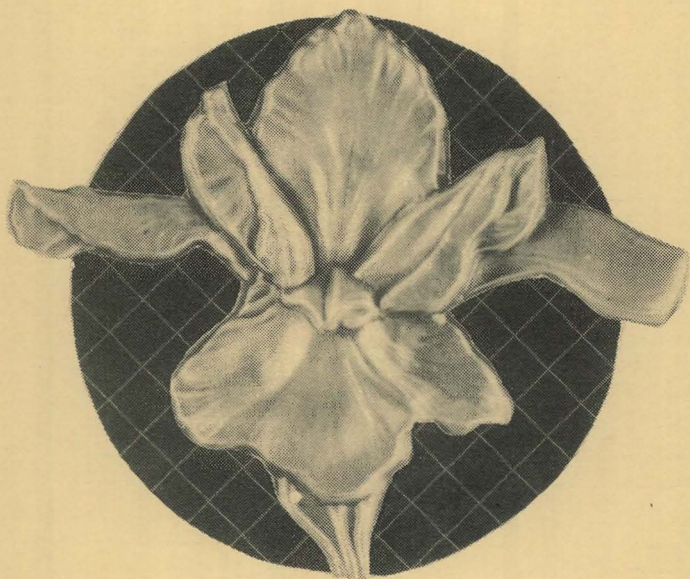


# *The Siberian Iris*



*Volume 6*

*Number 9*

*Spring 1989*

# THE SIBERIAN IRIS

VOLUME 6, NUMBER 9

SPRING 1989

Officers, Board, Committees.....	Page 2
President's Letter (Anna Mae Miller).....	3
Report on Book Sales (Julius Wadekamper) .....	4
New Thoughts on Pollination (Marty Schafer).....	5
Treasure Hunt- Locating Siberians in Commerce (Howard Brookins).....	7
1988 Award of Merit Winners (photographs).....	10
A New Iris For Very Cold Climates (Eckard Berlin).....	12
1988 Registrations and Introductions.....	17
A Discussion of Several Diseases of Siberian Irises (Jennifer Hewitt, Bob Hollingworth).....	23
New Members.....	29
In Memorium-Mattie Reinhardt (Howard Brookins).....	31
Treasurer's Report (Gunther Stark).....	32
Ask the Expert (Dorothy Hamilton, Bob Hollingworth).....	33
Publicity in Review for 1988 (Ainie Busse).....	34
Last Word (Editorial).....	35
Siberian Source List.....	36
Check list, book advertising.....	inside back cover

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## FROM THE PRESIDENT'S DESK

As I assume the  
Presidency of the  
Society for Siberian Irises  
I hope that we will be able  
to advance the popularity  
of Siberian irises and that  
the society may grow and

serve you well. As Robin Director I have met many wonderful gardeners from across the country dedicated to promoting the love of Siberians; some of them have agreed to serve on the board. We try to represent all parts of the United States and will welcome your help in suggesting changes you may see that are needed for the betterment of the society.

We have a number of display gardens voluntarily maintained so that you can go and compare many varieties of Siberians. Please enjoy them! I would especially like to see many of the improved varieties growing in our public gardens so that "John Q. Public" can see the progress in form, color, and longer blooming time that many of our hybridizers have been working so hard to achieve.

Another longtime need we have had is about to be met with an updated Check List to add the past twelve years of registrations and introductions and award winners in one booklet. We owe a great gratitude to Howard Brookins for all the work he has done to bring this to fruition. Many members have added their special expertise to this endeavor. I thank you ALL. The checklist will be on sale at the 1989 AIS Convention, and it is advertised on the inside back cover of this issue.

I would also like to thank the King County Iris Society and the North East Apogen Society for their generous donations. We appreciate their confidence in us and we will use their gifts well.

When I meet strangers I usually mention my interest in growing and hybridizing Siberian irises. One of these, an antique dealer shared the following anonymous author's poem with me....

Some hang above the tombs  
Some weep in empty rooms  
But I, when the iris bloom,  
Remember.

Anna Mae Miller

"Start Something Great in Memphis" - April 29th-May 3rd. SSI Board meeting, Saturday April 29th at 8pm. Section Meeting May 2nd at 7pm. Officers and Committee Chairs who cannot attend please send your reports to Anna Mae by April 21st.

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#### SOCIETY FOR SIBERIAN IRISES

Annual Report on Book Sales

Julius Wadekamper, Coordinator, December 31st, 1988

No of books sold	236
Total income from sales	\$611.11*

\* This figure represents retail and wholesale sales. Our best distributor is Timber Press of Oregon.

Julius writes that we still have a large number of the books for sale. This is lost revenue to the society while they sit in storage in Minnesota - so let's be creative and help Julius move these excellent books along. A couple of suggestions; if your club plans a meeting featuring Siberians why not get in half a dozen books to sell. This is an excellent chance when people are stimulated after the program to make a sale. Another possibility; Commercial gardens - you could offer them as a bonus for a Siberian order over a certain amount or with new introductions. Contact Julius at 15980 Canby Ave Rt. 1 Faribault Mn 55021 and see if you can arrange a wholesale price for buying in bulk.

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#### GARDEN MUSINGS

We once had a neighbour who every weekend set out his lawn chair, checked that he had a good supply of cold drinks at hand, and began to work on improving his tan. He frequently said that watching us work like beavers in our garden added to his sense of well being.

It's true, particularly at iris time, that there is little opportunity for sitting in the shade; perhaps we should all take a few moments to sit and enjoy the beauty we have worked so hard to create. Then again, the weeds are popping up, there's mowing, mulching, fertilizing, and spraying crying out for our attention, and visitors due at the weekend! Our best revenge? - to go and visit someone else's garden.

# NEW THOUGHTS ON POLLINATION

BY MARTY SCHAFER

"When you plant seeds that bear the stamp of your own hand your thoughts are in full bloom the year around. From one year to the next your imagination is kindled with possibilities and the need to know what you and Nature have brought into being. In creating something that did not exist before, life seems to extend beyond its limitations..."

## Florence Bellis Gardening and Beyond

As a novice, the most difficult part of hybridizing irises was the complicated process of actually making the cross. The conventional method calls for emasculating the pod flower (opening the flower and removing the anthers), tying up the flower, ripening the pollen, applying the pollen to the stigma, and finally tying up the flower again. All this is done to ensure controlled and successful pollination.

Using a different pollinating technique in 1985, I made 26 successful Siberian crosses and of those 24 produced germination and 730 seedlings were planted in 1986. With the aid of a wet summer and a beaver in the stream below these plants were well watered and 95% bloomed in the summer of 1987.

I could not wait to see the results. In addition to hoping there would be beautiful flowers among them I hoped they would confirm that my pollinating technique had been effective. As I walked down the rows I could see that each cross had a unique family resemblance. CABERNET X MAGGIE LEE gave all reds, while CABERNET X RUFFLED VELVET gave reds, purples, and blues. The cross of ARV 82-31 (a yellowy-white) X BUTTER AND SUGAR produced all yellows. SNOWCREST X WHITE SWIRL gave all whites. S 83-1-2 (white) X TEALWOOD yielded all dark purples resembling TEALWOOD (though not as good). The family of BELLISSIMA X DANCER'S FAN was half blue-violet with green throats like DANCER'S FAN and half white. Reciprocal crosses of YOUNG LADY and HARBOR MIST produced light blues and whites. It was clear that siblings were related to each other AND that they were the children of their parents - confirming that it was indeed I who made the crosses and not the bees.

The following describes how I make crosses.

