







# THE REVIEW

## OF THE SOCIETY FOR JAPANESE IRISES

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# FROM THE PRESIDENT'S DESK

As this is being written I can see the "patch" through the window and am pleased with what I see. Color good and growth normal for this time as measured by the calendar. Seedlings taller by three inches than the older plants, as though they were in a hurry to "show their stuff." Hope that they have something different to show. There was no winter kill here although the temperature hit -20 and weeks of zero weather. We were fortunate as to late freezes this year, -26 once and several hard frosts that seem to have caused no damage.

We have passed our first birthday and if interest continues to grow in the future as it has in the past we can expect to have a very outstanding Section in the not too distant future. To that end we should all try to interest as many new members as possible. Reports from West and South are good and interest in the North and East continues high.

Convention time is near and I hope to meet and greet most of you there. We have many things to talk out and about, including the election this fall of officers for the next two years. We will have a good slide show. Be there with your best. See what is new. If you have any bloom, bring it, show it, as many have never seen a Japanese iris. PCOR SOULS!

C.A.Swearengen

# HYBRIDIZING

# W.A. Payne

Occasionally persons interested in Japanese irises seek information concerning the various minor details of crossing the flowers and growing seedlings. As a matter of fact the routine methods employed in originating new varieties of irises are almost as numerous as the persons engaged in the hybridization. The following program, long used by the writer, has given satisfactory results although it may appear unnecessarily fussy and, no doubt, varies in many respects with the methods employed by other growers, it probably is as simple as is compatible with accuracy, which in my opinion is of the utmost importance in any well organized breeding program. Though it well serves my purpose it will not apply equally well for everyone and more than likely the beginner after a time will adopt a routine better suited to his individual needs.

During the blooming season it is necessary to begin work in the garden soon after daylight as pollen needed for the crosses one plans to make, and the flowers to be pollinated, must be covered before the bees begin their early morning pollen gathering flight. The stamens, which are the flower parts that bear the pollen, are beneath the styles at the center of the flower and are easily removed by the use of tweezers. The pollen ripens soon after the flower opens, therefore the stamens are removed from newly opened flowers and loose buds wanted for crossing before the pollen ripens, to prevent self fertilization of the flowers. After all the stamens have been removed from the flower the petals are carefully folded over the styles and the flower enclosed with florists' tissue or other light covering, securely tied to exclude the insects and left until the following day for pollination. I generally make reciprocal crosses therefore the blooms of both varieties are

covered after the collen has been gathered. Buds which are too tight to be easily opened or any opening flowers to which one cannot give immediate attention can be covered to exclude the bees until a more convenient time for preparation. The stamens, however, should always be removed before the pollen ripens, which generally occurs an hour or so after the flower opens. Most iris growers, as a means of preventing extraneous fertilization, instead of covering the flower, simply remove the petals on which the bees alight when gathering pollen. This method is not wholly effective with Japanese irises and is not recommended. Flowers that have been covered, however, are more susceptible to burning during extremely hot weather and it often may be necessary to shade the bloom at such times. In gathering and holding pollen a very simple and entirely practical method for my way of working is using a freshly gathered plantain leaf on which the variety of the pollen gathered has been written several times by a lead pencil and the stamens enclosed and carefully tied by a piece of raffia or thread. Ordinarily pollen so wrapped will keep in room temperature for two or three days. In extremely hot and humid weather it can be stored in a refrigerator at a temperature above freezing where it will remain viable for a week or more. This method offers little chance for error when polling and is satisfactory unless one wants to store pollen for an extensive period.

The stigmas on which the pollen must be deposited for fertilization of the flower are on the under side of the styles near the base of the style branches. A small lip which is flexed away from the lower side of the style will be noted. Its inner surface is covered with a sticky substance to which the pollen adheres. The stigmas, however, do not open and become receptive until a few hours after the flower has opened and will not become fully receptive until the second day, after which they remain receptive until the flower wilts. Pollination the first day the flower opens frequently is not successful, it therefore is more practical to prepare the bloom in early morning and pollinate it in late afternoon the following day. If the plants are in thrifty growing condition this generally results in a good percentage of seed pods. Pollen is easily removed from the stamens and applied to the stigmas by the point of a penknife. In instances when pollen is profuse the stamen itself may be rubbed over the stigma. If a brush is used it should be sterilized after each pollination. Pollen applied to only one stigma will suffice for complete fertilization, I feel however that fertilization is somewhat more certain by pollinating all the stigmas. After pollination of the flower has been completed a string tag with the cross - the pod parent by the pollen parent - written on both sides of the tag is attached to the flower stalk and the cross is fully recorded in the garden book for future reference. The covering is then replaced on the flower and left three or four days until the flower has wilted, when it may be removed. Bloom stalks generally have two, or occasionally three, terminal buds which open successively after the first bloom. All extra blooms on the flower stalk should be broken off as soon as wilted if allowed to bloom, since they may develop unwanted seed pods and also this diverts the entire strength of the stalk to the hand pollinated seed pod. Plants bearing seed pods should be maintained in active growing condition until the pods are fully developed. When the flower stalk turns yellow it should be cut low and hung pod end up in a room to dry thoroughly before extracting the seed. When the seeds are removed they are placed with the accompanying tag in an envelope or other receptacle and enclosed in a mouse-proof container and stored in a dry cool place until wanted for planting. This may be done in late

fail when germination will not take place before winter or, preferably, delayed until February or early March planting.

