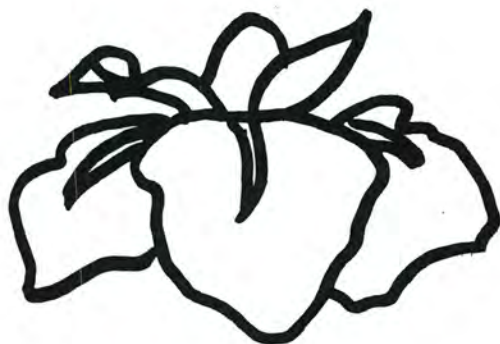
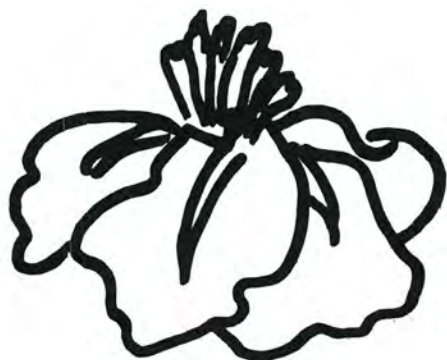


VOLUME 8, NUMBER 2

OCTOBER, 1971



THE REVIEW

OF THE SOCIETY FOR JAPANESE IRISES

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OF
THE SOCIETY FOR JAPANESE IRISES

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Vice-President	Mr. Frank B. Foley, Davenport, Ia.
Secretary	Mr. Ronald F. Miller, Kalamazoo, Mich.
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Mr. W. E. Ouweneel, Terre Haute, Ind., 1971 through 1973
Mrs. J. E. McClintock, North Olmsted, Ohio, 1971 and 1972
Mrs. Vay B. Sargo, Hot Springs, Arkansas, 1971

APPOINTMENTS

Mr. W. E. Ouweneel, Editor and Publications Chairman,
Terre Haute, Indiana
Mr. E. H. Wagner, Columbus, Ohio, Robin Chairman

FROM THE PRESIDENT'S DESK

The bloom season this year was disappointing throughout the Eastern part of the country. We had a late, dry spring and Japanese iris plants did not make the proper growth until later than usual. We look forward to next year with the hope that it will exceed our greatest expectations, bloom-wise.

We send special thanks to Region 1 of the American Iris Society for again including us in their fall auction of beardless irises. This event added \$125.00 to our treasury and enables us to continue our publication of THE REVIEW. The auction was made possible by Bee and Frank Warburton, who organized, publicized and hosted the sale. Kevin Vaughn who served as auctioneer and very generous contributions from Art Hazzard, Paul and Louise Watts, the Warburtons and a few others.

This auction has now become an annual event and is one for you to plan to contribute to and attend next year, if possible. Contributions from outside the region may be made by sending a card with the name of the variety to be given and the contributor's name and address. The successful bidder then contacts the donor and the plants are mailed at the proper time, directly to the buyer. We hope this idea will be copied in other regions. Our treasury can use the help. It's a nice way, too, to share your surplus with others who are interested. It's a good way, too, for hybridizers to distribute new introductions to have them seen and tested in other parts of the country.

The distribution of Japanese iris plants in areas where they will be seen by AIS judges is our greatest problem. Plants have been contributed to Kingwood Center in Mansfield, Ohio and the University in Berkeley, California for their test gardens. In her excellent article in the October, 1971, Bulletin of the American Iris Society, Mrs. Burton suggests that the Swan Lake iris Gardens in Sumter, South Carolina ought to have a block of named varieties of Japanese irises so that judges might view them there. This sounds like a very worthy project for our Society. Could you help us launch such a project?

We are planning another slide show for the convention in Oregon next May and would like to borrow slides of new varieties from our members. Please let me know if you have any slides that you would like to have shown.

We need more information on breeding, growing plants under artificial lights and techniques for propagation. If you have space, time and energy for conducting experiments along these lines, we need your help. Do keep records of the crosses you make and the results. Such information could be of help to others in improving color, vigor, patterns, branching, height, length of bloom, flower size and establishing a line of miniatures.

It is always a pleasure to hear from our new members. If you have any suggestions as to how we can help you, please let us know. I hope that I will be able to meet many of you at the convention next year.

In our April issue, I would like to list members' gardens which will be open for visitors next summer. If you wish to be listed, please write to me giving me your usual bloom dates--and directions for reaching your garden. I am very pleased to learn that Region 6 is planning to visit the Ouweneel garden on June 25th in Terre Haute, Indiana. I sincerely hope that other regions will include a Japanese iris tour in their plans for next year.