First for pollen I use a just opening or almost open flower. (Early morning is the best time to find flowers at this stage.) I open the flower by hand, remove the anther and carry it to the pod flower. The anther looks hard (whole) and the pollen grains are still enclosed in its four chambers. Second, for a pod parent I use a similar almost open flower. After opening it by hand, I loosen or lower the stigma away from the style with a tweezer, because at this newly-opened stage, the stigma is held tightly against the style. Third, I use the tweezer to ream the pollen out of one of the anther chambers (you could use a toothpick) and put it on the stigma. Finally, I label the cross.

There is a natural process which supports this method of pollinating called protandery (i.e. anther first). In the spring of 1986 a naturalist, Don Stokes, came to walk through our garden. While admiring some foxgloves he told me about the strategies by which flowers transfer pollen from plant to plant and minimize self-pollination. In a protanderous flower, the female part (stigma) waits immature until the male part (anther) has matured and its pollen has been shed on passing insects. It's almost like each flower is two flowers - the first day it's male and the second day it's female. Siberian and other apogon irises exhibit protandery. On the first day the flower opens, the pollen becomes fluffy and mature. The stigma of that flower, however, stays tightly held against the style and does not receive any pollen (without human interference). On the second day, after the pollen of that flower has been carried away, the stigma drops and is ready to receive insect delivered pollen.

My pollinating technique takes advantage of protandery and short circuits it. By manually applying pollen to an immature stigma I am sure of beating the bees to the punch. By ripening the pollen on the stigma I do not have to catch the pollen at the moment it is viable - one of the more frustrating aspects of Siberian hybridizing. My pollen is ready to fertilize at the instant the stigma becomes receptive. I believe that the stigma is fertilizable at least a short time before it actually drops. I have had a high percentage of successful takes using this method (75-85% depending on the heat of the day) and I recommend it to anyone. For me it makes the crossing as much fun as viewing my seedlings.

---



## *treasure hunt*

Howard Brookins, besides setting up an interim checklist of Siberian irises is also working on a source list of Siberian species and hybrids (TSI Vol.6 No.6, Fall '87). The following list contains the Siberian irises for which he does not currently have a source. If you are a commercial garden growing but not listing any of these irises, some modern some not so modern, or a member growing any of them in your garden who would be willing to be listed as a source, please contact Howard at N75 W14257 North Point Drive, Menomonee Falls, WI 53051-4325. It would be a help to the society in ensuring that these varieties are not lost.

ABITIBA	Preston	'30	
AEGEA	Spender	'43	40x28 cross
AGAIN	McEwen	'84	(Tet)
ALBESCENS	Vilmorin	'32	
AMAZEMENT	Wiswell	'72	
ANN STAHLMAN	Washington	'32	
ANNAMARIE TROEGER	Tamberg	'80	
ATLANTIS	Spender	'39	
BABET	Nesmith	'37	
BARBARA'S CHOICE	Kitton	'64	(48chr.)
BICKLEY CAPE	Kitton	'63	
BLUE CHARM	Sass	'30	
BLUE ENCORE	McEwen	'80	(Tet)
BLUE FLAME	Cleveland	'26	
BLUE HERON	Cleveland	'27	
BLUE MEADOW FLY	Ahlburg	'80	(40 chr.)
BLUE OWL	Cleveland	'26	
BLUE PERFECTION	Cleveland	'26	
BLUE POLL	Wallace	'40	
BLUE ROSEBUD	Tamberg	'82	
BLUE SPRAY	Cleveland	'39	
BLUE STAR	Cleveland	'26	
BLUECAPE	Kitton	'56	
BLUSH WHITE	Perry	'19	
BRACKNELL	Waterer	'39	
BRAVE COMRADE	Ritchie	'80	
CAMBERLEY	Waterer	'39	
CANTON	Nichols	'34	(40 chr.)



CANTON BLUE	Nesmith	'73
CARRIE DAWN	Farmer	'79 (40 chr.)
CHAUDIERE	Preston	'30
CHRYSOBIRICA	Perry	'23 40 x 28 cross
CHRYSOGR. PICTURATA	Smith, B.	'27 (40chr.)
CLARET	Wiswell	'76
CLASSIC LASS	Smith, P.	'85
COURT RUFFLE	Kitton	'63
COURT VIOLET	Kitton	'63 (40 or 40x28)
CRYSTAL CHARM	Scheffy	'49
DAVID HEBDITCH	Bartlett	'85
DIAMOND JUBILEE	Wallace	'39 (40chr.)
ELEANOR	Wallace	'29 (40chr.)
FAIR AND FORTY	McEwen	'70 (40chr.)
FAIRY BUTTERFLY	Cassebeer	'55
FIFINELLA	Wallace	'39 (40chr.)
FOND REVELATION	Reinhardt	'74
FORREST SCION	McGarvey	'70 (40 chr.)
FORRESTII MAJOR	Perry	'30 (40 chr.)
GLADYS MARTIN WISWELL	Wiswell	'73
GREEN MOUNTAIN BOY	Wiswell	'73
GREEN PROMISE	McEwen	'84
HELICON	Spender	'34 40x28 cross
HELIODORE	Spender	'43
HUMBOLDT	Foerster	'31
I. sib. atosanguinia	Ingwersen	'36
I. sib. azurea	Smith	'27
I. sib. falcifolia	Perry	'30
I. sib. major	Macoun	'27
I. sib. maxima	Macoun	'27
I. sib. montana	Correvon	'30
I. sib. Mrs. Hatch	Scudder	'33
IANTHIS	Spender	'43
JENKINSII	Perry	'23 (40chr.)
JUNE VIOLET	Spofford	'73
KELAT SPIRES	Slade	'84
KENOGAMI	Preston	'38
KING'S FORREST	McGarvey	'65 (40 chr.)
KIRTIZ	Cleveland	'39
KOOTENAY	Preston	'30
LA BLANCHEFLEUR	Spender	'43
LAURENBUHL	Berlin	'79
LICHTERFELDE	Tamberg	'78 (Ind. tet)
LILAC BEAUTY	Cleveland	'39
LILAC NYMPH	Kokich	'73
LITTLE BLUE	McEwen	'76
LITTLE RED	Vaughn	'76
MADAWASKA	Preston	'30
MANDARIN PURPLE	Neel	'60 (40 chr.)
MARGOT HOLMES	Perry	'27 (Calsib)
MARTHA LE GRAND	Washington	'34
MATTTAWAN	Preston	'30

MAY MORNING	Wayman	'38	
MEADOW PRINCESS	Ahlburg	'80	(40 chr.)
MILDRED STAHLMAN	Washington	'31	
MISS DODO	Koehler	'23	
MORNING MAGIC	Cleveland	'39	
MOUNTAIN POOL	Cleveland	'39	
MOUNTAIN STREAM	Hodson	'54	
NIGHT SPRITE	Gersdorff	'34	
NIPIGON	Preston	'30	
NURSE CAVELL	Perry	'23	
OPAL BLUE	Sturtevant	'33	
PEMBINA	Preston	'30	
PERSIMMON	Wallace	'39	(40 chr.)
PICKANOCK	Preston	'36	
PORCELAIN DOLL	Shinkle	'59	
POWDER BLUE	Cleveland	'39	
PRINCE OF WHITES	Shinkle	'59	
RIDEAU	Preston	'30	
ROB	Hansford	'72	
SCHOENE UNBEKANNT	Ahlburg	'86	
SECRET PLANET	Iles	'78	
SIBIRICA CRISTATA	Vilmorin	'32	
SIBIRICA GRACILIS	Smith	'27	
SIBIRICA SNOWDRIFT	Blacklock	'39	
SIGNALS BLUE	McEwen	'79	
SKYBLUE WATER	Gersdorff	'33	
SKYLARK	Cleveland	'23	
SNOW COVER	Wadekamper	'85	
SNOW WHEEL	Hodson	'54	
SOOTHSAYER	Vaughn	'73	
SPLASHDOWN	Hansford	'72	(40 chr.)
STARDUST	Cleveland	'26	
TAWNY PIPIT	McEwen	'73	(40 chr.)
TOKAY GRAPE	Wiswell	'72	
TRUE BLUE	Fryer	'19	
TWO WORLDS	Tamberg	'81	
VELVET GEM	Cleveland	'39	
VIOLET MERE	Hutchinson	'63	
VIOLET REPEAT	Brummitt	'67	
VIOLET WAVE	Spender	'43	28x40 cross
WATER ICE	Cleveland	'39	
WEISSEN ETAGEN	Tamberg	'84	(Tet)
WHIRL	Warburton	'71	
WHITE EMPRESS	Cleveland	'76	
WHITE WAY	Wayman	'34	
WHITEHILL	Berry	'29	
WINANDER	Spender	'43	
WOOD DOVE	Cleveland	'39	
YELLOW POLKA	Mize-Ruggles	'72	(40 chr.)