The seeds are planted in numbered flats rather than in the open ground, although the latter may give slightly better germination, as there is always the risk of loss by field mice and other rodents and the seedlings can more easily become mixed. A screened soil mixture of approximately one half good garden soil, one fourth sharp sand and one fourth compost and peat moss or leaf mold, a very light sprinkling of powdered sulphur to assure acidity and also a half inch of sphagnum moss which has been rubbed through a screen, placed in the bottom of the flat to provide drainage, will give satisfactory results. The seeds are planted about one half inch deep in rows two inches apart and one inch apart in the row. The various crosses are recorded as planted. The flats are placed in full sun and a normal amount of moisture is maintained, never allowing the flats to dry out. With good care germination can be expected in late April. Seedlings in flats are kept in active growth by occasional applications of Rapid-gro until transplanting time in early fall.

In late August or early September seedlings are transplanted from flats to well prepared trial beds which are maintained for three years. From these trial beds seedlings showing promise at blooming time are given a number and fully recorded with description of the flower. In the fall these numbered seedlings are transplanted into trial rows where they are given sufficient room to develop and there undergo further trial. The first bloom of a new seedling is never typical of the variety, as seedlings invariably change in form and occasionally change in color to some extent. Some varieties improve and others will degenerate, therefore extensive trial is always necessary to fully evaluate a new Japanese iris seedling.

## AN ALTERNATE METHOD OF STORING POLLEN

### C.A.Swearengen

In Mr. Payne's article he describes his method of handling and storing pollen for current use. I also used the same method for several years and found it satisfactory for the periods of time described by him. Due to the fact that I have needed pollen from the early singles for use on the late doubles and nine-petal peony type blossoms when it was no longer available, I have changed to the method which I shall describe.

Secure a plastic container with a tightly fitted lid such as is used to package Korn Kurls and similar foodstuffs. This container is round, transparent and about six and one half inches in diameter and three and one half inches high. Also secure a tin vegetable can of about #2 or #303 size and cut off the top, leaving two inches of the sides. Secure enough dessiccant such as Flower Dri to fill the can to a depth of about one and one half inches, and set this in the center of the plastic container. Next you will need for this size container fourteen plastic or glass pill bottles. At the drug store they cost about three to four cents each. And last you will need a roll of Scotch magic mending tape. This type is frosted, will stick to plastic and can be written on with an ordinary lead pencil. Put a label on each bottle and place them in the container around the can and you are ready to collect fourteen kinds of pollen, make your crosses and then, with the lid on the container store the lot till you need it again. It takes little room in the refrigerator, is clean and effective. About once each month you should dump the dessicant into a pan and put it in a 250 degree oven for about one half hour to dry out the moisture that has been absorbed. Pollen kept for seven weeks was effective and I see no reason why pollen could not be stored all winter in this manner. A piece of tape around the lid would eliminate the need of drying the gel in the winter. Another advantage is that you can read the labels on the bottles through the container and not have to sort out what you need. A time saver. It costs little. Try it.

# PREPARATION OF PLANT BEDS

# C.A.Swearengen

As your plants, seedlings or divisions, will probably be left for three or four years where they are planted it is very important that the soil be properly prepared before planting as it is not only easier but better that all the necessary nutrients be put in the soil at that time.

Some may not be able to procure everything that I use and others may choose to vary the method that is used here but it has been found very satisfactory over a period of years and I recommend it to you subject to such changes as circumstances and availability of material may require in your individual case.

The soil is worked to a depth of eight to ten inches with a power tiller (a garden fork is one form of this tool) and one to two inches of peat moss and up to three inches of well rotted cow manure and/or compost is spread on the bed and this is tilled in thoroughly. If the acidity of the soil, before you worked it, was found on test to be pH 6.5 or lower you are now ready to plant. If it tested more alkaline (higher) than this, add dusting sulphur or a mixture of equal parts of sulphur and iron sulphate (commonly called copperas) at the rate of a tablespoonful to the square yard and till this in.

This will give you a near ideal planting medium that will supply the humus needed by the plants. It will be found that the water holding ability of the soil has also been increased. It is a much better way to feed the plants than using commercial fertilizer and there is no danger of burning plants with excess nitrogen to which they are a bit sensitive.

In connection with bed preparation, drainage is very important, particularly where hard freezes occur. One of the greatest fallacies connected with the growing of Japanese irises is that they are all bog plants. I. <u>laevigata</u> is such a plant, but I greatly doubt that there are a hundred plants of same in the United States. What we grow here is <u>L</u> <u>kaempferi</u> and it is <u>not</u> a bog plant although it does require considerable water through the bloom period. These plants will not tolerate wet feet in the winter. They should not be planted in the edge of pools or ponds in latitudes where hard freezing will occur if you expect best results and an increase in plant size each year. It is more satisfactory to plant back far enough that the water level is a foot or more below the plant crowns, but that is a minimum. How well would you stay if you stood in freezing water all winter? Of course, this is of little interest to our members who live in the 'bot belt' but to those in the north it is something to remember.

