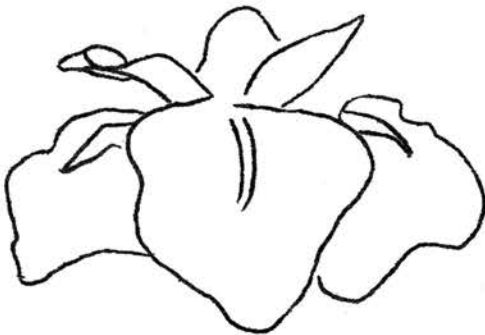
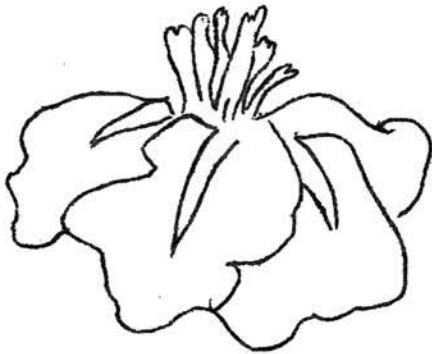
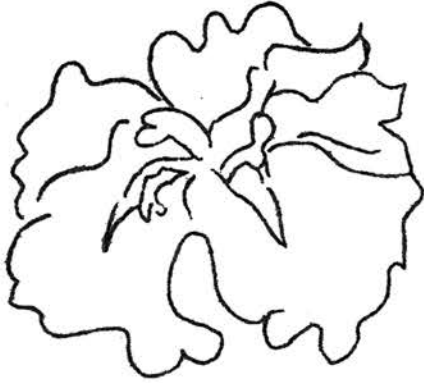


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THE REVIEW

THE REVIEW

OF THE SOCIETY FOR JAPANESE IRISES

Volume 3, Number 1

May 1966

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Expire 1966:	Frank Foley, Davenport, Iowa

FROM THE PRESIDENT'S DESK

Spring again and with it great expectations. Our membership is increasing at a reasonable rate and this is a desirable condition as it shows not only an increase in interest but also that, with an organization to represent and assist them, more people want to grow Japanese iris, many of whom had heard several of the many erroneous reports that they were "hard to grow." There are no deep dark secrets, only the application of simple procedures and common sense. Elsewhere in this issue is a short article on "How to Succeed with Japanese Irises."

Our financial condition is excellent and if those of you who have the ability (there are many) will send the editor an article for publication, we can enlarge The Review and make it of more interest to more people. The articles need not be long. Tell us about that new one you saw or planted last summer (or before), new insect controls or weed controls that you have learned of or use, new "breaks" or color patterns in seedlings and also share your troubles with various of the cultivars with us so that we may be warned if the plants are poor doers. Perhaps some of us have solved your problem in our own gardens and can "give you a hand." These and many other things are subjects for your pen. You don't need a PhD, not even a typewriter. All that is needed is a little willingness and a few minutes of your time.

Beginning with the next issue of The Review we will publish Robin Gleanings. These will be excerpts from the Robins that contain items of general interest. In that way more news of general interest will reach more people. Unless permission is granted no names will be used but we would like to give you the credit, which is your due, for the good ideas that so often are in the Robin letters. If you are not in a Japanese Iris Robin, join one. It is well worth your time and costs only the postage on the letter.

It started to rain last night. We are "short" five inches so far this year. The Japs are "up" from one inch to two inches here. This is April 10. I have various reports on the past winter and most of them are about average. The East had considerable snow which is all to the good, the far West had enough rain to "lay the dust" (some of it under a lot of mud) and the home area was a bit more mild than usual but we had 28 degree weather on the eighth of April. I predict that the 1966 season will be much better than the past two over most of the States.

Now one very sore point will have to be brought to your attention. This is NOT a one man organization. Your president needs the help of a few of you working on committees. Numerous requests have been answered to the effect that the writer did not have the ability to serve. How do you know that when you have never tried? I can use as many as will volunteer to serve. When you put a little effort into an organization you get more out of it. The officers have generally been helpful but there is need of help at committee level. A postcard will do. Just let me know that you are willing to try and along what line you are best fitted in your opinion. Don't tell me that you can't spare the time, that you are not well, that you have sickness in your home, etc. These are not reasons, only excuses, in most cases. The best workers that we have are so loaded with other work that time is at a premium.

I am a retired railroad shop man, 68 years old. I cannot live forever. The younger members must learn. It is experience that counts. Get a little by helping us. Mr. W. A. Payne, a youngster of 85, will close his garden this fall. You all know of his years as a hybridizer. Who of all of us will take his place? Who will make a few crosses this year? Each of you should do so. We need more GOOD irises. To get them we must grow more seedlings. Yes, I said WE, you and you and you as well as those who are now doing so. If the early settlers had not cleared roads and cut down trees so that they could plant crops what

would the United States amount to now?

Societies are no different. If we are to grow, we must all work if only an extra hour each day. Therein lies success and with it contentment. What more does this life offer? Now I want volunteers! Must you be drafted? There are no 4F's. Let's all lift. The load will be lighter for all if we do.

This is election year for us. The nominating committee is at work now.

C. A. Swearengen

HOW TO SUCCEED WITH JAPANESE IRISES

C. A. Swearengen

This is deliberately short. It contains only the essential points as I have no desire to confuse you.

