25th ANNIVERSARY

the Siberian IRIS

vol. 6 no. 2
Fall 1985

Sdlg. S222 Dale Johnson

THE SIBERIAN IRIS

Volume 6, Number 2 Fall 1985

The Siberian Iris is published semi-annually by the Society for Siberian Irises. Editorial Office is at P.O. Box 398, Wayland Academy, Beaver Dam, WI 53916. Deadlines are February 15 and September 15; earlier receipt of material is desirable. Black- and-white photographs and drawings are welcome; please put return address on the back if they are to be returned. Reprinting is by permission of the writer and the editor, with due acknowledgement.

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Want to be useful?
Write the Chairman of the committee of your choice!

THE PRESIDENT's LETTER

It is most fitting that Siberian irises have reached a new height in popularity in this our 25th Anniversary year. Siberians were much in evidence in almost every one of the convention tour gardens at the AIS Convention in Indianapolis and its environs. The blooms were magnificent.

This is the first year that Siberians have been eligible for the AIS Award of Merit. Congratulations are extended to Ben Hager for Chilled Wine, Julius Wadekamper for Borbeleta, and Currier McEwen for Teal Velvet--the 1985 winners. Thirteen more Siberians won Honorable Mentions this year. This bodes well for the future, and the timeliness of the AIS Board's favorable action on our recommendations to upgrade the society's highest award--the Morgan--to special medal status as the Morgan-Wood Medal. Our special thanks to Betty Wood and Dave Silberberg for lending a helping hand.

We also wish to congratulate Steve Varner for his SSI Distinguished Service Award this year. Steve has labored long and hard to increase the popularity of Siberians and those big bouquets that Steve and Avis cut and brought to the Indianapolis Convention for our section meeting were much appreciated. Special thanks is also due to Bob Hollingworth who designed and helped get this lovely certificate established.

Special recognition is due for Peg Edwards, our editor emeritus who planned and gathered together most of the material on Siberians in the current AIS July bulletin. This is the finest, most comprehensive coverage of Siberians that AIS has ever had. To MaryAnn Anning, and Keith Keppel we extend our appreciation for a job well done. You have really helped us get better recognition for Siberians in the world of irises than we have ever enjoyed before.

It is most appropriate that the AIS Bulletin cover picture of I. delavayi should come from our English friend, Harry Foster. Both Harry and Maureen Foster are responsible for significantly upgrading the SSI slide library, and have just made another great donation of new slides to that collection.

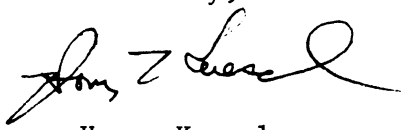
After reading Peg Edwards' story about how our society began, and how she struggled to get our semi-annual publication established, I must acknowledge that we have come a long way. Thank you, Peg, for 24 wonderful years as our Editor, and to Carolee Clay, our new editor, we commend you for an excellent transition to a new, exciting format. Everybody wants

a copy of your first issue, and when they find the color pictures in the Spring issue, I predict you will top Jaymie Heathcock's record breaking sale of the new AIS Judges Handbook.

Currier McEwen set a new standard of excellence for us with the publication, SIBERIAN IRISES. I can hardly wait to tell you about Jim Foreman's latest adventure in Siberian publications. What started out as a simple update of the Siberian Checklist, has now become a little encyclopedia of information about Siberian Irises. B. Leroy Davidson and Jean Witt are doing a special section on the Siberian species, and it will have line drawing illustrations and some black and white pictures of the Siberian hybridizers. Roy just wrote "I've gotten the printout of the first draft--what a terrific job it is!" I echo his sentiments. It will probably be sometime next year before Jim can get the publication completed.

And now it is time for me to step aside as your President, and thank all of you who have supported me and faithfully carried out the work of our society these past three years. Jim Foreman will succeed me in this office and I request your continued support for Jim and his new administration.

Sincerely,



Harry Kuesel

SIBERIAN SECTION BOARD MEETING MINUTES

The Siberian Section Board of Directors met at the Atkinson Hotel, Room 208, Indianapolis, Indiana on May 19, 1985 at 4:30 with Harry Kuesel presiding.

Board members present were: Harry Kuesel, Jim Foreman, Ruth Wilder, Gunther Stark, Ainee Busse, Jaynie Ritchie, Dr. Currier McEwen, Carolee Clay, Annie Mae Miller, Julius Wadekemper, Dr. Don Koza, Bea Warburton, Bob Hollingsworth, and Dave Silverberg. Visitors included: Ralph Bullard, Lillian Bourne, and Martha Wilkins.

Minutes of the 1984 Board meeting were approved as published in the 1984 Fall issue of The Siberian Iris.

Treasurer's report was given by Gunther Stark. It is published in the Spring issue of The Siberian Iris. Harry Kuesel made comment that The Siberian Iris loan has been repaid to the AIS Foundation.

Carolee Clay, in her editor's report, stated that she had used several different sizes of type in the bulletin and would welcome comments on your preferences.

Julius Wadekemper gave a report on the sales of The Siberian Iris by Dr. Currier McEwen. In 1981, 5,000 copies were printed. As of now, we have 3,191 copies left (almost 2,000 copies sold).

Newsletter expenses were presented by Jim Foreman. The Spring issue cost approximately $282. Mailing costs are .06¢ postage in the United States and .97¢ to overseas members not included. Comments were made as to increasing dues of overseas members to help cover some of the cost. It was decided to leave dues the same as a good-will gesture.

A discussion as to what type envelope to use for mailing purposes followed. It will be left up to Jim Foreman to decide which type is best to use.

Dr. Don Koza made a motion that a big "Thank You" be given Jim Foreman and Carolee Clay for an outstanding job on the Spring issue of The Siberian Iris.

Harry Kuesel gave the status on the non-profit 501 C3. There would have to be an AIS By-Laws change before this could be accomplished, since we are under the same rules as AIS. They have not obtained this status. Jim Foreman made the motion, which was seconded by Julius Wadekemper, to table this motion until next year. Motion passed.

Carolee Clay proposed The Siberian Iris (bulletin) read "The Siberian" or "Siberian Iris." A

copy of the proposed By-Law change would have to be mailed to each member for approval. Jim Foreman stated that a separate sheet with changes proposed should be folded and sent as a separate sheet in the next issue of The Siberian Iris. Harry Kuesel also asked Carolee to print the slate of officers, as presented by the nominating committee, on a separate enclosure in the next issue.

Jim Foreman gave an update on the printing of the Check List. Since it had been postponed for a year, a new typeset would have to be done and it will be called "The Siberian Encyclopedia." Julius Wadekemper has pictures of most of the hybridizers that will be used in the new encyclopedia.

David Silverberg presented the costs of the Morgan-Wood Medal. Cost of recasting the medal would be $516.16. This would be for thirteen medals. A point of information on the cost of the new model was called for by Jim Foreman. This cost was not available. David Silverberg also stated that Region 19 would be responsible for half of the expenses. A motion by Gunther Stark to accept David Silverberg's proposal was seconded by Ainee Busse. Motion passed. Check was made to Medalic Arts Company for $258 for SSI portion of this cost.

In Committee reports, Ainee Busse gave a report on the auction for the beardless Iris. The Siberian Section received a nice amount from the auction in the Northeast last year. Next auction will be August 18, 1985.

Publicity report: Ohio State University Symposium Publication included Ainee Busse's presentation on Siberian Irises given at their Horticultural Symposium. Annie Mae Miller wrote an article on Siberians for the July 1984 Horticulture Magazine. Ruth Wilder reported that a white Siberian by Dr. McGarvey, 'Wing on Wing', had won "Best Specimen in Show" at the North Alabama Iris Society Show in Huntsville. It was exhibited by Rosa Belle Vanvalkenberg.

The "Invitation to join Siberian Section" brochure will be reprinted as updated and distributed to Ainee Busse and Julius Wadekemper to mail in Publications and to Gunther Stark and Ruth Wilder. A motion for 18,000 to be printed was made by Ainee Busse and seconded by Julius Wadekemper. Motion passed.

New Judges Handbook will be on sale at this convention in a limited supply.

We have three boxes of new slides to add to the slide library, thanks to Harry and Maureen Foster in England.

The slate of officers for 1986 as presented by

the nominating committee are as follows:

President	Jim Foreman
First Vice President	Anna Mae Miller
Second Vice President	Bernard Hobbs
Secretary	Ruth Wilder
Treasurer	Gunther Stark

Board members remain unchanged.

Julius Wadekemper moved, and Ainee Busse seconded, that this slate by accepted. Motion passed.

The program at the Section meeting at this convention will be given by Dr. Bob Hollingsworth. A motion by Jim Foreman and seconded by Annie Mae Miller to give Dr. Hollingsworth an Iris print passed. Ainee has these prints for sale at this convention. (The Section will buy one for Dr. Hollingsworth.)

Steve Varner was nominated for Distinguished Service Award. Dr. Currier McEwen made the motion, which was seconded by Dr. Don Koza. Motion passed.

Annie Mae Miller gave a report on the Siberian Robin. One flight has thirteen participants, with two more possibilities. The hybridizer's robin has been restarted and is progressing well.

Meeting adjourned at 6:30.

Ruth Wilder
Secretary

Publications

Back issues: All back issues will be $1.50 each if available. Some of the early issues are no longer available. The Check List is $2.75; Judging Standards, $1.00 while they last. Checks for all publications, payable to the Society for Siberian Irises, should accompany all orders. Send to the Publication Office, Mrs. Ruth Wilder, 2219 Mathews SE, Huntsville, AL 35801, except for SIBERIAN IRISES, by Currier McEwen, which should be ordered from Mr. Julius Wadekemper, 10078 154th Avenue, Elk River, MN 55330. Price for this, by mail, is $7.00 including postage and handling.

Potentials of the Siberian Iris

Dr. G. I. Rodionenko (U.S.S.R.)

Translated by R. D. Fabel-Ward

In this article I would like to share with others interested in Siberian Irises some conclusions I have arrived at.

The most important quality of these irises is their resistance to low temperatures and to high air- and soil-humidity. This explains why they can be found at much more northern latitudes than the bearded irises. This characteristic is very important to the iris growers in the northern parts of Europe, Asia and America.

Another very significant feature of the Siberian Irises is their immunity to bacterial soft rot. During the hot, humid summer of the Leningrad region--July and August--we lose up to one-third of all Intermediate and Tall Bearded Irises to this disease in some years. Usually, the growing portion of the rhizome, with developed buds, dies, while the rest of the plant is still alive; thus, we lose about one-third of the flower cup. In contrast, the Siberian Irises grow well in soil infected with Erwinia carotovora bacteria, the cause of bacterial soft rot. They bloom well, and their strong root system improves the physical properties of the soil. In some especially severe cases of soil infection, we have used plantings of Siberian Irises to fight it. At the end of three or four years, the soil is once more healthy and we can plant the Tall Bearded Irises there.

The only pest harmful to the Siberian Irises in the northern areas of the country is the iris borer. In the northern regions the roots are damaged by Gryllotalpa gryllotalpa.

In considering the decorative qualities of these irises it should be noted that the British hybridizers, and even more so, the Americans, have achieved notable success by their efforts. Dr. McEwen must be regarded as a leader among them. He has created several beautiful varieties and has written a book on this subject (Siberian Irises, by Currier McEwen, published by The Society for Siberian Irises, at Suburban Press, Haywood, CA., 1981).

Even with these successes in the breeding of Siberian Irises, there are still numerous biological and structural improvements that could be made.

1) The Foliage: This perennial plant definitely

can be called a decorative-foliage plant. The impressiveness of the bushy clumps depends on the leaf color, the dense growth of the fans of foliage, and the shape and the lasting quality of the leaves. I was very fortunate to find an especially attractive narrow-leaf form of I. sanguinea f. angustifolia (Rodionenko) in the eastern part of Siberia. It differs significantly from the usual form of this species, and deserves to be used extensively in breeding programs. It is also important to watch for garden forms with variegated foliage if such should appear. Foliage similar to the variations existing in I. pseudacorus and I. pallida would be very effective, look impressive in large clumps, and lend themselves to decorative displays.