1988 AWARD OF MERIT  
WINNERS



KING OF KINGS (Varner 1982) Photo: D. S. Varner



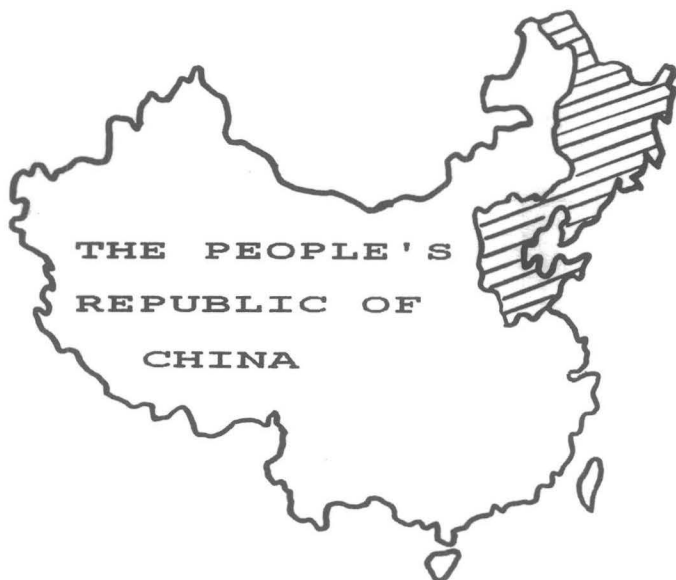
CREME CHANTILLY  
(McEwen 1981)  
Photo:  
SSI slide set

DANCING NANOU (A.M. Miller 1983) Photo: A. M. Miller



LAUGHING BROOK  
(K. Waite 1984)  
Photo: K. Waite





# A NEW IRIS FOR VERY COLD CLIMATES

BY ECKARD BERLIN, WEST GERMANY

Dear Friends: It grows in a vast area which is about 600 miles long and 250 miles wide. In the southern part of this big area the climatic conditions are similar to the region here in Swabia (Southern Germany) with an average yearly temperature of 7-8° C (44.5 to 46.5° Fahrenheit) and a yearly average rainfall of 700-800mm (27-32"). But in the northern part near the 50th degree of latitude, the average temperature is only 0 to -3° C (26-32° F) and the yearly rainfall is only 300-400mm (12-14"). Most of this rain comes in the summer. The winters are very cold and the thermometer sometimes drops to -50° C (-58° F).

This iris is not yet well known. It was described for the first time by the Japanese botanist Kitagawa in The Botanical Magazine (Tokyo) in the year 1934. Then in 1982, the "Iris Czar of China" wrote an article in the British Iris Society Yearbook (1982, p. 47-51) on "The Geographical Distribution of Iris in China" where it was mentioned. In 1985 the same author then published in the Flora Republicae Popularis Sinicae (Vol. 16 (1) 1985) a comprehensive description of all irises in China, and this plant was mentioned accompanied by a drawing.

What kind of plant you ask? - - - Excuse me for making my letter deliberately mysterious, it is Iris typhifolia and the "Iris Czar" is Professor Zhao Yu-Tang of the University of Changchun, Jilin Province, N.E. China. Changchun is situated between the towns of Schenyang (formerly known as Mukden) and Charbin (formerly Harbin). The yearly average temperature is 4-5° C (about 40°F) and the average rainfall 660mm (26"), the coldest temperature recorded in the last 30 years was -40° C (-40° F). These must be similar conditions to those in certain parts of the States, perhaps in northern Minnesota in the area of Duluth. But because I. typhifolia grows in the far north (Manchuria and Inner Mongolia) I think it should also be adaptable for such regions as central Canada and Alaska.

From the "Flora Sinicae" I have as mentioned obtained the drawing on the next page, but unfortunately the accompanying text is written in the Chinese language. I am too old to learn the Chinese tongue, although I am very interested in

the exceedingly beautiful calligraphical signs. I will therefore paraphrase the article in the B.I.S. yearbook, Zhao Yu-Tang writes there: "In the



northeastern regions of China including the province of Liaoning (northward of North Korea), Jilin (in the middle) Heilongjiang (about the old Manchuria), and the Inner Mongolia Autonomous Region, 19 species of irises grow, with Liaoning topping the list with a total of 16 species. Only three species grow further north. The main species are as follows:

I. sanguinea (I. orientalis),  
I. nertschinskia I. ensata  
(I. kaempferi), I. typhifolia,  
I. laevigata, I. maackii,  
I. minutoaurea, I. kobayashii,  
I. ventricosa, I. manchuria,

I. bungei etc.... I. ensata,  
laevigata, sanguinea are all well known species in horticulture. They grow in large numbers in marshlands. I. typhifolia belongs to series Sibiricae (Diels.) Lawr. Its leaves are narrow about 2mm (1/12") wide with a very prominent mid nerve and its flowers are dark violet; Its distribution is a wide one in N.E. China and Inner Mongolia. The typical specimens for this species were collected in the Bailing district of Shenyang City (Liaoning Province)".

As you can see in the drawing the plant is very similar to I. sibirica perhaps a bit more charming and pretty, or graceful. My plants here, grown from seed sent to me by Zhao Yu-Tang in the summer of 1987 have

IRIS typhifolia (KITAGAWA)

Drawing in: Flora Republ. Popularis Sinicae  
(Vol. 16 (1) 1985)

leaves a bit broader (4mm) than the plants in his description. The plants which I have given feedings of artificial manure grow better than the non-fertilized plants. Most of the plants should flower in May/June 1989 - I think they will bloom a little earlier than the other Siberians because they come from a colder region.

But now the chief matter, Mr. Zao Yu-Tang wrote to me: The chromosome number is  $2n = 28$ . I think then that as it is a subspecies or variation of I. sibirica, surely you could cross it with other cultivars of I. sibirica."

I hope so dear friends! In June '89 if you were to be here in Biberach you might see a bee (rather an old bumblebee) bussling and humming around these Chinese guests. I hope to seduce these little girls to be impregnated with pollen from graceful McEwen irises and my own cultivars. I wonder, has Currier ever dreamed of becoming the grandfather of a Chinese baby?

With best wishes to you all from West Germany

Yours Eckard Berlin

PS. For the more northern regions of the USA (Minnesota, Alaska), and Canada surely we should have other forms of I. typhifolia from Manchuria and Mongolia. I do not yet have these forms but hope to receive them from Mr. Zhao Yu-Tang. Can anyone write and tell me how far north the usual I. sibirica grows?

---

The following is a translation from Chinese of the botanical description of I. typhifolia in Flora Republicae Popularis Sinicae, Vol. 16 (1) kindly provided for this article by Professor Wang Jin-wu of the Department of Biology, University of Beijing. This is not an official translation but is provided for the interest and benefit of TSI members. Our thanks to Dr. Wang.

Ed.