The above methods and practices have proven very satisfactory for many years here and I wish you equal success.

# Max Steiger

Primarily, it was not my intention to create tetraploid Iris kaempferi since they did not seem to promise special improvements. Usually, tetraploids are bred for an increase of the flower size, but since Iris kaempferi as they are seem rather overdimensioned, I did not think that a further increase would make them more beautiful. And at that time some drawbacks had to be anticipated. To eliminate them would mean breeding work for a number of years. All that might still seem desirable concerning floriferousness, elegance, waving, or cultural requirements, can be reached more quickly and easily with diploid than with tetraploid plants.

There are, however, two colors which we cannot hope to attain in the diploid stage, a yellow and a brown Iris kaempferi. These being two of my breeding aims, reasoning induced me to aim at tetraploidy by means of colchicine. There are guite a number of yellow irises which, though with difficulties, might certainly be crossed with Iris kaempferi. Unfortunately, the hybrids derived from such crossings show a decidedly dirty color and, besides, they are highly sterile. Since only the F2 could give clean flower colors, crossing experiments on a diploid state would be futile. The matter is quite different with tetraploid plants, since they give fertile hybrids. For this reason, not only high grade seed of the Higo type was treated with colchicine, but equally brown and yellow flowering varieties of Louisiana irises and of I. pseudacorus, I. forrestii and I. wilsonii. These experiments, made on an extensive scale, had, with the exception of I. wilsonii, good results. Already this year, there is a sufficient number of tetraploid plants available for making crossing experiments on a pretty large scale. Perhaps it is of interest to compare the above-mentioned artificially changed irises with the tetraploid Iris kaempferi:

Iris pseudacorus: Flower size doubled, substance of petals much heavier so they stand rain and storm much better.

<u>Iris forrestii</u>: Flower size also nearly doubled. The much heavier substance of the petals in a strange way entirely changes the appearance of the flower. The falls no longer hang down as with the species, but are horizontal, and their edge is waved to a striking degree. They styles, and even the stamens, show the elongations and deformations known from Iris kaempferi.

Louisiana iris: No increase in flower size, but a remarkable thickening of the substance. Unfortunately, our cold climate here in Northern Bavaria is unfavorable for Louisiana irises so that bloom is poor.

Now, concerning the tetraploid Iris kaempferi, all difficulties appeared that had been predicted. Improvements which meant real progress could not be detected.

1. Fertility: Tetraploids are fertile, but less so than diploid plants.

2. <u>Thickening of the substance</u>: had the drawback that the flowers unfolded poorly from the buds and proved very brittle.

3. <u>Flower size</u>: shows a decrease, but this cannot be stated with certainty at the present time, since the complex nature of high-bred Higo varieties results in great size divergencies. 4. <u>Blooming time</u>: somewhat later. This might be considered an improvement by lengthening the whole flowering period of Iris kaempferi.

5. <u>Foliage</u>: is darker with the tetraploids, the characteristic middle rib is thicker which certainly improves the appearance of the plant when not in bloom.

6. <u>Waving and ruffling</u> of the petals is much more decided, and this is generally considered as highly beautiful by Iris kaempferi lovers.

We may conclude, therefore, that the improvements observed hitherto are amply balanced by the drawbacks.

Besides the breeding aims of producing yellow and brown Iris kaempferi, a new aim appeared which might seem promising. Crossings between diploid and tetraploid varieties result in triploid plants of high sterility. Their flowers quickly and easily break away from the sterile pod. With a sufficient quantity of breeding material, it ought to be possible to find parent plants which transmit this quality in a pronounced manner to their progeny. Thus it might be possible to obtain self-cleaning plants, i.e. plants on which the withering flower breaks away by itself. At any rate, it would be a decided improvement if our garden varieties were no longer "adorned" by the ugliness of withering flowers.

Translated by Georg Hackländer

# GROWING JAPANESE IRISES IN IOWA

# Frank B Foley

My new stock is usually received in early September, but Walter Marx will ship in April and fall. I usually dig my bed and remove some soil so the bed is lower than the rest of the beds or garden around it. Then I dig in acid peat and rotted cow manure and wait for the new stock.

After planting I use aluminum sulphate <u>around</u> but not on the plants. I water it in and flood the bed several times each night for a month, or until I see new growth. I keep the bed wet and water when it looks dry. If we are to have rain, I change the downspout so it is aimed at the bed, but not in it. This prevents washouts and we get them here in Iowa. More care and attention makes larger and nicer irises when the bloom time comes. I spray the same as I do for my 250 varieties of tall bearded irises.

