

# THE REVIEW

OF THE SOCIETY  
FOR  
JAPANESE IRISES



VOLUME 27  
NUMBER 2  
FALL, 1990

# THE REVIEW OF

VOLUME 27  
NUMBER 2

THE SOCIETY FOR JAPANESE IRISES

FALL, 1990

## OFFICERS

President	Mr. Clarence Mahan, 7311 Churchill Rd., McLean, VA 22101	Tel. (703)893-8526
Vice-pres.	Mrs. Maurice B. (Shirley) Pope, Jr. 39 Highland, Gorham, ME 04038	Tel. (207)839-3054
Secretary	Robert Bauer, 9823 E. Michigan Ave., Galesburg, MI 49053	Tel. (616)665-7500
Treasurer	Mrs. Andrew C. (Carol) Warner, 16815 Falls Road, Upperco, MD 21155	Tel. (301)374-4788
Immediate Past Pres.	Mr. Donald Delmez, 3240 Connecticut St., St. Charles, MO 63301	Tel. (314)724-4274
Directors at Large	Dr. William L. Ackerman, P.O. Box 120, Ashton, MD 20861	Tel. (301)774-7538
	Jill Copeland, 34165 County Rd. 652, Mattawan, MI 49071	Tel. (616)668-2156
	William E. Barr, 12565 Cloudesly Dr., Rancho Bernardo, San Diego, CA 92128	Tel. (619)451-6333

## NOMINATING COMMITTEE

Through 1990	Mrs. Wells E. (Virginia) Burton, 3275 Miller Dr., Ladson, SC 29456	Tel. (803)873-7388
Through 1991	Ronald F. Miller, 6065 N. 16th St., Kalamazoo, MI 49007	Tel. (616)349-5934
Through 1992	John White, RFD 2, Box 980, Auburn, ME 04210	Tel. (207)345-9532

## APPOINTMENTS

Editor, THE REVIEW	Mr. Leland M. Welsh, 7979 West D Ave., Kalamazoo, MI 49009	Tel. (616)349-9253
Membership Chairman	Mrs. Andrew C. (Carol) Warner See address above.	
Slides/ Librarian	Mr. John Coble, 9823 E. Michigan Ave., Galesburg, MI 49053	Tel. (616)665-7500
Robins Chr.	Mr. Vince Bitzer, 614 Nandale Manchester, MO 63021	Tel. (314)227-5930
Publicity Chairman	Mrs. Wells E. (Virginia) Burton See address above.	
Display Garden Chairman	Mrs. William E. (Claire) Barr, 12565 Cloudesly Dr., Rancho Bernardo, San Diego, CA 92128	Tel. (619)451-6333
Awards & Registrations	Rich Randall, 524 Windsor Gate Road, Virginia Beach, VA 23452	Tel. (804)340-9077



TRANCE (Warburton '79)  
as seen in the Moore Garden

Favorite Garden Iris at the  
1990 SJI Convention

photo by L. Welsh



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OF

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## BUSINESS ITEMS

"The Review" is published semi-annually by the Society For Japanese Irises. Editorial office is at 7979 West D Ave., Kalamazoo, MI. 49009. Deadlines for receiving copy are March 1 and September 1; with earlier receipt desirable. Black & white photographs and drawings are welcome. Reprinting is by permission of the writer and editor, with due acknowledgement.

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Family annual, \$4.00; triennial, \$10.50; life, \$100.00  
Send either to the AIS membership chairman, or directly to **The Society For Japanese Irise's Membership Chairman.**

**Renewals:** If your mailing label is marked with the expiration date 9007 this will be the last copy of "The Review" on your present membership. Please renew. If you have just recently sent in your dues, ignore this notice as there is an inevitable gap in passing along the information.

**Address Changes:** Please notify the Membership Chairman.

**Sales and**            **The Japanese Iris** by Currier McEwen            \$24.95

**Rental Items:**    **Back Issues of "The Review",** per copy            \$1.50  
Volume 1 (1964) consists of three issues,  
all subsequent volumes contain two issues  
each.

**The 1988 Cumulative Checklist of JI**            \$4.00

**SJI Slide Set rental.**                            \$5.00

All prices include postage. Send your requests to **Slides/Librarian Chairman, John Coble**, with check made out to **The Society For Japanese Irises.** Please order slide sets early for scheduling.

**Advertising:** Will be accepted for plants and horticultural related items. Charges are: Full page layout, \$18.00; ½ page layout, \$10.00; short adds, text only, \$2.00 for up to five lines and for each additional five lines or fraction thereof.

For information on how to prepair and submit adds, contact the **Editor.** Send adds to the **Editor** with payment in the form of a check made out to **The Society for Japanese Irises.**

## THE PRESIDENT'S LETTER

Two years ago I wrote my first letter as your president and set forth eight objectives for our Society. How have we done?

First, we have The Japanese Iris published. Currier McEwen's monumental work has resulted in a truly beautiful book which has greatly stimulated interest in Japanese irises and prompted many people to enroll as new members in our Society.

Second, we have three local iris societies which are planning to hold their first Japanese iris shows this coming year in these areas: Oakland, CA; Virginia Beach, VA; and Pittsburgh, PA. Several others will try to have shows in 1991 or 1992. Third, I haven't checked the figures, but I would be surprised if our goal to increase membership by at least 25% has not been surpassed.

Fourth, our goal to increase the number of SJI members who are judges by 10% may or may not have been reached. I should have asked someone to keep track of this, and to actively promote the objective. In keeping with this objective, however, we have made great progress toward improving the quality of judging. Our adoption of new judging standards at the Maine convention will, when approved and accepted by AIS, lead to much improved criteria for our judges to use. We owe Jill Copeland much for her work in getting this done.

Our fifth objective of continuing the program of SJI conventions has been a rip-roaring success. The affair in Maine was first-rate, and to all those in New England who pitched in, "Thank you, very much for such a splendid job!" A very special "Thank you" goes to Shirley Pope and Evelyn White. We have future conventions well scheduled, so we are fairly sure this great tradition will continue.

In at least one instance our phenomenal growth has created a few problems. Who could have predicted that so many people would have wanted to attend the Maine convention? Even though the Maine Iris Society allowed for a 40% increase in attendance over 1989, many people who wanted to attend had to be turned down because of space limitations. We are deeply sorry this happened, but I would ask everyone to be understanding that such a demand could never have been forecast. If you were one of the unfortunate who applied to register after all the slots were filled, please forgive us, but register early for Portland, Oregon next year!

I know that Ensata Gardens has added a number of historic cultivars over the past year. Our sixth objective was to encourage and assist Bob Bauer and John Coble in obtaining all extant cultivars from the past. I would hope the Society would continue to support Bob and John in this noble endeavor.

Seventh, Virginia Burton's wonderful efforts in getting the JI Popularity Poll running well with lots of participation have really paid great dividends. Participation these past two years has been far beyond what any of us could have projected two years ago. Our conventions have been a great aid in this success. Thank you, Virginia.



The last goal, to expand the display garden program to all AIS regions was a bit ambitious (to say the least). We have added a number of gardens and two regions...but we are still a long way from the objective. I have written several members in regions where we do not have gardens, and have had some encouraging responses. We all owe Claire Barr much appreciation for her diligent efforts to keep this program going.

Perhaps of all the progress we have made in the past two years, the action I am personally most pleased with is the Society's adoption of a concerted campaign to get the AIS registration of Japanese irises straightened out once and for all. We now have a Chairman for Awards and Registrations, Rich Randall, and a project underway by Howard Brookins to begin to redo our Cumulative Checklist. In Maine we adopted a resolution to establish January 1, 1995 as the date for getting all cultivars in commerce properly registered, or to look upon commercial nurseries who continue to carry unregistered cultivars after that date with great disfavor.

Many members will be pleased to note that our beloved ROSE QUEEN is now properly registered with AIS, and will be so designated in the ten year bound 1989 Iris Check List when it is published. I am sure that this iris will probably continue to be carried by the incorrect designation "Iris laevigata Rose Queen" by some nurseries, and that it will take many years to get "the word around." Perhaps the myth that this splendid cultivar is a "true species" that can be raised from seed will be "put to bed" before too long.

I cannot possibly individually thank everyone who has given so generously of time, resources and talent to our Society. Elsewhere in this issue of The Review there appears an open letter of appreciation to Mototeru Kamo. One word of thanks I must not neglect is to Freda Hazzard who has worked untiringly in the background to promote Japanese irises and our Society, and whose advice and support have assisted me in so many varied ways.

Having the honor of being your president these past two years has brought me great pleasure. I have gained far more, especially in all the new friends I have made, than I have given. We have a wonderful Society. Its finances have improved greatly over the past two years. Its membership has grown in both numbers and knowledge. Its purposes, I believe, have been well carried out. As a society we are indeed fortunate to have a very talented leader, Shirley Pope, soon to accept the president's duties; and I know she will have the same fine support that you have given me.

We have gone far. We have done much. Much remains to be done. In the busy social world of meetings, programs, shows, tours, and myriad other activities which make up our Society, the words of the Japanese poet Fujiwara Hirotsugu come across twelve centuries to keep all in perspective:

Slight not these flowers!  
Each single petal contains  
A hundred words of mine.

Sincerely,  
Clarence Mahan



IN MEMORIAM

LOIS "JONNYE" RICH

April 23, 1918 - July 15, 1990

Ben Hager

Lois "Jonnye" Rich lived a full life in her iris garden. Beginning with the arils and arilbreds in early spring and the Japanese iris at the end of the iris season; and then with weeds and culture during the rest of the year. But it wasn't all tedious garden care during the months when the iris were not in bloom. Jonnye had made any number of crosses during the bloom time so there were the jobs of embryo culturing the arilbred seed and germinating and transplanting the Japanese iris seedlings. Jonnye was always busy with her garden projects. The results of these efforts are, and will continue to be, beautiful reminders that Jonnye's obsession with her iris creations is also her legacy and contribution to a world that sorely needs the beauty that she left to us.

Jonnye's career in Japanese irises, along with her protege, Fred Maddocks, spanned the period between the Marx-Payne years and into the current more expanded phase of the development of this iris section in the United States. She introduced all of her irises through Melrose Gardens. At the height of her productivity, tragedy struck. A plague of root knot nematode invaded the Japanese iris planting at the commercial garden. Root Knot nematodes are easily gotten rid of and controlled in most other irises, but with the Japanese irises it proved nearly impossible. It took ten years of experimentation to find a way out of the dilemma, and in that time none of Jonnye's irises were introduced to the market. Finally, by 1986 the problem was solved and two of Jonnye's irises were introduced: CENTER OF ATTENTION and KONTAKI ON. In 1989 came one of her greatest: GEISHA OBI.



There are more seedlings of quality, but before these could be introduced Jonnye left her garden and the retirement of the introducers left the future of those seedlings in question. The retirement was anticipated and the discussion of what to do with the seedlings culminated in the decision to approach ENSATA GARDENS (with the beautiful catalog) with the hope that they would be willing to handle the seedlings. Bob Bauer and John Coble responded with enthusiasm. So now Jonnye's best are growing in Galesburg, Michigan. Watch for the introductions.

The Japanese iris that Jonnye developed and introduced did not go begging. Nearly all of those iris received the Honorable Mention Award and two of them, STAR AT MIDNIGHT and TUPTIM were honored by receiving the PAYNE AWARD. There were other notable iris that started life in her seedling beds: FROSTBOUND (it certainly should have received the Payne Award), ENCHANTING MELODY (the biggest and most beautifully formed of the pink irises), SUMMER SNOWFLAKE, WALK IN BEAUTY (form!), MIDNIGHT LAGOON, CENTER OF ATTENTION, KONTAKI ON, and GEISHA OBI (the last three the most recent). Most are still available.

Jonnye and her late husband Raymond "Rex" Rich, contributed enormously to the iris world. We are indeed sad that they are no longer with us, but what they have left behind will bring joy to our gardens for years to come---the perfect memorial for any iris breeder.

#### AN OPEN LETTER OF APPRECIATION

Dear Mototeru Kamo,

On behalf of the Society For Japanese Irises, I write this letter to express the deeply felt, sincere appreciation of our membership for the extraordinary services you have rendered. Your gifts of irises of Japanese origination to the Society have enabled us to see the finest advances in Japan, and have greatly expanded the gene pool available to American hybridizers.

Your magnificent generosity manifested by valuable donations of irises and iris artifacts to our Society's auction is without peer in our Society's history. Your donations of the fertile tetraploid crosses between I. ensata and I. pseudacorus were especially magnanimous.

We also wish to extend a special word of appreciation for your attendance at the Maine convention. Your wisdom and advice extended to our members were invaluable. We all enjoyed the opportunity to get to know you, your talented wife, Mr. Ichie, Dr. Yabuya and Mr. Shimizu. The contributions that each made to our convention were indeed great treasures which will live forever in our hearts and memories.

Respectfully,

Clarence Mahan, Pres.  
Society for Japanese  
Irises

## IRISES SENT TO MR. KAMO

On September 4, 1990, President Clarence Mahan sent a shipment of recent Japanese iris introductions, by American hybridizers, to Mr. Kamo. These irises were sent as a gift from the Society for Japanese Irises in appreciation for Mr. Kamo's many contributions and services to our Society.

The iris plants were donated by members of the Society. Following is a list of donors, and the irises from each which were shipped.

Carol Warner: CAPANEUS (Innerst, 88), CASCADE CREST (Aitken, 88), ELECTRIC RAYS (Aitken, 90), HEGIRA (Innerst, 85), JAPANESE SANDMAN (Bush, 79), KALAMAZOO (Hazzard, 89), LET ME SEE (Ackerman, 90), LITTLE SNOWMAN (Vogt, R.81), MICHIO (A. M. Miller, 89), MIDNIGHT STARS (Aitken, 88), ROSE FRAPPE (A. M. Miller, 89), ROYAL BURGUNDY (McEwen, 88) and the Siberian iris SHAKER'S PRAYER (C. Warner, 90).

William Ackerman: (All are Ackerman originations) AMETHYST WINGS, JOY PETERS, LASTING PLEASURE, LAVENDER KRINKLE, ACK-COUNTABLE, WINE RUFFLES, ROYAL ONE, ROYAL FIREWORKS, LET ME SEE, GRAPE FIZZ, TAFFETA AND VELVET.

Joy Peters: ENDURING PINK FROST (Ackerman, 85).

Clarence Mahan: ORIENTAL EYES (Vogt, 84), ANYTUS (Innerst, 81).

The Society wishes to express its gratitude to these members for their donations.

## A SHORT NOTE OF THANKS

Shirley Pope  
Chairman, 1990 SJI Convention

A short note of thanks to everyone who was involved with our Japanese Iris Convention.

From the Maine iris Society who sponsored the Convention, to the many visitors who enjoyed the show, the gardens and the lobster bake.

We enjoyed working with our Region 1 friends who helped make our first Japanese Iris Show a success.

All in all the 1990 Japanese Iris Convention will always be a pleasant memory.

We sincerely thank all who participated and hope to see you again next year in Oregon.

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THE 1991 SJI CONVENTION  
PORTLAND, OREGON

THE GREATER PORTLAND IRIS SOCIETY invites you to the  
1991 Convention of the Society for Japanese  
Irises.

DATES \_ June 13, 14, 15, 1991

HOTEL - ExecUdodge  
6221 NE 82nd Avenue  
Portland, OR, 97220  
Phone, 1-800-423-3047

RATES - Double Room - \$50.00 plus tax  
Free airport shuttle

REGISTRATION FEE - will be approximately \$75 - \$80  
Confirm later with registrar.

This will include Welcome Banquet, box  
lunches on tour days and the Closing Banquet.  
(The motel restaurant opens at 6:30 a.m. for  
optional breakfast.)