- 3: North-Tomb Iris (Key to Plants in Northeast Region of China), Cattaileaf Iris (Key to Plants in Northeast Region of China) Plate 44: 1-3  
Iris typhifolia Kitagawa, in Bot. Mag. Tokyo 48: p.94 10 1934  
Lineam. Fl. Mansha. 149, 1939; Key to Plants in Northeast Region of China 586. 1959.



Perennial herb; reddish brown at base, enveloped by lanceolate sheathing leaves and withered fibres of leaf sheath. Rhizome thick, obliquely extended; fibrous roots palescent or pale brown, the thickness of its upper part and lower part are about equal. With crispy veins, leaves linear, and rounded, 30-40 cm long, about 2mm wide in flowering phase, 90 cm long, 2-3mm wide in fruiting phase, apex long acuminate, sheath-like at base; midrib conspicuous. Flowering stem glabrous, hollowed, 50-60 cm tall; stem leaves 2-3, lanceolate; bracts 3-4, membranous, with brown or reddish-brown spots, lanceolate, 5.5-6 cm long, 1-1.2 cm wide, apex acuminate, midribs conspicuous; flowers deep blue-purple, 6-7 cm diameter, pedicels 1-5 cm long; perianth tube about 5mm long, outer perianth segments obovate, 5-5.5 cm long, about 2 cm wide, claw angusticuneate, grooved, without appendage in midrib, inner perianth segments oblanceolate, apex retuse, 4.5-5 cm long, 1-1.2 cm wide; stamens about 3 cm long, anthers yellowish-brown, filaments white; style arms about 3.5 cm long, 1-1.2 cm wide; lobes of the tip triangular, paucidentate, ovary 3-angled, terete, 1.5-2 cm long, 2-3 mm diameter. Capsules 3-angled, elliptic, 4.5-5 cm long, 1.2-1.5 cm diam., with 6 ribs, 3 ribs of which are more conspicuous, loculicidal dehiscence. Flowering phase is from May to June, fruiting phase is from July to September.

Distribution: Heilongjiang, Jilin, Inner Mongolia. It grows in a marshy spot or moist land. Type was collected from North-Tomb in Bailing district of Shenyang.

This species differs from Iris sanguinea in having anguste leaves about 2mm wide, and flowers deep blue purple with brown spots. The center of distribution is in the west part of the Northeast Region of China and the east part of the Inner Mongolian Region of China.

---

angustate:	narrow
cuneate:	wedge-shaped: triangular, with narrow part at the point of attachment.
dehiscence:	the process of opening of a fruit seedpod, anther or sporangia.
loculicidal:	splitting along the walls of the locules of a capsule as contrasted to dehiscence along the septae.
terete:	cylindrical and tapering.

These are the words I had to look up, it may save you some time if you are not familiar with them.

## 1988 REGISTRATIONS AND INTRODUCTIONS

ABENDKLEID (A. Winkelmann, R. 1988). Sdng. 26183. SIB (diploid), 28" (70cm), L. Lightly ruffled violet, few darker veins around small white signal. Unknown parentage.

ALMOST A MELODY (A. Miller, SIB, R. 1987). Old Douglas Perennials 1988.

BEAUMARIS (H. Foster, R. 1988). Sdng. 2/75/222. SIB (tetraploid), 36" (91cm), M-L. Ruffled pale cambridge blue, fine silver edge on F., white blaze signal. Ewen X Silver Edge. SC (BIS), ST (Wisley) 1988.

BERLIN LITTLE WHITE (T. Tamberg, R. 1988). SIB (diploid), 20" (50cm), M. Ruffled white. Ego X Blue Rosebud. Schoppinger Irisgarten 1988.

BILLY MAC (W. McGarvey by J. Wadekamper, R. 1988). Sdng. McG85-11. SIB, 36" (91cm), LM. S. pale blue, edged dark blue; F. medium blue, edged dark blue, very dark blue signal. Unknown parentage.

BISHOP'S PAWN (Dale Johnson, SIB, R. 1986). Borbeleta Gardens 1988.

CADER IDRIS (H. Foster, R. 1988). Sdng. 15/75/244. SIB (tetraploid), 42" (107cm), E-M. Purple blue, fine silver edge on F., distinctive white blaze with central streak, gold hafts. Yankee Consul X Silver Edge.

CATHY CHILDERS (Dale Johnson, SIB, R. 1987). Borbeleta Gardens, Johnson's Iris 1988.

CONNIE 'A' (J. Ashford, R. 1988). Sdng. JA(T)5. SIB, 30" (76cm), M. Medium blue; gold hafts and signal. Seed from BIS.

DIANNE'S DAUGHTER (C. McEwen, R. 1988). Sdng. T4 78/174. SIB (tetraploid), 30" (75cm), L-VL. S. violet blue (RHS 93C); lighter violet blue (93D) styles with lighter violet blue (97C) midrib: F. darker violet blue (93B), slight white stitching at haft edges, slight silver edge; white signal with white streak halfway to tip; ruffled. Dear Dianne X Adj. Pope's perennials, Seaways Gardens 1988.

DREAMING BROWN (C. McEwen, R. 1988). Sdlg. T5 76/70B. SIB (tetraploid), 30" (75cm), M-L. S. medium violet blue (RHS 89D); F. medium violet blue (89D) at outer half, darkening to 89B at blended brown (175A) base, green (147C) hafts encircled brown (175A). T4 73/150(1): ((Fourfold White x Ewen sib) x unknown) X T1 72/86B: ((Blue Brilliant x unknown) x Cambridge) x Cambridge.

ENBEE DEEAYCH (L. Reid, R. 1988). Sdlg. NBDH. SIB (40 chrom.) 60" (152cm), L. S. deep rich purple; F. same, black eye spot, diamond dusting on each side of white center line. I. delavayi sdlg. X unknown. EC 1988.

ETHELRED (L. Zurbrigg, R. 1988). Sdlg. SIB 74. SIB, 36" (91cm), ML. Wine red, pale yellow signal. Violet Repeat X unknown, probably Violet Repeat.

FLIEDERFEE (A. Dinkelmann, R. 1988). Sdlg. 2173. SIB (diploid), 31 1/2" (80cm). E. S. lavender; F. lavender lilac, pale signal. Thelma Perry X Royal Ensign.

GULL'S WING (W. McGarvey by J. Waderkamper, R. 1988). Sdlg. McG 1861. SIB, 36" (91cm). L. Pure white self; white signal. Unknown parentage.

HELICOPTER (Ho Shidara by B. Hager, R. 1988). Sdlg. HO#6. SIB, 32" (81cm), M. F. violet (6), gold leaf signal. Unknown parentage. Melrose Gardens 1988.

ILLINI DAME (D. S. Varner, SIB, R. 1987). Illini Iris 1988.

ILLINI PURPLE PEPPER (D. S. Varner, R. 1988). Sdlg. 6038. SIB, 27" (69cm), E-M. S. aqua, dappled light purple; styles dappled lilac purple; F. dappled bright medium purple. Friendly Welcome X Sole Command.

ILLINI STARDUST (D. S. Varner, R. 1988). Sdlg. 3153. SIB (diploid), 24" (61cm), M. Bright light blue, veined deep blue, white signal veined deep blue; bright light blue styles. V969: (Avon sib x Sally Kerlin) X self.

ISABELLE (B. Warburton, R. 1988). Sdlg. Bs/B-1. SIB, 27" (69cm), L. S. cream; cream and yellow styles with curled crests and green heart; F. open bright yellow and fade to pale yellow with dark

yellow veining and green influence; heavily ruffled. Butter and Sugar X Bellissima.

IT'S DELIGHTFUL (Dale Johnson, SIB, R. 1987).  
Borbeleta Gardens, Johnson's Iris 1988.

JEWELLED CROWN (R. Hollingworth, SIB, R. 1985).  
Windwood Gardens 1987.

