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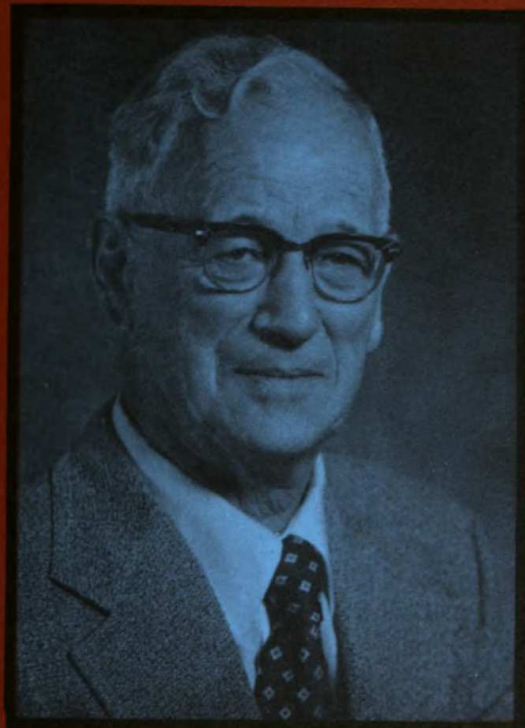
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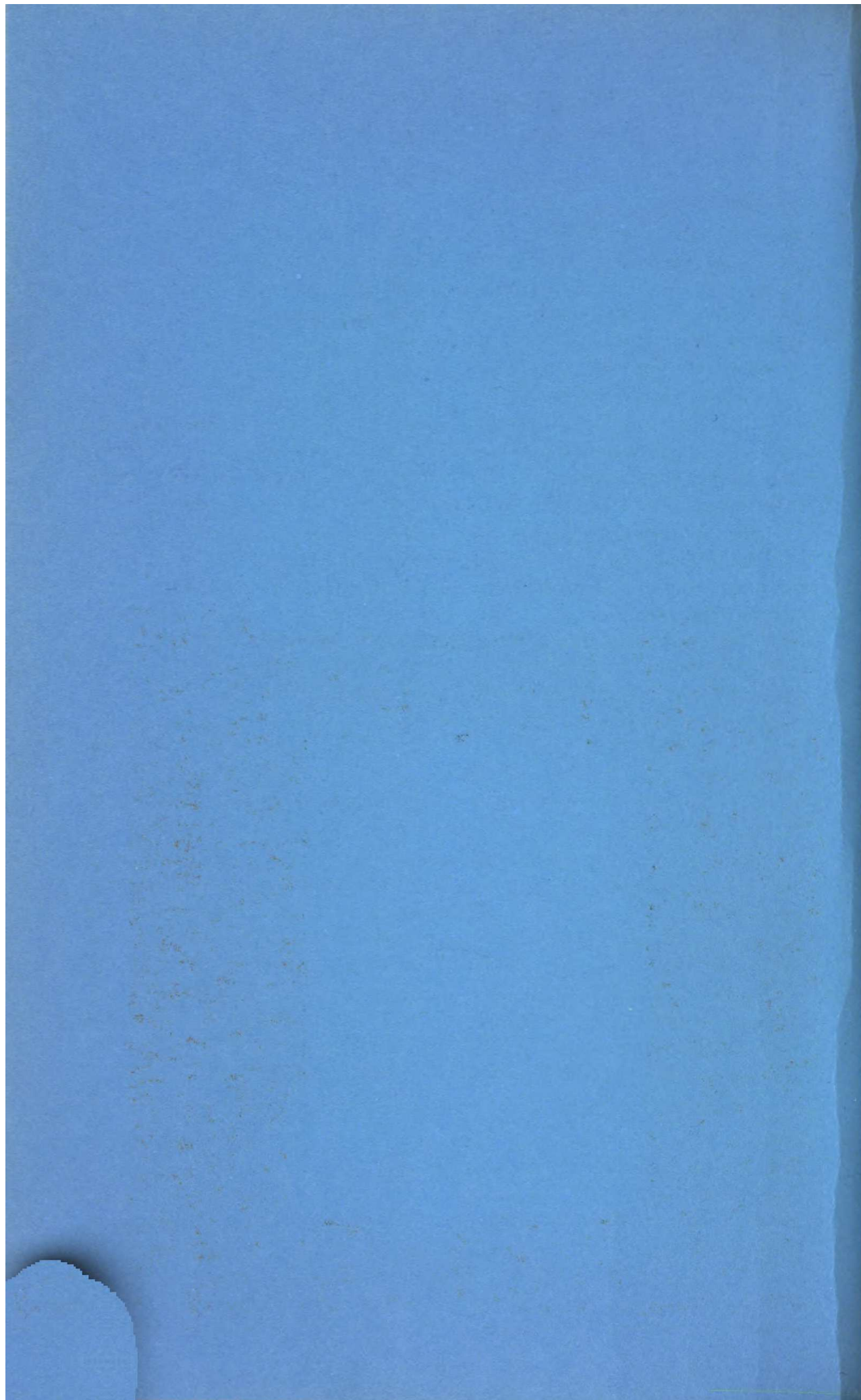
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# The American Peony Society Bulletin





## **WILLIAM H. KREKLER, SOMERVILLE, OHIO** *Bulletin cover.*

*Hybridizer, work of a lifetime. Mr. Peony.*

Bill Krekler, now 80 years of age, has spent many happy years in landscape architecture and in the nursery business in Ohio, Indiana, California, Boston, and New York. He has registered 366 peonies and many daylilies, beautiful varieties for our gardens of today. Over the past years he has planted bushels of hand-pollinated peony seeds, hybrids, trees, and lactifloras, as well as many gallons of shelled dayli seed from the best stock.

In the winter months, Bill and his lovely wife reside in their home in Whittier, California. He continues to be active, especially in hybridizing. Bill rents his Peacock Nursery at Akron and his Mexican land to his son, Norman. In the spring he returns to his farm home near Somerville, Ohio, where his beloved flowers are grown.

His life's work and achievements take on a regular Horatio Algiers accomplishment. When he began registering so many peonies at one time, he explained that he had been growing these seedlings for many years, caring for them and evaluating acres and acres of seedlings for a very long period of time. When the Charles Klehm and Son Nursery were interested in all of them, they had to be registered. All of his peonies have been purchased by Klehms and have been moved to the Klehm Nursery in southern Illinois. In his semi-retirement, he enjoys one of each of the few hundred of the very best varieties that were left for him for more breeding. In addition to his beautiful peonies, he has several thousand daylilies from hand-pollinated seed that are growing at his Ohio farm.

He has given truckloads of peonies and daylilies to arboretums, colleges, and public parks, the blooms being enjoyed by many. Bill was awarded the gold medal at the World's Fair in Hamberg, Germany. He has sold more peonies abroad than in the U.S.A. He was awarded the American Peony Society medal. The inscription read, "Hybridizer Supreme." He has always been a supporter of the American Peony Society, writing many informative articles for the Bulletin. He wrote some of the material for the book *The Peonies*, as well as being on the Editorial Committee. He is one of the peony greats of today.

His favorite peonies that he rates as excellent are:

**Bessie  
Bob Krekler  
A. Krekler  
James Lewis  
Bride's Dream  
Dad  
Bev  
Brucie**

**Ray Payton  
Gladys Hodson  
Camden  
Kevin  
Ann Goemans  
Eliza Lundy  
Golly  
Harry L. Smith**

**Illini Warrior  
Lord of Spring  
Lloyd Kennedy  
Alice Roberts  
Cincinnati  
Eaton  
Begun  
Sweetie**

**Bill's Darling  
Helen Matthews  
Greta  
Cora Stubbs  
David Lee  
Dutch Dwarf  
Martha Reed  
Rose Noble  
Snow Storm  
Carver  
Big Mama Bear  
Becky  
Don Richardson  
Gratis  
Myron Branson  
Nellie Saylor  
Beacon**

**Dawn Pink  
Ludovica  
Barbara  
Firebelle  
Flame  
Chalice  
Garden Peace  
Red Charm  
Mrs. F.D. Roosevelt  
Burma Ruby  
Montezuma  
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Westerner  
Splendens  
Princess Margaret  
Myrtle Gentry  
Moonglow  
Miss America  
Maestro  
Joseph Christi  
Marion  
West Elkton  
Do Tell  
Lanings Seedlings**

## **FIFTH DISTRICT PEONY EXHIBITION**

*June 14-15, 1980, Woodfield Mall, Schaumburg, Illinois*

*Location: Intersection I-290 and I-90,*

*just northwest of Arlington Heights in Schaumburg*

Workroom open Friday, June 13—Schaumburg Room B. Exhibitors use entrance by Magic Pan Restaurant on southeast side of the complex. Located between Marshall Fields and Sears. Workroom open for late evening arrival of flowers.

Saturday: Workroom open 5:00 a.m.

Show Schedule: March Bulletin 1980

Show is scheduled to be set up and ready for judging by 9:30 a.m. Saturday.

Mall is open Saturday from 9:00 a.m. to 5:00 p.m., Sunday from 12:00 noon to 5:00 p.m.

For list of accommodations, artistic schedule, or information, write or phone Judith Rose, R.R. #2, Box 120, Elgin, Illinois 60120, Phone 312-695-3848.

## **MINNESOTA PEONY SOCIETY EXHIBITION**

*June 21-22, 1980*

*Har-Mar Shopping Mall, 2100 North Snelling  
Roseville, Minnesota 55113*

Location—One mile north of the state fair grounds and one block south of Highway 36.

Use entrance door near Cicero's on the east side.

Show schedule: March Bulletin 1980

Information: Floyd Kimball, President, Telephone 439-7953, 4290 Northbrook Blvd. North, Stillwater, Minnesota 55082.

## AMERICAN PEONY SOCIETY

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 Vice President ..... Irvin Ewing Bulletin Editor ..... Greta M. Kessenich

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### DEPT. OF REGISTRATION

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

Greta M. Kessenich, Secretary

### OBJECTIVES

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

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

### MEMBERSHIP

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

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

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

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

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



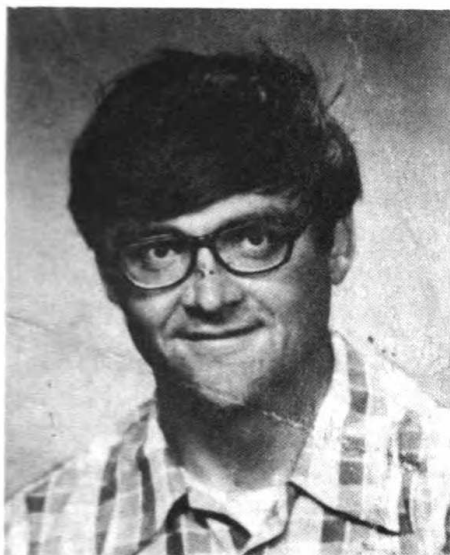
# AMERICAN Peony Society Bulletin



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## FROM YOUR PRESIDENT

### PRESIDENT'S MESSAGE

Dear Peony Lovers:

Now that spring is here, one's thoughts turn to the upcoming Peony Convention and the joy of seeing the beautiful blossoms of our beloved peony on display for each and every one of us.

I personally would like to extend an invitation to attend the 1980 American Peony Society Convention and Exhibition to be held at Cornell University in Ithaca, New York, on June 5-8, 1980. It will afford everyone the opportunity of seeing and touring the campus and stopping at Cornell Plantations for a very brief "Dedication of the Garden" ceremony, followed by refreshments and then the show itself.

I encourage all peony lovers and growers to attend and participate in this show. Let us all make this a memorable and colorful event for our eastern neighbors.