Eleanor Westmeyer

* * * * *

NUMAZU WINS THE PAYNE CUP

The highest American Iris Society in the class for Japanese Irises for 1971 goes to Numazu, introduced by Arthur H. Hazzard in 1964 and named in honor of Kalamazoo's sister city in Japan. Numazu is an 8 inch single, pure white flower, 30 inches in height, medium early blooming variety that comes from a cross of Catherine G. Childs and Gold Bound. It was featured on the cover of the January 1966 American Iris Society Bulletin. Numazu has been distributed through the courtesy of the breeder and is truly a lovely flower. The Payne Cup is equivalent to the American Iris Society Award of Merit and makes Numazu eligible for the Dykes Medal.

HONORABLE MENTION FOR 1971

HUE AND CRY (Maddocks)
BLUETONE (Payne)
MEMORIAL TRIBUTE (Payne)

ORIENTAL BALLERINA (Payne)
PRAIRIE LOVE SONG (Hazzard)
STRANGER IN PARADISE (Hager)

* * * * *

THE 1971 AIS CONVENTION

by Frank Foley

First of all I would like to congratulate the Wichita Area Iris Club for their efforts in making the 1971 AIS national convention a well-organized week of entertainment.

Our meeting of The Society For Japanese Irises was scheduled for 9:30 A.M., Wednesday, May 12, in the Walnut Room. Ford Grant and I showed 64 slides of all types of Japanese irises. We followed with a question and answer period which created so much interest that we finally stopped only because we had to let the next group have the room. Questions asked included the following: How acid must soil be, what diseases do they get, would the hot Kansas sun and wind hurt them, how wet must the soil be, what fertilizer should be used, where can they be purchased and are they hardy.

Quite a few people arrived late in the afternoon. We met some of these from Region 21 who asked whether we had any Japanese iris slides. We arranged to show them after dinner in the Walnut Room when we found it was not going to be in use. This meeting brought in 46 people. Questions and answers followed the slide showing. Two more groups were shown the slides later in the evening. At the custodian's request we finally packed up at 11:30 P.M. The total attendance was over 100.

* * * * *

THE JAPANESE IRIS BOOK

Dr. Hirao reports that THE JAPANESE IRIS BOOK which he and Mr. Kuribayashi have been working on for several years "has been popular and selling very well." He says "the first edition was only 1500 copies and I fear it may become out of stock in a few months."

Your editor received a copy of the galley proof of Dr. Hirao's introductory remarks in the book under the title "The Japanese Iris: Its History, Varieties and Cultivation." It is a well written detailed account of the history of each of the Edo, Ise and Higo types in Japan with another section on "The Japanese Iris in the West" and one on cultivation.

The section on cultivation contains a much needed authoritative statement regarding the often heard erroneous belief that Japanese iris fields are flooded for cultural purposes. As Dr. Hirao said at the 1st International Iris Symposium in Florence, Italy, in 1963, he repeats in the book "A frequent misconception concerning the Japanese iris is that it is a bog plant and that flooding is necessary for its cultivation. In Japanese iris gardens, running water is usually to be seen when the flowers are in bloom, which creates the mistaken impression that the Japanese iris grows in water, but in fact the water is there for its aesthetic effect and flooding is not necessary. The Japanese iris can be grown without difficulty anywhere that is congenial to ordinary perennials."

T L C
FOR JAPANESE IRISES
(meaning, in this case, Tender Loving Culture)

Proper culture of Japanese irises is more important than choosing good varieties. Anything short of good culture is likely to be a waste of effort and, worst of all, may mislead one as to the virtues of our favorite flower. Each of us has probably taken short cuts occasionally for apparently expedient reasons hoping, all the time, that nothing catastrophic would result. Usually we learned that the book was right and that we would have been better off following its instructions. Good culture is good just because it produces good results.

Every planting in a new location or under a new condition is an experiment. One may not be inclined to view it that way at the time of planting but it is a good attitude to take. It keeps ones eyes and mind open for unexpected events and enables one to recognize and attack troubles sooner than if his confidence, or perhaps even indifference, allows him to neglect Tender Loving Culture.

We probably all operate on the principle that a healthy body can guard against disease better than an unhealthy one. We know that animals produce antibodies to fight infection. At least some plants produce similar substances, called phytoalexins, that counteract infections which have induced them. Most recently this has been confirmed in the case of southern corn leaf blight which has troubled corn growers. Resistant strains of corn are resistant because in them the infecting agent produces a phytoalexin which in two or three days stops the disease. As a working principle it certainly is not out of order to want to grow strong plants whether for disease resistance or just to have larger, greener plants with more beautiful flowers. There is some reason to believe that the number of branches on a Japanese iris plant is at least partly dependent on good culture.

