We did not hear the blast, although my cousins in Vancouver, B.C., Canada, had their house and windows shaken.

On June 12, 1980, St. Helens erupted again and sprayed about one-eighth of an inch of ash over Portland and burned all of the blooms and most of the buds. Everything burned to a brown color. The foliage was heavy with ash, and there were small holes burned, but it did not seem to do any damage otherwise. This ash was very difficult to wash off the bushes. In fact, we still have ash in the house gutters and have tried many times to wash it out.

Now it has been found through this area that the ash even helped the crops, grain, apples, etc. We wonder what it will do for our peonies next year.

We seem to have a perfect place for peonies to grow and are only disappointed in about three plants which do not seem to have as many blooms as all of the others. They are not too deep in the ground. Most of our plants are thirty-five years old and, of course, very large.

I might add that Mount St. Helens continues her eruptions over so many weeks. We had ash over Portland again on October 16, but just a trace of it was on the patio the next morning. In fact, she erupted five times in forty-eight hours. However, we were definitely protected because it was the northeast side and top of the mountain that blew out.



The peony bloom was very good this year. We had very little rain at that time. My peonies were planted in 1965. *Minuet*, *Doris Cooper*, and *Nick Shaylor* were especially nice.

—John L. Winterringer, LeMars, Iowa

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FROM THE BIG SKY COUNTRY

Our garden is most definitely novice class, but the peony is becoming more evident each year. 1980 was very good to us, with an early spring and late fall. Here in south central Montana we have marginal zone five climate; changeable, but very nice. We love it! I guess you could call it northern sun belt. We are entering the twenty-year cycle of mild winters again; the last snowbound cold was 1978. 1979 was open with intermittent moisture, and 1980 has been very mild so far. Skiers are very unhappy with no snow.

I'm a bit worried about several perennials. Hopefully, my Christmas tree gleanings used as mulch over everything will minimize open winter damage. This is my favorite mulch, used yearly to stop heaving, as winter thaws come with "chinooks" causing 40-60° temperature changes here in Montana. Peonies—herbaceous hybrids, species, and lactifloras—have never been affected once established. First-year plantings are my concern.

1979 plantings, to bloom in 1980 (first-year bloom), were about ninety percent my favorites: *Cheddar Cheese* (Klehm); if with time it gets even better, I'll not be able to stand it. Wow! *Red Charm* is perfection of form and color. *Honey Gold* is a wonderful Jap type, white and yellow. *Fairies' Petticoat* is so delicate and so vigorous. *Vivid Rose* and *Glory Hallelujah* are both huge, distinct pinks. *Jaycee* is a brilliant red. *Chocolate Soldier* is the first to bloom, but the heat wave shortened its early bloom. I just loved these bombs, *Big Ben*, *Charlie's White*, and *Mme. Butterfly* (I would have called her *Cho-Cho-San*!).

Yes, 1980 was most enjoyable, as you said it would be, both for peonies and those beautiful publications of the American Peony Society. *The Best of 75 Years* made me feel like a child again, hearing of our marvelous heritage. The golden years of peony shows seemed almost outrageous! Yet look at what we have to choose from in our present time. I only wish I had forty-plus acres to plant.

Of course, now that I'm hooked, this last fall's planting was ambitious again. I planted more early hybrids, *Seraphin*, *Golden Glow*, *Heritage*, and *Lovely Rose*. In addition, there are *Kansas* and *Mandarin's Coat*. I also planted some classics: *Mrs. F.D.R.*, *Westerner*, *Lotus Queen*, *Do Tell*, *Dorothy J.*, and for a memoriam to our historic natural tragedy in 1980, *Volcano* (Marx). Mt. St. Helens sent a lava dusting to us on May 19 that gave us a Los Angeles-type smog haze this far away. My concern will never end for the poor, unfortunate people in Washington. Was the late Walter Marx a prophet?

So here's wishing you all a very good new year.

—Loren Arthun, "Tipi Gardens," Absarokee, Montana

My season was about average. *Dinner Plate* was excellent. *Kansas* was big, a good red, and *Vivid Rose* was my best late pink.

—C.D. Pennell, Van Wert, Ohio

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FROM THE STATE OF VIRGINIA

Lowell E. Ashley, Harrisonburg, Virginia

I always look forward to the Bulletin and enjoy it immensely. Dr. Landis' article on tree peonies in the December issue was most interesting. I am a catalog librarian at James Madison University here in Harrisonburg, Virginia. Most of my peonies are at my parents' home near Blacksburg, Virginia, about 120 miles south of here, since I only rent a house in Harrisonburg. The elevation of Blacksburg in southwestern Virginia is higher than the Shenandoah Valley, so the climate there is a bit cooler and better for growing peonies.

The growing season in this part of Virginia has been good this year. There was plenty of rain and no prolonged dry spells, but we did have quite a bit of hot weather. The blooming season for peonies in the spring of 1980 was not so good. There was an unusual amount of windy weather; some doubles did not open well, and those that did open were not generally up to their best form and size.

Some peonies that were good this year were *Virginia Dare* (I think this is a flawless single white and am very fond of it), *Seashell*, *Red Star*, *Officinalis rubra plena*, *Red Charm*, *Nick Shaylor*, and *Jaycee*. I also had a tree peony in Blacksburg, *Godaishu*, which bloomed very well with about fifteen large blooms. One of the first peonies I planted about twenty-five years ago was an unnamed double blush. It is on the south side of the house and comes into bloom about two weeks earlier than it would otherwise. This year it produced some excellent blooms as it usually does now, although it didn't do much for the first six or eight years after it was planted. I think it may be *La Lorraine*. Anyway, it is usually one of my loveliest peonies. I have many other peonies which are too young to bloom well, and I look forward to them in the coming years.

In 1978 I purchased a tree peony graft at a local garden store and planted it in a twelve-inch wooden tub. It had one bloom in 1979 and three beautiful blooms in 1980. It came with the name *Yatsuka-jishi*, a name which I have been unable to verify anywhere. The blooms are a very clear, warm rose pink, a bit darker at the base of the petals. They are semi-double to double. I leave it outside until November or December and then put it in an unheated area underneath a porch until the buds just begin to show signs of growth in March or early April. I also check to make sure the soil does not completely dry out during the winter. I am going to "pot it on" to a sixteen-inch clay pot in the spring. Success with this plant in a container has encouraged me to try a few more.

Rosedale was the eye-catcher in my garden this year. *Tenuifolia Ruba Plena (Fern Leaf)* was beautiful. My later ones were hurt by the drought, but they rewarded me well, supplying many lovely blossoms for Memorial Day. —Agnes Cooper Miller, Friend, Nebraska

Our peony season was very good. Spring was late and not too hot. I have come down to about ten peonies in our new smaller home and garden. I do miss the fifty I left behind in a large garden. My favorites are *Red Charm* and *Gay Paree*. I also miss the tree peonies, but I figured that I am too old to have them mature to their full beauty. One advantage we have in our area is the lack of rain during the blooming period. Of course, we have to irrigate, but there is no harm to the flower. In selecting cultivars we do best with early or midseason, as the late ones bloom when it is too warm. One cause of failure in blooming is planting too deep. I always mention this on my radio program each week when a caller wonders why they fail to bloom. We also need to fertilize more frequently because of constant irrigation.

I never use bonemeal and agree with Milt Carleton's article in the last Bulletin. I use cottonseed meal and superphosphate. Bonemeal generally has a pH of 10.0 and our pH will vary from 7.5 to 9.0. Cottonseed meal has a pH of around 3.0 and is slow-acting, so it gives better results here.

—Mrs. George L. (Rosalie) Doolittle, Albuquerque, New Mexico

CUT FLOWERS

We enjoyed an ideal harvest. Buds were of excellent quality. We ship to all western states as well as Hawaii and Puerto Rico. We planted additional ground this year, dividing our own stock. Three varieties were planted: *Felix Supreme*, *Festiva Maxima*, and, of course, *Mons. Jules Elie*. We are in need of a good dark red that qualifies as a cut flower. —Wayne Trumbull, Trumbull's Peony Gardens, Milton-Freewater, Oregon

1980 GROWING SEASON

Hinode Sekai, ten years old, poor bloom; *Kamada Fuji*, excellent year, profuse bloom, good size and color, vigorous; *Flora*, only three years old, four blooms; *Kinkow*, thirty-plus blooms, excellent substance, large blooms, needs support on bush, ten years old; *Howraku Mon*, ten years old, forty blooms, very large, ten inches, heavy rain ruins this plant; *Shima Daigin*, excellent bloom; *Akashi Gata*, ten years old, vigorous, forty-plus blooms; Lutea Hybrids *Savage Splendor*, *Golden Hind*, *Roman Gold*, *Silver Sails*, *Princess*, *Renown*, *Marchioness*, *Thunderbolt*, from four to ten years old, excellent bloom, better weather conditions.

—Wardell Alston, South Nyack, New York

FRAGRANCE

Red Charm: faint fragrance; *Mme. de Verneville*: wonderful fragrance; *Edulis Supreme*: good, normal fragrance; *Pillow Talk*: wonderful fragrance, form, and color; my absolute favorite; *Hargrove Hudson*: normal fragrance; *Dolorodell*: faint fragrance; *Elsie Pickett*: normal fragrance; *Rosedale*: delicious, sweet fragrance.

