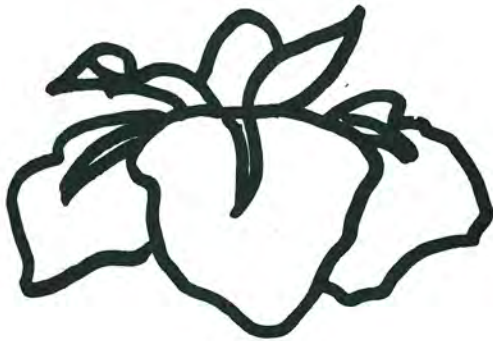
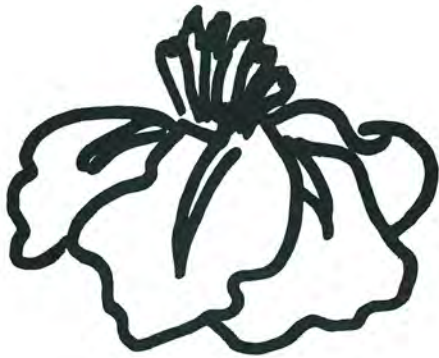
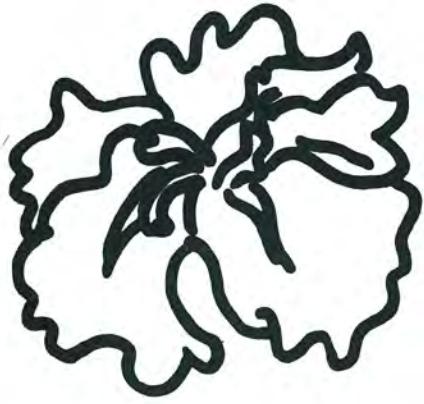


VOLUME 11, NUMBER 1

APRIL 1974



# THE REVIEW

**OF THE SOCIETY FOR JAPANESE IRISES**

THE REVIEW  
OF  
THE SOCIETY FOR JAPANESE IRISES

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FROM THE PRESIDENT'S DESK

Ah, spring! Though the nights may still be frosty, and hailstorms send the gardener for hurried cover, the irises know the time has come to push above the soggy ground and into the occasional warm sunny spells that become ever more frequent. The difficulty here from February to bloom-time is finding enough minutes to make any recognizable dent in the mountainous stacks of chores in the garden and at the typewriter.

National Iris Convention time is nearly upon us again. Mid-May in Roanoke may be pretty early for seeing Japanese irises in bloom, but convention visitors will see them vicariously in the slides, pictures, etc., at the Society for Japanese Irises meeting. Convention personnel have rescheduled our meeting time from 9:30 to 4:00 p.m. on Wednesday, May 15.

Too late to make the deadline for the fall Newsletter, I learned that Dr. Shuichi Hirao had donated a copy of his marvelous book, The Japanese Iris, to the Society. Truly an iris lover could spend hours or even days enjoying the beauties pictured therein! Thank you, Dr. Shu, most sincerely for your generosity. Dr. Currier McEwen accepted the book on behalf of all of us, when he attended medical meetings in Japan last fall. I hope arrangements for its display in Roanoke at the National Iris Convention can be completed! Later a sturdy box for damage-free shipping will be constructed, and it will hopefully be available for study by Society members and other interested persons.

My thanks to the Society members who sent comments and suggestions for "making ends meet." We are especially indebted to Mary Alice Hembree who has typed the copy for this issue as well as the address labels. A suggestion was also made to publicize the Beardless Irises Auction held in the fall by Region 1 at the Warburtons'. Society members should be encouraged to donate extra Japanese Iris rhizomes of named varieties to be auctioned there, with the proceeds being added to our Society dues as part of treasury funds. Since I received this suggestion only yesterday, I need to ask about possible mail participation (on the bidding as well as on the donation end). I certainly plan to do some donating from Laurie's Garden!

As we go to press we are in receipt of \$25.00 from Dr. Currier McEwen. It was given to him unsolicited by a garden club to whom he had spoken and which insisted that he take it for expenses. Dr. McEwen felt that the SJI treasury would be a good place for it and it gives us pleasure to thank him in the name of the Society.