In the fall, I mulch heavily and early. I use marsh hay and mulch before the first hard freeze, usually around Thanksgiving Day. This may be due to the fact that I'd rather do the mulching early than freeze, but then again these fall planted irises can use a bit of warmth as it gets down to 20 to 25 degrees below zero. I remove the mulch when it seems that the ground is good and warm because it frosts here up until May 20th.

Four years ago I started out with two Japanese irises that Mr. Ford Grant showed me how to plant. When I saw the Japanese irises at his home, I was sold on them. I now have 42 and am batting for 50 this spring. Mr. Grant and I are going to put on a Japanese Iris Show here in Davenport in 1965 and invite all growers to participate in it.

This year we are going to display our Japanese irises in store windows, banks, florist shops and any other place that will show them honor. We will have a sign explaining that these are Japanese irises and that more information about them may be obtained by visiting our gardens. Then we can convert some gardeners and get them interested for our show in 1965. We have two strains, Walter Marx and W.A. Payne introductions.

In a tall bearded iris robin, one of the ladies mentioned the Swan Lake Iris Gardens of Sumter, South Carolina. Mr. S. P. Wright, Superintendent of Sumter Parks and Recreation, sent me a nice letter and a pamphlet about the park. Bloom dates there, for Japanese irises, are May 25th through June 10th. This would be a good opportunity for anyone near Sumter at that time to see a beautiful display.

# JUDGING THE JAPANESE IRIS

# W.A. Payne

Due to the very limited color range in Japanese irises, form is their most important feature and inasmuch as they have an unlimited number of possible forms, their judging depends to a great extent upon the judge's sense of beauty. All types of bloom, single, double, peony type, cup shape, fanciful, monstrosa or any other form that may make appearance in the future should possess pleasing proportions and refinement and are meritorious only to the extent of their beauty, as stated in the judging schedule.

Relative to "novelty" and "distinction" you will note in the schedule, novelty is entirely different from distinction. Novelty consists of "entirely new and uncommon features", whereas distinction is a quality that sets a particular flower aside as being superior to others of similar character. Consequently, it may or may not embrace the quality of novelty. In the case of dappled varieties, with rare exceptions, they are interesting only because of their novelty and most varieties are lacking in beauty due to their dull, indefinite coloring and lack of a pleasing color pattern. Such varieties should be penalized. Only varieties possessing beauty should receive a high rating.

Any flower with blemishes or lacking symmetry would be disqualified or penalized automatically. Last season in my garden a new variety which otherwise was very definitely of introduction quality, had this defect. On every bloom, the spacing between two of its petals was noticeably wider than that between the other petals. Such a bloom would be disqualified. In showroom judging, size of bloom is a matter of indifference as long as it is in proportion to the height of stem and may range to twelve inches or more. Obviously a twelve-inch flower on a twenty-four inch stem or a three inch flower on a four-foot stem would be out of proportion and unpleasing. The stem in all cases, however, should be long enough to adequately show the branching.

As to form, single or three-petal flowers may vary from those with petals held reflexed forming a more or less ball shape through those with drooping and flaring petals to horizontal form, with petals of varying widths and shapes from narrow to broad overlapping. The three standards are of varying sizes and lengths and may be held upwardly flaring or the shorter forms may combine with the styles to form a cup shape in the center of the flower. Drooping standards should be considered a defect. Double or six-petal flowers have forms ranging from a deeply convex shape through flaring, stiffly horizontal, salver shape to a saucer or flaring cup shape, with a perponderance of convex-shaped varieties. Double and peony types of nine to twelve or more petals have no standards. In these types the standards have been transformed to petals. The fanciful or monstrosa type, as classified by the Japanese, are those in which the styles or stamens, or both, which may be more than the three which is normal for Japanese irises, are partly or wholly transformed into petaloids and are sometimes arranged in an interesting pattern such as rosettes in the center of the flower.

I believe color is adequately covered in the schedule. Japanese iris flowers occasionally are definitely displeasing. Last season I had a group of more than 30 seedlings of a certain cross of which the blooms without exception were decidedly ugly.

Pattern of flower includes splashing as sometimes is present on the standards. Blending which occurs on the petals as a halo of color surrounding the signals and extending to a greater or lesser extent over the petals. Veining, white or colored, which may be normal or narrow in width or broadened, may radiate in varying lengths on the petals. Sanding, which may form a light or heavy, uniform, blended or striated deposit between the veins and or on the styles. Stippling is a finer grained deposit of color than sanding and consists of minute dots. Dappling consists of spots of color and may occur in varying sizes from mere flecks to more or less prominent marbling and rarely may extend throughout the entire flower including the styles, forming a self-colored flower. Standards generally, though not always, have a more or less prominent edging of white or or color and petals may have an edging of white extending throughout the flower, varying from a hairline to a more prominent feature. All arrangements and combinations of color should be harmonious and pleasing. Solid colors in general should be clear, and hues - which are those colors that lie between two spectrum colors, such as those of the new brown varieties - should be attractive. A degree of smokiness in color is allowable if it lends attractiveness to the flower and in such instances should not be penalized.