—Ruth Belitz, Berlin, Germany

The year 1980 was an outstanding one for peonies and irises in our area. I can't say the same for daylilies; however, we did have some beautiful ones.

The season started off with the tree peonies. I bought a few plants four or five years ago, and this is the first time a couple of them bloomed. One, a Japanese, had a bloom quite large with reddish-purple color. A couple of luteas bloomed, *Age of Gold* and *High Noon*. Both had multiple blooms although neither had bloomed before. *Banquet*, planted only the year before, had one bloom.

Then came the hybrids. *Diana Parks*, *Paula Fay*, and *Red Charm* were most admired by visitors. However, *Prairie Moon* also received its share of rave notices. When the regular season arrived, it was difficult to pick favorites. However, some of the perennial standbys came through again—*Bowl of Cream*, *Celebration*, *Dresdon Pink*, *Paul Wild*, *Maestro*, *Dinnerplate*, *Pink Jazz*, *Best Man*, and *Princess Margaret*. Other favorites were *Camellia*, *Gold Standard*, *Cytherea*, *Henry Bockstoe*, *Highlight*, *Raspberry Sundae*, *Susie Q*, and *Angelo Cobb Freeborn*. While not beautiful in itself, *Cleopatra* is usually my last peony to bloom. This held true again this year. Sometimes the season is so warm by the time it opens that blooms do not open properly.

It was a great peony year; I hope next year will be the same. We had a very dry summer. The water bill was \$66.00 one month from trying to keep plants from burning up. We were successful; I don't believe we lost one.

—Olin Frazier, Warrensburg, Missouri

I live on a farm, and we can have wind drift of chemicals. I am not quite sure just what happened, but my peonies were affected. The blooms and foliage curled, and the stems were stunted on many of the plants. Some of the peonies did not seem to be bothered. I do hope they will recover and be more normal in 1981.

A beautiful double white peony that is very floriferous and vigorous gave me two buckets of blooms. I put them in a frost-free refrigerator in our church in early May. On June 28 we used them at our daughter's wedding. We kept them at our home several days after the wedding. They were gorgeous.

—Mrs. Carl F. Hertz, Nevada, Iowa

Heavy rainfall in April and May worsened the infection of botrytis in many stalks of earlier- and midseason-blooming varieties. The percentage of bloom was significantly less for varieties such as *Jules Elie*, *Mrs. F.D. Roosevelt*, *Fern Lough*, *Fuyajo*, *Snow Mountain*, *Felix Crousse*, and *Moonstone*. Above-average blooming was obtained from *Nick Shaylor*, *Ella Christiansen*, *Sylver*, *Pink Lemonade*, *Blanche King*, *Sarah Bernhardt*, *Dinnerplate*, and *Elsa Sass*.

—C.W. Hubbard, Lake Forest, Illinois

I have thirty-two tree peonies and about twenty-eight herbaceous peonies on our one-half-acre plot in the rightly-named Garden State. We had a very dry summer. I lost two of my newer plants while away for eight weeks in July and August. The old tree peonies survived. My wife and I visited Peking and two thousand miles west on ancient silk road in September. We saw some very strong tree peonies in the Imperial Gardens in Peking.

—Robert U. Redpath, Jr., South Orange, New Jersey

PEONIES AND LILACS

My grandfather, an early settler in eastern Nebraska, had a very large planting of lilacs on his prairie acres. Before coming to America, he worked in the Ludwig Spaeth nurseries in Germany. After his death the lilac farm was inherited by my parents, and after their death it came to me. It was the wish of my mother that I restore Lilac Farm. Lilacs are long-lived shrubs, outliving generations.

There were no peonies at Lilac Farm, but I already had a large planting of the Sass varieties. So in addition to lilacs, many peonies were planted. Since the Sass family were personal friends of mine, they would bring many seedlings of peonies, and all were planted at Lilac Farm. These plantings continued until there were over three hundred lilacs, many coming from the Brand Nursery in Minnesota, as well as the Sass nursery.

Eight years ago this beautiful farm was sold, and all this lovely beauty destroyed by the bulldozer. This was a great sadness.

Now I am trying to locate the many varieties of Sass peonies again. I am sure that I have one of the better collections of peonies on one city lot in Lincoln, Nebraska, and it is carefully maintained. At present most of my peonies are from Brand's. I have all the tree peonies that I have room for. They are a magnificent sight every season.

In addition to trying to locate the Sass peonies, I am trying to collect material about the Sass family. They were so retiring, so self-contained, that their wonderful talents in breeding lilacs, peonies, hemerocallis, and iris, as well as other plants, were really unknown except to a few dedicated gardeners like themselves.

Any information that could be sent to me would be appreciated. The Sass family gave so much; they contributed to the world of flowers and to the state of Nebraska.

—Mrs. Lourene Wishart,
2140 Sheridan Blvd., Lincoln, Nebraska 86502

We had a horrible season—cold, wet spring, dry, hot summer. We lost many perennials even though they were mulched. Our hybrids (Saunders) were harmed by the cold, practically snow-free winter. Our best peony bloom was *Nick Shaylor*; lovely!

—Helen Beal, Castleton-on-Hudson, New York

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1980 PEONY SEASON IN RICHMOND, VIRGINIA

Most of the tree peonies put on a great show, as usual. The Japanese tree peonies began to bloom here during the last week in April. Among my favorite pinks are *Hana Kiso*, *Tama Fuyo*, and a delightful deep pink double which is mislabeled but a very good seed-setter. I am very partial to the bright reds such as *Kaow*, *Shima No Kagayaki*, *Nissho*, and *Jitsu Getsu Nishiki*. Among the whites, *Hakuow Jishi* is always very dependable. Also, a good bloom of *Fuso No Taukasa* is a sight to see, but the flowers are so double that they do not always open well. The lutea hybrids began to bloom the first week in May. *Age of Gold* put on a good show, but the beautiful *Marchioness*, still a small plant in my garden, had only one bloom. *Yellow Dream* and *Yellow Heaven* are handsome plants, but the bloom was sparse.

This was not a good spring for the few herbaceous varieties I have. There were disease problems, and we had an unusually mild 1979-80 winter, which may have affected them. None were up to par. We also had a warm May, which is always detrimental. My *Ludlowii* made good growth this spring, but there was no bloom. I am anxious to have pollen from this species for hybridizing. The plant has not bloomed in the four or so years I have had it, yet every spring I get my hopes up as the buds start to swell.

—L.J. Dewey

My peonies were not affected last winter or directly by the horribly hot and dry summer, which was the hottest on record here. However, I did sell my house in town and bought another house with ten acres in a semi-rural community. I will have enough room to grow all the peonies I want as well as other flowers and shrubs.

I was given a deadline to dig and remove anything I wanted in the way of flowers. I had a lot of digging and transplanting to do in very hot weather, with highs of about 105-109° every day. This was in July when the peonies were in full leaf and had very small eyes. After they were transplanted to their new home the leaves began drying up prematurely in the desiccating heat, even though I kept them watered. In the spring I will know what lived and what died. I ordered and planted many other varieties in October.

—Judith Stika, Pittsburg, Kansas

All peonies were beautiful, as always, but the drought was so severe last summer that I feel it will affect this year's bloom. It is very dry here now, as we have had no moisture since a four- to five-inch snow Thanksgiving.

—Ruth Skagg, Fredericktown, Missouri (Jan. 9, 1981)

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We had a good blooming season with several new seedlings. Seed production was not large, but some crosses pleased me. *Kamada-Fuji* x *Moonrise* crosses produced one huge and five normal sized seeds. *Moonrise* x *Domoto* tree hybrid produced one seed as did *Hesperus* x *Domoto*. *P. Peregrina* x *Tama Fuyo* (tree) pollen produced thirty-seven blue-black seeds. Now to see if I can get the seeds to germinate. Four out of nine tree peonies imported in 1979 from Japan (grafts) bloomed on tiny plants.

The peonies I enjoyed most this year are *Hesperus*, *Dutch Dwarf*, *Red Charm*, *Mother's Choice*, *Moonrise*, *Rivida*, *Salmon Glory*, *Prairie Afire*, and *Coral Fay*.

I have a seedling to register in the name of *Avis Varner*; please send instructions.

—Steve Varner, Monticello, Illinois

My peonies did not do well this year. The heat and drought caused the problem. We planted many beautiful varieties this fall, and with tender loving care, we look forward to many years of beautiful blooms.

—Mrs. Clifford Stover, Minneapolis, Minnesota

Hesperus and *Thunderbolt* of the Saunders hybrids were particularly beautiful. *Banquet* continues to remain bloomless and is not rigorous. *Renkaku* of the Jap trees was great also. The hybrid herbaceous generally did not do so well this spring except *Paula Fay*, which seemed unaffected by the mild winter or whatever bothered the others.

We had forty-six days of drought, with temperatures in excess of 100° most days. However, because of our sprinkler system I did not lose anything.

—Jack Young, Little Rock, Arkansas

My peonies have been neglected due to circumstances. I will say that they have been undergoing a survival test of unusually bad winters, having been subjected to great temperature variation, extreme heat and drought, prolific smothering weeds, and general lack of care. Those that are holding up best are the old standard lactifloras, both doubles and Japanese. Several of these were my grandmother's that she bought fifty or sixty years ago from Mr. Wettengel, a grower near Macomb, Illinois.

