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**NATIONAL EXHIBITION, KINGWOOD CENTER, MANSFIELD, OHIO. 1978.** One part of the show room. Front inset — Court of Honor.

Photographs - Robert F. Schmidt, Brecksville, Ohio.

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Kansas Peonies. Titus Residence, Derby.



Peonies grown in Oregon. Mr. & Mrs. O. F. Brandt, Portland



Peony, JOHN HOWARD WIGELL Wm. B. Hooper residence. Derby Kansas.



Peony, KARL ROSENFIELD. Kansas.

Kansas photographs-Edward Michau

Oregon photograph - Oscar F. Branc



250 Interlachen Road	(612) 938	- <b>4</b> 706	Hopkins, Minn. 55343
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Vice President	Ted R. Mysyk	Bulletin Edito	or Greta M. Kessenich
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		·	
	DEPT. OF REG	SISTRATION	
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			
	OBJEC		,
The Astisles of Incorporation			wiles abjects for which the coope
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 SO postpaid quarterly to all members	CIETY BULLETIN in good standing.	s the official S	Society publication. It is mailed
	MEMBE		
The By-Laws state: All r Peony, its propagation, culture, s follows:	reputable persons, sale and develop	, professional or ment are eligibl	amateur, who are interested in the le for membership. Dues are as
Single Annual		lunion of	ember family2.50
Single Triennial			
Family Triennial	10.00	Commercial	
Family membership any two			
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 M	Supportuna	\$100.00
Sustaining			250.00
Julianing amount			

AMERICAN PEONY SOCIETY



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# Spring Message FROM YOUR PRESIDENT

#### Dear Peony Lovers:

Now that winter is rapidly drawing to a close, one's thoughts turn to the upcoming spring and the emergence of our beloved peonies.

-I personally would like to extend an invitation to attend the 1979 American Peony Society Show and Convention to be held at our peony farm in Champaign-Urbana in May. Approximately 100 acres of growing fields of peonies will be available for viewing. We also have arranged a tour of the horticultural facilities at the University of Illinois.

For your pleasure, several hundred varieties originated by Krekler and Rudolph which we purchased will be available for first viewing this year.

Since this show is rather early I especially encourage peony growers in more southern climates to participate in this exhibition. Hopefully, the tree peonies will be far enough along at this time to add their beauty to the show.

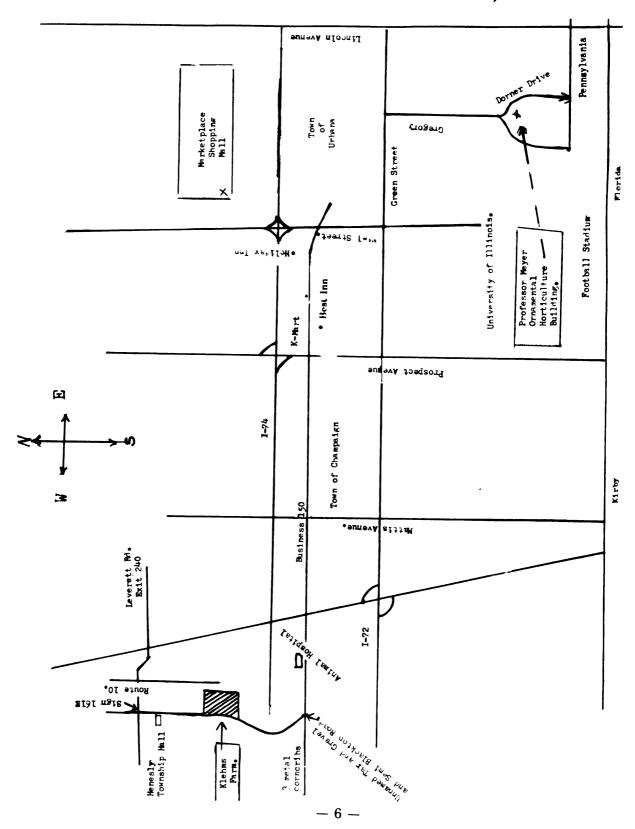
Now that the United States has formally recognized the Peoples Republic of China I have written their Liaison Officer in Washington, D.C., about the possibility of exchanging information on peonies. If any reply is forthcoming it will be read at the National Convention in May.

Sincerely, Chuck Klehm



# NATIONAL CONVENTION OF THE AMERICAN PEONY SOCIETY

MAY 24-25-26, 1979 THE MARKET PLACE — CHAMPAIGN-URBANA, ILLINOIS



# CONVENTION OF THE AMERICAN PEONY SOCIETY THE 76th ANNUAL MEETING AND THE 74th NATIONAL EXHIBITION

May 24-25-26, 1979 THE MARKET PLACE — CHAMPAIGN-URBANA, ILLINOIS

#### SCHEDULE OF EVENTS

Thursday night — May 24th: Arrival of visitors and members.

Friday — May 25th:

9:30 A.M. Board of Directors meeting. The Market Place.

Preparation for the show and set up of exhibits.

6:30 P.M. Professional Judging

8:30 P.M. **Amateur Judging** 

Saturday — May 26th:

12:00 Noon Barbecue banquet at the Klehm Peony Farm\*

Annual Meeting

Auction

3:00 P.M. Tour of the Klehm Peony Farm — Hay rack ride

through the fields.

7:00 P.M. Board of Directors meeting.

#### **ACCOMMODATIONS:**

**Best Inns** — Telephone 217-356-6000

Address: 914 Bloomington Road

Champaign, IL 61820

1 person - 1 bed\$13.88

2 persons - 1 bed(Double beds 19.25

2 persons — 2 beds 21.35

4 persons — 2 beds 28.00

1 person — King 18.72

2 persons — King 22.40

Holiday Inn — Telephone 217-359-1601

Address: 1505 N. Neil, Champaign, IL 61820

1 person - 1 bed\$23.10

2 persons - 1 bed26.00

2 persons - 2 beds29.40

each extra person 3.00

Ramada Inn — Telephone 217-252-7891

Address: 1505 S. Neil, Champaign, IL 61820

\$26.00 for a single

34.00 for a double

3.00 each extra person.

**-7-**



H:ickory Smoked Ham, Potato, Vegetable, Salad, Dinner Rolls & Butter, Drink and Dessert.

Wes will be \$12.00 per person, \$6.00 for children.
This includes registration, banquet gratuities and incidentals.
Send reservations directly to:

Mrs. Arthur R. Landen, Jr. Rt. #3, Bowes Road, Box 120 Elgin, Illinois 60120

\*Pre-paid reservations will be required. Accepted now. Non-

### **RULES FOR SPECIMEN EXHIBITS**

- All entries must be completed and in place by 5 P.M. on opening day.
- 2. All entries must have been grown by exhibitors.
- 5. Enery 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. Untry 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.
- to thems should be approximately 12" long. (tree peonies excepted)
- 5. Exhibitors are limited to one entry each in classes 101, 102, 163, 194, 195, 196, 201, and 301. In all other classes up to two entries of each variety are permitted; however, any number of elifferent varieties may be entered.
- 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 on the Novice classes, but no entry shall be disqualified for failure to identify.
- Shandard containers will be furnished by the show committee and must be in all classes.
- Para American Peony Society Handbook will govern bloom agrees and color.
- As amone type such as Gay Paree shall be shown as Japanese.
- A saids need not be given to unworthy exhibits.



# 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 term of color
		One bloom each in separate containers.
	103	American Peony Society Award
		Ten varieties, herbaceous hybrid only, any tore or color One bloom each in separate containers.
	104	American Peony Society Award
		Ten varieties, Tree peonies only, any type or entered on bloom each in separate containers.
	105	Five varieties, Japanese Type lactiflora only, ray color
		One bloom each in separate containers.
	106	Five varieties, single type lactiflora only, any core
	200	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 blood
112	Double light pink		Japanese pink
	Double dark pink		Japanese red
	Double red		Single white or burds
115	Semi-double white or		Single pink
	blush		Single red
116	Semi-double pink		

# One Bloom Lactiflora Only

#### Class

131 132 133 134 135		139 140 141 142 143 144 145	Japanese pink Japanese red Single white or black
	Semi-double red		

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



Class			
150	Double or semi-double white	, blus	h or yellow
151	Double or semi-double	153	Single yellow
	pink	154	Single white or blush
152	Double or semi-double	155	Single pink
	red	156	Single red
		157	Itoh hybrid any color
One blo	om Herbaceous Hybrid or Spe	cies.	

# On

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 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 **- 10 -**



18 <b>6</b> a	Japanese (Moutan) pink, single		
	186b semi-double	18 <b>6</b> c	double
187a	Japanese (Moutan) red, single		
	187b semi-double	187c	double
188a	Japanese (Moutan) violet, single		
	188b semi-double	188c	double
18 <b>9</b> a	Japanese (Moutan) maroon, single		
	189b semi-double	189c	double
190a	Lutea Hybrid, white to cream, single		
	190b semi-double	<b>190</b> c	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 b	lush	
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
		- 11 -



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 pink317 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.

Collection by commercial grower of 25 to 50 varieties in separate containers. A placard approximately 9"x14" 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.

# Court of Honor. All blooms in Division I, II and III eligible.

Best Double white Single white blush pink red

dark pink red Hybrid yellow, white or

red blush

Semi-Double white pink

pink red Tree white Bomb white pink red

pink red
red yellow
Japanese white violet
pink blend

red maroon

#### Also best bloom from Division II and Division III

All blooms in Court of Honor to receive Rosettes printed COURT OF HONOR.

Best Double, semi-double, Japanese, single, Hybrid and tree to receive larger rosettes.

Division II printed: BEST AMATEUR; Division III printed: BEST NOVICE.

Best in show purple Rosette printed: "GRAND CHAMPION."

# HARVEST - REAP - SAVE

Peony seed should be sent to P. C. Laning, 553 West "F" Ave., Kalamazoo, Michigan 49007.

Seeds are freely given to all those that write for them. 1.00 is required for postage. -13



#### **DIVISION VI**

The artistic Schedule:

- "DISCO DYNAMITE"
- "CHINESE DIPLOMAT"
- "PEONY PICNIC"
- "CHAMPAIGN BUBBLIE"
- "TO MARKET-TO-MARKET"
- "MICKIES GOLDEN MEMORIES"
- "URBAN URBANA"
- "CHECK IT OUT"

#### **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 the 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. Final entries of arrangements, Friday, May 25th. 4 P.M.
- 7. While the show management will exercise due caution in safeguarding exhibits, it cannot assume responsibility for injury or loss.
- 8. Personally owned properties must be claimed immediately after the show closes at 5:00 p.m., Saturday, May 26.

Register in advance — Mrs. Arthur Landen, Jr., Registrar.
Box 120, Rt. #3, Bowes Road, Elgin, Illinois 60120



#### PEONIES FOR EXHIBITION

Cultivate thoroughly
Water generously
Fertilize cautiously
Choose well-developed plants
Select the best and largest buds
Prepare your exhibits carefully.



### **SPRING GENESIS**

Anthony J. De Blasi RD 198A, E. Wakefield, N. H. 03830

In the airy temples of Nature's haunts

The morning bell is struck—

(The bell of life)—

Its golden intonations

Thrum teasingly through rock and tree.

The urgent tone stretches the air and stirs the sun

To boyish dreams.

Winter's icy crystals melt and flow

To join the mingling, musical waters

Of the vernal Reveille.

Earth flexes her muscles—
Splitting her winter mold—
Releasing the Protean Fluid that
nourishes

Every bud and leaf, bone and feather.