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# A.I.S. JAPANESE IRIS SHOW

## June 26, 1964

American National Bank and Trust Cc. 136 East Michigan Avenue Kalamazoo, Mi higan

A week long display of blooming, potted Japanese Iris plants will be maintained at the Bank

Contact A. H. Hazzard for further details

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# COMPARATIVE VALUES AND POINTS FOR GARDEN EVALUATION OF A

JAPANESE IRIS

comparative values	FLOWER	points
30 21	<ol> <li>Form</li> <li>Color         <ul> <li>a) Clarity</li> <li>b) Harmony</li> <li>c) Stability</li> </ul> </li> </ol>	30 7 5 5
5 .4 10	<ul><li>d) Novelty</li><li>3. Substance</li><li>4. Texture</li><li>5. Distinction</li></ul>	4 5 4 10 70
70	PLANT	10
8 14	<ol> <li>Vigor</li> <li>Flower stalk         <ul> <li>a) Branching</li> <li>b) Strength</li> <li>c) Height</li> </ul> </li> </ol>	8 8 3 3
22	GARDEN QUALITIES	22
3 3 2	<ol> <li>Carrying properties</li> <li>Floriferousness</li> <li>Extension of season.</li> </ol>	3 3 2 8
8		100

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#### DEFINITIONS AND EXPLANATION OF GARDEN SCHEDULE

points

#### FLOWER

Flower must be beautiful regardless of size, possess distinction and be well poised on stem. Shape of flower is most important feature.

30 1. <u>Form</u>: (shape or formation as distinguished from type). Proportion and balance with all parts forming a pleasing ensemble possessing character and refinement is of primary importance. The value of unusual arrangements is in direct proportion to their distinction and attractiveness.

2. Color:

7 a) clarity: clarity and brilliance of solid colors and blends, distinctness of markings and pleasing arrangement of color pattern, or delicacy and refinement of lighter color arrangements are essential features.

### points

5 b) <u>Harmony</u>: the various colors of the flower should associate well totogether or complement each other.

5 c) <u>Stability</u>: color which remains fixed for duration of flower or onw which fades to a pleasing tone, enhancing its attractiveness, are equally desirable.

- d) <u>Novelty</u>: new or uncommon colors or color arrangements are acceptable only if pleasing.
- 5 3. <u>Substance</u>: should be consistent with the form and sufficiently heavy to maintain the shape of flower for its duration of bloom. If substance is light this feature should contribute to the particular shape or character of the flower and also withstand hot sunlight.
- 4 4. <u>Texture</u>: if velvety it should possess richness and depth. Other types of surface quality should possess delicacy and refinement.
- 10 5. <u>Distinction</u>: a combination of flower qualities which sets a flower apart from others of similar character. A flower possessing particular charm.

## PLANT

- 8 1. <u>Vigor</u>: regardless of size plant should be a good grower, a reliable bloomer, and produce many flowers.
- 2. Flower stalk:
- 8 a) Branching: stem should have a minimum of one branch, preferably more. The branches should be well spaced so that the buds are not clustered and long enough so that the flowers are not crowded. Each branch should preferably carry two or more buds.
- 3 b) <u>Strength</u>: stems should be fairly straight and present a good appearance and sufficiently large and strong to carry the flowers erect, regardless of their size, during ordinary weather conditions. In no case should they be flexible or wiry. Flower should be supported by a strong perianth tube and held erect.
- 3 c) <u>Height</u>: should be in proportion to size of plant and flower with the flower carried above the foliage. Stem should be neither too high nor too low to display the flower to the best advantage consistent with its size and particular form. Ratio of bloom diameter to stalk height should be near one to five...(e.g., bloom 7", stalk 35").

# GARDEN QUALITIES

- 3 1. <u>Carrying properties</u>: pleasing appearance of the individual plant and flower in a mixed flower border or in a massed planting with color of the flowers of sufficient intensity or brilliance to carry well.
- 3 2. Floriferousness: an abundance of bloom, and dependability.
- 2 3. Extension of the blooming season: a succession of bloom on the individual plant extending over a long period. Also remontancy.
- 100

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# COMPARATIVE VALUES AND POINTS FOR SHOWROOM JUDGING OF A JAPANESE IRIS.

comparative		points
values		
30	1 Form	30
25	2. Color	
	a) Clarity	12
	b) Harmony	8
	c) Novelty	5
5	3. Substance	5
5	4. Texture	5
15	5. Distinction	15
15	6. Flower stalk	
	a) Branching	10
	b) Height	5
5	7. Condition	
	a) Cultural perfection	3
	b) Grooming	2
100	*****	100

# FLOWER

POINTS

Flower must be beautiful regardless of size, possess distinction and be well poised on stem. Shape of flower is the most important feature.

30 1. Form: (shape or formation as distinguished from type). Proportion and balance with all parts forming a pleasing ensemble possessing character and refinement is of primary importance. The value of unusual arrangements is in direct proportion to their distinction and attractiveness. 2. Color: · . .

12 a) Clarity and brilliance of solid colors and blends, distinctness of markings and pleasing arrangement of color pattern or delicacy and refinement of lighter color arrangements are essential features.