Sincerely,  
Chuck Klehm

## ADDRESS OF MR. J. ELIOT COIT AT THE MEETING OF THE AMERICAN PEONY SOCIETY, ITHACA, NY, JUNE 27, 1907

*The American Peony Society is returning to Cornell University in June for the 77th annual convention. It was at Cornell in 1907 that the task of establishing a correct nomenclature was undertaken. Mr. J. Eliot Coit, a young advanced student studying the peony for his Ph.D., undertook this very large and exacting project. The project was under the direct supervision of the nomenclature committee of the American Peony Society.*

*From Bulletin #107.*

*Mr. Coit has been in direct charge of the peony department investigations at Cornell University.*

*Dr. J. Eliot Coit, Horticulturist, Educator, Author, and Administrator  
March 9, 1880 — June 4, 1976*

Gentlemen:

Up to the middle of the 19th century the only peony which was known to any extent in America was the old double red of our grandmothers' gardens. It was comparatively common throughout the extent of the Atlantic seaboard, and its large vivid red blossoms with their disagreeable soapy odor were familiar to everyone. Even to the present day this flower comes into the mind of perhaps the average American when the peony is mentioned. For various reasons, this old peony was looked upon as an indelicate and unrefined flower, rarely, if ever, given a prominent place in the collections of discriminating flower lovers.

However, a great change in sentiment was destined to take place, and this brought about by the introduction of the species *Paeonia albiflora*, popularly known as Chinese or Chinensis peonies. This species bore single white flowers with many buds upon a single stalk. Under the stress of cultivation by the Chinese and later by M. Lemon, Victor Verdier, M. Guerin, and others of France, it sported into many shades of red and all degrees of doubleness. It possessed all the beauty of the old *officinalis* type and also combined fragrance with great hardiness. I consider the species *albiflora* therefore as responsible for the great wave of popularity which the peony has undergone, and as evidence I offer the fact that the vast majority of the popular varieties on the American market today belong to this species or contain a large share of *albiflora* blood.

### Peony History

The history of the peony previous to 1650 should be treated in two parts, for before that date the peony of the Greek and Latin literature was the *Paeonia officinalis* which is wild in southern Europe. The ancient history of *P. moutan* and *P. albiflora*, however, lies entirely in China and Japan, as previous to 1656 neither of these species were known to Europeans.

It is the species *P. officinalis* which probably secured for the genus its name. The genus *Paeonia* was so named by the ancients in honor of Paeon, a physician, who cured the wounds received by heathen gods during the Trojan War. Antiquity celebrates the virtues of this plant and places it among the wonders of the vegetable creation. Fable gives us its origin, Aesculapius its properties, and superstition ranks it among miraculous plants, assuring us that demons will fly the spot where it is planted, and that even a small piece of root worn around the neck is sufficient to protect the wearer from all kinds of enchantment.

### The True Peony

In A.D. 536, the Chinese in a general way distinguished two kinds of peonies: the Sho Yo or common kind which we know as *P. albiflora*; and the Mew Tang (Mow Tan) or improved kind which we recognize as *P. moutan*. In their flower gardens, the *moutans* claimed first place in point of beauty, and the Sho Yos took second place. For this reason the former were often called Hwa Wang, "King of Flowers," and the latter Hwa Seang, "The King's Ministers." I am indebted to an ancient Chinese horticulturist, Hung King, who wrote in 536 A.D., for the information that the original native home of the tree peony is the valley of Pa Keun, in the district of Hang Chung, in the easterly part of the province of See Chuen, together with the neighboring south part of Shen Se, or the country about the two rivers Kea Lin Keang and Han Keang. In 656 A.D., Soo King, another writer, announces Hang Chung as the native home of the tree peony, thus corroborating the account of Hung King in 536. I go into this matter thus fully because it has been repeatedly stated in print that the feral home of the tree peony is not known. Robert Fortune himself states in 1880 that the tree peony may be found on the mountains of the central provinces of China.

An old Chinese book on the "Origin of Matters and Objects" states that by 713 the number of kinds had so greatly increased that the plant was common about the huts of the poor as well as about the mansions of the rich. Soon after this, about 720, eleven hundred and eight-seven years ago, the number of kinds had so greatly increased that Gow Yang Sew established a genealogical register in which to record the characters, qualities, and parentage of the kinds which came from seed. So we find that our efforts to establish a register for our varieties of peonies are by no means original, but we must take off our hats to our friend, Mr. Gow Yang Sew, whose efforts along this line antedate ours by 1187 years!

In 1656 the Dutch East India Company sent an embassy to China which secured free access to that country, and in the published accounts of this embassy the peonies were described in glowing colors. To make a long story short, Sir Joseph Banks of England became interested in these accounts and after various unsuccessful attempts succeeded in 1794 in introducing into England two living tree peonies. Progeny of these plants were later introduced into France and Mons.

Noisette, a nurseryman of Paris, distributed them throughout the country.

### Albiflora History

The early history of *albiflora* is very similar to that of the *moutan* except that it was indigenous to a very wide range of territory in northern China and Siberia. As far as I have been able to find, the variety *Fragrans* was the first *albiflora* to find its way into Europe, and it was brought from China by Sir Joseph Banks in 1805.

Peonies of various kinds were introduced from China into Japan in 724 A.D. and were subsequently greatly improved by the Japanese. Peonies were first introduced into America by William Prince of Flushing, Long Island, soon after they reached England. McMahon speaks of them in 1806, and in 1824 Mr. Prince had a collection of over forty varieties. Some twenty other species have been introduced at various times during the past century, but they are of minor importance. Only one species (*P. Browni*) is native to America, and that we find in California. It is of value solely as a botanical curiosity.

### Evolution

Certain it is that the magnificent large fragrant blooms which appear upon our tables today are very unlike their wild prototypes which were introduced from Siberia. How has this vast improvement come about? What agencies have been at work? How are we to proceed to still further develop this wonderful flower? These are all pertinent questions, but their answers are difficult to find.

There are three chief causes of variation in plants. They are change in environment, change in food supply, and inter-crossing. Now, the genus *Paeonia*, together with its relatives, is naturally variable in a wild state. In addition to this, all three of these chief causes of variation came into active play when the peony was removed to Europe, a totally different climate, and heavily manured by the French growers, and all of the species obtainable were planted together in botanic gardens and amateur collections where they had every opportunity for inter-pollination. Many of the early growers cross-pollinated by hand to insure the production of hybrids. Even hybrids between the tree peony and the herbaceous sorts were secured. Small wonder then that the new generations presented striking and valuable variations which were selected as parents for succeeding generations. Not only did the peony vary in color, size, and odor, but most important of all, it varied greatly in form; and as a result, we have seedlings representing all stages of transformation from the simple single to the fully double.



## TREE peonies

Exotic and glorious are the blossoms of the tree peony. The culture of this peony differs from the herbaceous. Study the habits and follow the culture instructions before planting.

Then the peonies  
Extinguishing  
All others . . .  
Opened their petals. —Kiichi

*Anthony J. De Blasi, RFD 198A, E. Wakefield, NH 03830*

Cup your hands around a peony bloom and you cradle the universe. Reach over and breathe in its fragrance and you inhale the air of heaven. Gaze into its heart and you open the very gates of paradise.

Now the spirit soars like a bee in nuptial flight, as the mind skips off to sunny pastures, where happy times—treasured moments, wonderful experiences both lived and imagined—come into crisp focus, while reason flees to a cave to hide his stony face.

The wonder of it is that the few seconds it takes to regard the flower is transmuted to a sense of eternity, where time and space escape from the noose of mathematics. It doesn't matter how brief the interval may be by the ticking of the clock. *While it lasts, it is forever!* An eternal moment within a temporal moment! The cosmos rests in our hands!

Upon breaking out of this magical time bubble, we feel refreshed, strengthened, at ease, at peace. Unlike a daydream—which leaves us right where we were when we come back minutes later—this mini-meditation, lasting but a few seconds, lifts us and charges us with energy, as it fills us with a direct knowledge of the Creation.

The claim that there is so much significance in a flower may sound presumptuous to some. I remember vividly, during my student days, how I had to contain myself from laughing at a music instructor when he dissected a passage from Mozart's *Le Nozze di Figaro* and confronted us with numerous instances of subtle, hidden meanings behind the notes. For example, as a certain character in the opera grew excited, the notes climbed upward. As he grew sad, the notes went down. Rage, fear, hesitance, amorous intent, all had their echo in the music, which the composer used to "paint a fuller picture" than the words alone conveyed. The specific configuration of each melodic phrase graphically mirrored those emotions and imitated every action of the drama.

"Coincidence," I said to myself. "Surely Mozart was just writing appropriate music and had his mind on other considerations than that of burdening every detail with special meaning!" But upon closer analysis, and after observing how consistently the dramatic content of the opera correlated with the nitty-gritty of the music, I became convinced—and amazed—that Mozart had indeed charged every element of the score with a significance beyond the obvious, surface appeal of the music.

And why should the Creator have done less with *His* works? If we are drawn to a flower—that universally appealing marvel of nature, which seems to crystallize all of the purest essences of matter and spirit into a perfect unity, and which finds its way at the banquet hall of royalty, on the table of a humble cottage, in a bud vase attached to the door frame of a Japanese taxicab, on the grave of a departed loved one, in the hair of a girl, in a bouquet from a lover, in a bridal procession, at the altars and temples of worship—it is because we see in that blossom a living expression of divine beauty, to which we fancy a deep and mysterious relation.

The significance of the flower is clear to each beholder of this object of contact with God, and the meaning is not diminished one degree—in fact is infinitely magnified—by the fact that it is inexpressible in words.

There are many interfaces with heaven, but to my mind flowers are among the best, and of these, I believe the clearest and most successful is the peony.

## ABOUT PEONIES IN SWEDEN

*Hermann Krupke, Ljung, Sweden*

There are a lot of lactifloras in many older gardens. They are often richly flowering, but never or very seldom known by any name. You will also find the old red *Officinalis*, but hardly any *Tenuifolia*. *Lactifloras* visible here and there and are of different colors and shades. Most flowers are double, only a few are semi-double or anemone types. Singles or Japs I haven't seen yet, except in species.

From the Garden Amateur Society here, it is possible to get seed of 10-15 different species every year. Here is the latest list among 1300 other perennials: *P. Anomale*, *Lactiflora mix*, *Mlokozewitchii*, *Obovata*, *Lobata* "Sunshine," *Suffruticosa*, *Suffruticosa v. Spontanea*, *Triternata*, *Veitchii v. Woodwardii*, and *Wittmaniana*.

I have seen a number of tree peonies in the Botanic Garden of Gothenburg, always admired when blooming.

I live at 600 feet over seameanlevel at the 57th altitude. Together with my wife I have a little plant shop, about 60 miles up the country from Gothenburg. The climate is much harder than on the coast. In 1975 customers began to ask for peonies more and more. I tried to get some from other nurseries. When successful, I got only red, white, or pink.

The best way was to import them. In the autumn of 1976 I bought our first named and labeled varieties from the well-managed nursery of von Stein Zeppelin, West Germany. These plants are growing vigorously. Even after dividing, *Hari Ai Nin* and *Robert W. Auten* attempted to bloom. Who can resist the temptation to see a new flower? Of course I cut them off immediately when opened. *Mandaleen*, *The*

**Mighty Mo, O Sho Kun, General Bertrand, and a pink Officinalis were other varieties I bought from the Stein Zeppelin Nursery.**

At this time a neighbor threw out his old plants. They grew poorly, he said, and always failed to bloom. I took care of them, divided and planted and sold and divided. Naturally, so far there have been only a few flowers.