Unless you live in the extreme South or Southwest, select a well drained location in full sun. In the South and Southwest partial shade will help. Work the soil as deep as you can get a garden fork. Add a generous amount of well rotted cow manure, compost and peat moss. If the soil is light or sandy, add a little extra peat to help hold moisture. The soil should be on the acid side, pH 5.5 to 6.5. If your soil is alkaline add about a teaspoon of dusting sulphur or sulphate of iron (copperas) or a mixture of the two, to each square yard of surface. This will acidify the average soil enough. Work well. I stir my beds at least four times with a power tiller. Plant good strong divisions, cover one to two inches and keep well watered until growth starts. This does not necessarily mean new green tops although if planted early in the fall you just may have them. It is not necessary that top growth occur, it is the new root growth of which we are talking. In areas where freezing occurs it will be necessary to mulch as soon as the ground freezes to prevent heaving.

In the South and Southwest, where freezing does not occur to any damaging extent, it is not necessary to follow the "well drained" instructions. Also, except to conserve moisture and control weeds, the mulch may be omitted. If no rains fall and you have no snow cover in January and February, a good watering will help. Pick a warm day if your area has any at that time. In the spring normal watering till the bloom stalks start, then plenty of water till after bloom time. Normal garden care from then until winter. The mulch is not a must after the first winter.

JAPANESE IRISES IN HUNTINGTON, WEST VIRGINIA

James M. Aultz

I have grown some collections of Japanese Irises for a number of years. Friends have recently given me several named varieties. Mrs. Pauline Williams of Charleston, West Virginia (one of your members) brought a large sampling of Japanese irises to the June meeting of our Southern West Virginia Chapter, Region IV, AIS, two years ago. These attracted a great deal of favorable attention, as few of our members grow them — a fact which I would like to see changed. As Chapter Chairman, at the present time, I may use whatever influence I have to promote the growing of these lovely flowers.

To date I have been unable to visit the Williams' garden at bloom time, but both Mr. and Mrs. Williams have visited my garden here. My Japanese irises

are grown in a recessed bed, close to the garden hose connector, where they can be flooded from the time it is warm enough to work out of doors in April until they bloom in June. I feed them with manure and aluminum sulphate, use peat moss on the bed in spring and mulch with maple leaves in the fall. Mulch is removed in April. The irises seem to thrive on this treatment.

I use all fertilizers in the same manner -- rather stupid of me, perhaps -- but it simplifies things, and seems to work well enough: a ring around each plant, lightly dug into the soil, the way they recommend for roses, if I may use that word to an irisarian!...Incidentally, no fertilizer of any kind was used last spring by me because I was in Arkansas at the time it should have (would have) been applied...and speaking of such, I swear by superphosphate for the tall, and put it on two weeks or a month before expected bloom time. Mrs. Sargo says that in Arkansas they apply it six weeks before bloom time.

Excerpts from letters to Secretary, John Hartman, published by special permission of the author.

NUMAZU

A. H. Hazzard

When we were planning our first Japanese Iris show in 1963, there was considerable activity in Kalamazoo, regarding the Sister City movement. The Chamber of Commerce and the City Commission favored the idea of honoring our sister city in Japan by showing Japanese Irises in Kalamazoo, and the City Parks Department put in a planting of Japanese Irises on the Mall for both 1963 and 1964. All this resulted from a ten minute appointment, which lasted an hour and a half, with Mr. F. J. Buckley, Executive Secretary of the Kalamazoo County Chamber of Commerce. Japanese irises were new to him but the Marx catalogs were simply irresistible.

At the 1964 show, of which Mr. Frank A. Williams was co-chairman, my seedling #113 won Best in Show and a bronze certificate from AIS. It was suggested to Mr. Rokutaro Shioya, Mayor of Numazu, Osaka, Japan, our sister city, that we would like to name a Kalamazoo originated Japanese iris NUMAZU, and he approved the idea. The Kalamazoo Parks Department was asked to make the selection but Manager Kik delegated me to do it. Inasmuch as the judges found #113 so attractive, I felt obliged to follow their lead and the registration and introduction followed.

Numazu is a pure, warm white, three-petal type of good size, medium height and a free bloomer. Editor J. Arthur Nelson wrote me that they would use a cover with a blue tint "to set off the whiteness of the iris" and I liked it but some have gained the impression that the bloom is light blue in color. Mr. Williams supplied the snapshot for the Bulletin cover and owns the subject cultivar.

While it seemed in order to introduce this iris at my standard price for introductions, I have decided to distribute it on a goodwill basis, only, to continue the friendly association which played so strong a part in its creation, and I hope those who obtain it will follow the same plan. One was included in an exchange of plants with our member Mr. Akira Horinaka of Osaka, Japan, and others will be supplied as desire and opportunity offer.

THE CULTURE OF IRIS IN JAPAN*

Tohichi Ito

Beautiful flowers were blooming, with nature's blessing, in our land, though we lost the feeling for beauty because of the terribly strained emotion of the war. Little remained of iris culture as the gardens planted with colorful varieties were converted during the war into rice and potato fields.

I preserved my iris plants in a corner of my garden, and began to breed them in 1946. Now I have more than three hundred beautiful varieties.

In 1951 Mr. Milton Blanton visited my garden often and enjoyed these varieties with me. In 1952 Mr. Horace Bristol told me that he had never before seen iris as beautiful as these and he made many color photographs of these varieties. Later, Mr. Blanton told me to write an essay on iris culture in Japan. He will introduce me to the Iris Society in the U.S.

History of the Japanese Iris

The original iris plants grew wild in many districts of Japan, and the culture is very old; namely:

1. There are records of the culture dating back about five hundred years.
2. In 1781 several varieties were cultivated.
3. In or about 1840 Mr. Matsudaira began to breed Iris, and succeeded in getting more than two hundred beautiful varieties. These spread over many districts, and formed special local types as we now see them.

