OF THE SOCIETY FOR JAPANESE IRISES

THE REVIEW







VOLUME 7, NUMBER 2

OCTOBER, 1970

THE REVIEW

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NOMINATING COMMITTEE

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APPOINTMENTS

Mr. W. E. Ouweneel, Editor and Publications Chairman Terre Haute, Indiana 877-1978 Mr. E. H. Wagner, Robin Chairman, Columbus, Ohio

FROM THE PRESIDENT'S DESK

1970 has been a successful year for our Society. Although our membership makes us one of the smallest of the Sections of the American Iris Society, attendance at our meeting in New York City last June indicates a growing interest in the Japanese iris. We are indebted to Kevin Vaughn, RVP Frank Halleck, Bee Warburton and Region 1 of the AIS for sponsoring the first auction of beardless irises. The event proved such a success that those present demanded a repeat next year. Sale of Japanese iris plants donated for the auction added \$123.50 to our treasury--a welcome help now that rising publication costs alone just about use up the money received from dues each year.

Again I want to thank our retiring officers for their devoted assistance during this past term of office and to salute Bill Ouweneel for making THE REVIEW a publication worth much more than our current dues. Bill's dedication to our Society has been the one factor that has kept our group functioning throughout a year that has been personally difficult for me.

The report of the Nominating Committee, herewith enclosed, was quite a shock to me since I had asked, for the second time, to be relieved of my duties as President. I am most flattered. If the ballot is accepted, I will consider myself drafted and pledge to do my best.

The future looks bright. Orville Fay's message at the convention offers hope to those who have had difficulty in growing Japanese irises due to local soil conditions. It is hoped that there will be more garden tours and shows throughout the country in the future. Perhaps additional auctions of plants will help to make newer named varieties available to more people. We are pleased to have a new member in our group from Switzerland. Inquiries from Poland, New Zealand and Australia also indicate interest in growing Japanese irises around the world. We look forward to the publication of Dr. Hirao's illustrated book on Japanese irises and also to the updating of our Society's Check List.

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PRE-EMERGENCE WEED KILLERS T. L. Heston, Region 13 1969 Yearbook

The Schreiner Gardens in Salem, Oregon, experimented with these for three years on a test acreage and through the results of what they learned from the laboratory tests of soil samples from this acreage, they have gone back to weeding by hand.

The problem at hand with the weed killers is that they leave a residue in the soil, and there is no way of getting rid of this residue. Through continued use the residue would build up in the soil, changing conditions completely. They consulted both of the universities in Oregon and also a top soil specialist. It was determined that currently there is no preemergence weed killer on the market that does not leave a residue.

The weed killers do exactly as advertised and are very efficient, and if there is ever a product that does not leave this residue, we are assured that they would use it, because it would be cheaper than hiring crews to go out and weed all that acreage. The Golden Jubilee Convention of the American Iris Society was truly memorable. The weather was perfect (not a single day of rain;), bloom was at peak, gardens were beautifully groomed and the food was superb. The highlight of the convention, however, was a delightful surprise--a display of beautiful Japanese irises in bloom. Our thanks go to Ben Hager and Bill Gunther for wrapping so many buds with tender loving care and showing us what gorgeous flowers they grow in the West Coast.

The program for the meeting of the Society for Japanese Irises boasted an all-star cast. Lee Eberhardt, President of the Median Iris Society, showed slides he made of Japanese iris gardens in Japan and told us about his frequent visits there. We especially enjoyed seeing the group of distinguished irisarians gathered in Dr. Shuichi Hirao's garden. Orville Fay told us of his work with Japanese irises. He now has second and third generation plants that are adapted to his soil. Ben Hager showed slides of the newest Japanese irises at Melrose gardens. The President completed the program by showing slides of many of Arlie Payne's varieties.

An innovation at this convention was the wearing of ribbons denoting membership in a Section of the American Iris Society. White ribbons with black script, Society for Japanese Irises, were passed out to those attending the evening meeting. It is hoped that the use of ribbons in the future will help our members to get acquainted.