The largest delivery of varieties, also some tree peonies, I obtained in 1978. Among others, I obtained **Fairy's Petticoat, Festiva Maxima, Moonstone, Emma Klehm, Highlight, Lowell Thomas, Miss America, Do Tell, Westerner, Winchell's White Cap, Flame, Mikado, Convoy, Cytheria, Jean E. Bockstoce, Horizon, Paula Fay, Postilion, Ray Peyton, and Red Charm.** A good choice, Mr. Smirnow accorded. I do not forget to mention a good portion of seeds which I sent for from Chris Laning.

Until further, and while waiting for the spring, I have good time to read about peonies.

Always looking forward to a new Bulletin.

## **PEONIES—FLOWERS FOR THE GOVERNOR'S GARDEN**

*Mrs. Robert Bradle, Horticulture Chairman*

Members of the Garden Club of Illinois have a special interest in the new perennial garden which is being established at the Governor's Mansion in Springfield. When the Mansion was renovated in the early 1970's, the Garden Club of Illinois and the Springfield Civic Garden Club collaborated on a landscape project there. Both organizations contributed monies to the cause and the garden was designed by John Schulte of the Department of Conservation. Lowell Anderson, Curator of Historic Sites, currently works on the project.

Last fall when the Governor's Mansion was opened for the Springfield Civic Garden Club's fiftieth anniversary celebration, a European larch tree was planted on the grounds. At that time, state Garden Club officers were shown the new perennial garden. When they found that there were only a few peonies planted, it was suggested that a collection of Klehm's Estate Peonies would be an appropriate addition.

Estate Peonies were propagated by the Chas. Klehm & Son Nursery of Arlington Heights and represent careful and patient work by three generations of the Klehm family. When Klehms were approached for a supply of these peonies, they graciously donated one each of 14 varieties, plus 5 hemerocallis. These were shipped November 6th and should add a great deal of beauty for many years to come.

While we are on the subject of peonies, now is a good time to review the procedure for growing and exhibiting prize peony blooms. The rules are simple. Cultivate your plants lightly every ten days t

two weeks after the shoots emerge from the ground in the spring. Be careful not to damage the plant because the eyes, stems, and roots are very brittle in the spring and fall. If they are broken or otherwise damaged, the plant will be set back in growth and will be much less vigorous than if it had not been injured. Never dig down to see if the plant is alive—there can be as much as a month's difference in the emergence of shoots, and young plants are particularly slow in appearing.

Water generously and fertilize cautiously. Three good handfuls of bonemeal mixed in your soil per plant is sufficient for the first three years. Disbudding is imperative if you want to exhibit a prize specimen. The lateral or side buds should be removed when they are about the size of a pea, leaving only the central bud remaining. Remove each bud separately, holding the central bud and using a quick, downward movement with your free hand, leaving the foliage on the stem.

The techniques for transporting specimens for national shows consist of hooding the buds after they are well developed by tying a paper sack over each bud to prevent damage in very rainy weather; cutting them when they are about to open and placing them in a dark, cool place; several hours before exhibition time, remove them from storage, place in water with stems freshly cut, and put in the sun or a warm room, where they will quickly unfold.

The most common disease peonies encounter is botrytis, which is a fungus that is most prevalent in wet seasons. It wilts the young shoots and turns them black. Use Bordeaux mixture, Captan, Benlate, or other fungicides as soon as the eyes begin to show in the spring, then again in two weeks and then four weeks later.

Fall is the ideal planting time for peonies. They can grow unattended for years, but a rule of thumb is to replant or divide them when they are eight to twelve years old. When dividing established plants, dig down with a round-nosed spade six inches from the main stem and dig as deeply as you can, then lift. Cut tops back, knock the soil from the clump, and cut the roots back to about six inches with a sharp knife.

Examine the "eyes" where the stems meet the root—the average division should contain three to four of these. Plant the eyes about two inches underground with the soil firmed over them. Give them all day sun, if possible, although there are some varieties for partial or full shade.

The history of peonies dates back many centuries into Chinese history, from whence the plant was introduced to the Western world. The development and propagation of peonies were of particular interest to the imperial bureaucracy of China a thousand years ago and much knowledge of that period of time is now coming to light. Since the U.S. formally recognized the Peoples Republic of China, the

American Peony Society is investigating the possibility of exchanging information with the Chinese on peonies.

The 1979 American Peony Society Show and Convention was held at the Klehm's Nursery peony farm northwest of Champaign last May, with the Show at Market Place Mall. Several hundred varieties originated by Krekler and Rudolph were available for their first viewing last year. Propagation of peonies is a long and tedious process and requires ten to twelve years before a new cultivar can be marketed.

## HYBRID peonies

The hybrid peonies are early blooming, before the lactiflora. Most of them are single or semi-double, very brilliant in color. Exciting and lovely. Any variety selected is of the utmost beauty.



## Floral Art

*Phyllis Andrews, Burnsville, Minnesota*

The flower show is coming. You have done well with growing and showing of perfect blooms in the past. You know what the judges are looking for when they point score your favorite specimen. You know when and how to cut, condition, and groom for another blue ribbon. However, the show chairman has announced that everyone is encouraged to make an arrangement.

Your contact with arranging has left you cold. You hear statements about the "elements of design," the "principles of design," and the arranger is an artist with plant materials. You do not feel like an artist, but, my friend, you are! You already know the importance of "line" as your eye moves up the stem to the perfect "form" of the peony. You know the value of "color" and the surface quality of "texture." You are aware of "pattern" as you look at outlines and silhouettes on the bush as you look for your best specimen. These are the "elements" of design, and they are a part of every flower arrangement.

The next part of the rules for making an arrangement covers some common sense things you use every day. You know that if something is *off-balance* it will tip over. A small flower gets lost next to a larger, more colorful peony. It also looks ridiculous staged in a gallon container because it is out of *proportion*. *Rhythm* is the smooth flow of color and line in the arrangement, and *dominance* is just more of one thing than another.

Now you are an expert on the elements and principles of design—and you still don't know where to start. You start by cutting and conditioning your flowers and foliage. To make a peony arrangement, decide the class you wish to enter, decide what shape you

like—see illustration. You will need the proper tools: knife, clippers, wire, container, mechanics (needle point holder, bonnie cup or oasis), and plant material. Your most successful arrangements will be at least one and one half to two times as high as your container plus the width of the opening. You will need some kind of line material—a tall bud, a pretty vine, or a nice branch to give you the height you need. If you build your basic outline in the beginning you will find that your arrangement will take shape quickly. As you fill in the arrangement always remember that your flowers are the most important part of your arrangement. Trim out excess leaves so that you avoid confusion. Use the smaller flowers at the top or sides and then increase the size toward the center or bottom of your design. You can open the bloom with a gentle breath. Tricks are acceptable only if they do not show enough for the judges to spot your manipulation.

If you use more than one color of plant material, be sure that you carefully balance the placement so that your eye can move over the whole arrangement with ease. Be sure to keep foliage and debris out of the water so that your arrangement will stay fresh as long as possible.

Peonies are an elegant flower. They make beautiful formal arrangements, but they also can be used with wood that has been nicely finished. Containers of different materials can be used if the color combinations and textures complement and accent the flowers.

The most important thing to remember when you are arranging is to *enjoy* your peonies. You may be trying to win a blue ribbon, but your arrangement is a personal thing. Use your *imagination* and be happy with what you have created.

### BASIC SHAPES



*Horizontal*

*Upward Crescer*



*Symmetrical*

*Downward Cresce*



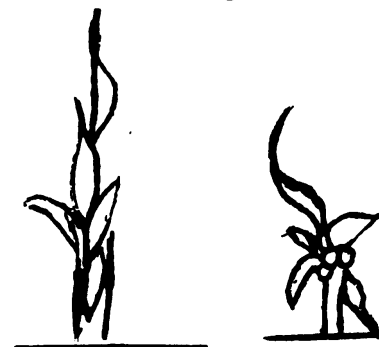
*Asymmetrical*

*Hogarth*



*Spiral*

*Circular*



*Vertical*

*Zig-Zag*

*Source Unknown*

# MANAGING NEMATODES WITHOUT BENEFIT OF PESTICIDES

*By Don Hollingsworth*

The lack of a nematicide which is authorized and available for use by home gardeners is certainly irritating, if one happens to be looking for such a product. Peony fanciers primarily want to produce flowers, and not to be digging peonies to clean up roots. Thus, for those who have discovered that there really are nematodes which parasitize peony roots, it is keenly disappointing not to have a promising curative at the local garden center.

It hasn't always been this way. For a decade or so, new nematicide products, suitable for treating established plants, were being widely tested and some introduced for general use. However, the most effective pesticides are often the most toxic, the most dangerous. Recognizing this, it takes no great power of reasoning to note that with the recent rise in consumer product safety standards, the availability of the new nematicides has declined, so far as the general public is concerned. Paradoxically, commercial uses of nematicides are perhaps growing, especially in agriculture and in turf grass maintenance. The catch for home grounds users is that availability is limited to legally authorized uses, called label approval. The more dangerous materials are limited not only by place of sale regulations, but they can only be purchased by trained and certified pesticide operators.

Compounding the situation is that pesticides for nematodes have never been in great demand by home grounds users. In spite of all the publicity nematodes have had, most people do not recognize even the telltale galls of root knot nematodes. Accordingly, manufacturers faced with the rising costs of establishing label approval for specific uses have had an economic decision to make—whether to continue offering certain products. I have been told that the active ingredient of **Nemagon**, a once offered nematicide, now appears in a garden center product labeled for control of tree borers. Perhaps it is not the danger level, but lack of having made a successful labeling application to approving authority, that makes this nematicide not available. Thus, an indirect effect of the new regulations is seen.

While root knot nematodes may be widespread in occurrence, both in the range of plants parasitized and in their geographic extension, they are only occasionally an obvious problem to peony growers. (See "Parasitic Root-Knot Nematode in Garden Peonies," this Bulletin, June 1974.) While it is an appealing prospect to have a curative pesticide available, other means may be taken which are to the grower's advantage and with perhaps greater long-range benefits.

The model logic of how to grow root-knot-free plants is to place disease-free divisions in disease-free soil. The crux of the matter is how to re-establish disease-free soil once nematodes have been found. There

are two approaches. One is to sterilize the soil, by any convenient method. The other is to grow non-susceptible crops for a season or so. These techniques are used in combination and with good potential of success in commercial propagation nurseries. On the other hand, when nematicides are used to treat established perennial crops, the best that can be hoped for is a suppression of the population, giving an economic control through reduction of the problem. Ideally, sterilization of small areas and clean-ground rotation of crops on larger growing areas can lead to nematode-free plantings. These methods can be adapted for use in home grounds situations.

For sterilization of affected sites, a product called Vapam is available through garden centers. It destroys everything that it contacts, thus the roots of nearby plants will be pruned, up to some short distance from the nearest point of application. An alternative to sterilization is excavation of the old soil and replacement with soil from a clean source, such as a grassy field. Nematodes are likely to be present in the soils of old garden sites, unless clean-up cropping has been carried out.

Clean-up cropping can also be used to advantage for improving soil fertility before setting new plants. Use cereal rye for a winter crop and sudan grass for a summer crop. Control all broadleaf weeds. Fertilize well and return all growth to the soil to improve the organic matter level. The addition of organic matter in large quantities has been found to correlate with reduced populations of nematodes in controlled experiments. Thus, by its use one may at once make things better for peony growth and worse for the nematodes. I have been told by one veteran peony grower that in most cases he couldn't see much difference in growth of peony roots which had nematode galls and those which didn't. If this observation is accurately understood, he didn't really have a nematode problem, whether or not they were actually present. Rather, the soil situation must have been good for the peonies and worse for the nematodes.

Little that is new can be constructively offered about the importance of good soil for growing peonies. It has been well covered in the peony literature. Any perennial which has to make great growth in order to perform best is benefitted by assuring that the soil is at the peak of fertility and of good depth. Peonies are not the sort that are good candidates for success "tucked-in" to some gap in the border on the spur of the moment. The rewards are more reliable when conscious preparations are made in advance. The same kind of conscious planning will pay off when correcting problems where peonies have not done well in the past.