Youthful tissue of every style and essence—

Roots, juices, cellular arabesques Swirl and dance, weave and play,

And decorate the earth with inventive strokes

Of extravagant form and color! Hear the sounds of life's happy work!

Lift your heart and join the Revelry!

Winter's Void—where is it now? As though not satisfied with one Creation,

The Creator has dispatched another to us.

The Little Creation within the Large Creation

Overwhelms the mind and senses.

Could we but see that Divine Face

Whose smile lavishes such treasures on us

Time after time!

But wait! Incline your heart—sense the heavenly pulse

Waving through the pliant ground,

Amplifying the bell's deep chime—

Feel the all-embracing Presence—

Will the Divine Author reveal Himself?

Look!—surely He peers at us— And we catch a glimpse of Him—

When we gaze upon a flower,
That enchanted form
Whose warm and pulsing visage
Impels the soul to glorious
Revery.



# CONVENTION OF THE AMERICAN PEONY SOCIETY THE 76th ANNUAL MEETING AND THE 74th NATIONAL EXHIBITION

May 24-25-26, 1979 — Champaign-Urbana, Illinois

**KLEHM PEONY FARM** 

Hay rack ride through the peony fields.

Barbecue!

-15-



# THANK YOU, from CLEMSON UNIVERSITY.

(Clemson, South Carolina)

The American Peony Society has been most helpful and generous. No plant Society has been more responsive. We really appreciate it.

We received the book, History of the Peonies and Their Originations. It's an extremely attractive and useful publication.

We have located all cultivars in it and will use the information as a basis for planting.

Currently (Nov. 22), all are in storage at 40°. The weather this fall has been most unusual. We have not had a good rain in well over a month and the temperatures have been above normal. I am reluctant to set them out until I feel sure the cold is here to stay.

This holding will surely satisfy a part of their rest. As I have previously related to you, peonies do fine here.

If I can get them through the first winter, the planting will be very successful.

We will let you know how they perform. We would be delighted to have all members of the American Peony Society visit us at any time.

Yours truly, Alton J. Pertuit, Jr. Associate Professor of Horticulture Clemson University

# ONE OF THE GREAT PINK PEONIES

Clarence O. Lienau, Detroit, Michigan

All the peonies at the National Show this year at Kingwood, Ohio, were of good quality; this includes all varieties of which any one could have been given a final tribute.

I was one of the Judges and we were instructed by the Chairman of the Exhibition to search among all the display of peonies for the best pink single so it could be selected and judged for the COURT OF HONOR.

When the Judges returned with their selection, all five brought forward SEA SHELL. This does verify what has always been known that SEA SHELL is one of the outstanding pinks.

SPARKLING STAR is also a fine early pink single and has a beautiful color having the same cup form as SEA SHELL, only darker, and it holds its bloom for a long time.

# **Peony Roots for the 1979 Auction**

Your contribution of one or more peony roots adds to the support of the Society. We look forward to your letter, with information of any contribution offered, whether it be peony roots, books or any material pertaining to the peony.

\_ 16 \_Greta M. Kessenich, Secretary



# Fall is ideal planting time says expert peony grower

By June Hicks - The Detroit News News Staff Writer

Some peonies have been known to grow for up to 100 years without a gardener hardly lifting a finger.

But according to Clarence Lienau, the 73-year-old local dean of peony-growing in the Detroit-Redford-Canton Township area, when these plants reach about eight to 12 years of age it's time to conside how well they're doing. If blooming has started to drop off or flowers aren't as big and beautiful as they used to be, maybe the gardener should be lifting them from the ground and dividing them.

And right now, says the expert, from September until the ground freezes in late fall, is the ideal time. This means it's also the best period to buy and plant new ones.

Who would know better than a man who's won many of the top blue ribbons in national peony shows all across the country and who turned his hobby into a business?

On his five acres of land at 45875 Ford Road (just west of Canton Center Road), he now has about 3,000 peonies representing some 300 different varieties. He also carries about 12 to 15 name varieties of Oriental poppies. (This is also a good time to plant them).

Lienau explains that this is down from the peak of 5,000 peonies that the property once contained. "It's getting to be too much work."

He and his assistant, Kim Keast, have been digging and dividing peonies like mad. (The tiny garage office is open 10 a.m. to 4 p.m. every day except Wednesdays until mid-November when Lienau goes deerhunting.)

Although this grower does his digging and dividing with a digger, he was willing to go out into the field with his three round-nosed spades to show how the amateur should go about it.

The sample he chose was a three-year-old plant. Even with this young a plant, getting it up out of the heavy clay soil was a real struggle. First he put two spades down on both sides about six inches from the main stems and jumped up and down on the tops. Then he put the third in and jumped up and down on that. Finally he was able to get the clump out of the ground. (He explained that one needs only about six inches worth of good strong roots so dig about that far out from the stems.)

Clumps are then moved back to the garage where the dividing takes place. First the tops are cut back, and then the soil is knocked out from in between with a screw driver so the gardener can see what he's doing.

Then the big roots are cut back (to about six inches). Lienau advocates using a hunting knife for this heavy part of the job. Then he



examines the clump to find where to divide.

Lienau pointed to the "eyes" that develop where the stems meet the roots and explained that the average division should contain three to five of these. Sometimes these buds are red, other times green, pink or white. This year they are smaller than usual because of the drought and harder to see.

With a division containing three to five eyes, chances are that varieties like Mrs. FDR will bloom the first year. By the second year there's a 90 percent chance that most will bloom. From the third year on, the display should be good and get better and better as time goes on.

(This doesn't mean that an individual can't also plant divisions with one or two eyes . . . but it will take him much longer for them to start blooming.)

When decisions have been made, the knife is plunged into the clump. Once the divisions have been cut, final work means cleaning up the division with a penknife. This includes cutting out the older roots and stems from past years that have rotted.

How deep should these eyes go into the ground when the gardener replants the roots? About two inches, recommends Lienau, who also suggests preparing the spot well ahead of time so the loose soil will have a chance to settle before planting. The gardener can also firm it down with his feet. Then a "little bird's nest" can be dug in the middle, roots put in with "eyes" up and soil filled back in and firmed around with the fingertips.

For success with peonies Lienau advocates a heavy clay loam much like the type in which roses seem to thrive. Peonies don't like sandy soils. If the gardener doesn't have clay loam, the grower suggests digging the hole out to the size of a bushel basket (wide and deep) and putting it in. Gardeners who do this have few troubles with their peonies.

Peonies also do best where there's sun... the more the better, although they will get along on a half day's worth. Don't put them where they will have to compete with other tree or shrub roots. There won't be enough moisture for both.

"You can't beat cultivation when it comes to helping your peonies produce their best," explains Lienau. From the time the shoots first come out of the ground in the spring, he recommends lightly cultivating the soil around them (being careful not to injure the shoots, of course) and then about once every 10 days to two weeks thereafter. (He's right. I've tried this and the gardener can almost see the shoots popping up immediately after cultivation.)

Also make sure the plants get enough moisture during dry spells, especially when young. As they grow older they can take care of themselves.

Late in the fall when the peony foliage has turned brown, Lienau



recommends removing it. "I'm getting lazy in my old age I guess," explained the expert. "Last fall I used a flame thrower and burned the tops off."

Lienau has been growing peonies since he was about five or six years old. His grandfather grew them and he helped. In 1943 this peony lover went into business, buying an acre of land in Redford Township. About 14 years ago after hunting all over Wayne County for the ideal clay loam ihat he feels is so good, he purchased the current property where he grows his crop in Canton Township.

# **SOIL FERTILITY**

The use of fertilizer is as old as agriculture itself. Observations of applications of natural fertilizers resulted in larger plants and improved yield. Later experiments led to the use of commercial fertilizers. Although deficiencies of one or more of the essential elements have been observed in various soils, it has been commonly necessary to replenish regularly only those ingredients utilized in greatest amounts, e.g. nitrogen, phosphorous and potash. Low plant production has resulted more commonly from a deficiency of these elements than from the lack of any other constituent. The percentage of concentration of these elements is usually expressed as analysis or grades in terms of 5-10-5 or 7-7-7, expressing nitrogen, phosphorus and potash in that order. At the present, there is a tendency to include sulfur, magnesium, zinc and boron.

Nitrogen is the major element in plant nutrition. It is responsible for producing leaf growth and green leaves. Deficiency causes yellow leaves, stunted growth, excess delays in flowering and renders the plant less resistant to disease.

Phosphorous is important to a strong root system, brighter and more beautiful flowers, and overall growth. Phosphorous hastens maturity, increases yield and the vitamin content in the plant.

Potash carries carbohydrates through the plant. Potash helps form strong stems, fight disease, improve color and provides starches, oils, and reduces water needs. It is essential for cell division, balancing the effects of excess nitrogen or calcium and helps the plant to utilize nitrogen.

In order to feed the soil properly, the organic gardener must control his pH factor. The proper pH will stimulate soil bacteria and help release the fertilizer to the plant. After this factor is controlled, he must know when and how much fertilizer to apply. It is essential that he maintains a proper balance because an overapplication can cause the same problems that he is trying to correct. It is here that the fertilizer analyzer becomes a basic tool. It takes the guesswork out of feeding programs.

Environmental Concepts, 710 N.W. 57th St., Ft. Lauderdale, Florida 33309





Photograph courtesy of The Observer and Eccentric Newspapers.

Clarence Lienau, Detroit, Michigan, assisted by Kim Keast, harvesting peony roots for the spring pleasure of flower lovers.

# SOME TIPS FROM THIS VETERAN COMMERCIAL GROWER OF PEONIES.

These are some of the things one should do in growing peonies. They are very important. Do not plant in low ground or where soil appears to stay damp or soggy at any time in any season. Drainage is most important

Do not over-fertilize. Three good handfuls of bonemeal mixed in your soil is sufficient for the first three years. Do not cut down foliage after blooming time. Do not cut bloom for the first two years, never more than 2/3 of the blooms on any one plant. Leave two bottom leaves on each stalk.

Water young plants when necessary, giving each plant two or three gallons of water. Cultivate again after soil dries. Do not plant in light sandy soil. Disbud all side buds. Cut off faded blooms and trim plants into nice-looking bushes when blooming season ends unless you are saving seed. Mulch the plants the first three winters after planting.

Proper soil, good drainage, disbudding and most important of all — frequent cultivation, and you should be a most successful grower of fine peonies. It's as easy as that.



# TRY POLLEN OF HYBRID PEONY 'AGE OF GOLD' TO MAKE THE ITOH CROSS

by Don Hollingsworth, Kansas City, Missouri

To botch a metaphor—in order to make a rabbit stew you must first get a rabbit. To successfully make Itoh Hybrid peonies you must get some viable Lutea Hybrid pollen. That is only half the "rabbit," of course. You'll need some flowers of the Chinese peonies that bear carpels having normal unmodified stigmas.

Most growers are better equipped to come up with the Chinese peony side of the cross than they are to get the viable pollen. Very few peony growers have plants of the few reasonably fertile second generation Lutea Hybrids. Thus the most available pollen source is the F1 (first generation) Lutea Hybrids. These are highly sterile, but not entirely so. Individual cultivars vary from others in this respect and the same one may vary from year to year, perhaps depending upon vigor of growth or seasonal temperature cycle differences. However, there are now strong indications that the popular cultivar Age of Gold may be in some ways a much better source of pollen for the Itoh Cross than others of the F1 Lutea Hybrids which I have tried.