The group was represented by the President on Dr. Hugo Wall's panel on Judging. A series of selected slides was shown to illustrate both desirable and undesirable features of Japanese irises. Improvements made by hybridizers in form, substance, color and branching were emphasized.

Attendance at both meetings was most gratifying. We appreciate the efforts of the Convention Planning Committee in staggering meetings so that one Section did not have to compete with another Section for prime time.

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ROBIN GLEANINGS

Edith Cleaves - San Jose, the twin-city of Osaka, Japan, is the location of the Japanese Friendship Gardens. When I moved, there were several tubs of Japanese irises and I donated them to the park. I wish you could see them, planted in the lagoon, in water, rock outlined and in soil, they have grown to tall beautiful plants in that continuously moving water and the flowers are enormous. It is difficult to realize that they were once in my garden. How I wish I had the room to have a big pond with flowing waters. These are beautiful gardens, five lagoons, and a wonderful array of azaleas, rhododendrons, ferns, blossoming trees, the smoothest lawns, waterfalls, over several acres. If anyone is in San Jose in June and July, make an effort to see and enjoy their beauty. There is no place to picnic and only one bench. The bridges are unusual. It is only three years old, but every plant is responding to the tender loving care they get from the Japanese gardeners.

Eleanor Westmeyer - I am pleased to see in the New York Times today (March 1, 1970) that one of the new Expo stamps to be released in Japan the middle of March will be a miniature reproduction of Japanese irises from a painting by Korin Ogata.

FIRST AUCTION FOR APOGON IRISES

Bee Warburton

A proposal by Kevin Vaughn, Display Gardener in Region One for the Siberian group, for a regional meeting program on Siberian irises got blown up by Kevin and some of his friends into a full-fledged late summer meeting and auction picnic for ALL of the apogon irises to be held at Bee Warburton's in Westboro, Mass. As far as we know, this was the first such auction ever held anywhere, and it turned into a rousing success in spite of unfortunately coinciding with the Hemerocallis auction for the same area, New England and New York. Notices were sent to all members of AIS Region I, which cosponsored the auction meeting, and all members of the Siberian and Japanese societies in the Northeast.

Currier McEwen was the speaker. His morning lecture with slides was about his work in making tetraploids out of the Siberian irises. Currier is also working on the Japanese irises but so far has no successes to show. Let us hope that they turn out as well as the Siberians which are a most striking story.

Currier brought some of his tetraploids, and so many other newer Siberians were available that the bargain table overflowed with "goodies," and the auction itself furnished those present with bargains galore. Peg Edwards was present as official representative of the Siberian group, with Bill Peck, Harry Kuesel and Irene van de Water also present from New York. Eleanor Westmeyer, SJI president, officiated by keeping track of the Japanese irises offered.

Irises offered by Bill Ouweneel, SJI Editor, were auctioned off in a novel and workable way by writing the name and description of the iris offered on an envelope with a stamped postcard inside addressed to Bill with the name of the iris bought requiring only the name and address of the purchaser. Bill mailed these plants out as soon as he received the cards so there was little delay in their planting. Why not a combination auction-meeting by this method any time of year? It should combine beautifully with a slide showing of the irises being auctioned...or raffled...or maybe drawn for? And perhaps at the same time a review of flower types?

A number of other apogon irises were also offered including one or two named spurias and Louisianas, and various species including I. kaempferi, fulva, virginica, ensata, setosa, pseudacorus and tectorum.

I might add that the Japanese irises are the most difficult of all to describe beyond the bare statistics of their type and general color, each of which applies to a number of irises and can give no hint of their individual personalities. Hence we have very little varietal comment in our literature. I'm sure Bill would welcome any descriptive material members might send him.

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W. A. PAYNE

Arlie Payne will celebrate his 90th birthday next February 4. He is now living at 2228 Cruft St., Terre Haute, Indiana 47803. If one wants to read a book on how to hybridize Japanese irises, he will probably have to write it himself. That fact alone is an indication of the lack of knowledge on the subject.