Some of my hybrids have become quite puny under this regime, but in spite of the neglect, *Tango*, *Orange Glory*, *Angelo Cobb Freeborn*, and *Requiem* look quite impressive. About five years ago I planted four peonies that seemed to have nematodes in a location next to asparagus. Now they seem to have been restored to their own healthy selves.

Since my peonies have survived this ordeal, I will resume my hobby of gardening and again give time to hybridizing.

—Nyla Tompkins, Webster Groves, Missouri

Most of my peonies are singles and Japanese, but, as always, my best performer is *Bowl of Beauty*, a luscious, feminine pale blush very double flower that I bought ten years ago for \$1.00 from that crazy mail order nursery in Tripp City, I think, in Ohio. I cannot remember the nursery's name, but I am sure someone will! What a bargain, and how enchanting she is, with great heavy heads. She is never troubled by late snows, which happen here in June. She has a lovely smell, too. This proves that one should not be too picky about peonies. *Seashell* thrives here, as does a one-hundred-year-old root belonging to my great-great-grandmother, dug in 1952 in Kernville, California, before it became a dam.

—Louisa Brown Batemen, Kalamath Falls, Oregon

The peonies were not at their best this year in southern Saskatchewan, as we had a snowless winter followed by a very early and extremely hot spring. This severely reduced the flowering. Our summer was extremely dry, so this will have some bearing on the number and quality of the blooms for 1981.

—Mrs. Elsie Heggie, Demaine, Saskatchewan

My blooming season was again a good one. One of the greatest thrills I have ever had in growing peonies came this year when *Coral Charm* opened. The color was magnificent—a clear salmon coral. I have two plants and each grew eighteen straight strong stems topped with perfect semi-double six-inch blooms. Not since *Norma Volz* and *Madylone* have I experienced as great a thrill in a peony maiden bloom.

—Marvin C. Karrels, Milwaukee, Wisconsin

While there were others in the county who found the winter of 1980 hard on their peonies, I was fortunate to have had a very good year of bloom, with the earliest, *Double Fern Leaf*, blooming May 22 and the latest bloom June 15. About eight miles to the west the country was in a drought, but we lay in the path that carried moisture from the southern tip of Lake Michigan.

My grandfather started a peony bed in 1916. My father helped him plant them and then inherited the plants. I inherited the plants from my father, and some from grandfather, and this started my addiction. I now have about 83 named varieties, most of which bloomed very well this past summer. Among those that performed the best (if I could limit the choices) were *Mons. Jules Elie*, *Charlie's White*, *Double Fern Leaf*, *Salmon Glow*, *Coral Charm*, *Jean Bockstoce*, and *Jaycee*.

—Marion Phillips DeReamer, Merrillville, Indiana

My peonies were a little late in blooming, but once they did I thought they were exceptionally nice and held up very well. We really enjoyed them.

—Wayland G. Rice, Groton, New York

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Having inherited Dr. White's peony garden third hand, I am getting much pleasure from it. I found only three or four *Claire de Lune* in the garden. They had given so many of these plants to friends when they moved to Florida. I have resurrected the garden in part, getting more *Claire de Lune* and others of his culture. Now it looks reasonably good. I have Dr. White's old planting books, and I look at them occasionally.

—David Shakow, Kensington, Maryland

My peonies did not get much care or lawn mowing this year, but they were the best in size and color that I ever grew. We had about one inch of snow for about forty days, followed by a cold, long, rainy spring. Early flowers such as daffodils were very poor. Lilacs were splendid. I cannot report a single bad bud on my peonies or any apparent disease.

—Arnold W. Messmahl, North Brunswick, New Jersey

Our 1979 winter and 1980 spring were not the best for our peonies. There was not enough cold freezing weather and not enough snow for covering and moisture. The same problem is with us so far this winter (December 17)—it is above freezing too much of the time and the snow is melting. We planted tulip bulbs the week of December 4-5. Our peonies are always best when they get two and a half or three months of frozen, covered sleep and then a slow thaw. We had some Court of Honor blooms last season (in my opinion). The following were all tops: *Salmon Glow*, *Flame*, *Westerner*, *Miss America*, *Dinner Plate*, *Annisquam*, *Emma Klehm*, and *Roselette*.

—Dee and Delia Garrison, Milwaukee, Wisconsin

1980 was a disappointing year for peonies. Abnormally warm weather in late April and May caused growth to start. In addition there was dry weather. The early start and lack of moisture resulted in small plants, small and poorly developed blooms, and no fragrance. During the summer there was plenty of moisture. This helped good summer growth with good plant development. This should mean a better season in 1981.

—Rev. Floyd Miller, Fergus Falls, Minnesota

Although we had a cool, wet spring, our bloom was better than ever and longer-lasting. Our best blooms were *Athena*, *Audrey*, *Early Scout*, *Laddie*, *Mrs. F.D.R.*, *Campagna*, *Diana Parks*, and *Mandarin's Coat*. Our tree peonies were great, especially *Gold Sovereign*, *Chinese Dragon*, *Ubatama*, and *Godaishu*.

—Dot and Al Rogers, Sherwood, Oregon

I had longer-lasting than usual peony blooms. They were beautiful. My first and always my favorite is *Seashell*.

—William H. Cheesman, Englewood, Ohio

I have sixty-five herbaceous and eighteen tree peonies, all of which really put on a display this last spring. The herbaceous blooms were very large and the trees breathtaking. Our garden club marched in our annual Cheverly Day Parade, and I carried a basket of many huge peony blooms. They stole the show. Many people asked if they were real flowers, as they had never seen any of that size and color. I have ordered some new varieties and donated one to the garden club for a special prize. This coming spring I will have many garden visitors to view the peonies and iris.

—Ada Young, Mitchellville, Maryland

Priscilla Storer, Sherborn, Massachusetts, displayed tree peony blooms in the registration room at the convention of The American Rhododendron Society in late May on Cape Cod, Massachusetts.

This was my first year. The summer was very dry. I planted ten plants and nine came up. Due to moving, three peonies were planted in April 1980. I did have some bloom. I am looking forward to the spring of 1981.

—Thomas H. Meushaw, Easton, Maryland

My peonies here at Peru, Indiana, were just beautiful this season. Some of the varieties that were really outstanding were *Douglas Brand*, *Red Charm*, *Wilford Johnson*, *Henry Bockstoe*, *Paula Fay*, and *Myra McRay*. We did have a dry spell, but when the other perennials were watered, so were the peonies.

—Mrs. John T. Gunnell, Indiana

The 1980 season was difficult for me, as I am in the process of rearranging my peony garden. Some of the varieties that have not been moved did very well. The weather did not affect the peonies in western Ohio, and the bloom was normal. The following are some of my plants: *Helen*, pink single (Thurlow 1922); *Susan B. White*, white double (Brand 1933); *Detroit*, red double (Auten 1948); *Nome*, white single Jap (Auten 1945); and *Peppermint*, pink double (Nicholl-Wild 1958).

—Robert G. Wise, Sidney, Ohio

My new peony planting of one and two years grew very well. Some had blooms.

—Norman F. Voorhees, Gambrills, Maryland

We continue to grow over fifty varieties of tree peonies, their third year in this location. Bill Gratwick gave us five more unnamed varieties that we look forward to see bloom.

I hope to see you at next year's convention and show in Ohio.

—Richard D. Rommer, for Dr. and Mrs. J.S. Watson, Jr.,
Rochester, New York

All of Klehm Estate Peonies planted in the fall of 1978 did very well. I allowed only one bloom on each plant. The plants went dormant before my other peonies. They are *First Lady*, *Pink Lemonade*, *Whopper*, *Raspberry Sunday*, etc. *Red Charm*, *Mighty Mo*, *Chocolate Soldier*, and *Kansas* made excellent growth the first year. On the six-year-old Japanese peonies *Hollywood*, *Sky Pilot*, *Westerner*, *Feather Top*, etc. the foliage was still green until frost this week (December 1).

—Mrs. E.G.B. Wright, Jr., Machipongo, Virginia

Wet weather during blooming season ruined the blooms the last two seasons.

—John C. May, Felton, Pennsylvania

Our peonies did very well this June of 1980. We had too much rain and very severe storms throughout the blooming period (late May through June) which destroyed many of the blooms. The following peonies were beautiful: *Carol*, *Lottie Dawson Rae*, *Cheddar Cheese*, *Lois Arleen*, *Burma Ruby*, *Mister Ed*, *Flame*, *Virginia Dare*, *Le Cygne*, *Gardenia*, *Moonstone*, *Susie Q*, *Cytharea*, *Pillow Talk*, *A.G. Perry*, *Doris Cooper*, *Seashell*, *Dawn Pink*, *Kansas*, *Mrs. F.D.R.*, *Dolorodell*, *Bride's Dream*, *Bessie*, *Madam Butterfly*, *Sylver*, *Bowl of Cream*, and many others. We are growing around two hundred varieties.

—Bob and Daphene Hansor, Novi, Michigan

Our winter in 1980 was not the worst that we have had. The peonies were great when blooming. It seems as though we always have hail that gets some buds or blossoms. *Flame*, *Pink Lemonade*, *Janice*, and *Carina* were outstanding. Our summer was horrible. We had 100° weather for two months. I kept all plants watered, but somehow I lost *Claire de Lune*. I am not sure what happened to it. I have not lost a peony since I started growing them. I wonder if I watered it too much and the heat just cooked the plant!