A few words of explanation about sterility of inter-species hybrids are appropriate. When hybrids between two different species are found to be highly sterile, an examination of their pollen grains will often find a great deal of pollen abnormality. A high proportion of the pollen grains may be very small, misshapen, absent or they may appear normal but do not produce a pollen tube when given conditions under which other pollen grains germinate and grow.

The production of a pollen tube after the pollen grain comes to rest on the stigma of the pod side of the cross is absolutely necessary in order to deliver the sperm cell to the vicinity of an ovule for fertilization. (The ovules are in the carpel or pod and after fertilization they develop into the seeds).

Infertility is not only directly caused by pollen abnormalities but such abnormalities when seen in inter-species hybrids are strongly indicative of the common condition leading to a variety of direct causes of infertility—mismatches between the sets of chromosomes that were received from the parents of the plant. While different species in a genus, as among the peonies, have an overwhelming majority of genetic material in common, it is the differences among various segments of the chromosomes that give each species its distinctive characteristics. Apparently some chromosomal mismatches simply block the development at some stage between embryo and maturity of the plant and it does not survive. However, a great many interspecies crosses will give hybrid offspring that develop to maturity very well, in which instances the mismatches carried by the individual may actually confer an advantage, called hybrid vigor. However, when it comes to producing germ cells for the next generation is where the



mismatch problems in an otherwise vigorous cultivar may come to the front. In the reduction division of cells during germ cell formation—the stage at which balanced half sets of chromosomes must be produced if there will be fertility—mismatch segments interfere more or less with proper pairing. When the interference is more, the plant is more highly sterile. Nevertheless, some small incidence of correctly balanced half sets of chromosomes will be possible in certain cultivars. It is these correct germ cells that lead to our successes in breeding from interspecies hybrids.

When we achieve advanced generation hybrids, themselves the result of sufficiently correct germ cells, some will have a much better proportion of adequately formed germ cells and are therefore much more productive to work with.

Some F1 Lutea Hybrids produce large quantities of pollen grains, others produce few or none, although it is the typical habit in all peony species to produce large quantities of pollen. High Noon makes lots of pollen, but my tests suggest that less than one in a thousand is capable of germinating. One would have to use enormous quantities on a single stigma to give any chance at all of fertilization. Age of Gold makes very little pollen, but a fair to good proportion of the grains will germinate. Thus a modest distribution of pollen on the stigmas should give a fair chance that fertilization will be achieved. What appears to be happening is that the incorrectly balanced half-sets of chromosomes which are produced in Age of Gold tend to lead to failure before the pollen grain level of development is reached. In High Noon, on the other hand, the innately determined result is that pollen grain production approaches the norm for plants of the genus paeonia, even though almost none of the grains are viable. While it appears that Age of Gold may be actually producing no greater numbers of viable pollen grains than some of the other Lutea Hybrids which have sired Itoh Hybrids, the quality of its pollen is not diluted by such a large proportion of worthless grains.

Persons already growing Age of Gold may be uniquely advantaged in making the Itoh Cross.

For persons unfamiliar with basic techniques of collecting anthers and preparing the pollen for use a few points should be mentioned. Take the anthers from a barely opened flower, in order not to lose any of the scarce pollen. Put them on a piece of smooth paper to dry, away from air currents that might blow away some of the pollen. Only when thoroughly dry, after several days, the anthers and loose grains may be poured into a small vial with cap for storage. In order to dislodge as much as possible of the pollen grains from the anthers, I put a B-B (air gun shot) in the container and shake it vigorously. When pollen is scarce, I use a very small, soft artist's brush to pick up the grains and transfer them to the stigmas of the flower that is to be pollinated.

For pod parent do not use flowers that have already been open and the stigmas exposed previous to the time you do the pollination.



Preferably use only flowers that have no pollen of their own, or else strip out the pollen-bearing parts before the grains are released. This applies to those Japanese type flowers that release pollen from the edges of the staminodes as well as single and semi-double forms. Lastly, cover the flower from bees and ants for 24 hours or more.

The list of growers who have achieved the Itoh Cross continues to lengthen. A conservative estimate is that 100 or more different clones are now growing and approach flowering or have already flowered. Yet it will be a long time before there can be a supply of these unique plants that is of sufficient number to meet general sources of demand. Persons who will make just a little effort may be treated to the satisfaction of producing their own Itoh Hybrids.

### COLOURED PHOTOGRAPH OF PEONIES

Neville J. Harrop. Newton, Tasmania. Australia

Some basic points to assist the novice before he starts developing his own style will, I think, be of assistance.

We will assume that the photographer has a camera fitted with a "through the lens" light meter and is capable of having both the aperture and the shutter speed manually adjustable.

- 1) What type of film? This depends on
  - (a) Are the films for publication?
  - (b) Are they for scientific record?
  - (c) Are they purely artistry?
  - (d) Are they for scientific record with a leaning towards aesthetic?
  - (e) Are they for your own, and your friends' appreciation?

#### **SLIDES**

#### Advantages:-

- (a) One normally associates coloured films for publication with coloured slides.
- (b) They are considerably cheaper than negative type film.
- (c) They may be "blown up" on a screen which is shown to a gathering.
- (d) Prints may be obtained from the slides which you consider meritable.

#### Disadvantages:-

(a) No one will ever convince me that prints from slides, irrespective of how expert the printer, are as good as prints from negatives.

They have a harsh and rather discordant colouring which cannot be softened to the extent that they compare favourably with negative prints.



#### Some people will not agree with me!

- (b) Although it may not apply in the States, there is nowhere in Australia where I can get the printing "filter compensated" i.e. the emphasis of the colour spectrum adjusted to give a more faithful colour rendition which is so important from the scientific point of view.
- (c) You cannot have a record of prints in a photo album of the calibre obtained from negative to positive prints.

I therefore plumb for negative to positive prints for my own enjoyment!

### **NEGATIVE & POSITIVE FILMS:**

#### Which one to use?

It must be remembered that a lot of film is blamed incorrectly for poor colour rendition. How often does one hear that a reddish-purple (say Montan), a pink (say Yashyo Tsubaki), and a blush pink all come out virtually the same colour?

Although the purples are difficult— and in some cases well nigh impossible— to get faithful reproduction, the prime cause is the processing.

When the film is sent to, say Kodak, it is computer processed at some fantastic speed with the computer set up to ensure that flesh colours are reasonably reproduced. This is fine for family snaps and the like, but no good at all for flowers of differing shades. However, even if they are hand printed, unless the technician has a yard stick to work with he has no idea what colour he is trying to reproduce. More on that later.

Of the various films I have tried I prefer Kodak Verichrome Professional II. Although slightly more expensive than the standard film it gives a high colour density, and being USA 100 (faster than the normal standard) allows for a relatively faster shutter speed and thus reduces blur from "camera shake" and slight movement of the flower.

#### TAKING THE PHOTO.

Assuming the flower is required to fill the whole frame, in most instances a normal 50 or 55 mm lens is sufficient. If the flower is only about 3 to 4 inches in diameter as is the case with some of the species a No. 1 tube introduced between the lens and the camera should suffice.

I find that photos of flowers taken full face with maximum focal depth in sunlight offensive. It does nothing to enhance the flower and the sunlight creates such a contrast between light and shadow that the film cannot cope. Remember that the smaller the aperture (i.e. the higher the "f" number selected) the greater the depth of the photo in ocus. This may at first be considered an advantage, but if some oftening of the petals closest to the camera is achieved, and the -24



backgrpund fuzzed the overall effect is more pleasing and the instinctive focal point is the centre of the flower.

- (a) Do not allow the flower to sadly droop downwards. Tie it up so that it is at least facing slightly upwards.
- (b) Try to include a bud showing colour in the shot, making sure that it is approximately the same distance from the camera as the flower.
- (c) Try to put some of the leaves close to the same distance from the camera as the flower and a depth of leaves going back from the camera.
  - This gives a pleasing natural background fading into a blur if the correct aperture setting is chosen.
- (d) Aperture setting. A little should be said on this. Keep in mind that the smaller the aperture (i.e. the higher the "f" number) the greater the focal depth (i.e. the greater the depth of focus). Because it is small it lets less light thru to the film, and this has to be compensated by the shutter speed (i.e. the time the light is allowed to affect the film).
  - I have found that from F8 down to as low as F 2.4 gives about the correct focal depth for my tastes.
- (e) Don't take a picture of the flower full face. Try taking it from 3/4 face to where you can still just see the stamen.
- (f) DO NOT TAKE IN DIRECT SUNLIGHT IF YOU WANT FAITHFUL COLOUR RENDITION.
  - Take it on a dull day, or have someone hold an umbrella over the flower to reduce the light to shadow contrast. This I find most important, for to date I have never taken a successful photo in full sunlight even with fill-in flash.
- (g) Pay particular attention to the flower that you pick. Make sure that it is free of blemishes.
- (h) If petals tend to droop on one side, take the shot from that side which will reduce the lack of balance and allow the stamen to be seen at almost ½ face.
- (i) Have the sharpest focus on the stamen and let the rest of the flower look after itself.
- (j) If a depth of leaves cannot be achieved, then introduce a back drop in the form of coloured cardboard, blue, green, fawn, or even black for a dramatic effect with some pastel-coloured flowers.
- (k) Mount a label on a stick with the name and year written on it and include on the edge of the framed picture (i.e. framed in camera lens).
- (l) Include a standard Kodak colour patch on a stick so positioned that it is included in the edge of the picture and in focus. This then allows the technician whom you employ to hand develop



a print to introduce the correct compensating filters to ensure that this colour spectrum is faithfully reproduced, and therefore the chances of faithful reproduction of the shades within the flower are infinitely increased.

This strip of the film may be cut off the print before mounting in your album.

It also gives you the opportunity to ensure that the technician has done a fairly decent job when you compare your colour patch with the reproduction on the print.

- (m) If you have the opportunity, pick the time of the day when the flower has nearly, but not quite, fully opened. The flower has more character.
- (n) The photo is now fully set up with the umbrella in place. Finally, with a "neutral grey card" which may be purchased for a dollar or so at a camera shop, set the exposure of your camera.

Remember that your light meter only gives an average of whole picture's reflected light and this is very much influenced by the background. You are only interested in the subject matter.

Hold the neutral grey card as close to the subject matter as possible, in a vertical plane, and with the aperture set at between F8 and F2.4 establish the correct time exposure. Set the time exposure to this reading and then take your photo.

This at first may seem a terribly laborious procedure, but when you get the hang of it, it doesn't take long at all.

I stress that this is a starting point for pleasing and descriptive shots.

From then on you will decide on the multitude of improvements which you as the artist will try to achieve. Even the best photographer is still experimenting.

# THE PEONY — A BUTTERCUP?

Rev. Joseph A. Syrovy, Vining, Iowa

It is rather fascinating and intriguing to see how feverishly some of our members are hybridizing and working so hard to capture a true yellow herbaceous or a better yellow Itoh, also to improve the yellow moutans or tree peonies that we already have. To retrieve, if possible the yellow we now want, lost perhaps through the evolution of the genus or may we add through the devolution of the genus called Ranunculus.

Ranunculus is the true family name or genus to which the peony is supposed to have belonged. Somewhere along the way someone called it Buttercup, truly describing its color. The name Ranunculus was given to this genus by Pliny, the Elder, a Roman naturalist who lived 23-79 A.D. A tradition of over nineteen hundred years! He gave it this name because it grew in wet places. Translated from the Latin it is



"Little Frog." Which is better, Peonia-Little Frog or Peonia-Buttercup, or just Peony as we know it?