As readers of The Review know, the origin of garden varieties of Japanese irises is hidden in the midst of time. Japanese scholars believe the precursor of these plants to be the species we call Iris kaempferi but probably should be calling Iris ensata. It is found principally as a red-purple self although occasionally in a white form. The wild forms of the species, however, have none of the variations in shades and patterns found in the garden varieties.

Hybridization of bearded irises has a large modern historical record of sources in species. No such record exists for Japanese irises. Moreover, attempts to hybridize Japanese irises with other species have not been useful. There is neither historical nor scientific evidence to indicate that any species other than I. kaempferi has been a precursor of our garden varieties.

Differences in plants are the result of differences in genes which are submicroscopic sections of the chromosomes found in the plant cells. Normally genes are inherited without change from a plant's parents. However, their chemical structure, and consequently their identity, can be changed by natural or artificial radiation thus producing a new characteristic in the species.

Because variations in Japanese irises do not seem to be due to the introduction of genes from other species, one is left with the conclusion that mutations have played at least a major role in their development.

One of the principal objectives in the science of genetics is sorting out and identifying the genes of an organism. Plant cells contain thousands of genes. With proper effort the important genes can be detected by their effects. This can be a highly complicated job. As Bee Warburton has aptly said:

"To learn the inheritance of these mutant genes means a rigidly controlled schedule of test-crosses plus the knowledge necessary to interpret them, and it would be a stroke of extraordinary good luck to find a trained geneticist who made his living in a good commercial plant field and would take on a 'postman's holiday' to work on Japanese irises."

The lack of information about the origin of Japanese irises is similar to that which existed for corn until the early 1900's. For economic reasons, of course, more is known about the genetic make-up of corn today than of any other plant. The history of the development of corn, also out of the mists of time, is being aided by archeologists who, by the nature of things, probably will never be able to uncover facts in the history of Japanese irises. Corn, in warm, dry regions, may be preserved thousands of years whereas no remnants of Japanese irises may be expected to be found in Japan. Perhaps the study of dead pollen grains, which can survive in bogs hundreds of thousands of years, will throw light on this problem some day.

In one respect hybridizers of Japanese irises have an advantage of simplification over hybridizers of bearded irises - they don't have to take chromosome number into account. As Dr. Tomino reported in the April, 1968, issue of The Review, Japanese irises have a chromosome count of 24 with the exception of a small number of the Ise type which have a count of 25. In spite of this variation it may be said that Japanese iris varieties are diploids (2n=24). As was reported in the April, 1970, issue of The Review, Max Steiger produced some tetraploids but tetraploids, as yet, are of no importance to the hybridizer. Japanese iris hybridizers can, therefore forget chromosome counts in choosing parents from today's varieties.

Bearded iris chromosome counts, on the contrary, exist as multiples ranging from diploids to octoploids. Since modern advances in tall bearded irises have been largely due to the use of tetraploids, perhaps one should not write off tetraploids in Japanese irises because of the negative results obtained thus far. Likewise, since crossing of species has introduced new genes to bearded irises, one should not discard the idea of crossing I. kaempferi with other species. With modern developments in cellular chemistry, one wonders whether new techniques may be developed for producing mutants.

Lack of genetic knowledge, or even an understanding of their principles, need not be an obstacle to a person starting his own hybridizing program. After all, genetics, as a science, is only 105 years old. Developments prior to that time were based largely on simple choice of desirable specimens as parents. If open pollination (natural pollination by wind or insects) was accepted, at least one could choose the pod parent.

The sophistication of ones goals and methods is entirely a matter of choice by the hybridizer and may be suited to his aesthetic standards, available time and space and scientific background. He can take the open-pollinated (bee-pod) seeds which his plants will produce without any effort on his part, grow his seedlings and wait with interest for the flowers which pure chance will give him. Most, if not all, will be beautiful and interesting. Most likely though, a grower will pick his pollen and pod parents because of admirable characteristics, protect both parents from pollination by insects, pollinate by hand and know the parentage of his seedlings. By simple observation he may approve or disapprove new varieties either because of their overall quality or because of a single trait.