LIBERTY HILLS (A. Miller, R. 1988). Sdng. 78-14-1  
SIB, 32" (81cm), M-L. Mid violet blue (RHS 92B),  
deeper signal area. White Swirl X Roanoke's  
Choice.

LINDA MARY (J. Cooper, R. 1988). Sdng. D16. SIB,  
36" (91cm), EM. S. purple violet (RHS 82B), darker  
rib; light purple violet (82D) styles with blue  
midrib, shading to turquoise; F. darker purple  
violet (82A) flushed blue, white halo; ruffled.  
(Jimmy's Gem x self) X (Jimmy's Gem x self).

LLANBERIS (H. Foster, R. 1988). Sdng. 12/78/230.  
SIB (diploid), 30" (76cm), EM-L. Ruffled dark  
slate blue, small white signal; cambridge blue  
style arms. White Swirl X Ruffled Velvet.

LLYN IDWAL (H. Foster, R. 1988). Sdng. 15/75/243.  
SIB (tetraploid), 36" (91cm), M-L. S. flaring  
purple blue; F. royal blue, flushed fuchsia purple,  
strong silver edge, broad gold signal edged white.  
Yankee Consul X Silver Edge.

LUCKY LILAC (C. McEwen, R. 1988). Sdng.  
T2 82/123(1). SIB (tetraploid), 36" (90cm), VE &  
RE. S. lavender pink (RHS 81D); F. lavender pink  
(81C), white signal. T1 76/38B: (Lavender Light x  
Augury) X T1 76/38K, sib. Pope's Perennials,  
Seaways Gardens 1988.

LYRIC LAUGHTER (J. Witt, R. 1988). Sdng. 82-08-  
XC. CA-SIB, 24" (61cm), VL. S. very pale yellow;  
F. yellow (Munsell 5Y 9/9), darker yellow (5Y8/12)  
signal outlined with brown veins. 40 chrom. yellow  
Siberian sdng. X lemon I. innominata sdng.

NOBLESSE (A. Winkelmann, R. 1988). Sdng. 20813.  
SIB, (diploid), 24" (60cm), M. Ruffled pure white,  
yellow signal. Red Passion X unknown.

PAS-DE-DEUX (R. Hollingworth, SIB, R. 1985).  
Windwood Gardens 1988.

PENMON POINT (H. Foster, R. 1988). Sdlg. 72/75/247. SIB (tetraploid), 40" (102cm), M-L. S. pale cambridge blue; F. rich purple blue, strong silver edge, white signal splashed and dotted gold. Fourfold White X Silver Edge.

PRECIOUS DOLL (D. S. Varner, SIB, R. 1987). Illini Iris 1988.

PRECIOUS ILLINI (D. S. Varner, SIB, R. 1987). Illini Iris 1988.

QUEEN'S GAMBIT (Dale Johnson, SIB, R. 1987). Borbeleta Gardens, Johnson's Iris 1988.

RASPBERRY BLUES (J. Ennenga, SIB, R. 1986). Ennenga's Iris 1988.

RASPBERRY PUNCH (J. Ennenga, SIB, R. 1986). Ennenga's Iris 1988.

REDDY TO GO (Dale Johnson, SIB, R. 1987). Johnson's Iris 1988.

RIKUGI SAKURA (Ho Shidara by B. Hager, R. 1988). SIB, 30" (76cm). M. F. (6) pink, pale buff hafts. Unknown parentage. Melrose Gardens 1988.

RIVER CITY FLIRT (J. Ennenga, SIB, R. 1986). Ennenga's Iris 1988.

RIVER CITY RHYTHM (J. Ennenga, SIB, R. 1986). Ennenga's Iris 1988.

RIVER CITY ROCKET (J. Ennenga, SIB, R. 1986), Ennenga's Iris 1988.

RIVER CITY WINE (J. Ennenga, SIB, R. 1986). Ennenga's Iris 1988.

ROBIN (D. S. Varner, R. 1988). Sdlg. 5144. SIB, 25" (64cm), M. S. red grape pink; very light aqua styles; F. deep red grape purple, blue wash below signal area. SO44, Dance Ballerina Dance sib X Dance Ballerina Dance.

ROTER PRUNK (A. Winkelmann, R. 1988). Sdlg. 31183. SIB (diploid), 32" (80cm), M. Lightly ruffled red purple, white signal. Red Passion X unknown.

ROYAL ILLINI (D. S. Varner, R. 1988). Sdlg. 5182. SIB (tetraploid), 26" (66cm), M-L. S. deep purple; purple styles with deep aqua blue midrib; F. lustrous navy purple, inconspicuous white signal. V1061: ((V698 x Ann Dasch) X (Wine Wings sib x self)) X Dance Ballerina Dance.

SERENADE IN BLUE (K. Waite, R. 1988). Sdlg. Ws-73-1B. SIB, 34" (86cm), M. Violet blue (RHS 92A) self, yellow signal blending to white; flaring and slightly ruffled F., turquoise style arms. Sally Kerlin X Cambridge. Tow Path lane 1988.

SNOW PRINCE (S. Tiffney, R. 1988). Sdlg. T580-1. SIB, 34" (86cm), E-M. S. pure white; white styles; F. creamy ivory (RHS 155A), blue (94A) signal with light butterscotch (163B) markings. Selected I. sibirica sdlg.

SNOWY MOUNTAIN (Dale Johnson, SIB, R. 1987). Borbeleta Gardens, Johnson's Iris 1988.

SPRINGS BROOK (B. Warburton by Schafer/Sacks, selectors, R. 1988). Sdlg. S83-1-1. SIB, 40" (102cm), M-L & Re. S. pearl white with blue violet veining and shading; white styles with blue violet shading on edge, aqua midrib; F. dark blue violet shoulders, blending to blue violet shading, yellow and white signal veined blue. ARV 80-28: (Atoll x Ruffled Velvet) X George Henry. Joe Pye Weed's Garden 1988.

STANDING TALL (Dale Johnson, R. 1987). Borbeleta Gardens, Johnson's Iris 1988.

STARTING CRYDATA (T. Tamberg, R. 1988). Misc. beardless, 39 1/2" (99cm), M. S. yellowish; F. yellowish with blue lines; slight sweet fragrance. 40chr. yellow Siberian, subseries chrysographes X I. biglumis lactea.

STOUT DARLING (T. Tamberg, R. 1988). Sdlg. SSTT. SIB (tetraploid), 23 1/2" (60cm), E-M. Mid-blue with greyish hue. Silver Edge X sdlg.

SULTAN'S RUBY (R. Hollingworth, R. 1988). Sdlg. 82J2B18. SIB, 29" (74cm), M. S. deep magenta; lighter feathered style arms; F. velvety deep magenta, prominent round gold signal, green hafts; ruffled. Ruffled Velvet X Showdown. HC 1987. Windwood Gardens 1988.

SYLVAN POND (J. Ennenga, R. 1986). Ennenga's Iris 1988.

TIFFANY LASS (C. McEwen, R. 1988). Sdng. T5 76/70A. SIB (tetraploid), 28" (70cm), EM & RE. S. dark violet blue (RHS 89C); lighter violet blue (89A) styles with darker midrib; F. darker violet blue (89A) with blend of brown (200C), darkening to 200A at signal; velvety and ruffled. T4 73/159(1): ((Fourfold White X Ewen sib) x unknown) X T1 72/86B: (((Blue brilliant x unknown) x Cambridge) x Cambridge).

TOO MUCH FUN (R. Hollingworth, R. 1988). Sdng. 83M2A27. SIB, 29" (74cm) M. S. light mid-blue; large feathered multi shaded style arms, edged darker; F. heavily ruffled light mid blue, white and gold signal. Steve Varner X 80X1C8: (Super Ego x Anniversary).