Consulting Bailey's Cyclopedia of Horticulture under Ranunculus, we find twenty-nine species and under key to the species with all its subdivisions, almost fifty. Many of us perhaps have observed some of them in the wild state in woods, fields or swamps. Some of them are annuals and some are perennials. What we believe is the true wild golden shiny yellow Buttercup is **Ranunculus Acris**. It is a single about one inch across.

Perhaps to most of us, Ranunculus Asiaticus is the most familiar, grown in many Southern gardens. It is tender and bulbous and not winter hardy. It is known as Double Persian Buttercup. Described in flower magazines as giant and semi-double peonylike flowers, two inches across from yellow straw through all shades of deep golden yellow, reds of all shades and pinks. Farther north, we plant them in the spring as bulbs and they bloom in May and June. They are also qold as potted plants by florists, as Ranunculus.

There are other interesting Ranunculae among the twenty-nine listed in the Key to the Species and if interested consult Bailey's Cyclopedia of Horticulture. One which caught my eye also was Anemonefolius. The Anemone is also a member of the Ranunculusfamily and twenty-nine are also described by Bailey under Anemone. If only the peony was a Ranunculus, would it be possible to hybridize it with some of the members of its family to obtain our Buttercup yellow? Look what Mr. Itoh did when he hybridized for the first time the herbaceous peony and the Moutan. We now have the new Itohs, yet this seemed to be beyond our wildest dreams!

Michael Kasha of the Institute of Molecular Biophysics, Florida State University, Tallahassee, Florida, has written a paper entitled "New Insights for the Amateur and Professional Hemerocallis Hybridizer" published in the December Hemerocallis Journal. It contains such valuable information on color, temperature and trace element effects on coloration. Mendels Third Postulate. \*

The information could be used by any hybridizer whether Peony, Iris or Hems. Amateurs who wish to hybridize should surely have a copy of "The PEONIES" edited by John C. Wister and the Handbook of the Peony. Both are offered as a special for only \$5.00 by our Peony Society.

We all should concentrate on color in our peonies. The yellow in most of our peonies tends to fade out, especially in the sun. Perhaps we will find what we are striving for in the Lobatas, those tending to the orange (a combination of red and yellow, carrot color—corotene), then like a painter, add a little more yellow until we get that golden, unfading Buttercup yellow. Always in search of "The Golden Fleece!"

\*A copy of the Hermocallis Journal sells for \$1.50. Address of the Journal is in the advertising section of the American Peony Society Bulletin. -27



# The Flower Market

by Po Chu-i

In the Royal City spring is almost over: Tinkle, tinkle—the coaches and horsemen pass.

We tell each other "This is the peony season":

And follow with the crowd that goes to the Flower Market.

"Cheap and dear-no uniform price: The cost of the plant depends on the

number of blossoms.

For the fine flower,—a hundred pieces of damask:

For the cheap flower,—five bits of silk. Above is spread an awning to protect them:

Around is woven a wattle-fence to screen them.

If you sprinkle water and cover the roots with mud,

When they are transplanted they will not lose their beauty."

Each household thoughtlessly follows the custom,

Man by man, no one realizing.

There happened to be an old farm labourer

Who came by chance that way. He bowed his head and sighed a deep sigh:

But this sigh nobody understood. He was thinking, "A cluster of deepred flowers

Would pay the taxes of ten poor houses."

In China, the peony was so popular and well thought of that it was often referred to simply as the Flower. Po Chü-i's poem, "The Flower Market," included much that we can think about today. The translation is by Arthur Waley and comes from his **Translations from the Chinese**, Alfred Knopf, 1941.

Contributed by - Virginia Beatty, Evanston, Illinois.

#### SPRING CARE OF PEONIES

Cultivation should begin as early in the spring as the ground can be worked. The eyes, stems, and roots of a peony are very brittle in the fall and spring, and, when cultivating or working around or with the plants, take every precaution to prevent damage to these parts. If they are broken or otherwise damaged, the plant will be set back in growth and, though new growth may appear, it will be much less vigorous than it would have been if the plant had not been injured. If you are uncertain where the new growth will appear, it is best not to work around the plant until it comes up. A stake, set over the plant, will show its location and protect it. All varieties do not come up at the same time in the spring. Young plants are particularly slow in appearing, at times. Some will be a month later than others. So never dig down to see if the plant is alive, for there is great danger to the new shoots. Just let them alone and they will come up in their own good time. If they have not appeared six to eight seeks after the others have come up, it may be well to examine them and see what is wrong. You may save the plant.

Botrytis is a fungus that attacks all peonies. It is more prevalent in wet seasons. This blight first wilts the young shoots and then turns them black. It is controlled by spraying the plant and ground with



Bordeaux mixture, Captan, Benlate or other fungicides. Begin a spraying program as soon as the eyes begin to show in the spring. Spray again in two weeks and again in four weeks.

# **ARTISTIC DESIGNS**

Kingwood Center, Mansfield, Ohio 1978 Photographs — Robert F. Schmidt, Brecksville, Ohio





PEONY EXHIBITION, Champaign-Urbana, Illinois. May 24, 25, 26, 1979. The Market Place. Floral Arrangements — Final entry Friday, May 25, 4 p.m.

The artistic schedule for this year has been carefully outlined, specifically to reach both the advanced and the amatuer.

Peony blooms will be available at the show, in the display area. Bring your containers and material along with you and let your imagination express in flowers, the category, in this beautiful work of art.

# GROW YOUR SOIL AND YOUR PLANTS WILL GROW WITH IT Environmental Concepts Research & Development

Organic gardeners pay special attention to the pH of the soil. They know that the use of organic material, that is acid in nature, makes periodic soil testing of pH fundamental and essential.

Yet, it is unwise for the grower to add lime as a matter of routine. Many organic growers who follow this habit not only waste time, effort and money but may retard plant growth as well.

Inefficient use of fertilizer results from the over application of lime because the nitrogenous materials require an acid soil (6.0 to 6.9) to break down into a soluble form.

Not only are the minerals in the soil quickly exhausted, but the soil itself often gets polluted with harmful salts from tap water, an oversupply of fertilizer and from other chemicals. The plants become sickly, frail, sterile and lifeless. PH measurements become vital to control this environment.

PH is the most significant factor in determining the plant's ability to use fertilizer. If the pH is proper, the plant can feed because the nitrogen-fixing bacteria are most prolific in the pH range of 6.0 to 6.9. In essence, pH controls the plant's environment and total well being.

Soils that are too alkaline can be corrected by applying organic matter which produces natural acids as it decays. If the soil is too acid, it may be brought back to a favorable pH by the addition of ground limestone or dolomite lime.

Therefore, to grow live organic soil maintain the soil pH with a scheduled testing program. And, to simplify this program use the pH Analyzer from Environmental Concepts.

# Address given at the 5th District meeting, Lake Geneva

By Marvin C. Karrels, Milwaukee, Wisconsin Ladies and Gentlemen:

This is our 32nd annual meeting of the 5th District of the American Peony Society. Each year for 32 we have made these pilgrimages not only to our 5th District but also to our National Convention & Show. What motivates us? I like to feel it's a quest for beauty. Someone has said, "The peony is one of God's gifts of beauty to mankind." Keats said, "A thing of beauty is a joy forever." So each year we come to pay homage to our chosen thing of beauty. Yes, we are the connoisseurs, the devotees of the peony. The A.P.S. classes us as the amateurs. Possibly we can find a better description of us by resorting to a colloquialism. About a week ago I received a telephone call from Mrs. Hertha Hyde who asked that I send a meeting notice to her son Fred. She said that Fred has been bitten by the peony bug. We have all been bitten by the peony bug so we have all contracted a most wonderful disease called Peonyitis. It is incurable. It can only be



treated by getting more peonies. This sometimes causes a problem. Our wives complain that we are encroaching upon their wash-drying area. I bought mine a new clothes dryer.

However, we are not the only segment of this peony world of ours that has this great affection for the peony. Several years ago, I had occasion to talk to Mr. Karl Klehm, the father of Roy and Chuck. I asked him if it was profitable to grow the peony commercially. He said, "It is not the most profitable item in our nursery but there is no other that I have as deep affection for as the peony. I inherited this love for the peony from my father and I in turn have passed this on to my sons, Roy and Chuck." In this year's Klehe Color Catalog, on the first page is a picture of Nancy holding an armful of peonies overlooking a large field of peonies in full bloom. I have a suspicion that there will be a fourth generation of peony lovers in the Klehm family. Can we stretch the meantng of the word heirloom to cover this? Yes, the commercial growers are important; it is through them that we can purchase these wonderful plants.

There is still another segment of our peony world that I feel deserves our gratitude. I speak of the hybridizers. From their hands come the new and exciting varieties. They deserve more recognition from the A.P.S. We here in the 5th District have realized this. Several years ago we had a special Sunday for Sam Wissing. Sam produced, among others, Coral Charm, a real color break. Only two years ago at our National meeting in Milwaukee, Myron Bigger was awarded the Mr. Peony medal for his 50 years of service to the A.P.S., and for his work in hybridizing. I was asked to present this award to Myron in absentia. I would like to quote a brief excerpt from that letter I sent him. I feel it represents our feelings towards all the hybridizers.

"What you have done in your lifetime is one of the highest achievements of mankind — to spread beauty and happiness in this world of ours."

Ladies and Gentlemen, there is still another rich dividend my membership in the 5th District has brought me. It is the fine friendships of wonderful people.

If you will permit me a bit of nostalgia, I would like to go back into the early years and recall some of the great peony men. First, there was Roy Gayle. He was probably the most astute, discerning and knowledgeable authority on the peony the A.P.S. produced. He was my peony mentor. Another man who left his mark upon the annals of the A.P.S. was Jim Mason. Jim was jokingly referred to by Mr. Peyton as the sniff hound of the A.P.S. Jim felt no peony was complete unless it had fragrance. Whenever a show was held and you saw a man walking up and down the rows of peony bloom and sticking his nose into them, you knew it was Jim Mason. I swear Jim had at least a half dozen categories of depth and type of peony fragrances. Another man I cannot forget as I revel in nostalgia is Dr. Hyde. There never was a more avid exhibitor in the A.P.S. One time in our earlier shows, Dr.



Hyde felt there was not enough participation in our arrangement classes. So he felt he had to know more about this business of arrangements. So, he joined a class of arrangers — he was the only man in the class. Thereafter, he and Hertha showed floral arrangements with peonies in many of our shows. In going back to those formative years of our 5th District, who could possibly forget Will Christman?

We set aside one Sunday to honor him for having published 100 consecutive issues of the Bulletin. Yes, Will Christman was a man of great heart and consideration for his fellowman. I have often referred to him as one of God's noblemen. My life has been enriched because of these friendships and associations. Now as I look out here at these tables, I recognize familiar faces, and I am proud to call you my friends.