- 8 b) Harmony: the various colors of the flower should associate well together or complement each other.
- 5 c) Novelty: new or uncommon colors or color arrangements are acceptable only if pleasing.
- 5 3. Substance: should be consistent with the form and sufficiently heavy to maintain the shape of the flower for its duration of bloom. If substance is light this feature should contribute to the particular shape or character of the flower.
- 4. Texture: if velvety it should possess richness and depth, other types of 5 surface quality should possess delicacy and refinement.

15 5. <u>Distinction</u>: a combination of flower qualities which sets a flower apart from others of similar character. A flower possessing particular charm.

10 6. Flower stalk: a) Branching: stem should have a minimum of one branch, preferably more. The branches should be well spaced so that the buds are not clustered and long enough that the flowers are not crowded. Each branch should preferably carry two buds. One open flower on a stalk at one time is normal for Japanese iris but more are desirable.

b) <u>Height</u>: stem should be in proportion to size of flower, be fairly straight and present a good appearance. It should in no case be flexible or wiry and flower should be well supported by a strong perianth tube and held erect. Proportion of size between flower and stalk should be near one to five (e.g., flower 7 inches, stalk 35 inches).

7. Condition:

a) <u>Cultural perfection</u>: Exhibit should show that the plant has been well grown, is free from insect injury, rust attacks, etc., is as near perfection as possible and has typical bloom for the variety. First flowers to open on a stalk are usually best. Two year old plants usually give superior bloom.

2

5

3

b) <u>Grooming</u>; specimen should be clean, free of flower or bud damage and present the best possible appearance.

100

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# JAPANESE IRISES AROUND THE WORLD

# Shuichi Hirao

When I met Arlie Payne in Terre Haute, he suggested that I write a detailed article or robin letter about my observations on Japanese irises grown in Western countries. Of course I should do it someday.

The Japanese irises in Wisley Gardens were disappointing because the varieties were old and unlabeled, though the growth of the plants was excellent. They were also disappointing in Kew and Seville Gardens in spite of their amazingly nice collection of all the alpines, hardy perennials and shrubs. Munchen Botanic Garden was seen to be one of the supreme in all sorts of plants. However, if I remember correctly, I did not find more than two dozen Japanese iris plants of a very old variety

At the Florence Symposium, Dr. Blazek from Czechoslovakia told me he was very pleased to receive nice plants from Arlie. Professor Rodionenko from Russia requested that I spare him some better seed as he had some violet flowering seedlings in his botanic garden in Leningrad and they were the only Japanese irises grown there. Mr. Hoog of van Tubergen, Holland, requested that I send him some of my best introductions, which I did last fall. He says he will start breeding Japanese irises now.

In southern France, I visited a nursery that has started with some of the better Higos and I hope their work will prove successful in the near future as the climate there is sililar to that here in Japan.

In IGA 63 Hamburg, I found the 300 plants, including the newest Japanese irises by Dr. Tomino, Mr. Mitsuda and myself had been planted in very well laid out, generously furnished gardens. Visiting there several times, I found on my last visit, on June 24th, some of the early varieties blooming. Hatsugoromo (Hirao) which is a single pink was the first to bloom but the substance was too poor. Marx's Good Omen was a large velvet violet six-petal flower and attracted many visitors. To our Japanese eyes, however, that variety was seen insufficient in the size of styles, though the substance was good. A middle-sized pink of Marx, of which I have unfortunately forgotten the name, was very nice with very good substance. It was a pity that I had to leave there before any of Arlie's varieties bloomed. Mr. Hans Frohn reported to me afterwards that it was amazing that many better varieties continued to bloom as late as the end of August. For the time being, in the case of Japanese varieties, the better varieties are always late. One of my varieties, Shiki-no-Hajime was awarded a silver medal by IGA. This is a huge, three-petal pale blue with sturdy stem and leaves, but I think if the judging had been done at a later date, the judges might have voted on some other later varieties.

Visiting Holland, I believed that it is an ideal country to adorn with Japanese irises and <u>Iris laevigata</u>, because every block, every garden and house is surrounded by shallow, quiet streams. I believed it a shame for those people to be indifferent to waterside irises. I have found none there except some <u>Iris pseudacorus</u>.

Max Steiger and his family were very pleasant and kind people. His success in crossing many irises on tetraploid tectorum was wonderful.

The garden of Dr. Patzelt was delightful. He has a very big, quiet valley which he wants to preserve. He planted his Japanese irises from Arlie and me in grass here and there, which was quite natural and I believe makes one of the best Japanese iris gardens in the world. His plants were not many, possibly around 50, but they harmonize beautifully with the surrounding scenery.

An International Garden Show will be opened in Wien this year. About 500 plants of Japanese irises were sent there by Mr. Kamo, a friend of mine. Dr. Tomino and Mr. Mitsuda and I have sent some, too. I have sent about 50 plants to Mrs. Flaminia Specht in Florence. On visiting her garden, however, I found them in rather poor condition. I hope to send her replacements someday.

