

THE REVIEW
OF
THE SOCIETY FOR JAPANESE IRISES

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Memo from Your President

Every once in a while things catch up with you. This has been such a year for me. Practically every iris needed to be replanted, and in the process, sorted, discarded, new varieties added and all of them rearranged. First the tall bearded---saving old favorites, throwing those who refused to perform and including new ones; then to find homes for surplus iris that were too good to compost and giving them to people who might become interested enough to join a group. Next, the Pacific Coast iris that could only be moved when roots were at a certain stage of growth. The dwarfs had to wait for another year, the little things like to be left undisturbed longer, I hope. Then the Japanese---they really needed it more than any other. They had been in much too long---it is surprising that they bloomed as well as they did last year. Overgrown and tired, the clumps were huge and solid. I tore them apart, washed and cleaned them up, sorting the seedlings and discarding those that were too much alike. I saved the best ones, including varieties that are in commerce that I like. Each kind was put into a plastic refrigerator bag and was kept moist until replanted. After I had replanted them in their well prepared bed (see Melrose Garden's acid bed), I was faced with endless bags of lovely surplus under an avacado tree. I called friends, many of whom grew few iris, if any Japanese. They came, they were delighted and carried the plants away to put them in beds or containers. Some of these friends have joined our society and after the plants bloom next summer, others may be intrigued. I suppose this never ending process of changes, selecting, discarding, propagating, and admiring is one of the reasons we garden and hybridize plants---it is an endless and exciting challenge.

These remarks are probably too personal, but this has been such a year. As far as I can tell, interest in Japanese irises is increasing here in southern California, and I hope this is true elsewhere---for of all kinds of iris, the Japanese seem most adaptable, given natural or supplied acid conditions with water and sunlight.

Here's to a good bloom season ahead.

Thornton M. Abell, President
spring 1976

A JI Garden in Switzerland

(taken from questionnaire responses of Sir Peter Smithers)

Perhaps I should explain the principles of this garden and the place of Japanese iris in it, which is rather insecure for reasons which will appear. I started gardening age four and have never stopped: am now 61. My gardens were on Hampshire chalk, in Cuernavaca (briefly) and finally here since my retirement in 1969. The narrow strip of country at the southern foot of the Alps, about 20 miles wide, is an ideal gardening climate and we have an ideal soil. Our garden is quite new, and we have planted at great speed, almost all our plants coming from England, but some from Japan and the U.S.A. In design, our steep terraced hillside bisected by a stream, is a Japanese "stroll garden," but there are no Japanese trimmings and the plant material is the much richer English range. The circular route of the "stroll" takes one through sixteen different characters of planting. No plants are repeated in more than one grouping unless experimentally or unless in a different context, so that there is constant change and surprise as one passes from one group to another. Thus although we are extremely particular to procure the very best cultivars of whatever we plant, and although second-bests are ruthlessly composted, all our plants are grown as part of the composition of their particular grouping EXCEPT the Japanese iris, which have a little flat terrace bed all to themselves next to a few roses grown for cutting for the house and tucked away out of sight where they cannot offend my eye. Now as we are very new we have been planting shelter very heavily, and the price of shutting out the wind will probably be depriving the Japanese iris of the sun which they demand. I shall then select say six kinds and look for a place where I can integrate them into our system, and give away or compost the rest if nobody will have them. Finally, this is a small garden, using labour saving methods, and designed for maintenance by the owner with the help of an unskilled but obedient man, and the theory is that as the owner gets feebler the big specimens such as Magnolias will occupy more room and the labour of upkeep will get less, until finally there is a more or less continuous canopy---sometimes a two or three-tier canopy, which finally can be viewed from one's wheelchair on the terrace. Meanwhile eighty steps from top to bottom of the terraces provide excellent exercise when the telephone rings. Perhaps I should add that up to the present at the amount of shade which the Japanese iris will tolerate. I do not notice much difference in flowering between the parts of the bed which get some shade and those which don't---in fact, so far there is none.

Editor's Comments

Because returned questionnaires showed a large desire for information on JI culture, this issue contains two articles on that subject obtained from earlier issues of The Review, TLC FOR JAPANESE IRISES covering garden culture and POT CULTURE OF JAPANESE IRISES.