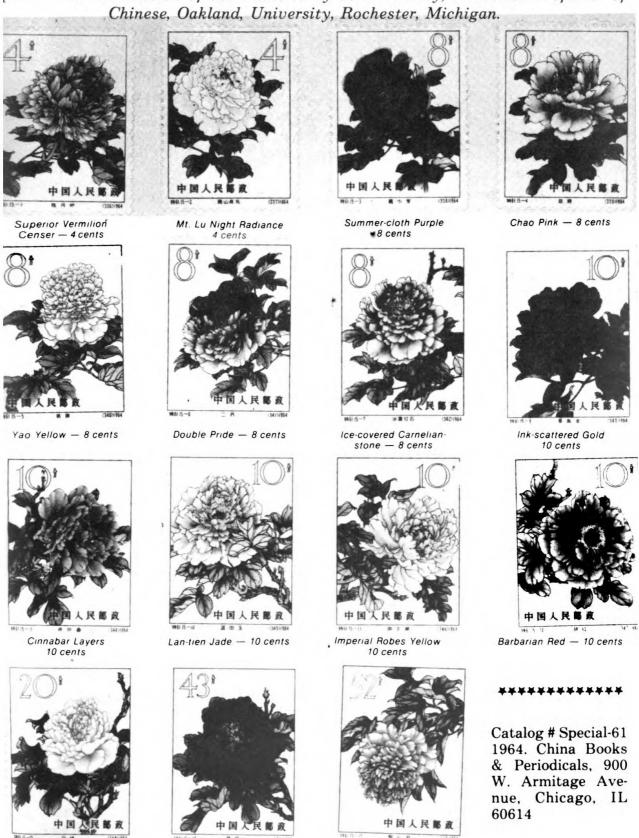
Now in closing, I want to express the deep debt of gratitude of the members assembled here today. How deep a debt of gratitude we owe Greta Kessenich. I want you to judge after I tell you how we got Greta and what she has done. To begin with, we must go back some 10 years. On that first meeting of the Board of Directors in Minneapolis we received the resignation of our then Secretary. It was one of the dark moments in the history of the A.P.S. We were in deep debt and no money in the bank. As I lay awake that Friday night and pondered that bleak situation, I wondered how we could ever find a person to face this challenge. Yes, I literally prayed to God that He would guide us to that person. In that Sunday morning Board meeting when the matter of a new secretary was brought up, Greta Kessenich was chosen. I was appointed to a committee to ask her to serve. She accepted and said she always had a love for the peony and the A.P.S. She took over and immediately supervised the membership roster and brought many of the delinquents back. With the help of the Board of Directors and dedicated members we got the greater portion of our indebtedness paid. Since then, Greta has revised the "Handbook," compiled and published a number of booklets which she sold to the membership and others. However, the one publication which she compiled, edited and had published, "History of the Peonies and Their Originators," is now in practically all of the horticultural libraries in the U.S., also widely used in Canada, Europe and Australia. This monumental work will always stand as a monument to Greta Kessenich. Our financial position now stands — no indebtedness and some \$13,000.00 in the bank. What really proved to me that hers was truly a labor of love — we offered her a salary for her services, she always refused. Ladies and Gentlemen, if it be true that the peony is one of God's gifts of beauty to mankind, I feel that Greta Kessenich is God's gift to the American Peony Society.

Yes, ladies and gentlemen, may our quest for beauty always be a guiding principle and "A thing of beauty is a joy forever" be a tenet of our faith.



# A SET OF FIFTEEN STAMPS FROM **COMMUNIST CHINA** COMMEMORATING THE TREE PEONY

plied with translation of the varieties by John Marney, Associate Professor of



Bean Green - 20 cents

Wei Purple - 43 cents

Tipsy-Immortal Peach

### TRANSLATOR'S NOTE

Ou-yang Hsiu (1007-1072) was one of the greatest of the many great men in all Chinese history. In his career as a member of the established imperial bureaucracy he rose to be prime minister, and was responsible for efficient administration and innovative legislation. He was a renowned classicist and contributed most significantly to the Neo-Confucian thought whose development was a feature of early Sund intellectual activity. A historiographical genius, he wrote the official history of the preceding T'ang dynasty; a litterateur, he is universally recognized as one of the finest poets in the grand Chinese literary tradition.

His "Record of the Tree Peonies of Loyang" is, as he observes himself, the first treatise on the peony, and as such deserves very close attention. Its content reveals his philosophical speculations on the fundaments of the natural and metaphysical worlds; his famous skepticism; his curiosity and interest in the multifarious affairs of man; and his down-to-earth, systematic practicality.

James T.C. Liu's study of this extraordinary man, Ou-yang Hsiu An Eleventh-Century Neo-Confucianist (Stanford University Press, 1967), is generally available in public libraries.

John Marney, Oakland University

# RECORD OF THE TREE PEONIES OF LOYANG

by Ou-yang Hsiu

The first and only translation from the original Chinese, by John Marney, Assoc. Prof. of Chinese, Oakland University. Rochester, Michigan.

#### 1. Varieties

The tree peony (p. mutan; p. arborea; p. suffructicosa) comes from Tan and Yen provinces; to the east it comes from Ch'ing province; and to the south it also comes from Yueh province. But those from Loyang are today considered prime in the empire. What Loyang calls "Tan province flower," "Yen province red," and "Ch'ing province red" are the eminence of those localities. However, only the Loyang variety ranks among the first three species of flowers, and no



other can compete independently with Loyang. The Yueh flower is little known because its place of origin is so distant, and it is not valued. The Yueh people, too, dare not themselves boast about its relative rating in competition with Loyang, and so the Loyang flower is considered the best in the empire.

In Loyang there is also the "Yellow shao-yueh" (herbaceous peony; p. lactiflora; p. albiflora) and the "Crimson Peach." There is also the "Auspicious Jade Lotus," the "Thousand Petals," the "Plum Red," the "Elegant Plum," and the like, none of which are to be discounted by other varieties that have appeared, but the Loyang folk do not much like them, and call them "berry flower" and "some-such flower' and so on. As for the tree peony, this has no name but is merely referred to as "flower," meaning that in the empire the tree peony is the only true flower. Not without good reason is it called mutan (male vermilion). Frequently, theories for the great esteem in which it is held state that Loyang is situated between the Three Rivers (Yellow, Wei, and Han), an anciently idealized territory. Here in the past, the Duke of Chou (d. B.C. 1105) calculated with foot and inch measure the appearance and disappearance of the sun to determine the concordance and discordance of season and climate, thereby to hold fast to the Correct Way. Thus, as the central point between heaven and earth, the perfect flourishing of trees and herbs, and the achievement of the vital force of central harmony, this locality is unique and differs from other places.

I disagree with this. Within Chou territory and the tributary lands of the four directions, Loyang lies at the center of the Nine Divisions; but the city is not necessarily central within the boundlessness between heaven and earth, and the K'un-lun Mountains! Furthermore, the harmonizing vital force of heaven and earth should pervade all four directions, above and below, and should not be limited to the center so selfishly. "Center" and "harmony" have their constant vital force which, translated into physical being, should also result in constant form. The constancy of physical being is neither extremely beautiful nor extremely ugly. When defect in that physical being's fundamental vital force occurs, since beauty and ugliness are incongruous and are not in mutual harmony, that such physical being be utterly beautiful or utterly ugly is because of the bias in its vital force. As to a flower's being imbued with its beauty, and the crooked and swollen ailanthus tree's being imbued with its ugliness (Chuangtzu Chpt. 1), although the ugliness and beauty differ, yet they inherit the same vital force's bias and defect, and so are equal.

Loyang city covers an area of several score square miles, yet none of the flowers from the counties and districts can equal those within the city. And going outside these boundaries, it becomes impossible to grow them. But how on the other hand does the vital force biased towards beauty uniquely concentrate within these several square miles? This too is one of the great universal imponderables.



Unusual physical occurrences that are harmful to human beings are called catastrophes; unusual occurrences that are merely startling but do no harm are called phenomena. A saying goes, "If Heaven rebels against due season, then that is catastrophe; if Earth rebels against physical materia, then that is phenomenon." This too, then, is the phenomena of the shrubs and trees, and one of the wonders of the myriad physical materia. Thus the crooked and swollen ailanthus tree might rather alone be imbued with beauty, and be received with favor by mankind!

I observed four spring seasons in Loyang. I first arrived in the city in the 3rd month of the 9th year of T'ien-sheng (1031), which was too late to see the peonies in full bloom. The next year I went on an excursion with a friend, Mei Sheng-yueh, into the Shaoshih, Kou-shih, and Ling-shih peaks of the Sung Mountains, and the Purple-Clouds Caves of the T'ang Mountains (in modern Honan province), and I did not return in time to see the flowers. Again in the following year I suffered the bereavement of a relative and had no time for flower-viewing. And yet again the next year, I was fully engaged in my official duties and it was well into the harvest season before I could get away, by which time only the leaves remained to be seen. And so I have never seen these flowers in the fullness of their bloom, and what my eyes have seen is not their full beauty.

Whilst at my office, I once paid a visit to Ch'ien Ssu-kung, and downstairs in the Twin Cassia Pavilion I saw a small screen whose back was covered with tiny characters. Ssu-kung pointed to it and said, "I want to compile a 'Classification of Flowers' and these are the names of more than ninety varieties of tree peony." At the time I was too busy to read it; however, those that I have seen and that people these days commonly mention, number only some thirty varieties. I do not know where Ssu-kung obtained such a large number. His writing down all these others must be because they had names, although they were not particularly admirable specimens. And so I now record only the most outstanding varieties, and rank them in order.

Yao Yellow, Wei Flower, T'ing Red (also called Ch'ing province Red), Fine Petal Shou-an, Niu Family Yellow, Ch'ien Pool Purple, Tso Flower, Presentation Red, Petal-base Purple, Cranes-in-Harmony Red, Adding Color Red, Inverted Sandal-wood-heart, Cinnabar Red, Nine-stamen True Pearl, Yen province Red, Multi-petalled Purple, Coarse Petal Shou-an, Tan province Red, Lotus-flower Calyx, One Hundred and Five, Doe's Womb Flower, Liquorice Root Yellow, One Tucked-in Red, Jade Tablet White.

#### 2. Nomenclature

The names of mutan peonies are derived from clan surnames, names of provinces, localities, color, or according to distinguishing characteristics. Yao Yellow, Tso Flower, and Wei Flower derive from



surnames; Ch'ing province, Tan province, and Yen province Reds take the names of provinces; Fine Petal and Coarse Petal Shou-an, and Ch'ien Pool Purple refer to localities; One Tucked-in Red, Cranes-in Harmony Red, Cinnabar Red, Jade Tablet White, Multi-petalled Purple, and Liquorice Root Yellow are named for their colors; Presentation Red, Adding-color Red, Nine-stamen True Pearl, Doe's Womb Flower, Inverted Sandalwood-heart, Lotus-flower Calyx, One Hundred and Five, and Petal-base Purple all note their peculiarities.

Yao Yellow has multiple petals and yellow flowers. It originated with the Yao family less than a decade ago. The Yao family lives at Pai Ssu-ma Slope, in Hoyang. However, this flower did not spread here, but rather spread to Loyang. Even in Loyang they are scarce and only a few sprays are produced each year.

Niu Family Yellow also has multiple petals, and originates with the Niu family. It is smaller than the Yao Yellow. The Chen-tsung Emporer (998-1022) conducted sacrificial ceremonies at Fen-yin and on his return to Loyang, lodged at Shu-ching Pavilion. Mr. Niu presented these flowers and thus they acquired this name.

The Liquorice Root Yellow has single petals, and is of the color of kan-ts'ao (liquorice root). The Lo folk excel at horticultural distinctions, and observing the stem know that it is such and such flower. Only the Yao Yellow is easily recognized by its petals, and it is not rank to the taste.