—Mrs. David (Lana) Ross, Jetmore, Kansas

On November 8 we permanently located seven peony bushes in the circular garden north of Klampfer House. In the center we planted a large white peony; the first circle contains two plants each of a single red, a double pink, and a double orchid-pink. In order to give these peonies a good start, low annuals will surround them in 1981, and then they will be continued in another circle next fall.

All of these peonies were owned by my grandmother and nurtured by my mother. We plan to plant only inherited peonies in this garden so that it can be correctly named "Grandma's Garden."

—Mrs. Howard E. Jackson (referring to landscaping at the Peony Park Apartments), Cedar Rapids, Iowa

We had too much humid weather; peonies did not last long.

—Victor G. Drew, Cumberland, Maine

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HISTORY OF THE TREE PEONIES OF HAO PROVINCE

by Hsüeh Feng-hsiang (Ming, 1368-1644)

A first and complete translation by John Marney,
Associate Professor of Chinese, Oakland University

[Translator's Note: This is a detailed description of the items listed in Hsüeh's "Index to the Tree Peonies of Hao Province" translated and published in the last issue of BAPS. The items in the Index and the History differ in some small degree.]

Heaven's Fragrance Single [prime, unique] Category has a round embryo [womb] and can form a tree. It suits the shade. The flowers are level-headed, with large petals. The color is like scarlet blood. It was produced from seed by the Chia Li family, and so another name is Chia Li Red.

Ten-thousand Flowers Single [prime, unique] Category. The color is like pomegranate fruit. The corolla [lit. flower-house] is purple and tightly dense, bookshelves rising in tiers, but the color is beautiful and brightly seductive. Some are like a cinnabar-decorated temple spire.

Lovely Face of Three Transformations. At first emergence [lit. "tear," "split"] it is purple in color, and when it opens it is peach red. After a day it gradually reaches plum red, and by the time it falls it is an even deeper red. The color of all other flowers gradually fades after a while; only this progresses even further. Thus it is called Three Transformations. Those blossoming in the shade differ from those blossoming in the sunshine; and they are not limited to three changes of color. Ou [-yang Hsiu] "Record [of the Tree Peonies of Loyang; trans., Marney, *BAPS* #229, March, 1979, pp. 34-41]" includes an Adding-Color Red. Perhaps this is the same variety. Yüan Shih-kung's "Record" [not identified] gives Hibiscus of Three Transformations. Its source originates from Mr. Fang.

Vermilion Crimson Robes was formerly called Seizing Kingfisher, and was obtained from Hsü province [modern Hsü-chang district in Honan province]. The corolla rises in fish-scale regularity and tightly. Fruit are small and artful, and its general looks are winning and handsome. The complexion is like a deep reddish-brown. On a single petal there are interspersed deep and pale colors. Only this flower is the same on the interior and exterior, like a sort of powder [lit. flowing cinnabar]. They come close to the First Prize [wrongly trans. in the "Index" as Surpassing Brocade; lit. seize the brocade, i.e., win the prize]. One variety has large petals, deep red and shimmering brilliance, so that you'd suspect it to be even more lush than the Seizing Kingfisher.

Enlightened Red. This flower was cultivated at a monastic residence in Hao [district] of Shu [province, modern Ssuehuan prov-

ince]. Because monks are called "enlightened men," so the flower was called Enlightened Red. It was also said that because it grew upon Buddhist soil, the red color did not appear on its righthand side. Another name is Topless Red. The embryo is red and pointed; the flowers are loose, level headed and large petaled. The corolla is also crowded and full, and there are quite a number of tiers. However, its beauty surpasses the Prime Category. The pity is that more often than not it is single petaled.

The Greater Yellow has a green embryo and most suits the shady side. It grows more and more wondrous. The flowers are large petaled and easily open. When it first opens it is faint yellow and as it approaches decay it becomes more yellow. Placed in a vase overnight the color can be classed with the autumn sunflower [*Althaea rosea*].

The Lesser Yellow has a green embryo. The skin of the flower is orderly, lightweight, crinkled, and more tender than deep raw-silk. Around the four sides there are support [or secondary] petals.

Melon Section Yellow ["Index" gives Melon Abundance Yellow. "Section" and "Abundance" are cognate graphs]. The substance surpasses the Greater Yellow. It is extraordinarily tender, smooth, and delicately pretty. However, a single corolla does not exceed four or five tiers, and near the calyx it carries a faint purple color. Thus it is somewhat inferior.

Gold and Jade Exchanging Radiance has a green embryo and long branch. The flowers are large petaled and yellow. The pistils are like strung pearls, and all emerge outside the corolla. The tiered petals are especially profuse. When it begins to decay it opens up loosely as if it still had some lingering strength. It is superior to the [Yellow Flannel] Spread Upon Brocade. This is a product of Ts'ao province [modern Ts'ao district in Shantung province], and ranks in the prime category.

Eight Beauties Adornment, i.e., Eight Varieties Flower. In Hao province only three are obtainable: Cloud Elegance Adornment, Goddess of the Lo [River] Adornment, and Yao Ying Adornment [i.e., the adornment of Yao's daughter Ying, 3rd mill. B.C.]. Cloud Elegance is the finest. There is another variety, Green Flower, whose color is like bean-green and which has large petals in a thousand tiers rising in a tower. It came from Mr. Teng, and is truly a most unusual category.

Ten-thousand Layers Snowy Peak [correction of Cotton Cloth Snowy Peak in the "Index"] is thousand petaled with white flowers.

Yellow Flannel Spread Upon Brocade. This flower is fine-petaled curled like flannel threads. Beneath there are four or five petals, rather broader and linked together. Above there are yellow whiskers spread fully like a variety of golden chestnut.

Rose-color Loveliness. Its flowers are large-petaled, graceful in appearance, and of a modesty, like crimson snow raveling the branches.

Embroidered Robes Red has a flesh-red embryo. When the flowers open they are level-headed and large-petaled. They are also a plum red color. The flower petals shine in mutual dazzlement. They have a

yellow aura like an amber light as clear as a mirror. Because they came from the *shih-yü* officer [censor] Hsia, they are called Embroidered Robes.

Soft Petal Rose-color. The branch is long, the embryo round, and the flower petals are as light and thin as cicada wings, without any resistance. Its color is ranked with Embroidered Robes Red but is superior to it.

Jade-green Gauze Lantern came from Mr. Chang. Facing the sun it easily opens. The head is extremely abundant and flourishing. Its color is pale red like an autumn cloud gauze kerchief; its fruit is cinnabar red. You can see hiding away in its middle the green calyx [here, lit. "instep"] covering and protecting just like a kingfisher curtain. Thus it is also called Layered Kingfisher.

New Red Loveliness. Those flowers which are the deepest plum red are of winsome substance and charming beauty like morning clouds hiding the sun, with light and shadow in confusion, and further as though newly dyed and not yet dry. Thus it is called New Red. At its best, when it first forms thousand-petals, it especially stands above the prime category. In the first year there are many single petals, and that is its weakness. Mr. Fang's variety is the New Red Embroidered Ball. Mr. Chao's variety is the New Red Wondrous Sight. The beautiful color of both is very moving. However, those which have been passed down are for the most part spurious, and are confused with Heaven's Fragrance Prime Category.

Palace Brocade. This category has broken petals and plum red color. When it opens one must wait for the corolla to fill with fruit before it becomes fully loosened, and only then will it gradually form a patterned silk halo.

Flower Red Embroidered Ball has embryo round and small. When the flowers open the corolla is tight and the petals profuse. All around there are support petals. It easily opens, and early. It is closely entangled or diffuse in all directions like layered and broken sunset clouds. The name Embroidered Ball derives from its round shape and concentration.

Rose-color Embroidered Ball. Flowers are fine and small and the color is light.

The Concubine Yang's Embroidered Ball and Jealous Charm Red are akin in color to the Flower Red Embroidered Ball but their general style is different.

Flower Red Densely Coiled has red embryo. Upon the twigs, green leaves are narrow and small and the stalks are rather short. Outside the corolla there are support petals of a deep peach red color, and the green "instep" has double calyx.

Heaven Planned Brocade has green embryo. The open flowers are small but round and full. The vermilion corolla inlays the twigs in stylish ornament like scissored hues.

Rose-color Transgression has two varieties. The red beauty of the first surpasses Heaven's Fragrance Prime Category. It is extremely difficult to get the flowers to open. The other color is seen to be rather weaker than the Prime Category. It easily opens. Both have long stalks and are large-petaled with round embryo. The flowers are tight and full. The season when they open is very late.

"Flying Swallow" Adornment has three varieties. One came from Mr. Fang. It has long twigs and long petals. This flower is yellow and red. Another came from Mr. Ma. Although it is deep red and rises in a tower it is far from equalling the Fang. The other came from Mr. Chang and has white flowers akin to ivory in color. It is somewhat superior to the Ma.

"Flying Swallow" Red Adornment has another name, Flower Red Concubine Yang. It is fine-petaled, slender and long. It was obtained from the Fang household in Ts'ao district.