2) The Flower Stalk: The tallest stems of Series Sibiricae are found among populations of I. sibirica found in the western parts of its area of distribution. In our collection there are some plants of this species which have stalks of 130-140 cm. height (52"-56"). The shortest are seen among the chrysographes forms.

A disadvantage of the Siberian Irises is their relatively short period of bloom. This could be increased by selecting types with many flower buds and branching stems, or by finding clones that have early and late blooming periods. Well-branched stem forms can be found among I. sibirica and I. clarkei. In our conditions the latest-blooming cultivars are WISLEY WHITE and SNOW QUEEN. Unfortunately, the latter comes from Southern Japan and does not bloom in our area in some years, due to climatic conditions. The earliest to bloom here are some types of I. sanguinea brought here from Mongolia; these bloom during the second half of May. They are known for early bloom and for being short and compact. In our work we have been trying to collect as many and as varied types as possible so that we can determine the potential of each clone.

Another basis for further improvement of the Siberian Iris' biological and decorative qualities is the very broad range of their hybridization. These possibilities were very well covered in Dr. McEwen's book mentioned above, and also in an article by Dr. Lee W. Lenz ("Hybridization and Speciation in the Pacific Coast Irises", Aliso, Vol. 4, pp. 237-309, June 1959), stressing the genetic relationship between the Siberians and the Californian irises. This study is very interesting scientifically, and also provides us with unlimited hybridization possibilities. An excellent example of this method's possibilities is MARGOT HOLMES, a hybrid of I. douglasiana (of the Californicae) X I. chrysographes (of the Sibiricae) which was awarded the Dykes Medal in 1927.

SIBERIAN IRISES AT THE 1985 INDIANAPOLIS CONVENTION

Report by: Julius Wadekamper

It seems evident from the 1985 convention voting that tall, bearded irises are the favorites of convention goers. Five of the top six irises voted for the Franklin-Cook Cup and the Presidents Cup were TB irises, and this, in spite of the fact that the Indianapolis convention had the most and the best-grown Siberian Irises ever seen at a National convention. One, 'Steve Varner' by Harley Briscoe, was the second runner-up for the Franklin-Cook cup.

There were more new Siberians and more Siberians from new hybridizers than ever before seen, and most of them in peak bloom.

Perhaps the most exciting new Siberian was from a new hybridizer--Dale Johnson from Blackjack, Missouri. While he had several outstanding seedlings, in my estimation nothing came close to his S-222. It showed both new color--a soft grayed, blue-white and new form--fully rounded, horizontally flared and wavy. If one can judge by the admirers of this iris in the Wampler garden, it could be concluded that this was also a favorite of many other people.

Although I have known of his work for some time and have written of it in the Siberian Iris Bulletin, the Indianapolis convention served to bring Bob Hollingworth to the forefront as a major Siberian Iris hybridizer. His seedlings, his garden (which was not on tour) and his guested Siberians, were a spectacle to behold. 'Wizardry' was greatly admired and many people commented on its beauty. The falls are full, flared, and a rich purple. The lighter style arms, with turquoise blue midribs, set it off perfectly. It put on an admirable display in the Wann garden.

Dr. Wm. McGarvey's 'Jamaican Velvet' is a rich, full wine-colored Siberian with excellent form and substance. Again, in the Wann garden it made a fantastic display and is surely one of the great irises of the future. His 'Blue Chanteuse' in the Stam garden was a true blue beauty.

It was in the Stam garden that both of Dr. McEwen's Harpswell irises stood out. 'Harpswell Hallelujah' and 'Harpswell Happiness' are among his finest newer introductions.

Harley Briscoe's 'Steve Varner' won second runner-up for the Franklin Cook cup and was at its best in the Wampler and Stallcop gardens. This light blue Morgan award winner is one of the great Siberian

Irises. 'Glenda Norrick', a rich velvety purple of Harley's, won many admirers.

Steve Varner's 'King of Kings,' a very accomplished white, showed up well in several gardens. I especially admired his 'Avon,' a medium blue. His 'Demure Illini' was also very attractive.

It was definitely a Siberian Iris convention, and these great plants showed off remarkably well.

Report by: Anna Mae Miller

At the Norrick garden they had 2" of rain during the night and high tornado winds. As we entered the garden, there were established clumps of Blue Moon, Temper Tantrum, Savoire Fare and Ewen.

Bob Hollingworth had a beautiful row of seedlings [but nothing better than at home, where I had decided that Heliotrope Bouquet (85), Jewelled Crown (87) and Vanessa (87) and 82X3B6 were superb.] The quality of his flowers has really advanced in three years; however, there was evidence of very early varieties which had bloomed out. A4-C3, A3-A1, E3-B1, and C1-A7 were nice. Dale Johnson's S-92 were short and not well branched. S-242 was not as good as S-92.

When I stepped off of the bus into the Wann garden, there was a lovely clump of Dancing Nanou (A.M. Miller 84) growing next to Jamaican Velvet (McGarvey 83), a new velvety red violet self, both in full bloom. Wow, how proud I was!

Heliotrope Bouquet (Hollingworth 85) was not as nice as the clump at his home; it has a lovely flower when well grown.

Illini Flirt (Varner 85), was too propeller shaped and had pinched falls, as the first generation tetraploids are prone to be--a sibling to Dance Ballerina Dance (introduced for its tetraploid genes for hybridizing help)--Steve Varner has bloomed three pink tetraploids from some seed that Currier McEwen treated with colchicine. Wizardry (Hollingworth 85), a mid-blue tetraploid, was good.

The Clarke garden had a lovely bed of Siberians that our bus ran to first, as by this time Tony Willot, our bus captain, had made this The First SIBERIAN IRIS CONVENTION. Now, I could see that the TBs were great here, but first things first! Dancing Nanou was perfect here, right in front or Orville Fay (McEwen 70), a lovely medium violet blue tetraploid and a favorite of mine.

Blue Chanteuse, McGarvey (77), is lovely, light blue self Stds aqua, fringed. I'd never seen it.

I took pictures of Windwood Spring (Hollingworth 85), a light blue with a prominent yellow and white large signal area and Sunburst Blue (Hollingworth 84), medium blue with large gold signal. His plants were growing short, but had some representative flowers on 12" stems. EC-C1B was nice. D2-C3 was also nice (purp/RV StA. C2A2? good white, BB-1 RV very nice).

Illini Flirt (Varner 85), a pink-lavender amoena; Avon (Varner 78), a lovely blue; Letitia (Varner 74), and Diana Blue (Varner 83), some of Steve Varner's, were blooming nicely. I noted that Ode to Love is a later white. Tempus fugat! As I had used most of my time up, I walked to the house for cookies and to talk to Doug Clarke, and he conducted us on a tour along the Wildflower Trail, past peak of course, to the back to see his hideaway, furnished with animal skins and Indian rugs. But we did see his three piles of ground, composting leaves that he uses to enrich his soil, and it surely works. By this time Bill Maryott, Calif., was enamored with Siberians and had given up looking at TBs. He could not believe the size of the beech trees and was comparing them to the redwoods of California. One cookie, and Tony was blowing the whistle to return to the bus. However, since I only had a shot or two in the camera, I just stood there taking pictures of Dancing Nanou growing in front of Orville Fay and holding its own VERY well.

Emma and Barney Hobbs also have a lovely large garden and it made me awfully tired just thinking of all the work they had done--nice island beds of irises all over as well as a lovely rock garden.

Dreaming Yellow (McEwen 71), was nice, as usual. However, Orville Fay was too short. Briscoe's Steve Varner (76) had only one open flower.

I took pictures of Pink Haze (McGarvey 80); Glenda Norrick (Briscoe 83), such a velvety purple red color; Lavender Bounty (McEwen 82), another of the lavender-pink color breaks; Forrest McCord (Hollingworth 83), a medium violet blue with prominent signal area; and Sunburst Blue (Hollingworth 84).

Dance Ballerina Dance (Varner 83) was pink-white amoena tetraploid that has nice flared, ruffled falls that I liked very much. Harpswell Happiness (McEwen 83), a lovely white tetraploid siberian, had a lovely flower. Besides these pictures I noted Avon (Varner), a lovely blue sib, and Briscoe 773B, a nice white with no branch. We had had a nice day (73°) and no rain and had visited four lovely gardens.

Wednesday I had to go back up and get a sweater as it was cold. We began at the McFadden garden where we saw Dale Johnson's Sdlg 242 and Briscoe 7645A with a nice signal. We soon decided that the Siberians

were not placed well and not growing well; there was too much competition with a willow tree. As it was cold, we went over to the gazebo and had hot coffee and good, hot cinnamon rolls and saw the first crawdad holes (chimneys) I had seen for years. There were hundreds of them. We visited with Ainie Busse, Minnesota, and Carol Morgan, Michigan.

The Wampler garden was beautiful with the guest iris in a separate place, and here we had another good session with the Siberians (Steve V. was doing judge's training for Carol and Paul Morgan, which was joined by others, and all learned a bit more). Windwood Spring (Hollingworth 85) was good, about bloomed out; also Heliotrope Bouquet (Hollingworth 85) was good.

But the talk of the garden was Dale Johnson's Sdlg. 222. It had a very good texture and was very nice (#31,32,33). Dale Johnson is from Florrisant, MO, and it was too bad he was not present to hear the raves as his Sdlg. 222 does have a different white color, with a nice flat and full form; seen on an overcast day it was white with a grey cast and beautiful opening buds. I felt it was much superior to his other seedlings. Peg Edwards (McEwen 75) was good; Teal Velvet (McEwen 82) was early with probably no branch, but a lovely velvety reddish purple self. Soft Blue (McEwen 79) was early; others blooming here were Pink Haze (McGarvey 81), S42-D. Johnson and Jamaican Velvet (McGarvey 83), Avon (Varner) had been nice in all gardens.

The last day I visited the Stallcop garden on a cold morning to find a very nice Siberian planting. But I have nothing new to report, as they have all been noted before.

The Winton garden was laid out so it was easy to study the various types of iris. I liked Varner's Sole Command there, and Hollingworth had two very nice seedlings here: 82D3C2, a nice dark violet flower with wide standards; and 82C2A2, a nice white with green influence of good form and two branches besides the top. King of Kings (Varner 83) was a nice, wide white. Lilienthal (Tamberg 78) was a nice white. The Stamm garden was the last one, and she had some surprises--Chartreuse Bounty (McEwen 83) was just opening a chartreuse yellow, but as it was not fully open I couldn't tell much of its final color and size.

This was the last garden of a very successful AIS FIRST SIBERIAN IRIS CONVENTION--and would you believe, I was on a tour that didn't have to be rained on during the garden visits!

INTERIM REPORT ON SUMMER SKY SEEDLINGS

by Peg Edwards

Three years ago I sowed the contents of a seed pod on SUMMER SKY. I used the ripest pod, which I had marked because it was the first one set that spring, and I am fairly sure that the pollen came from ROYAL HERALD, as those two usually start blooming a good week before any others. But I am not going to go to court and swear to the parentage!

The seedlings didn't bloom in 1984, but this spring about a third of the batch did flower. The first one out opened in early afternoon when the sun came from behind a cloud layer, and as I got out of the car after doing some errands, my eye was immediately caught by a combination of white and orchid-pink. I got there fast! White standards and styles, pink falls! Form was not so wonderful, but the color--wow! In the next week several more bloomed. Most were the same sort of gucky little messes I'd had before from SUMMER SKY, but there were four interesting ones. One had white styles, rich orchid-pink falls and pale pink stands. Another was pale orchid with some white on the styles; another orchid with pink midribs on white styles, and the last was an orchid bi-tone with even paler styles--but no white. None had really good form, and they varied in size from small to medium-size flowers.