The Wei Flower has multiple petals and flesh-red flowers. It originated with the minister Wei Jen-p'u's family. At first a woodcutter in the Shou-an Mountains noticed the flower, took a cutting and sold it to Mr. Wei. Mr. Wei's ponds and buildings were vast and it is related that when the flowers came to bloom, those who wished to see them were charged a dozen cash or so, embarked upon a boat and taken across the lake to the flowers' location. Mr. Wei thereby collected a dozen or so strings of cash every day. Later, falling on hard times, he sold his gardens. Now the woods and lakes behind the P'uming temple occupy these grounds. The monks here tilled this land and planted mulberry and wheat. A great number of the flowers were distributed among the local families. Someone counted its petals and stated that there were as many as seven hundred. Ch'ien Ssu-kung once said, "People call the tree peony the 'king of flowers.' Now, if the Yao Yellow can indeed be considered the king, then the Wei Flower is the queen."

The T'ing Red has single petals and deep red flowers. It comes from Ch'ing province, and is also called Ch'ing province Red. In the past the pu-yeh officer Chang Ch'i-hsien had a residence in the Hsien-hsiang (worthy ministers) district of the Western Capital (Loyang). He transported this species by camel-back from Ch'ing province. Thereafter it spread throughout the Lo area. Its color is like the stiff t'ing waistband and so it is called the T'ing Red.



The Presentation Red is extremely multi-petalled, with pale red flowers. When the p'u-yeh officer Chang retired from his ministership, he resided at Loyang. Someone presented him with this flower and so it was called Presentation Red.

The Adding-color Red is multi-petalled. When it first blooms it has white flowers but after several days it gradually reddens until by the time it falls it is deep red. This transformation is particularly artful.

The Cranes-in-Harmony Red is multi-petalled. The tips of the flowers are white and the base flesh-red like the coloring of the crane's feathers.

The Fine Petal and Coarse Petal Shou-an both have multiple petals and flesh-red flowers. They originate in Shou-an district, in the Chin-p'ing Mountains. The Fine Petal is especially beautiful.

The Inverted Sandalwood-heart is multi-petalled and has red flowers. With most flowers, the color is deep near the calyx growing paler towards the tip. This flower, however, is deep-colored at the edges, growing whiter towards the calyx, and with deep sandalwood spots in the heart. This is utterly charming.

One Tucked-in-Red is multi-petalled, with pale red flowers. The extreme tip of the petal is deep red, as though tucked in (pinched?) by three (or third?) fingers.

Nine-stamen True Pearl Red has multiple petals and red flowers. The petals have a dot of white like a pearl, and are densely knit around the stamen.

One Hundred and Five has multiple petals and white flowers. In Loyang the flowering season occurs during the Grain Rains (c. April 20 to May 4), but this flower blooms as a rule from the one hundred and fifth day at the earliest (i.e., one hundred and five days after the winter solstice.)

The Tan province and Yen province Red both have multiple petals and red flowers. It is not known how they came to the Lo region.

The Lotus Flower Calyx has multiple petals, red flowers, and green tarsi in triple folds like the lotus flower's calyx.

The Tso Flower has multiple petals and purple flowers. The petals are dense and uniform as if tailored. It is also called Even-headed Purple.

The Cinnabar Red is multi-petalled and has red flowers. Its origins are unknown. A commoner excelled at grafting flowers as a commercial enterprise, and bought some ground in front of the Ch'ung-te Temple, where he cultivated a flower garden. He had this flower, but the great families of Loyang are still unacquainted with it and so its name remains little known. The flower petals are extremely fresh, and looking at them in the sun, they look like crimson blood.

Petal-base Purple has multiple petals and purple leaves, the color



of ink. It is also called Ink Purple. When in thickets, this flower always puts out at the side a large branch leading the petals over its top. It blooms some ten days longer than other (peony) flowers. Heigh-ho! The Creator Himself had compassion for it: this variety in comparison with others has its origins in the most remote locations. A tradition says that at the end of the T'ang dynasty, an empress's retinue included a kuan-chun jung-shih officer, in whose household this flower originated. It is thus also called Chun-jung Purple. This was so long ago that his name has been forgotten.

Jade Tablet White has single petals and white flowers. The petals are fine and long, like Chinese theatrical wooden clappers; its color is like jade and deep sandalwood-heart (pale reddish-brown). Few of the Loyang folk have specimens. I once went with Ssu-kung to the Fu-yen Monastery to view it. I questioned the monks there and was told its name. I have never seen it after that.

Ch'ien Pool Purple is multiple petalled and has purple (or very dark red) flowers. It originated in the Ch'ien Pool Monastery, behind the Lung-men Mountains, originally the T'ang premier Li Fan's country retreat. This variety has already disappeared from this temple, but there are people who have it. At first the flower is purple, but suddenly, in a thicket, it will put forth a head or two of deep red flowers. The following year this color will transfer to a different branch. The Lo folk call it "Passing from Branch to Branch Flower." Cuttings are very hard to obtain.

Doe's Womb Flower is multi-petalled, and has purple flowers with white dots like the pattern on a doe's womb (belly). Su Hsiang-yu's imperially-conferred residence (the produce of which was used for ceremonial sacrifices) has specimens.

The Multi-Petalled Purple's origins are unknown. At first, before the Yao Yellow had appeared the Niu Yellow was considered supreme, and before the Niu Yellow had appeared, the Wei Flower was considered supreme. Before the Wei Flower had appeared, the Tso Flower was considered supreme. And before the Tso Flower, there were only the likes of the Su Family Red, the Ho Family Red, and the Lin Family Red, all of which had single-petalled flowers, and which at the time were considered supreme. After the appearance of the multi-petalled and multiple petal flowers, these flowers have fallen from their former eminence, and people today no longer grow them.

At first, there were no written records of the tree peony, except in the materia medica, in which they were noted for their medicinal qualities, and so they were not ranked highly among flowers. For the most part, from Tan and Yen provinces westwards to Pao-hsieh Circuit, there are a great many, and are regarded no differently from thorns and brambles. The local people gather them for firewood. From the time of the T'ang Empress Tse-t'ien (684-704) onwards, the Loyang tree peony began to flourish. However, there was no mention



of any specific nomenclature, i.e., the likes of Shen (Ch'uan-ch'i), Sung (An-shu), Yuan (Chen), and Po (Chu-i) all excelled at versifying flowers and herbs, but differ from the records of today in that they always gave descriptions in their texts but said nothing about any tradition. Only Liu Meng-te wrote a poem about the tree peony at the household of Yu Chao-en, and merely said, "In a single clump, ten thousand heads." Nor did he mention its beauty or its distinguishing features. Hsieh Ling-yun wrote that there were many tree peonies among the fine bamboo on the banks of a river. Nowadays the Yueh Flower is nowhere near as good as the Loyang and that is because the Lo flower is more flourishing than it has ever been.

#### 3. Customs

The commonfolk of Loyang for the most part have a great fondness for flowers. In the springtime, the people in the city, no matter whether noble or baseborn, all wear flowers. Even the officials do so. When the flowers bloom gentry and commoners vie in taking pleasure trips and strolls to ancient temples and derelict households and turning such places as have lakes and pavilions into marketstances. They open up tents and awnings, and everywhere is heard the sound of music and singing. It's all most flourishing on the pleasure-boat embankments, the **prunus japonica** area of the Chang residence gardens, the East Lane of the Ch'ang-shou Temple and the Kuo Ling household. All this goes on until the flowers fall.

Loyang is six post-stages from the Eastern Capital (K'ai-feng) and never used to send flowers there. But recently when Li, the hsien-hsiang, Yu of Hsu province became the liu-shou officer (a high imperial appointment in the metropolitan district), the peony was first presented at the Imperial Birthday (i.e., the first decade of the eleventh century). A single ya-chiao officer (a junior position, usually given to those of persevering nature, and good fighters) mounted upon post-horses in a single day and night reached the capital city. The presentation did not exceed three or so sprays of Yao Yellow and the Wei Flower, which were wrapped in vegetable leaves and placed in a firm bamboo basket so that they would not be thrown about on horseback. The blossoms were sealed in wax, and the peduncle did not shed for several days.

For the most part, Loyang households all have flowers, but rarely go in for large trees. And if they are not grafts, they are not valued. In early spring, the Lo folk take little cuttings in the Shou-an Mountains and vend them in the city, calling them "mountain combings." People cultivate some ground into small plots, fertilize them and plant the cuttings. By autumn the cuttings have taken. A famous specialist in such cuttings was called "Men-yuan tzu" (Specialist Gardener) because his name was Tung-men (East Gate. This is a pun on men, meaning "gate" hence "insider" or "specialist"). The eminent families without exception all requested his services. One cutting of Yao



Yellow was worth five thousand cash. The purchase contract was made in the autumn, and when in spring the flower was seen, the purchase price was paid. The Loyang folk are extremely grudging of this flower, and are unwilling to circulate it. When powerful nobles seek cuttings, they are sometimes given those that have been killed by immersion in hot water. When the Wei Flower first appeared, a cutting was also worth five thousand cash. Nowadays it is still worth a thousand cash.

Cutting time should be between the Spring Grain Festival and the Double Ninth (9th day of the 9th month); other than this it is unsuitable. A cutting should be taken five to seven inches up the main stem from the ground, enclosed in loam, set in soft earth, and covered over by a structure of arum leaves to prevent exposure to wind and sun. A small opening to the south should be left for ventilation. When springtime comes, dispense with the cover. This is the method of cultivating cuttings. Pottery tile may also be used. In planting the flowers, one must select the very best earth. The old earth must be completely removed and replaced with fine soil mixed with a chin weight (approx. 1/3 of a lb.) of pai-lien. This is because the tree peony roots are sweet and are very attractive to insects, and pai-lien is insecticidal. This is the way to plant the flowers. Watering the plants must also be done at the proper time. Some people do so before the sun has risen; others do so after the sun has set. In the ninth month (approx. October) the flowers should be watered once every ten days; in the tenth and eleventh months, they should be watered once every two or three days; in the first month (approx. February) they should be watered every other day; and in the second month they should be watered every day. This is the method of watering the flowers.

If a single stem produces several heads, prune away the small ones and leave only one or two heads. This is called "stripping" lest the arteries be divided. When the flowers have fallen, trim the stems; do not allow them to form seeds, since this will age them. At the beginning of spring, having taken away the arum-leaf shelter, remove the thorns from the more heavily-thorned branches on the flower thicket. If the air is warm, it may be possible to avoid frost and there will be no damage to the flower buds. This is true of larger trees, too. This is the method of cultivating the flowers. If the blooms are smaller than before, that indicates insect damage. In this case, look for the wormholes and apply liu-huang (sulphur). If at the side of these holes there are further tiny holes like the eye of a needle, then that is where the insects are located.

Horticulturists call this the "transom." Take a large needle dipped in sulphur and poke the end. The insect will then die and the flower again flourish. This is the method of curing the flower. However, if a cuttlefish-bone needle is used and the bark of the trunk is penetrated, the flower abruptly dies. This is what the flower must avoid.



# IN MEMORIAM RALPH ROHDE November, 1978

Written by George Tollefson, Fargo, North Dakota

I enclose my check made out to the A.P.S. as a memorial to our very good friend, peony lover, show competitor, and one of the finest gentlemen that we have ever known, Ralph Rohde, whose funeral we attended at Grand Forks, N.D., yesterday, in the First Presbyterian Church of that city. Ralph had been a member of the building committee of that church and his popularity was demonstrated by the well filled sanctuary and floral memorials all over the front like you wouldn't believe.