On visiting the Brooklyn Botanic Garden in New York, I pleasantly found some Japanese irises planted along a pond in the Japanese garden. I believe those plants are ones brought back from Japan by Dr. G. M. Reed in 1930 when he visited here to observe Japanese irises. The plants, however, seemed to have been long neglected. Though many of them were blooming, I could not tell their names. Possibly most of them were outdated varieties.

In Bee Warburton's garden, big plants of wild kaempferi were blooming nicely. A few were also seen blooming on the plants of newer Higo varieties which I had sent in the previous fall.

The performance of Japanese irises in Orville Fay's garden was very informative to me. Two of my varieties, Hekitoh and Kuina-bue, were of good substance and more or less wind-proof. Mai-ohgi and Yuki-dohro, which are also my varieties, were miserable under strong sunlight and wind. The performance of the above four varieties is rather similar in Japan. I noted that many of Marx's varieties were suffering from excess calcium there. Some plants were yellow almost all over.

Orville very kindly educated me while I was with him for two weeks. Of the many lessons, the colchicine inducement proved most practical. He gave me some pure powder of colchicine and some paste. On returning home I applied the latter to germinating Nerines. Two of fifteen treated plants showed a symptom of swelling, and now I have confirmed that one of them is truly a polyploid. Last

month I tried the same on Californian iris seedlings. Two of about 20-seem to be polyploids. Orville urges me to try it on Japanese irises, which I will do as soon as my seeds germinate next month. None of my plants were killed by the colchicine. When effective, the seedlings will be polyploid, and when unsuccessful, the seedling will continue growing normally. I do not know what the future of tetraploid Japanese irises will be, but it may be that polyploidy will bring many new possibilities to them after nearly a hundred years in which essentially no progress has been made with them, since Sho-oh Matsudaira, who died in 1856, succeeded in breeding numerous fine varieties from wild ones. Indeed some of his introductions are still popular. Crville showed me two Japanese iris plants which may possibly be a tetraploid though not a big difference was observed between the plant and ordinary ones. He hopes that his tetra plant may be crossed with pseudacorus more easily than the ordinary Japanese irises.

Meeting Arlie was the most impressive experience, possibly in my whole life. I was very pleased to find the last bloom of Confetti Shower greeting me there. In truth, this is one of my favorites of his introductions. I enjoyed talking with Bob Swearengen and many other pleasant people there.

In the garden of Mrs. C. B. Hamilton in Baton Rouge, Louisiana, I found that the Japanese irises I had sent were amazingly vigorous growing. Though no bloom was left, she told me she liked my flore pleno varieties best. She seemed intending to extend her Japanese gardens. The increase of her plants was observed to be much faster than in Japan. Mr. Claude Davis is another lover of Japanese irises there.

Mrs. S. L. Heacock in Denver is another successful gardener of Japanese irises. I did not imagine that they would grow so well in such a dry climate until I observed them myself. It was a pity that I could not visit Oregon but I hope to do so the next time I am in the states.

Japanese irises in the garden of Bob Trueman in El Sobrante, California, were also amazing with their drouth resistance. I sent him some plants a few years ago and I found about ten of them were surviving. They were planted side by side with tall bearded irises and had been receiving water once a month. The plants were very small but the foliage was deep green and healthy. I had not imagined that Japanese irises are such drouth resistant plants. Someday I shall report to you in more detail, possibly with pictures.

Art Hazzard asked me whether we Japanese have any test gardens here or not. No, we do not have such a system here. I have learned that Western people are much more advanced in carrying on an organization. We have organized here The Japan Iris Society, the executive of which is myself. Our society has been an organization so far for Japanese irises almost exclusively. New varieties are mostly registered in our bulletin. For the moment, however, the Society does not take leadership to qualify a new variety, which is partly due to our historical background and partly due, perhaps, to our people' nature.

Dr. Patzelt in Germany wonders if it might not be advisable to judge Japanese irises under the same or similar standards as those for tall bearded irises. For me, this is a difficult question to answer. I have told him that Japanese irises are too little known now among people to establish any standard for judging. Even in my country, the point of view is different depending on localities,

purpose (for instance, in pot culture to exhibit in a Japanese room, a big bud which remains unopened as long as possible is desired, but for the garden better substance may be essential...) and so on. Taking branching habit, for instance, I cannot imagine it beautiful to have a huge flowering variety branched too much. In the case of large flowering varieties, a huge flower on the terminal of a nonbranching stalk with a nice harmony with foliage which is not too erect but not too drooping is essential for beauty. If one wants to extend the blooming season of large flowering variety, he should work on three-bud-installing strain on the terminal. Of course I do not deny that a heavily branched medium or small flowering Japanese iris is desirable.

# TO GARDEN JUDGES OF THE AMERICAN IRIS SOCIETY

It is regrettable that so few of many fine varieties of Japanese irises being grown in America, have received awards. Make it a point to see and take notes about some of the newer Japanese irises in your area this year. See them in the gardens of members of this Society and visit one of the larger display gardens if possible. Vote for varieties you consider worthy of recognition.