Mr. G. M. Reed, Botanical Garden of Brooklyn, New York, came to Japan in 1930 to establish the Japanese Society of Iris. The Society was progressing systematically when the war broke out. The war years resulted in the decline of the culture, and the decrease in varieties.

Nowadays, the course has turned to the direction of further development. The number of iris culturists is increasing, the Japanese Iris Society has re-started, and new research is progressing.

Classification of Japanese Iris

A unified classification has not yet been established, meanwhile the following classifications are used:

I. Based on place of production.

A. Tokyo Type.

Most cultivated iris in Japan are the Tokyo Iris. This iris inherited the lines from varieties bred by Mr. Matsudaira in 1840 in Tokyo. The numerous varieties vary in color and type.

- a. The terminal flower in bloom is situated higher than the leaves and the flower stem is hard and straight.
- b. The leaves of most grow upright and strong. Those blooming early have more leaves than the others.
- c. This type is available for cutflowers, gardens and Bonsai (dwarf culture in pots).

*Reprinted by Special Permission, THE BULLETIN of the American Iris Society No. 128, January 1953.

B. Ise Type

This iris is cultivated in Mie Prefecture.

- a. The petals are narrow, long and hanging. The distinctions of this variety are that the leaves grow upright and higher than the flower stem. It is used in flowerbeds and gardens because of its enchanting beauty.

C. Kumamoto, or Higo Type

This type is bred, and was developed in Kumamoto Prefecture, Kyushu Island.

- a. The flowers are generally big, several varieties being 10 inches in diameter. The petals overlap, and are crinkled like silk crepe. Most flowers flourish late in the season. The flower is situated higher than the leaves.
- b. Most leaves bend at the top, while a few grow upright.
- c. The flower stem is easily blown down by the wind and rain, because the flowers are large and heavy. For this reason, they are mostly grown in pots, and appreciated in the house.

The above mentioned is the popular classification, but it is difficult to draw an exact distinction between these types. Several of the Tokyo iris and Kumamoto iris resemble each other.

II. Based on flowering season.

The natural flowering season in Tokyo districts is about May 25th for the early varieties, and about July 5th for the late ones. Most Tokyo iris flourish in the middle of June, and most Kumamoto iris flourish late in June.

I classify the Iris flowers according to the flowering season mentioned above:

A. Earliest variety	Before June 5
B. Early	Between June 5-10
C. Middle	Between June 10-20
D. Late	Between June 20-25
E. Latest	After June 25

III. Based on color.

A. White	E. Deep indigo	I. Spotted
B. Violet	F. Pink	J. Picotee
C. Light purple	G. Reddish violet	K. Graduation
D. Indigo	H. Striped	

Situations and Circumstances

In Japan, lying between the latitudes of 30 degrees and 45 degrees N., we find here and there iris groups growing wild. It appears that the Japanese Iris is a very strong plant, and the territory of possible cultivation is rather extended. In the northern districts the iris grows where the temperature drops to 40 degrees below zero in the winter, whereas in southern districts it grows where no frost appears. The iris prefers to make its home in marshes and swamps. However,

from the fact that we find them growing in dried up marshes, we can conclude that the iris can also grow on normal dry land.

I knew from my cultural investigations that they can grow easily on dry ground with good watering.

In Tokyo districts, the leaves die in November as a result of frost. In spring buds sprout out. In June leafbuds grow thickly, and flowerbuds are in bloom. At the end of September rootstems begin to grow fat, and in the middle or end of October flowerbuds are formed. The luxurious growth of leaves and fatness of rootstems depend on better fertilization, ventilation and sunshine.

In the Tokyo area, buds which grow out in June or July form flowerbuds when they receive good care and fertilization. Also, when new sections, separated from the old plant in July, are planted on August 1st after having been kept in cold storage, the flowerbuds form in autumn and bloom in the next spring as usual. This means that the iris can be cultivated in districts where summer is short. According to my experience, the iris with six or seven perfect leaves at the end of September can form flowerbuds and bloom perfectly in the following spring.

The Soil

Most wild iris grow in marshes in the mountains. This soil is alluvial, formed by top soil from the mountains and fallen leaves. On deep alluvial fertile soil, iris grow thickly, in poor, shallow top soil the height of the plant is low, and the flowers are small. From this we can conclude that the soil of clay and leaf mold is most suitable for iris culture, as this is the type of soil in which they are found growing wild in Japan. As my farm is situated at a low elevation, and the soil is alluvial clay, the iris plants flourish. I use compost for pot culture. The compost is made in winter, and weathered enough after mixing two or three times to avoid the decay of rootstem, which has a few new roots after separation from the old plant. The separation and planting occur in June and July at my farm. The proportion of materials to make the compost is as follows:

Farm soil.....	100
Cow manure.....	20
Bone dust.....	1

The Manure

We see iris blooming on comparatively barren soil, but to have really beautiful flowers we must use a good quantity of fertilizer. Iris plants suffer less from too much fertilizer than other plants and the method of fertilization is easier.

At my farm the proportion of three essential factors is as follows:

N3 P3 K2

The fertilizers containing these factors are fish meal, ammonium sulphate, superphosphate, rape seed meal, plant ash, potassium chloride and cow manure.

The newly transplanted plant is fertilized differently from the old plant. After the newly planted young plant has two or three leaves, it is fertilized with well weathered mixture, as any unmaturred manure in the soil prevents the formation of new roots, and also causes decay of the young plant. When the plants are set out in June or July, the first fertilizing occurs at the beginning of August, and the second at the beginning of September, according to the results of the first fertilization. In the case of the plant which has not been transplanted, the first fertilization is applied as soon as blooming is over, and the second during the middle of August.