Ralph had gone out in a manner that he would have chosen. He had gone out to Bowman, N.D., with a party on a deer hunting trip. On Friday, he had lined his sights on a fine buck and brought him down, and experienced all the ecstasy and elation that only those who have had this experience can understand. But on Saturday he succumbed to an old heart ailment for which his twin sons, both doctors and heart specialists, had treated him for several years.

Ralph was a World War II veteran and his passing thins the ranks of our Buddies by one more. He was a successful businessman, being president of the Congress Company, a wholesale distributing firm, from which he had retired some years ago to let his brother take over. But his brother passed away suddenly, and Ralph had to go back into the harness again. However, he seemed to find time to do what he liked best — grow flowers. I recall, years ago when Tuberous Begonias were a craze, driving to the Forks to see his display. Later he became interested in dahlias and built a lath house for his giants. By then his peonies began to mature and he was off and running, and for many years he became one of my toughest and most friendly competitors. He served his terms as president of the North Dakota Peony Society and was a big help in securing the financial backing of the merchants for our shows. His charming wife, Hazel, was also a power in the Garden Flower Section of the shows. She will now be moving to her home state of California where she can be near her twin sons at Covina. She also has a daughter at Bismarck, N. Dak.

We can only hope that whoever buys the Rohde house will have a little of the love of beautiful flowers that was an inspiration to Ralph, and deal kindly with his beloved peonies.

### Z. R. PRENTISS

Mr. Z. R. Prentiss, Akron, Ohio, died July 7, 1978.

Quote from Bulletin #226, "Four hundred peonies were planted by Mr. Z. R. Prentiss of Akron, Ohio, at the Stan Hywet Gardens. His work was freely given as one interested in the peony and civic beautification." This planting is of magnificent beauty and will always be a living memorial to Mr. Prentiss, who had an ardent love for the peony. -42-

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### **EDWARD L. WOOD**

Mr. Edward L. Wood of Lockport, Illinois, died Sept. 1978.

Mr. Wood grew peonies for pleasure. He added new varieties every year to his large acreage, having over 125 different named varieties. Working with his beautiful peonies was his great pleasure. He was a member of the American Peony Society for many years.

#### PREPARING PEONIES FOR EXHIBITION PURPOSES

Continued from P. 39, Bulletin #228. W. F. Christman

The first step is the choosing of well-established plants, which should be at least three years old. Sometimes splendid specimens are secured from two-year-old plants. Very liberal cultivation of the plants is imperative from the time they make their appearance in the spring until the plants have attained their growth and the buds are well formed. Should there be insufficient rainfall during the growing season, see that your plants are well supplied with water, for this is one of the most important items in the production of large exhibition blooms.

FERTILIZATION is also important, and to get the most out of your plants should be resorted to. Well-decayed cow manure will be found the best fertilizer for all practical purposes. Spading in between the rows and following by liberal applications of water will distribute the liquid manure directly to the roots of the plants. This should be done as early in the season as possible. If this is not done, liquid manure applied at least once a week, twice, if possible, at least a month before blooming time will be found especially beneficial in producing fine show flowers. An application or two of nitrate of soda in the form of a liquid will also produce very noticeable results. A quarter of a pound is sufficient to cover a square rod when not used as a liquid. Potash in the form of a liquid applied to the surface of the ground (do not spray on the foliage), used once or twice during development of the plant will also be found beneficial. Wood ashes may be used liberally with splendid results. Bone meal is also a splendid fertilizer but does not give as quick results. Would prefer the application of liquid manure above all others. The matter of fertilization can be easily overdone and a word of caution at this time may not be amiss. In our zeal to achieve unusual results we are apt to let our enthusiasm get the better of us to the detriment of our plants.

DISBUDDING—This is absolutely imperative if you want to get specimen bloom. The lateral or side buds should be removed, leaving only the central bud (which is usually larger), remaining. These should be pinched or clipped off as soon as the buds have attained the size of a pea or soon thereafter. By holding the central bud, or the bud you choose to remain, the lateral buds are easily removed by a quick, downward movement with the free hand. I do not mean to strip the leaves but to remove each bud separately. After some practice you can



do this quite rapidly by using both hands without holding the central bud. I do not approve of cutting off all the stems but those selected with the most promising buds, as is advocated by some, as it tends to injure your plant. When you remove the specimen bloom there is not sufficient foliage left to properly care for the root system if this method is followed.

CHOOSING YOUR FLOWERS—After the buds are well-developed the most promising ones may be hooded by placing a paper sack over the bud and holding it in place by tying loosely with twine, or what is better, a rubber band. See that the rubber or string is not so tight as to prevent free circulation to the bud.

The hooding is not absolutely necessary but if a very rainy season as is oftentimes experienced, it protects the bud very materially. If necessary to hold some days before exhibiting, the buds may be cut as soon as they are about ready to open and placed in a dark, cool cellar. This varies somewhat with the different varieties which can only be determined by experience. No absolute rule can be followed but the slow developing varieties should remain longer undisturbed than the more loosely formed or free blooming varieties. Place them in water for three or four hours after which the buds should be wrapped in oil paper to prevent them from getting wet. It is very necessary that the buds are dry before being placed in cold storage or they will spot and turn dark. It often becomes necessary to cut your exhibition blooms during rainy weather. By taking hold of the stems firmly and swinging the flower with a downward motion most of the water can be removed. This can be done without snapping off the stems if the arm moves in a circle.

Several hours before time of exhibition they should be removed from storage, placed in water after the stems have been freshly cut to permit free circulation, and placed in the sun or a warm room, where they will rapidly unfold. If you find they are opening too slowly, a gentle shaking of the stem, firmly holding directly beneath the bloom and blowing gently with the breath, will produce the desired result very promptly. You should always make ample provision, where possible, to have extra flowers on hand of the variety you wish to display, as some may not be of exhibition quality or may become damaged in some manner to make them unfit for show purposes.

Considerable trouble and expense is saved if it is not necessary to resort to cold storage (or to your own refrigerator as a substitute for a cold storage plant), if you only have a few blooms to take care of and can leave them to develop in the fields. They should be protected from the sun that will fade the delicate colors on some of the varieties and the rain that will deteriorate their quality. By bringing them in the house and placing in water in a dark, cool cellar just as the bud is starting to open, you will preserve the natural color of the bloom and the flower will have considerable more quality and substance. Flowers taken from cold storage will not hold up long after they have been exposed to heat. -44-



#### 1978 REGISTRATIONS

The following peonies registered by The Charles Klehm and Son Nursery, Arlington Heights, Illinois.

All were hybridized by William H. Krekler, Somerville, Ohio.

LITTLE PRINCESS, 734, Hybrid, May 22. 18 inches, single orange red.

EARLY BEAUTY, K768, Hybrid, May 27. 30 inch, single deep red. EARLY SHOW, K774, Hybrid, May 28. 34 inches, single pink cutter. GAY MAY, K786, Hybrid, May 29. 35 inch gay pale, salmon pink. MAGIC CUP, K795, Hybrid, May 30. 33 inch, big pale pink single. BOLD ONE, K807, Hybrid, May 30. 31 inch, bright single red. MEMORIAL GEM, K812, June 1. 29 inch, twisty, chocolate red. MOONLIT SNOW, K820, Lacti, June 2. 33 inch, double near white. RUMPLED PINK, K824, Lacti, June 3. 38 inch, double flesh, big. FAIRY PAINT, K827, June 3. 35 inch, near white Japanese, generous.

WITCHCRAFT, K840, June 5. 31 inch, black red Japanese, creamed edge.

BUCKAROO, K850, June 5. 29 inch, bright wine Japanese, cutter, gav.

QUAKER PRIDE, K854, Lactiflora, June 7. 32 inch, near double white

MY DREAM, K864, Japanese, June 7. 27 inch, deep wine red-cream.

#### **PAEONIA**

Editors: The Lanings — Summarized by Bill Seidl

MARCH 1978, Volume 9, No. 1. Charles Trommer (Rehoboth, Mass.) reports a root knot nematode problem with his peonies. He wonders if any readers have planted marigolds to eliminate nematodes and he encloses an article by P. R. Robinson on the subject. In the article are described experiments where plantings of marigolds (1) successfully controlled or eliminated nematodes, (2) repelled weevils in African cropland, (3) discouraged growth of some noxicus weeds, but (4) became a weed itself in some warm climates, and (5) reduced the yield when planted with potatoes. The stronger-smelling old-type varieties of marigolds seemed more effective than odorless types. Sulfur compounds have been found in marigold roots and, in the leaves, a pyrethrum-type insecticidal alkaloid.

Harley Briscoe is looking for two varieties: BARBARA UTTER-BACK (Winchell 1948) and MOONGLOW (Rosefield 1939).

Notes from the Saunders' Notebook describe Prof. Saunders' lacti (albi) x coriacea crosses. The average yield was four seeds per pollination and ultimately produced a strain called "The Lavenders." The coriaceas, after blooming, have a brilliant red calyx. Editor Chris Laning wonders where the lavender comes from as the species coriacea



bright pink or deep red. He also points out the Lavenders are sterile and the parent species unobtainable. Chris believes lavender colors may one day occur in the lutea hybrids, noting that Daphnis hybrid #258 has a plum-purple color. Its parentage is (RED CLOUD  $\times$  F<sub>2</sub>A)  $\times$  CHONI (ROCK'S VAR.?).

Don Hollingsworth (Kansas City, Mo.) reports good success in grafting below-ground buds of Itoh hybrids. However, only a small but encouraging measure of success was achieved by using above-ground buds. Don also expresses a willingness to supply pollen of various lactis, hybrids, and lutea species to hybridizers in northern areas who wish to use pollen of later-blooming varieties on earlier kinds.

JUNE 1978, Volume 9, No. 2. Chris Laning gives detailed instructions for outdoor planting of seed. He recommends a cold-frame type enclosure to facilitate weeding, watering, and protection of plants from animals, birds, and human feet. Plant labeled seed one inch deep, one inch apart, in June, July, or August, later if necessary—as for new-crop seed. Protect tree peony seed from freezing for first two years. Locate seedbed in full sun but screens or laths can be used to provide half-shade. Transplant one-year-old seedlings but allow a second year for delayed germination, usually of lobata hybrids, t.p. crosses, and Itoh crosses.

Four pages are devoted by Silvia Saunders to a complete rundown of all the Saunders' Herbaceous Hybrids. These are listed alphabetically by the name of their species parent, beginning with albiflora x anomala F<sub>2</sub> (ECHO) and ending with willmottiae x macrophylla (SILVER DAWN, ANGELICA). There also follows a list of triple and quadruple hybrids. This excellent reference article is intended to help growers and hybridists to evaluate their own hybrid peony possessions and to aid in any "Save the Clones" project. Silvia's own preferences as to clones to save are HALCYON, FIREFLAME, SILVER DAWN and ANGELICA, 16350 F<sub>2</sub> (double, fertile triple hybrid), PICOTEE, the WINDFLOWERS, the LAVENDERS (from P. CORIACEA), CAMELLIA and DIANTHA (both of these from P. DECORA ALBA).

Knowing the pollen quality of intended parents helps immensely in planning one's crosses and making them efficiently. Prof. Saunders came to realize this and evaluated many hybrids for pollen viability and recorded his findings in his notebooks in a certain format. Don Hollingsworth analyzes this format. An entry such as "pollen v few — O — v few 5-7%" indicates a two-part evaluation. The first part, "very few, none, very few" refers to Prof. Saunders' evaluation of the pollen germination in three tests in a culture medium, each test at a different level of sugar: 5, 10, and 15%. This evaluation is not expressed as a per cent because of the difficulty in counting the elongating pollen tubes due to their intertwining. The second part, "5-7%," is the ratio of fertile pollen grains to total number as observed dry under magnification, assuming that full plump grains are fertile and that dry shriveled ones



are not. Don goes on to list the equipment and supplies needed for testing pollen germination and gives the measures suggested by Prof. Saunders.