For more information contact:

Duane & Joyce Meek, Registrars  
7872 Howell Prairie Road NE  
Silverton, OR 97381  
Phone 503 873-7603

The first day will consist of registration, board  
meeting, possible iris display and Welcome Banquet.

There are two days of tours planned. Day one will  
consist of a visit to Aitken's Salmon Creek Garden  
and Chad Harris' garden in Vancouver, a noon stopover  
at the Japanese Gardens in Portland, and a trip to  
the Caprice Gardens, high on a hill west of Portland.

Day two of the tours will include a stop-off to see  
Bob Schreiner's private collection of Japanese  
irises, then on South to Laurie's Garden on the  
MacKenzie River east of Eugene. On our return trip  
we will be stopping at the D & J Garden of Duane &  
Joyce Meek, with a new planting of Japanese irises on  
display.

We wish to greet all of you who enjoy looking at  
Japanese irises in Portland.

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## THE 1990 JI SHOW REPORTS

### Summerville, SC --- June 2 --- Virginia Burton

The Summerville Iris Society held its 12th show at the Cuthbert Community Building in Summerville, SC. Claire Honkanen was show chairman with Peggy Beason as co-chairman. Theme for the show was "New Beginnings."

Peak bloom was two weeks early this year. A few "help" letters went out to iris friends who came through in flying colors. Exhibited were 30 named Japanese iris, 1 tall bearded, 1 Louisiana, 1 Siberian, 4 species, 4 JI seedlings, 99 companion plants, 20 artistic designs and 1 iris educational exhibit. Those entering in the iris division were Clarence and Suky Mahan of VA, Joe and Janet Watson of GA, Bill Poston of GA, John Wood of NC., Shirley Paquet and Virginia Burton of SC.

John Wood won JI sweepstakes and AIS silver medal with 11 blue ribbons, JI best specimen with DAPPLED DRAGON, best JI seedling and J.B. Hale Memorial Plaque with W-101-89 and best species iris with a specimen of I. brevicalis. Joe and Janet Watson won the AIS Bronze medal for the second most blue ribbons.

In the companion plant division Maggie Johnson had the most blue ribbons. In the artistic design division Betty Black won best design in the show for her interpretation of "The Day After the Storm." Leora Moore won design sweepstakes.

37 members took the 2 hour judges training session given by panelists Adolph Vogt of KY, John Wood of NC and Clarence Mahan of VA. The garden tour visited the gardens of Pat Brooks and Ginny Burton of Ladson and the home of Arvid and Claire Honkanen on the Isle of Palms, where lunch was served to 40 people.

After returning to Summerville, an auction was held with Ruth Wilder as auctioneer. Clarence Mahan, president of the Society for Japanese Irises gave a brief talk on the new Japanese Iris Book, the 1991 AIS Convention in Washington D.C., the JI National Convention in Portland, ME this July, and other facts of interest to iris members.

### St. Louis, MO --- June 2 --- Don Delmez

The Greater St. Louis Iris Society presented its annual Beardless Iris Show on June 2nd. Much like last year, it was just to early and there were only six entries in the Japanese class. The best in the Japanese section was DEWA-NO-AKEBONO, an import, single with vivid rich red purple falls with white edging and white veining. Very beautiful. Much to our surprise a named species, IVORY QUEEN pseudacorus, won Queen of Show with three nicely opened blooms, exhibited by Jim Morris. In the design division Joan Finke won best design and Rita Kinsella won design sweepstakes. A special bronze medal was given to Bob Pries for his SIGMA exhibit.

Next year our show will be on the 8th of June, which will be great for Japanese iris.

Washington D.C. --- June 16 --- Diana Nicholls

The fifth annual Beardless Iris Show, jointly sponsored by C&P/FSK, was held on June 16, 1990 at the United States Botanical Gardens, Washington, D.C.. Twelve exhibitors brought in 131 entries. This is the first time a beardless iris show has been held at the Botanical Gardens. The public was very interested in the Japanese iris.

Best Specimen of Show was FRILLED ENCHANTMENT, JI exhibited by Rosalie Figge. First runner up was ROSE FRAPPE, JI exhibited by Rosalie Figge. Second runner up was ORIENTAL ELEGANCE, JI exhibited by Carol Warner. The AIS Silver Medal for most blue ribbons goes to Diana Nicholls. The AIS Bronze Medal for second most blue ribbons was captured by Carol Warner. Dr. William Ackerman's JI seedling A4-4-86 won Best Seedling. This is a single, 3F, white ground with a pale lavender pink blush. The standards have almost a wire rim edge of darker lavender pink.

After the judging, lunch was served by Bobbie Lively-Diebold and Mike Nicholls for our judges, Anne Lowe, Mike Lowe and Larry Westfall; and all who worked or entered the show. A most pleasant iris event.

Special thanks goes to Ruth Filsinger and Carol Warner for jointly chairing the show along with their wonderful crew of faithful helpers.

Portland, OR --- June 16 --- Barbara Aitken

The 1990 Greater Portland Iris Society show was held at the Japanese Gardens in Portland.

Best Specimen of the Show was won by Chad Harris, with a fine stalk of SNOWY HILLS. Certificate for the most blue ribbons also went to Chad Harris. Runner-up was Elsie Skinner, a new member to the Portland group.

Best Seedling went to Terry Aitken for his seedling #86J-1-15, a 3-fall raspberry red with overlapping falls.

Harrisburg, PA --- June 30 --- Ophelia Straw

The Susquehanna Iris Society presented its Japanese Iris Show at the Harrisburg East Mall. There were 4 exhibitors with a total of 70 entries.

The Best Specimen of the Show was CASCADE CREST, exhibited by Harold Griffie. The runners-up were: MIDSUMMER REVERIE and CRYSTAL HALO, exhibited by Barbara and Sterling Innerst, LIGHT AT DAWN and CAPRICIAN CHIMES, exhibited by Harold Griffie. Best Seedling of Show was #3246-11, exhibited by Barbara and Sterling Innerst.

There were also arrangements showing the use of Japanese iris in floral designs.

The Susquehanna Iris Society awarded a gift collection of tall bearded iris rhizomes for each arrangement entered with a special award of iris for the most popular arrangement.

Kalamazoo, MI --- July 7 --- Leland Welsh

The Southwestern Michigan iris Society held its 16th Japanese Iris Show at the Crossroads Mall in Portage. Chairman for the event was Sue Copeland. Theme for the show was "The Great Ones."

Nine exhibitors entered a total of 72 specimens, representing 69 cultivars. A few of these were Siberians, the rest were JIs. Best Specimen of the Show was awarded to Capaneus, exhibited by Ensata Gardens. Ensata Gardens also won the AIS Silver Medal for greatest number of blue ribbons. The Bronze Medal for second largest number of Blue ribbons was won by Duane Darling. Best seedling of the show was awarded to A4473, originated by Adolph Vogt and exhibited for him by Ensata Gardens.

There were a total of 19 artistic arrangements entered by 4 exhibitors. Bernard Jones won best arrangement rosette for his interpretation of class 4, "Marie Curie." He also won sweepstakes for the design division.

Portland, ME --- July 12 --- Please see convention coverage in this issue.

#### CHANGES IN ORDERING "THE BOOK"

It was decided at the SJI Board meeting in Maine to lower the price of our book, The Japanese Iris to \$24.95 including postage. The price change was made effective immediately.

It was also approved to change the supplier of the book. It will now be handled by Ensata Gardens, so that all publication materials can be ordered from the same address. Please send orders to John Coble, address as shown under the Business Items at the front of this issue. Checks should be made out to the Society For Japanese Irises.

IRISES  
FOR 1991  
  
A  
GARDENER'S  
COLLECTION

#### 1991 IRIS CALENDAR

It's time to order our sixth annual iris calendar. Make check to AIS: for single copies, send \$5.00. Quantity purchases come in packets of ten or multiples of ten: the price for packets of ten is \$30.00. Order from C. J. Lack, AIS Sales Director, 718 West 67th Street, Tulsa, OK 74132.



1990 AWARDS TO JAPANESE IRISES

AIS AWARDS

The following information has been received from James Copeland, AIS Awards Chairman.

PAYNE AWARD

votes

- 26 CAPRICIAN BUTTERFLY (W. Marx/D. Rogers)

runnersup

- 18 WINE RUFFLES (W. Ackerman)  
14 HEGIRA (S. Innerst)  
12 RUFFLED DIMITY (L. Reid)  
11 GRAPE FIZZ (W. Ackerman)  
11 ROYAL GAME (A. Vogt/H. Stahly)

HONORABLE MENTION

votes

- 55 JAPANESE PINWHEEL (C. McEwen)  
36 IAPETUS (S. Innerst)  
32 CASCADE CREST (T. Aitken)  
26 EDGE OF FROST (M. Dienstbach)  
24 CAPANEUS (S. Innerst)  
21 MIDNIGHT STARS (T. Aitken)  
16 DOUBLE FIRST (C. McEwen)  
15 ORIENTAL CLASSIC (C. McEwen)  
15 SPRINGTIME SHOWERS (L. Reid)  
12 JOCASTA (S. Innerst)  
12 OL' MAN RIVER (C. McEwen)  
11 JAPANESE PRINCESS (C. McEwen)

HIGH COMMENDATION

votes

- 12 86J-1-2 (T. Aitken)  
8 85J-2 (T. Aitken)  
7 86-L-7 (J. White)  
7 86-L-24 (J. White)

AWARDS FROM SJI CONVENTION, PORTLAND, ME.

**Favorite Guest Iris**

ORIENTAL EYES (Vogt)

Runnersup

HOTARUBUNE (Hirao)  
86J-1-2 (Aitken)

**Favorite Garden Iris**

TRANCE (Warburton)

Runnersup

ORIENTAL EYES (Vogt)  
JAPANESE PINWHEEL (McEwen)

## 1990 JI POPULARITY POLL RESULTS

### Virginia Burton

In 1984 when we first started this poll, we asked for 10 JI in the order of your preference. We had 9 voters in '84, in '85 we had 20 voters, in '86 we went back to 9 voters. In 1987 Lee and I discussed, maybe a ballot in "The Review" would help members to take part. We also decided to change it to the 10 JI that you liked best and not in any special order. In 1987 we had 44 voters from 11 states, in '88 we had 39 voters from 15 states, in '89 we had 61 entries from 19 states and this year, 1990, we have 58 entries from 17 states and Canada. The states are CA, CT, GA, IL, KY, ME, MD, MA, MI, MO, NY, NC, OH, PA, SC, VA and WA. The first 5 to send in ballots were E. Hulbert of VA, Eric Baker of NY, Walter Hoover of NC, Jane Hall of NY and Ruby Clark of OH.

Entrants commented that they liked the poll as it helped them in deciding on what JI to purchase.

#### Comments from entrants:

**E. P. Hulbert, VA---**"It's hard to choose between MIYOSHINO and KYOKKO--maybe both should be on my list. The ROSE QUEEN I'm voting for is the old single pink forerunner of the two above. ORIENTAL EYES was very impressive in 1989."

**Eric Baker, NY---**"DOUBLE FIRST by McEwen is the most beautiful JI I have seen. Its ruffled, crisp and excellent substance. I love it."

**Walter Hoover, NC---**"Portland was just too much! I'm still in a recovery phase. The iris were wonderful, but especially fun for me was Bernard McLaughlin's garden, and then there was Stubby Treworzy's garden!"

**Jane Hall, NY---**"What a fun JI convention--think I'll go again."

**Dr. Ackerman, MD---**"Today it is hot and humid again--wish I was back in Maine!" (me too, heat index 115 the 29th of Aug., VB)

**V. Burton, SC---**"OOGI-NO-MATO by Ichie is a nice blue with white combination--where is it for sale? Maine's JI were well grown and their convention will be a hard act to follow. The auctioneers, the folks who donated JI for the auction, our over-seas friends input and all-----THANK YOU."

**Joe and Janet Watson, GA.--**SHAKKYO was a lovely blue ribbon winner for us in the Summerville JI show. We were delighted to have an entry left as late in the season since things blossomed early for us. GARNET ROYALTY is superb in our hot/humid climate. It is so large and showy. It deserves the highest award and iris can get. It was great even on a first year plant. GAY GALLANT was, again, our visitors favorite flower of any type when it was in bloom. Its veining wins most people instantly. SILVERBAND has a lovely small bloom, but its beautiful foliage in HOT July was a great asset in the garden. I hope others will find it of landscape value."

Larry Moss, CA.--"I would like an article in 'The Review' which provided information on various fertilization schedules to stimulate maximum growth."

Carol Warner, MD.--"I had about 100 favorites this year. The flowers were so beautiful in the Maine climate that they were all spectacular. I had some guests left from our convention and would say the white SH-8 was my favorite. It is very vigorous and flowers for a long time."

Bauer/Coble, MI.--"A bloom on CONTINUING PLEASURE today - Aug. 9. ROSY SUNRISE was just registered by Adolph Vogt of KY and won best seedling of the show at Kalamazoo, MI this year---19 JI seedlings were entered."

Adolph Vogt, KY.--"The following late blooming JI were in bloom the 4th of July--BLUE NOCTURNE, STATELY FLAMINGO (a nice new one of Adolph's VB), KONGO SAN, LING and WARAI-HOTEI."

Mary Ann Johannson, Region 1--"There are so many good ones! Other favorites include GOOD OMEN and IKE-NO-SAZANAMI."

John W. Wood, NC--"I have registered and will introduce Col. Hugh Knight's K-101-86 as DAMSEL KNIGHT next year. I have registered 3 more: WILDERNESS DEBUTANTE, WILDERNESS CRINOLINE and WILDERNESS INTRIGUE."

Dr. McEwen, ME.--"CONTINUING PLEASURE is my favorite light medium blue, diploid 6F, continuing bloomer, closest to true light blue except for one of its children. DOUBLE FIRST, a tetraploid, 6F, huge white of informally ruffled form. EXUBERANT CHANTEY, diploid 6F, good vi/blue and our best repeater. FRECKLED GEISHA, diploid 6F, charmingly speckled. JAPANESE PINWHEEL, tetraploid 3F, rich color with sharp light edge, marvelous branching, and bud count, and repeats modestly. MAINE CHANCE, tetraploid, 3F, my favorite white single, early and continues a very long time. ORIENTAL CLASSIC, tetraploid, 6F, a classic white double, early to very late. SOUTHERN SON, diploid 6F, the closest to true medium blue that I know. TROPIC SHOWERS, diploid 6F, the best marbled variety that I know. TUPTIM, diploid, 6F, utterly charming, perhaps my favorite. I have included no pinks. Of current ones I guess I would select HIME KAGAMA but I like better my own CELESTIAL PINK which is named but not even registered yet and won't be available for several years. 8/5/90 some Siberian repeaters are still blooming and also some of the JIs: ORIENTAL CLASSIC, POPULAR DEMAND, DOUBLE FIRST, CONTINUING PLEASURE, SOUTHERN SON, JAPANESE PINWHEEL, EXUBERANT CHANTEY, (and its repeat stalks haven't even started yet!) and lots of seedlings."

Lee Welsh, MI--"Again it is very difficult to trim the list down to only ten. It is amazing how the list changes from year to year. I only had a chance to get to Ensata Gardens one time this year. Some of last years favorites were either not in flower at the time or not blooming well this year. Selections were made from that trip and the Portland Convention as my own garden was in a bad state. This resulted in selecting varieties viewed only one or two times, not the most ideal way to select JIs. Even then the list was far greater than ten."