A bud stimulating fertilizer is given in early spring, after clearing away dead leaves. At this time a decayed extract of fish meal is used before watering. In the middle of April plant ash is given and in the middle of May the matured extract of fish meal, or a mixed solution of ammonium sulphate and superphosphate are applied.

Propagation

There are two methods of propagation, by seedling and by separation of plant. Separation is the popular method, while seedlings are used only for breeding new varieties.

A. Seedling

Iris naturally bears seed well without help, unless it rains or blows heavily during blooming season. However, there are also sterile varieties and non-self pollinators.

To make a better variety, the stamen is taken away one or two days before the flowers open, and pollen is put on the stigma on the day of flowering. This is done to avoid the degeneration by natural fertilization, which frequently occurs. As soon as the stigma is fertilized, the fruit begins to grow, and ripens at the beginning of September. When the seed is ripe, the fruit taken from the stalk is dried and the seed removed. Two seasons, spring and autumn, are adapted to sowing.

a. Sowing in Autumn.

Iris can grow under relatively low temperatures, while it takes about onemonth for germination of seed under the temperature of 15 degrees C. Thus it is better to sow early in autumn. Dried seed is sown at the end of September after having been soaked in water for 24 hours and stored for ten days in refrigeration at 0 deg. C. Weathered soil, made from decayed leaves, is used for sowing in pot or flat with good drainage.

The thickness of cover soil is about 0.2 inch and the watering is plentiful. After germination in the middle of October, the pot or flat is kept in a coldframe for wintering.

Early in April the seedlings are transplanted into pots or beds. One seedling is planted in a 3-inch pot, while in beds the plants are set five inches apart. In June or July the potted plants are transferred to five-inch pots, and the bedded plants are moved to ten inches apart. By careful fertilization and watering, the plants will bloom in the following spring. Plants grown from autumn sowing have a higher percentage of blooming than those grown from spring sowing.

b. Sowing in spring.

Stored seed is sown on beds or flats in the middle of March. The seed germinates by the middle or end of April, with care taken for good watering. When the plants have three or four leaves, they are transplanted into three-inch pots or in beds seven inches apart. In the latter half of July, the potted plants are transferred into six-inch pots. These plants under normal care will mostly bloom in the next year. Good varieties are selected from these flowers.

B. Separation of shoot.

The stem of iris is situated in the ground, and holds some nutriment. The joints of this stem have roots and buds. In proportion to the growth of buds, many roots come out and new stems are formed in the ground,

to become new individual stumps. There are two ways to separate these stumps.

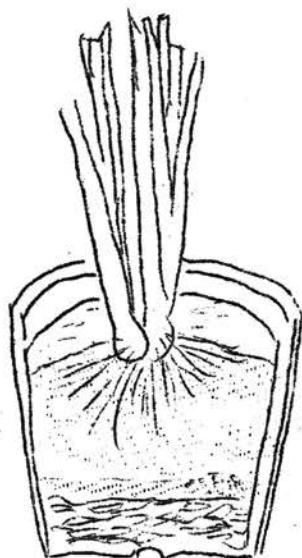
a. Separation in winter to spring.

The stumps with enough stem and roots to be separated in this season can bloom and form buds in the same year, though the flowers are small. In the following year the stump becomes a good plant after growing fat on new soil.

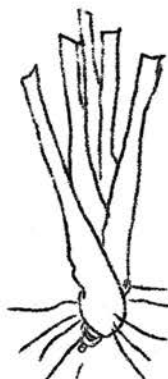
b. Separation in summer.

The separation at this season before flowering has the same results as that done in spring. The separation after flowering is done as soon as possible, and this results in the best plants, and is the popular method in Japan. To propagate plants only without expectation of flowers, as many buds as possible are separated in spring and flower buds are cut off. Former year's rootstems with sleeping buds are used too.

In order to get stumps for propagation from the iris garden without changing the style of the garden, half of every plant is cut off, and the holes left are filled with well fertilized soil. By this method one can extend the iris garden without preventing the year's flowering.



Two Flower-Style
Potting



Summer
separation
"New Bud"



Spring
separation
"Old Plants"

Disease and Insects

Iris in Japan are not heavily damaged from insects and injurious disease.

A. Insects.

1. *Dichrovrosis Punctiferalis*, Juenee

Young worms eat the stems and leaves. Spray 1 part DDT too 800 water.

2. *Apamea nictians*, L.

Young worms eat young stems and buds. Spray 1 part DDT to 800 water.

3. *Phytometra festata*, Graeses.

This worm appears in April and May and injures the buds. B. H. C. sprayed.

4. *Xylina formosa*, Butter.

This worm eats leaves in April and May. Spray with D. D. T. and B. H. C.

B. Disease.

1. *Puccinia Iridis* (DC) Walk.

The attacked plant dies from rust spots.

2. Root rot.

The attacked plant should be dug up and burned.

Cultivation

Some people tend to think that iris should be cultivated on marshy ground, as that is where most wild iris is found growing. Iris like a wet place, but they can be grown more easily on normal dry ground with plentiful watering. The popular method of cultivation nowadays is in dry fields, gardens or pots.

1. Culture on marshy ground.

Many iris gardens are on marshy ground, ricefields and shallow ponds, due to the habits of wild iris, but also because it is beautiful to see them reflected in water.