An article like TLC FOR JAPANESE IRISES must include general principles. How far it goes for local requirements depends on whether anyone, particularly the author, knows any. The opening sentence in the second paragraph says, "Every planting in a new location or under a new condition is an experiment." Such experiments determine local requirements and, hopefully, reports to THE REVIEW for the benefit of others. Therefore, if a reader has a problem, he, very likely, is in the unique position of being able to discover something about JI culture. What he learns will depend on his ability to apply general principles of horticulture to his situation. TLC FOR JAPANESE IRISES is intended to give him a base from which to proceed. THE REVIEW will be happy to publish solutions to local problems.

In the second paragraph of POT CULTURE FOR JAPANESE IRISES Dr. Hirao says, "From the fancier's viewpoint Edo varieties are not worth potting." He undoubtedly intended this statement to apply to the subject of the following three paragraphs and not to potting for other purposes. The techniques he describes are perfectly useful also for growing potted plants for increase, disease treatment, experiment and just plain convenience. Edo and Ise irises can be potted for these purposes to advantage.

Several returned questionnaires asked for information on sources of JI seeds. The only commercial source your Editor knows of is the George W. Park Seed Co., Inc., P.O. Box 31, Greenwood, S. C., 29647. They advertise, "1069, Kaempferi blend, 50 seeds, 75¢ and 100 seeds \$1.25." The dealer also asks that 45¢ be added to each order for handling and insurance. Another possible source is the AIS Species Seed Exchange, c/o Jean G. Witt, 16516 25th NE, Seattle, Wa., 98155. The 1975 list includes 75N121 Japanese, mixed." Seeds are 25¢ per packet, minimum of 20 seeds. Limited supply.

As noted in Mrs. Hembree's QUESTIONNAIRE SUMMARY in the previous issue, information on subjects other than those mentioned above was also requested. Those subjects will be treated in future issues of THE REVIEW.

Pot Culture of Japanese Irises*

Dr. Shuichi Hirao

In most of the gardens in Japan the Japanese irises are planted in the ground for landscaping. Many of the plantings are similar to those at Swan Lake in Sumter, South Carolina. In the blooming season they are magnificent indeed and are very popular among the people. The varieties in these gardens are old Edo ones or, sometimes, they are mixed seedlings. These simple flowers harmonize with the natural surroundings better than the large-flowering Higos.

The practice of pot culture is probably less than ten per cent of the total cultivation of Japanese irises in Japan. From the fancier's viewpoint Edo varieties are not worth potting. They look better in an open field than in a pot.

Higo varieties have been developed for potting since their earliest days of cultivation. Around 1841 a landlord in Higo, a small district in Kyushu Island which is one of the main islands of Japan and south of the main island, Honshu, brought back some of the varieties grown in Edo, which is now Tokyo City, and distributed the varieties to his retainers. He ordered them not to plant these irises in such dirty places as ditches or swamps as he considered Japanese irises as valuable and noble plants. His retainers tried potting them and succeeded in growing them. On arranging the potted plants in a room when in bloom they found the irises looked better in front of a gold panel. In selecting the seedlings they discovered the mystery of the movement or the "act" of the flower and were fascinated by it. The "act" may not be observed outdoors as the wind and sunshine disturb the natural movement.

A well-grown potted Higo, when taken into a room at the early stage of bloom, will unfold the petals quietly one after another. On the first day of the three-day life the bloom may seem rather small although the petals are rather thick. In the case of a six-petaled flower the inner three may stand erect for a while which makes the whole appearance unusual. The petals enlarge ceaselessly until the afternoon of the next day during which the whole appearance of flower will change hour after hour. The fancier will be unable to leave the flower until it ends its three days of life. Watching a flower in this way leaves an impression that will last a lifetime.

Some of the Ise varieties do act. I do not mean, though, that all Higos do perform in this way. Some of them may not. Edo varieties do little.