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## WHERE TO SEE JAPANESE IRISES IN BLOOM

Kingwood Center, Mansfield, Ohio New York Botanical Garden, New York, N.Y. Presby Memorial Gardens, Montclair, N.J. Mr. W. A. Payne, 7001 Dixie Bee Road, Terre Haute, Indiana Mr.C.A.Swearengen, R.3, Box 136, Terre Haute, Indiana Mr. A. H. Hazzard, 510 Grand Pre Ave., Kalamazoo, Mich. The Walter Marx Gardens, Boring, Oregon Mrs. Troy Westmeyer, 60 Gary Road, Stamford, Conn.

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#### **REVIEW OF AWARDS TO JAPANESE IRISES**

#### AIS Honorable Mention - Now Eligible for Award of Merit

Orchid Majesty (Payne) 1959 Enchanted Lake (Payne) 1960 The Great Mogul (Payne) 1959 Fringed Cloud (Craig-Hager) 1962

## International Horticultural Show Awards, 1963

Blue Nocturne (Payne) Fashion Model (Payne Orchid Majesty (Payne) bronze medal Shiki -n-hajime (Hirao)

acld medal silver medal silver medal JAPANESE IRISES ELIGIBLE FOR THE 1964 HONORABLE MENTION AWARD The following varieties introduced prior to January 1964, are widely grown:

Walter Marx Marhigos		W.A. Payne Introductions	
Acclaim	Light at Dawn	Butterfly Prince	Sea Fury
Apple Blossom Cas	cade Magic Lantern	Blue Nocturne	Shadow Play
August Emperor	Majestic Mountain	Carnival Queen	Silvercrest
Azure Ruffles	Mammoth Marvel	Classic Mcdern	Silver Frills
Battle Cry	Mauve Opera	Cobra Dancer	Sky and Water
Beauty on Parade	Midnight Whisper	Confetti Shower	Smiling Beauty
Belle of the Ball	Midsummer Reverie	Cresting Waves	Snow Glitter
Blue Coat	Morning Mischief	Dame Fortune	Strut & Flourish
Blue Gentian	Mountain Grotto	Danseuse	Swirling Waves
Blue Lagoon	Mystic Buddha	Danseur Noble	Violet Lustre
Blue Orchid	Ocean Mist	Dark Rhythm	Whiff o' Smoke
Blue Pompon	Orchid Fawn	Distant Echo	Winged Chariot
Brilliant Burgundy	Oriental Witchery	Fall and Frost	
Calico Maid	Over the Waves	Fashion Classic	
Court Jester	Pastel Princess	Fashion Fete	
Crystal Halo	Peacock Dance	Fashion Model	
Dark Drapery	Persian Rug	Fiery Steed	
Dappled Bay	Pink Frost	Flying Crane	
Dawn Ballet	Pin Stripe	Flying Tiger	
Diamond Night	Pink Triumph	Garden Enchantress	
Driven Snow	Pomp& Circumstance	Gayety	
Embossed	Rampant River	Gay Festoon	
Emperor's Robe	Reign of Glory	Gay Firefly	
Falling Star	Rose Prelude	Imperial Robe	
Flying Kite	Rose Tower	Ivory Glow	
Frilled Enchantme	nt Royal Crown	Ivory Mantle	
Frosted Pyramid	Royal Pageant	Joyous Cavalier	
Galatea	Ruffled Brocade	Joyous Youth	
Gay Gallant	Silken Parasol	Lady Gay	
Geisha Dance	Sea Titan	Lilac Fairy	
Giant Blue Butterfly	y Silver Waves	Lilac Pageant	
Giant Carmen	Snowy Hills	Magic Spark	
Gift of Heaven	Sorcerer's Triumph	Miss Simplicity	
Good Omen	Stippled Ripples	My Fancy	
<b>Great</b> White Heron	Storm at Sea	Night Festival	
Gusto	Summer Glory	Night Music	
Hall of Marble	Summer Storm	Pillar of Fire	
Heather Red	Sweet Murmur	Prima Ballerina	
Hoyden	Temple Maiden	Princess Aurora	
Imperial Palace	Thunder & Lightning	Red Titan	
Imperial Magic	Tidal Waves	Reigning Beauty	
Imperial Velvet	Tinted Cloud	Restless Sea	
Island Paradise	Vain Victor	Rose Cavalier	
Ivory Glow	Valiant Prince	Rose Fantasy	
Jeweled Kimono	Veiled Vanity	Royal Sapphire	
King's Court	Velvet Canopy	Royal Tiger	
Knight in Armor	Woodland Brook	Scheherazade	
Lady in Waiting	World's Delight	Scherzo	20
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Blackthorne Gardens, 48 Quincy St, Holbrook, Mass.
Brown's Iris Gardens, 14920 Highway 99, Lynnwood, Wash.
C. A. Swearengen, R. 3, Box 136, Terre Haute, Ind.
Melrose Gardens, Rt 1, Box 466, Stockton, Calif.
Rex D. Pearce, Moorestown, N. J.
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Walter Marx Gardens, Boring, Oregon
Wayside Gardens, Mentor, Ohio
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