Of equal importance in cleaning up a nematode problem is that they not be re-introduced by bringing infected plants (or infected soil) to the site. Clean divisions can often be propagated from plants infected by nematodes. They can also be propagated by grafting buds onto disease-free nurse roots. The first thing to consider is how to be

sure that the diseased roots are affected with root knot nematodes rather than Lemoine disease, which also results in knots or lumps. For positive confirmation, contact your county agricultural extension office for instructions on how to send a sample of root for examination at your state university plant pathology lab.

For your own diagnostic efforts, a fairly reliable visual key to the difference between the two diseases is found inside the root galls. Slice through a medium-sized or larger lump in successive, thin slices. The Lemoine lumps will have an embedded area of yellowish tissue, in contrast to the surrounding normal whitish tissue. Nematode galls will be whitish all the way through, often with a bit of dead, blackened tissue. Do not overlook the possibility that an individual plant may be affected by both diseases.

If you have a Lemoine disease-infected plant, normally the indications are to destroy it. The cause is unknown, so believed to be a virus. Consequently, it can probably be spread to other plants by insects, root grafts, and cutting tools. Disinfect tools in alcohol between plants.

If root knot nematode is found and it is desired to cut clean divisions for replanting, you need a keen eye, water and scrub brush, and a place to work where the infected waste can be kept from getting to other susceptible plants. Cut back all roots to unaffected tissues. Destroy all new white roots, for they may be too young to see the distorted growth which indicates infection. On larger roots, look for two distinctly different gall formations, regular galls and side galls.

Regular galls are obvious, for they arise by blocking the entire growing point of a young root, so that it stops extending. A branch root may or may not arise from just behind the infection site. These galls will assume a more or less round shape as they grow over several seasons, due to secondary parasitization.

Side galls do not interrupt the entire cross section of the root, so that the root continues to grow normally except for the immediate area of distortion. As the root grows in diameter over several seasons, the gall may grow also but may become obscured by the surrounding normal root tissue. In a cross section slice, the gall will be seen as a wedge of irregular tissue that is widest at the outer surface of the root. Some of these side knots will be easily overlooked unless the root is examined very carefully. Any unusual surface feature of the root should be "cored out" with the point of a knife to see what is under it. It is best to rid the premises of any suspicious tissue at this time. A small amount of clean propagating material is better than a larger amount of risky material.

The need for the scrub brush and water is obvious. Roots must be clean in order to be examined closely. Scrubbing should be applied to all peony plants coming onto the premises, as well as to the divisions from any suspected home-produced plants. The shipper knows his own planting stock and may be quite justified in sending roots with a cer-

tain amount of soil clinging to them. One very good reason is the high labor cost involved compared to the low price which general nurseries are accepting for peony plants at this time. However, the extra effort involved for the buyer to double-check against the entry of diseased roots is negligible, compared to the potential benefits.

Peony growing pays off well for the extra effort entailed in maintaining vigorous, healthy plants. It has always been so, since centuries before the advent of garden pesticides. While it would be nice to have a curative for root knot nematodes, it is not a necessity. Being able to win without the benefit of chemical pesticides, however, probably sets a peony grower apart from some other classes of plant cultivators by the implied certification that a higher level of skill has been attained.

## PLANTING PEONIES IN HOME GARDENS

*J. F. Jones, Minneapolis, Minnesota*

Peonies, when properly planted and cared for, are as choice and interesting flowers as we can have. In the first place, peonies should be planted in the open where the sun strikes most of the day and should be planted away from trees and buildings, so that they will not have to work against shaded areas or tree roots.

After selecting the proper location, the next thing is to select the spot where you are to plant and see to it that the distances between the plants are sufficient. Peonies should be planted not less than three to four feet apart. I plant my peonies four feet apart between rows, three and one-half feet apart in the row. Dig your holes about 20 inches deep and the same in diameter. See that your soil is first class. If not, it would be well to bring in some good soil to secure the best results. If you plant where peonies have been removed, fill holes with new soil. Careful growers always do this. In filling up the hole, pull in four or five inches of dirt, then sprinkle quite liberally, an equivalent of about two or three handfuls, with a mixture of bonemeal and sheep manure. Stir this up till well mixed, then tramp down with feet, then pull in four or five inches more of dirt and sprinkle again as above, and repeat, in the meantime packing the ground by stepping in the hole so that it becomes well firmed. When you have the hole filled to within five or six inches of the top, pull in the dirt until it is filled, but do not fertilize this top portion, and then allow the hose to run into the hole until thoroughly soaked, or if a hose is not available put in two or three pails of water. If well-rotted cow manure is available, it is excellent and if used it would be a good plan to prepare the holes quite awhile in advance to be sure that the ground is well firmed. Many commercial fertilizers are good, but for this purpose I consider them dangerous as it would be easy to harm your plants by an overdose of these strong fertilizers. When the holes are prepared, allow this area to dry off well for a day or so, then when you are ready to plant, dig a hole large enough to receive the root so that when planted the eyes will not be more than two inches from the top of the ground. If the ground is not firmly

packed, set plant so that the eyes are only one inch from the top. Then pull in the dirt and make a little mound over your plant of about five inches. This is for the first year only. See that the roots, after planting, are kept watered well enough to keep them in good condition as drying out in late fall might possibly kill the roots before they have a chance to become established.

The best time to plant peonies is early in September, but they may be planted until the ground freezes. However, the later planting is not recommended. For winter protection cover them with straw or hay, something that is loose in character, but not leaves or any material that will pack, as this may kill the plants. Then in the spring of the year sprinkle about a handful of bonemeal around your young plants perhaps six inches away from the stocks and work it in the soil lightly with a cultivator. For larger and well-established plants two or three handfuls of bonemeal is not too much.

For the first year I do not allow my peonies to bloom, preferring to throw the strength into the roots. After two years you may begin to cut the blooms, but when you do, always leave a few leaves below the point of cutting, as they are the lungs of the plant and are needed for further development. I do not cut off the tops of peonies until after September 1, then I haul the tops away as a precaution against spread of disease. Cover plants with loose material as described above, but not till after the ground freezes. Before you do all of these painstaking things, be sure that you have bought your roots from reliable growers. Cheap roots may be your poorest investment. When your peonies are nicely planted in Mother Earth, do not think your duties are done; they must have sufficient moisture, with good and frequent cultivation till early in August.

If you follow the directions above, you should have peonies of the highest quality.



## **ANEMONE type peonies**

While this peony resembles the Japanese type, it is easily distinguished from it because there are no anthers and the stamens, called petaloids, are broader, forming the center of the flower. The petaloid centers have no contrasting yellow marking, though some have yellow centers. The anemone has been favored by many peony fanciers and the varieties have been accepted as having much individual beauty.

To name a few, **PRIMEVERE** is a creamy white with a center of sulphur yellow. **GOLDEN DAWN** has ivory white petals with a pale yellow center. **GAY PAREE** is a beautiful two-color novelty peony. **PRAIRIE AFIRE** is a pink with fiery red petaloids. **PINK LEMONADE** is a soft blend of pink with yellow centers. **POWDER PUFF** is a pink with cream anemone bomb center. The Klehm Nursery recently introduced **CHEDDAR CHEESE**.

## SINGLE type peonies

Five or more petals arranged around a center of pollen-bearing stamens and carpels. A class of peonies that is not recognized sometimes by the viewers at an exhibition. Many viewers only know the peony as a large ball form double that has been grown for years. Now they see a single pink beauty called SEA SHELL, and PICO, a pure snowy white with large cup-shaped bloom, followed by VIRGINIA DARE, a medium-sized white, a real beauty. The list goes on with SPELLBINDER, SPARKLING STAR, LOTUS QUEEN, MR. THIM, and CAMDEN.

## MAPS OF PAEONIA SPECIES DISTRIBUTION

The excellent maps showing the distribution of peony species (representing the collection sites of herbarium specimens) from *A Study of the Genus Paeonia*, by Sir Frederick Stern, will be reproduced in this and succeeding issues of this Bulletin. Stern's synthesis of the species relationships is already widely available to North American readers through *The Peonies*, John C. Wister, Ed., published in 1962 by the American Horticultural Society. One of the purposes for this series is to make some of the additional graphic reference material from the Stern book readily available to interested peony growers. Another purpose is to compare Stern's concept of the species relationships with alternative proposals; especially with those which arose out of the work of A.P. Saunders and G. Ledyard Stebbins, Jr. A discussion of these issues may be of special value to present-day peony hybridists who are working with multiple species lines of breeding.

The Stern book is a magnificent folio volume, published in 1946 by the Royal Horticultural Society. It is the most comprehensive work that has ever been produced on the genus *Paeonia*. Superbly illustrated with full-page color plates, line drawings, and distributional maps, it is not only the best known reference on the subject worldwide, but it has become a collector's item as well.

The book is the culmination of a project that continued more than twenty years in preparation for the writing. Stern made it a standard of the study that only specimens collected in the wild or grown from seeds collected in the wild be considered. He grew most of the known species in his garden at Highdown and studied preserved specimens of most major herbaria in Europe and Asia.

Plants from the Stern collection made their way to some American gardens and at least one, Stern Tall Yellow, is being propagated for use by breeders at this time. Although the Sterns are no longer living, the garden is maintained for public interest. It is still influencing the collections of peony fanciers, currently through the attention and effort devoted by C. Graham-Jones, APS member of Churchdown, England. For a present-day account of peonies at Highdown, see the Graham-Jones article in Bulletin No. 223, March 1977.

The first map presented in this series (pages 22-23) depicts a geographic summary of sites at which peonies have been collected in the wild in Europe and Asia (and North Africa). The smallest units shown on this map are the Stern groupings of species. See Wister, *The Peonies*, to review the species included in each group (e.g., the Witmaniana group includes three species). These species groups will be taken up individually in connection with future maps of the series. Four of the five centers of geographic distribution are presented in this issue of the Bulletin. The fifth, Pacific North America, will be considered in a separate issue.