TRI-BLUE (Dale Johnson, SIB, R. 1987). Borbeleta Gardens, Johnson's Iris 1988.

WHOZIT (R. Buchanan by J. Wood, selector, R. 1988). Sdng. W-115-85. SIB (tetraploid), 30" (76cm), M. S. blue violet (RHS 92A); light blue styles; F. blue violet (89B), brown reticulation at hafts; slight fragrance. Seed from SIGNA exchange.

WID-WID (H. Foster, R. 1988). Sdng. DD/F/422. SIB (40chrom.), 38" (97cm), M. S. pale purple, fine white edge; F. yellow, pale pink purple striations, fine white edge. I. delavayi "Didcot" X I. forrestii. SC (BIS), ST (Wisley) 1988.

ZITRONEIS (A. Winkelmann, R. 1988). Sdng. 11183. SIB (diploid), 23 1/2" (60cm), M-L. S. creamy white; F. light yellow, fading to creamy white, yellow signal. Super Ego X Ruffled Velvet.

#### CORRECTIONS OF EARLIER REGISTRATIONS

IN STITCHES (L. Reid, CA-SIB, R. 1987). Correction of height to 20-24" (50-60cm).

REDDY TO GO (D. Johnson, SIB, R. 1987). Correction of parentage to Bishop's Pawn X S-12, red sdng.

A DISCUSSION OF SEVERAL (Too Many) DISEASES OF  
SIBERIAN IRISES

1: Sclerotinia cinerea and Sclerotinia convoluta  
in Siberian Irises.

By Jennifer Hewitt

Growing quite a large number of Siberian irises, I have unhappily found in recent years that botrytis, or grey mould (Sclerotinia cinerea) has become a recurring problem that must be watched for and dealt with as soon as it is seen. Spraying with a systemic fungicide at regular intervals (I try to vary the product used so as to guard against resistance to any one) is, fortunately, effective. I have also found that in some plantings a ground cover of other perennials can apparently help.

In June 1985, I noticed that some plants failed to respond after being sprayed with a fungicide and proceeded inexorably to die in spite of further applications. To the best of my recollection these were, FANNY HEIDT, "DENKEWITZ RED SEEDLING", IRA WOOD and CLEETON STARBURST. All were growing in the same bed, which measures about 7 x 5 yards and contains about 150 plants, two were growing next to each other and the other two were at least 9 feet away and at least 6 feet from each other. Most of the remaining 150 and many others in the garden remained unaffected. The Denkewitz seedling was the first to be affected and die and, when the others showed the same lack of response to the fungicide, I took off pieces which did not then show symptoms and moved them to ground which had not previously had irises of any kind in it, or potted them up in sterilised commercial compost -- but to no avail. When I dug up the dead or dying plants the leaf remains were quite firmly attached to the rhizome and a dark brown in colour when quite dead. The rhizomes were hard, and the roots had vanished except for a few remaining strands of tissue.

A few weeks later (August 1985), three more plants began to show the same symptoms: RUFFLED VELVET and BUTTER AND SUGAR, which were growing in the same bed, but about 12 feet from the nearest affected plant, and a 40-chromosome hybrid seedling at least 60 feet away in another part of the garden.

I began to fear that whatever it was that was attacking these plants would not only kill them, but possibly all my Siberians and I turned for help to Cy Bartlett (irisarian and Vice-Principal of the



Somerset College of Agriculture and Horticulture) who could, I knew, either identify the mystery killer himself or get help from his group of plant pathologists.

He asked me to send parts of the affected plants to him as he could not identify the problem from my description, and suggested that as an interim treatment I should dig the plants up, wash the healthiest parts in a weak solution of Jeyes' Fluid (A common general and garden disinfectant in the UK) and replant them in clean ground if possible; if they had to be returned to their former sites, I could try disinfecting the soil by drenching it with more of the solution. However, I did have space elsewhere, and after washing all the soil from the roots and immersing the entire plant in the disinfectant, planted BUTTER AND SUGAR and RUFFLED VELVET in another bed. These plants have survived and flowered, but have never, to my mind, seemed as strong as formerly. This time I observed the plants more carefully and saw that the leaves began by going yellow and then light brown, as with Sclerotinia cinerea, but had a drier look to them and quite quickly became a dark smoky purple-brown, a colour I have not seen on botrytis affected plants. The outer leaves of the fan show symptoms first, colouring from the tip downwards. Also I believe they did not collapse as rapidly as with botrytis and fall away from the rhizomes, but stayed more or less upright until they curled down when almost dead. The roots were clearly dead or dying, generally rotting away completely without any remnants remaining attached to the rhizome.

The lab report that Cy obtained on the first batch of material stated that botrytis rot (Sclerotinia cinerea), had been found and this was the sole cause of death. As neither he nor I felt this could be true, I provided further infected material of BUTTER AND SUGAR. This time the pathologist found a secondary infection which was identified as Sclerotinia convoluta and suggested that the plants had first been weakened by S. cinerea, making them vulnerable to the second infection. Whilst S. cinerea is found in all soils and situations and attacks many types of plants, S. convoluta is a more specific pathogen which, though normally present in soil, does not always attack plants, especially if they are in good health. When it does attack Siberians, it is clear that it is the roots and rhizomes which are attacked rather than the leaves, whose death is a symptom of the other deaths below ground. No treatment could be

suggested other than what Cy had already proposed, but as has been related, this had proved at least to "cure" the plants. Since that time, other (not too precious) Siberians have been planted on the sites of the lost ones after drenching the area with disinfectant once the sick plants had been removed, and no further trouble has occurred. I have not so far (touch wood), seen Sclerotina convoluta again and whilst any recurrence would give me chance to make more observations and notes, I am quite happy to miss the opportunity!

### Editor's Note

Unhappily, in a letter received a month ago, Jennifer told us that this un-named disease again caused some scattered losses in her iris beds in the summer of 1988. Jennifer stressed that she did not think that the disease she attributes to S. convoluta is the same as "scorch" (about which see below).

There are the seeds of confusion in the information from Jennifer. In the USA, botrytis rot, which attacks the leafbase from the outside in, particularly in cooler weather, has been attributed to attack by Botrytis (=Sclerotina) convoluta e.g. see The World of Irises (Warburton and Hamblen p. 339) and Siberian Irises (McEwen; p. 39). In Jennifer's letter it has been attributed to S. cinerea in the UK, and S. convoluta is designated as the causative agent of the second rhizome disease she describes. Whether these agents cause different responses in the two countries is not clear, and perhaps we are dealing with different diseases that just sound the same when described, but we do need a more detailed study of the pathology of these diseases. At least, all are agreed (we hope) on the symptoms of botrytis rot and the fact that it responds to several systemic fungicides such as Benlate.

### 2: Scorch -in TB's and in Siberians

Bob Hollingworth

The question of what causes "scorch" in TB's has for a long time been obscure although the symptoms are familiar to many iris growers. Leaves die back from the tip with the newer leaves affected first and eventually turning a rusty-red color. The roots are lost, but often the dried outer covering and

central conducting strand remain attached to the rhizome. The soil in which affected rhizomes have been growing does not seem to be "infectious" and new rhizomes can be planted where old ones have been lost without increasing the risk of getting scorch. Although scorch has caused some extensive losses of TB's in the plains states of the USA, it is often thought to be a "spotty" disease that does not show a focus of infected plants in one region of a bed and which may be very sporadic in its distribution within a garden.