RESULTS OF THE 1990 JI POPULARITY POLL ARE:

ORIENTAL EYES and TRANCE had 21 votes each, FRECKLED GEISHA 20, JAPANESE PINWHEEL 14, KALAMAZOO 12, MAINE CHANCE 10, EDGE OF FROST and LILAC PEAKS 9 each, CASCADE CREST, DOUBLE FIRST, HOTARUBUNE, and ICY PEAKS had 8 each, FRILLED ENCHANTMENT and GARNET ROYALTY 7 each, DACE 6, CAPRICIAN BUTTERFLY, CONTINUING PLEASURE, DANCING WAVES, HAGAROMO, HEGIRA, KATY MENDEZ, SOUTHERN SON and UMI BOTARU had 5 votes each.

The following had 4 votes each, CAPANEUS, CRYSTAL HALO, GALA PERFORMANCE, GAY GALLANT, IKE-NO-SAZANAMI, IZU-NO-UMI, OCEAN MIST, OL' MAN RIVER, ORIENTAL CLASSIC, POPULAR DEMAND, RASPBERRY RIMMED, ROSE QUEEN, ROYAL GAME, STRUT AND FLOURISH, WARAI-HOTEL, WHITE PARACHUTE and WINE RUFFLES.

These had 3 votes each, AMETHYST WINGS, ARTHUR HAZZARD, CASCADE SPICE, CENTER OF INTEREST, CONFETTI SHOWER, DAPPLIED DRAGON, DARK INTRIGUE, FLASHING KOI, FROSTBOUND, GALATEA, GEISHA GOWN, GUSTO, HARLEQUINESQUE, HUE AND CRY, JOCASTA, PRAIRIE CHIEF, PRAIRIE TWILIGHT, ROSE ADAGIO, RUFFLED DIMITY, SEA OF AMETHYST, SPRINGTIME SNOW, SWIRLING WAVES, TAGA SODE, TUPTIM and WILDERNESS RUBIES.

These had 2 votes each: AGRIPPINE, BETTERYET, BLUEBERRY RIMMED, BLUETONE, CHIDORI, COURT JESTER, DRIVEN SNOW, FROSTED PYRAMID, HATSU KAGAMI, HEKITO, HIME KAGAMI, IAPETUS, JOY PETERS, KNIGHT IN ARMOR, KONTAKI-ON, KYOKKO, LITTLE SNOWMAN, LONG DELAY, MAIKO-NO-HOMA, NARIHIRA, NUMAZU, OOGI-NO-MATO, ORIENTAL ELEGANCE, PEACOCK DANCE, PINK MYSTERY, PRAIRIE PEACE, ROSE CAVALIER, ROSE FRAPPE, ROSY SUNRISE, ROYAL FIREWORKS, SAKURA-JISHI, SHAKKYO, SILVERBAND, SIMPLE ELEGANCE, STAR AT MIDNIGHT, SWEET AND LOW, SYLVIA'S MASQUERADE, THE GREAT MOGUL, TROPIC SHOWERS, VIOLET AND SILVER, WILDERNESS SNOWBALL and WINDSWEPT BEAUTY.

The rest have 1 vote each: ACCLAIM, ACK-COUNTABLE, ANYTUS, AZURE RUFFLES, BENITSUBAKI, CAPRICIAN CHIMES, CHIZAKUJAO, CREPE PAPER, DANSEUR NOBLE, EMPEROR'S ROBE, EXUBERANT CHANTEY, FAIRY CARILLON, FASHION MODEL, FLYING STAG, FLYING TIGER, FOURFOLD MYSTERY, GAYETY, GEISHA DANCE, GEISHA PARASOL, HANA-TAUE, HIDDENISHIKI, IMMACULATE WHITE, IMPERIAL MAGIC, JAPANESE SANDMAN, JOYOUS TROUBADOR, KOZASA-GAWA, LASTING PLEASURE, LAVENDER HINT, LAVENDER SASHAY, LEAVE ME SIGHING, LITTLE SNOWBALL, MAGIC MORN, MAGIC OPAL, MAIKO, MAI OGI, MEMORIAL TRIBUTE, MIDNIGHT STAR, MIST O'MORN, MONO-TIDOU, PERSIAN RUG, PINK DIMITY, PINK FROST, PRAIRIE BLUEMOON, PRAIRIE EDGE, PRAIRIE ELITE, PRAIRIE GLORY, PRAIRIE NOBLE, PRAIRIE ROYALTY, PURPLE MARLIN, REIGN OF GLORY, ROSE PRELUDE, ROSE WORLD, ROYAL VISION, SAKURAKU, SAKURA KOMACHI, SHEER FASCINATION, SHIDORI, STRANGER IN PARADISE, SUDEN ISHIKI, TEA CEREMONY, TRIPLE TREAT, VALIENT PRINCE, VENETIAN VELVET, WHITE PARASOL, WINGED SPRITE, WISTERIA ENCHANTMENT, WORLD'S DELIGHT, WORLEY PINK, WOUNDED DRAGON, YAKOW-KAGAMI, YAMATA HIMA, YAMATA, KOKU, YO-HO and YORU-NO-SUMEREI.

## REGISTRATION OF JAPANESE IRISES

Clarence Mahan

For many years the position of Chairman, Awards and Registrations, prescribed in our by-lays, remained unfilled. This is an important position, and likely to become even more critical as the popularity of Japanese irises soars, and scores of new cultivars arrive on the scene. We are fortunate that Rich Randall of Virginia Beach, Virginia has agreed to perform the duties of this position for our Society.

From the very beginning of the American Iris Society's efforts to install a comprehensive registration system for irises, Japanese irises have posed a special challenge. In the 1920's and 1930's, Charles Gersdorff, who was AIS Registrar for the first three decades of AIS's existence, struggled to get hybridizers and iris sellers to comply with the rules of the new AIS registration system. By the time the monumental 1939 Check List was published, Gersdorff had succeeded in gaining adherence to AIS rules for almost all types of irises. The notable exception was the special case of Japanese irises.

In the preface to the 1939 Check List, Ethel Peckham wrote: "It may be noted that very few Japanese varieties are now in commerce, the reason being that names which were largely only synonyms or misspellings of what were but a few varieties spread over many countries, have fallen by the wayside. I think the American Iris Society and the Iris Society (Eng.) can feel rightly proud of the work they have done in just this one matter." Unfortunately, lacking cooperation and information, this resulted in a number of good, historic cultivars being declared obsolete in the 1939 Check List.

The SJI 1981 Cumulative Checklist and its subsequent update, the 1988 Cumulative Checklist, attempted to identify and describe all cultivars listed as valid in AIS Check Lists and all varieties known to be in commerce, whether properly registered with AIS or not. Consequently, quite a few cultivars listed in the 1988 Cumulative Check List are not recognized by the AIS because they have never been properly registered.

At present there are literally hundreds of Japanese iris cultivars being grown, sold and exhibited in iris shows which are not properly registered with the AIS. Some of these cultivars are older varieties never properly listed in AIS Check Lists in the early years of the AIS. In some cases these are cultivars which were grown and sold in Europe and Japan, but not widely distributed in the 1930's in the U.S.. Most of the unregistered cultivars are, however, varieties which have originated in Japan subsequent to WW II.

At the Maine convention the SJI Board of Directors adopted a proposition to sponsor a concerted campaign by SJI to get all extant JI cultivars registered with AIS by January 1, 1995. I have agreed to organize and work on this project, and have been getting much cooperation and support from both American and Japanese hybridizers. A special debt in this regard goes to the untiring efforts of Dr. McEwen and the wonderful encouragement and support from our President-elect Shirley Pope.

Our Society has received permission to register the late Mr. Hirao's irises and Mr. Mitsuda's irises in commerce in the U.S.. Mr. Kamo has given permission to register the cultivars he sent to Dr. McEwen. Mr. Kamo has also expressed his intent to join the AIS registration system, which is wonderful news! SJI can, of course, register older cultivars whose hybridizers are no longer living.

I am developing a special form and instructions for collecting the information needed on each unregistered cultivar to facilitate registration. I shall furnish copies of the form and the instructions to those of you who will volunteer to collect the required descriptive information for specified cultivars. If you are willing to participate in this project, you will need a copy of the RHS color charts (or other standard color charts), a small metric ruler, and a tape measure. I will need a list of the currently unregistered cultivars you are growing and willing to furnish information on.

Please drop me a line letting me know your intent to participate in this project, and the names of the cultivars you will be able to provide the required information on: Clarence Mahan, 7311 Churchill Road, McLean, VA 22101.

#### HAZZARD PAPERS GIVEN TO SJI

The Society expresses its appreciation to Freda Hazzard for donating papers belonging to Arthur Hazzard to our historical files. Three boxes of materials were received by the Historian, John Coble. These included Mr. Hazzard's correspondence, issues of "The Review", and old catalogues.

When time this winter permits reading through these items, it is hoped that additional information and insights will be available regarding the formation and early years of SJI. We expect that these papers will be an important addition to our archives. "Thank you" Freda for placing these papers with the SJI Historian for safe keeping and future reference.



# IRISES REGISTERED BY SJI

Following are photocopies of the registration certificates of two irises registered by Clarence Mahan for SJI. ROSE QUEEN was registered to correct the mistake made when it was introduced in 1915 as a variety of I. laevigata. AIS Registrar Kay Nelson back-dated the registration to 1989 so that it can appear in the new 1989 Check List soon to be published. As she said, "It would be a shame to make ROSE QUEEN wait another 10 years to correct this error."

SHUICHI HIRAO is the white seedling, SH-30, by Hirao which was admired at the Manassas Convention a year ago. Mrs. Hirao gave SJI permission to introduce it in honor of her late husband, Dr. Hirao.

THE AMERICAN IRIS SOCIETY

No. 89-872

## Certificate of Registration

*This is to Certify that the iris clone*

ROSE QUEEN

which conforms to the following description:

(Society for Japanese Irises, R. 1989). JI, 38" (97 cm), M.

S. rose pink (RHS 77D); F. rose pink (77D) veined darker (77B), giving overall effect of 77C, yellow green (154B) signal. ~~Unknown parentage. This cultivar was originally introduced in 1915 under erroneous name 'I. laevigata Rose~~

~~and for which application for registration was made by: Queen'.~~  
Society for Japanese Irises by Clarence Mahan, 7311 Churchill Road, McLean, VA 22101

has been officially entered in the Iris Register and is now eligible for introduction.

Date December 31, 1989

Kay Nelson

*Registrar*

THE AMERICAN IRIS SOCIETY

No. 89-682

## Certificate of Registration

*This is to Certify that the iris clone*

SHUICHI HIRAO

which conforms to the following description:

(Shuichi Hirao by Society for Japanese Irises, R. 1990). Sdlg.

SH-30. JI (3 falls), 35" (89 cm), M. White, yellow signal veined green; cream style arms tipped white. ~~Unknown parentage.~~

~~and for which application for registration was made by:~~  
Society for Japanese Irises c/o Clarence Mahan, 7311 Churchill Road, McLean, VA 22101

has been officially entered in the Iris Register and is now eligible for introduction.

Date July 30, 1990

Kay Nelson

*Registrar*

1989 JAPANESE IRIS  
REGISTRATIONS AND INTRODUCTIONS

as taken from the  
AIS 1989 Registrations and Introductions.

- AMETHYST WINGS (W. Ackerman, R. 1989). Sdlg. A4-10-32. JA (single), 24" (61 cm). M. S. violet (RHS 83A), 1/16" near white rim; violet (83D) styles; F. near white ground, veined dark violet (83A) around yellow green (154B/C) signal. D4-10-87 X B61969 "Nishikie". EC 1988.
- CASCADE SPICE (L. Reid, JA, R. 1988). Laurie's Garden 1989.
- CREPE PAPER (J. Copeland, JA, R. 1988). Ensata Gardens 1989.
- EBB AND FLOW (S. Hirao by B. Hager, JA, R. 1988). Melrose Gardens 1989.
- EXUBERANT CHANTEY (C. McEwen, R. 1989). Sdlg. 84/66(1). JA (diploid, 6F.), 37" (93 cm), E-VL & RE. Dark blue violet (near RHS 88A but darker than 89A), yellow signal. 80-165: (77/65(1): (((Garden Caprice x self) x Frostbound) x unknown) x unknown) X self.
- FUJI'S SNOWCAP (G. Bush, R. 1989). Sdlg. 84-84. JA (6F.), 34" (86 cm), M. S. white; white style arms; F. lavender blue, white center, yellow signal. Inv. sdls.
- GEISHA OBI (L. Rich, JA, R. 1988). Melrose Gardens 1989.
- KALAMAZOO (A. Hazzard by Bauer-Coble, R. 1989). Sdlg. 796. JA (single), 35½" (90 cm), EM. S. blue violet, edged white; dark purple style arms tipped white; F. white with blue violet center and veins, dark blue violet halo, yellow signal. Unknown parentage. Ensata Gardens 1989.
- KATY MENDEZ (C. McEwen, JA, R. 1988). Pope's Perennials, Seaways Gardens 1989.
- KINA (Jill Copeland, JA, R. 1988). Ensata Gardens 1989.
- LET ME SEE (W. Ackerman, R. 1989). Sdlg. A4-3-69. JA (6-petal), 40" (102 cm), M-L. Violet blue (RHS 89D) veined darker (89B) around green yellow (1A) signal; dark violet (86A/B) styles. Warai-hotei X "Jakagononami".
- MCKENZIE SUNSET (L. Reid, JA, R. 1988). Laurie's Garden 1989.
- PINK CANOPY (G. Bush, R. 1989). Sdlg. 86-40. JA (double), 36" (91 cm), ML. Orchid pink, lime yellow signal; orchid styles. Inv. sdls.
- PINK LIPS (G. Bush, R. 1989). Sdlg. 89-29. JA (single), 18" (46 cm), M. S. pink; pink style arms; F. cream veined orchid pink, yellow signal. Inv. sdls.
- ROSE WORLD (L. Reid, JA, R. 1988). Laurie's Garden 1989.

- ROSY REMEMBRANCE (W. Ackerman, R. 1989). Sdlg. D4-15-156. JA (6-petals), 30" (76 cm), M. Ruffled pink violet (RHS 81C) blending to darker purple violet around yellow (13A) signal; white styles with purple violet margin and lip. D5-5-39: (F21 x P2, sdls. from Seiko-en Nursery of Japan) X self.
- ROSY SUNRISE (A. Vogt, R. 1989). Sdlg. A-4473. JA (6-petal), 36" (91 cm), M. Lavender tinted pink (near RHS 76B), dark lavender veining changing to light lavender at edge, dark lavender red halo surrounding bright yellow signal. Confetti Shower X Rose Adagio. HC 1986.
- ROYAL BURGUNDY (C. McEwen, JA, R. 1988). Pope's Perennials, Seaways Gardens 1989.
- ROYAL ONE (W. Ackerman, R. 1989). Sdlg. A6-3. JA, 43" (110 cm), M. S. pale lavender (RHS 76C); F. pale lavender (76B/C), veined darker (77A), yellow green (153B/154A) signal. A4-3-104, sdls. from Seiko-en Nursery of Japan X "Gosho-No-Asobi". EC 1987.
- SILVERBAND (Bauer-Coble, R. 1989). JA, 35½" (90 cm), EM. Dark red violet; silver white and cream variegated foliage. Plant from Japan through Art Hazzard. Variegated sport of I. ensata spontanea. Ensata Gardens 1989.
- SKYROCKET BURST (S. Hirao by B. Hager, JA, R. 1988). Melrose Gardens 1989.
- SOROCOCCO (D. Spoon, R. 1989). Sdlg. A-3. JA (6F.), 32" (81 cm), M. White petaloids tipped lavender blue; style arms same; F. flaring and ruffled lavender blue (RHS 91 A/B) lightening at yellow signal, white halo and rays (flower ages to silver blue). Unknown parentage.
- SOUTHERN SON (C. McEwen, R. 1989). Sdlg. 85/88B. JA (diploid, 6 F.), 36" (91 cm), M-L. Close to true medium blue (RHS 93B), gold signal. 80/165: (77/65(1): (((Garden Caprice x self) x Frostbound) x unknown) x unknown) X Continuing Pleasure.
- VERMILION SUNSET (A. Vogt, R. 1989). Sdlg. Z-2078. JA (3-petal), 32" (81 cm), M. S. white edged light red; F. lightly ruffled red (near RHS 74B) prominently veined white, 1/4" red edge, light yellow signal. R. Isle #3 X Acclaim.
- WILDERNESS RUBIES (J. Wood, JA, R. 1988). J. Wood 1989.
- WILDERNESS SNOWBALL (J. Wood, JA, R. 1988). J. Wood 1989.