The grower may also delve more deeply into the secrets of hybridizing. He may start a self-instruction course in genetics and try to apply its principles of selfing, back-crossing and out-crossing. He may want to make a mathematical study of his seedlings as Bee Warburton has suggested using parents in different combinations to uncover dominant and recessive characteristics.

Whatever the level at which a grower's capabilities allow him to work, hybridizing can be fun to say the least. The greater the study and effort put into the work, the more rewarding will the challenge be.

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WANTED - News about Japanese irises in your garden, your region - problems solved or unsolved, things and events of interest to other growers. Write to your Editor, Mr. W. E. Ouweneel, R. R. 31, Box 206, Terre Haute, Ind. 47803.

Your Editor would also like to hear from anyone having the following Payne varieties:

Cascade and Billows Debonair Colossus Fondest Expectations Imperial Imp Sheer Glamour Rose Fantasy Spirit of Shadow Nocturnal Splendor In the preceding article the word "hybridize" has been used to refer to the procedure of producing Japanese iris seedlings. A purist who was brought up to use the term "cross" when both parents belong to the same species, finds the use of the term "hybridize" hard to accept in this case. But that is just the way it is. English is not a dead language and the two words are not used as they were fifty years ago.

Webster's New Collegiate Dictionary, (1958), defines "hybrid" as "The offspring of the union of the male of one race, variety, species, genus, etc., with the female of another....By many plant and animal breeders the term HYBRID is limited to a cross between different species." The derivation of HYBRID is given as a Latin word meaning the offspring of a tame sow and a wild boar.

The Random House Unabridged Dictionary (1968) gives the same broad definition as above but does not mention the stricter one.

Janick's Horticultural Science (1963), page 332, states: "The term hybrid is applied loosely; any organism resulting from genetically dissimilar gametes is technically a hybrid. Thus a plant that is heterozygous for a single factor is a genetic hybrid. In horticultural and botanical terms the word hybrid is often incorrectly used to refer specifically to the result of crosses between species." Starting at page 350 of the same book under the heading "Controlled Hybridization," the manipulation used in making crosses is described. The word HYBRIDIZE seems to be used as a general term on the level of theory and the word CROSS for the manipulation and its results. The term HYBRID CORN includes the whole family of crosses. Each cross, however, is identified and sold by number or name as a CROSS.

Garden Irises (1959), page 557, defines HYBRID as "The offspring of genetically unlike parents" and HYBRIDIZATION as "The crossing of two genetically different individuals." This seems to cover crossing of Japanese irises.

Perhaps the reason that the definition of HYBRIDIZATION has drifted from the crossing of species is that the word "species" itself does not at all times have a specific meaning. Botanists and zoologists frequently disagree in actual cases as to whether two similar, and apparently related organisms, belong within one or more species.

A parallel example of controversy is given in Rodionenko's remarks at the Florence Symposium in which he stated that certain species which Dykes included in the Iris genus are not really irises.

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DR. HIRAO'S BOOK

Your Editor has asked Dr. Hirao for details on the contents of the text of his forthcoming book on Japanese irises and information on how it may be purchased.

We hope to have this information in the next issue of The Review.

IN HYBRIDIZING BE BOLD * Herb Spence

Many years ago Sir Michael Foster, who laid the foundations of modern iris culture, advised W. J. Caparne, "In hybridizing be bold." This advice has obviously been followed by many iris hybridizers. I am certain that most of our famous hybridizers were not great geneticists at the beginning of their hybridizing careers. Most were merely "bold" and began hybridizing as a hobby. Because of the natural curiosity of the human specie, they studied and experimented and, in the process, became self-taught scientists.