Japanese irises are good plants for potting. It is easy to bloom them in either small or large pots. A single fan potted

* Repeated from the November, 1964, issue of The Review.

from July to September in a four-inch pot will form at least one bloomstalk the next year and bloom normally. If one finds the plants overgrown for the four-inch pot, he may repot to a slightly larger one. In our exhibitions Japanese irises are staged in 6.5 to 7 inch pots.

Soon after the bloom is over, which is usually early in Japan here, the potted plants are pulled out of the pots. The spent bloomstalk is cut off at the base and the rhizome is cut longitudinally with a scissors to divide the clump into two. Then each division with two or three fans on it is divided again into single fans. Each single fan may have a piece of the old rhizome, but in many cases the fan lacks roots although new sign of roots is noticed at the base of the fan. There is no need to worry about the lack of roots as many roots will come out in some weeks. The leaves should be cut back to about six inches. If the fan is a well-grown one with about seven green leaves, the potted plant will form at least two bloomstalks the next year. If the plant is tiny with two or three feeble leaves, it will produce at least one bloomstalk if it is well fed after becoming established.

The soil in which to pot the divided plant should be poor acid soil. Sphagnum moss is a good medium for the amateur. It may be used in the same way as it is used for orchids. Recently sawdust has proved successful. It should be boiled in water to remove the tannin which may be harmful to the roots. Fresh sawdust can be used if treated this way. If the dark brown water in which the sawdust is boiled is discarded immediately, the sawdust can be used at once. If the amount of sawdust is too large to be boiled, it is piled with any suitable agent for fermentation for a few months. The heat of fermentation will inactivate the tannin. Any sort of wood is said to be good for the compost and this seems to be true.

The potted plants should be kept always in shallow water. This practice is most important. Japanese irises survive droughts in summer and can live in water all the year round; but if a newly potted plant is treated alternately with drought and water, the plant will soon rot and die. Since the potting season is summer and the small pot may fail to retain enough moisture, a pool is essential to keep the pots always well watered. Spread a sheet of vinyl film on the ground holding the ends with a piece of wood or other material suitable for the purpose. Fill with water to a depth of one to one and a half inches and arrange the potted plants in the pool so formed. Slight shading will encourage the formation of new roots, but is rarely practiced in Japan. To supply water to the pool is all that is needed for some weeks. Fertilizer should be strictly avoided until the new roots grow enough to accept it, which takes at least three weeks after planting. In some cases the potted plants look unhappy with dying outer leaves but do not worry. After three or four weeks the potted plants will recover and set up tremendous

growth if fed little by little. At the end of the fall season a tiny potted plant may surpass a big one left in the garden.

After three or four weeks left in the pot the center leaf of a fan will be erect and vivid. This is the time to begin feeding the plant. In Japan some growers use rapeseed meal, the component may be similar to cottonseed meal which is the residue after extracting the oil; others use granules of balanced chemical fertilizer. Liquid fertilizer is especially effective on plants grown in sawdust. The plants respond well to feeding at this time and in a few weeks the pot may seem too small for the plant. Repotting in a larger pot may be necessary. A well fed plant will continue to be green until a hard frost kills the foliage. Such a vigorous plant will promise wonderful blooms next year.

These potted plants may be kept in water all the year around but it is advisable to reduce the depth of water when the severe summer period ends to encourage better root growth and ripening of the rhizome. To feed them well before dormancy sets in is thought to bring better success in the coming year.

In winter pots should be mulched to protect them from over-dryness and being heaved by frosts. In spring, when new shoots start into growth, feeding should be resumed and should be continued until a few weeks before blooming. Then all feeding should be stopped. Excess of spring fertilizer may cause the rot of petals.

After the bloom the clump may be pulled out of the pot and either repotted in a larger pot or divided and starter over. After passing through the summer in the pool, the plant may be planted in the ground. This is a good way to start the plants that are divided in the summer.

Sawdust planting is recommended to anyone who intends to ship plants because such plants may be mailed without disturbing the roots thus insuring better success.

THE JAPANESE IRIS BOOK

The book with the above name by Kuribayashi and Hirao, published recently is now a collector's item. 1500 copies were printed and have been sold. There are no plans for printing additional copies.