After flowering in June or July, old plants are separated in pieces with three to five buds. Sometimes old plants which grow too thick fail to bloom. The plant pieces are set out 20 to 30 inches apart in staggered rows. The ground to be planted should be plowed and fertilized with stable manure, and liquid fertilizer, as described under "fertilization." The leaves are cut off at 10 to 15 inches to avoid injury from dryness or wind. In the middle of August when three or four leaves have grown and the plants have become vigorous, they are weeded, then fertilized with fish meal, superphosphate and plant ash. Care must be taken that the ground will not dry out, or that water will not go over the root crown. After the middle of November, the water should be drained off to keep the ground dry.

In the middle of March, the dead leaves or layer of straw which covered the plants through winter are taken away. Now the plants receive the budding fertilization, and care is taken to free them from injurious insects. The plants are fertilized with matured extract of fish meal two or three times in proportion to growth before blooming.

Immediately after blooming the flower stalks are cut, unless seed is required. Again the plants are fertilized with fish meal, bone meal, plant ash, etc., to continue healthy growth.

Plants are usually left in the same place for two or three years until they have reached maximum growth. For propagation, clearance, or rejuvenation of old plants, which bear no flowers, plants are separated in March or April as described above. Plants separated in spring bear few flowers, but the growth of buds is vigorous, and the sprouting is better. For this reason, stumps with only two or three buds are planted out, and sometimes flowerbuds are cut off in the first year to enforce growth of plants. This method of planting in spring gives a

a better result in growth and flowering in the next year, than the autumn planting.

2. Culture on dry ground.

In the beginning of iris culture, people grew them where they were easiest to water, by a well or scullery. As it became known that iris grow and bloom easily on dry ground, too, people planted them in their gardens and fields. For dry land cultivation, a relatively low spot of garden or field is preferred and beds are made low so as to hold rain or drain water, and the place becomes like a pond.

On this bed the separated stumps with three or four buds are planted at a distance of twenty to twenty-five inches apart. After planting care is taken with good cultivation and watering to avoid dryness until November. In August or September the plants are fertilized with decayed extract of fish meal, as in the case of marshy culture. In November, to prepare for wintering, watering is reduced, and the plants are protected with a layer of dead leaves or straw. At the end of March the protective layer is removed, and the plants are fertilized with thin liquid fertilizer, applied two or three times for budding. Until the blooming season, watering is continued, and care is taken against injurious insects. After this the same care is taken as in the case of marshy culture.

Naked rootstems without earth covering cause poor formation of roots, and slowness in growth. To prevent this, "earthing" is given by means of compost manure. This is applied in the middle of March, June and November, according to the condition of rootstems.

3. Pot culture.

There are various methods of pot culture, of which the following are popular:

A. One flower style.

This style is to obtain one flower as beautiful as possible for iris exhibits, mainly the Kumamoto variety in the Kumamoto district. The separated plant piece with just the one best bud is cultivated in a seven-inch pot, starting in June or July.

B. Two flower style.

This style is used for competition of the potted Kumamoto iris flowers in the Tokyo area. In June or July two separated plant pieces with one good bud each are cultivated in a 7 or 8 inch pot.

C. Bush style.

Pot, cask or box of suitable size is used to plant three, five or seven selected plants of one or various varieties. The number of plants is decided according to the size of the container and varieties. For example, three plants for a ten-inch pot, five plants for a 15-inch container.

Each piece is planted so as to touch the others, and all should face to the outside. Usually the pot culture is done in the final pot from the beginning. However, in my garden I plant in a small pot at first and transplant to the final pot at the beginning of October before flower buds are formed, or in early spring after flower buds are already formed. In the latter case, only the plants with flower buds are transplanted. This method requires a small area, and the maintenance is simple.

Clay soil mixed with 20% cow manure and 1 or 2% bone meal, is piled up in January or February. In June after having been forked over twice and well weathered, the sifted soil is used for culture and the rough soil remaining in the 1/2 inch sift is used at the bottom of the pot for good drainage. For single bud planting, 4-inch pots are used, for two or three buds six-inch pots, and for seven buds eight-inch pots. These are placed in large flats filled with water up to 2/3 the height of the pots. Before transplanting the leaves are cut off to ten inches. When two or three leaves grow out, 1/4 teaspoon fish meal is given the four-inch pots, 1/2 teaspoon full for the eight-inch pots. In the beginning of September when the leaves grow thickly, a little solution of superphosphate is given and the distance between the pots is widened, about two or three times the original distance. This stimulates the growth of rootstems by more sunlight and better air circulation. When there are not enough flats to contain all the pots, the pots may be placed in a low place in the garden and carefully watered.

At the end of September when the leaves grow thickly and root stems are fat, the plants are transplanted into bigger finishing pots, from four inches into six, from six inches into eight and from eight into ten. At this transplanting, care is taken not to injure the new roots and the rootstem is covered with compost. This transplanting to the finishing pots is sometimes done at the beginning of March, but September and October transplanting results in better formation of buds in the next year.

In November when the leaves die down, the pots are removed to a sunny place, and covered with layers of straw or dead leaves of about one or two inches to prevent dryness. In the beginning of March, this covering is removed, the plants are fertilized with matured extract of rape cakes and again they are watered. Injurious insects are exterminated. At the end of April, matured extract of rape cakes mixed with a little solution of superphosphate is given to await flowering. Watering is never neglected.

D. Bonsai (Dwarf culture in pot).

The iris is a strong plant, and can be grown in a shallow pot of two or three inches depth, when water and nutriment are available. Several buds are cultivated in a pot and admired. For this purpose varieties having the following habits are most suitable:

1. Dwarf variety
2. Narrow and short leaves
3. Vigorous
4. Small flowers
5. Single flowers are more admired than double.

Plant pieces with one bud are planted two or three inches apart in a scattered pattern, as in normal pot culture. Soil used is the same, sifted through a 1/2 inch strainer, with the residue being used in the bottom of the pot.