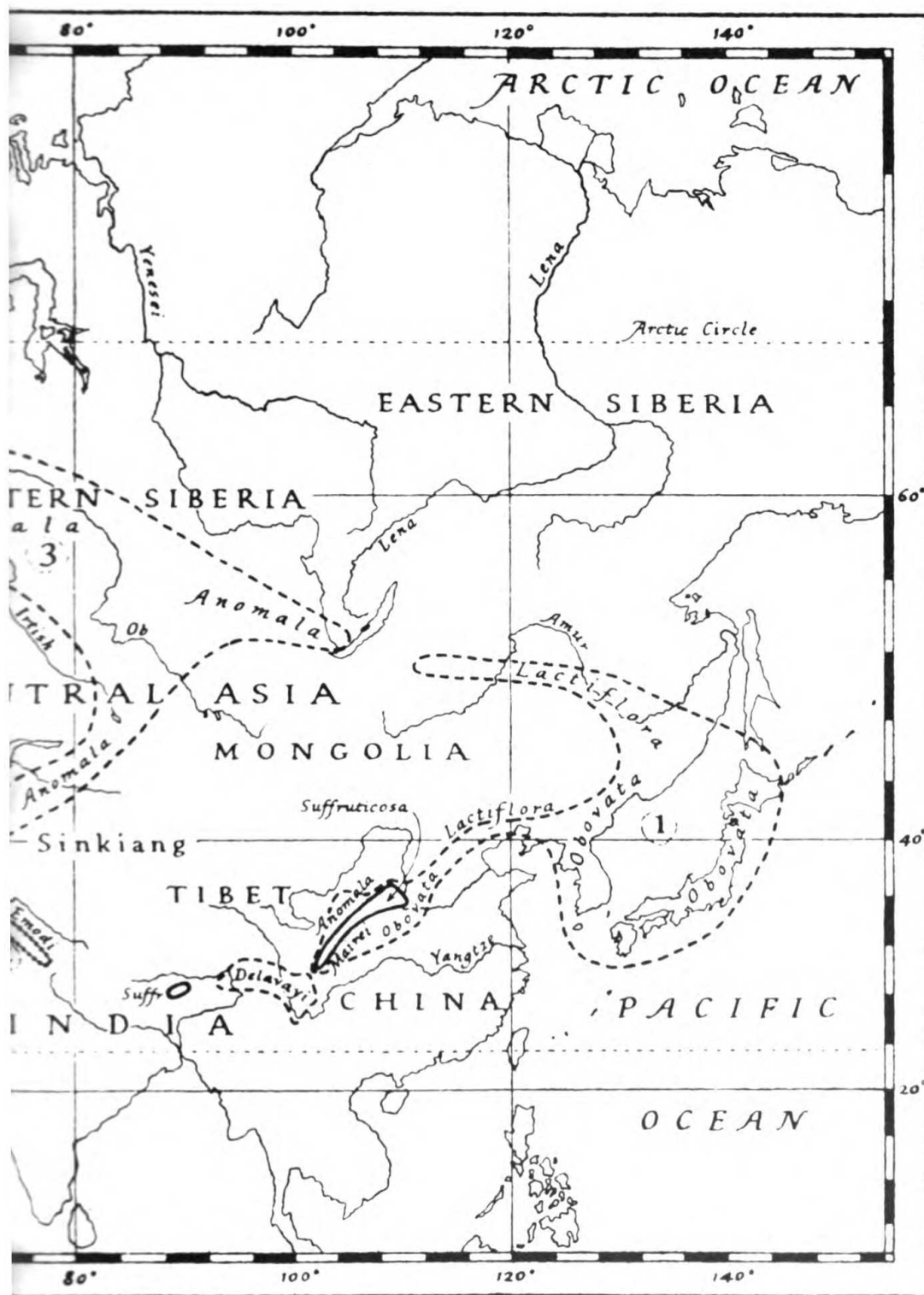
The following quote from Dr. Stebbins' review of the Stern book (Madrono: West American Journal of Botany, Vol. 9, 1948, pages 194-195) points up the significant implications of the geographic distribution:

"The patterns of distribution of the various species provide material for a most interesting discussion. Endemism is common in the genus; 8 of the 33 recognized species are restricted to a single island, mountain range, or other small area. The genus as a whole occurs in five disjunct areas; the Mediterranean region; central Asia from the Urals to Siberia with an outlier in eastern Lapland; the western Himalaya; eastern Asia from southwestern China to Manchuria and Japan; and Pacific North America. Such a distribution is evidence of the great age of the genus, as is also the primitive nature of its morphological characteristics. Stern points out that the cytological condition of the species is characteristic for each separate area of distribution. North America contains only two diploid species, which have a distinctive type of chromosome behavior at meiosis. The species of eastern Asia are diploid with one exception, while those of Central Asia and the Himalaya are strictly diploid. The Mediterranean species include both diploids and tetraploids, with the latter having by far the widest distributions. This latter fact brings forth a very plausible hypothesis as to the origin of these tetraploids. The diploid species are believed to be preglacial relics, which were pushed southward by the advancing ice sheet of the Pleistocene period, and took refuge in the islands of the Mediterranean and other warm areas. The tetraploids, which are believed to have arisen from the diploids by autopolyploidy, were supposedly the only forms which were able to migrate northwards in postglacial times."

Future discussions in connection with the individual species groups will afford the opportunity of elaborating on these comments by Stebbins.

Don Hollingsworth





1. OF *PAEONIA* SECT. *MOUTAN* AND SECT. *PAEON* :—  
 2. Arctic group ; 4. Mediterranean and Caucasian group.

# FIRST EDITION . . . . P E O N I E S

*A HISTORY OF PEONIES AND THEIR ORIGINATIONS*

Compiled and edited by Greta M. Kessenich in cooperation with the  
nomenclature committee of the American Peony Society

## In Three Parts

### 1. VARIETY CHECKLIST

Based on a list compiled and edited  
Mr. & Mrs. Byron Gist, completed in 1  
and kept on file at Kingwood Center, M  
field, Ohio.

### 2. REGISTERED PEONIES

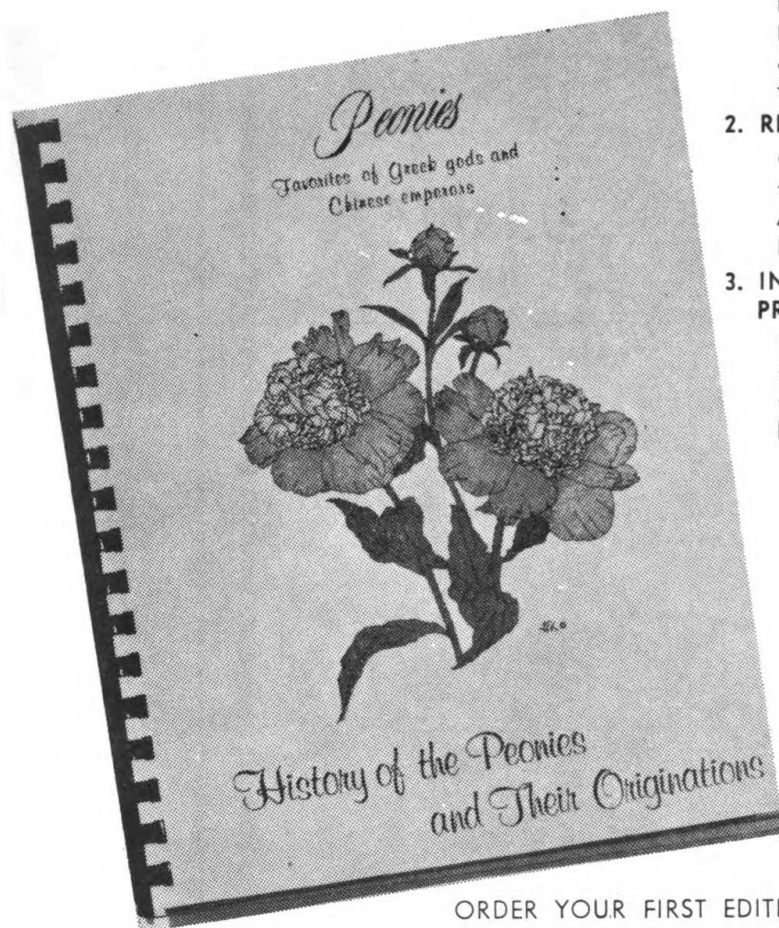
Compiled and edited by Greta M. Kesse  
from bulletins of the American Peony Soci  
All varieties registered with the Amer  
Peony Society are listed.

### 3. INTRODUCERS OF PEONIES AND THEIR PRODUCTIONS

Peony varieties listed by growers and  
velopers with emphasis on information  
vided by George W. Peyton during the y  
he was secretary and editor.

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and Clarence O. Lienau.



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## JAPANESE type peonies

So called because the Japanese people prefer them to all other types of blooms and were the first to develop many new kinds. This type is the first advance toward the double type, with narrow center staminodes, usually edged with yellow.

They furnish color contrast in the same flower obtained in no other type and are especially valuable for cutting. —*Edward Auten, Jr.*

Some very beautiful varieties are **DIGNITY, CARRARA, BRIDE'S DREAM, TORO-NO-MAKI, AMA-NO-SODE, WESTERNER, BU-TE, DO-TELL, KAY TISCHLER, TOM ECKHARDT, BARRINGTON BELLE.**

## SOME FAVORITE PEONIES THAT I GROW!

### CASTLETON-ON-HUDSON, NEW YORK

It is very difficult to select only a few good garden varieties of peonies. However, the following all do very well in gardens in this area, our own and also the gardens of those for whom I have purchased roots.

**Mons. Jules Elie** — one of the earliest, double, lt. pink, some slight fragrance, weak stems, good cut flower.

**Nick Shaylor** — a must have—beautiful double blush pink, strong stems. Bushes loaded with flowers every year. Late, not fragrant.

**President Lincoln** — single red, tall, mid-season. Not fragrant.

**Kansas** — double red, early, medium tall, many blooms, good stems.

**Sea Shell** — another must have. Tall, single, large lt. pink flowers, has yellow stamens, mid-season. Good cut flower and landscape plant.

**Westerner** — Jap, pink, mid-season, tall, many flowers, good in arrangements.

**Nancy Nichols** — double blush flowers, mid-season, prolific, good cut flowers too.

**Florence Nichols** — fragrant, midseason, double blush flower, strong stems.

**Elsa Sass** — late, large double flowers nice form, good bush, prolific.

I could really go on and on! Other particularly good plants and blooms in our garden are **Ludovica hybrid, Lovely Rose hybrid, Cytherea, Red Charm hybrid** (these require covering of evergreen boughs in winter in this area), **Mrs. FDR, Krinkled White, Dolordell, Ensign Moriarity, Moonstone**, among others. These flowers are not in order of preference but a sampling of plants that have done well in past seasons. Some are ten or more years old, others have been planted three or four years.

—*Mrs. Russell (Helen) Beal*

## WARRENSBURG, MISSOURI

Picking only five or six favorite peonies is difficult; nevertheless, here are my favorites.

**CELEBRATION** (Nicholls-Wild & Son, 1964) is a deep rose pink with a subtle bluish cast. The heavy rose-type flowers are filled with finely cut petals. The bush grows over four feet tall in my garden and has approximately 100 blooms per year after the side buds are removed. It was planted in 1973 and has never failed to produce a fine show about May 30.

**DINNER PLATE** (Klehm, March 1968, P.P. 2952) produces a large number of blooms—many of which are 9 inches or more. This light pink is very tall—four feet plus—in two different places in my garden. The blooms are well formed and displayed on strong, stiff stems—perfect for cutting.

**DRESDEN PINK** (Wild & Son, 1957) is a rather late bloomer in my garden. The blooms are so fully packed with finely cut petals that they seem like solid masses of very light pink with silver edges. The blooms are very heavy, and since I always stake the plants, I can't say whether the blooms would stay erect on their own. Removing the side buds makes the blooms huge. This is truly a winner in Missouri.

**MOONSTONE** (Murawska, 1943) is my favorite blush. The blooms are large, full, and heavy, and the plant makes a spectacular show in the garden. Last season, Moonstone was one of the most beautiful plants in my garden.

**PAULA FAY** (Fay, 1968) is an early hybrid of exceptional merit in my opinion. The color is a deep, vivid pink that cannot be ignored. The blooms are semi-double, and even though I prefer rose-type blooms, Paula Fay is still one of my favorites. It makes a bright spot for a week or more in the early spring garden. Even after blooming, the bush is very attractive.

**RED CHARM** (Glasscock, 1944) is my favorite red peony. Perhaps part of its appeal is due to its early bloom. In my garden, it is one of the first to bloom and each bloom is full and well formed. The stems hold the heavy blooms well above the ground. We have successfully refrigerated blooms of this cultivar for three weeks awaiting Memorial Day. No garden should be without Red Charm.

—Olin Frazier

## MINNESOTA

**RAMONA LINS** —Very large, late white to blush double with excellent form that lasts for a long time when cut. The stems are strong and the plant has fine foliage.

**PILLOW TALK** — Beautiful large light pink with perfect rose form. The bush is medium height and the blooms come in mid-season on sturdy stems.

**DOUGLAS BRAND** — Huge medium red blooms with perfect show form that hold their color and come in mid-season on a medium height bush. In most seasons it will dominate the red lactiflora class.