I expect most of the rest will bloom next spring. More about them next year. I really think I hit a color-break jackpot!

NEW IRIS BOOK

Word of a new iris book has reached me from New Zealand. It is "THE WORLD OF IRIDACEAE" by Clive Innes F.L.S. F.B.C.S.S.

It contains 250 color plates, 12 drawings and 8,000 references. For further information or to order, write: David Bateman, Ltd., P.O. Box 65062, Mairangi Bay, Auckland 10, New Zealand.

(Cost in ad was $85.00 plus $2.00 postage. New Zealand money, I presume.) Ed.

NEW METHOD FOR USING COLCHICINE TO INDUCE TETRAPLOIDY IN SERIES SIBIRICAE

by Robert D. Fabel-Ward, Horticulturist (ret.)

Several well-established methods are used by iris hybrisiers to enlarge floral and foliage parts of irises and other plants and that is to treat the meristem tissue with colchicine.

This relatively new method is to use existing diploid stock by injecting colchicine within a few inches of the undeveloped flower bud. This method can be used as a starter programme, or by those with an existing tetra iris programme.

THE METHOD: Using a solution of 0.1% of chochicine in a 1-cc Tuberculin syringe which is tied to a stake, the syringe is filled with 3-cc of the solution and is pressed until all the solution is emptied. The process is completed in two to five days (some have been completed in much less time); a lot depends on the size of the stalk.

The syringe is inserted just below the first leaf blade in a downward fashion so the needle can be tied and easy to use. Care must be taken so as not to insert the needle too far as it could exit the other side. No prior puncture is necessary as this type of needle is small enough to cause no problems for entering the stalk.

RESULTS: After about three to four days, the visible results are: first, the stalk will begin to swell and bend as the sun's rays begin to draw the solution upward into the floral parts. Secondly, as the flower opens it will be thick in substance and much larger than those not treated. It usually takes three to four weeks for the process to be completed. What makes this method important is the fact there is no damage done to the existing plant.

PROBLEMS: There are no existing methods of using colchicine without some problems. The following problems occurred in 1981 and other tests thereafter.

1) The seed pod can burst open because of the "rush" of the solution and in order to overcome this problem, parafin wax can be applied to seal the splits in the pod.
2) There are times when the stalk will split open

and it will collapse.

3) Because of a "rush" the whole flower bud will pop off.

4) Failure to produce tetraploidy and this results in chimera tissue which is undesirable.

Because several tetraploids have resulted since 1981, this method has merit and will be used with other iris species. This NEW method was formulated by Dr. Thomas Denton, et al. at Samford University, Birmingham, Alabama.

Addenda to The Siberian Species

Page 11 TSI Vol 6, No 1 Spring 1985:

by Harry B. Kuesel

I am indebted to Roy Davidson of the Species Iris Group of North America, and Chris Grey-Wilson who wrote "The Genus Iris-subsection Sibericae" for the British Iris Society in 1971, for their helpful comments.

What I reported in the first paragraph about the 28 chromosome species--I. siberica and I. orientalis, not called sanguinea--is essentially correct. The dates given for I. siberica (Linnaeus)--1753 and I. orientalis (Thunberg)--1794 were the ones in which these two botanists first reported them. It is not known who first discovered them in the wild, but it's quite probable that these species existed for some time prior to the dates in which they were reported.

For the other eight -40 chromosome species, much of what I reported last time is incorrect and I will now supply the correct information based on what these two authorities have given me:

I. clarkei Baker was first described in 1892 but it was sketched from a plant growing in the wild by the plant explorer J. D. Hooker in 1848, and collected by J. D. Clarke in 1875. The plants are found in Eastern Nepal, Sikkim in northeast India, Bhutan, southern Tibet, and upper Burma.

I. delavayi was first described in 1895 by the

botanist Marc Micheli who named the species in honor of the Abbe Delavay who discovered it in Szechuan province in southwest China in 1889.

I. wilsonii was collected by E. H. Wilson in the W. Hupeh, and Shen-si provinces of southwest China in 1907. The species was named in Wilson's honor by C. H. Wright, a botanist at the Royal Botanical Garden in Kew, England in 1907.

I. chrysographes was also collected by E. H. Wilson a year later in 1908 in the Szechuan province of southwest China. It was also collected by Forrest and Henry over a wide range in west Yunnan, China, and upper Burma. It was first described by Dykes in 1911. This was the dark blue purple form. I. chrysographes (rubellum)--the dark red form--was first discovered by the plant explorer, F. Kingdon Ward, in western China in 1921.

I. forestii was first discovered by the plant explorer, George Forrest, in the high alpine pastures of west Yunnan province in China in 1908. It was first named by Dykes in honor of its discoverer in 1910.

I. bulleyana was first described by Dykes in 1910. The original plants were raised by A. K. Bulley and believed by Dykes to have come with the first batch of I. forrestii collected in 1908. Its status as a true species has since been questioned, but Chris Grey Wilson has concluded on the basis of further research that I. bulleyana is probably a species hybrid between I. forrestii and I. chrysographes.

I. dykesii was found in Dykes' garden after his death. The origin is unknown although Dykes' notes suggest that it may have originally come from China. It was named in Dykes' honor by Dr. Otto Stapf at the Royal Botanical Garden in Kew, England in 1933.

I. phragmitetorum was first described by the botanist Handel-Mazzetti in 1925. Chris Grey Wilson reports that as far as he can determine it has never been in cultivation in gardens and only collected once. The name is derived from the Phragmites swamp in which it was found growing. This is located in northwest Yunnan province in China.

More detailed descriptions of all these species will appear in Jim Foreman's Siberian Encyclopedia, which will be published next spring.

A Historical Siberian Hybridizer

AMOS PERRY, V.M.H., F.L.S., F.Z.S.

(Copy of obituary in BIS Year Book, 1953)

The following extracts from British Iris Publications were made by Jennifer Hewitt. . . .

Amos Perry died at his home at Kirby-le-Soken, Essex, on August 21, 1953. He was educated at the Tottenham Grammar School and served his apprenticeship with Thomas Ware of Tottenham, in whose Nursery his father was a partner. Wares had an extensive collection of Alpines, perennials and bulbous plants, and after a period Perry was given sole charge of the bulbs, which brought him into contact with the best known of the Dutch and English bulb-growers. In 1899 he started on his own at Winchmore Hill, where later he was joined by his father. As "Perry's Hardy Plant Farm" grew, a larger Nursery was necessary, and they moved to Enfield (Middlesex), where they still remain. (See note at end--JH)

Many appreciations of Amos Perry have appeared in the press, but it is questionable whether any of them could do adequate justice to the man as some of us have known him. No one could talk to him for five minutes on any subject connected with gardens and plants without being infected with his enthusiasm, as well as being impressed with his profound knowledge and experience in every branch of horticulture. A man of small stature, he had immense energy and unbounded enthusiasm for any plant which was new and good, whether of his or another's raising and discovery, not just because it was new or peculiar; like most giants in the gardening world, past and present, he had an eye to a good plant. Some of the giants have been forgotten or are remembered by a very few, but Amos Perry has claims to be remembered by many for his achievements.

In the latter days of the War he compiled a book entitled 'Amos Perry's Diary' which was printed for private circulation in 1946. He himself described it as "A record of plants raised and introduced by Amos Perry." Mr. Bowles (E. A. Bowles) wrote the foreword and stressed that the book provides valuable information about the origin, dates of introduction, awards and contemporary notices of an astounding number of

plants, and that the accurate history of many garden favourites has frequently been forgotten; Perry records these facts and history. The particular section which interests our members, of course, is that on irises, but the wide interests of the man can be realised when one lists the various other sections comprised in a volume of over 200 pages. They include Alpines and perennials, aquatics, asters, chrysanthemums, delphiniums, ferns, hemerocallis (George Yeld wrote the foreword to a manual issued on this subject by Perry), lilies, Papaver orientale, Rhodea japonica, and trillium. The copious illustrations add greatly to the value and interest of the record. Perry tells us that he visited botanical and private gardens and nurseries in most European countries, finding many a good plant tucked away in a most unlikely corner, and that he corresponded with hundreds of gardeners and collectors in every part of the world. One would like to know more of these journeyings and of the people with whom he had connections in his long business career. He was awarded the Victoria Medal of Honour in 1935 and the Veitch Memorial Medal in Gold in 1950.*

The iris section of Perry's 'Diary' covers 27 pages, and the perusal brings back many pleasant memories. How many iris-growers to-day will recognise even the names of the lovely irises praised in the twenties? Many of us grew these, and though, in the Bearded section, none would be selected for trial in these days, they were vast improvements on older varieties and, being very floriferous, had a high garden value. I still have clumps of ABENDA and MARY GIBSON. Here is a note on BLACK PRINCE, introduced in 1900, which received the RHS Award of Merit in the same year. The 'Horticultural Advertiser' says "One of the most handsome iris we have ever seen in this class, the falls being a rich purple, almost black, with light purple standards, a profuse bloomer." A quotation from the American "Quality Gardens Publication" brings one up with a jerk (the date is in the late twenties): "Amos Perry of England has been breeding for a great many years. Back in 1900 he introduced BLACK PRINCE, which many people believe to be one of the parents of DOMINION. Then for 20 years he produced nothing of distinction. About 1912 (1914 to be correct) he began breeding using as a parent an unnamed pallida, which he never sent out, which was about 5 feet tall, with enormous flowers of a very poor color, but the plant was as hardy as a weed. As a result of this, during the 5 years 1921/5 inclusive, he introduced 30 varieties covering every colour and shade, all first class, deserving a place in every garden."

*The V.M.H. and V.M.M. are RHS awards given to people, not plants.

Between 1900 and 1932 Perry received 19 RHS Awards of Merit for bearded irises raised by him, and in 1930 he was awarded the Dykes Medal for G. P. BAKER, a fine upstanding yellow, which received also the Silver Medal of the Iris Society. In 1912 nine irises, introduced by Perry, received the AM at RHS Trials at Wisley, and these include such well-known old favorites as CATERINA and RHEIN NIXE. Among the hybrids from species, Perry's introductions were even more remarkable. As early as 1909 a number of Sir Michael Foster's hybrids were introduced by Perry. Two of these, SIR DIGHTON PROBYN and SIR TREVOR LAWRENCE (iberica x pallida) received Awards of Merit, but I doubt whether any of these survive. I grew PARSAM (paradoxa x sambucina), a charming flower, for many years, but it died during the war. The California x Chinese sibirica hybrids were much more exciting. Every sort of cross was made between bulleyana, chrysographes, forrestii, tenax, douglasiana, hartwegii, bracteata, watsoniana, and others. Among these, CHRYSOWEGII received the Iris Society's Silver Medal, and WATBRACT an AM, but the outstanding success was MARGOT HOLMES (chrysographes x douglasiana) which received an AM and had the distinction of being the first winner of the Dykes Medal. I venture to predict that this iris, introduced in 1927, will live for many years, coupled with the name of its raiser. I should like to think that in the Sibirica section such plants as PERRY'S BLUE, A.M. 1917, NORA DISTIN, and THELMA PERRY would share in his immortality, but recent introductions have produced flowers of such wonderful form and colour, that older varieties are outmoded.

It will be obvious from the above that Amos Perry was a collector of iris species, for which his enthusiasm was unbounded. He was ready to seek them from everywhere and everyone, and would share his discoveries of the iris or his experience of its special culture with anyone who was interested. Whenever discussion took place on species at Joint Iris Committee meetings, the knowledge of Amos Perry made him a tower of strength. This was well expressed by the following words of Mr. Spender in the Iris Year Book of 1935, after Perry had been awarded the Foster Memorial Plaque: "Many a difficult problem of identification and many a budding dispute has been settled by his sure but kindly intervention...through his long range of successes, from the Dykes Memorial Medal downwards, Amos Perry has preserved the same modest philosophy towards awards and the searching eye for a thing of beauty. For him, one feels that is the only goal--that which is beautiful and that which is true."