Until very recently, no causative organism has been plausibly identified with this disease in the case of TBs, despite repeated attempts. However, in the last year Dr. Richard Sjolund at the University of Iowa has developed strong evidence that the infectious agent underlying scorch is a mycoplasma-like organism (MLO). Such MLOs are bacteria-like organisms with a soft cell wall which reproduce in the conductive tissues of the roots, blocking them and thus preventing water reaching the leaves. As the leaves die from desiccation, the roots are no longer fed by photosynthesis products and they too die. The MLOs cannot long survive outside the plant and are not invasive. They are almost certainly transferred from plant to plant by sucking insects, particularly leaf hoppers. The involvement of MLOs in scorch would explain both the symptoms seen and, since these organisms do not live outside the plant, why the local environment around the plant is not infectious. The spotty distribution of the disease could also be related to the need for an insect to pick up the disease from one plant and transfer it to another. Finally, fungicides and non-systemic bactericides would not be effective in controlling the MLOs causing the disease.

Diseases caused by MLO's have been implicated in a number of serious plant diseases in the past e.g. decline of palm trees in tropical regions and stone fruit decline in the USA.

Scorch-like symptoms have been seen in Siberian irises e.g. Currier McEwen discusses this in his book "Siberian Irises". We do not yet know whether this disease is identical to scorch in TBs or whether it is caused by MLOs, but the chances are good on both counts. On the other hand "scorch" may be a generic name for several diseases that prevent water reaching the leaves and thus desiccate them.

In discussing "scorch" in Siberians in the past, it has generally been described as a very occasional problem in which only one or two widely scattered irises in large plantings might be

affected. Currier McEwen has mentioned losing three or four plants in several thousand to this condition. But, it may be that at times scorch can be more devastating in its effects. The following is an excerpt from a Robin letter I wrote in 1985:

"We have struggled with a severe disease problem in two of our seedling beds, but without much success. Consequently we have lost many seedlings. The affected irises started growth well early in the year and nothing appeared amiss until the new shoots reached 6-12 inches. Then, one at a time, fans lost condition, withered from the tips and eventually turned a characteristic red-brown color. Quite often for a while a plant would have several apparently healthy fans and several that were diseased. Further inspection showed that these unhealthy fans had lost their roots to a soft rot. Subsequently the roots dried out to leave only a central fibrous core surrounded by the outer covering of the original root. The rot seems to penetrate from the root up into the base of the affected shoots, and a brownish rot is evident that starts in the center of the shoot and works its way outwards to the surface to give a shrunk and darkened look at the base of the fan later in its progression. Thus the visible parts of the shoot base seem healthy, but if the fan is removed early, just as the leaf tip loses its shiny, green appearance, the hidden inner parts of the shoot can be seen to be browned and shrivelled. There was no consistent odor associated with this effect on the leaf base. This is quite different from the disease we have termed botrytis because botrytis clearly invades from the outside of the leaf base and works its way inwards. The outer leaves in the fan thus die before the inner ones are badly affected, the reverse of our "new" disease. Also botrytis tends to be a cool weather disease and slows down as the weather warms into the 80's. The warmer days are when the new disease is most evident. Benlate is very effective in controlling botrytis, but it has no effect on the second disease. Nor has anything else been effective (and this includes a variety of fungicides including soil fungicides such as PCNB (Terraclor), and the bactericide, streptomycin)."

The irises were later removed from this "death" bed, it was left for a year and some new soil added to raise it. Irises replanted in it grew very well and we saw no further signs of this disease. Originally this problem was attributed to crown rot

(Sclerotium rolfsii; Spring 1985 issue of TSI), but the symptoms and lack of effectiveness of fungicides in controlling it sound very scorch-like. Perhaps the crown rot organism was a secondary pathogen invading some plants already weakened by scorch. We can't be sure we experienced was scorch at work, but it cost us most of our seedlings (about 1,000) from the 1983 and 1984 years! Presumably, if Siberians are generally susceptible to MLOs, a combination of a good population of insect vectors and a build up in the inoculum of MLOs in a bed crowded with irises could lead to an epidemic and major losses.

It is interesting to ponder the possible vector of this disease, the leafhopper (Cicadellid). They are a common insect but I cannot ever recollect seeing one on a Siberian iris. They may not commonly feed on this plant and this may account for the relative rarity of the disease. Also, one of our entomologists at Michigan State University in studying stone fruit decline in orchards which is transmitted by leafhoppers, observed that they mainly feed on these trees in the late evening and are not likely to be seen feeding in daylight hours when they are hidden in the undergrowth in the orchard. Could the same be true of irises? A Systemic insecticide such as Cygon may be one answer to interrupting the transmission of MLOs, if such is occurring.

If there is no easy cure known for MLOs once they are in the Siberian plant, there are some excellent modern tools available for detecting them, including electron microscopy to see the organisms in the tissues of the plant and very sensitive diagnostic methods that can locate the MLO-specific nucleic acids either in the insect vector or in the plant tissues. I hope that this summer we will be able to use these methods to investigate whether MLO's do cause scorch in Siberians. One very useful contribution members could make would be to send any plants suspected to be suffering from scorch to me for this analysis.

We need to know much more about what is going on with these several diseases of Siberians. We need careful descriptions of the pathology and development of any diseases you see in your irises, and the efficacy of any treatments you try. Infected plants should be sent to a competent plant pathologist for diagnosis at as early a point in the infection as possible and with due attention to the real possibility of confusing secondary infections. Then let your Editor know the results.

## NEW MEMBERS

We are delighted to welcome the following members who have joined us since the last printing of our membership list.

Adams Patricia, W. 2741 Heroy Av. Spokane WA 99205  
Apsher Alvin /Joella Rt 5, Box 386, Rolla MO 65401  
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Growing Place Flower Farm, 25 W 471, Plank Rd. Naperville IL 60540  
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 Phillips Ellen/Robert, 621 15th Av Bethlehem PA 18018  
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 Regan Francis M. Box 118 Fish's Eddy NY 13774  
 Richards Marjorie, P.O Box 26, Donaldson IN 46513  
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 Shaefer, Tom & Alice, 27 Waverly Ave Newton MA 02158  
 Sheridan Nurseries, Rt. 4, Georgetown Ontario L7G 4S7 Canada  
 Shook M/Ms James W. 3987 Lincoln Lake Rd Lowell MI 49331  
 Spaugh Beth, 810 B St. Lincoln NE 68502  
 Stedman M/Ms Herman, Rt 1 Box 213, Rolla MO 65401

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 28211  
 Stoneburner Dennis, 2114 Avenel Av Roanoke VA 24015  
 Takach Andrea, 81 Oak St. Oakland ME 04963  
 Timmer Wilmer, 2121 Britton Ct. SE Grand Rapids MI  
 49506  
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 Belgium  
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 Walczak Virginia, 7531 Pine St. Manassas, VA 22111  
 Waldron Barbara, P.O Box 751, Hinsdale NH 03451  
 Warrell Mrs. Howard E. 5846 Beecher Rd SW Granville  
 OH 43023  
 Weaver Wendy A. 6009 Forest Rd. Cheverly MD 20785  
 Whitfield Hettie, 1510 41st. Lubbock TX 79412  
 White, M/M John W. RFD 2, Box 980 Auburn, ME 04210  
 Williams Ron, 2310 Elmwood Rd. Green Bay WI 54313  
 Wong Vicki, 7181 Hazelton St. Powell River,  
 British Columbia V8A 1P9 Canada  
 Wulf Opal, 7172 So 70th Lincoln NE 68516  
 Wussow Mary, 521 W 2nd St. Hastings MN 55033  
 Zellmer Lucille, RR 1 Box 128 Kingsley IA 51106

We apologise for any delay experienced by new  
 members in receiving their copy of TSI. There has  
 been a hold up, due to illness, in the forwarding  
 of memberships from AIS to our treasurer.

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IN MEMORIUM: MRS. MATTIE A. REINHARDT

Mrs. Reinhardt died at the age of 92 on Jan 29th  
 1989. She and her late husband Robert were very  
 active in AIS and the Wisconsin Iris Society in  
 times past.