**EDGAR JESSUP** — A brilliant red double hybrid with medium size, perfect rose form blooms. The bush is short, the stems need support and the foliage is an attractive dark, shiny green.

**LAURA MAGNUSON** — A large soft rose-colored semi-double which usually blooms with the last hybrids. It has excellent lasting qualities and takes refrigeration very well.

**CYTHEREA** — A very large, cup-shaped semi-double hybrid. The vivid rose pink bloom is truly of exhibition quality.

—*Dick and Georgine Edblom*

### **FRONT ROYAL, VIRGINIA**

**Location:** Northern Virginia in the Shenandoah Valley at the foot of the Blue Ridge Mountains. Limestone soil.

**Nature of planting:** a few herbaceous, hybrid herbaceous, and tree peonies as mixed planting with daffodils, iris, daylilies, and other flowers. Since I had to work for a living, I could not hire help, and since vegetable gardening was my first interest, flowers received little attention.

**HERBACEOUS:** There are many marvelous varieties—**ISANI GUIDUI**, **KELWAYS GLORIOUS**, **PHILIPPE RIVOIRE**, **ELSA SASS**, **FELIX CROUSSE**, **MOONSTONE**, **MATTIE LAFUZE**. These have all done well. **ISANI GUIDUI** has been praised more than any other, probably because of its location. The vigor, color, and form are noted. Other varieties that have not done so well are **JACOB STYER**, **HANSINA BRAND**, and **SARAH BERNHARDT**, probably because of planting location.

**HYBRID HERBACEOUS:** Only three and they are beautiful—**RED CHARM**, **LAURA MAGNUSON**, and **CYTHEREA**. If I were to plant more peonies, they would be hybrid herbaceous.

**TREE PEONIES:** These have been most interesting to me, but I must admit of only partial success. The most successful are **MOUTAN**, **UKAREGI OWI**, **HANA KISOI**, and **RENKAKU**. The first two are about thirty-five years old. **MOUTAN** often bears more than one hundred blossoms. It is four feet high and six feet across, first of all to bloom. The tree peonies that are not doing too well are **GESSEKAI**, **ALICE HARDING**, **HIGH NOON**, and **AGE OF GOLD**.

Location seems to be very important for tree peonies. The ones that do well have some high shade. The others are in full sun. There has been no spraying and only occasional fertilizer spread around the base.

—*Percy Rogers*

— 27 —

## ATLANTA, GEORGIA

Atlanta's climate is not the best for growing peonies but I am so fond of them, I grow them anyway. In colder winters, they are beautiful. I learned the hard way which varieties grew here. The following varieties perform satisfactorily.

**MONS. JULES ELIE** — Light rose pink which blooms well.

**ANN COUSINS** — A double white which blooms well here but stems are weak.

**MINNIE SHAYLOR** — Always performs well. White petals showing centers of yellow anthers and stamens. Clump has grown large since planting.

**MRS. F. D. ROOSEVELT** — Light pink and usually performs well. Hot days inhibit perfect opening.

**MARTHA BULLOCK** — Deep pink buds never unfold properly due to hot days during blooming season.

**FESTIVA MAXIMA** — White with red flecks on petals, most reliable.

I have several other varieties that perform well following a cold winter. The semi-doubles seem to perform best in Atlanta.

—*Harold V. McEachern*

## MINNESOTA

Peony varieties that have been used in artistic designs:

1. **WALTER FAXON** is a double, shell pink in color. Its color is especially appealing and delicate, a pink that is on the yellow side, rather than with the usual blue cast.

2. **CYTHEREA** is a hybrid, semi-double, that is a show-stopper, particularly because of its unusual color, which I call coral. It also has a lovely cup-shaped form. It never fails to receive the admiration of people who view it.

3. **VANITY**, a Japanese type peony that is pale pink, a very delicate hue, is lovely for arranging. Its foliage is glossy and light green in color, good to incorporate in an arrangement.

4. **KRINKLED WHITE** is a white single peony and has long been a favorite. Its buds are blush to pale pink in color and its open petals have the texture of crepe de chine, or as its name implies, are crinkled.

5. **MAHOGANY** is a hybrid, single type, dark red in color. Its petals are extremely glossy, almost waxy in appearance, commanding attention in an arrangement.

In general I like to use smaller flowers for arranging, secured sometimes from young plants. I often use flowers in different stages of development, from tight buds to the wide-open blooms.

—*Charlotte E. Sindt*

## NEW YORK

1. **NADIA** — Hybrid herbaceous, wide open, single, bright deep cherry color, gorgeous, an eye stopper. Neat plant with strong stems.

2. **MINNIE SHAYLOR** — Herbaceous, medium-sized plant and blooms, semi-double white with conspicuous yellow center touched with red. Many side blooms prolong its season and are good for flower arranging. A lovely peony.

3. **SILVIA SAUNDERS** — Herbaceous, semi-double. Dainty pink. Lovely in perennial border and nice to pick.

4. **HOWZAN** — Tree peony, early, enormous deep pink to rose with silvery overtones. A gorgeous bloom held upright, not drooping among the leaves as on some tree peonies.

5. **PINK LEMONADE** — Herbaceous double, large plant and flowers with long stems. A blend of soft pink, yellow, and cream. The colors and size are impressive. It is not as upright as I like for a garden subject.

—*Josephine M. Parks*

## ORINDA, CALIFORNIA

**FESTIVA MAXIMA** — exuberant grower, needs little care and a prolific bloomer.

**MRS. FRANKLIN D. ROOSEVELT** — delicate coloring and such fine substance, Californians that see few peonies can hardly believe such an exquisite bloom exists.

**ARCHANGEL** — Sent as a bonus plant from Gilbert Wilds. Didn't expect much of it but it has grown voluminously and has very large beautiful blooms.

**SWORD DANCE** — Does well—colorful, exotic in the front yard. People will stop when it is in full bloom and ask what it is.

**MONS. JULES ELIE** — SO dependable, every year a great performer, prolific, easy to grow, luscious, lovely pinkness. I have transplanted it and "mangled" it at all the wrong times of the year but still it does well. A great plant for those who think they can't grow peonies.

**OPAL HAMILTON** — Japanese type, glows as if lit from the inside. Sturdy, efficient grower in this difficult "adobe" (heavy, heavy clay) soil.

May I include **RED CHARM**—grows poorly here (in seven years I have had a maximum of two blooms, hardly worth keeping), but when it blooms, people in my location find it as exciting as the rarest of orchids. It is that beautiful.

We also have six tree peonies, four of which are in containers (as an experiment). The container tree peonies are doing very well. **HANA KISOI** will have nine blooms this year.

—*Edward Perry*

## OKLAHOMA

March 15, tree peonies beginning to leaf out. All peonies must be sturdy to stand the wind and hot sun.

**CYTHEREA, LUDOVICA, POLAR STAR, MOONSTONE,** and my own two registered peonies, **AH SO** and **RAG DOLL** have been satisfactory with their bloom holding over a long period. Early and mid-season peonies should be planted in this country. Late varieties do not bloom, just turn brown. Occasionally we do have spring rains, then **SPRING FORMAL, DORIS COOPER, MISS AMERICA,** and other varieties are very pretty.

—*Muryle Kostiuk*

## NEBRASKA

Blooming season: May 25—June 10, approximately.

**ANGELO COBB FREEBORN** — Hybrid, double, early midseason. The unusual color has been called coral-red or shrimp pink. Either way it is a standout when in full bloom. We have grown this for 18 years and it is one of the best growers as well as a favorite with garden visitors. This does open slowly and can't be cut until it reaches the right stage. Usually open for us by May 30th.

**BOWL OF CREAM** Estate Peony — Double, midseason. Large creamy-white. Very good grower for us as are all of the Estate Peonies.

**BURMA RUBY** — Hybrid, single, very early bright red with good substance and fragrance. Not too fond of singles, but this I like. Very good grower and blooms with Red Charm.

**CHARLIE'S WHITE** Estate Peony — Double, early white with long stem and good for cutting. In an early season will be out for Memorial Day.

**CHEDDAR CHEESE** Estate Peony — Double, midseason. Large white bloom with yellow petals mixed throughout giving a sulphur-yellow effect. Good grower and well-liked by all visitors.

**CORAL CHARM** — Hybrid, semi-double, early coral-pink. A different color that is very popular with visitors. Have had for 4 years and has grown very well for us.

**DIANA PARKS** — Hybrid, double, brilliant scarlet. Same form as Red Charm, slightly brighter red color and a few days later. Has some fragrance. Very popular and one of our favorites.

**DIXIE** — Double, late dark red bomb. Good grower with long stems. Always wonder how such a small bud can turn into such a large bloom.

**EMMA KLEHM** Estate Peony — Double vivid pink. One of the latest to bloom for us, but worth waiting for. It has the effect of freshening up the garden when it starts blooming.

**ENSIGN MORIARTY** — Double, late midseason. Large pink bloom with good stem. Another variety we've grown for 15 years and is

always good. Usually blooms after Memorial Day unless an early season.

**FIRST LADY** Estate Peony — Double, early deep pink. Usually able to cut this for Memorial Day.

**FLAME** — Hybrid, single, early very bright coral pink. Always stands out in any planting. Very good grower. Very much admired by visitors.

**GAY PAREE** — Japanese, deep cerise with near white center. Good grower for us in every way.

**PAULA FAY** — Hybrid, semi-double deep pink with waxy petals. A new and different peony that grows very well for us. Very popular with visitors.

**RED CHARM** — Hybrid, double, early large red bomb (like red plastic) that always draws a crowd. This is the favorite of all the peonies we grow. After 15 years of growing Red Charm, we still rush out to see its first bloom (May 20-25). Always able to cut more of this than anything else for Memorial Day. Holds well when cut as the first petal loosens. We sell more plants of this than any other every year. Fast increaser.

**RED GRACE** — Hybrid, double deep dark red. Much darker than Red Charm or Diana Parks. It has the same type bud as Angelo Cobb Freeborn, so can't be cut too soon. Usually open by May 30th.

It is very difficult to select varieties from the many that we grow, so many are in close competition. We do not list all our varieties in our commercial catalog.

—*Lester Hildenbrandt, Star Route Box 4,  
Lexington, Nebraska 68850*

## PEONY SEED DISTRIBUTION COMPARABLE TO JOHNNY APPLESEED

Peony seed requests have been received from all areas of the United States, Australia, Sweden, Holland, Germany, Canada, etc. Chris Laning, chairman of the peony seed program, has mailed thousands of seeds to members of the American Peony Society. Each individual selected seeds of his choice which were available in the list published in the March Bulletin. It is with special thanks to you, the peony growers, in being so generous in harvesting your seed which is making this program possible.

Again this fall our seed pool must be supplied. All the seed that you can send, all varieties and/or special crosses will be used.

Mail seeds to Chris Laning, 553 West F. Avenue, Kalamazoo, Michigan 49007. Chris and Lois Laning are editors of the Hybridizers Newsletter, Paeonia. This newsletter discusses techniques and methods in peony breeding. Write the Lanings for details.

Bulletin Editor

# RECORD OF THE FLOWER GARDENS OF LOYANG

*By Li Ch'ih (Sung Dynasty)*

*Translated by John Marney, Associate Professor of Chinese,  
Oakland University, Michigan*

There are a great many varieties of flowers, but only the tree peony is called "flower." Only those gardens which grow tree peonies are called "flower garden." They have no other [amenities like] ponds and pavilions, but only tens of thousands of tree peonies. The households of townsfolk who depend upon flowers for a living all congregate here [in Loyang]. In the flower season, tents and awnings are put up, markets and stalls are set out, with the music of flute and strings among them. The city men and women in great throngs wander there. When the flower season is over, then again the mounds and hillocks, embankments and walls, and abandoned stoves are left to face each other. Nowadays, the tree peonies increase and multiply yearly, but the Yao Yellow and Wei Purple are a thousand cash for a single stem. No one will sell a Yao Yellow.