C.W. Christie-Miller

(continued on page 27)

BRITISH IRIS SOCIETY AWARDS

(AN EXPLANATION)

by Jennifer Hewitt

A Certificate of Seedling Commendation (SC) may be awarded by a panel of at least three Awards Judges (who are senior to Show Judges) to an iris seedling at a BIS Show, Regional Group Show or in any garden (not necessarily the hybridiser's). An iris must gain an SC to qualify for entry to the BIS Trials but entry may also be gained through Selection for Trial (ST) at Wisley by the Joint Iris Committee of the RHS/BIS, or by a breeder nominating ONE iris only of his/her raising in any one year for entry (BN). Following the award of SC, ST or BN, the iris must be distributed to at least three approved BIS Test Gardens within four years (the distribution being made in a single year) where it will be judged in the 2nd and 3rd flowering seasons for Award of Garden Commendation (A.G.C.). Irises awarded AGC then qualify to enter competitive trials for higher awards; they must be distributed to at least five approved gardens in the year of the AGC award and will be judged in the 2nd, 3rd and 4th flowering seasons, firstly for the Dykes Medal and then for three other trophies, two of which are for bearded irises and the Hugh Miller Trophy (Miller) which is awarded annually to the most deserving cultivar of a non-bearded iris. An iris which wins the Miller cannot win it again but remains eligible for the Dykes Medal (unless it has already won it; I did hear that only winners of the Miller and the other two trophies were to be eligible for D.M. but the Rules as printed in the 1984 Year Book do not seem to confirm this).

Presented in 1961 by H.F.R. Miller, the Trophy has been won by these Siberians:

1961 Bluecape (Kitton) (year of first award)
1964 Nottingham Lace (Hutchison)
1966 Violet Mere (Hutchison)
1967 Cambridge (Mrs. M. Brummitt)
1968 Dreaming Spires (Mrs. M. Brummitt)
1969 Sea Shadows (Mrs. M. Brummitt)
1974 Limeheart (Mrs. M. Brummitt)
1977 Anniversary (Mrs. M. Brummitt)

Editor's Postscript: Cambridge and Anniversary went on to win the British Dykes Medal in 1971 and 1979 respectively.

SSI DISTINGUISHED SERVICE AWARD
TO D. STEVE VARNER

Steve served as President of the Society for Siberian Iris and RVP for AIS Region 9 and as Regional Judges Training Chairman for more than 20 years. A native of Monticello, Illinois, he started growing iris in 1946 and began hybridizing them in 1950. He has introduced more than 30 siberians to date with "King of Kings" and "Dance Ballerina Dance" being his favorites. He won the Morgan Award for his Siberians "Tealwood" and "Ann Dasch" in 1964 and 1983, respectively.

Over the years Steve has contributed several articles on iris to various publications. He has also served as a speaker on the subject of iris and other flowers.

Steve and his wife Avis have raised four sons. The Varners have a large garden of seedlings and are the proprietors of the Illini Iris Gardens in Monticello, Illinois.

GET SET FOR A BEARDLESS IRIS AUCTION

Dear RVP & Interested Beardless Irisarians. . .

THE AIS CONVENTION IN INDIANAPOLIS treated visitors to a wealth of beardless irises for viewing. Many of us who attended would love to have the opportunity to buy some of the treasures we saw. The BEARDLESS IRIS AUCTION is an ideal way to fulfill the wishes of this writer and many of those attending. The BEARDLESS IRIS AUCTION serves a twofold purpose. It gives interested AIS members the opportunity to buy beardless irises that are not readily available in their Region; and, it provides an avenue through which the sections can earn monies on a regional level. Besides, it's a lot of fun!!

THE UPPER MIDWEST AND THE EAST have had annual BEARDLESS IRIS AUCTIONS for several years and they have been very successful. The monies that are generated through the BEARDLESS IRIS AUCTION are sent to their respective sections. For example, the monies received for species iris go to SIGNA, for Japanese iris to SJI, for Spurias to SIS, for the Louisianas to LISA, and for Siberians to SSI.

THE MECHANICS FOR CONDUCTING a BEARDLESS IRIS AUCTION are very simple. Appoint a person to represent each beardless section and he/she will do the contacting of those people growing the iris. They need not contact only hybridizers, but those within the region who grow the iris. The names of donated plants are given to the BEARDLESS IRIS AUCTION chairperson who compiles a bid list. A copy of the bid list is sent to all AIS people you think will be interested as well as to the local membership. The donor can send the plant to the chairperson, or send a card with the name of the beardless iris with the understanding they will send the plant direct to the successful bidder at the appropriate time.

TABLE SALES are a delight to those attending the auction. They also draw the general public who are curious about planting beardless iris, but feel insecure about spending large sums of money on only one plant. Occasionally, there are little "treasures" for table sales that are a fun departure from all the green iris plants. The goal is to help the beardless sections in any way you can.

Helpful hints follow this letter. In the Summer 1980 issue of the AIS Bulletin, an article titled

"Upper Midwest Beardless Iris Auction Set to Bloom" may be of help. It gives a history of the genesis of the BEARDLESS IRIS AUCTION and other helpful information.

We hope you will actively participate in a BEARDLESS IRIS AUCTION in your Region. If you have any questions, please write or call.

Iri-sincerely,

Ainie Busse
Auction Chairperson
Society for Siberian Irises
635 East 7th Street
R 2, Box 13
Cokato, Minnesota 55321

BEARDLESS IRIS AUCTION HELPFUL HINTS

SUGGESTED PROCEDURE OUTLINE:

1. CONTACTS--Each person representing a beardless iris section should make a list of people to contact by phone or letter.

2. PUBLICITY--Use your regional newsletter, the local chapter newsletter if you have one, fliers, word-of-mouth, area garden club newsletters, local newspapers and radio, local arboretum bulletins and/or boards, nursery associations, area college and university extension newsletters, state horticultural societies, etc.

3. AUCTIONEERS--Ask about 4 people to help sell. Usually these are local AIS members who are already known for their auctioneering skills.

4. CASHIER(s) and CARD-KEEPERS: Ask two people to help. "Runners" are a help in getting the card back to the cashier from the bidder.

5. CARDS: for each item to be auctioned. The cultivar or species name and the auction number is on the card. It is helpful to have some description of the plant, the hybridizer's name (if a cultivar), and the name of the donor on the card.

6. AUCTION OR BID LIST: See sample enclosed.

7. CULTURE LISTS--This is helpful to the newcomers who will be planting some of the beardless items for the first time. They need not be sophisticated. We keep a master and photocopy as needed.

8. EQUIPMENT: Tables, chairs for cashier and card-keeper, extra chairs, paper bags (to put the purchases into), beverage (hot and/or cold), styrofoam cups and napkins, cookies (optional), pencils and/or ball point pens, plain paper, extra labels for plant without tags, small plastic bags, rubber bands and/or stapler.

9. PLANT PAL LIST: Should be people who are fairly knowledgeable about the plants being auctioned. Also, it is helpful if the "Pal" knows the absent bidder personally.

10. LOCATION OF AUCTION: This is of the utmost importance! The U. of M. Landscape Arboretum in Minnesota is by far our best location since it draws such a large number of the visiting public. You have a similar location, I'm sure. A home of a member is suitable if it can accommodate a crowd and if it is located within a metropolitan area. Our experience of having the auction 60 miles from the Twin Cities on two consecutive years was not profitable.

11. ACKNOWLEDGMENTS: A letter of thank you to the donors is a must! Also, the chairperson should inform the local people of the final results of the auction via newsletter or the like. Further, the national chairperson of each beardless iris section is always interested in knowing if there have been monies made for their section.

12. ATTITUDE: A sense of humor, adventure, anticipation and cooperation.

Siberian Robin Notes . . .

Notes taken from Siberian Iris Robins
by Anna Mae Miller, Director

There is not too much Siberian Robin news. The Hybridizers' robin has not made a round since convention. G2 has, and here are a few interesting comments: Joan Dillard, Harvard, MA, places a brick on the fall planted rhizomes to prevent heaving. Marian Schmul, Bedford, MA, thinks, "Why not a Siberian Symposium?" tallied on a regional basis published in the Regional Newsletters as a form of PR for the Siberian Society?" John Coble says HUBBARD (McEwen 82) was the talk of their garden and says that "at Bob Hollingworth's his latest introductions were ignored at the sight of his 'JEWELLED CROWN' '86 (Sdlg. 82J2B10). The creamy white seedling was difficult to get close enough to to photograph, because of the admirers."

The new robin begun after the Convention has just completed a round with nine members, including sending the letters to Dr. Fred Schlegel of Valdivia, Chile, SA, with good feelings among all the members.

Dave Silverberg, NJ, is blooming some selfed I. siberica Nana alba and finding different sized plants and blooms not similar. He wonders if it is a true species or ?? Anyone had any experience with this? Virginia Heller, MI, comments, "The geography of the robin members is varied from urban sites to large acreages, streams, and mountains; shale soil to rocky "dirt," clay, and foreign shores: an interesting mix." And also, "The siberians fascinate me; they aren't common. They seem to have elegant, non-flamboyant, enduring charm: more substance, more dignity. They are punctuation marks with carrying power. I like their greater size and width of the modern cultivars and I especially cherish their greater durability and their health."

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San Jose, California
April 26-30

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PERRY'S HARDY PLANT FARM

by Jennifer Hewitt

About three or four years ago (after 1979, but I have no opportunity to find out the exact date at present) the business at Enfield which had continued trading under this name (but whether or not in the ownership of the Perry family I don't know) was sold and the name ceased to exist. I have been told that all the stocks of irises were sold to Stapeley Water Gardens of Nantwich, Cheshire. Certainly they listed and had available when I visited in 1984 the following sibiricas: Marcus Perry, Mrs. Rowe, Mrs. Saunders, Perry's Favourite, Perry's Pygmy (or Pigmy), Roger Perry. Perry's Blue is also still listed by other nurseries, including Michael Wickenden of Well Meadow, Crawley Down, Sussex who also lists (1985) Margot Holmes. Perry's White was listed by Southdown Nurseries, Redruth, Cornwall, in 1978/9 but I have no later information.

MELROSE CUP

Won by a siberian seedling of Prof. Bob Hollingworth at Region 14 Pre-Convention Tour, Spring 1985.

Dues

Dues are: Single Annual, $2.50; Family Annual, $3.00; Single Triennial, $6.50; Family Triennial, $7.50. Write the Treasurer about Life Membership. Membership is open to all AIS members in Canada and the United States, and to all iris fanciers elsewhere.

From the Archives

A THEORY WHICH SEEKS TO EXPLAIN THE LARGE IMPROVEMENT IN THE QUALITY OF SIBERIAN IRISES

William G. McGarvey

(Reprinted from AIS Bulletin Number 202, July 1971, Courtesy of the American Iris Society.)

Let's begin by recounting a few facts. Previous to 1950 there had been no significant improvement in the quality of Siberian irises for a period of thirty years. From 1950 to 1963 only four significantly improved forms were introduced. But since 1958 I have had hundreds of seedling Siberians, the majority of them much better in many ways than all but a few of those still in commerce today. More recently other hybridizers are reporting similar successes.

From my good seedlings I selected and registered fourteen between 1963 and 1970. That these are good irises is obviously a matter of my own judgment, but their virtue is also attested by what has happened to them since introduction. All of those in commerce for two years or more have been receiving high praise and awards as well as distribution around the world. None of these irises were introduced before 1966, which means that more improved forms of Siberian irises were introduced by one hybridizer in three years than were introduced in the previous forty years. That this could happen is worthy of an examination and, if possible, an explanation.

One reason for the lack of good new forms is obvious. For that whole long period of time, no one, with three exceptions, had been getting any improved seedlings worthy of introduction. Previous to 1950 and even until 1963, most of the introduced Siberians were only different from those in commerce in minor and insignificant ways.