## LOST AND FOUND DEPARTMENT

Following the SJI Convention in Maine, Currier McEwen found a roll of 24 exposure kodak color film lying between rows of iris in his garden. The film was rolled into the cartridge, appearing to have been exposed, and had been rained upon. Currier sent it to be developed to see if it was still good, and to find any clues as to its owner. What came back was 24 photos of an attractive young lady in a green dress.

If anyone recognizes, and is missing, such a roll of film, it may be claimed by contacting Currier McEwen. Write to him at:

Route #1, Box 818  
South Harpswell, ME 04079.

## INVITATION FROM ENGLAND

Our friends in England send the following invitation to join their group:

THE SIBERIAN, SPURIA and  
JAPANESE IRIS GROUP and  
(PACIFIC COAST IRIS)

British Iris Society

Formed 1976 by the late Alex Back, to bring together growers of these beautiful iris, and also to facilitate the exchange of information, ideas, seeds and plants.

Members of the 'three' American societies support us with great generosity.

We have members in Australia, New Zealand, "Germany", France, Holland, Canada and the U.S.A. who contribute information to our Newsletter.

Members are encouraged to regard the Newsletters as an outlet for their 'queries' and 'comments'.

Membership fee is 1.50 pounds sterling per annum, payable on July 1st.

Two Newsletters are issued - one in February, the other in July.

For more information please contact:

Mrs. Joan Trevithick  
Hon. Secretary/Treasurer  
86a Grantham Road  
Radcliffe-on-Trent  
Nottingham  
NG12 2HY  
England

## SPECIAL AWARDS GIVEN

### Shirley Pope

At President Clarence Mahan's suggestion and with approval from the Executive Board, The Society for Japanese Irises presented 3 distinguished service awards at the Japanese Iris Convention in Maine this summer. The three recipients were: Leland Welsh, Currier McEwen and Adolph Vogt. A plaque and honorary life membership was given to each man. The combined work and years of service to the Society by these gentlemen is reflected in the growing interest in Japanese irises.

Lee's unyielding efforts to get and present as much interesting material as possible for our membership to read and enjoy has helped our Society grow by leaps and bounds.

Currier's ability to get all visitors involved in his hybridizing endeavors has made fledgling hybridizers out of scores of casual visitors. His many Japanese Iris introductions are now the parents in many breeding programs.

Adolph's willingness to share all his knowledge of culture and hybridizing with anyone who asks for advice has endeared him to all of us. He is usually surrounded by eager students.

These three men have been and will always be part of the backbone of the Society for Japanese Irises. We hope to others in the near future.

### THE 1990 CONVENTION REPORTS.

The 1990 Convention in Maine was a wonderful, continuously enjoyable event. Much credit goes to the planners and workers who made everything run so smoothly. Many thanks from those of us who attended to the convention committee, the Maine Iris Society, and members of Region 1 who gave them help and support.

Not only were the gardens and irises beautiful, but the hospitality was superb, and they even ordered the weather just right. In addition to the gardens, there were several other highlights to this convention. On Thursday was the beautifully staged show (see report following), and the lecture in the afternoon by Dr. Yabuya (see separate articles this issue). On Friday there was the fine noon-time lunch in Auburn, and in the evening superb entertainment. Tom and Alice Shaefer presented a well staged and executed puppet show entitled the "Misadventures of Mr. & Mrs. Mulch." These "misadventures" saw the lead characters through a full year of iris planning and gardening, during which time they had made a pact with the devil to be able to win "Queen of the Show." The script provided many opportunities for humorous remarks about iris society and convention committee members, SJI officers and hybridizers who were attending the convention. Many plaudits to Tom and Alice for a delightful hour of entertainment.

Saturday was highlighted by our visit to the McEwen garden. Here, in addition to the iris, was the magnificent view, coupled with the sounds and smell of the ocean. Like being in a bit of paradise. To give festivity to the scene was the big tent under which everyone enjoyed the lobster bake. Many people were learning for the first time how to crack open the lobster, or shuck the clams. This was followed by the meeting, presentation of awards, and the auction. A final highlight was the donation to the auction by Mr. Kamo, of Japan, two plants each of the first two known fertile inter-species crosses. Also donated were several fine pieces of artwork by Mrs. Kamo. She had in addition, held a sale of her work following the Friday evening meeting.

This convention is one that will be long remembered by all of us who attended.

### THE JAPANESE IRIS SHOW Dorothy Ferris

The Cumberland Room of the Portland Sheraton Tara became a fairyland July 12, 1990, as it became the home for "Maine's First Japanese Iris Show", sponsored by The Maine Iris Society. Delighted convention guests viewed 86 entries of Japanese iris and 22 arrangements. Jane Kratsch staged the event using parasols, fans, dishes and fabric to create an oriental atmosphere. The iris were displayed on tatami mats so that they were viewed from above.

The Queen's Court was arranged under a fabric arch. The Queen was KALAMAZOO, displayed by Russ and Joan Moors. Runners up were WHITE PARACHUTE and OL' MAN RIVER displayed by Shirley Pope and FOREST BOUND displayed by Peter Young. The best seedling was 86M-10 by John White. The AIS Silver Medal was won by Jan Sacks and Marty Schafer. The Bronze Medal went to Shirley Pope in a close 3 way contest. Judges for the event were Rosalie Figge, Jill and James Copeland and Clarence Mahon.

The theme for the artistic division was "Welcome to Maine." Federated Garden Club judges served for the arrangements which were in five classes: Rockbound Coast; Forest Primeval; Winter Wonderland; Summer Artist Colony; and Summer Vacation, a youth class. Most of the arrangements featured the smaller Japanese iris, paired with foliage, accessories and other flowers such as pink and yellow yarrow, feverfew and lady's mantle. Pam Elwell was in charge of the artistic division. Best arrangement was won by Peter Young for his interpretation of Summer Artist Colony. He also won the sweepstakes ribbon in the design division.

Darrell Probst arranged a special display of potted plants to simulate a perennial garden. In the center were the Japanese irises ROYAL GAME, VINTAGE FESTIVAL and PRAIRIE NOBLE. Surrounding these were pots of liatris, astilbe and hosta.

Peter Young, the show chairman, expressed his appreciation for the help of the Massachusetts Iris Society, who volunteered to assist the Maine group in staging the event.



## THE WHITE GARDEN Diana Nicholls

Our introduction to the White garden started on Thursday morning at the iris show. In the seedling section were several very nice seedlings to the credit of John White. We knew we would be in for a special treat and looked forward to visiting this garden on Saturday, to see more of John's work.

There are three gardeners at the White residence. Evelyn, the convention registrar, is active in the garden. John is particularly fond of the Japanese iris. Ted, their son, is active hybridizing TBs and recently daylilies. Ted is also the President of the Maine Iris Society.

As we stepped off the bus, John eagerly greeted us and welcomed us to this lovely garden. To the left of the house, the seedling patch was quite large. John's J1 seedlings were blooming as well as a few of Ted's daylily seedlings. Many TBs were also lined out. Leaving this area and crossing over to the other side of the house one discovered the main garden area. This part of the garden was edged with trees with a nice sunny spot in the center allowing maximum performance of the flowers. In addition to the bearded and Japanese iris, we found Siberian iris, daylilies and lilies all growing to perfection. (Editor's note: It was interesting to note that each type of plant had its own bed. There was a whole bed of lilies just coming into bloom). The Japanese iris were making nice clumps which gave a lovely garden effect.

John's 86-L24, a single, sanded and sprinkled light lavender with slightly darker standards, was getting much attention. ROSEWORLD (Reid 89) was very showy with white styles sitting on top of bright red-purple falls with an added bonus of nice branching. 86-J-1-4, an Aitken seedling, was drawing attention. Others that were doing especially well and were being added to many want lists were ROSE FRAPPE, (Miller 88), OL' MAN RIVER (McEwen 87), ACK-COUNTABLE (Ackerman 88), GARNET ROYALTY (Reid 84), WHITE PARACHUTE (McEwen 81), and ORIENTAL EYES (Vogt 84).

We thank John, Evelyn and Ted for sharing their garden with us.

## THE POPE AND BIBBER GARDENS Lorena M. Reid

The vintage Maine vanity plate IRISES on the garden shed was the very first thing which caught my eye as I came around Shirley's house. Behind the house, beneath the four pines are planted shade loving perennials such as Bleeding Heart, Bloodroot, Lily of the Valley, I. cristata, Columbine and Hostas. Siberian Irises are interplanted with Astilbe and Lilies. Along the left side fence there is a charming low border with Sedums, Hosta, and I. cristata. (Editor's note: Along the right side fence was a long and very nice perennial border in full bloom. Here Japanese irises had been successfully planted with perennials and lilies. The JIs were in full bloom and all seemed to be doing well.)



Above - Queen's Court display  
at the Maine show.

Left - Best artistic design  
by Peter Young.

Below - Display of horticultural  
specimens at  
the Maine show.

photos by Jan Sacks



The Japanese Irises are planted neatly in beds about four feet wide and bordered by logs or timbers. The irises are thickly mulched with pine needles. The paths between the beds are mulched with shredded woody material, soft underfoot and a great barrier against weeds and muddy feet! With close planting every inch is used without looking overcrowded!

A few of the many gorgeous Japanese Irises which especially drew my attention were: A row of SOUTHERN SON (McEwen 90) in full bloom, a lovely light to medium purple blue and nearly every stalk with two branches!; PURPLE PARASOLE (McEwen 77) looking large and lushly dark purple en masse; JAPANESE PINWHEEL (McEwen 88) the single and flaring, ruffled dark maroon with such sharp white edges on all parts; LAVENDER HINT (McEwen 87) the lovely white double with its styles showing just a bit of pinky lavender, giving a warm glow to the center; ORIENTAL ROYALTY (McEwen 86) a single maroon with white rays from the signal. The styles and standards are white rimmed with maroon; and CONTINUING PLEASURE (McEwen 82) the double pale blue-lavender with white styles and rays. This one is very bright blue appearing when first opening.

I noticed only a few guest irises in the Pope Garden. The winter of '88 really just about did Shirley in. Kalamazoo (Hazzard 89) the lovely dark veined single we saw strutting its stuff in so many gardens was lovely here too! The McEwen seedling TL-85-95-F was outstanding; similar in many ways to CONTINUING PLEASURE but an improvement in blueness and greater ruffling.

I must admit I had spent more than the allotted time at Shirley's, so had less time to savor the Bibber Garden, just through the right side gate from Shirley's. The first impression was of wide open spaces. Broad green lawn extended some distance to a garden of Siberian irises and perennial/annual cutting beds. I am sorry to say I had time only to view these from a distance.

To the left of the side gate was a square water-lily pond beside which grew a bed of Japanese Irises. I'm sure reflections would have been great, save for the eager iris viewers in the way. Many others had spent a disproportionate share of their time in the Pope Garden and were also now trying to see and photograph the many blooms here.

The 5 foot tall guest, KOUKI (Ichie) a dark maroon single variant of *I. ensata* drew many eyes; truly an iris to "look up to"! I will describe a few other lovelies I managed to find viewing space for (alas, there simply wasn't time for all before the bus captains' whistles blasted us out of the gardens). SAKAE-MURASAKI (Hirao) was a lovely blue lavender single, edged and freckled with white. The standards of this were also white. ROSE WORLD (Reid 89) a bright red double with white center; Ackerman's A4-10-46 a single purple with white center and styles; ROSE PRELUDE (Marx 60) so bright and deep magenta pink here in Maine. SAPPHIRE STAR (Marx 83) a lovely pinky lavender single with white rays and center; SYLVIA'S MASQUERADE (Eddy/Miller 89) a pale pinky lavender double with purple halo and veins, the styles of this are white with lilac pink tips. KALAMAZOO (Hazzard 89) was outstanding here as elsewhere. Ackerman's A3-11-64, a white





Left - Dr. Tsutomu Yabua speaks to the convention.



Above - the Iris Flag, at the Boyce Residence, Glenara Garden.



Left - The Whites; John, Evelyn & Ted, greeted visitors to their garden.

photos by L. Welsh

single with pale lilac veins and pinky lavender style tips. This one gives an impression of rose-centered white.

The entire Maine convention was a super experience. They ordered the weather just right, lovely and sunny, but not hot! The season was early to mid., many of the late varieties were just budded, showing no color. Lots of bloom, lots of congenial folk, lots of beautiful scenery. What else could we have asked? You can bet this Japanese iris enthusiast will want to do it again.

#### MOOR'S GARDEN Caryll Randall

Our first trip to Maine, what a delight. The organization was superb. The people could not have been nicer and as for the weather, the lack of humidity helped to make the beautiful gardens a joy to visit.

I don't think we had anyone on the convention that doesn't enjoy looking at JI's. But even if we did, they couldn't help but be impressed with all the hard work that Russ and Joan Moor have put into the creation of their garden. There was something for everyone. Hostas, 100 feet of them, interspersed with Primulas, the Golden Rod and Crabapple trees giving them the shade they need. There was a herb garden alongside a vegetable patch that included asparagus, rhubarb and raspberry bushes. The flower beds had numerous different colored phlox, a 4 foot bush of malva, sweet peas growing on a trellis. All the flowers were labeled, for the non-gardener like myself it was an educational experience. I like the miniature rose bushes planted in the IB beds. The tiny pink roses contrasted well with the green iris foliage. The day lily beds on either side also helped to enhance the overall effect. But let me stroll to the back of the garden and feast my eyes on the JI's.

The first thing that caught my eye was their height. There were not many there that were not close to eye level for me. Those of you who know me will believe me, for those of you who don't, you will just have to trust it to be true. Two of Schaefer-Sacks irises caught my eye; J86-2-3, lavender falls with darker styles, and J86-2-7, which was purple with lots of splotches. Terry Aitkins 85J-2-A, blue with lots of veining was another of my favorites. ORIENTAL EYES (Vogt 84) was an extremely large clump. Also impressive was Russ's favorite, TRANCE (Warburton 79) a violet blue with violet style arms with plicata like markings on the edges.

Russ Moor was heard to say that "We don't take our flowers seriously, we just have fun." Well, all I can say to that is if ever they do take to growing flowers seriously, all you normal height people out there may also see the Moor's JI's at eye level.

Thank you Russ and Joan for sharing your charming garden with us.





Left - George and Carol Boyce  
of Glenara Nurseries.



Above - The Japanese iris  
planting at the  
Moore Garden.



Left - Russ and Joan Moore  
in their garden.

photos by L. Welsh



## THE GLENARA GARDEN Carol Morgan

Amid knarled fruit trees and rolling hills George and Carol Boyce are building a show-place. The Boyces are using the pleasing natural features to show off a large number of perennial plants.

George explained that the weeping White Pine, his pride and joy, was a major acquisition and a "corker" to plant. After purchasing the tree, it was loaded with a fork-lift tractor onto the bed of a pick-up truck. Once the tree was "home", it was "jostled" around in the truck by two or three big guys, until it was approximately in the correct position for "drop-off." With considerable effort the two or three hefty men shoved the pine unceremoniously off the end of the truck into its new home. As luck and the careful pre-drop hassles would have it, the tree landed just right and has decided Glenara is a "happy" spot. It's beautiful.