## ON FLOWERS

*By Wang Shih-mou (1536-1588)*

*Translated by John Marney, Associate Professor of Chinese,  
Oakland University, Michigan*

The Tree Peony:

The tree peony originated in the central region. The people of Chiang-yin [in modern Kiangsu province] could graft it onto the herbaceous peony root. By now they have multiplied and a hundred varieties have miraculously appeared. They are particularly flourishing in my Tranquil Garden [Wang styled himself Tan-yuan, or Tan-fu, after the name of his flower garden], the crown of the entire province. They include the Emerald Butterfly, Great Red Lion-head, Dancing Black Beast [an animal, or wild horse that can travel some two hundred miles in a day], and the Foot [-width] White, which are most difficult to bring to flower. The Southern Capital [i.e., Ta-liang, in Chiangning district of Kiangsu province] tree peonies yield to Chiang-yin only in the supremacy of the Western Melon-pulp. I also extend to that. If in the future I can purchase a Yellow Tower from the central region, then my whole life will be without regrets. People say the tree peony is by nature lean and does not take well to fertilizers. They also say that during the summer time, one should continuously water them. However, I do not agree. I use fertilizer in my garden, and the flowers excel. Furthermore, the soil of the central region is parched, and so it needs constant irrigation. My land is moist, so how can it be constantly watered! In Tatu [modern Peking] this plant suits the sandy soil. People of the

Southern Capital say that when dividing a tree peony to plant, one must keep the stem straight; if made crooked it will die. Deepen the hole, support the stem with a bamboo stick, and bank it up with soil. Later, remove the support. This method of planting should be understood.

## PEN-TS'AO KANG-MU

[Botanicum Sinicum]

by Li Shih-chen [1518-1593]

translated by John Marney, Oakland University

Mutan [Tree Peony]. Middle category in [Shen-nung, 3rd millennium B.C.] *Pen-ts'ao ching* [Botanicum Classicum].

Explanation of the Name.

Shu-ku [lit. rat-girl/woodlouse] *Pen* [-ts'ao] *ching*. Lu-chiu [lit. deer-scallion] *ibid*. Pai-liang chin [lit. one hundred taels of gold] [Su Kung, 7th cent.] *T'ang* [*Hsin*] *Pen* [ts'ao] [The New Botanicum of the T'ang]. Mu shao-yueh [lit. tree herbaceous peony] [*Pen-ts'ao*] *Kang-mu*. Hua-wang [lit. flower king].

[Li] Shih-chen says: Because the male-vermilion [tree peony] is vermilion in color, it is considered best. It forms seeds, yet the root-stem also produces shoots, and so it is called "male-vermilion." People of the T'ang dynasty [618-906] called it "tree herbaceous peony" because its flowers resemble the herbaceous peony, but its residual branches [which still produce shoots] resemble a tree. In the many catalogues of flowers, the tree peony is considered prime, the herbaceous peony second. Hence, the world calls the tree peony the "king of flowers," and the herbaceous peony the "premier of flowers." Ou-yang Hsiu's *Register of Flowers* lists more than thirty varieties, whose names derive either from a location, person, color, or distinctive feature. For details, see the original text. [See *American Peony Society Bulletin* #229, March 1979, pp. 34-41, for a translation of this *Register*.]

Collected Commentaries:

*Pieh-lu* [i.e., T'ao Hung-ching, 451-536, *Ming-i Pieh-lu* Classification of Materia Medica] says: The tree peony grows in the valleys of Pa commandery [modern East Ssuchuan province] and Han-chung [modern South Shensi province]. In the 2nd and 8th months [March, September], the roots are culled and shade-dried. T'ao Hung-ching says: These days, it also appears in eastern districts. The red sort are good.

[Su] Kung [*T'ang Hsin Pen-ts'ao*] says: It grows in Han-chung and Chien-nan [modern West Ssuchuan province]. The shoots resemble the yang-t'ao [lit. goat-peach, i.e., *averrhoa carambola*]. In summer, it produces white flowers; in autumn, its fruit is round and green. In winter, the fruit becomes a red color, and in the severe winter it does not

shriveled. The root-stem resembles the herbaceous peony; the flesh is white, the bark vermilion. Local folk call it "hundred taels of gold." In Ch'ang-an [modern Sian, in Shensi province] it is called the "tree peony of Wu," the true flower. The variety in common use nowadays differs from that, and further has a rank odor.

Sung [i.e., Su Sung, 11th cent., *T'u-ching Pen-ts'ao* Illustrated Materia Medica, 21 vols.] says: These days those that come from Ho province [in modern Ssuehuan province] are superb. Those from He province and Hsuan province [in modern Anhui province] are also splendid. The white [serve as a] tonic [i.e., supplement, as a medicine]; the red are beneficial.

*Ta Ming* [*Jih hua Pen-ts'ao* c.a. 970] says: This then is the root-stem of the tree peony flower. Those of Pa, Shu, Yu, and Ho provinces [all in modern Ssuehuan province] are best; those of Hai-yen [modern Chekiang province] are second.

[Su] Sung says: Nowadays [tree peonies] are found in the mountains of Tan and Yen [both modern Shensi province], Ch'ing [modern Shantung province], Yueh [modern Chekiang province], and Ch'u and Ho [modern Anhui province] provinces. However, the flowers include yellow, purple, red, and white. These are hill [i.e., wild] tree peonies. The stalk and stem are sere and parched, and black and white in color. In the 2nd month shoots and leaves are produced on the stem. In the 3rd month the flowers open. The flower petals resemble those cultivated by people; however, the flower segments stop at five or six petals and no more. In the 5th month they produce a fruit of black color, as big as a cock's head. The root-stem is a yellowish-white color, some five to seven inches long, and as large as the barrel of a pen. In modern times, many people greatly prize and value the rare curiosity of its flowers, and during the autumn and winter they all make grafts and bank them up with fertilizer and soil. By springtime they blossom in great profusion, their forms a hundred transformations. Thus the nature of the root-stem differs from and loses its original true [nature]. It has no medicinal value, and is without efficacy.

Tsung-shih [i.e., K'ou Tsung-shih, *Pen-ts'ao yen-i* Botanical Explanations c.a. 1114] says: The tree peony flower also includes dark red and deep jasper colors. Only the mountain variety [i.e., wild tree peonies] are single-petaled. The root and bark of the red-flowered variety have great medicinal application. Some townsfolk supplement it with the bark of the branches and stem, but this is extremely mistaken.

[Li] Shih-chen says: Among tree peonies, only the red and white single petal-section ones have medicinal value. The thousand-petaled are of variant categories, and are produced by human skill. The odor and taste are impure, and they are unusable. The *Hua-p'u* [Register of Flowers] states that they most proliferate westward from Tan and Yen provinces to the Pao-hsieh Road [the route between Shensi and Ssuehuan provinces]. They are not differentiated from brambles and

thorns, and the local folk use them for firewood. The root-stem has wondrous medicinal efficacy. Whenever cuttings are made, white-vine [*ampelopsis* or *vitis serjaniaefolia*] is daubed under the root to repel insects. Sulphur applied to cavities serves as an insecticide. If cuttlefish-bone needles are used, the tree will die. This is the nature of the plant, and must be understood.

Root-stem and bark (Preparation).

[Lei] Hsueh [5th cent. Liu-Sung dynasty. *P'ao-chih lun* On Decoction] says: When a root is culled it is sun-dried. Split it open with a bronze knife and remove the bone [i.e., the wood core]. Trim to approximately [the size of] a large bean. Mix with wine and steam from the *ssu* hour [9-11 a.m.] to the *wei* hour [1-3 p.m.]. Sun-dry and apply.

Odor and Taste.

Pungent and cold. Non-poisonous.

[T'ao Hung-ching, *Ming-i*] *Pieh-lu* says: Bitter and rather cold. [Wu] P'u [5th cent. Wei dynasty. *Wu shih Pen-ts'ao* Mr. Wu's Botanicum] says: Shen Nung and Chih Po [say] pungent. *Lei-kung* [*Yao-tui* Lord Thunder's Medical Prescriptions. By Hsu Chih-ts'ai of the 6th cent. Northern Ch'i dynasty] [says] slightly warm, bitter, non-poisonous. *T'ung Chun* [*ts'ai yao lu* T'ung Chun's Record of Culling Medicinal Herbs c.a. 2700 B.C.] [says] bitter, poisonous.

[Wang] Hao-ku [14th cent. Yuan dynasty. *T'ang-i pen-ts'ao*] says: The odor is cold, the taste bitter and pungent. Within the *yin* [female, dark, negative] element there is a trace of *yang* [male, light, positive] element. [The meaning of the next sentence here has not been determined, and translation awaits further research.]

[Hsu] Chih-ts'ai [*Lei-kung Yao-tui*] says: It fears fritillaria verticillata, rheum officinale, and cuscuta japonica.

*Ta Ming* [*Jih Hua Pen-ts'ao*] says: It shuns coriandrum sativum, garlic, and concealed arsenic.

[The next two sections, Cures and Discoveries, will be translated after medical terminology has been identified.]

Appended Prescriptions:

Swollen hernia. The *ch'i* [vital force] is swollen, causing immobility. Tree peony bark and fang-feng [anti-flatulent—silver divaricatum?] in equal quantities. Grind to a powder. Dosage: 1/5 [Chinese] ounce, with wine. Extremely effective. *Ch'ien-chin* [*yao*] *fang* [Thousand-gold Essential Recipes, by Sun Ssu-miao of the T'ang dynasty].

Female unclean blood. Accumulates in the upper part, causing ill-temper. 1/2 [Chinese] ounce of tree peony bark. A full 1/2 [Ch.] ounce of smouldered kan-ch'i [lit. dried lacquer, a form of wild lacquer]. 2 cups of water. Dosage: one heated cupful. *Chu-cheng Pien-i* [All Evidence to Distinguish Uncertainty, by Wu Ch'iu, fl. early 12th cent.]

Bruise-extravasted blood. 2 [Ch.] oz. tree peony bark. 21 stalks of meng-ch'ung [fritillaria]. Boil. Pound into powder. Dosage: each morn-

ing with warm wine, 1 square-inch spoonful. The blood will then change into the water beneath. *Chen-yuan Kuang-li fang* [i.e., *T'ang Te-tsung Chen-yuan Kuang-li fang*, The Kuang-li recipes of the Chen-yuan period of Emperor Te-tsung of T'ang (785-804)].

Cuts and internal discharge. Three pinches of powdered tree peony bark with water. Sets up urination, and discharges the blood. *Thousand-gold Recipe*.

Boils on the lower parts: After [the boil] is opened, take one square-inch spoonful of powdered tree peony in hot water three times daily. *Chou-hou* [i.e., *Chou-hou pai-i fang* One Hundred and One Recipes from Behind the Elbow, by Ko Hung, 283-343].

Antidote for Insect Stings. Dosage: a pinch of powdered tree peony root-stem in a 1/10 [Chinese] oz. spoon, three times daily. *Wai-t'ai Mi-yao* [*fang* Secret and Important Recipes from the Outer Terrace, by Wang Shou, of the T'ang Dynasty].

#### Appended Records:

Shu-ku [rat-girl/woodlouse/tree peony]. [*Ming-i*] *Pieh-lu* says: The taste is bitter but it is not poisonous. It controls coughing and suppresses the breath; fevered and chill running sores; foul ulcers [mod. definition of venereal sores]; and noxious breath. Another name is hsueh-sheng tan-shui [hsueh-sheng vermilion water].

[T'ao Hung-ching says: People nowadays are not aware of it, but another name for mutan [male vermilion] is shu-ku [rat-girl]. Shu-fu [rat-wife] is also called shu-ku. I do not know which is correct.