Lorena M. Reid

FURTHER REPORT ON EFFORTS TO INDUCE TETRAPLOIDY  
IN JAPANESE IRISES

Currier McEwen

In the April 1971 issue of the Review (1) I first reported the efforts we began in 1960 to induce the tetraploid state in Japanese irises, giving our reasons for trying and a brief discussion of methods. In that article I mentioned one chimera which had bloomed in 1964 and four others which bloomed in 1970. Unfortunately the 1964 plant has given no seeds and crosses of the 1970 ones gave only diploids. Last year I reported briefly in the April issue of 1973 our further lack of success in the plants which bloomed in 1971 and 1972 (2) In view of those essentially negative reports it is a satisfaction to be able at last to present some successes. As before we used the method which had been taught to me by Mr. Orville Fay in which newly sprouted seeds are treated with colchicine (3). Some 300 seeds harvested in the fall of 1971 were treated with colchicine in March 1972. Of these 79 survived and bloomed in 1973, and 16 of them proved to be either apparently pure tetraploids or chimeras. Experience with Siberian irises and daylilies has taught that one cannot make solid judgments regarding the characteristics of tetraploids from studying colchicine induced plants. Many such plants are chimeras, that is, plants which have been only partially converted to the tetraploid state, and even those which appear to be fully tetraploid may not be typical. Only after second generation tetraploids have been obtained through successful crosses of induced (first generation) plants can one draw reliable conclusions as to what tetraploidy has accomplished. An exception is the so-called sectorial chimera, in which one part of the plant has been unaffected by colchicine and hence is diploid whereas the rest of the plant is tetraploid. Such chimeras provide an excellent means of comparing the diploid and tetraploid forms of the same flower. (Note: two such sectorial chimeras in Siberian irises are shown in the April 1974 Bulletin of The American Iris Society (4)). To date we have observed only one sectorial chimera among our colchicine treated Japanese irises. Hence, I must emphasize, that the following statements regarding differences between diploids and tetraploids must be considered tentative. It must be noted also that these plants were blooming for the first time and might be somewhat different in later years. All the plants on which these observations were made during the 1973 blooming season were from crosses of unnamed seedlings derived from seeds originally sent to me in 1963, 1964 and 1967 by Dr. Shuichi Hirao. (Note: I regret to say that other seeds given to me earlier by Eleanor Westmeyer and W. A. Payne did not survive my colchicine treatment). The original seeds involved in the plants described here contained, in addition to some mixed seeds from "bee pods," some from a Tomino pink by self, Mizukagami by Kumomano-kari and Ageha by Shikino-hajime. The one sectorial chimera was from the latter. In it the tetraploid flowers are distinctly larger than the diploid ones, have wider falls, have greater substance and flare more horizontally. In addition the foliage is more robust but not taller. Since the other 15 plants are not sectorial chimeras, they can be compared only with sister seedlings which is, of course, not



a strict comparison. Neither the plants nor the flowers appeared to be larger last year than those of the diploids. The chief differences appeared to be greater substance and horizontally flaring form. One white one had distinctly more green than yellow in the signal markings. Another white one had very stiff, wide standards different from any I have seen in other Japanese irises.

During the 1973 iris season all of these plants which had been treated in March and planted outside in May 1972 bloomed and were used extensively in crosses. Nine pods developed which matured 104 seeds. Some of these were larger than usual diploid seeds and I hope, therefore, that they are tetraploid. They have been planted and 76 seedlings are growing from them, but it's still too soon to know whether some second generation tetraploids have at last become available.

As noted in previous articles (1,5), a major handicap to our use of colchicine in the past has been the poor germination we have obtained of the seeds to be used. Last year for the first time a very large number of Japanese iris seeds harvested in 1972 germinated through use of the methods described in the fall 1973 issue of *The Review* (5). Some 430 of these survived treatment with colchicine and were planted outdoors in May 1973. In view of the experience with those that bloomed last year, I am encouraged to hope that a good many tetraploids and chimeras will appear among them this year and next.

I must add that through Dr. Hirao I have received two of Mr. Mitsuda's induced tetraploid plants (6). One of these, I expect, will bloom this year and I wait eagerly to see it.

#### References

1. McEwen, C. Efforts to induce tetraploidy in Japanese irises, *The Review*, Vol. 8, No. 1, p. 9, April 1971.
2. McEwen, C. 1972 tetraploidy report, *The Review*, Vol. 10, No. 1, p. 8, April 1973.
3. Griesbach, R. A., Fay, O. W. and Horsfall, L. Induction of polyploidy in newly germinated *hemerocallis* seedlings, *The Hemerocallis Journal*, 17:70, 1963.
4. McEwen, C. Further experience with tetraploid Siberian irises. *Bull. Am. Iris Soc.*, Vol. LV, No. 2, series 213, p. 52, April 1974.
5. McEwen, C. Facts influencing germination of Japanese iris seeds and health of the sprouted seedlings, *The Review*, Vol. 10, No. 2, p. 4, Oct. 1973.
6. Polyploidy in Japanese irises, *The Review*, Vol. 9, No. 2, p. 24, Oct. 1972.

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BENOMYL - BENLATE

In a Robin letter, Lorena Reid reports that the above names are synonyms.

## A FUNNY THING HAPPENED WHEN THE GOPHERS CAME!

Edith Cleaves, San Jose, California

It is early spring as I write and time for me to divide my potted Japanese irises. They were removed from their plastic wading pools early last November, the foliage was cut to about two inches, and they were then lined up, still potted, in my yard waiting to be divided.

The pots are clay or plastic, four inch or six inch size. I prefer clay pots as they do not crack in frosty weather.