An AIS Region wishes to obtain a copy for presentation to a nationally known garden's library. If any reader wishes to have the identity of the Region, please contact the Editor of THE REVIEW.

TLC

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 one's 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.

* Repeated from the October, 1971, issue of The Review

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 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 that a seedling 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 Terra-chlor have been reported to have some success. One step that may be taken is to cut out affected rhizomes as soon as symptoms appear.

Benlate (also advertised as Benomyl) is advertised as a systemic fungicide and seems to be effective against an infection diagnosed as rust. In plants thus affected the foliage became straw-colored and the dead areas had small distinct rust-colored spots. When the plants were sprayed with a water solution before all of the foliage was dead, the infection seemed to be stopped immediately. Some remarkable recoveries have been observed.

Yellow Japanese Irises?

The George W. Park Seed Co., Inc., P.O. Box 31, Greenwood, S. C., 29647, is advertising, "IRIS KAEMPFERI, Golden Queen, Japanese Patent No. 253. After more than half a century of breeding work by Mr. Shinnosuke Oosugi of Japan he has at last achieved his goal: A bright clear yellow iris, the first in the Kaempferi (Japanese Iris) family. . . flowers 5 to 6 inches across. . . deep green foliated plants 14 inches high, F4862. . . \$9.95 each, 3 for "27.95."

A colored illustration about two inches square in the Park's catalog shows three three-petaled medium yellow flowers with standards about one inch high (if the flower is five inches wide). A signal patch cannot be definitely discerned but there is a suggestion of an orange halo.

Parks kindly referred the Editor to their Japanese supplier, Fukukaen Nursery and Bulb Co., Ltd., for further information on Golden Queen. The Japanese name for the variety is Aichi no Kagayaki. Regarding the history of the variety Fukukaen Nursery reports, "Mr. Shinnosuke Oosugi, who are living Tsushima City, Aichi pref., has started to cross from 1918, and hand over his son Mr. Ryuichi Oosugi, and have fixed half century endeavor with father and his son on period 1962, and registered in Patent No. 253 in Japanese Agricultural Dept." They suggest that the flower is of the Ise type. The foliage is described as "yellowish-green, more deeper in green in flowering time." "Flower buds appears deep-yellow and turn to lemon-yellow in blooming period." A sketch shows a flower diameter of 17 cm (about seven inches) with petals held horizontally and an overall diameter of 12-13 cm (about five inches) with petals in their natural position.

An excellent 5 x 6½ inch colored photograph from Fukukaen shows three stalks of Golden Queen with a single terminal flower on each stalk and six other varieties in the group. The Golden Queen flowers are selfs with three slightly over-lapping and slightly creped petals. Standards, perhaps an inch long, are erect. In the photograph the petals are a buff-yellow and the standards a rich yellow. The signal patch is spoon-shaped, perhaps an inch long and a half-inch wide. The general appearance is attractive.

Dr. Hirao reports as follows regarding Golden Queen: "The Oosugi's hybrid (Golden Queen) is called in Japan as Aichi no Kagayaki (Pride of Aichi, the name of the district where he lives) and introduced two years ago. I have never seen the flower yet, but I believe it is very close to Kimboshi. The new foliage in spring is yellow green and will look lacking in chlorophyll, but becomes more green later and rather vigorous. Flower stem is not tall above the foliage as the Japanese iris does. Flower is about 15 cm wide. So far it is completely

sterile. Both Mr. Oosugi and Ueki (who produced Kimboshi) used a white Japanese iris as pollen parent but one should get a brown colored hybrid if he uses a purple Japanese iris."

Although none of your Editor's sources have identified the pod parent of Golden Queen, it seems safe to presume that it was *Iris pseudacorus*. An article by Dr. Hirao on hybridizing *I. pseudacorus* and *I. kaempferi* appeared in the 1971 BIS Yearbook and the April, 1972, issue of The Review. It describes the work of Mr. Uegi in producing Kimboshi and of Mr. Sakurai. What facts are known about Golden Queen and Kimboshi suggest that they have much in common. Dr. Hirao's article is condensed in the following paragraphs.