Near the highway an iris plot was showing off. There, the convention irises beamed. Of special beauty was Aitken's '88 introduction MIDNIGHT STAR. It is a very deep, dark, velvety, violet red-black, six fall, that has strikingly bright blazes which make a star pattern in the heart of darkness. Another lovely one was Ackerman's A4-4-78, a large rose pink, three fall that had white haloes around its blaze. One other seedling caught my eye. It was 86-L-9 by White. This threefall, blue-purple bloom shows off white ribbed style arms that make an exciting contrast to its blueness.

As one wandered deeper into the garden a new pond surrounded by many blooming plants shows promise as an excellent place to grow Japanese iris. PRAIRIE CHIEF (Hazzard 74) was a high-light. Near it PRAIRIE PEACE (Hazzard 70) also gave a blue glow to the garden.

In a naturalized setting with ferns and grasses, Japanese iris ACTIVITY made a handsome clump of royal, deep blue. If one followed the path across the stream, the gracious colonial home atop the hill made one wish to spend an hour or two there where it would be possible to look over the entire garden.

The rose garden boasted some nice blooms as well. For those of us who can see flowers other than iris, DR. BROWNELL an apricot colored rose, though low, was lovely. Two varieties that will be beautiful all this week were a Jackson-Perkins seedling #80-20903 and MIRANDY.

I was not prepared to leave the garden when our bus captain sounded the whistle. There were many areas that were planted full that I didn't get to visit. The Boyces have put a considerable amount of time and energy into Glenara and as the project continues, there will be more and more splendor to see.

## THE TREWORGY GARDEN Virginia Burton

As the buses pulled into the field of this 30 acre farm of Audway (Stubby) and Phyllis Treworgy's, we SJI members were



Above left - Joyce Bibber talks with guests in her garden.

Above right - The perennial border in the Pope Garden included clumps of Japanese irises.

Below - Part of the JI planting in the Pope Garden.

photos by L. Welsh







Top left - Philip Allery from England and Shirley Pope at entrance to the Hazelton Garden.

Top right - Warren & Marie Hazelton in their garden.

Left - Adolph Vogt with a fine clump of his introduction ORIENTAL EYES (Favorite Guest Iris winner) in the Hazelton Garden.

photos by L. Welsh



again amazed at the bus driver's ability to manuver those "big monsters" between 2 fence posts and still leave both standing!

Ruth Wilder went one way in this garden and I the other and then compared notes only to find we wrote down several of the same JI and double marked many outstandingly grown perennials.

Here in this garden were tall blue delphinium, foxglove, white and pink astilbe, bleeding heart, white clematis draped over a white archway to one section of the garden, and something I haven't seen since back on the farm in New York State, stone walls. The spacious grass areas were edged with perennials and had backgrounds of magnificent trees and shrubs. Spacious walks, some outlined with RR ties and others with stone led us further into the gardens. The sky was a clear blue and there was a soft breeze. The good Lord was again smiling on the sponsoring group, "The Maine Iris Society" and us.

There was a nice clump of WINE RUFFLES by Dr. Ackerman. It is a 6f dark red-wine self and is a vigorous grower. Next, I had never seen Dr. McEwen's MUFFLED DRUMS grown so well. It is a 3f dark red/purple with dark violet stylearms, in 1980 it was, I believe, one of the earlier ones of this color to have a lighter edge. BEYOND THE HORIZON, a 6f white self with greenish signals by J. Shook seems to be a vigorous grower, it was a big clump with multiple bloomstalks. This might be one for hybridizers who are trying to get more greenish color into JI. ROSE QUEEN was getting its usual amount of attention. This is an unregistered 3f variety of near species form, a rose pink self, 2"-3" in diameter and on tall slender stalks. The color is what draws the crowd. Also in this section were PRAIRIE TWILIGHT by Arthur Hazzard, a 3f, blue/lavender bitone with darker veining; PRAIRIE GLORY by Hazzard, 3f dark red/violet bicolor and a bluish halo; OCEAN MIST a 6f by Marx is still hard to beat as a light to medium blue with a white center; DRIVEN SNOW, 6f by Marx, white with extra petaloids, an oldie but still a nice white with substance. Still another of Arthur Hazzard's was BETTERYET a 3f blue/violet combination with white edged standards, this was Ruth's favorite. There's the whistle and I haven't even reached the snacks yet---a first, which proves just how interesting and beautiful this garden is. Our SJI Convention Booklet says "after Stubby retired 25 years ago"---that gentleman hasn't retired, he has just taken on landscaping, forestry, masonry, and a job as maintenance engineer.

Stubby and Phyllis, THANKS for sharing your garden with us.

(Editor's note: The layout of this garden was very interesting. From the field where the buses parked, we entered the garden through an opening in a stone wall which enclosed a large circular area of open lawn. The area was completely ringed by a wide bed of daylilies inside the wall. Exactly opposite the entrance opening were two openings into the perennial garden, a square area surrounded by a wooden fence and divided into two equal rectangular sections. From the right had area one could enter at the opposite end into an informal wooded area planted with shade loving plants. From the left hand area, one entered a large informal grass area surrounded by trees and shrubs, and from this was an opening to the front lawn of the house with the front door on axis with the garden openings).



Top left - Currier and Elisabeth McEwen welcome Freda Hazzard to their garden.

Top right - Mototeru Kamo of Japan discusses soil rejuvenation in the McEwen Garden.

Left - Hiroshi Shimizu (left) and Toyokazu Ichie in the McEwen Garden.

photos by L. Welsh





Left - Audway (Stubby)  
and Phyllis Treworgy  
in their garden.

Below - Perennial beds  
in the Treworgy Garden.



Opposite page:

Top - The McEwen home and "View."

Center - Visitors in the McEwen JI garden.

Bottom - Jill Copeland (center) conducts judge's  
training in the McEwen garden.

photos:

Opposite bottom - Dorothy Willott

All others - L. Welsh





THE McEWEN GARDEN  
Carol Warner

Awesome! Indescribable! Fantastic! How can anyone write up Currier and Elisabeth McEwen's garden? I wanted to ask if I could stay in the little "guest cottage" out on the point overlooking the Atlantic for a week or so to compose my article. The cool salt air blows in making the whole place smell and feel like the greatest vacation spot you can imagine. If one could just strain their eyes a little harder I think they could see England.

The clams, corn and lobster were steaming under a blanket of seaweed all prepared by Pot Luck Caterers. These, plus a wonderful blueberry dessert and several beverages were devoured by the 250 guests after touring the garden for an hour or so.

Wide paths through very fragrant wild pink roses lead to two huge "garden rooms". In the first room, the first row was Payne Award winners. STRUT AND FLOURISH (Payne 66), WORLEY PINK (Worley 70), STRANGER IN PARADISE (Hager 76), PRAIRIE VELVET (Hazzard 76), FUGI (Abell 81), RASPBERRY RIMMED (McEwen 79), and FRECKLED GEISHA (Reid 81) were the most outstanding to me on the day we visited. The colors in the Maine climate were so terrifically clear and bright that it was almost hard to recognize your old friends.

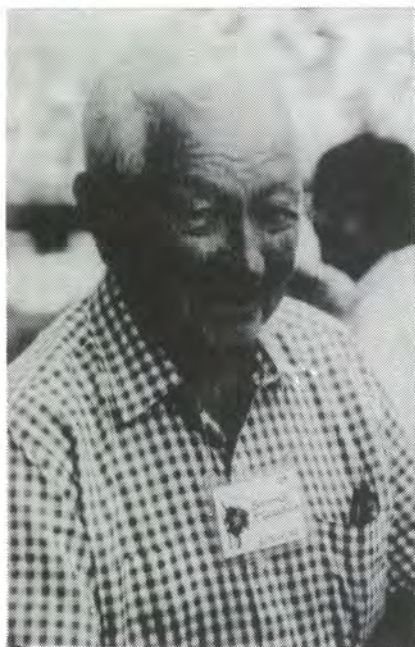
In row 2, McEwen introductions, RETURNING TIDE, SIMPLE ELEGANCE, RASPBERRY RIMMED, TROPIC SHOWERS, MUFFLED DRUMS, TRIPLE TREAT, BLUEBERRY RIMMED, and MAINE CHANCE were really putting on a show. Most of the rest of this garden was devoted to Siberians but out in the middle, for the serious grower, could be found MYSTERIOUS MONIK (a deep purple versicolor with distinctive purple and white styles). A yellow Wilsonii grown from seed from Jean Witt had its last few blooms and CLEETON STARBURST, a 40 chromosome Siberian from Hewitt.

The second garden room, on the other side of a rose hedge was even more beautiful than the first. Here were Currier McEwen's seedlings and his guest plants from Japan. A basket held little white tags which guests were asked to sign and slip around the stalk of seedlings which they especially liked.

Only Currier thoroughly understands his seedling numbering system but as best I can figure, I loved 80/168(2) (Celestial Pink) a 3f. light pink; T1 88/59(8) a light blue marbled 6f. variety which was a colchicine treated seedling; T1 88/59(6) a dark blue-violet purple; TJ87/14(2) (a JAPANESE PINWHEEL cross) ruffled 3f. with a dark halo, light rim and dark veins and T5 83/69 a pinstripe white with purple standards.

Guests from Japan which were especially lovely included YATA-NO-KAGAMI, a ruffled 6f. dark blue to light blue bitone, IZO-NO-UMI (Hirao) a blue with white rays, HIME-KAGAMI (Hirao) a pale lavender pink, and CHEZO-NO-HARU (Hirao) a 3f. white with dark violet standards and white styles. A grouping of pink varieties drew much attention. YOSHINO-NO-YUME a 6f. pink from Ichie, and MITSU-SAKURA were lovely. Although not





**Above left - Bernard McLaughlin welcomes visitors to his garden.**

**Above right- Currier McEwen and Koen Engelen of Belgium in the Hazelton Garden.**



**Left - Carmin Vallone of PA, Bill Ackerman of MD (the hybridizer) and Larry Westfall of PA discuss Ack-Countable and UnAck-Countable as seen in the Treworgy Garden.**

**photos by L. Welsh**



in bloom SAKURA-KOMACHI, a 3f. pink also from Ichie was said to be quite nice. (Editor's note: this was seen by the editor on Wednesday evening prior to the convention, a nicely formed, very smooth light to medium pink.)

Other seedlings which attracted a lot of attention and white tags included T5 85/93A, a white 3f. with purple standards and nice branching, T5 85/93D, and T5 85/93E, both blue and white.

Between the two gardens was a small shed which had a workbench with a microscope where Dr. McEwen can examine pollen from his seedlings. He attracted many an interested guest as he showed them the difference in the size of the pollen grains indicating which varieties had become tetraploid after their treatment with colchicine.

Currier speaks of "McEwen luck" as a large part of his success. For those of us lucky enough to know him, and to have been able to visit his garden, it was a thrill of a lifetime.

#### THE HAZELTON GARDEN

Buses pulled up to the Hazelton garden in front of a long, low stone wall. Behind the wall were spacious lawn areas within which were plantings of fruit trees, iris gardens and areas devoted to vegetables. To the right, the large house sets well back from the street.

Behind the house in another large lawn area, a stone retaining wall served as the backdrop for a perennial border. To the left of this were two beds containing the Japanese irises. Here we found ORIENTAL EYES (Vogt '84) growing and blooming vigorously as usual. Also of note were: a seedling, 86-A-7 by John White, 3 falls, violet blue with small yellow blaze; GUSTO (Marx 54) 6 falls, dark blue with white halo and rays surrounding a small yellow blaze; ROSE FRAPPE (A. M. Miller R.'88) 3 falls, standards red violet edged white, falls white veined violet, dark violet style arms; GALA PERFORMANCE (A. M. Miller R.88) 6 falls, standards white, falls white with dark blue violet veins, dark blue violet style arms; LILAC PEAKS (Vogt 87) 6 falls, white w/violet veining, yellow signal and light lavender style arms.

Thank you Warren and Marie for letting us visit your garden.

## BERNARD McLAUGHLIN'S GARDEN

Rosalie Yerkes Figge

Here was a little bit of heaven in the controlled wilderness that even rivaled the fantastic Japanese irises we had been privileged to see. But this garden! It was an inspiration for the young, but especially for us more mature (!) senior citizens. We were so graciously greeted by our host, Bernard McLaughlin and, if we had not been told he was 90 years young, we would have never suspected this.

There was a pleasant woodsy atmosphere and the shade was so welcomed! We saw his lilac trees and could imagine how beautiful they would be in the spring. The wildflowers along his woodland walks really caught our eye. It made us realize that wildflowers can be attractive in a garden - - a lily along one path was most unusual and looked so at home among the many varieties of ferns. Here too were many nice clumps of Hepatica nobilis making one wish for a return trip in the spring to see them in bloom.

The long path where we had entered this garden was lined on both sides by huge perennial borders in full summer color. Here, in addition to the daylilies, etc., were large masses of Astilbe in shady spots and Achillea in the sun, both in several varieties. Along the way were many lesser known plants to catch the serious gardeners attention. The path led to a "working garden" in the back. Here, in areas enclosed with railroad-tie edging were a few Japanese iris, lilies, vegetables, and a delphinium at least 7 feet tall displaying its brilliant blue color.

I finally found the huge tricolored beech that had been mentioned. It had a wide spread and queened over the front of the yard with hundreds of darling little sedum so attractively nestled in small hollows in the rocks, in crevices, trailing over the rocks and along the ground. They were so dear that I've been converted to try, not duplicate, but at least to simulate the effect if I can. The hosta varieties, the daylillies, coral bells, etc. added to the spectacular display.

All the gardens were wonderful to behold, but I think this was one of my favorites because it gave me so many ideas I had never considered: Such as more shrubbery and perennials and wildflowers that will help toward the goal of more permanent maintenance as a background for my irises.

The hospitality in general, the friendliness of the gardeners and conventioners, joined in an esprit de corps that was heart-warming. The Japanese irises strutted their best all weekend, surpassed only by the unbeatable Maine weather which was glorious in any language. All of these pluses made this an outstanding weekend of meetings.

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STUDIES ON THE BREEDING OF JAPANESE GARDEN IRIS,  
*Iris ensata* Thunb..

1. INTERSPECIFIC-CROSS BREEDING

Tsutomu YABUYA

Laboratory of Plant Breeding, Faculty of Agriculture,  
Miyazaki University, Miyazaki, 889-21 Japan.

Introduction

I gave the lecture entitled "Studies on the breeding of Japanese garden iris, *Iris ensata* Thunb." at THE 1990 CONVENTION OF THE SOCIETY FOR JAPANESE IRISES. my lecture was composed of the following subjects.

1. Interspecific-cross breeding of Japanese garden iris.
2. Cytogenetics of aneuploids of Japanese garden iris.
  - (1) Elucidation of the origin and development of aneuploid varieties.
  - (2) Production of aneuploid lines, especially trisomic ones.
3. Micropropagation of Japanese garden iris and its related species by tissue culture.

The breeding history and future of Japanese garden iris were outlined, and interspecific-cross breeding was discussed as a breeding method with some modifications of the scheme proposed previously (Yabuya 1989). The present article is concerned with the first of the three topics of the lecture. The characterization of Japanese garden iris, and especially the flower pigments are discussed and the modified interspecific-cross breeding method is presented.

Flower pigments.