To divide I tip the plant out of the pot, remove the scrap of clay pot used to cover the drainage hole, and with a hack saw saw off the bottom one and a half inch of soil and roots. I then saw the plant into two to five divisions and remove the dead roots. I try to have two or three fans on each division. I usually divide a plant every other year.

The soil used for repotting consists of equal parts of garden soil, leaf mold or redwood compost and a mixture of manure (rabbit is excellent), soil sulphur and ammonium sulphate. The ingredients should be thoroughly mixed. Soil on the division is loosened and the division is then placed in a pot. Roots are spread out well and the soil mixture is packed firmly around the roots and rhizomes to within about an inch of the top of the pot. The plant is labeled and the pot then placed in a wading pool to stay until a bud shows color.

The wading pools are the kind children use. They are made of plastic, rest on the ground, and cost \$2.75 each.

At least two inches of water is kept in the pools. Each plant is fertilized every ten days with three-fourths of a cupful of a solution of Fertil-feed (20-20-10). It is a granular substance and the solution is made by dissolving one tablespoonful in a gallon of water. Fertilizing is discontinued when buds appear.

The pools are in full sun. The plants stay in them until the buds are ready to unfold. The pots are then moved to a shady or filtered-sun area, still keeping them in water in those large "turkey roasting" pans of foil. This way there will be no sunburn on the falls and the flowers seem to last a day longer.

By this time the stems are 27 to 44 inches tall and the flowers will be six to ten inches across. As I prefer unbranched stems there are only a few branched varieties but I do have some lovely patterns and colors, many doubles with good overlapping falls.

Fortunately, they do not all bloom at the same time. My earliest bloom has been at the end of May. They do not stop until November, some blooming two or three times. I have many seedlings from seed obtained from Art Hazzard and Lorena Reid which have done well and given me much enjoyment.

My Japanese irises were received from Jack Craig who got them in Japan. Consequently the names are not familiar although Melrose Gardens has a couple with the same names.

If flowers are to be pollinated, it is done at noon on the first day of the flower, trying to avoid a windy day.

Growing Japanese irises in pots has solved several difficulties for me. There are very few weeds and the few that grow are easy to pull. And, as my garden seems to be "Disney Land" for the gophers, there is no trouble from them now. I tried planting Japanese irises in garden beds but, while the critters did not eat the rhizomes, they tunneled around them so that the roots dried out and the plants died.

One can grow the plants in galvanized tubs, but, when they are to be divided, what a tangle of roots one has to deal with.

When winter comes, the potted plants are removed from the wading pools, the pools are cleaned, rolled over to one spot and stacked upside down very carefully so as not to crack them. Come spring and they are ready to serve again.

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#### REGION 1 AUCTION

This Editor's note refers to the above subject as mentioned in FROM THE PRESIDENT'S DESK in this issue.

Because of the lack of time to verify plans for 1974 before this issue goes to press, the Editor reports on past auctions herewith. In 1973 the auction was held on August 26. For each plant donated an envelope was sent to Bee Warburton with the variety name and description on the outside and a statement that the Editor would send one plant of that variety to the successful bidder. In each envelope was a post card addressed to the Editor bearing a statement to be signed by the successful bidder saying that he (or she) had won the auction and requesting that the plant be sent to him (or her) at the address included in the signature.

It is suggested that persons wishing to donate plants to the Region 1 auction this year notify Bee Warburton. Write to Mrs. F. W. Warburton, 2 Warburton Lane, Westborough, Mass., 01581.

# The Society For Japanese Irises

Section of THE AMERICAN IRIS SOCIETY

## FINANCIAL STATEMENT

JANUARY 1, 1973 TO DECEMBER 31, 1973

Cash in Savings Account, January 1, 1973 \$ 252.11  
Cash in Checking Account, January 1, 1973 \$ 262.41

### Deposits

Sale of Review . . . . . \$ 1.00  
Dues . . . . . \$170.50  
Slide Rental . . . . . \$ 5.00  
Iris Auction, Region #1 . . . . . \$ 11.50  
\$188.00 \$ 188.00  
\$ 450.41

### Expenses

Printing Review, April . . . . . \$ 119.31  
Postage, April Review. . . . . \$ 7.68  
Miscellaneous Postage. . . . . \$ 2.48  
Dues Cards. . . . . \$ 8.90  
Printing Review, October . . . . . \$ 171.48  
100 letters to membership. . . . . \$ 6.93  
Postage, October Review. . . . . \$ 11.32  
Miscellaneous Postage. . . . . \$ 3.53  
\$ 331.63 \$ 331.63

Cash in Checking Account, December 31, 1973 \$ 118.78

Savings Account, January 1, 1973. . . \$ 252.11  
Interest Received \$ 7.60  
\$ 259.71

Savings Account, December 31, 1973 \$ 259.71  
Total Cash on Hand, December 31, 1973 \$ 378.49

*Ford L. Grant, Treasurer*