I would be the last person in the world to say that a knowledge of genetics is unimportant and unnecessary in the beginning. Every beginning hybridizer (even advanced hybridizers who have not done so) must read Gregor Mendal's treatise, "Experiments in Plant Hybridization" or some of the more recent publications on this subject. Be sure you grasp the full meaning of the terms 'recessive' and 'dominant' as used in genetics.

Before trying to hybridize, you must know what constitutes a good modernday iris. Study and re-study chapter 6 of the A.I.S. Handbook for Judges and Show Officials. Visit gardens of hybridizers and study the results they are obtaining. Evaluate all of the current award winning irises by A.I.S. standards. Carefully picture in your mind, all of the traits required of a top-rated iris. Try to obtain for your garden many of the very best irises of today (this does not necessarily mean the very latest introductions.)

Then formulate a plan to develop an improvement or a new color, I.E., a laced blue, a geranium red, a hardier pink, etc. Do not get reckless with the pollen as the more crosses you make the more work that will be required later. It doesn't take any more work to grow good crosses than it does to grow bad ones. Planting the seed doesn't take much work but lining-out in the hot June sun is something else. Digging out the 'dogs' during the bloom season can get rather tiring too, if done properly. I would suggest that this be done immediately upon bloom so you do not suffer the embarrassment of having others see your mistakes. Don't be too soft-hearted as those mediocre seedlings are just taking up space that could be used for your still to be planted Dykes medal winners. It's well to remember that one of the best tools of an iris hybridizer is a shovel.

If you make indiscriminate crosses you are only slightly better than a bee and then only because you know the name of the pollen parent. Wide (Sir Michael's bold) crosses are fine, providing one has a plan and is preserving enough to continue generation after generation with little improvement. Remember that being 'bold' does not mean you should make ridiculous crosses. In order that you do not become too discouraged when first beginning to hybridize, I would recommend that some of your crosses be between two irises of the same color or related colors. Always remember that like begets like. If you cross two irises with poor substance, you can count on getting seedlings with the same quality. And without substance in the flower, you have nothing. I remember one of my first crosses was Palomino x Ruth Couffer. Why? I do not know. They were either planted close together or were the only two in bloom at the time. I don't need to tell you, all of the seedlings were horrid. This brings me to another point, i.e., keep records. Make a note as to the reason for each cross. By keeping records, you may also develop a mental index of what parents produce good seedlings.

I have found that Rippling Waters is probably the greatest parent introduced to date. It is difficult to get a bad seedling from this iris as its (*) Taken from AIS Region 12, 1970 Yearbook. good qualities seem to always be transmitted to its children and grandchildren. If you use R. W. for hybridizing, it is safer for you to be 'bold'. There are other irises that have produced worthwhile seedlings for me, as follows: Miss Indiana,Whole Cloth, Madamoiselle, Celestial Snow, Enchanted Violet, Ever & Ever, Court Ballet, Marilyn C, Christmas Time, Skywatch and Orchid Brocade. There are some highly touted parents (no names mentioned) that I have used much to my sorrow. One must develop his own lines and work them in with named irises that produce results for him. It seems strange that one iris will really be a grand parent for one hybridizer and not for another.

So: know your iris parentage, develop a discerning eye for good irises, study elementary genetics, formulate a plan and "in hybridizing be bold."

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BILL GUNTHER REPORTS

On page 7 of the October, 1969, issue of The Review Bill Gunther provided a picture of a Hirao seedling with four branches. Bill sent a copy of the picture to Dr. Hirao who subsequently wrote to Bill as follows:

"I heartily admire your effort and good luck in raising this wonderful plant. I have been observing many years many varieties and numerous seedlings but this is the very first time I see a plant with FOUR branches, although I have once heard from Arlie* that one of his variety performed that way. In addition it is a wonderful habit that your variety blooms several at one time. I sincerely hope that you progress starting from this material and open a new field for Japanese iris. In Hokaido where summer is cooler than main island and the Jap iris are happier I have been inspecting the habit of most of the current varieties for some five years. As far as I have seen there, the number of the branch was three at the highest, and I have never seen a plant with four side branches as is seen in your picture. In addition I have raised rather often the similar combination as you tried this time, I do not remember any of them with good branching. So it is rather strange that you have got one. Might have been a mutation?