Planting season is from the end of June until the middle of July. Plants are given plenty of water, and the soil surface is covered with water moss to prevent dryness. When new buds begin to grow, the soil is fertilized with matured extract of rape cakes, mixed with superphosphate, applied two or three times. The pots are placed in a sunny corner to stimulate the forming of flower buds. At the end of November, the pots are covered with straw or dead leaves to prevent dryness. In

the middle of March this cover is removed and the pots put in a sunny corner with good air circulation. Watering is to be done only to avoid withering and to keep the leaves narrow and small. The short plant with as many flowers as possible is most admired.

4. Off season culture.

The following methods are used to profit from off season flowers:

A. Cultivation utilizing hot spring water.

This method is used in the hot spring districts at Kawatsu Village, Kamogu, Shizuoka Prefecture. Hot spring water with the natural temperature of 78 degrees F. is brought to the iris garden by means of earthen ware or bamboo pipes, and discharged on the surface of the gardens. The temperature at the entrance is 20 degrees C., while at the exit the water is 15 degrees C. The temperature most preferred is 20 degrees C. The dimension of a garden in this area is anywhere from 1,600 square feet to 4,900 square feet. The hot water is used in the hours from sunset to sunrise. During the daytime the garden is warmed by the sun. Plants grown by this method bloom in the middle of April. For this purpose the very early flowering variety "Hatsushimo" (The First Frost) is used. The planting of these gardens is done in June, and the rejuvenation by separation occurs once in two years.

B. Cultivation utilizing well water.

This method utilizing the relatively higher temperature of well water in winter to that of the outside temperature, began in or about 1910 and now is used everywhere in Japan. The method most used is to utilize water which flows naturally from the well, but where that is not possible the pump must be used. Early flowering varieties are used in this culture.

After deep plowing, a bed eight feet wide by 100 feet long from east to west is laid in the neighborhood of the well. In the middle or end of June, adult plants of earliest flowering varieties are separated in pieces with two or three stumps, and these are planted in the bed at the distance of 3 x 6 feet, to get further treatment. From the end of December or early January until the middle of May, the well water is discharged onto the beds during the hours between one hour before sunset until one hour after sunrise. The beds are warmed by sunshine during the day. To prevent damage from cold wind in winter, a straw roof is fixed at the north side of the bed from the beginning of December until the end of March. Plants grown by this method bloom one month earlier than normal plants.

C. Forcing in the Greenhouse.

Whereas the flower buds of iris are formed in the beginning or middle of October, the plant is brought into the greenhouse in the middle or at the end of November. In the greenhouse with continuous temperature of 15 degrees C. the plant can bloom within 80 to 90 days. The use of artificial light at night is very effective, according to recent research.

D. Restraining.

There is no record of restraining in iris culture, before the following:

For the breeding of iris, which I began several years ago, I wanted

to get at the same time flowers of the very early flowering varieties which bloom in May and the flowering varieties which bloom in July. For this purpose I dug up at the beginning of March the plants of the very early flowering varieties and stored them in the ice box to plant in May. These plants flowered in the beginning of July, just the same as the late flowering varieties.

In 1951 I stored at the beginning of March numerous plants of several varieties in the ice box. From the first of June until September 10th, I planted them out at one-month intervals to investigate the flowering. By this experiment it became clear that the flowering comes within 45 to 60 days after planting. These cut flowers are welcomed in the Tokyo market and brought a high price, because there are few flowers in the middle of August, midsummer.

In 1952 I stored in the ice box numerous plants of my own seedlings, dug up on March 3rd, and planted out on July 1st. Now (August 15th) these flowers are in full bloom and welcomed sensationally among the florists.

According to these experiments we know that we can perfectly restrain the flowering and we can get the flowers within 50 to 60 days when we want.

The plants are dug up carefully in winter, and stored in the ice box at the temperature of 0 degrees C. To store plants I use a wooden box with the buds faced upwards.

The restrained plants are, of course, short and the flowers small. Meanwhile, I learned from the experiment this year, that the plants in pots, stored in the ice box, get better flowers than the above mentioned.

THE HONOR ROLL

International Horticultural Show Awards

Blue Nocturne (Payne) gold medal, 1963
Confetti Shower (Payne) bronze medal, 1964
Fashion Model (Payne) silver medal, 1963
Orchid Majesty (Payne) bronze medal, 1963
Shiki-n-hajime (Hirao) silver medal, 1963
The Great Mogul (Payne) silver medal, 1964

AIS Honorable Mention Awards

Azure Ruffles (W. Marx) HM 1965
Cresting Waves (Payne) HM 1964
Enchanted Lake (Payne) HM 1960
Fringed Cloud (Craig-Hager) HM 1962
Garden Enchantress (Payne) HM 1964
Gay Gallant (W. Marx) HM 1965
Jewelled Beauty (Payne) HM 1965
Leave Me Sighing (Maddocks) HM 1965
Orchid Majesty (Payne) HM 1959
Prima Ballerina (Payne) HM 1965
Star at Midnight (Rich) HM 1965
Strut and Flourish (Payne) HM 1964
The Great Mogul (Payne) HM 1964
Vestal Trident (Swearengen) HM 1965
Winged Chariot (Payne) HM 1960

AIS GARDEN JUDGES: The above varieties having received the Honorable Mention Award are now eligible for the Award of Merit. All other varieties introduced prior to July 1, 1965 are eligible for the Honorable Mention Award.