#### Translator's note:

Alexander Wylie's landmark *Notes on Chinese Literature* (Kelly & Walsh, Shanghai, 1867) describes the *Pen-ts'ao kang-mu* as follows: "The great Materia Medica known as the *Pen-ts'ao kang-mu*, in 52 books, was compiled by Li Shih-chen of the Ming [ca. 15th century], who spent 30 years on the work, having made extracts from upwards of 800 preceding authors, from whom he selected 1,518 different medicaments, and added 374 new ones, making in all 1892. These are arranged in 62 classes, under the 16 divisions: Water, Fire, Earth, Minerals, Herbs, Grain, Vegetables, Fruit, Trees, Garments and Utensils, Insects, Fishes, Crustacea, Birds, Beasts, and Man. Under each substance, the Correct Name is first given, which is followed by an Explanation of the Name; after this there are Explanatory Remarks, Solution of Doubts, and Correction of Errors; to which is added the Savour, Taste, and Applications, with the Prescriptions in which it is used. There are three books of pictorial illustrations at the commencement, with two books of prefatory directions, and two books, forming an index to the various medicines, classed according to the complaints for which they are used. It was first printed in the Wan-li period [1563-1619]. . . . The nucleus of all writings on this subject is a small work, which tradition ascribes to the ancient [and mythical] Shen-nung [3rd millennium B.C.] [i.e. *Pen-ts'ao ching* Botanicum Classicum]."

The translator also directs readers to English language renderings of sections of the *Pen-ts'ao Kang-mu* by E. Bretschneider, *Botanicum Sinicum: Materia Medica of the Ancient Chinese*. London: Trubner, 1882, 1892, 1895. His translation of brief extracts of the Tree Peony section of the *PTKM* appear on pp. 109-111. He also includes quotations from other sources: A. Tatarinov, *Catalogus Medicamentorum Sinensium*, 1856 (Bret. I:122)., Cat., 39: *Mou tan p'i* (rind). *Radix Paeoniae moutan*.—Gauger [28] figures and describes the drug. In the drug-shops it is simply called *tan p'i*.—P. Smith, 169. *List of Chinese Medicines passing through Chinese Maritime Customs*, 1889. p. 104 (87):—*T'an p'i* exported 1885 from Wu hu 1,606 piculs. E. Kaempfer, *Amoenitates Exoticae*, 1712 (Bret. I.126). 862:—*bo tan*. *Paeonia major* stirpe ligneo surrecto. folio ramoso, laciniis inaequaliter divis. [Translator: The Greater Peony, being of erect wooden stem, and of leaves multi-branched, and of unevenly divided ragged fringe.]

The translator further draws the readers' attention to a number of comprehensive bibliographies which include mention of works pertaining to botany and the peony:

Henri Cordier, *Biblioteca Sinica* 5 Vols. Paris, Libraire Orientale & Americaine, 1904. Reprt. Ch'eng-wen Pub. Co., Taipei, Taiwan. All pre-20th cent. western works on China.

Yuan T'ung-li, *China in Western Literature*. Princeton: Yale University Press, 1958. Western language books on China from 1921-1957.

John Lust, *Index Sinicus*. Cambridge: W. Heffer, 1964. Journals/Articles on China in western languages 1920-1955.

Teng & Biggerstaff, *An Annotated Bibliography of Selected Chinese Reference Works*. Cambridge: Harvard U. Press, 1950.

*Association of Asian Studies Annual Bibliography of Asian Studies*. Ann Arbor; U. Michigan. To date.

## THE GREAT NATIONAL PEONY SHOW OF 1906 IN BOSTON

*From The Peony Manual by C.S. Harrison*

These annual gatherings have become national events. These winsome, beautiful, and attractive flowers have their devotees in all parts of the land. They gather from most of the northern states, some going 1,500 miles, and are amply repaid. Reports of the meeting are sent to all parts of the Union. Boston leads in all floral attractions. The Horticultural Society is the richest in the world. It owns a mammoth building and there is ample room for the display of the gathered tributes from the different states. Peonies are sent in by the ton. Some of the wealthy people near the city have splendid collections, often reaching into hundreds of varieties, gathered, regardless of the cost, from Europe and America. Here is a physician whose fad is peonies. What a collection he has! There for the first time we saw some of

Richardson's best. There was Milton Hill, which we never had seen before, and it was a case of love at first sight. Here is quite a collection from Ohio. They look faint and weary from the long journey, but they revive and take the prize. There are many from New York and the neighboring states.

T.C. Thurlow, the prince of peony growers, is there with his wife and daughter and three enthusiastic sons. Their collection is from France, Holland, and England, besides many American favorites. They carry off prizes, of course. They always do.

J.E. Shaylor is there with his marvelous collection, chief among them Mme. Emile Lemoine, a French queen of imperial beauty and radiance. He has one of the fine collections of America. President Ward is there with his favorites. Mr. Hollis is on hand with his splendid new creations. He is a magician, who has been calling forms of wondrous loveliness out of the unknown. He has many exceedingly fine ones, so many that, if all other varieties were wiped out, his family of new ones could stand as fair representatives of the whole race. His crosses between the Chinese and Japanese are very attractive and claim much attention. We are glad to know that there are now hundreds in different states at work along the same lines developing new varieties.

Here are exchanges going on. One man has very fine sorts, and another has others, and so they swap. Some are sold at high prices. And here let me say that the best varieties must go up. Mr. Hollis asks from \$1 to \$15 a root for his new ones, and they are worth it. Baroness Schroeder soars to \$5. And why not? Scoring all the points of excellence and multiplying as rapidly as any, the original cost would be lost in a short time. What are five dollars, when you can get thirty or forty roots in four years, and \$1,000 in ten years? People have been fooled so much in importing worthless sorts. They had much rather pay \$5 or \$10 for something they can depend on. The west may learn a lesson from the east and secure the very best, regardless of the cost. They are doing this with cattle, horses, and hogs, but haven't come to it yet with flowers. But they will, for there is plenty of room for growth along all lines.

## COLORED SLIDES

A gift of colored slides, all new seedlings, for the slide program has been made by Don Hollingsworth. Our thanks to him for the following:

Lanings peach hybrids

Lanings Silver Dawn F3 hybrid

Lanings best yellow hybrid

Lanings hybrid descended from Archangel

Roy Pehrsons best yellow

Don Hollingsworth #205, lacti can East No. 2 × lutea hybrid Alice Harding

Don Hollingsworth #685, lacti Alexander Duff × Clair de Lune.

## REGISTRATIONS

**RASPBERRY ICE.** *Roy Klehm, Charles Klehm and Son Nursery, Jan. 25, 1980*

Lactiflora. Very early bomb-shaped blossom whose color appears to be a rosy raspberry with silver highlights. Very unusual color combination and very intriguing in arrangements. It does not have many blossoms per bush but the individual blooms and stems are large and make good cut flowers. Height 36 inches. Bold exotic foliage, no pollen, sets seeds and fragrant. Plant Patent applied for.

**CHEDDAR SURPRISE.** *Roy Klehm, Charles Klehm and Son Nursery, Jan. 25, 1980.*

Seedling #108L. Lactiflora. Parentage, line bred Bowl of Cream. First bloomed 1967. Reliable, pollen, seeds and fragrant. Semi-double to fully double white rose flowers with numerous gold petaloids and stamenoids prevailing throughout the blossom. Midseason, medium height, plants approximately 28 inches tall. Excellent green foliage and good sturdy stems. Displayed in the seedling class, Fifth District 1979 show. Plant Patent applied for.

**BURMA MIDNIGHT.** *Roy Klehm, Charles Klehm and Son Nursery, Jan. 25, 1980.*

Parentage, female parent Burma Ruby  $\times$  ?. First bloomed about 1965. Dark red single flowering hybrid peony whose growth habits are somewhat more vigorous and taller than the parent Burma Ruby. Flower is deeper red than Burma Ruby. Has fertile pollen, seeds, 32 inches in height, early, no fragrance. Plant Patent applied for.

**MR. ED.** *Roy Klehm, Charles Klehm and Son Nursery, Feb. 19, 1980.*

Parentage colchicine treated Mons. Jules Elie. First bloomed about 1960. Extra early, blushing cream color large bloom of high centered form. Vigorous yearly growth with strong stems. No pollen, sets seeds. Fragrant. This chimera mutation of Mons. Jules Elie will occasionally produce frosty white flowers dappled with rose.

**WHOPPER.** *Roy Klehm, Charles Klehm and Son Nursery, Feb. 19, 1980.*

Parentage Mons. Jules Elie  $\times$  71 D. First bloomed 1953. Soft pink, early double ball, no stamens, good substance. Ruffled guard petals add texture. Fragrant. Seeds. Striking in arrangements. 39 inches in height, strong stems. Excellent foliage. Reliable. Plant Patent 4234.

**RED GRACE.** *(Lymon D. Glasscock.) Charles Klehm and Son Nursery, April 8, 1980.*

Parentage unknown. Double deep red hybrid. First bloomed about 1955. Good substance, ball form. So tightly petalled it is almost a complete globe.

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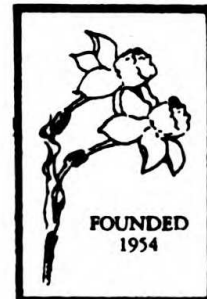
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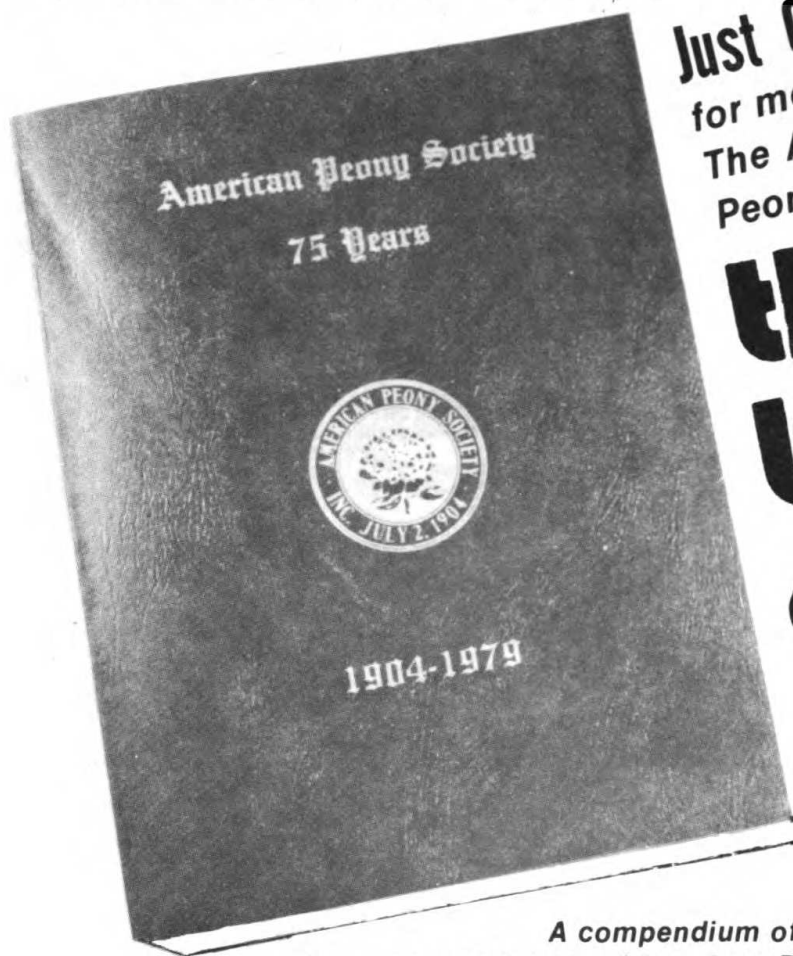
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