The introduction of yellow color into *I. kaempferi* by crossing *I. pseudacorus* onto *I. kaempferi* has long been tried without success, as the resulting seedlings invariably lack chlorophyll and soon die. However, the reverse combination succeeds occasionally and two people have flowered the hybrid independently for the first time in the summer of 1971. They were Mr. Hisaharu Ueki, an amateur hybridizer in Yokohama, and Mr. Onshin Sakurai, a collaborator of Dr. Koji Tomino in Mie University.

Seedlings thus obtained by Mr. Ueki are vigorous and increase rapidly. Leaves are initially pale green but darken later. The yellowness differs from that of iron-deficiency in which the veins are light green on a yellow background. On viewing the leaf blades against a strong light the green network found in *I. pseudacorus* is barely seen. In 1971 one plant flowered for the first time. The buds were pure yellow and light yellow when opened. The flowers were six inches across, the falls being 2 1/8 inches long and 2 1/3 inches wide. One bloomstalk had one bud and the other two. The flowers had a small amount of pollen but use on *I. kaempferi* varieties was unsuccessful. When *I. kaempferi* pollen was used on the hybrid, the pod swelled but eventually died.

Mr. Sakurai's hybrids were generally similar to those of Mr. Ueki. The principle difference was that Mr. Sakurai's had more of the brown markings of *I. pseudacorus* around the signal patch. The chromosome count of Mr. Sakurai's plants was $2n = 29$, the mean of *I. pseudacorus* (34) and *I. kaempferi* (24).

From these experiments it does not appear easy to carry on breeding with the F_1 hybrids because they seem highly sterile, but it may be interesting to use different varieties of *I. kaempferi* as pollen parent.

Boerner Botanical Gardens

Members who attended the 1969 AIS Convention in Milwaukee will recall the Alfred L. Boerner Botanical Gardens were the test gardens were placed. The Gardens have had a few JIs for several years but are planning on expanding their planting starting this year.

JI Garden Directory

The following directory is made partly from general information and partly from questionnaire reports. Dates given are early average dates. In the case of individual's gardens it is suggested that owners be contacted before visiting to be sure weather has cooperated and the owner will be home. Except in Southern California, where bloom lasts much of the summer, bloom usually lasts about two weeks.

California

Thornton M. Abell, 469 Upper Mesa Road, Santa Monica. 6/15.
Bill Gunther, 740 Crest Road, Del Mar. 5/1.
Mrs. Evelyn Hayes, 611 S. Lemoore Ave., Lemoore. 5/25.
Mr. and Mrs. R. A. Rich, 8501 Sunrise Ave., Citrus Heights. 5/20.

Connecticut

Mrs. Charles J. Stevenson, Woodbridge, New Haven. 6/25.
Mrs. Troy R. Westmeyer, 60 Gary Road, Stamford. 6/25.

Illinois

Leonard Jugle, 261 W. Grantley Ave., Elmhurst. 6/4.

Indiana

Cliff Berger, Jr., RR 6, Plymouth. 6/20.
Russel Isle, RR 16, Box 125, West Terre Haute. 6/20 (esp. potted).
W. E. Ouweneel, RR 31, Box 206, Terre Haute. 6/20.

Iowa

Frank Foley, 1419 Marquette St., Davenport. 6/15.
Ford L. Grant, 2125 Sturdevant, Davenport. 6/15.

Maine

Dr. Currier McEwen, South Harpswell. 7/7.

Massachusetts

Bea McDonald, 457 High St., Hanson. 7/1.
Mrs. W. N. Tiffney, 226 Edge Hill Road, Sharon. 7/1.

Michigan

Wolf Lake State Fish Hatchery, Mattawan. 7/1.
Arthur H. Hazzard, 510 Grand Pre Ave., Kalamazoo. 7/1.
Ronald F. Miller, 6065 N. 16th St., Kalamazoo. 7/1.

New Jersey

~~Mary Alice~~ Hembree, 951 Brown Rd., Bridgewater. 7/1.

Willard I. Rogers, 109 Twin Falls Road, Berkeley Heights. 7/1.