Convention Meeting

A special program including a slide showing is being planned by The Society for Japanese Irises for those attending the American Iris Society Convention in Newark, New Jersey. This meeting is scheduled for the Sectional Program evening, May 30th at The Robert Treat Hotel. Plan now to come and bring your friends.

The Japanese Iris Show

Saturday, June 18, 1966

Women's Department Club Building

507 South 6th Street

Terre Haute, Indiana

Exhibits must be in place by 9:30 AM

and removed after 6 PM

Doors open to the public at 1 PM

"A" MEMBERSHIP LIST

Adams, Charlotte M. (Mrs. Ray), 7802 Kyle Street, Sunland, Cal. 91040
Allen, Dr. R. C., Kingwood Center, P.O. Box 1186, Mansfield, Ohio 44903
Allen, William T., 10 Kemper Ave., Newport News, Va. 23601
Alpahr Gardens, 5080 Allison St., Arvada, Colo. 80002
American Iris Society, 2237 Tower Grove Blvd., St. Louis, Mo. 63110
Asbill, David S., Sr., M.D., 1417 Barnwell St., Columbia, S.C. 29201
Aultz, James M., 1010 13th St., Huntington, W. Va. 25701
Cammer Iris Gardens, 311 Cottage Ave., Williamsport, Pa. 17701
Chambers, Mrs. William E., 282 Forrest Rd., Merion Station, Pa. 19066
Conrad, Mrs. Violet, 412 South Orcas St., Seattle, Washington 98108
Cooper, Mrs. Margaret, Moscow, Kans. 67952
Dallas, Robert E., Rainbow Gardens, Rt. 1, Clarksville, Ohio 45113
Du Jardin, Isabelle (Mrs. Victor), R #1, Glen Ellyn Rd., Addison, Ill. 60101
Edwards, Mrs. J. W., Box 14, Pipecreek, Banders Co., Texas 78063
Fay, Orville W., 1775 Pfingsten Rd., Northbrook, Ill. 60062
Firth, L. Gerald, Springbank, Bryant Ave., Roslyn Harbor, N.Y. 11576
Gaines, Mrs John S., Box 883, Rome, Ga. 30162
Grant, Ford L., 2125 Sturdavant St., Davenport, Iowa 52804

Hager, Ben R., Rt 1, Box 466, Stockton, Calif. 95205
 Harper, Samuel J., 210 Falmouth Rd., Falmouth, Maine 04105
 Heacock, Mrs. S. L., 1235 S. Patton Ct., Denver, Colo. 80219
 Helt, Mrs. Floyd, 509 West 19th St., Sioux City, Iowa 51103
 Henize, Mr. Beryl, 310 Diehl Drive, Lawrenceburg, Ind. 47025
 Hidden, Martha E. B., (Mrs. J. R.), 9911 Finney Dr., Baltimore, Md. 21234
 Hirao, Dr. Shuichi, 186 Yamanone, Zushi, Kanagawa, Japan
 Hobbs, Mr. and Mrs. B. E., Rt. 1, Box 127B, Noblesville, Ind. 46060
 Holl, Earl A., 8812 Nora Lane, Indianapolis, Ind. 46240
 Hooker, Lerton W., 117 W. Greenfield, Lombard, Ill. 60148
 Horinaka, Akira, 17 Kitamomodani, Minami-ku, Osaka, Japan
 Humphrey, John W., 1102 Adams St., Stillwater, Okla. 74074

Indianapolis Hemerocallis & Iris Society, 3840 E. 77th St., Indianapolis, Ind.
 46220

Kamo, Mototeru, 110 Harasato, Kakagawa City, Shizuoka Pref., Japan
 Kindell, Sherman A., 1900 South 18th St., Maywood, Ill. 60153
 Kummer, O. L., 997 Vine St., Preston, Ontario, Canada

Lofton, Mrs. Leona Glee, 3279 S. Franklin St., Englewood, Colo. 80110

MacKendrick, W. Harry, Boxerly, 2038 Lakeshore E., Oakville, Ont., Canada
 Marx, Walter, P.O. Box 38, Boring, Oregon 97009
 McEwen, Dr. & Mrs. Currier, 5441 Palisade Ave., Riverdale, Bronx, N. Y.
 10471

N. Y. Botanical Garden, The Library, Bronx, N. Y. 10458

Parker, Edwin K., Rt 2, Box 35, Astoria, Oregon 97103

Reynolds, Mrs. Maiben C., 1253 Alford Ave., Birmingham, Ala. 35209
 Roberts, Earl R., 5809 Rahke Rd., Indianapolis, Ind. 46217
 Rogers, Willard I., 109 Twin Falls Rd., Berkeley Heights, N.J. 07922
 Ross, Mrs. Kate P., R. 2, Clinton, N. C. 28328
 Rowe, Arthur E., Jr., RFD #2, Mason City, Iowa 50401

Sargo, Mrs. Vay B., RFD #7, Box 72, Hot Springs, Ark. 71901
 Scholz, Victor F., M.D., 7530 S. Western Ave., Los Angeles, Calif. 80047
 Schreiner, Robert, Rt. 2, Box 301, Salem, Oregon 97303
 Sensenbach, Cloyd F., 612 Berwick St., White Haven, Pa.
 Shaddix, Cooper D., POB 4305, ACS, Gadsden, Ala. 35901
 Stephenson, Mrs. Charles I., Box 3004, Westville Sta., New Haven, Conn. 06515
 Swearingen, C. A., Rt 3, Box 136, Terre Haute, Ind. 47802