A fact about the exceptions can aid in our attempt to explain both the rush of improved forms since 1963 and the lack before that time. The four exceptions were accidents and not the result of purposeful hybridizing. This statement should not be regarded as an attempt to belittle those who introduced them, for the ability to recognize and save a good seedling may be just as important as the ability to plan to get one. But the fact still remains that not one of the four exceptions selected by three different persons is from known parentage. They came

from "bee pods." WHITE SWIRL, for example, was by far the most significant improved form to appear during 1950-63 and it came from seedlings that Fred Cassebeer grew from planting a whole bushel of Siberian seed.

Why, from the thousands of seedlings that Fred grew at that time, did he only get one that was worthy of introduction? Why would so much Siberian seed, even though it was from uncontrolled pollinations, produce only one seedling that escaped the taint of aesthetic mediocrity?

The answer to these questions seems logically obvious to me now, though it certainly escaped me for a long time. I am convinced that Siberian irises are self-pollinated to a larger degree than all other iris species with the possible exceptions of I. setosa and I. versicolor. Beyond this, the five or six Siberians that Cassebeer grew at the time were all representatives of what I am now convinced are self-fertile inbred lines which shall be discussed later, but about which it will suffice to say now that they produce progeny closely similar to themselves.

That Siberian plants tend to self pollinate may not be widely known, but that they tend to have many seed pods will not surprise any one who grows them. In fact, this tendency to pod became incorporated in Siberian lore as the often repeated "fact"--"It is not worthwhile to make Siberian crosses because you can't control them."

As I have reported elsewhere one of my first experiments involving Siberians was an attempt to check on this you can-t--control-crosses belief. This attempt resulted in complete success since I prevented the pollination of fifty Siberian blossoms and it gave me the knowledge that such crosses can be controlled.

These experimental results contrast with the evidence that most of the blossoms of Siberians in my garden to develop seed pods every year. These must be carefully harvested and destroyed to avoid growth of unwanted seedlings.

This saturated podding of Siberian plants contrasts with the lack of seed pods on my many bearded plants. Since I have thousands of plants I still get a lot of pods, but few flowers on the bearded plants develop pods. The only exception occurs among a number of Imbricata hybrids that pod almost as freely as my Siberians. As a generalization, bearded irises are certainly not subject to much wind or other types of self-pollination. Hundreds of my attempts to self bearded irises have failed for every success. (PLUIE D'OR and its seedlings are interesting exceptions.)

Why is it that the Siberians exhibit so much self pollination?

The first, and perhaps most important reason is that they lack the incompatibility factors possessed by many plants that cause them to refuse, or at least to resist, self-pollination. The only Siberians that I have not been able to self are the hybrids between the 28- and 40-chromosome species (I now have an exception in my seedling 'FORETELL) and those that produce no pollen.

A second factor is mechanical. The stigmas of Siberians have stiff projecting triangular tongues which do not fold up and out of the way as the bumblebee backs out from under them. Rather, they stick out and comb through the pollen-laden hairs of the body of the bee and hence collect pollen in a way that many species of iris do not. That the honeybee is just about as capable of pollinating a Siberian iris as is the bumblebee is in part determined by this same factor.

This same physical or mechanical factor operates in another way. The pollen of Siberians drops off the anthers when it is ripe as a result of the smallest disturbance or movement of the flowers. Much of this pollen drops onto the falls. Further motion of the flower brings the stiff downward pointing triangular tongue of the stigma into contact with the surface of the fall and self-pollination takes place.

Inbreeding, made more than usually possible by the absence of incompatibility factors, has, in a hen-egg kind of relationship, continued this process and has perhaps enhanced it. I have successfully selfed all of the Siberians I have used in my experiments except WHITE SWIRL. This plant, when located a sufficient distance from all other Siberians (150 yards in my garden), tends not to develop seed pods at all. Since bees and other insects still visit this plant in its isolated situation, the absence of pollinations still argues for self-pollination as the rule for Siberians since WHITE SWIRL seems not to discharge any pollen during such visits and hence it misses pollination--self, or otherwise.

Other factors which support the argument for maximum selfing and inbreeding are the lightness of Siberian pollen as compared with that of many other irises. This increases the chances for airborne pollination. Beyond this, Siberian pollen remains viable when placed on the stigmatic surface before that surface is ready to accept pollination. Such pollen begins growth only after the stigma becomes receptive.

In my garden the visiting pattern of bees is still another influence for the selfing of Siberians. If the clump in full bloom is located even a small distance away from another, a bee will tend to visit the flowers of that clump before moving on to another.

That hummingbirds and hummingbird moths can make significant contributions to the self-pollination of Siberians is an observation that I am convinced is correct but rather difficult to check experimentally. Since the process would have to take place when the pollen is free to be blown about by the fanning of wings, a number of other causes of pollination that could occur at the same time would have to be controlled before bird or moth influence could be measured.

That flies and other insects can cause the self-pollination of Siberians is a fact that can be partly explained by the influences already mentioned. These complete the major influences for self-pollination in the Siberian species.

Any attempt to explain the sudden appearance of changed (improved in this case) forms of species should also offer some explanation for the continuation of older (conventional) forms. The most important influence for both recent change and forty years of lack of change in the appearance of Siberians, as I have come to understand what happened, is INBREEDING. The importance of the tendency for Siberians to self-pollinate really grows from its influence on the process of inbreeding. Inbreeding is the process of mating closely relating individuals and the extreme form of this process if SELFING.

Selfing, more than any other form of breeding, tends to make a population homozygous with respect to its genes. It tends to bring together in the same individual the recessive mutations that are destructive and as a result to destroy the individuals that carry them in the combined or homozygous condition. But the genes for good as well as for poor characteristics are also brought together by inbreeding and when this occurs in nature, vigorous though closely inbred lines may develop as is clearly true for such plants as wheat and oats.

Though selfing has an overriding importance as an influence on the characteristics of Siberian irises, cross pollination can and does take place. In either case the influence of the entire available pool of genes within the Series Sibiricae is significant to any understanding of the species of the Series. But of more immediate importance to those who are interested in the various species as garden plants, is the pool of genes available to the hybridizer since this latter complement of genes is most certainly quite small as compared with what may exist in nature. The number of individual clones or seeds of Siberians that were brought to America were few in number and new imports from the original locations or from any place have never been many. Though such limitations on the size of the pool of genes is also true for species other than Siberian, other species have not been so

influenced by selfing and hence inbreeding.

Beyond being influenced by the limitations of the pool of genes that was imported, Siberian irises have not been subject to the same kinds of inter-specific crossing that has resulted in the movement of bearded garden irises away from diploidy (having two sets of chromosomes, even as you and I) and toward tetraploidy (having four sets of chromosomes). Only two species of Siberians, I. sibirica and I. sanguinea, have been interbred to produce almost all of the hybrid garden varieties. These are the two 28-chromosome species of the series. Not being subject to the diploid-tetraploid trend of the bearded irises, the sibirica-sanguinea complex has also missed the effects of having the genes from dozens of quite dissimilar species added to its genetic pool.

So we have the combination of a limited pool of genes and the second factor of consistent inbreeding which together create the very conditions necessary for the natural development of pure lines of 28-chromosome Siberians. It is my considered opinion that this is what has happened.

Difficult to understand and to an amazing degree, the 40-chromosome Siberians have been ignored as garden plants in America. Two of the fourteen Siberians that I have registered and that were introduced are plants from pure 40-chromosome breeding (ID from I. chrysographes and KING'S FORREST from I. forrestii). Another I. forrestii plant was introduced in 1970. Few gardeners grow or even know about the 40-chromosome species of Siberians. But even when they are grown together with the 28-chromosome plants, and in spite of the fact that the 28- and 40-chromosome plants cross quite freely, their progeny are almost always infertile. (As previously mentioned, I do have one exception.) As a result there has been almost no interference in the process of inbreeding within the 28-chromosome complex.

The 40-chromosome species of Siberians would be subject to some of the same influences as those described for the 28-chromosome group. But the fact that there are eight of the former as compared with only two of the latter and that the plants of the eight species interbreed freely to produce fertile hybrids means that the genetic pool for the 40-chromosome group is potentially vast as compared with the sibirica-sanguinea pool. But the plants of the 40-chromosome species self inbreed as freely as do the 28-chromosome varieties. This certainly means that a tendency toward the development of inbred 40-chromosome lines could have occurred when the plants were growing in their native locations. It seems logical to conclude, therefore, that although the generalizations being developed here are primarily

directed toward explanation of the progress of 28-chromosome Siberians, they should also help to explain the 40-chromosome groups as well.

The results of experimental selfings have been extremely interesting and quite consistent with the positions being taken here. It must be emphasized that what I am discussing here is the selfing of parental stock or the further selfing of the progeny from such inbreeding and not the selfing of the hybrids from the crosses between the parental plants. The latter type of selfing shall be discussed later.

Selfing such plants as GATINEAU gave me many plants that were amazingly like their parent in height, form, growth habits and color. In quite a few cases selfing of this type gave me many plants that were so similar to the parents that detailed comparison revealed so few differences that only careful tagging and mapping in the garden could insure against confusing parents and progeny. That some of these selfings produced useful color differences from their parent as manifestations of recessive genes does not alter in any significant way my conclusions that selfing certain Siberians tends to produce plants much more like their parents than different from them. Though the presence of recessive genes that are essentially neutral in their influence (neither advantageous nor disadvantageous) is not as likely to be continued as the presence of genes that produce a positive advantage for a species, such presence is not surprising.

Selfing of the type under consideration resulted in plants so much like the parent plants that confusion between parent and progeny was bound to occur and result in the sale of look-alike plants being sold as representative of a single clone. I am satisfied, for example, that ROYAL ENSIGN is represented in commerce by more than one clone as was demonstrated by the results of my own experimental breeding program.

Siberian irises seem to provide us with an interesting example of a case that falls some place between such consistently self-pollinating plants as wheat and oats, which in nature have produced many vigorous lines despite inbreeding, and the pure inbred lines of corn that have been developed by modern plant breeders. I place the Siberians in between because they are not so strictly limited to self-pollination as is true for wheat and oats, but they have still developed into vigorous inbred lines from which recessive harmful genes have been removed. But in this way they are also different from the man-made pure lines of inbred corn, which though also free of all recessive harmful genes and despite very careful selection, are still lacking the vigor that the Siberians have.

Although Siberian blossoms tend to be self-

pollinated, they offer no special resistance to being cross-pollinated. Hence some heterozygosity is maintained within the many inbred lines despite their drift toward homozygosity. One evidence for such continuing variability is found in the very same plants that provide the evidence in support of the claim that Siberians drift toward homozygosity as a result of inbreeding. Those plants in commerce that came from unknown parents are particularly interesting with respect to this point. I have selfed a number of such plants and have had consistent results from all of these experiments. In every case the progeny was significantly more like its parent than different from it. This result supports the claim that Siberians tend to move toward homozygosity. But infrequently, one or two seedlings from a large progeny would be different from its siblings and also from its parent in some noticeable ways, and this provides evidence of continuing variability. One of my reasons for selecting CAEZAR'S BROTHER and GATINEAU for further serious study was that when I selfed them they both gave me a couple of plants that were different from themselves and from their other seedlings.

With regard to this discussion of the importance of and evidence for inbreeding within the Siberian species, it must be noted again that the seedlings that I judged to be different were actually and only different in attractiveness from my own point of view and not in ways that would have contributed to the survival of the species. In nature there is no genetic pressure toward the development of irises that win AIS awards. Planting the seed from "bee" or "wind" pods may result in a winner once in ten thousand times, but not much more frequently. It takes the interfering eye and hand of the hybridizer or student to increase the chances for the buildup of characteristics that have no natural survival value.