Robert used his artistic talents to produce  
 beautiful life-sized wood carvings of irises and  
 daylilies, which on Mattie's death are to be  
 donated to the National Woodcarver's Museum in  
 Mountain, Colorado, just north of Colorado Springs.

The Reinhardts maintained a large iris garden in  
 New Berlin, Wisconsin, and were listed in TSI in  
 1973 as a commercial source of Siberian irises.  
 Mattie registered and introduced three Siberian  
 irises: FOND REVELATION (1976), LIGHTNING (1973).  
 and MYSTIC BLUE (1973)

Howard Brookins



# **TREASURER'S REPORT 1989**

**SUBMITTED BY GUNTHER STARK**

On hand checking account.....2263.19

## **INCOME**

Dues	1028.00
Book sales	713.61
Advertising Revenue	35.00
Misc. sales	69.00
N.E Apogen Soc.	100.00
King Co. Iris Soc.	100.00
Interest	334.63

Total income.....2380.24

**4643.43**

## **EXPENSES**

Printing, 2 bulletins	1146.73
Postage	60.21
Officer expenses	50.47
Book shipping	38.21
label expense	29.09
Envelopes	15.60
Purchase Cert. of deposit	1000.00
Deposit box rent	5.00
Check list printing	926.88

Total expenses.....3272.19

On hand Checking Account.....1371.24

**4643.43**

On hand (Certificates of Deposit) 7000.00

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## **PUBLICATIONS**

All back issues are \$1.50 each if available. We no longer have copies of some of the early issues. Judging Standards should be ordered from the AIS. Checks for all publications, payable to the Society for Siberian Irises, should accompany orders. Send to the Publication Office, c/o Mrs. Ruth Wilder, 802, Camellia Rd., Anderson SC 29621.



## ASK THE EXPERT:

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Q: May I ask if Cygon 2E is the same as Cygon. I cannot find 2E and was told it had been discontinued and that I should buy Cygon which has the same formula.

Dorothy Hamilton  
Beverly Farms, MA.

A: The name Cygon is the general trade name of the chemical whatever form it comes in. Cygon 2E is a specific formulation of Cygon which contains 2 lbs. of insecticide/gallon of liquid as an emulsifiable concentrate. The strength of this formulation is 23%. Typically this is used for borer control at about 1 Tbs/gallon formulation of spray.

If you find another formulation you can adjust the amount of material to give the same concentration in the final spray. For example: A 12% formulation, if such existed, would need  $\frac{23\% \times 1\text{Tbs}}{12\%}$

which is about 2Tbs/gal.

Cygon 2E is still available in our part of the country, but the availability of pesticides to the homeowner is likely to decrease in coming years - let's hope Cygon isn't one of the products to which we loose access.

Bob Hollingworth

This question and the one in the last issue were answered by my in-house expert but we have a wealth of expertise within our society and will find someone to answer any questions you might have on Siberians.

Ed.

---

## PUBLICITY IN REVIEW FOR 1988

AINIE BUSSE, Publicity Chairman

### FEBRUARY

The Upper Midwest Region of the Perennial Plant Assoc. hosted a conference on perennials in Bloomington MN for 250 persons. "Perennials, an Imaginative Perspective" was the title of my presentation. Siberian irises were featured in slides showing them as companion plants along the driveway and walkway to homes; as a transition between a rock wall and the lawn at Case Estates, Boston MA; as a specimen plant next to a backyard pool; and used in containers for apartment dwellers.

A similar talk was given at the Green Bay Botanical Gardens, but with the addition of slides showing the wide range of colors available in Siberian Irises on the market today.

### MARCH

The University of Minnesota Technical Institute at Waseca, MN. invited me to be horticulturist-in-residence for three days. I had an opportunity to show slides of the color range of Siberians; how they are divided and planted; their use in landscaping; the use of the pods in the dried flower market; and how we market them through our mail-order catalog.

The Detroit Lakes Vocational-Technical School asked for a presentation on perennial plants for the dried flower market. Among the plants recommended were Siberian irises for their pods. The same talk was given that evening at the Fergus Falls High School for growers in that area.

### JUNE

The University of Minnesota Landscape Arboretum with the Minnesota Nursery Assoc. offered an all-day seminar on perennials. My presentation, "Perennials in the Landscape", included slides of Siberians as specimen plants in the landscape; used in a naturalizing mixture to form a transition from field to garden; and as companion plants with peonies, daylilies, and other perennials.

### AUGUST

A copy of the SSI brochure was included in the packet distributed to 450 registrants at the Perennial Plant Assoc. symposium in Portland, OR. Roy Davidson, Bellevue, WA and Panayoti Kelaidis, Denver Botanical Gardens were both speakers and featured Siberians in their talks. The book

"Siberian Irises" was sold at the book table.

A copy of the SSI brochure was included in all Fall '88 shipments sent from Busse Gardens and given to all participants in the above mentioned conferences. Copies were also left at The University of Minnesota Landscape Arboretum to be available for registrants attending other programs during the year, and for visitors to the arboretum.



## *the last word*

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The news about I. typhifolia is really exciting! If it is indeed a distinct third species in the 28 chromosome Sibiricae group it may well prove to be a significant addition to the Siberian gene pool. We hope that Eckard Berlin will keep us informed about whether it crosses with the current sanguinea and sibirica types. If it does, then we may have exciting new hybrids for the garden (hopefully fertile ones).

I was particularly interested in the description of the foliage (could it really be only 2mm (1/12") wide?). I first checked a dictionary of plant names and found Typhaceae; aquatic or bog-garden perennial herbs - Reedmace. I then headed off to the Library and located the original article in the 1934 Botanical Magazine of Tokyo. Kitagawa's description of the foliage says "It is very distinct from other species in the genus by having slender twisted leaves which show the outlook of reedmace".

Bingo! confirmation of the narrowness of its leaves and the origin of the name.

You may have noted in the typhyfolia article that in the botanical description the height of the foliage is recorded at the flowering and fruiting stages. I think this is something we could usefully incorporate into our descriptions of Siberian irises. It could be very useful information in landscape and border planning since plants often grow on to a very different height from that measured at blooming time.

# COMMERCIAL DIRECTORY OF SIBERIAN IRISES

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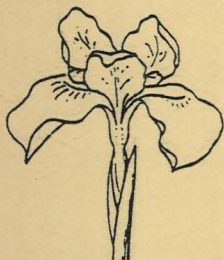
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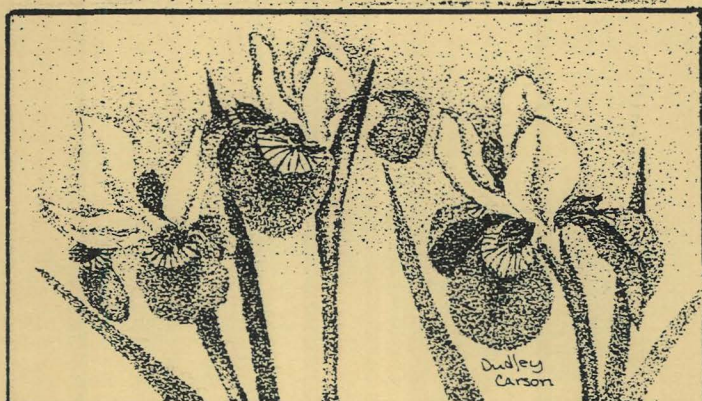
This source list will be printed in each spring issue of TSI at a cost of \$5.00 per listing per year. Gardens advertising between now and the next printing of SSI's "Invitation to Join" brochure will be listed as a Siberian source when the next brochure is printed.

**SIBERIAN IRISES ..... Postpaid \$7.00**



By Currier McEwen; illustrated with color plates, drawings and monochrome; includes glossary of terms; prepared with help from committee of advisors and contributors from The Society for Siberian Irises. Proceeds from sale of books will be used to support the work of SSI.

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