A main objective in the breeding of Japanese garden iris is the creation of novel flower colors. This plant produces purple, red-purple, blue-purple, light purple, pink and white flower color due to flavonoid pigments, the main components of which are anthocyanins. In spite of the variations, this species is lacking in such flower colors as blue, red, yellow, orange and so on. In more than 200 cultivars anthocyanins in the flowers of Japanese garden iris were analysed paper-chromatographically. Major anthocyanins were shown to be malvidin 3-(p-cumaroyl)-rutinosido-5-glucoside(malvidin 3RGac5G) and petunidin 3-(p-coumaroyl)-rutinosido-5-glucoside(petunidin 3RGac5G) (Hayashi et al. 1978, Ishikura and Yamamoto 1978). In spite of such studies no useful pigment for the breeding of new flower cultivars has been found.

I have analysed anthocyanins in the falls of 43 cultivars and 4 wild lines of *I. ensata* using a high-performance liquid chromatography(HPLC) procedure (Yabuya unpublished). The mean value for the anthocyanin pigments detected in this species was 10.9 and the range 3("Akebono") to 17 ("Chitosehime"). Six anthocyanins were identified by comparison with known



samples using the visible max and co-chromatography: delphinidin 3-rutinosido-5-glucoside(delphinidin 3RG5G); petunidin 3-rutinosido-5-glucoside(petunidin 3RG5G); malvidin 3-rutinosido-5-glucoside(malvidin 3RG5G); delphinidin 3-(p-cumaroyletrutinosido-5-glucoside (delphinidin 3RGac5G); petunidin 3RGac5G; and malvidin 3RGac5G. Of these the five anthocyanins other than delphinidin 3RG5G were regarded as the major anthocyanins, which accounted for more than 21.6% of total ones detected in each cultivar and wild line of I. ensata.

Table 1 shows the classification based on major anthocyanins and flower colors in I. ensata. Using the different components of the major anthocyanins, 43 cultivars and 4 wild lines are classified into six types such as malvidin 3RGac5G-petunidin 3RGac5G, petunidin 3RGac5G-malvidin 3RGac5G, malvidin 3RGac5G, Petunidin 3RGac5G, delphinidin 3RGac5G and malvidin 3RGac5G-petunidin 3RG5G. Fig. 1 shows the representative HPLC chromatograms in the six types of major anthocyanins of I. ensata. Among these types, the delphinidin 3RGac5G type is a noteworthy one because such a type is useful for the creation of a novel flower color. that is, delphinidin is a key anthocyanidin for the breeding of a blue flower (Saito 1989). However, although "Chitosehime" is the only cultivar in the delphinidin 3RGac5G type in the present experiment, this cultivar exhibits bluish purple flowers in place of true blue ones.

Table 1. Classifications based on anthocyanins and flower colors in 43 cultivars and 4 wild lines of Iris ensata

- 
- |   |  |
|---|--|
| 1. Malvidin 3RGac5G - Petunidin 3RGac5G   |  |
| Purple: Kumafunjin, Chinkotei, isenohomare, Ohmurasaki, Kokinoiro, Kosuinoharu, Kurokumo, Shiganouranami, Shishinden, Murasakishikibu, Miyojo, Nuregarasu, Hanamagaki, Wild line 2, 3, and 4. |  |
| Reddish purple: Matsusakatsukasa, Reijin, Saruodori, Tsuruginomai, Tsuyakomachi, Shakyō, Hinodezuru, Suibijin, Daikuni, Tatsutagawa, Hananoen, Asahimaru, Wild line 1                         |  |
| Light Purple: Kacho, Okichidori, Kyodaizan  |  |
| Bluish purple: Suitenishshoku, Okina  |  |
| <hr/>   |  |
| 2. Petunidin 3RGac5G - Malvidin 3RGac5G   |  |
| Reddish purple: Komurasaki, Nagaikomurasaki   |  |
| Purple: Asaka   |  |
| <hr/>   |  |
| 3. Malvidin 3RGac5G   |  |
| Pink: Tsunohana, Anonootome, Kyokko, Naniwatsu, Akebono   |  |
| <hr/>   |  |
| 4. Petunidin 3RGac5G  |  |
| Pink: Satsukibare   |  |
| <hr/>   |  |
| 5. Delphinidin 3RGac5G  |  |
| Bluish purple: Chitosehime  |  |
| <hr/>   |  |
| 6. Malvidin 3RG5G - Petunidin 3RG5G   |  |
| Light purple: Sansekinokan, Shinonome   |  |
| Purple: Ohedo   |  |
- 

Wild line 1 - 3 and 4 were collected at Miyazaki and Hiroshima prefecture in Japan.

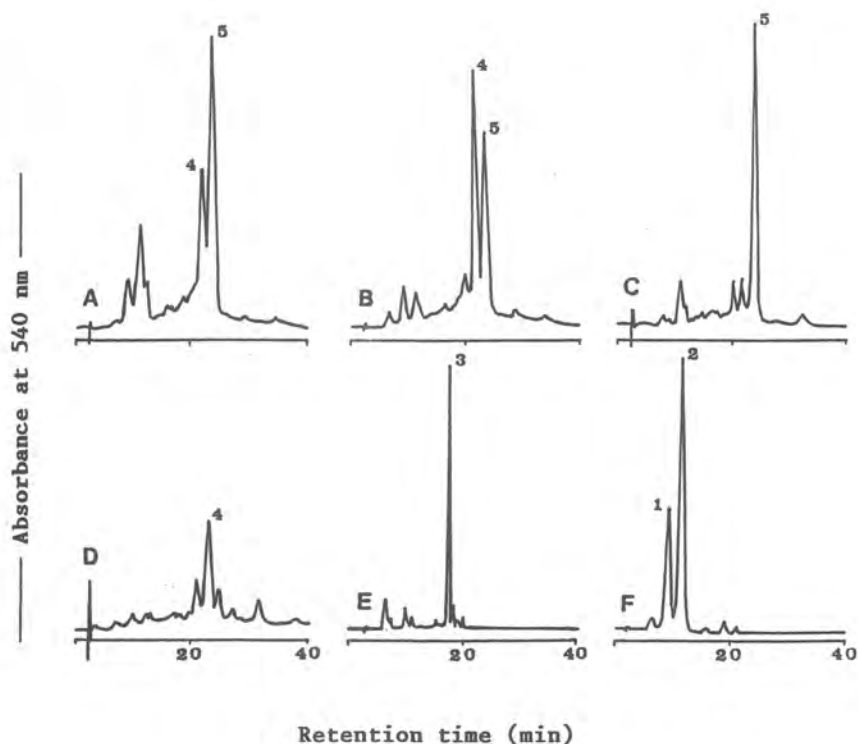


Fig. 1. The representative HPLC chromatograms of malvidin 3RGac5G(Peak No. 5) - petunidin 3RGac5G(Peak No. 4) (A: "Hanamagaki"), petunidin 3RGac5G - malvidin 3RGac5G (B: "Komurasaki"), malvidin 3RGac5G (C: "Naniwatsu"), petunidin 3RGac5G (D: "Satsukibare"), delphinidin 3RGac5G(Peak No. 3) (E: "Chitosehime") and malvidin 3RG5G(Peak No. 2)<sup>1</sup>- petunidin 3RG5G(Peak No. 1) (F: "Ohedo") type in *Iris ensata*.

<sup>1</sup>In HPL analysis, a Zorbax PC8-10S (A-D, F) and Shim-pack CLC-ODS (E) column were used.

The flower color is known to be influenced by co-pigmentation and the vacuolar pH values of epidermal flower cells (Takeda 1980, Brouillard 1988). The former was found in the genus Iris. Asen et al. (1970) reported that the blue flowers of the iris Prof. Blaaw, a hybrid I. tingitana Boiss & Reut., was exhibited by a stable blue non-metallic co-pigment complex of C-glycosylflavones and delphinidin 3RGac5G. Their result indicates that co-pigmentation is useful for the breeding of blue flowers in Japanese garden iris. Moreover, since a C-glycosylflavon such as vitexin was detected in the varieties of this species (Hayashi et al. 1978), new varieties with blue flowers may be obtained by intraspecific-cross breeding between such varieties and "Chitosehime".

The malvidin 3RGac5G-petunidin 3RGac5G type accounts for about 70% of the varieties and all wild lines examined (Table 1). Therefore, this type is regarded as the basic one for I. ensata, with the other types as variants for major anthocyanins. Such variants have been produced by the flower breeding of this species, and further studies are required to carry out the genetic analysis for the variants.

Table 1 also shows the relationship between flower colors such as purple, red-purple, blue-purple, light purple and pink and the types of major anthocyanins. There was no particular relationship between the flower colors and the types of major anthocyanins except for one, i. e., all varieties classified into the malvidin 3RGac5G type or the petunidin 3RGac5G type exhibited pink flowers.

As each major anthocyanin detected in I. ensata consists of malvidin, petunidin and delphinidin as anthocyanidins, the reason why this species produces purple, red-purple, blue-purple, light purple and pink flower colors depends obviously upon these anthocyanidins. Besides these anthocyanidins, therefore, the other ones are required to breed new flower cultivars, for example, pelargonidin and cyanidin to exhibit orange-red and red flower colors (Takeda 1980). Consequently we need to seek new pigments from the related species of I. ensata.

#### Interspecific-cross breeding.

Subsection Apogon, which is one of the largest groups on the genus Iris, involves sixteen series (Lawrence and Randolph 1959). Series Laevigatae, one of such series, consists of five species, I. ensata, I. laevigata Fisch., I. pseudacorus L., I. virginica L. and I. versicolor L. (Lawrence and Randolph (1959)). Table 2 shows comparison of characteristics among series Laevigatae species. As shown in the table, among the related species of I. ensata, I. laevigata and I. pseudacorus are useful genetic resources for the interspecific-cross breeding of Japanese garden iris. This is because I. laevigata has genes for early and perpetual flowering, and I. pseudacorus genes for yellow outer and inner perianths due to carotenoid pigments. Therefore, to introduce useful characters of both species to Japanese garden iris, the interspecific-cross breeding of the species has been studied (Yabuya 1984, 1985 and 1989). A schematic illustration of such a breeding method was proposed by Yabuya (1989) (Fig. 2). A detailed account for the breeding method is given by Yabuya (1989).



Table 2. Comparison of characteristics among series *Laevigatae* species of *Iris*

Species	Main color of flower	Main flower pigments	Flowering date month/day <sup>1</sup>	Perpetual anthesis	Hybridization with <i>I. ensata</i>
<i>I. ensata</i>	Purple	Malvidin 3RGac5G, Petunidin 3RGac5G	May/11	-	+
<i>I. laevigata</i>	Purple	Petunidin 3RGac5G, Malvidin 3RGac5G	April/13	+	+ <sup>2</sup>
<i>I. pseudacorus</i>	Yellow	Carotenoid pigments	May/8	-	+
<i>I. virginica</i>	Purple	Petunidin 3RGac5G, Delphinidin 3RGac5G, Malvidin 3RGac5G	April/26	-	+ <sup>2</sup>
<i>I. versicolor</i>	Purple	Petunidin 3RGac5G, Malvidin 3RGac5G, Delphinidin 3RGac5G	May/20	-	+

<sup>1</sup>The data were obtained at Laboratory of Plant Breeding, Faculty of Agriculture, Miyazaki University in 1989.

<sup>2</sup>Embryo rescue needed to obtain hybrid plants.

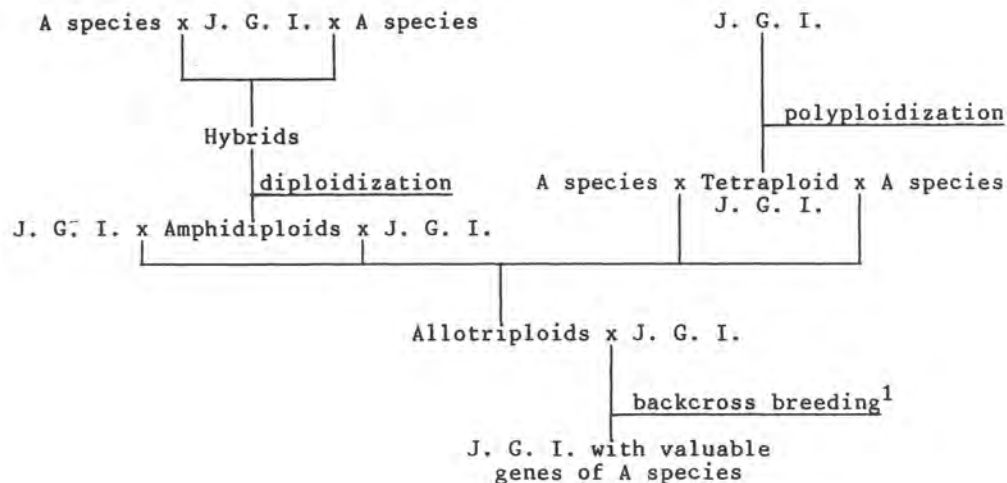


Fig. 2. Schematic illustration of the interspecific cross-breeding of Japanese garden iris (J. G. I.)

<sup>1</sup>J. G. I. is used as the backcross parent.

As mentioned by Yabuya (1989), the third step in the interspecific-cross breeding of Japanese garden iris was the obtainment of allotriploids. Fig. 2 shows that there are two ways of crossing for the obtainment of allotriploids between Japanese garden iris and other species (for example, A species in Fig. 2): namely, between amphidiploids and Japanese garden iris and between autotetraploid Japanese garden iris and other species. However, no allotriploid plant between Japanese garden iris and I. laevigata was produced through the two ways crossing between Japanese garden iris and amphidiploids of I. laevigata x I. ensata and between autotetraploid Japanese garden iris and I. laevigata (Table 3). In addition, no normal seed was obtained in the reciprocal crosses between the amphidiploids and I. laevigata (Table 3).

See Table No. 3, page 49

To overcome such breeding barriers, the reciprocal crosses between autotetraploid Japanese garden iris and the amphidiploids were examined. As shown in Table 3, only the cross of tetraploid Japanese garden iris x the amphidiploids in the reciprocal crosses produced normal seeds and the germination rate of these seeds was 17.9%. In the same cross, moreover, seedlings were obtained by embryo culture, but the frequency of seedlings obtained was 24.2%. Table 4 shows somatic chromosome numbers of the plants obtained from tetraploid Japanese garden iris x the amphidiploids. The somatic chromosome numbers of these plants varied from  $2n=50$  to  $2n=54$ , with a noticeable number being  $2n=52$ . This indicates that these plants are true hybrid plants between tetraploid Japanese garden iris ( $2n=48$ ) and the amphidiploids ( $2n=56$ ). I would like, tentatively, to call such hybrid plants allotetraploids.

See Table No. 4, Page No. 51

Since the allotetraploid plants are prepared in place of the allotriploid ones between Japanese garden iris and I. laevigata, the scheme for the interspecific-cross breeding of Japanese garden iris needs to be modified (Fig. 3). As shown in Fig. 3, allotetraploids in place of allotriploids are used as the breeding materials for the backcross breeding. The next step for the interspecific-cross breeding is the production of hybrid plants between the allotetraploids and diploid Japanese garden iris (Fig. 3).

See Figure No. 3, page No. 50

#### Acknowledgement

The author wishes to express his gratitude to Dr. Currier McEwen for valuable comments and critically reading the manuscript.



table 3. Results of crossing

Cross	No. of flowers pollinated	% of capsules obtained	No. of seeds per flower		Germination rate(%)	Germinated seeds per flower
			Total	Normal		
<u>Iris ensata</u> (2X) <sup>1</sup> x Amphidiploids <sup>2</sup>	113	71.7	23.2	0.02	0	-
Amphidiploids x <u>I. ensata</u> (2X)	24	0	-	-	-	-
<u>I. laevigata</u> (2X) <sup>3</sup> x Amphidiploids	77	66.2	39.3	0	-	-
Amphidiploids x <u>I. laevigata</u> (2X)	12	0	-	-	-	-
<u>I. ensata</u> (4X) <sup>4</sup> x <u>I. laevigata</u> (2X)	10	0	-	-	-	-
<u>I. laevigata</u> (2X) x <u>I. ensata</u> (4X)	35	71.4	8.5	0	-	-
<u>I. ensata</u> (4X) <sup>5</sup> x Amphidiploids	7	100	12.1	5.7	17.9	1.0
Amphidiploids x <u>I. ensata</u> (4X)	6	100	1.2	0.5	-	-

<sup>1</sup>"Kacho(2n=24)". <sup>2</sup>Amphidiploids(2n=56) of I. laevigata "Shikizaki" x I. ensata "Kacho".