That inbreeding resulted in vigor rather than a weakening of Siberian species can be explained and should not be too surprising, considering where and how fortuitous seedlings must grow. Siberian seed falls close to the parent plant. A given seedling would have to compete with its vigorous perennial parent as well as with its siblings in order to reach maturity. My examination of the seedling plants growing up around isolated and overgrown Siberian clumps revealed vigor rather than its absence. It will be said, of course, that seed is distributed in the same way for a majority of iris species. But few other species have command of their growth sites in the way that is true for Siberians. In root growth, only I. ensata occupies its territory as completely as does a Siberian plant. By fortunate circumstances, survival of the fittest does seem to describe what has happened to Siberians.

When man intervened to move Siberian clones from their natural habitat he had vigorous inbred lines to select from. But only a very small number of the available clones were brought to Europe--chiefly England--and to America. Those brought into cultivation were frequently planted together and some few purposeful crosses were made between them in the years between 1900 to 1930. During this time time and on until 1960 a majority of the Siberians that were named and introduced were from chance pods. Mrs. Francis Cleveland, who introduced more named Siberian irises than anyone else, for example, made most of her introductions between 1913 and 1939, almost all without pedigrees. In light of the tendency of Siberians to self-pollinate, the practice of planting the seed from chance pods was a return to nature's inclination toward the inbreeding of Siberians. Maintenance of the genes for vigor in the inbred lines was as well insured by this haphazard breeding technique as they would be by purposeful selfing.

In passing, and in consideration of the difficulty encountered in selfing tall bearded irises as well as the poor quality of the progeny resulting from the process, selfing is in general poor repute with hybridizers. It is doubtful that much purposeful selfing was done with Siberians or with any iris species.

It is impossible to know with any certainty which of the two Siberian species that were combined to give us a majority of our garden Siberians was genetically the more influential. But certain known influences may be considered and at least a logical position determined.

The influence of I. sanguinea (formerly and frequently called I. orientalis) was large. Although the flowers of the plants of this species were carried too low in the foliage, they were much larger and brighter than those of I. sibirica. The latter carried its flowers high above the foliate. Hybrids between the two produced much improved garden plants. It is obvious that sanguinea has a larger influence in terms of its use in purposeful hybridizing, to the degree that this was done, than did sibirica between the years 1900 and 1930. Such importers as the Barrs brought clones of the species from Japan. These were immediately introduced to commerce and had wide distribution in Great Britain and the United States. The very fact that these plants were imported from Japan made them exotic and desirable. The nursery catalogs published between 1900 and 1930 placed special emphasis on JAPANESE IRISES if they were fortunate enough to have them for sale. The plants referred to were orientalis (sanguinea) and not just kaempferi hybrids or Japanese irises as we call them today. The evidence for the presence of both sanguinea and sibirica is obvious in various charac-

teristics of the garden hybrids but for America and England the available records show more evidence of the use of sanguinea. Beyond this, it seems psychologically more likely that the common central European sibirica was less likely to be favored for use in gardens than the more showy and romantic orientalis.

In any case the relatively few clones that were brought into cultivation were planted together in many gardens. Some few purposeful crosses were made between them and then the Siberians were turned back to their own devices for a period of about forty years. Within this period some few were introduced to commerce, usually the results of chance pollinations and, as I have become convinced, the result most frequently of self-pollination.

It was about 1951 that an increased interest in experimentation with diploid irises caused me to begin to use the Siberian hybrids then growing in my garden. As mentioned earlier, I first determined that I could control such crosses and I then went on to self and to cross a number of these plants. Among the crosses made was one in which i combined GATINEAU X CAEZAR'S BROTHER. That is to say, I used plants that were purchased under those labels. This comment is necessary because I have become convinced that there are more clones than one of each of these plants (note the earlier comment on ROYAL ENSIGN). But this cross brought surprise. Instead of intermediate things that looked much like their parents, I got big, strong, handsome plants with big beautiful flowers. They appeared not in one or two exceptions, but in whole lines of them. I still grow those that I selected for further study and they are still more handsome than a majority of the Siberians in commerce or that I see growing in mixed borders of flowers. Crosses between these plants and between some few others have given me hundreds of improved Siberians.

The explanation for these results should be fairly evident by now. Strong inbred lines were waiting there to be combined. Combined, they gave their progeny the vigor of heterosis as well as that of heterozygosis.

The same conditions that tend toward the production of strong inbred lines also offer us an explanation for the absence of improved forms of Siberians, except in very small numbers, for a period of forty years. The strong inclination for self-pollination and the fact that the resulting seeds were planted either by accident or on purpose, guaranteed the growth of a mass of seedlings very similar to their parents.

That changes in the breeding processes as a result of the interference of either the scientific

investigator or of social practices can bring disadvantage as well as advantage to a species is an accepted fact. Applied to the Siberian irises, the development of many new and improved forms is not the whole story. As I have combined some of the handsome new things I now have in my garden the resulting progenies have shown wide variability. Along with still other improved forms, I have obtained some very bad forms. One of these is exhibited by the plants that carry what I have called flowers with spatulate falls.

The appearance of variability under the conditions just described supplies a convenient further link in the logic for the theory that I am advancing here--the theory that as a result of a strong tendency to self-pollinate, Siberian irises have inbred to produce many vigorous lines quite similar in appearance to each other. Many of these lines will also be genetically like each other. So long as selfing is the chief process of pollination within the inbred lines and even when cross-pollination occurs between genetically similar inbred lines, one may expect progeny that show strong resemblance to their parents.

But when two inbred, but not closely related, lines are crossed the result may be--as it was in my GATINEAU X CAEZAR'S BROTHER cross--large vigorous progeny that are quite similar to each other in appearance but quite different from their parents. It is when crosses are made between these plants that wide-ranging variability appears, including some forms that are highly undesirable. These results are like those obtained when the seed on the big uniform ears of hybrid corn is planted. Variability and the loss of hybrid vigor is an immediate result. To have the advantages of hybrid corn, the inbred lines must be continued so that they may be crossed to obtain hybrid vigor.

For the further and continuing improvement of garden Siberians in line with the theory being advanced here, the program is relatively simple to state, though not necessarily easy to accomplish. One step is to search out, by making controlled crosses, the inbred combinations that nick (i.e., that produce progeny with obvious hybrid vigor). Once such cones are located they should be preserved with care since, as has been suggested, all Siberians under a given name are not necessarily the same plant. A second technique involves selfing the plants that are located by the process just described. This can bring two advantages. It can further the development of vigorous inbred lines and it can help us to locate the hidden aesthetic characteristics that, though neutral in survival value, may be important to the improvement in the appearance of garden plants. Having small or no survival value, the color or shape of an iris

flower can be significant for garden beauty.

In summary, the theory advanced in explanations of the appearance in the last few years of many new and improved Siberians, is that nature has been in the game of producing vigorous inbred lines of at least one series of irises, Series Sibirica, by means of the process of selfing. The genetic results of this process has resulted in the development of many new and improved forms of garden Siberians when the inbred lines were crossed. With some care to preserve these inbred lines, iris hybridizers should be able to maintain the stock that has the potentiality for the further production of many handsome new Siberians for the pleasure of those gardeners who particularly enjoy them.

The date on the right of your address label is the expiration date of your membership. If you have recently paid your dues, ignore it. There is inevitably a gap in the passing along of this information.

1984

REGISTRATION & INTRODUCTION REPORT

Submitted by Agnes Waite

Siberian irises registered for 1984	40 varieties
Siberian irises introduced for 1984	40 varieties
Number of hybridizers involved	14

(Two of the hybridizers are from overseas)

1983-1984 Registrations & Introductions

We are grateful for the following data which was searched, compiled and typed by Nancy Boone of Milwaukee, Wisconsin.

- A -

ADJ (C. McEwen, R. 1983). Sdlg. $T_1$72/109(2). SIB (tetraploid), 30" (76 cm), LM-L. S. dark violet-blue (RHS 89A); F. same with a narrow edging of yellow (9C) fading to silver by 2nd to 3rd day; yellow (9C) signal with white tip. Sally Kerlin X Cambridge. Seaways Gardens 1983.

AGAIN (C. McEwen, R. 1984). Sdlg. $T_1$79/30. SIB (56 chrom. tetraploid), 19" (48 cm), EE-VL & RE. S. light violet-blue (RHS 94D); F. same with wide veins of darker violet-blue (94B), giving overall effect of 94C, only white edge of signal is visible. $T_2$75/119E: (Welcome Return x self) X $T_2$75/4B: (Welcome Return x $T_1$72/139(1): (68/78RK(5) x My Love)). Seaways Gardens 1984.

ALICE MAE COX (H. Briscoe, R. 1984). Sdlg. 776A. SIB, 30" (76 cm), LM. True blue (RHS 94A) self. Polly Dodge X 71-4: (Sparkling Rose x P. Hutchinson 6779).

ALL IN STIPPLE (B. Warburton, R. 1983). Sdlg. ARV-80-12. SIB, 38" (97 cm), M-L. S. marked violet-blue (RHS 93B) on lighter (93C/D) ground in tweedlike fashion, rimmed dark violet-blue (93A/B); F.same, tweedlike rim circling white sunburst signal that is mostly concealed by pearly floret type styles. Atoll X Ruffled Velvet. Warburton 1984.

ANNIVERSARY (M. Brummitt, SIB, R. 1965). Orpington Nurseries 1969.

APPALOOSA BLUE (L. Bellagamba, R. 1983). Sdlg. S-179. SIB (diploid), 33" (84 cm), M. S. medium blue,dappled white on center edge; F. medium blue, dappled white on center edge. Unknown parentage. Borbelata 1984.

- B -

BELLISSIMA (B. Warburton, R. 1983) Sdlg. ARV-82-24. SIB, 30" (76 cm), M-L. S. white, greenish off-white tinge when fresh; F. same with fine lines of dark green raying out, ruffled; styles fringed at midrib with floret crests. ARV-80: (Atoll x Ruffled Velvet) X Ruffled Velvet.

BERLIN DELFT (T. Tamberg, R. 1984). Sdlg. SSTT 135. SIB, 31 1/2" (80 cm), E-M. Light blue self. SSTT 50: (Blue Brilliant x White Swirl) X Wide White.

BOUNTIFUL VIOLET (B. Warburton, R. 1983) Sdlg. WW/72-7D-3. SIB, 35" (89 cm), M-L. S. Violet-blue (RHS 92B); F. darker (92A) with green hafts barely concealed by lighter violet-blue styles with blue midrib, inconspicuous signal nearly covered by styles. Wing on Wing X 72-7D-3: Rosace sib. Warburton 1984.

- C -

CAMBRIDGE (M. Brummitt, SIB, R. 1964). Orpington Nurseries 1967.

CHARMING DARLENE (A. Miller, R. 1984). Sdlg. 79.12.4. SIB, 38" (97 cm), M-L & RE. S. mid-violet (RHS 84B); F. ruffled light blue, white signal. Wing on Wing X unknown.

CHARTREUSE BOUNTY (C. McEwen, R. 1983). Sdlg. 78/175(4). SIB (diploid), 38" (97 cm), M-L & RE. S. white with pale veins of green (RHS 154C); F. greenish yellow (2C), changing to pale yellow-green (154D) by third day, bright yellow-green (154A) haft area. 75/110(1): (Limeheart x Wing on Wing) X Butter and Sugar. Seaways Gardens 1983.

CIRCLE ROUND (C. McEwen, R. 1984). Sdlg. $T_5$78/103(1). SIB (56 chrom. tetraploid), 27" (67.5 cm), EM-LM. Medium violet-blue (RHS 94C), only white edge of signal visible; lighter violet-blue (94D) styles. Lady of Quality X $T_1$74/21(1): (Dear Delight x 70/98Y: ((Cambridge x unknown) x (White Swirl x Pirouette))).

CITY OF YORK (G. Bush, R. 1983). Sdlg. 82-1035. SIB, 36" (91 cm), M. S. rose-orchid; F. rose-violet, dusted gold, small white signal veined violet. Sparkling Rose X 80-275: unknown parentage.