The Japanese iris is a temperate zone plant. It is especially adapted to the northern half of the United States and with a little extra attention to culture may be grown in other parts where natural conditions would not otherwise be as favorable. Winter temperatures in the United States and southern Canada are no hazard for Japanese irises. Losses observed in spring are probably due to weak plants drying out in fall or unmulched or lightly mulched plants heaving during the winter because of alternate freezing and thawing.

The most critical cultural requirement is proper soil conditions. The precursor of Japanese irises is a wild species found in northeastern Asia in and near marshes. However, over the centuries hybridizers have produced cultivated varieties which are perfectly at home under field conditions and not dependent on the wet soil preferred by their ancestor species. They can be grown anywhere from the water's edge to midwestern field conditions with an annual rainfall of forty inches and probably less. A heavy loam seems best because of its ability to retain moisture and fertility. Lighter or sandy soil should be adjusted with heavier soil and organic material well mixed in. The soil pH should be under 7.0 - perhaps best between 5.5 and 6.0. If the pH is not low enough, a pound or two of sulphur per hundred square feet may be worked into the soil. If this is done, the pH should be checked a few months later to be sure desired results have been obtained. Sources of lime, such as runoff from crushed limestone drives and soakage from basement walls, should not be allowed to affect the bed. If organic matter is added to the soil, it may be necessary to modify fertilizer additions as discussed below.

Full sun produces the best Japanese irises. The flowers of a few varieties seem to be more sensitive to hot sun than others. This seems to be especially

true of some pinks. Shading the flower in mid-day or afternoon may lengthen the life of such blooms.

Japanese iris rhizomes and roots cannot be allowed to dehydrate between digging and planting. When shipped they should be free of soil, other foreign material and dead roots. They should have a healthy growth of live (white) roots. In shipping it is best practice to soak the rhizomes after cleaning, remove the excess water by slinging or air-drying and enclose the roots and rhizomes in plastic bags. The foliage should not be enclosed. Moist packing material may be included with the roots. Plants should be packed snugly in ventilated cartons and shipped without delay the quickest possible way which usually is parcel post. For long distances air parcel post should be used. Containers should bear state nursery inspection certificates and, where necessary, federal quarantine certificates.

When received, rhizomes and roots should be soaked overnight in water. Rootone may be added to the water and the solution used in the planting. They should be planted early enough in the growing season so that plants can be established by winter. In Canada and the northern states this probably means that spring planting is best. South of that area planting may be done in September and October.

In preparing the bed the soil should be well broken up to a depth of at least six inches. Roots should be well spread, soil worked in between them, and the plants well watered. The rhizomes should be an inch or two below the eventual surface of the bed. Plants may be spaced a foot apart if they are to be moved in a year or two. Otherwise, if at all possible, they should be planted two feet apart. With the wider spacing they will grow better and require dividing less often. Chemical fertilizers should not be used until growth is established.

After planting the plant should be well watered and kept moist until freezing weather in the case of fall planting in the north or until growth is established in the case of spring planting.

Mulching can be of great value with Japanese irises. At the time of planting it will help conserve moisture and at all times it will help to keep the soil cool. Mulch should certainly be used in freezing weather the first winter to keep the plants from heaving. Mulches frequently used are straw, hay, grass trimmings, ground corn cobs, peanut hulls, shredded bark and wood chips obtained from tree trimming crews. Straw and hay are possible sources of weed seeds. All natural mulches probably are sources of fungus diseases. In spite of this possibility, mulching is recommended. Fine mulches such as sawdust and ground corn cobs may tend to wash away in heavy rains. They also decompose more rapidly and constitute a heavier drain on soil nutrients. Leaves should not be used as mulch because they tend to pack tightly and interfere with spring growth. If possible a half-inch layer of mulch should be maintained at all times. Weeds are much more easily pulled out of a mulched bed.

Once growth has been established, care depends on local conditions. Plants should be watered, sprayed and fertilized as needed.

The need for water will be apparent from the condition of the soil and foliage. The soil should be kept damp and cool. The soil should be especially sure of moisture prior to blooming.

The amount and formula of fertilizer used should, if possible, be determined on the basis of a soil analysis. State agricultural schools frequently do this for a small fee. If a planting is growing well, a fertilizer with a low nitrogen content, such as 5-10-10, may be used lightly.