<sup>3</sup>"Shikizaki(2n=32)". <sup>4</sup>"Main Chance(2n=48)" and "Pinku-Fukurin(2n=48)".

<sup>5</sup>"Raspberry Rimmed(2n=48)".

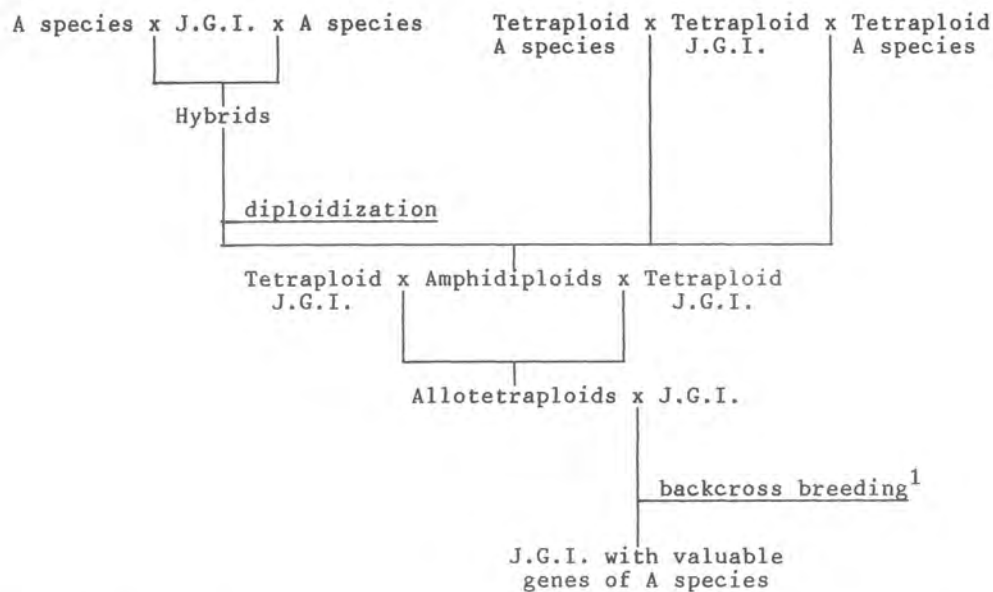


Fig. 3. Modified schematic illustration of the interspecific cross-breeding of Japanese garden iris (J.G.I.)

<sup>1</sup>J.G.I. is used as the backcross parent.

Table 4. Observation of somatic chromosome numbers in hybrid plants obtained from Iris ensata (4X)<sup>1</sup> x amphidiploids<sup>2</sup>

No. of plants examined	Somatic chromosome number			
	2n=50	2n=51	2n=52	2n=54
14	3	6	3	2

<sup>1</sup>"Kacho(2n=24). <sup>2</sup>Amphidiploids(2n=56) of I. laevigata "Shikizaki" x I. ensata "Kacho".

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## DISCUSSION OF DR. YABUYA'S IMPORTANT IRIS ENSATA RESEARCH

William L. Ackerman

Many of us who attended the Japanese Iris Convention in Maine, and heard Dr. Tksutomi Yabuya's excellent presentation of his research on the pigment analysis and interspecific cross breeding, learned what is being done at the very frontiers of Japanese Iris investigation.

Now, in this issue of the Review, Dr. Yabuya presents much of that work in written form. As with most professions, there is a special vocabulary used to accurately depict the work done, which may not be completely understandable to those outside that profession. Thus, our Editor, Lee Welsh, has asked me to attempt an explanation of what this all means in more common terms. This I will endeavor to do.

Basically, the paper is divided into two sections, the identification of flower pigments and the interspecific cross breeding of Japanese Iris. I make no claim to be an expert on the analysis of color pigments. The first and only experience I had in this realm, was the analysis of fruit and leaf pigments of yellow and white-fleshed peaches in 1948 as part of my Masters thesis. Pigment analysis has come a long way in the last 42 years.

### Flower Pigment Analysis

Perhaps a good way to think of flower pigments is to think of an artist painting a picture in oil or water colors. The color we see in the picture is dependent upon what pigments are used and in what combinations. Basically, there are three primary colors, red, blue, and yellow. All other colors are derived from combinations of these. The color we see is dependent upon the wavelength of light coming from the surface of the object. All colored substances absorb certain wavelengths and reflect others. It is the wavelength that is reflected that determines the color we see. Thus, the artist associates cobalt compounds with blue, and cadmium compounds with yellow and red. However, these are all inert pigments, easily measured, and simple to apply. When one gets involved with the color of living tissue, as in Japanese iris flowers, things tend to become complicated.

Pigment analysis in living tissue as discussed in Dr. Yabuya's paper, is an attempt to identify the various compounds that affect the colors present in JI flowers. The paper identifies six major anthocyanin compounds and their relationship to the flower colors observed (such as purple, red-purple, blue-purple, light purple, and pink). although there is a direct relationship between the presence or absence of one or more of these anthocyanin compounds, it is not as simple as the artist blending and mixing his pigments to achieve the desired hue or tone. For example, there is the masking effect. Most of us are familiar with the fall coloration of many of our native trees. Here, much of the color we see was there in the leaves throughout the summer, but was masked by the presence of chlorophyll. It was not until the chlorophyll broke down that the yellows, oranges and reds became evident.

This brings up an interesting sidelight. To most of us, the color green is synonymous to life and the fresh vigorous countryside. Without green vegetation, none of us would be alive today. Yet, plants absorb sunlight (essentially white light) to utilize those wavelengths needed and reflect (discard) green light. Thus, actually, green light is the plant's waste product!

Another complication is that the actual flower color we see depends much on where in the flower tissue the color pigment is located. If it is present in the outer epidermal layer, that is one thing, if it is present only in the internal tissue, that is quite another. A third complication is that in some instances the same pigments give off different colors depending upon the pH (acidity or alkalinity) of the tissue underlayer (substrate). I am not sure whether this factor is important in Iris, but it is in some ornamentals. Probably the best example here is the Hydrangea flower which may be either blue or pink depending upon the pH of the soil the plant is growing in.

My purpose in writing this article was to simplify things, not complicate them. What I have tried to convey in the above are the variables that may influence the color we see as based on factors other than the pigments present. Yet, without identifying the pigments involved, the plant breeder is at a disadvantage as to how to proceed.

Dr. Yabuya, by identifying the color pigments, not only in I. ensata, but also I. laevigata, I. pseudacorus, I. virginica and I. versicolor, shows us plant breeders where to look for the promises of new color combinations through both intra- and inter-specific breeding.

#### Interspecific Cross-Breeding

If we are going to get new flower colors or forms among our garden JI cultivars, it is going to have to come by interspecific cross-breeding. Crossing within I. ensata (intraspecific crosses) has been underway for several centuries by the Japanese, and perhaps 50 years or more, in the United States. We may still obtain that rare new combination that gives us something totally different, but we have certainly reached the point of diminishing returns. The exciting new possibilities lie within the interspecific combinations (crosses between Iris species. For example, I. ensata x I. pseudacorus). However, this field is loaded with stumbling blocks and is not an activity for the faint of heart.

To better understand Yabuya's activities in interspecific cross breeding, it may be best to review some basic genetics. To grow and reproduce, the cells of all living organisms must divide and multiply. Cell division is of two types, somatic (body cells) divide by a process called mitosis. Diploid cells have two sets of like chromosomes (a set is called a genome). A shorthand for genome is X (a diploid = 2X, a triploid = 3X, a tetraploid = 4X, etc). Japanese garden iris are diploids (2X). At cell division, the chromosomes go through a process of five steps in which they line up at the center of the cell, split longitudinally, with half of each

chromosome moving to the opposite side of the cell. The cell then divides, and there are two identical cells where previously there was one. Sexual reproduction requires that the sex cells (in diploid individuals) have only one set (genome) of chromosomes, not two. This occurs through a reduction division process called meiosis. This is important to remember because in diploids, if the chromosomes comprising one genome are not the same as those of the other genome, then there will be sterility--proportional to the degree of differences. For example, the yellow-flowered cultivar 'Aichi-no-Kagoyaki' is an interspecific hybrid of I. pseudacorus x I. ensata, which is completely sterile because the genome it inherited from one species is quite different from that received from the other, and, as such, is called an 'allodiploid.' At meiosis, when the two genomes are supposed to pair like chromosome with like chromosome before moving to opposite poles of the cell, this is not possible. To overcome this, one must double the chromosomes (through the drug colchicine) of each species to form tetraploids (four genomes instead of two). When these tetraploid species plants are crossed, then an amphidiploid (allotetraploid) is formed. Here, the two genomes, inherited from each species, nicely pair up with each other, and normal meiosis can take place with the production of viable eggs and pollen cells.

Let it be said that to produce an amphidiploid hybrid is not an easy task. I know, I tried for four years without success. Two plants each of two such amphidiploids (donated by Mototeru Kamo, of Kakegawa, Japan) were auctioned at the Maine Convention. The first set sold for \$400.00 each, the second for \$650.00. This gives you an idea of what value we breeders place on these hybrids.

With the above in mind, let us get back to Yabuya's article. Following the development of the amphidiploids, Yabuya utilized two ways of crossing to try to obtain allotriploids (3 genomes of at least 2 different kinds) between I. ensata and other species.

First, he crossed an amphidiploid with a Japanese garden iris (diploid). Second, he crossed an autotetraploid Japanese iris (a plant with four genomes of like chromosome makeup) with other diploid species. Table III indicates that none of these crosses were successful. Among the various crosses shown in Table III, the only success came from the autotetraploid 'Raspberry Rimmed' x amphidiploid. This should produce equal numbers of amphidiploids and autotetraploids. Interestingly, the reciprocal cross where the amphidiploid was used as the seed parent was unsuccessful.

Here, I am afraid Yabuya loses me. The whole idea of producing an amphidiploid, I believe, was to produce fertile breeding parents (not like the sterile allodiploid 'Aichi-no-Kagayaki'). Crossing it with tetraploids should maintain fertility among the progeny while exploring a whole new gene pool for new color forms. On the other hand, the production of allotriploids would seem counterproductive. Here you have three genomes with two genomes of one kind and the third of another kind. Triploids (in general) are notoriously sterile and any allotriploid produced must certainly be highly sterile. The only objective I can see in



this is to bring into one individual germ plasm from different species. Then, if one can (through the use of Cholchicine) double the chromosomes to produce a hexaploid (6 genomes), fertility would be restored. The question then arises, would such a hexaploid individual look anything like a Japanese iris?

Table II shows the successful crosses of I. ensata with I. pseudacorus, I. virginica, and I. versicolor. It is difficult to overestimate the tremendous impact these new interspecific hybrids may have on the future of iris breeding. To begin with, they provide the potential for extending the blooming season. Secondly, and even more significant, is the potential for new flower color combinations. Most of us are aware of the need for yellow in our JI's, now hopefully available through the I. pseudacorus x I. ensata hybrids. However, if this carotene pigment of I. pseudacorus can be combined with existing pigments of I. ensata, then, like the artist mixing his color pigments, the breeder has at his/her disposal a new pallet of color combinations. Also, the incorporation of delphinidin from I. virginica and I. versicolor into the JI breeder's genetic material, will ensure us of eventually developing a truly blue-flowered hybrid.

It would appear that, with the recently developed interspecific hybrids discussed in Yabuya's article, the Japanese iris breeders will soon have the means to develop a broad new range of iris beyond any expectations we have had up to this time.

## A PLANT BREEDER'S DILEMMA

William L. Ackerman

How long should a plant breeder observe a new seedling for the uniformity of its flowers before he/she can be certain that it will be a consistent performer? Normally, if I see a flower for 3 to 4 years and it has not varied during that time, I feel reasonably safe in introducing it. Now, however, I realize there are exceptions.

Those of you who went on the garden tours during the Japanese Iris Convention in Maine, may remember a white and purple speckled and blotched flowering cultivar 'Ack-countable' (A2-53) in bloom in two of the gardens. At John White's garden, next to the typical flowering plant for that cultivar, was a second smaller plant labeled Un'Ack-countable.' This was apparently a color mutation of the larger plant. Here, instead of white being the predominant color (approximately 75%), and dark purple making up about 25%, the proportions were reversed with dark purple the predominant color. This same phenomenon was also observed on a second plant of this cultivar, during the garden tours, in the Treworgy garden. The question is, why did this happen?

The situation becomes the more puzzling when one considers the cultivar's background. The very first crosses I made with JI's was done in 1960. From that first population of 257 seedlings, only two selections were eventually named and released: 'Wine Ruffles' (A2-4-1) and 'Ack-countable' (A2-53). Why did it take me so long to get around to introducing these? Actually, I had not named any JI's during the first 20 years I worked on them. 'Wine Ruffles' was among the first introductions made. Yet, I held back another 7 years before releasing 'Ack-countable.' Thus, 'Ack-countable' (A2-53), which first bloomed in 1963, had been under observation for 25 years before it was named.

In reading back through my field records, I find that during those 25 years, there were occasional notations about one or more falls on A2-53 having a broad purple streak, but nothing more. In no case was there any further deviation. Looking back, it was probably these slight deviations that made me further delay its introduction.

Since returning from Maine, I have been speculating why this introduction, after all these years, has mutated so drastically. Did the different climate and growing conditions in Maine trigger this particular cultivar to suddenly throw a color sport? Will this color sport be stable, or will it revert to the original color pattern? These are questions I am much interested in finding answers to. I do know that some plants, for example, peaches, respond differently to different climates. I have not been aware that JI's do.

In an effort for me to proceed on this, John White has graciously sent me a portion of his Un'Ack-countable.' I have planted it next to several plants of the original and will watch it for color variations. Hopefully, it will not take another 25 years!

I have been asked whether I intend to continue with the introduction of 'Ack-countable.' After due consideration, the answer is yes. If nothing else, it should prove to be a curiosity. Moreover, depending on one's tastes, color variations within a single plant may be highly desirable. Has anyone observed the trait in other JI cultivars? It is quite common among several of the Glenn Dale evergreen azaleas, and in camellias, and is highly prized by some growers.

Nonetheless, it should be available next year from Nicholl's Gardens, 4724 Angus Drive, gainesville, VA 22065 for those who wish to try it out and see if it throws additional sports. I would be very much interested in hearing from anyone, if and when it does occur.

## EXPERIENCES OF A PLANTSMAN

Alex J. Summers  
Bridgeville, Delaware

The article by Sterling Innerst in the Spring, 1990 Review, motivates these notes. They are in no way critical of his experiences, for I have made my share of mistakes also.

Dealing with chopped up leaves first. Back 25 years or so ago, when I was doing over 50 service accounts weekly, I brought home many truckloads of leaves after grass cutting was over for the season. Added to this, some friends in the lawn maintenance business also dropped off loads to escape trucking to the landfill where they were billed for each pound. This added up quickly when wet leaves were weighed. One friend had a truck 8 feet wide and 14 feet long which when filled 4 to 5 feet deep with leaves made quite a pile. Most were spread a foot deep and tilled in during the fall. Two passes left only a surface litter. Another pass in the spring left clean, nice ground as the leaves spread and tilled under in the fall had already disappeared. The corn and vegetables planted on these patches would win prizes. A few heaps were left unspread. On one such heap a lone plant of crab grass germinated one spring. By fall it was a lush mass 8 feet across.