Cherry-apple Red likes the sunshine and easily opens. It has green petals, fine and long. For the most part, it usually comes out in the autumn. Most flowers are best called beautiful for their red color; only this category is throughout its body yellow gold with a concurrent red sheen. People say that it resembles the iron-branch cherry-apple, but the lively color and fragrant beauty all surpass this. In full bloom, from within the corolla four or five petals, long and short, thrust out. The embryo is basically red, but in the shade it becomes green. When springtime comes, it turns red again. Generally speaking, the flower embryo undergo many changes during the four seasons.

Soul of the Cherry-apple is so-called for its spirit. Mr. Shih brought it from Hsü province.

New Rose-color Ball and the **Fang Household Rose-color**, as two varieties are somewhat similar in rank in their color and demeanor. The green leaves at the top of the tree rather differ. Its color is brightly glossy and shimmering.

Broken Petal Flawless Jade has green embryo. The petals at the top of the twig are round. It suits the sun, and the white flowers at the very top thrive. Another variety, the Celery Leaf, is inferior to this.

Green Heart Flawless Jade is abundant and huge and most pleasing. One variety, whose petal branch is like the Greater Yellow, is also called Flawless Jade.

Mei Province Red by nature likes the shade. It has round petals and round embryo. The flower petals are long and short and sequenced, spaced apart or dense and most appropriate. The color is close to the Cherry-apple Red, but near the calyx it is rather purplish. It comes from Mr. Wang of Ts'ao district. It is otherwise called Mei Province.

Surpassing a Lovely Face is a deep red color and is most resistant to decay. If a single stem has two embryos, then one must be pruned away. If such pruning is not done, then still only one embryo can flower. The flowers can reach a size of some five or six *wei* [area]

measures, and a height of six or seven inches.

Tipsy Jade Ring [correction of Broken Jade Ring in the "Index"], cultivated by Fang Hsien-jen, is a flower from the seed of Tipsy Concubine Yang. The corolla is patched on upside down, hence it is noted as "tipsy." The embryo body is round and green. Below its flowers multiply five or six large petals some three inches across, encircling and pressing in all around like a basin. The flourishing flowers are sturdy and substantial. They are basically white but interspersed with lotus rootstock color. Light red and light blue also appear here and there forming an embroidery. Its mother, the Tipsy Concubine Yang produces a deep lotus rootstock color.

Pomegranate Red [text mistakes like graph *tu* jealous for *shih* pomegranate]. The embryo is round like a bean. The tree leaves are like chrysanthemum and it most easily forms a tree. It opens early according to the season. It cannot endure the blazing sun; after a while the color fades.

Pomegranate Flower Red. The color is close to the pomegranate flower.

Flower Red Layered Kingfisher [text mistakes like graph "dense" for "kingfisher"] has a pointed embryo. The body of the flower is gigantic and majestic and below it there are large petals in five or six tiers. About the waist pleats assemble, the fine petals curling and coiling, broken and accumulated at the top. It further produces a tier of large petals flowering at the very top of the green tree.

Autumn Water Adornment has flesh red round embryo. The twig leaves are elegant and long. Its flowers are level headed and easily open. The flower petals are densely thicketed and substantial. It is basically white but inside it retains a pale reddish color, and outside it faintly suggests a thicketed red-green aura. The *shih-yu* officer Hsia first obtained it. Mr. Fang referred to its refreshing ambience which intrudes upon a person, like the Goddess of the Lo [River] bathing in the [clear] autumn water. Thus it was given its present name.

Old Rose-color Ball. The flowers are basically deep red, but pink [lit. water-red] also exist. In due time, it becomes bordered as though in the application of [face] powder there seems to be some rouge spread there. The embryo is green-red.

Concubine Yang Deeply Intoxicated has a long embryo. The flowers are substantial and heavily fragrant, resembling the Surpassing a Lovely Face. The name Deeply Intoxicated refers to its color being deep.

Flower Red Divine Category. At the tip of the flower petals the color very faintly enters red, gradually red, gradually yellow. It was obtained from T'ai-k'ang [in modern Honan province].

Flower Red Level Headed has green embryo. The flowers are level headed with broad petals and a color like fire. In respect to a glittering and shining red, among all the flowers this is the crown. That which is handed down to this generation is the Ts'ao district Pomegranate Red.

For a heavy price, Mr. Han obtained it. Recently, unexpectedly, in the holdings on the grounds of Mr. Wang a specimen was purchased and brought back to Liang-shu Garden [lit. Cool of the Summer Heat Garden]. But the heads were few and loosely diffuse, and the middle exposed the sandalwood-heart [i.e., stamen]. Another variety, the thousand-petaled, existed at the South Village Garden. Whenever flowers are said to be level headed, it is because they are neat as if tailored.

Flower Red Dancing Green Lion suits the shade and is from the seed of the Old Rose-color Ball. The color of the flowers also resemble [its parent]. When it opens it forms an embroidery, and from the inside of the flower there emerge five or six green petals like kingfisher wings soaring in pairs.

Flower Red Giant ["Index" trans. Flower Red Pre-eminence] comes from Mr. Chang.

Giant of Ten-thousand Flowers [for "Index" trans. Pre-eminent above Ten-thousand Flowers] comes from Mr. Li.

Western Giant of Ten-thousand Flowers is of most extraordinary beauty. Mr. Fang otherwise has the Rose-color Giant.

Crimson Gauze Lantern. The embryo is small and the flower petals have purple color. A thread divides it across the middle. It is substantial and red like a candle.

Azalea Red has short stems and green embryo. The tree leaves are pointed and thick. The flowers create a deep plum red color. The fine petals are crowded in layers and tight. The fruit is formed like red jade broken and separated.

Greater Pale and Lesser Pale easily open and suit the shade. The Lesser Pale [lit. Small Undyed-silk] is also named Liu Liu-pai [Liu Six-white]. The two flowers are level headed, and the corolla is small. When they first open they form an embroidery. A single thicket often produces a number of heads. They are lustrously clean and much superior to such as the Pale White Tower and the Jade Girdle White.

Jade Girdle-pendants.

Jade-green Jade Tower is like Red-jade Tower and Jade Roof.

Jade Hairpin White is so-called because it is white like a jade hairpin flower.

Cockatoo White is so-called because it is akin to the white down on the crown of a cockatoo's head.

Competing with Sheep's Wool is so-called because the fine petals are coiled and circled like wool.

White Crane's Head [correction for "Index" trans. White Crane's Neck]. The color is extremely white, whereas a crane's head is dark red. It's odd that the name and the image do not match.

Shen Household White.

Emerald [lit. Green Pearl] **Toppling Jade Tower** has long embryo.

The flower color is brilliant white; however, the petals are half-spotted with green like pearls. The color is akin to the Buddha-head Blue [ultramarine], but the body is different.

Bordered with Broken Jade [or Broken-Edge Jade]. This flower is like white boiled-silk. The middle of the flower petal is split in a line like a peach red silk-thread cocoon, and just like wound undyed silk. Each petal-flake is alike. An old catalogue includes a Peach Red Silk-thread, which is the Plae Red Flower, but it is not this variety. The *shih-yu* officer Hsia recently produced a variety akin to the Broken-Edge Jade, and called it Red Thread. The outside of the thread faintly resembles a varicolored silk cord.

Flower Rouge. Stem and embryo are both red. The flower has large petals like rouge spots, and forming a glossy luster like a mirror. The only thing one might slightly dislike about it is that the corolla is often loose and slack.

Phoenix Tail Flower Red has pointed embryo and level head. Inner and outer petals have several tiers. The name Phoenix Tail derives from the resemblance of the petals [to this image].

Crinkled Petal Peach Red. The flower petals are pointed and fine, tier upon tier, close-knit and accumulated, ranking with silk-loom deep crimson raw-silk. The color is glossy and little shadowed. It was much prized during the Chia-Lung period [i.e., the reign titles Chia-ching 1522-1566 of Emperor Shih-tsung, and Lung-chi'ing 1567-1572 of Emperor Mu-tsung, of the Ming dynasty. This reference, incidentally, helps date the composition of this "History" later than 1572]. Others that come out at the same time also have large petals and peach flowers but their flowers are rather inferior to the Crinkled Petal.

Original Substance [i.e., gold; otherwise the universal forces of negative *yin* and positive *yang*] **Late Adornment.** This flower is thousand-tiered with small petals. The corolla is fruitful and full. The petals are orderly and in sequence, gradually becoming higher. Its color is faint red, but fresh and clean like the tears of the Original Substance congealed into red ice. It is so named on account of its late opening. One variety from Ts'ao district is called Enduring Charity Red, whose color is very close. Enduring Charity was named at Mr. Wang's studio.

Level Fruit Red. This flower has large petals and peach red flowers. The face is more than a foot across—no flower is bigger than this. This too is obtained in Ts'ao province.

Rose-color Brocade Embroidery suits the shade. The shape of the flower and its way of opening both resemble the Three Transformations. Its color is faint red, pale and deep most satisfactory, and just like embroidery.

Rouge and Powder Tower [text has cognate variant "mist" for "Index" "rouge"]. The color is the same as the Wei Red, but it easily opens. The flower was cultivated from seed by Mr. Chang.