CLEE HILLS (J. Hewitt, SIB, R. 1979). British Iris Society 1983.

CLEETON BUFF (J. Hewitt, R. 1983). Sdlg. CHR/3. SIB (40 chrom.), 24" (64 cm), M. S. pale yellow (RHS 160B) lightly flecked pale purple (87D); yellow (11A) styles brushed and flecked pale purple (87B); F. light yellow (8A) with deeper signal, all veined and spotted deep purple (79A) at center, pale purple (79D) at edge; very slight fragrance. Unknown parentage.

CLEETON CROSS (J. Hewitt, R. 1983). Sdlg. C/F/5. SIB (40 chrom.), 25" (64 cm), E-M. S. dark red-purple (RHS 79C), edged yellow; styles same; F. pale yellow, heavily veined dark red-purple (RHS 79C), bright yellow signal with light veining. I. chrysographes (dark) X I. forrestii.

CLEETON FANCY (J. Hewitt, R. 1983). Sdlg. CHR/1. SIB (40 chrom.), 24" (61 cm), M-L. S. pale violet (RHS 85) heavily overlaid reddish purple (87A); reddish purple (86A) styles; F. pale violet (85D) heavily veined purple-blue (89C), yellow signal veined dark purple-blue (89A). I. chrysographes X unknown.

CLEETON MIRAELLA (J. Hewitt, R. 1983). Sdlg. MC/1. SIB (40 chrom.), 30" (76 cm), M. S. pale cream (RHS 8D) marked light violet-blue

(91B); light violet-blue (93B) styles; F. pale cream (8D), marked violet-blue (91A), yellow signal veined dark violet-blue. BIS exchange sdlg. X unknown.

CLEETON MOON (J. Hewitt, R. 1983). Sdlg. W1L/1. SIB (40 chrom.), 32" (81 cm), L. S. very pale yellow (RHS 4D)speckled blue-violet (90A); pale yellow (10B) styles; F. pale yellow (10D) with deeper signal, all veined and speckled dark blue-violet (88A); faint fragrance. I. wilsonii X unknown.

CLEETON STARBURST (J. Hewitt, R. 1983). Sdlg. W1L/3. SIB (40 chrom.), 36" (91 cm), M-L. S. dark red-violet (RHS 86A); dark red-purple styles (79D) with yellowish midribs; F. dark rich red-violet (83B); brilliant yellow (9B) signal veined very dark purple (79A). I. wilsonii X unknown.

CLEETON TIGER (J. Hewitt, R. 1983). Sdlg. AN/1. SIB (40 chrom.), 23" (58 cm), E-M. S. pale yellow, heavily striped grey-purple; dark grey-purple styles with wide yellow edge; F. bright yellow with fine stripes of dark purple; slight fragrance. Unknown (possibly I. forrestii x unknown).

COLORADO COLONEL (S. Varner, R. 1984). Sdlg. V795. SIB, 32" (81 cm), ML-VL. Mid-blue with purple tint, lighter edges. V321: (Royal Herald x Tealwood) X 1103: (Little Tricolor x Tealwood).

- D -

DANCE BALLERINA DANCE (S. Varner, SIB, R. 1982). Illini Iris 1983.

DANCER'S FAN (B. Warburton, R. 1983). Sdlg. AWW-80-26. SIB, 40" (102 cm), M-L. S. deep violet-blue; F. lighter violet-blue (RHS 95B/D) with deeper fans at shoulders, green 'UU' at hafts surrounded by deeper wings, ruffled with dip at tip of F.; styles have aqua rib, violet edge, floret type crests. Atoll X Wing on Wing. Warburton 1984.

DANCING NANOU (A. Miller, R. 1983). Sdlg. 77.13.4. SIB, 33" (84 cm), ML & RE. S. violet-blue (RHS 89C), edged darker violet; stylearms violet-blue (89C) with turquoise rib; F. ruffled medium purple (93B) with navy lines, brown and green hafts with tiny white eye. 76.1, unknown parentage X Swank. Old Douglas Perennials 1983.

DEMURE ILLINI (S. Varner, R. 1984). Sdlg. V883. SIB, 36" (91 cm), EM-ML. Deep grape red, large white signal veined grape red. Showdown X self.

DIANA BLUE (S. Varner, SIB, R. 1982). Illini Iris 1983.

DIXON (S. Varner, R. 1984). Sdlg. V888. SIB, 32" (81 cm), M-L. S. medium deep blue with lighter blue edge; turquoise styles; F. medium deep blue with hint of dappling. Outer Loop X V637: (Dreaming Spires x unknown).

DREAMING SPIRES (M. Brunnitt, SIB, R. 1964). Orpington Nurseries 1969.

DUTCH (S. Varner, R. 1984). Sdlg. V8111. SIB, 28" (71 cm), EM. S. royal red plum; F. rich royal red plum, only little white veins in signal area. Maranatha X Wine Wings. HC 1984. Illini Iris 1984.

- F -

FAR VOYAGER (J. Witt, R. 1984). Sdlg. 82-03-02. CA-SIB, 28" (71 cm), L. Medium lavender-blue, white and yellow signal; purple stems. I. douglasiana X I. clarkei.

FATTANEH (A. Miller, R. 1983). Sdlg. 77.15.1 SIB, 33" (84 cm), E-M. violet (RHS 86D); violet (89D) stylearms; F. pinkish violet (86D), darker in center with violet (89A) eyelashes around green hafts. Swank X Roanoke's Choice. Old Douglas Perennials 1983.

FORREST MCCORD (R. Hollingworth, R. 1984). Sdlg. 77H2. SIB (28 chrom. diploid), 35" (89 cm), M-L. Medium dark blue violet, prominent blaze of gold and white, distinct white rim around F.; slightly lighter styles. Ausable River X unknown. Borbeleta Gardens 1983.

- G -

GEORGE HENRY (B. Warburton, SIB, R. 1982). Warburton 1983.

GLENDA NORRICK (H. Briscoe, R. 1983). Sdlg. 773R. SIB, 24" (61 cm), E. S. dark violet-blue (RHS 95A); F. dark violet (83A), dark yellow orange (22A) haft markings, ruffled; dark blue (100A) styles. Ruffled Velvet X 7051C: (Blue Brilliant x Cambridge). EC 1982. Borbeleta Gardens 1983.

GREEN PROMISE (C. McEwen, R. 1984). Sdlg. $T_6$78/99(1). SIB (56 chrom. tetraploid), 26" (65 cm), EM-LM. S. white with few veins of green (RHS144B); F. whiter than 145D with distinct green tint, deeper green at base and veining to tips and reverse, greenish yellow signal; white styles with green (145C) midrib. $T_4$76/25(5): ($T_1$65/71R2(1): (Pirouette x ?) x $T_3$70/89B: (Fourfold White sib x $T_1$65/71R2(1))) X $T_5$75/116(5): ($T_3$70/89B x $T_4$73/24(2)). Seaways Gardens 1984.

- H -

HALF MAGIC (P. Farmer, R. 1983). Sdlg. 77-A. CA-SIB, 25" (64 cm), M. Ruffled flesh pink, orange heart of F. heavily veined violet. AIS seed exchange. Ripple Rock X unknown.

HARBOR MIST (K. Waite, R. 1983). Sdlg. WS-72-1. SIB, 37" (94 cm), M & RE. Light violet-blue (RHS 97B/C) self, white signal; very light blue styles. Unknown parentage. Tow Path Lane Gardens 1983.

HARPSWELL HALLELUJAH (C. McEwen, R. 1983). Sdlg. $T_4$75/59Z. SIB (tetraploid), 32" (81 cm), M-L. S.violet-blue (RHS 88A), veined darker (89C), giving overall color effect of 89C; F. violet-blue (88A), veined darker (89A), giving overall color effect of 89C, slight edge of silver; styles 88A with darker (98A) midrib; only gold tip of signal is visible. Silver Edge X Adj. Seaways Gardens 1983.

HARPSWELL HAPPINESS (C. McEwen, R. 1983). Sdlg. $T_6$78/118A. SIB (tetraploid), 30" (76 cm), EM-LM. S. pale creamy white (RHS 155D), pale greenish yellow at base; F. pale creamy white, veined pale greenish yellow, yellow (2B) base area, yellow (2B) hafts and yellow-green (149B) veining; ruffled. $T_5$75/116Z: ($T_3$70/89B: (Fourfold White sib x $T_1$65/71: ((Pirouette x ?) x ?) x $T_4$73/24(2): ((((Snowy Egret x ?) x ?) x?) x (Fourfold White x $T_1$65/71))) X Dreaming Green. Seaways Gardens 1983.

HEATHER ANN (J. Ennenga, SIB, R. 1982). Ennenga's Iris 1983.

HELIOTROPE BOUQUET (R. Hollingworth, R. 1984). Sdlg. 80I3C10. SIB (28 chrom. diploid), 32" (81 cm), VE. S. light mauve, blue line up midrib; F. light mid-mauve, blue influence in center, inconspicuous blaze of white; broad, feathered stylearms with blue midrib on mauve ground. 7712: ((Dreaming Spires x Tealwood) x unknown) X 77L1: (Dreaming Spires x unknown).

- I -

ILLINI FLIRT (S. Varner, R. 1984). Sdlg. V9214. SIB (tetraploid), 30" (76 cm), M. S. White, tinted pale pink; styles white blend; F. violet-pink. Dance Ballerina Dance sib.

INDY (R. Hollingworth, R. 1984). Sdlg. 80I3C9. SIB (28 chrom. diploid), 32" (81 cm), VE. S. mid-deep red-violet with blue influence; F. mid-deep red-violet, blue lines radiating downward, blaxe almost absent; lighter stylearms with prominent light blue midrib. 77I2: (Varner O-62: (Dreaming Spires x Tealwood) x unknown) X 77L1: (Dreaming Spires x unknown).

- J -

JAMAICAN VELVET (W. McGarvey, R. 1983). Sdlg. 82-79-19. SIB, 30" (76 cm), M. Velvety deep red-violet self. 78-74-13 Red Pur-1 X 63-Roy Ens Color-1.

JANET K. MERRILL (H. Briscoe, R. 1984). Sdlg. 773B. SIB, 26" (66 cm), VL. S. bright purple (RHS 77A); styles lighter on edge, darker midrib; F. slightly darker than S., hafts veined white; ruffled; slight fragrance. Ruffled Velvet X 7051C: (Blue Brilliant x Cambridge).

- K -

KELAT SPIRES (G. Slade, R. 1984). Sdlg. 75-37-2. SIB, 35" (89 cm), M. Mid blue-violet (near RHS 94B), large yellow signal tipped white. Dark Desire X unknown.

KING OF KINGS (S. Varner, SIB, R. 1982). Illini Iris 1983.

- L -

LAUGHING BROOK (K. Waite, R. 1984). Sdlg. WS-73-7X. SIB, 36" (91 cm), M. Dark violet-purple (RHS 86A), white signal; light violet stylearms. Dewful X Tealwood. HC 1981, 1983. Tow Path Lane Gardens 1984.

LAURENBUHL (E. Berlin, SIB, R. 1979). British Iris Society 1982.

LIMEHEART (M. Brummitt, SIB, R. 1968). British Iris Society 1982.

LURID TALES (P. Farmer, R. 1983). Sdlg. 77-C. CA-SIB, 24" (61 cm), M. Violet with vivid orange lines on F. From AIS seed exchange. Ripple Rock X unknown.

- M -

MABEL CODAY (C. Helsley, R. 1984). Sdlg. 2-83. SIB, 30" (76 cm), EM. Ruffled medium blue (93A), white signal; styles tinted violet; slight sweet fragrance. White Swirl X Showdown.

MARLENE AHLBURG (J. Hewitt, R. 1983). Sdlg. MA2/1. SIB (28 chrom. diploid), 33" (84 cm), M. S. dark purple-red (RHS 77A); lighter purple-red (72B) styles; F. rich red-purple (near 77A), yellowish signal with white edge, blue-violet flash below signal. Sparkling Rose X Polly Dodge. SC (BIS), S/T (Wisley) 1980.