Mrs. F. P. Walther, Presby Memorial Gardens, 474 Upper Mountain Ave.
7/1.

New York

Alfred T. Wirz, 40 McKinley Ave., Kenmore. 7/1.

Brooklyn Botanic Garden, 1000 Washington Ave., Brooklyn. 7/1.

Ohio

Bro. Gene Wagner, 9444 Old Delaware Rd., Mt. Vernon. 6/25.

Oklahoma

Marthella Shoemake, 11327 Draper, Nicoma Park. 6/5.

Oregon

Lorena M. Reid, 17225 McKenzie Hwy., Rt. 2, Springfield. 6/20.

South Carolina

Swan Lake Garden, Sumter. 5/25.

Texas

Mr. and Mrs. C. C. Rockwell, Fentress. 6/10.

Wynnaline Stinson, 2035 Alhambra St., Dallas. 5/20.

Virginia

Floris R. Eby, Rt. 1, Box 294, Barboursville. 6/10.

Australia

Barry F. Blyth, Tempo Two, Frankston, Victoria. 12/1.

Robert Raabe, 62 Kileen St., Wentworthville, NSW. 11/1.

Japan

Dr. Shuichi Hirao, 3-14-23 Yamanone, Zushi, Kanagawa. 6/1.

New Zealand

Grant Iles, 81 Kings Ave., Matua Tauranota. 11/20.

Phyllis Kokich, Flowervilla, 35 Swan Crescent, Packuranga,
Auckland. 12/1.

Rhodesia

Mrs. P. C. Gwynn, 7 Gosling Ave., Gunhill, P.O. Highlands,
Salisbury. 9/25.

Switzerland

Sir Peter Smithers, 6911 Vico Morcote. 6/15.

Midwest Regional Report

A. D. Vogt

Kevin Winkler, Deerfield, IL.: Until now I have been afraid to try to grow Japanese iris. I was under the impression that one had to be some kind of a "Super Expert" before he tried his hand at the Japs. The Society and Mr. Bemis gave me the courage to try, and I am genuinely excited by the prospect of having Japanese iris in my garden.

Walter Brinker, Valley City, OH.: We have had a rather good winter here in this section of Northern Ohio which makes it look like a good flower season. There is no evidence of frost heaving in any of the established clumps and even in the few seedlings which were only lightly mulched.

Art Hazzard, Kalamazoo, MI.: Had a very interesting exchange of letters with Mr. Alex Back of Sussex, England. He is interested in doing some hybridizing and I have supplied some seeds. He has used seeds received from Japan and grown cultivars supplied by friends and wonders why more people do not grow them. His soil is yellow clay. He plans to inform me of the results which I believe will be more than satisfactory.

A.J. Vogt, Louisville, KY.: On a recent visit to Mexico I noticed seeds being planted between ridges about 14 inches apart. The roots that grow out under the ridges are deep under the ground and the ridges conserve and supply moisture to the roots for a longer period of time. This looks to me like a good method to supply moisture to roots of JIs. One reason why I must replant JIs every three or four years is their growing habit. I plant my JIs three inches deep but each year the plants come a little closer to the surface. After four years they are practically out of the ground with insufficient moisture to grow new white roots and they just disappear. By planting them between ridges they should tend to be covered by them. Anyway, I will try and find out.

Japanese Irises in the Northwest Spring (???) 1976

Lorena M. Reid, Oregon

Winter played a nasty April Fool's joke on Oregon. . .giving us snow!! (March came in like a lion. . .a wet one. . .and went out like one too. . .a sleety-snowy one)! And to think we often have irises in bloom by April 1. . .albeit not the Japanese!

The Japanese here look healthy with new foliage abundant, if only a few hesitant inches above the ground yet. . .All old foliage is removed, and spring feeding and remulching is underway. . .between rain and hailstorms (We have had already more

than 23" of rain this year. . .the iris love it. . .but this irisarian is not overjoyed).

Have tried in the garden leaving the foliage, after clipping from the clumps, in the path between rows; just in two beds. Want to compare how the irises do. . .how much more or less difficult the weeding is, etc. . .with the idea of perhaps saving some hauling time if it seems beneficial or harmless!