Skirts and Screens Charming Red, i.e., Drawing in the Neck [in modesty] Charming Red, has long embryo and willow-green long petals. Because the stem is short it flowers at the petal [leaf?] base. Its color is plum red, rising in a tower like the Thousand Petaled Peach. There is otherwise the Drawing in the Neck variety with single petals.

Flower Red Scissored Velvet ["Index" has Plum Red]. The flower petals are delicate and fine, thicketed and accumulated, tight and full, akin to [millet-seed] patterned silk gauze scissored to fashion. In large part it is similar to the Flower Red Tasseled Fringe.

Flower Red Tasseled Fringe has long twigs and large petals. Its flowers easily open. The layered petals are clustered and dense, and protected on the outside by five or six large petal-flakes.

Heartsick Serving-girl Charm has two varieties, both of which have green embryo and can form trees. Those originating from Mr. Chang are deep rose-color, large but handsome. Those originating from Mr. Han are peach red color and large, but second to [Mr. Chang's].

Han Palace Springtime has red embryo and firm stem. Invariably the lone stock forms a tree. It flowers every year. The flower petals are straight, aroused and erect. Its color is deep red. It comes from Mr. Chang.

Ink-black Mallow [or Sunflower] has large petals and is level headed.

Glossy Red is tall and upthrusting, rising in a tower, and shining, as does the Ink-black Mallow, like spots of lacquer black. It is as intensely black as smoke from burning pitch-pine.

Ink-black Scissored Velvet has broken petals, soft and pliable.

Ink-black Embroidered Ball is round and full, tight and concentrated.

Mid-Autumn Moon has a green embryo pointed and small, and the corolla is the outline of irregular hills. It is lustrous white and flawless.

Glass Vase Watered Vermilion. The tree leaves are tiny and round and the vermilion corolla is gathered in densely akin to partitioning opaque-glass, but flourishing. The "cinnabar prize" (?) is slightly objectionable. The petals are single, the root-stem purple. Whenever it comes into thousand-petal it too is a wondrous category.

Lotus-root Fiber Level Head. The flower petals are rather broad and profuse with a number of tiers. Furthermore, the Lotus-root Fiber Embroidered Ball commonly grows in thickets. It easily opens but the flowers are small. Again, the Lotus-root Fiber Tower has large flowers, but the corolla droops. Of these three varieties only the Level Head is superior. The Embroidered Ball comes next; the Tower is by far inferior.

Peach Flower Ten Thousand Folios Book ["Index" says Peach Red] has fine petals like a stairway. The twigs do not prevent the flowers from drooping down.

Ch'iao Household Water Melon Pulp has pointed embryo. The

twig leaves are green and long and suit the sunshine. It originated in Ts'ao district. The flowers are like the red flesh inside a melon; the color is akin to the Soft Petal Rose-color.

Entering the Palace Robes has green embryo and easily opens. The color is said to be like the madder-colored robes presented by the [imperial] court. Its body is substantial and can be taken for light-weight velvet and crimson raw-silk.

Charming Red Tower Terrace. Embryo and stem resemble the Wang Household Red. The body resembles the Flower Red Embroidered Ball. The color resembles the Palace Robes Red, but the general looks of it meet with the Rose-color Tower Terrace. There are deep or pale colors. Flowers and fruit concord with them inside and outside.

Trusting to New Makeup has green embryo and tall branches. The face of the flower is a full foot large, and akin to a dark reddish-purple peach color. It originated in Ts'ao district.

Joined-in-Pleasure Charm is deep peach red color, with one embryo for two flowers. The supporting peduncles are twin-paired with one slightly smaller than the other.

Revolving Branch. Each stem has two flowers, red and white, which open opposite each other. If you record their position, next year you'll find they've switched colors: the white to red, the red to white. It originated in the household of the Liu of Yen-ling [a district in modern Honan province], the magistrate of Shui-shan. It only exists in Hao [province]. Yen-ling still has the Shy Modesty of Ten Thousand Flowers.

Washed Face Charm is the South Garden Crane Feather Red. There suddenly opens on the tip of a twig a single flower in two colors, divided across the middle between red and white. The red is like rouge, the white like [face] powder. At the time, the commandery grand officer, Lord Yen, created an award which he called the T'ai-chi t'u [Chart of the Great Absolute]. According to a Six Dynasty text [220-589 A.D.] which tells of taking a red flower and taking white snow and washing the faces of one's offspring bright and shiny, I changed its name.

Kuan Yin Appears [Buddhist Goddess of Mercy/Fertility] has white flowers in the middle of which faintly appears a rose color. Of old there was a Kuan Yin's Face which well grew in thickets. The color is deep, and the flowers of various large size. It ranks with the level heads, but the fault lies in its looseness.

They're Not Sunset Clouds. The embryo is long, and the corolla is piled up high, tier upon tier, gradually rising. The petals lie beneath the flower tower petals at the end of the stalk. The color is pale red.

Tipsy Hsi Shih has red embryo and green petals, round and large, forming a tree. It easily opens, and the flowers are pink.

FROM THE PAST

Bob Tischler, Faribault, Minnesota

Looking through many of the old Brand Peony Farm catalogs and papers, I find records of many interesting and informative business transactions as well as items of our past.

A few years ago after my brother Archie and I purchased the nursery, Miss Myrtle Gentry gave us a small bundle of papers—invoices of new varieties of peonies. She said to keep them, as one day they might be of interest to me and also to other peony growers.

The following is a listing of the peonies sold at the Chicago peony show in 1924. There are a total of 81 orders listing fourteen peony varieties. Each sold for \$50 a root. These were all Brand's new introductions.

The following is a listing of the peonies and quantities sold:

| | | |
|-----------------------|------------------------|-----------------------|
| 72 Myrtle Gentry | 24 Ella Christiansen | 10 Mrs. F.A. Goodrich |
| 43 Victory Chateau | 25 Mrs. Frank Beach | 17 Mrs. Romaine B. |
| Thierry | 14 Mrs. Harriet Gentry | Ware |
| 32 Mrs. J.M. Kleitsch | 33 Hansina Brand | 1 Pres. Coolidge |
| 29 Blanche King | 25 Hazel Kinney | 5 by numbers only |
| 69 Mrs. A.M. Brand | 15 Laverne Christman | |

This was a total of 414 roots at \$50 each—a grand total of \$20,700. Here is a listing of some of the buyers whom I knew or have heard about.

Wm. Blanchette, Minnesota
Cherry Hill Nursery,
Massachusetts
Mrs. Deane Funk, Iowa
W. L. Gumm, Indiana
Ben Kern, Kansas
Chas. Klehm, Illinois
A. E. Kundred, Indiana
Harry Little, Indiana
Dr. J. H. Neeley, Ohio

A. G. Perry, Minnesota
George Peyton, Virginia
Pfeiffer Nursery, Minnesota
James Pillow
Prof. A. P. Saunders, New York
F. X. Schreiner, Minnesota
Rev. Tragitt, Minnesota
Dr. W. E. Upjohn, Michigan
L. van Leeuwen, Holland
Chas. Wassenberg, Ohio

In looking over this listing of peonies, you will find at least six that are still tops today. Some of the others are still around, but some have been discarded. What a tremendous number of good peonies to put on the market at one time, and what an amount of money to have sold them for. Those must have been the good old days that we now hear so much about.



We were saddened to hear of the death of C. Graham Jones, Churchdown, Gloucester, England. He passed away in April 1980. Word was received from Mr. and Mrs. John Simkins, Canada.

ORVILLE FAY

Today, December 7, 1980, I received word of the death of Orville Fay. He was 84 years old and lived in Devon, Pennsylvania.

I first met Orville Fay in the mid 1950's when his home was adjacent to the block-sized extra garden of David Hall in Wilmette, Illinois. He was in the candy manufacturing business then. I visited him and his garden often through the years and watched the development of his home and garden on Pfingsten Road, Northbrook, Illinois. He was recipient of both the Dykes (iris) and Stout (hemerocallis) medals three times. Brother Charles Reckamp and Orville were closely associated.

—Steve Varner, Monticello, Illinois

Because of his understanding and diligent work with peonies, he gave to the peony-loving world hybrids of color breaks and plants of great vigor. These are peonies that will live and grow in the gardens of not only today but also tomorrow and beyond.

Prairie Moon, semi-double creamy yellow, *Paula Fay*, *Coral Fay*, and *Fayette* are all semi-doubles of colors of pink, coral, and red. *Blaze* is the only single of bright red.

STERN'S YELLOW FLOWERED PEONIES OF THE CAUCASUS

by Don Hollingsworth

"Will the real yellow peony of the Caucasus please stand up" (to borrow the climax question from the long popular television show, "What's My Line"). *Paeonia Mlokosewitschi* is easily the authentic holder of that title, at least insofar as North American peony growers are familiar with the plants from the Caucasus region. "Mloko," the most frequently used common name for the species, is almost exclusively credited with the yellow and pastel-colored early flowering peonies currently being bred.