MARSHMALLOW FROSTING (C. McEwen, R. 1984). Sdlg. T78/94. SIB (46 chrom. diploid), 32" (80 cm), EM-LM. Pure white self; white styles. Happy Event X T74/21(14): (Dear Delight x 70/98Y: ((Cambridge x unknown) x (White Swirl x Pirouette))). Seaways Gardens 1984.

- N -

NAVY FANFARE (B. Warburton, R. 1983). Sdlg. A-72-9-B1-1. SIB, 32" (81 cm), M-L. Blue (RHS 95D) with dark navy blue (95D) shoulders; aqua styles are nearly floret type, curled. Atoll X 72-9-B1-1, Rosace sib. Warburton 1984.

NEKIMI ROSE (M. Wilkins, R. 1984). Sdlg. 84-22G. SIB, 30" (76 cm), M-L. S. medium light red-violet; lightly fringed, slightly darker

styles, blue midribs; F. ruffled medium light red-violet, clean white half-moon blaze and dark veining, bright blue flash below blaze; greenish yellow hafts. 80-34B: ((Ruby Wine x Towanda Redflare) x (Sparkling Rose x Royal Ensign)) X Exchange.

- P -

PINK SPARKLE (B. Hager, R. 1984). Sdlg SB96. SIB, 39" (99 cm), M. S. white tinged orchid-pink; styles same; F. mottled deep mallow pink, buff-bronze signal area. Sparkle X Rose Quest.

POLLY CHISM (H. Briscoe, R. 1984). Sdlg. 773A. SIB, 26" (66 cm), VL. Ruffled deep royal purple (RHS 83A) self. Ruffled Velvet X 7051C: (Blue Brilliant x Cambridge).

PRESIDENT TRUMAN (L. Bellagamba, R. 1983). Sdlg. S-679. SIB (diploid) 30" (76 cm), ML. S. red-violet, deeper at base; light red-violet styles; F. full red-violet, yellow-brown signal bordered violet-blue, heavily ruffled. Unknown parentage. Borbeleta Gardens 1984.

- Q -

QUIET SHAPE (T. Tamberg, R. 1984). Sdlg. SSTT 153. SIB, 27 1/2" (70 cm), M. Soft dark mid-blue self. SSTT 133: (Dreaming Spires x self) X unknown.

- R -

REGENCY BUCK (C. McEwen, R. 1984). Sdlg. $T_5$79/211(2). SIB (56 chrom. tetraploid), 33" (82.5 cm), M-L. S. rich violet (darker than RHS 88A); F. reddish violet (87A) veined darker than 89A, giving an overall color effect of velvety reddish purple, white signal; light red-violet styles, blue midrib. Harpswell Hallelujah X Violet Joy.

ROB (D. Hansford, SIB, R. 1972). British Iris Society 1983.

ROBBIE RAYMOND'S RED (W. McGarvey, R. 1983). Sdlg. 60 Inroy. SIB, 32"

ROMANTIC LADY (C. McEwen, R. 1984). Sdlg. 75/52(10). SIB (28 chrom. diploid), 35" (87.5 cm), EM-LM. S. light violet-blue (RHS 95D), with three lines of deep violet-blue (93B); F. deep violet-blue (93B) at base around signal, grading tolight violet-blue (92C) at sides and tip; only white tip signal is visible; heavily ruffled; very pale violet (92B) styles. Anniversary X 72/31(5): ((Cambridge x Blue Brilliant) x ((White Swirl x Blue Brilliant) x Cambridge)). Seaways Gardens 1984.

ROSE QUEST (B. Hager, SIB, R. 1982). Melrose Gardens 1983.

SAILING (C. Helsley, SIB, R. 1982). Helsley 1983.

SAILOR'S HORNPIPE (C. Helsley, SIB, R. 1982). Helsley 1983.

SAIL-PLANE (J. Ennenga, SIB, R. 1981). Ennenga's Iris 1983.

SEA CHANTY (C. Helsley, SIB, R. 1982). Helsley 1983.

SEA HORSE (M. Brummitt, SIB, R 1972). British Iris Society 1983.

SEA SHADOWS (M. Brummitt, SIB, R. 1964). British Iris Society 1982.

SILVER ROSE (B. Warburton, R. 1984). Sdlg. ARV 80-48. SIB, 28" (71 cm), M. S. pinkish white, forming a star in center with pinkish white styles; F. mid-purple (RHS 75A/77D), harmonious signal blending to deeper rosy violet. Atoll X Ruffled Velvet.

SPLASHDOWN (D. Hansford, SIB, R. 1972). British Iris Society 1982.

STAR GLITTER (B. Hager, R. 1984). Sdlg. SB94Y2. SIB, 36" (91 cm), M-L. S. white; F. light yellow, deepening at hafts. Star Cluster X Butter and Sugar.

STARS BY DAY (B. Warburton, R. 1984). Sdlg. ADS-80-1. SIB, 34" (86 cm), M-L. S. pale blue with deep violet-blue midrib and veinging; pearly white styles with floret crests; F. pale blue, deeper blue ray pattern, green hafts ending in double 'V', navy blue signal. Atoll X Dreaming Spires.

STARTING CALSIBE (T. Tamberg, CA-SIB (tetraploid), R. 1981). Schoppinger Gemeinschafts 1983.

STARTING SIBTOSA (T. Tamberg, R. 1984). I. sibirica X I. setosa hybrid (colchicine induced tetraploid), 24" (60 cm), L. Blue-violet self. I. sib. 'Elmeney' X I. setosa.

STIPPLED BEAUTY (C. McEwen, R. 1984). Sdlg. 76/72(2). SIB (28 chrom. diploid), 30" (75 cm), VE-EM. Ruffled dark violet-blue, white stippling extending 1/2" around white signal; dark violet-blue styles. 67/114: (White Swirl x Polly Dodge) X unknown. Seaways Gardens 1984.

SUNBURST BLUE (R. Hollingworth, R. 1984). Sdlg. 80U4C3. SIB (56 chrom. tetraplolid), 27" (68 cm), VE-E. Heavily ruffled medium to deeper blue, prominent blaze of light gold covering half of F.; large, feathered midblue stylearms; slight fragrance. 78G2, colchicine induced tetraploid:(Cambridge x unknown) X self.

SWIRLING LAVENDER (A. Miller, R. 1984). Sdlg. 78.30.2. SIB, 34" (86 cm), M. S. sea lavender-violet (RHS 85D); stylearms same; F. darker (85A/85D),ruffled. White Swirl X Roanoke's Choice.

- T -

TWEED (B. Warburton, SIB, R. 1982). Warburton 1983.

TWO WORLDS (T. Tamberg, SIB, R. 1981). Schoppinger Gemeinschafts 1983.

- V -

VALDA (A. Back, SIB, R. 1976). British Iris Society 1983.

VARIATION IN BLUE (C. McEwen, R. 1983). Sdlg. 74/21J. SIB (diploid), 38" (97 cm), M-L. Ruffled light blue; styles same with pale blue (RHS 101C) midrib; only white tip of signal visible. Dear Delight X 70/98: ((Cambridge x unknown) x (White Swirl x (Pirouette x unknown))). Seaways Gardens 1983.

VARIED BUNTING (C. McEwen, R. 1984). Sdlg. 79/238. SIB (40 chrom. diploid), 46" (115 cm), M-L. S. pinkish lilac (RHS 69B) with plum purple (79C) midline; styles (69B) with (79C) midrib; F. very light pinkish lilac (69C) ground with plum (79C) area at base and streak down midline to tip, short yellow line signal. 76/200: (Mauve Mood x unknown) X Tamberg SSTT14. Seaways Gardens 1984.

VEE ONE (A. Back by A. Blanco-White, SIB, R. 1982). British Iris Society 1982.

VELVET CANDLE (F. Koehlein, R. 1984). SIB (40 chrom.), 19 1/2-23" (50-60 cm), M. Dark violet self. Unknown parentage.

VI IN PEARLS (B. Warburton, R. 1983). Sdlg. WW/72-7D-8. SIB, 38" (97 cm),M-L. S. light violet-blue (RHS 95D); F. slightly darker, very dark at shoulders, ruffled with dip at tip; pearly styles with aqua midrib and violet edge nearly covering signal. Wing on Wing X 72-7D-3: (White Swirl x (White Swirl x Eric the Red)). Warburton 1984.

VISUAL TREAT (B. Warburton, R. 1983). Sdlg. ARV-82-9. SIB, 32" (81 cm), M-L & sometimes RE. S. metallic red-purple (RHS 89A); F. violet-blue (brighter than 89A) in center, metallic red-purple shoulders, ruffled; metallic red-purple styles, fringed and floret crested. ARV-80-UN: (Atoll x Ruffled Velvet) X Ruffled Velvet.

- W -

WEISSEN ETAGEN (T. Tamberg, R. 1984). Sdlg. SSTT 102. SIB (tetraploid), 36" (90 cm), E-M. White self, yellowish throat. From McEwen tetraploid seedlings.

WILTRUD GISSEL (T. Tamberg, SIB, R. 1978). Schoppinger Gemeinshafts 1982.

WINDWOOD SPRING (R. Hollingworth, R. 1984). Sdlg. 80U4C7. SIB (56 chrom. tetraploid), 28" (71 cm), E. S. ruffled light blue fading from mid light blue; F. mid light blue fading to light blue, prominent pale yellow blaze extending over half of F., fading to white, lightly ruffled; feathered multi-hued blue styles. 78G2, colchicine induced:

(Cambridge x unknown) X self. HC 1983.

WINGS AWAY (B. Warburton, R. 1983). Sdlg. AWW-80-23. SIB, 30" (76 cm), M-VL. Four tones of blue-violet (RHS 95A-D); S. paler except for midrib, darkest at shoulders in wings replacing signal and surrounding green 'UU' at end of haft centers, lightest at tip of F.; pale violet styles with aqua tints and laciniated edge. Atoll X Wing on Wing. Warburton 1984.

WIZARDRY (R. Hollingworth, R. 1984). Sdlg. 80V2B7. SIB (56 chrom. tetraploid), 29" (74 cm), EM-M. S. mid-blue,lighter at edge; feathered light blue styles; F. mid-blue, small white-gold blaze. McEwen $T_4$72/162(5): (Orville Fay sib x T_4 from Blue Brilliant) X 78G4, colchicine induced: (Dreaming Spires x unknown). HC 1983.

- Z -

ZWEITES HUNDERT (T. Tamberg, R. 1984). Sdlg. SSTT 200. SIB (tetraploid), 37" (94 cm), M. Light mid-blue self. Breiter Start X SSTT 101. Schoppinger Gemeinschaft 1983.

Editor's Corner

I am convinced an editor's New Year's wish must be that all copy, articles, photos, materials, printing and mailing meet the scheduled deadlines. In this case, I am late.

This issue was to have color, which had to be abandoned for this issue as several of the necessary photos were not usable or could not be found.

This points up the need for a good slide library. We at this time do not have a complete set of the Morgan Award winners. This should be a must. If anyone has a spare slide of a past Morgan Award winner, Jim Foreman could use it as part of the SSI slide collection. Also, he has mentioned a need for Judges training slides.

Getting back to this bulletin, the condensed copy and size were done to conserve costs, as it would have been many pages longer in the size and style preferred by some. We still need to work out a standard type style. Comments please.

The color issue continues in preparation for the Spring issue; but as a great share of it is voluntary and free in terms of cost, it takes a bit of a back seat in the workplace, where profit is the main concern.

Hope you will find something of value and interest in these pages.

Happy Holidays!

Carolee

Hollingworth Sdlg.

Hollingworth Sdlg.

Steve Varner, Dave Silverberg, Ainie Busse and Mrs. Hollingworth

Looking at the 'Shape of Things to Come' In the Hollingworth Seedling Bed