Another good friend 50 years ago, who was superintendent of a "Gold Coast" estate on Long Island, New York, where I grew up, lamented more than once about the difficulty of obtaining 'leaf soil' which was nothing more than old broken-up leaves. This was used in the soil and also in pots in the four greenhouses.

As to potted plants drying over winter: many friends in the garden centers or wholesale supply business lose thousands each winter from late plantings, mice, or just plain freeze out. One such, who last fall potted up a few hundred hostas and covered them for the winter with a plastic blanket, lost all. I had shared in this same lot of plants and the same varieties, planted here in the ground, all prospered. Another friend complained he lost 20,000 daylilies planted in late fall in the field. You all must remember the winter of '34, when the ground froze 5 feet down. In late May that year we dug down 4 feet and found frozen soil a foot thick, with of course, the frozen water lines leading into the house.

My thoughts are: heat and water must be supplied for hardy plants in pots during the winter as pots dry and freeze out rapidly. One winter years ago when I grew a large collection of heaths and heathers, I observed in a sunny area the top 2" of soil were powder dry down to a frozen layer beneath.

Apparently friend Sterling has been brain-washed by the chemical industry. About 20 years ago I met my present wife "Gene" at a meeting of the Long Island Organic Gardening Club. At one of the meetings a member's husband questioned me about lawn fertilizers, as I was teaching in the local high school about that time and lectured frequently. My recommendation was soy bean meal. 8 percent nitrogen. 8% is hard to measure



for a dusting is hardly the same as an inch thick application. In any case, Mr. Louie wanted two one hundred-pound bags, which was locally unavailable, but which I was able to obtain.

His plot consisted of 50 x 100 feet with house, paved drive and garage. Some months later Mr. Louie, at another meeting, was bragging about how green his lawn was. I was surprised that he wanted more soy bean meal as I thought he had enough for 5 years at least. He told me he had used it all and the lawn was the most outstanding in the neighborhood. He also told me he had to cut it 3 times a week.

One of my accounts was a fertilizer distributor for the entire Eastern Seaboard and we discussed fertilizers frequently. One question was: why was there phosphorous and potash in each bag when nitrogen was most rapidly depleted. He answered, "they were not required but were needed to fill up the bag and people expected 3 ingredients." (I used only 48% nitrogen on his lawn in early spring. A slow release urea made from natural gas.)

An overdose of pellated fertilizer in hot, wet weather will cause rapid breakdown and kill potted plants, as pots heat up faster than plants in soil.

Getting back to phosphates or potash which do not leach out and remain in the soil forever, unless used up by crops. There is a condition known as phosphate poisoning which results in stunted crops. Of course, all too frequently in an attempt to correct the symptoms, more fertilizer is used in these areas, resulting in heavier build-up, until no crop can be grown at all. At the farm where I now reside (since 1980) there is an old house with hand-hewn beams. I believe the land here has been farmed back to Colonial days. Before the chemical interests (originally an off-shoot of the petroleum industry) began poisoning the soil, farmers depended on animal manure and green manure crops. After about the 3rd generation of farmers using chemicals, it was discovered that manure could cure a build-up of phosphate poisoning. One heavy application of chicken manure a few years ago has changed the fields here from producing poorly to producing good crops, except in one field where no manure was spread. Here the present crop, barley, is good only in 3 very localized areas along the drive where fresh dirt, dug out from under one of the houses, was spread. By the way, manure is plentiful locally and free for the handling. Some stables will even load. Chicken manure can be purchased for \$20 a big load, delivered and spread on the fields.

Finally, back in the days when I was landscaping, I was called in to look at someones privet hedge. Looking out the window I said it looked like leaves had been burned under the hedge, killing the tops. Wrong! No fire!! Went out to look, no fires. Poked in the soil, found about  $\frac{1}{2}$ " of fertilizer still on top of the soil. This had killed off the roots. If it were soy-bean meal or manure it would not. It's as simple as that. My belief is: chemicals are unnatural stimulants and not really plant food at all and must be used with great caution. Mother Nature knows best.

I could carry on and on, but enough said.

## MODERN HORTICULTURE AND HOW TO AVOID A DISASTER

Kathy R. Woolsey

After reading "Disasters" by Sterling Innerst in the Spring 1990 issue of this Review. I felt compelled to respond. I have over 125 irises (many types) in containers and they are growing and blooming very well. I have never lost any to fertilizer burn, rot, or insect pests.

When I joined the AIS in 1986, I was eager to grow Japanese Irises. I made inquiries into their culture, and I was surprised to discover how little anyone knew of modern horticultural practices or products. I don't know of a single commercially successful greenhouse operation that uses cow manure, worm casting, garden soil, Michigan peat, compost, or K-mart potting soil.

My horticulture degree from Virginia Tech included a specialization in greenhouse and pot plant production (mums, geraniums, ect.). So I decided to grow my irises the same way I would grow other greenhouse or pot plants, except that I would grow the water-loving irises in shallow artificial ponds.

### soil

Soil is the most important factor in growing anything. Without good soil, a plant will not thrive no matter how much water, fertilizer, or TLC you provide.

Years of research at leading universities has shown that the best soil for potted plants is a soilless soil mix. That's right: no dirt, manure, sand, or clay! These potting soil mixes are often called Artificial soils or Cornell soil mixes.

Soilless soils are a medium for maximum root growth and development. They come dry, sterile, and with little fertility. They usually are pH neutral. Their primary ingredients are Canadian sphagnum peat moss, vermiculite, and perlite. Sand may be added to give weight. Pine bark is sometimes added as a cheap filler for nursery plants.. Charcoal can be added to absorb excess fertilizer and salt.

The grower must adjust fertilizer and pH for different crops. I know of orchid growers, azalea growers, and bedding plant growers who use the same soil mix. I use Premier ProOMix BX potting soil for my irises, orchids, vegetables, and flowers.

I add the styrofoam "peanuts" I receive with mailed packages. A handful in the bottom of the pot provides air and drainage. For top-heavy plants, I add clean coarse sand. I use Water Grabber - a water retention additive - on those plants not in ponds.

There are many other professional soil mixes on the market. Peter's Professional and Bacto Professional Mixes are good. W. R. Grace makes Metro-Mix with charcoal added and Ready Earth Soil Mix with no perlite. Fafard and Parks also have good growing mixes.

You are safe if you purchase any of these professional soil mixes. If you buy the cheap stuff, its Buyer Beware! There are no laws governing the sale of potting soil. Anyone can shovel anything into a bag and call it Potting Soil.

### Fertilizer

Fertilizer is essential for container-grown plants. But fertilizers are not all the same. Most have the three basic macro nutrients: nitrogen, potassium, and phosphate. Sometimes included are micro nutrients such as iron, copper, and zinc.

The ingredient that gives gardeners the most problems is nitrogen. Too little and the crop fails. Too much and the crop burns. There are many formulations of nitrogen on the market. The most common are Ammoniacal Nitrogen, Nitrate Nitrogen, urea Nitrogen, Sodium Nitrate, and Calcium Nitrate. Each of these react and release nitrogen at different rates. The cheaper ammoniacal nitrogen reacts very fast and can burn easily. Urea nitrogen costs more, but is slow release and rarely burns. A good fertilizer has a blend of nitrogens to provide fast, medium, and slow release.

I fertilize every week with a soluble fertilizer such as Peters 20-20-20, Nutri-leaf 20-20-20, Rapid-gro or Miracle-gro. And I fertilize once a month with Lebenon's Country Club 18-4-10. It has a slow-release synthetic organic nitrogen fertilizer that golf courses use on putting greens. Also, I use an Iron Tonic two or three times a year. I also like Holland Bulb Booster which has Urea nitrogen.

If you can't find the Country Club, use Osmocote 14-14-14 fast release in early spring (3 months) and slow release in mid-summer (6 months). The fertilizers are expensive if purchased in small sizes at chain stores or garden centers. Larger quantities at better prices can be found at greenhouse or farm supply stores. Check the yellow pages or call your extension agent.

It might seem that I use a lot of fertilizer, but soilless soils need it. The red clay soil found in most of the southeast has high fertility and is rich in minerals. Unfortunately, it is a poor growing medium. The fine clay particles pack and stick together, so there is no pore space for water drainage and air circulation. Peat moss, organic matter, perlite, or vermiculite are soil conditioners that improve the texture of clay soils. They are not fertilizers. Too often I have heard iris growers say they add peat moss or just plant in peat moss and found their irises did poorly. This is probably because they failed to add fertilizer. Even organic matter such as manure and compost add only a little fertility.

### Conclusion

It makes no sense to put expensive plants in cheap, low-quality potting soil and burn them up with the wrong kind of fertilizer. To avoid further disasters, please check with your local extension agent for more information on soils and fertilizers. The information is usually free.



## NOMINATING COMMITTEE REPORT

3275 Miller Drive,  
Ladson, S.C. 29456

June 27, 1990

To - Clarence Mahan, SJI President  
7311 Churchill Road  
McLean, Virginia, 22101

The nominating committee is pleased to report the following SJI members have been contacted and have accepted the nomination as officers for the Society For Japanese Irises.

For offices for a two year term are:

President	Mrs. Maurice B. (Shirley) Pope, Jr. 39 Highland Avenue, Gorham, Maine 04038
Vice President	Howard L. Brookings N 75 W 14257 Northpointe Drive Menomonee Falls, Wisconsin 53051-4325
Secretary	Robert Bauer 9823 East Michigan Avenue, Galesburg, Michigan 49053
Treasurer	Mrs. Andrew C. (Carol) Warner 16815 Falls Road, Upperco, Maryland 21155

Appointed to the nominating committee through 1993

Mrs. Bennett (Evelyn) Jones  
5635 S.W. Boundary Street, Portland, Oregon  
97221

The nominating committee for 1990 was

*Virginia Burton*

Mrs. Wells E. Burton, Chairman  
Mr. Ronald Miller  
Mr. John White

cc Miller  
White

MINUTES OF THE SOCIETY FOR JAPANESE IRISES  
BOARD OF DIRECTORS MEETING

THURSDAY, JULY 12, 1990 - PORTLAND, MAINE

(Due to a lack of quorum at the Spring Board meeting in Omaha, Nebraska, the SJI Board of Directors did not meet officially.)

As a prelude to this meeting, President Clarence Mahan expressed his thanks to the Maine Iris Society for hosting the 1990 Japanese Iris Convention. He noted that all convention chairmen from 1988 to 1994 were in attendance and stressed the importance of their helping each other so that the conventions could continue to improve. The large number of cinventioneeers was hardly expected. Several factors played a part: this was probably the latest bloom season in the U.S., Maine is a favorite vacation area in July, and Currier McEwen's home garden was a part of the tour.

The meeting was called to order at 2:15 pm by the Preident. Nineteen SJI members were present: additional officers Shirley Pope, Robert Bauer, Carol Warner; Directors Jill Copeland, William Ackerman, committee chairmen John Coble, Virginia Burton, Rich Randall, Ronald Miller; and Editor Lee Welsh.

The minutes of the two Board Meetings held in 1989 were approved as published in The Review. The Treasurer reported a balance of \$10,059.16 of which the Society owes \$5,000 to the AIS Foundation. It was reported that Don Delmez, in charge of the Society's new publication The Japanese Iris by Currier McEwen, had sold 210 copies. There are also 100 copies available at this convention. It was said he currently has a balance of about \$4,780 as a result of sales. A motion was passed to sell the book for \$24.95 and that Ensata Gardens be in charge of future sales. It was also passed to repay the \$5,000 AIS Foundation loan July 1, 1991, unless the Society has financial problems at that time. Rich Randall was appointed to audit the books of the treasury.

Virginia Burton reported that the Nominating Committee had selected the following slate: Shirley Pope, President; Howard Brookings, Vice-president; Robert Bauer, Secretary; Carol Warner, Treasurer; and Mrs. Bennet Jones to serve on the Nominating Committee through 1993.

Editor Welsh reported that the cost of The Review is approximately \$1.85 per issue (including postage) which the membership dues do not cover.

Membership Chairman Warner reported that the membership stands currently at 530 and she has 35 more names to add. The membership shows steady growth in numbers.

Librarian Coble reported on his programs of slides (12 were sent around the country last year). He thanked the estate of Eleanor Westmeyer for its donation of her letters and collected material to the Library.

President Mahan reported for Robins Chairman Bitzer that there is currently a nine-member robin in operation; if two more members would express interest, he would start a second. Anyone wishing to join can do so by sending Vince Bitzer a first class postage stamp.

Publicity Chairman Burton reported that she had supplied JI seeds and Popularity Poll Ballots to the current convention.

Awards and Registrations Chairman Randall would like to propose to AIS (which has ultimate registration authority) to request two slides of each new JI registration. One would be kept by AIS and the other by SJI. He was asked to see if AIS would agree to this.

A discussion of the new scale of points for judging Japanese iris, devised by Jill Copeland and her committee, was tabled until a later time.

President Mahan announced that JI guests from the Japan Iris Society which were sent for the Mannassas Convention last year were sent to future convention gardens. He has formed a committee to evaluate hirao seedlings which will have descriptions printed in The Review. These will also be evaluated at future conventions, and worthy ones will be introduced by the Society's auctioning them at convention. There was concern that this method of introduction might not meet AIS guidelines and that it would not bring them to the general public, only to those attending a convention.

Because of time limitations, the remainder of the meeting was postponed until Friday, July 13 at 10:25 pm.

The new point system for judging Japanese iris had been presented to the convention as a group by Jill Copeland. The convention voted support for the new system. Having found no objection to the system, the Board approved the system for both Garden and Exhibition judging. It is to be presented to the AIS Board at their fall meeting. If it is approved, it will be in use in 1991.

A discussion was held about the confusion in names of Japanese iris, especially those from Japan. The Board set a tentative goal that by January 1, 1995, only fully registered Japanese iris be in commerce. To that end, the Society will attempt to register those worthy varieties already in commerce.

Respectfully submitted, Robert A. Bauer, Secretary.



### THE EDITOR'S "REVIEW"

Another bloom season has passed, and by now gardeners have been planning and planting, in preparation for the next one. Though JI bloom may have been less than desired here in Michigan, it was great in Maine for the convention. Not only was the bloom great, so were the gardens, the planning and the hospitality. This member came home with a convention "high" that lasted for weeks. "Thank you", to all who worked so hard to make a great convention a reality.

It was a pleasure to see at the convention the group from Japan: Mr. and Mrs. Kamo, Dr. Yabuya, Mr. Ichie and Mr. Shimizu, and also Philip Allery from England and Koen Engelen from Belgium. The opportunity to meet and talk with these people added much, both to the enjoyment and the informative values of the convention.

The response to last spring's issue of this publication was gratifying. Two articles came back in response to Sterling Innerst's article. Such response is unusual and most welcome. It is of interest to note that the articles are from almost 180 degree opposite viewpoints in regard to using commercial fertilizers. They are published next to each other for your comparison and consideration. Such dialogue regarding culture is always welcome.

In addition to the two above mentioned articles, the response in providing other materials has been good and appreciated. The editor even has materials with which to start building next spring's issue - a much happier situation than existed for the previous two issues. Keep the material coming, and "thank you" from the editor.

As noted in his "President's Letter", Clarence Mahan's term of office is coming to an end. I express my appreciation to him for his strong support. Working with him has been a pleasure. It is also good to look forward to working with Shirley Pope; her numerous abilities and infectious smile will be great assests to our Society.

As winter approaches, this brings each of you best wishes that you can spend several hours by the fire, or, in some other pleasant spot, dreaming of the garden to be next spring. While doing this, how about jotting something down to send to the editor? I enjoy hearing from new people.

Best regards,

A handwritten signature in cursive script, appearing to read "Lee".