"Here in Japan many varieties do not branch at all. Others branch one. Some two branches. Very few varieties branch three. As far as I know, Mogami-gawa (raised by Ito in 1950 or so, deep blue veined single) branches best. Most of the plants branch two or three, with good space on the main stalk.

"Regarding the succession of bloom, I have an experience. About 12 years ago I raised a variety, the parents were Isuino-hama, a blue Higo, and Goshoasobi, a light magenta Edo both of which were big singles. The variety was lilac single and was a good flower. It bloomed in mid June as ordinary varieties perform. It produced new bloomstalks from the new fans one after another successively and did not stop blooming until the previous day of the autumn equinox. I was so pleased and named it Shikino-hajime which meaned "the first ever-bloomer," and gave the pieces to many friends. During the last ten years, however, I found this variety seldom rebloom both in my garden and others. My friends and I raised the self-pollinated seed of this variety, but no marked progress in the reblooming.

(*) W. A. Payne

"Dr. H. H. Frohn of German Iris Society reports on the many Japanese varieties grown Planten und Blomen garden Hamburg. Yatakagami, Iho-ichigo and Kenjino-uta showed good reblooming there although none of them has been observed to behave that way in Japan. Furthermore many of the Japanese varieties, which were known to be free flowering in Japan, have never produced flowers for years in Hamburg.

"Arlie's varieties are known to be excellent performers in your country both in branching and substance and many other characteristics. They do well of course here, but do not make much difference from most of Japanese varieties in the performance. The life of a flower of his variety seems exactly the same as Japanese ones. Arlie's variety does branch, but not always. Of course many of his variety are decided progress over some older Japanese ones, and they are getting popular here.

"The exact origin of garden variety of Jap iris is still unknown. It seems to have started from some wild mutations in north district of mainland of Japan more than 500 years ago. Then repeatedly raised in Edo, old name of Tokyo, by many people. About 140 years ago the variety was transplanted to Kyushu and then repeatedly crossed to produce Higo varieties. Consequently Edo and Higo varieties and Arlie's varieties which started from the former two seem to contain similar genes. Ise varieties, however, seem different. The origin also is unknown. It seems true Ise has Edo ancestry, but it contains some different genes. Crossing an Ise variety with others occasionally one finds something unexpected. My friend raised Irono-tsukasa crossing Ise and Higo, and this flower lasts entire four days in spite The Great Mogul planted side by side fades in two days and a half. It was strange that one parent of Irono-Tsukasa was an Ise with rather poor substance."

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As Bill announced in the previous issue of The Review, the April-May issue of Calif. Garden contained his one-page article on Japanese irises with two photographs. His habit of winning show awards with Japanese irises earned him a seven-column headline and article in The San Diego Union.

COPY

REPORT OF THE NOMINATING COMMITTEE

In accord with Article IX, Section I, of the Bylaws of The Society For Japanese Irises, the Nominating Committee nominates the following members of the Society for the offices and terms designated.

PRESIDENT	Eleanor (Mrs. Troy R.) Westmeyer	2 years
VICE PRESIDENT	Frank B. Foley	2 years
SECRETARY	Ronald F. Miller	2 years
TREASURER	Ford L. Grant	2 years

NOMINATING COMMITTEE

William E. Ouweneel	3 years
Virginia (Mrs. J.E.) McClintock	2 years
Vay B. Sargo (Mrs.)	1 year

All nominees have agreed to serve in the capacities indicated if elected, except Mrs. Westmeyer whose permission is deemed unnecessary as with no one else elected, our Bylaws require that she remain in office. It is the opinion of the Committee, however, that her excellent work merits a formal nomination for a third term.

Respectfully submitted

(Signed) A. H. Hazzard A. H. Hazzard, Chairman

Nominating Committee

November 6, 1970