F. C. Stern, however, attached the characterization "yellow-flowered" to a group made up of four forms of peony which are native to the Caucasus region and, supposedly, ones that he concluded to be closely related to one another in phylogenetic terms. In his monograph on the genus *Paeonia* (1946), he called this the Wittmanniana Group of the Sub-section Foliolatae (those having entire leaflets, not indented on the margins). In addition to Mloko, the group includes *P. Wittmanniana*, the form with tomentose carpels, as the type species of the group and two varieties, *P. Wittmanniana* var. *nudicarpa* and *P. Wittmanniana* var. *macrophylla*. *Macrophylla* is known in American gardens for its progeny, the Saunders Macro Hybrids. It has no evident yellow color in its flowers as known here. *P. Wittmanniana* is said to have much paler yellow color than does Mloko but is little known in North America, although both Saunders and LeMoine made in-

teresting hybrids between it and *P. lactiflora*. (See next page for a reproduction of Stern's map.)

Two additional species are reported from the Caucasus region, *Paeonia tenuifolia* and *P. daurica*, which was long known as *triternata*. (The oldest validly published name has precedence under the International Code of Botanical Nomenclature. Stern worked out these problems more thoroughly than had any previous monographer of the peonies.)

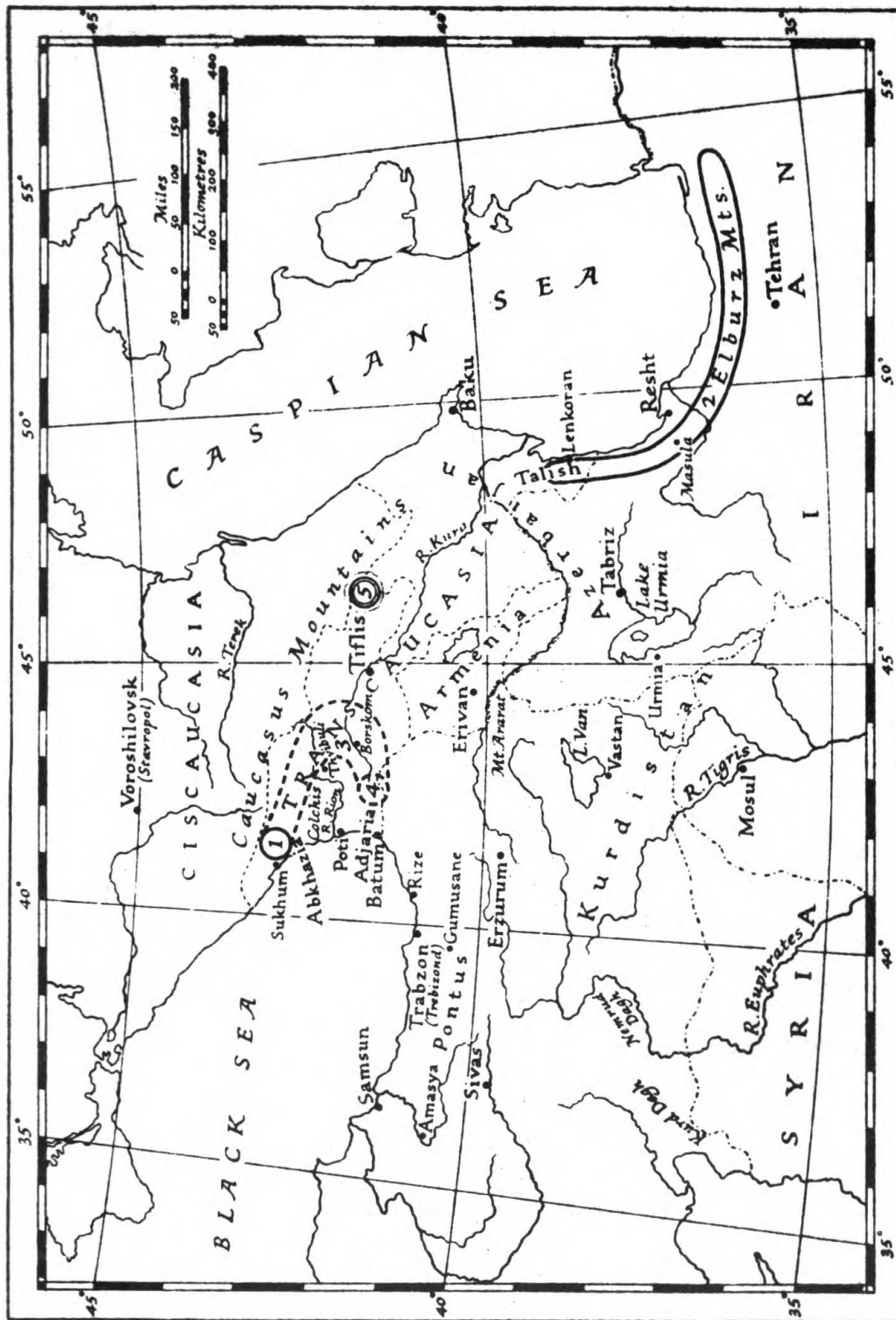
The Caucasus region, for purposes of this article, is considered to include not only the Caucasus mountain range, but also the Crimean Mountains, which form an extension to the northwest on the Crimean peninsula in the Black Sea, and the Elburz Mountains, which border the south shore of the Caspian Sea in Iran. The range of *Paeonia Wittmanniana* extends to the Elburz Mountains. *P. daurica* has been collected on the Crimean peninsula as well as in the Caucasus Mountains.

Placing the Caucasus region in its larger geographical context, it is a continuation onto the European sub-continent of the high mountains and rugged plateaus which rim the southern and southeastern boundaries of the Soviet Union on the Asian sub-continent. To the north of the Caucasus region lies the European plain. The Crimean Mountains are low, reaching elevations around 5,000 feet; the western Caucasus reach 18,000 feet, and the Elburz range reaches 19,000 feet (Lydolph 1970).

The influence of the Black Sea on the west and of the Caspian Sea on the east imparts a humid climate to part of the adjacent lowlands on the south of the Caucasus range, which is the Transcaucasia side, and in the foothills of the western Caucasus Mountains. Rainfall reaches 60 inches or more in limited areas. The sheltered lowlands have mild winters and hot, humid summers, supporting a warm temperate and sub-tropical agriculture. Lower slopes of the mountains support a temperate, hardwood forest, made up of genera common to the eastern hardwood forest of North America. Northeastward, in the rain shadow of the mountains, the climate is more continental and less maritime in nature, coming under much greater influence of dry, arctic air (Lydolph 1970, Kendrew 1961).

The mountain climate of the areas in which native peonies have been collected naturally provide a wide range of micro-climates. While the different populations no doubt are adapted to only certain micro-climates, there is little prospect of inferring just what their optimum requirements may be from the very general information that is available. However, it is worth noting that the collection sites portrayed on Stern's map seem to be in the more humid portions of the region, i.e., Transcaucasia and the Elburz Mountains which have the Caspian Sea to modify dry arctic air coming in from the northeast.

Specific climatic data is available from Tiflis, in the eastern Caucasus, where there is a botanical garden which Stern says has sent out many of the peony specimens from that region that are in the col-



MAP OF THE CAUCASUS AND ADJACENT REGIONS, SHOWING DISTRIBUTION OF THE WITTMANNIANA GROUP OF PAEONIA: —
 1-4. *P. Wittmanniana*, sensu lato; 1 and 2. *P. Wittmanniana* sensu stricto sec. F.C. Stern; 3. *P. Wittmanniana* var. *nudicarpa*; 4. *P. Wittmanniana* var. *macrophylla*; 5. *p. Mlokoewitschi*. The general ranges are based mostly on data from Busch, 1901-03.

Reprinted from Stern, F.C., A Study of the Genus *Paeonia* (1946), with permission of the Royal Horticultural Society.

lections of European herbaria. The Tiflis reporting station has an elevation of 1,325 feet. Over a ten-year period, the low monthly average temperature was 32° F. in January and the high was 74° in July and August. The annual temperature average was 54°. Rainfall March to May averaged 6.5 inches and June to August was 7.0 inches. Annual rainfall averaged 21.4 inches. The wild peonies were likely found at other elevations, which would have had different temperature and water balance factors, probably cooler and perhaps more humid, at least no drier. In North America, the areas where peonies are commonly grown are generally cooler and more humid than is reported for Tiflis (Kendrew 1961, USDA 1941).

G. L. Stebbins studied the peony species and data available in the United States and produced a partial organization of species relationships, which was published in 1939. He differed strongly with Stern's conclusions on the Wittmanniana Group as a taxonomic entity. By definition, a taxon is a group of individuals the members of which have been determined to be more like one another than they are like all other individuals. The species is the basic taxonomic rank. There are various criteria as to what constitutes a species. However, the use of a genetic, or interbreeding capability, criterion is well accepted among taxonomists. That is, all individuals which have the capability of producing fertile progeny when they are interbred are strongly considered to make up a species. The production of highly sterile progeny indicates the two parent populations are poorly fit to share genetic material and are thus genetically isolated from one another, indicating two separate species.

Evolutionary divergence depends upon the isolation of a subpopulation in order to go forward. When a part of a species population becomes isolated and remains so for a sufficient number of generations, there may eventually be accumulated unique genetic and chromosomal changes which render the descendants less able to interbreed when subsequently reunited with other descendants of a common ancestor population.

Taxonomic practice provides for graded classifications of the differences that such isolated populations may have from the predominant species of which they are still a part. A lower ranking grade of difference is "form," botanical "variety" is intermediate, and "subspecies" denotes a maximum accumulation of differences within the limits of being retained in the same species. Ultimately the accumulation of differences leads to the separation of the two populations as two species, now having the capability of existing side by side while retaining their separate identities.