Tiffney, Mrs. W. N. (Sarah C.), 226 Edge Hill Rd., Sharon, Mass. 02067
 Tudor, Mrs. James W., 124 Harvest Dr., St. Charles, Mo. 63301

Van Treese, Harold W., R. 10, Box 301, Indianapolis, Ind. 46239
 Varnum, Mr. & Mrs. E. E., 550 S. Princeton Ave., Villa Park, Ill. 60181

Walther, Barbara F. (Mrs. F. P.) 474 Upper Mountain Ave., Upper Montclair,
 N. J., 07043
 Warburton, Bee (Mrs. F. W.), Rt 2, Box 541, Westboro, Mass. 01581
 Wilson, Mrs. Howard O., Rt 1, Box 125, Bangs Texas 76823
 Winkler, Mrs. Alexander, 7 Spring Valley Rd., Woodbridge, Conn. 06525
 Wirz, Alfred T., 40 McKinley Ave., Kenmore, N. Y. 14217
 Wood, Guy C., RD #1, Cooperstown, N. Y. 13326

"C" MEMBERSHIP LIST

Bahret, Mrs. C. A., 16 Germantown Rd., Danbury, Conn. 06812
 Brandrith, Mrs. F. J., 5162 12th Ave., R.R. 2, Ladner, B. C., Canada
 Brinker, Walter F., R. D. 1, Box 405, Valley City, Ohio 44280

 Cleaves, Mrs. Edith S., 676 Downing St., San Jose, Calif. 95128
 Connecticut Iris Society, 38 Antonio Ave., Meriden, Conn. 06450
 Crist, Mr. & Mrs. J. A., Rt 5, Box 45, Franklin, Ind. 46131

 Danielson, Henry A., 4629 Northwest Blvd., Davenport, Iowa 52806
 Fischer, Hubert A., Meadow Gardens, 63rd Street, Hinsdale, Ill. 60521
 Foley, Frank B., 1419 Marquette St., Davenport, Iowa 52804

 Garvan, Mrs. Francis P., 308 Bellaire Dr., Hot Springs, Ark. 71901
 Goett, John E., RFD #1, Monroe, Conn. 06468

 Harder, Larry, Ponca, Nebraska 68770
 Hayes, Mr. & Mrs. Andy E., Jr., Rt 1, Troy, Tenn. 38160
 Hays, Robert W., 18 E. Grove St., Lombard, Ill. 60148
 Hazzard, Arthur H., 510 Grand Pre Ave., Kalamazoo, Mich. 49007
 Isle, Russel, Rt 3, Box 250, West Terre Haute, Ind. 47885
 Jackson, Mary Jane, 1909 26th St., Lubbock, Texas 79411

 Kamps, Louis A., 1315 Western, Northbrook, Ill. 60062
 Kenney, Mr. & Mrs. Charles E., 30 E. Woodrow Pl., Tulsa, Okla. 74106
 Lowe, Royce, Jr., 1205 Kavanaugh Blvd., Little Rock, Ark. 72205
 Lowrey, B. E., P. O. Box 168, Mansfield, La.

 McCaughey, Mrs. C. E., 5720 N. W. 36th St, Oklahoma City, Okla. 73122
 McClintock, Mrs. J. E., 5541 Fitch Rd., North Olmstead, Ohio 44070
 McConnell, Mrs. J. B., 1916 East 35th St., Tulsa, Okla. 74105
 Miller, Mr. & Mrs. Ronald F., 6065 N. 16th St., Rt 6, Kalamazoo, Mich.
 Molseed, Elwood W., Dept. Biology, Univ. San Francisco, San Francisco, Calif. 94117
 Monnie, Ray, 383 Chicora Rd., Butler, Pa. 16001

 Neidinger, Joseph W., 932 East 50th St., Chicago, Ill. 60615

 Och, Mrs. William R., 3591 Templeton Rd., NW, Warren, Ohio 44461
 Ouweneel, William E., Rt 5, Box 344, Terre Haute, Ind. 47803

 Payne, W. A., 7001 Dixie Bee Rd., Terre Haute, Ind. 47802
 Poole, Lyle R., 500 Edson, Lombard, Ill. 60148

 Reid, Mrs. Lorena M., 2280 Roosevelt Blvd., Eugene, Oregon 97402
 Rich, Mr. & Mrs. R. A., 8501 Sunrise Ave., Citrus Heights, Calif. 95610
 Robinson, Mrs. L. L., 6705 East Ridge Dr., Shreveport, La. 71106
 Rose, Darrell E., 405 W. Bundy Ave., Flint, Mich. 48505

 Schneider, Paul, P.O. Box 783, Altoona, Pa. 16603
 Siegling, Mr. & Mrs. E. M., 3071 Brownlee Ave., Columbus, Ohio 43227
 Squires, Mr. & Mrs. Coulson H., Nortontown Rd., R. 1, Madison, Conn. 06443
 Steiger, Max, Fincala Mina, Tacoronte, Tenerife, Camina Miranda, Islas Canarias

 Wagner, Eugene H., 125 Franklin Ave., Newark, Ohio 43056
 Westmeyer, Eleanor J., (Mrs. Troy), 60 Gary Rd., Stamford, Conn. 06903
 Williams, Mrs. Pauline G., Stonewall Sta., Box 6065, Charleston, W. Va. 25302

SOCIETY FOR JAPANESE IRISES
A. E. Hazzard, Treasurer
510 Grand Pre Avenue
Kalamazoo, Michigan 49007

RETURN REQUESTED