In a letter to Don, Father Joe Syrovy (Vining, Iowa) reports failure in propagating Itoh hybrids by attempting to root detached stems having above-ground buds. He believes that cuts should be made in July below the bud to stimulate callus development. In fact, he suggests this might be a good practice in grafting tree peonies, that is, in July make partial cuts of the intended scion. This suggestion is the essential point in the next article.

"How To Root Tree Cuttings" is the title of an article in a government bulletin by Dr. Robert C. Hare of the Forest Service, U. S. Dept. of Agriculture. Reprinted in Paeonia, the reader can make his own judgment as to how well the method will work for tree peonies. The key is to girdle the intended cuttings a month or two before detaching from the parent plant. This prevents translocation of sugars out of the shoot via the inner bark, causing an achumulation of food reserves above the girdle and thereby causing the formation of callus tissue and root primordia (small bumps). Girdle the shoots (hardwoods in late spring, pines in mid-summer) by first defoliating a two-inch section six to eight inches below the terminal bud and removing a one-inch ring of bark in the defoliated section. Apply a slurry of rooting powder to upper portion of the girdle and wrap with plastic film followed by aluminum foil. After six to eight weeks, sever cuttings below girdle, remove wrappings and select the most promising stock, that is, those having bumps or root beginnings. (Girdle more cuttings than you will need as not all will develop root primordia.) Reclip the cuttings at upper end of girdle, moisten, dip base in talc containing powdered sucrose and captan, insert cuttings into rooting medium of perlite and vermiculite, maintain warm temperature and humidity in greenhouse (or in perforated-bottom milk carton with polyethylene enclosure about the plant). After about three months, transplant rooted cuttings into individual containers to allow root system to become established.

### **HYBRIDS FROM SPECIES TREE PEONIES**

C. Graham-Jones, England

Botanical hybrids between species P. Delavayi and P. Lutea Ludlowi have not been plentiful in the British Isles. The first to be recorded was the one raised by Lord Russe in Ireland and given a Royal Horticultural Society award in 1961, to be named ANNE ROSSE.

A plant of this hybrid can be seen growing at 'Nymans,' the English home of Lord Rosse in Surry. The description of its color is a buff-yellow with red stripes down the back of each petal. No scent was detected when I saw it a few years ago. The seed parent may be P. Delavayi. -47-



This year (1978) there is much interest by the announcement of three more which have different characteristics, all of which are listed in chronological order:

This was reported in the June issue of the R.H.S. journal "The Garden," accompanied by photograph A. It is the most colorful of the three. Mr. Hills of Co. Donagal informs me that it came from a self set seedling near where P. Delavayi and P. Lutea Ludlowi grow and the seed parent is unknown. Seed are very scarce.

A letter from Charles Scott in Cheshire, England, describes his flower a distinct yellow with a red stripe. He does clarify the parentage as P. Delavayi as the seed parent, although no mention of the size or the position of the stripe.

Mr. John Beattie of Reigate Heath, Surry, England, also has a hybrid which he describes as a light lemon yellow with red stripes on both sides of the petals. Photograph B. This bloom is sweetly scented. The seed parent is unknown. The seedling was found 10 yards from P. Lutea-Ludlowi and 25 yards from P. Delavayi. The leaf and wood examined is





B

P. Lutea Ludlowi. The scent in this bloom is of P. L'Esperance which is growing nearby. I will see the flower in 1979. Mr. Beattie has horticultural knowledge of which he has tried propagation with rooting cuttings, without success, also earthing up around the plant base to encourage side growths. His plant is four years old, rather young to produce seed which is the easiest way in this country, with these hybrids. I have received two buds to try grafting, which were grafted on roots of P. Lutea Ludlowi. This was considered more compatible than herbaceous stock of P. Lactiflora.

As the plants grow older, more seed are produced which will be planted, but we still have the unknown factor.

The plant of **P**. **Delavayi** involved in this cross was the usual dark form with blooms about two inches in diameter, but unfortunately this shrub was lost two years ago. I have replaced this seedling of **P**. **Delavayi** to Mr. Beattie with a plant that produces four-inch flowers. This came from the stock of Sir Frederick Stern and is far superior.

I am looking forward to the 1979 season when I hope this cross will be carried out in the Stern garden with the superior strains available, with suitable weather conditions when these two species open their blooms in May. -48



#### THE PEONY PATCH

Ben Gilbertson. Kindred, North Dakota 58051

The year '78 was the year when the usually poor peony became good and the usually good peony became fabulous, at least in our area of the Red River Valley of North Dakota and Minnesota. This was especially evident in the varieties DAKOTA PRINCESS and GOLDILOCKS, both of which I had classed as good peonies but which this season proved themselves even better than that.

We had an early spring with the last freeze on April 10 and an early start of peony growth with the first bloom—Tenuifolia—on May 14th and the last was also earlier than usual—Oriental Gold.

Our nearly ample rainfall came quite regularly and without any hail or wind damage but rather dry through July and August but never too dry or deep enough to hamper the growth and development of the established peony plants. I did have to water the very small one and two-year-old peony seedlings two or three times. Fall digging was just ideal, not too wet or too dry.

The four plants received from Leningrad, U.S.S.R. were evaluated and the variety PALL, a Tenuifolia type Fernleaf with a purple colored single flower was dug and divided for further growing and distribution as it is an interesting plant. The foliage is somewhat coarser and darker green than the Tenuifolias but has a similar root system. I have used single Tenuifolia pollen on it and used its pollen on Tenuifolia without any results. It could be a hybrid or a tetraploid. We shall have to try harder next time we get some flowers on it.

ANOMALA L. also bloomed for me the second time and its flowers are very similar to PALL but more nodding or down facing. It's seed—open, which I harvested and planted as I also did in '77 but had no sign of little seedlings this year.

**POCEDA**, which was listed as a hybrid, bloomed for the third time, a dark pink, very double flowered that has never quite been able to fully open for me, was discarded. It reminded me of **Solange**, which I grew for many years and had good bloom in only one season.

The fourth and last was NOVESTA, a very tall upright and husky grower with single purple flowers. It was also discarded as it was sterile both ways. I had asked especially for purple flowered plants since we do not have any of that color in our trade. I will have PALL & ANOMALA L. in a year or two in a very limited quantity for those who will want them.

The seedling of Claire de Lune—open, that I mentioned last year bloomed for the first time and had a bomb type double flower of a rather poor dirty pinkish color. It was pollinated with Alice Harding Tree Peony pollen—unprotected, and came on with 25 seeds that were plump and heavy. I would like to have some Oriental Gold pollen for use on this one next spring but since this is an early bloomer and



Oriental Gold is very late, I probably will not get any in time. I do have several plants of Oriental Gold of blooming age and will try to force one into early bloom.

The other seedling that I mentioned last year was what I thought might be an Itoh-type hybrid, but I am very doubtful now that it is. This year it came up like any ordinary lactiflora; each of the four plants had one stem with one bloom, a single milky white of good size, nice tuft of pollen and a fine set of carpels. I bagged the first one to open and left it bagged for about 10 days and had no results so it did not self-pollinate. The next two to open had Alice Harding pollen and produced 45 seeds. The fourth one was left to open pollination and produced 25 seeds.

The large milky white single flowers had good pollen and carpels. Last year this plant had four stems, two of which each had a good well-developed bud about one inch above ground level in the fall and both sprouted and grew this spring. This was the only reason that I thought it might be an Itoh-type hybrid. This fall no such buds were evident.

Goldilocks, a seedling of Oriental Gold which in past years has had only medium sized, rather flat pale bright yellow flowers, no pollen but good fertile carpels and has had only its color and inherited possibility of producing our much sought-after good yellow double flowered peony, was truly fantastic this year. We had only a few two-year-old plants growing but they came on with very large and very full ball-shaped pale bright yellow flowers on all the primary stems and a very few laterals. We had nothing yellow to pollinate with on the primary bloom but had forced one plant of Oriental Gold intogearlier bloom so that I had its pollen for the three lateral blooms. The big primary blooms had only misformed carpels or none at all so there was nothing lost there, but the laterals did have carpels and I was fortunate in getting five good seeds from this cross of Oriental Gold x Goldilocks. It is my guess that when we get a good double yellow peony, it will come from an Oriental Gold base.

We had 12 3-year-old plants of 6414 this year that I had registered as **DAKOTA PRINCESS**, that really put on a show of its own. The flowers are a medium to light pink, very full double and this year were almost ball-shaped and huge. I showed three blooms at the Fargo Flower Show and since there was no 3-bloom class, I entered two blooms in that class and the other bloom by itself. All won first in their class plus Best Peony Flower in the show, plus the special award of Excellency in Horticulture. The best bloom measured a full nine inches across as nearly all of the primary flowers did.

New this year were two near yellow plants, pure lactiflora, very similar to Laura Dessert but larger and with a more brilliant yellow center tuft. I am not sure that this type of yellow is at all useful in developing a good yellow double but since it is so much easier to get yellow color in the guard petals than the main center of the bloom it may be of some importance that we work toward this end.



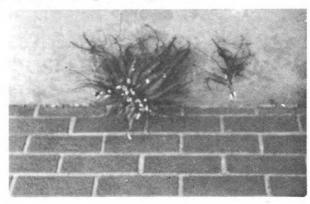
A new hybrid, Laddie x Early Scout pollen, came up with a full bomb type double of a rather dull red color, not much to look at but a very vigorous grower. It was left open but set no seed.

A Claire de Lune—open seedling I mentioned last year had one first bloom, a rather light bomb type double off white and showing a little yellow, was pollinated with Alice Harding pollen—open or unprotected and produced 28 good seeds. This plant seems to be very fertile. I will not register it but call it Claire de Lune 2 in my records. It has at least one-fourth Mloko. in its makeup. It could be of some value for breeding.

We also had a number of third generation Tenuifolia plants of **Double Tenuifolia** x **Single Tenuifolia**. That is the third cross of these, each time using pollen from the preceding cross—and one of them is quite good semi-double and I used its pollen on my double Tenuifolias this year, which will make the offspring 15/16ths of double breeding. I hope to eventually produce a new double Tenuifolia as the end product. I dug the very vigorous plant and it had an enormous root system which weighed over two pounds. I could have made many divisions from it easily. It was six years old from seed planting.

New third generation Tenuifolia root.
Common single Tenuifolia on the left.

Ben Gilbertson



In summarizing the summer's events, I feel that we have made a very tiny step in the right direction towards that evasive real honest-to-goodness double yellow peony and the five seeds of Goldilocks x Oriental Gold and the discovery of a highly fertile Mloko. offspring.

The old **Mloko**. I mentioned in last year's notes that I cut into four pieces and replanted, gave me four nice new **Mloko**. plants and I hope I will have a bloom or two for pollen next year. Season's greetings to all.

### COLORED SLIDES

Our thanks to Mr. W. G. Sindt for his contribution of the following colored slides for the slide library.

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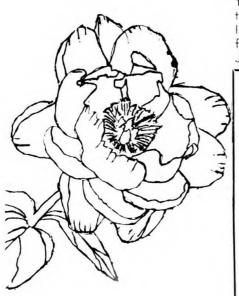
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