The study of a genus is ordinarily organized around the question of what are the observable criteria (characters) that will permit a botanist to sharply set the species apart from one another by examining plants and dried specimens. Stern emphasized vegetative characters in his study, particularly leaf form, and also the areas of the plant

which had the development of hairs (tomentum). This is not to say that he ignored the other differences, however.

Stebbins studied A. P. Saunders' collection of species and their hybrids, as well as the fertility of the hybrids. He correlated the results of the breeding observations with the directly observable characters of the plants and determined which variations in form seemed to be most consistent with the implications of the breeding results. The characters which he concluded to be the most reliable predictors were the form of the sepals (the flower bud covers), the shape of the stigmas and carpels, and the wrinkling pattern on the seed coat. The details of these criteria will be considered at greater length in another article.

The Stebbins findings led to an entirely different view of the wild peonies of the Caucasus region. Saunders' results from crossing *Paeonia Mlokosewitschi* indicate it is of the same species as the plants formerly known as *triternata* and now *daurica*. The plants of the two forms crossed readily and formed fertile offspring. Mloko had been found only in a single isolated region toward the eastern end of the Caucasus range and the closest *P. daurica* site was several hundred miles away. Their differences in appearance of leaf shape and flower color are observable results of evolutionary divergence that is not associated with factors which interfere with interbreeding capability. *P. daurica* is the oldest name and of more widespread occurrence. Thus, by Stebbins' analysis, Mloko becomes *P. daurica* var. *Mlokosewitschi*.

Paeonia macrophylla is set apart as a separate species by Stebbins, who noted that it forms highly sterile hybrids with *P. Wittmanniana*, "which is to be expected in view of the great differences between the two species in the shape of the sepals, petals, follicles, and stigmas" (1939). He also used the name *P. tomentosa*, Stapf 1931, believing from the published description that the plants Saunders was growing were the same. Stern, who had access to the Stapf material, attributed it to the form of *Wittmanniana* having tomentose carpels. Wister and Wister (1962) say that the plants Saunders grew were the same as the specimens Stern placed under the variety *macrophylla*. Thus, it seems that, unless new evidence is found, the name *macrophylla* supersedes *tomentosa* as used by Stebbins for this peony.

Stebbins concluded that the plants known as *Paeonia Willmottiae* are close to or the same as *P. Wittmanniana* and that *Wittmanniana* also has close affinities with *P. corsica* and *P. coriacea*. He says,

"Phylogenetically, these species are the most advanced of the genus. The strictly 1-flowered habit, the reduced number and specialized shape of the sepals, and the wrinkling of the seed coat are all specializations not found in the more primitive species of the subgenus, such as *P. anomala* and *P. albiflora*. Furthermore, their tetraploid nature indicates that they are of more recent origin than other species, such as *P. triternata* and *P. obovata*, which have similar morphological specializations. Nevertheless, their disrupted ranges and localized occurrence

suggests that even these species are very old chronologically, and therefore that the entire genus is an extremely old one" (1939).

Thus, Stebbins puts an entirely different perspective on the relationships, or lack of them, among the peonies of Stern's *Wittmanniana* Group.

Paeonia Wittmanniana was known since before 1846 and was used for hybridizing by LeMoine before *P. Mlokoewitschi* and *P. macrophylla* were known. However, the latter two have received much more attention from breeders, and their descendants dominate current reports of breeding progress. In contrast, the existing hybrids of *P. Wittmanniana* are scarcely heard from. The same is generally true in connection with the hybrids of *P. corsica* and *P. coriacea*, while the original hybrids of *P. Willmottiae* are now lost and only descendants through open pollination are known. Nevertheless, both the hybrids and these four species which Stebbins characterized as among the most advanced in the genus are believed to be obtainable, although a little ingenuity may be required to locate some of them. I believe that this group is very promising for the possibility of creating new ornamental qualities in garden peonies. I am already working with hybrids of *P. coriacea* and one of *P. corsica*. One thing that I can report is that progress is slow. This may present an advantage for persons who currently have only limited space. However, when progress is slow one must have an extra measure of hope and vision in order to sustain the effort.

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REGISTRATIONS

Coral Sunset (Samuel Wissing) — Registered by Charles Klehm and Son Nursery, January 2, 1981. Parentage: *Minnie Shaylor* x *Otto Frobel*; first bloomed about 1965; seedling number unknown.

Double hybrid, deep coral, flat form, reliable, stamens, pollen, no seeds, fragrant. Good substance. Good stem strength with excellent foliage, 34 inches, early, vigorous. Appears to be a sister seedling of *Coral Charm*. Mr. Wissing worked over 26 years to achieve these beautiful and unique coral hybrids. One bud per stem.

Plant patent applied for.

Coral Supreme (Samuel Wissing) — Registered by Charles Klehm and Son Nursery, January 2, 1981. Parentage: *Minnie Shaylor* x *Otto Frobel*; first bloomed about 1963 or 1965; seedling number unknown.

Double hybrid, salmon color, flat form, reliable, stamens, pollen, no seeds, fragrant, good substance. Good stem strength and foliage, vigorous, 36 inches, early. Appears to be a sister seedling of *Coral Charm*. This selection has more salmon color in it and somewhat fuller flower form. A healthy grower. One bud per stem.

Plant patent applied for.

Festiva Supreme (Carl Klehm) — Charles Klehm and Son Nursery, January 2, 1981. Parentage: *Alice Harding* and W. L. Gumm seedlings; first bloomed 1951; seedling #8421.

Double lactiflora, white with red flecking, ball form, no stamens, pollen or seeds. Pleasing fragrance, reliable, good substance, strong stems with dark green foliage, 34 inches, early midseason, good husky grower. Pearly white double with red tips of petals in center of bloom. A good opener. Four buds per stem.

Plant patent applied for.

White Ivory (Roy Klehm) — Charles Klehm and Son Nursery, January 2, 1981. Parentage: Line bred Chas. White seedlings; first bloomed 1959; seedling #922L.

Double lactiflora, ivory white, ball form, stamens, pollen, no seeds, fragrant. Abundant number of blooms, good substance, excellent stem strength with good foliage, 32 inches, midseason. Extremely clean ivory cream. Four buds per stem.

Plant patent applied for.

Bridal Shower (Roy Klehm) — Charles Klehm and Son Nursery, January 2, 1981. Parentage: Line bred Chas. White seedlings; first bloomed 1959; seedling #921N.

Double lactiflora, ivory white, bomb, no stamens or pollen. Has seeds, fragrant, refined and smooth full formed, clear and pure white. Good substance, reliable, excellent stem strength and foliage, 34 inches, midseason. Vigorous. Four buds per stem.

Plant patent applied for.

Chiffon Parfait (Roy Klehm) — Charles Klehm and Son Nursery, January 2, 1981. Parentage: Line bred *Mons. Jules Elie* x *President Taft* seedlings; first bloomed 1950; seedlings #838D.

Double lactiflora, soft salmon pink, ball form, no stamens, pollen or seeds, fragrant, excellent reliability, and good substance. Unusual soft shell salmon pink, very late, heavy petalage in blossoms with unusual round ball-shaped blooms. Strong stems with excellent foliage, 36 inches. Cut and show flower usefulness. Four buds per stem.

Plant patent applied for.

A La Mode (Roy Klehm) — Charles Klehm and Son Nursery, January 2, 1981. Parentage: *Alice Harding* x *Chas. White* seedlings; first bloomed 1966; seedling #99A.

Single lactiflora, pure white large flower with yellow stamens. Flat form, good substance, stamens, pollen, seeds, fragrant, very reliable. Outstanding stem strength with exceptional foliage, 36 inches, early to midseason. Its outstanding individuality has been noticed by all visitors in the garden. Four buds per stem.

Plant patent applied for.

Bridal Gown (Roy Klehm) — Charles Klehm and Son Nursery, January 2, 1981. Parentage: Line bred Charles White seedlings; first bloomed 1957; seedling #90G.

Double lactiflora, cute clean white bomb, compact and short which lends well to home gardens. No stamens or pollen. Has seeds and fragrant. Good substance and stem strength with exceptional foliage, 30 inches, midseason. Four buds per stem.

Plant patent applied for.

Avis Varner (D. Steve Varner, Monticello, Illinois) — January 5, 1981. Parentage unknown; first bloomed 1970; seedling #070.

Lactiflora, deep red, large full double ball, good substance, no stamens, no fragrance, reliable, height 36 inches. Midseason, excellent stem strength. Disbudded stems have never gone down in eleven years. A deeper red and superior to *Felix Supreme*. Three buds per stem.

Karen Kersch (Guy Tomlinson, Oblong, Illinois) — December 5, 1980. Parentage unknown; first bloomed 1955.

Blush white, ball form, excellent in yearly performance. Good substance, stamens, fragrant, no seeds. Stems strong with deep green foliage, supporting large blooms. Midseason, 3-4 feet in height. A delicate pink ball in center opens to a yellow hue. Three buds per stem.

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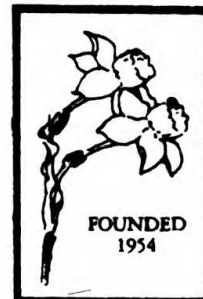
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