Occasionally plant symptoms indicate nutrient deficiencies. Nitrogen deficiency is indicated by a general yellow appearance. If it appears in a

mature plant nitrogen deficiency probably exists; but in germinating seedlings it may indicate a seedling that is unable to produce chlorophyll in which case the plant is doomed. Nitrogen deficiency may be corrected by adding a solution of one of the easily soluble nitrogen fertilizers such as ammonium nitrate, ammonium sulphate or urea. Nitrogen deficiency is especially likely to occur if large amounts of undecomposed organic matter have been added to the soil or if finely divided mulch is being used. Iron deficiency produces leaves with green veins and yellow areas in between. It may be corrected with iron chelate by sprinkling it dry on the soil or, better, by applying it in solution. One should not overlook the possibility of other deficiencies which may be found locally.

Dry fertilizer spread on the surface or worked into the soil is suitable for routine or seasonal results. For quick results one may make his own solution cheaply by adding a couple of tablespoonfuls of dry fertilizer to a gallon of water in an old glass or bleach jug and allowing it to stand with shaking a few days. The solution can be used to get quick results from seedlings and weak plants. Corrective formulas may be used. The amount of fertilizer used should be in proportion to the amount of foliage a plant has.

The frequency of division of Japanese iris plants depends on their vigor and flowering. Blooms usually are best the second year of the plant. Plants should probably be divided at least every four years. When a plant shows signs of crowding (small and few flowers and undersized foliage), dividing is overdue.

The pests which attack Japanese iris plants are the same as those that attack other plants. Stem borers, bud borers, chewing insects and thrips will probably be found in most gardens and may be controlled in the usual ways. In the northwest a local pest is slugs which attack Japanese irises as well as other plants.

Japanese irises are not subject to rhizome rot. Rust, sometimes associated with wheat straw, is found occasionally. Under damp conditions leaf spot may appear. There seem to be two systemic diseases which appear in isolated plants. In one the external symptom is blighted foliage in which the leaves develop a straw color at the tips which gradually works its way down until the whole leaf dies. In such cases it will probably be found that the roots (not the rhizome) have rotted away indicating that the root rot was probably the disease and the leaf blight a secondary result. In the other disease leaves are twisted and runty. A plant may suffer from this condition for a season or two and finally die. Nothing certain is known about these two diseases. Treatments with Agrimycin and Terrachlor have been reported to have some success. One step that can be taken is to cut out affected rhizomes as soon as symptoms appear.

* * * * *

PRONUNCIATIONS

Higo: same as he go.

Edo: Ed same as in Edison, o as in Tokyo but shorter.

Ise: Is as in hiss, e as in self.

* * * * *

IRIS KAEMPFERI VS. IRIS LAEVIGATA

Historically the names of the two iris species named above have had a loose, uncertain relationship. The all-time index of The Review in the April, 1971, issue lists several articles giving background on this subject. The article on Dr. George M. Reed in an earlier issue also refers to it.

Presently the two species names are distinct. Except for the question of the origin of varieties of Japanese irises, scientific discussion today does not relate the two.

How the confusion between these species has been perpetuated over the years is illustrated by quotations from four distinguished references. They are listed below in chronological order.

Index Kewensis describes itself as "An enumeration of the genera and species of flowering plants from the time of Linnaeus to the year 1885." It consists of two large, finely printed volumes published in Oxford, England. Linnaeus died in 1778. The Index contains the following statements:

"Iris kaempferi Siebold, ex Lem. Illustr. Hortic. v. (1858) t.157
=laevigata.

Iris laevigata Fisch. ex Fisch. & Mey. Ind. Sem. Hort. Petrop.
v. 36.-Siber.; Japon"

Liberty Hyde Bailey was a distinguished American horticulturist and botanist. The following three references are from his publications.

From Bailey's Standard Cyclopedia of Horticulture (1915):

"Iris laevigata, Fisch. (I. kaempferi Sieb., I. albo purpurea Baker). On account of the presence of a prominent ridge formed by one or more veins along the middle of the lvs. of I. kaempferi this species is sometimes considered as distinct from I. laevigata. If the species are distinct, the numerous cult. forms of Japanese irises are probably all derived from I. kaempferi since, at least so far as available material from forms cult. in the U.S. shows, all have the prominent midrib."

Bailey's Manual of Cultivated Plants (1949) reads as follows:

"Iris kaempferi Sieb. (I. laevigata var. kaempferi Maxim) the commonest Japanese iris and long considered synonymous with laevigata but from which it differs genetically as well as morphologically. Not a true bog or marsh plant. From this and perhaps influenced by (I. laevigata) have come many cultivars that may represent mutations, hybrids in which perhaps other species are involved, and segregations of extreme conditions. Iris laevigata - a true bog plant that will thrive where it is wet the year around."