It seems a far piece till mid-June bloom beginning for the Japanese. How typical that I will hardly have time to turn around and/or breath deeply till the time will be upon me!

Report from California

Bill Gunther

The date today is March 28, 1976. Tomorrow morning Clarke Cosgrove (President of AIS) and Archie Owen (a current Director of AIS) will jointly present a program on irises for the San Diego Botanical Garden Association. For their presentation they will use fresh iris bloomstalks rather than slides, as illustrations. We have cut a specimen of each iris type in bloom here today, and have groomed the stalks and labeled them, in order that there will be as many types available as possible for the presentation.

From my garden they will have a TB, an intermediate bearded, a dwarf bearded, an arilbred, a spuria, a Louisiana, a crested iris, a Pacific Coast iris, a Siberian iris, a Dutch iris, two species iris (I. pseudacorus and I. biglumis) AND a Japanese iris. The Japanese iris is STRUT AND FLOURISH; it is the best stalk of the three Japanese iris varieties available here today, March 28.

It is interesting to note that last year the AIS National Convention toured my garden on April 25, almost a month later than today's date, but not so many different iris types were in bloom here then as now. Last year the local iris season was very late; this year it is very early. Too bad the AIS Convention wasn't here this year instead of last. Too bad that there can't be really long range weather forecasts, so that the conventions can be scheduled for what will be the peak season of the specific year involved, rather than at a grab-bag date based mainly on a combination of hope and knowledge of the peak dates of prior years.

Here in the extreme southwest corner of the USA, we are happy that our Japanese iris bloom season extends over a large part of the year, as contrasted to the concentrated but short bloom season in most other parts of the world. But we are not at all happy that our individual blossoms average only about half the size, and that our bloomstalks average only about half the height, of those which, for instance, we have admired in Lorena Reid's garden in Springfield, Oregon. In the past, we always assumed that the explanation is that our water is so alkaline, so salty,

and so highly chlorinated that our Japanese irises were stunted by it. Accordingly, this season, in an effort to obtain tall bloomstalks and full sized blossoms, we have pampered one of my iris ponds for the last several months. Representatives of a local chemical company have helped by providing equipment and help to drain the pond, to leach out all accumulated salts and alkali from the soil in the pots, and then to refill the pond with specially treated water maintained at a Ph of 5.5. We hoped and anticipated that the plants in that pond would respond gloriously, and we had planned to take a photograph of the treated pond and of an adjacent untreated pond, to illustrate the difference; that photograph, we thought, would be great for this publication, and for the chemical company's advertising brochure. But our hopes have been shattered. There is no perceptible difference in the size or appearance or height of the Japanese irises in the two ponds.

So then if it is not our bad water which stunts our Japanese irises, then maybe it is our lack of a real winter season which stunts them. Maybe Japanese irises need a cold winter season to trigger them off to a real springtime surge of growth. Tulips and hyacinths and crocuses soon die out here unless the bulbs are dug up and refrigerated for six weeks or so during the dormant season. Lilacs will not bloom here in Del Mar, but they bloom magnificently up in the nearby mountains where it freezes during the wintertime. Maybe next December I'll put a potted Japanese iris in the refrigerator for a month, and another in the freezer for a month, and then see, during the spring of 1977, whether they perform spectacularly as compared with those which have spent the 'winter' outdoors in my shallow iris ponds which, in this climate, never even begin to freeze over.

NEW SJI MEMBERS

The SJI is happy to welcome the following new members:

Mr. Lindon S. Rogers, 1414 South Santa Fe, Salina, KS. 67401
 Mrs. Lottie M. Smith, 7517 Rannells Ave., St. Louis, MO. 63143
 Mr. Barrie L. Kridler, Rt. 3, Box 244, Mt. Pleasant, TX. 75455
 Dr. Stanley J. Baird, P.O. Box 516, Blue Lake, CA. 95525
 Mrs. Walter E. Bunker, Jr., 4721 Bancroft St., San Diego, CA. 92116
 Miss Gigi Hall, 2827 E. Voltaire, Phoenix, AZ. 85032
 Miss Debra Lynn Vogt, 9001 Luz Lane, Knoxville, TN. 37919
 Mrs. Ray Hanna, 3042 Ramblewood Rd., Ellicott City, MD. 21043
 Mrs. Gloria L. Vinton, 3248 Wayne Ave., Granite City, IL. 62040
 Miss Fern E. Williams, 3925 Byers Ave., Fort Worth, Tx.
 Mrs. Elaine P. Hulbert, 59 Dandy Dr., Cos Cob, CT. 06807
 Mr. Richard Sloan, 624 Adelyn Dr., San Gabriel, CA. 91775
 Dr. Donald Koza, 1171 E. Idaho Ave., St. Paul, MN. 55106
 Mrs. Frederick Halladay, 9949 E. Workman Ave., Temple City, CA. 91780
 Mr. Jean-Pierre Plouffe, 598 Dorchester Blvd., St. Jean, Quebec, CANADA
 Northern Illinois Iris Society, c/o Mrs. Florence E. Stout,
 150 N. Main St., Lombard, IL. 60148
 Mr. Joseph C. Hale, 5346 Fishcreek Rd., Stow, OH. 44224

As of this mailing the SJI has 135 members.

P. S. I. Pseudacorus x I. Kaempferi Hybrids

After our article Yellow Japanese Irises ? Had gone to press Dee Warburton kindly sent us a copy of a letter from Mr. Akira Horinaka, President, The Japan Iris Society, on the subject of I. pseudacorus x I. Kaempferi hybrids. The following paragraphs give in substance the contents of the letter:

GOLDEN QUEEN (Aichi no Kagayaki) is a hybrid of I. pseudacorus x I. kaempferi. In England it is sold as a form of I. pseudacorus. The I. Kaempferi used as a parent was a white seedling of HATSUSHIMO x HATSUNAMI.

Three Japanese hybridizers have produced I. pseudacorus x I. kaempferi hybrids. Mr. Oosugi produced GOLDEN QUEEN which bloomed in 1962 and was sold in 1974. Dr. Tomino and Mr. Ueki obtained blooms on the same kind of cross in 1967.

Extended JI Bloom

As most readers probably know, JI growers in Southern California (Los Angeles to San Diego) experience extended blooming seasons for JIs. In San Diego, for instance, they bloom from early to late summer. Such behaviour has been mysterious. In PLANT AND PLANET, recently published, the author, Anthony Huxley, says, "Deciduous trees grown in tropical climates behave oddly. Thus pear trees planted in Java become evergreen, although their buds may show individual growth cycles not synchronized with each other." Any connection with JIs?

The Society For Japanese Irises

Section of THE AMERICAN IRIS SOCIETY

FINANCIAL STATEMENT JAN. 1, 1975 TO DEC. 31, 1975

Cash in Savings Account Jan. 1, 1975	\$267.53
Cash in Checking Account Jan. 1, 1975	313.90

Deposits

Dues	\$ 11.00	
Dues	5.00	
Dues	60.00	
Dues	21.00	
Dues	36.00	
Dues	107.50	
Back issues of Review	5.50	
Iris sale---Region #1	48.75	
	<u>\$294.75</u>	<u>294.75</u>
		<u>\$608.65</u>

Expenses

April Review---covers		8.87
Printing		90.38
Postage		14.56
Incidental postage---Editor		6.58
Questionnaire---Printing		16.43
178 Envelopes		.89
Postage		20.48
Reproduction copies of April '75 Review		29.70
22 pcs. x 27 copies @ .05		
Mailing Envelopes---18 @ .12		2.16
Postage		3.68
Membership Chairman---Office supplies		6.93
Stamps		10.00
October Review---Printing		100.88
Postage		11.90
Incidental postage---Editor		10.86
		<u>\$334.30</u>
Cash in checking account Dec. 31, 1975		274.35
Savings account Jan. 1, 1975	\$267.53	
Interest received	10.99	
	<u>\$278.52</u>	<u>\$278.52</u>
Total cash on hand Dec. 31, 1975		<u>\$552.87</u>

Harold L. Grant, Treasurer