Hortus Second, which Bailey helped compile, reads as follows in the 1959 printing:

"Iris kaempferi - (I. laevigata var. kaempferi)

Iris laevigata - like I. kaempferi but lvs. lacking distinct midrib."

* * * * *

WANTED - PAYNE MINIATURES -- Roy Davidson, 911 Western, #200, Seattle, Wash., 98104, would like to hear from anyone having Payne miniature Japanese irises particularly Miss Coquette.

ENZYMES AS GERMINATION AIDS

A perennial problem in horticulture has been that of speeding up germination of seeds and increasing the percentage of first-year germination. A recently published book* contains the following paragraph which is copied with permission of the publisher:

"Although this is the story of the cultivated tomato, I cannot resist including one item about the wild tomatoes of the Galapagos Islands. The seeds of wild tomatoes, in common with those of wild species of many plants, are extremely difficult to germinate whereas seeds of the cultivated tomato, like those of most cultivated plants, germinate readily. A few years ago Charles Rick of the University of California at Davis, one of the world's foremost authorities on tomatoes, and R. I. Bowman carried out some interesting experiments on the germination of tomato seeds from the Galapagos. Various methods of inducing germination of seeds were tried. The only one that proved effective was treatment with sodium hypochlorite (ordinary household bleach). Obviously household bleach was not operating in nature to trigger germination, so Rick and Bowman tried other methods, including soaking seeds in water, storing them at various temperatures, treating them with acids, and having them passed through chickens - this last method was attempted because the seeds might be eaten by birds on the Galapagos. Seeds contained in rat droppings were tried also. The investigators even attempted planting seeds in soil brought from the Galapagos in the event that some substance might be present in the soil which would induce germination. None of these methods resulted in much success. Wild tomatoes were then fed to two tortoises that had been brought back to California from Galapagos. One to three weeks after the tortoises had been fed tomatoes, seeds appeared in their droppings. A red dye had been fed to the animals at the same time as the tomatoes, which proved a great aid in identifying the appropriate droppings. The seeds collected were then subjected to germination tests, and a very high percentage of germination was obtained. It seems likely that the digestive process erodes away part of the seed coat, much as bleach does, and thus removes a mechanical barrier to seed germination. The giant tortoise may well be responsible for the germination of seeds in nature, and since it takes a considerable length of time to pass through the gut of a tortoise, he would also be an effective agent for dissemination of the seeds."

When enzymes entered the detergent business a few years ago, your editor tried Biz on Japanese iris seeds to see if germination might be improved. Six pods containing 148 seeds were used. The seeds from each pod were divided into two equal groups. One group of each pod was soaked in rain water 24 hours at about 65° F. The other groups were soaked in Biz solution the same length of time using the concentration of Biz recommended for laundry use (0.4 tsp. per half cup rain water).

43.1% of the seeds soaked in rain water and 43.4% of the Biz-treated seeds germinated the first year when sown in flats. This would seem to be a stand-off in results. Individual pod percentages, however, showed much less uniformity in results. The Biz solution used on two pods showed considerable color indicating that some action had taken place. Both of these groups showed definitely poorer germination with the Biz treatment. Other lots showed no color change in the water and better germination for the Biz-treated seeds. No further tests have been made.

*NIGHTSHADES, THE PARADOXICAL PLANTS by Charles B. Heiser, Jr., published by W. H. Freeman and Co., San Francisco.



Left: Mai-ohgi. Very large, frilled six petal flower. Higo type, blue violet with white veins. Raised by Dr. Hirao.

Below: Bandaino-nami. An old Edo variety, seems to be fifty years old. A good floriferous plant. Semi-large white, six petal flower.



The Society For Japanese Irises

Section of THE AMERICAN IRIS SOCIETY

RR 31, Box 206,
Terre Haute, Ind., 47803
October 22, 1971

Mrs. Eleanor Westmeyer, President,
The Society For Japanese Irises


Dear Eleanor:

In accordance with Article IX of the
Bylaws of the Society the Nominating Committee
nominates the following members of the Society
to serve as Directors at Large during 1972 and
1973:

Mrs. F.W.Warburton, Westboro, Mass.
Mr..Leonard Jugle, Elmhurst, Ill.
Mr. W.J.Gunther, Del Mar, California

Each of these nominees has given
permission to be nominated.

Yours truly,



W.E.Ouweneel, Chairman,
Nominating Committee

Copies to Mrs. J.E.McClintock
Mrs. Vay B. Sargo