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The Siberian Iris

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The
Society for Siberian Irises

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Nov 1965

C O N T E N T S

Volume 2, Number 2 November 1965

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MEMBERSHIP REQUIREMENTS

All members of this Society residing in the United States and Canada shall be members of the American Iris Society. Dues shall be $1.00 per year.

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THE PRESIDENT'S PAGE
Peg Edwards

Well, kiddies, with this number I bow out. (No, no, dear, NOT AS CO-EDITOR!) It has been very interesting, there has been a lot of fun in this job; but I have to cut down somewhere for one thing, and for another it is high time we had a change of management around here. I have enjoyed corresponding with many of you, though sometimes my letters have been very slow in getting into your mailboxes; I've been helped in many ways by your suggestions, comments, proposals, and particularly by the encouragement you have been so generous with. I'm sure you will be as helpful to my successor.

I would particularly like to thank the officers and members of the Board who have been so generous with their limited time; it really is true that the busiest people seem to have the most time to help. To Sarah Tiffney, who really started the whole thing - our first Vice President; - to Charlotte Withers, first as Secretary and then as Vice President - my sine qua non: 'without whom nothing'-literally; if it hadn't been for Charlotte and her trusty typewriter I suspect we'd have been down the drain long ago. Bill McGarvey, a good man with a budget - he knows when to be fast with a buck and when to hang on tight to every penny; to Mildred Johnson, who took over the Secretary's job so smoothly and skillfully; to our Board - Bee Warburton, Peggy Burke Grey, Ben Hager - busy, busy people but always available when advice was needed; and to our many Committee members who went about the business of doing their jobs, without the need for long detailed instructions on every little point (unlike some committees I've tangled with!) To all of these my heartfelt gratitude. And if this sounds like the standard preliminaries to someone giving someone else a gold watch and a handshake - well, it isn't! This I mean - every word of it and so much more that I can't say.

I know that my successor will receive your support just as generously as I have; and I pledge mine too. I hope I can be a real help to the President, the Board and the Membership in my new job as Past President and Chairman of the Finance Committee, and I hope to be able to serve, for many more years, the Society for Siberian Irises.

And now, hooray, I can 'sit in the back row and heckle' to quote someone who was retiring from another presidency.

Now for a little 'Editor' business. I would like to call your attention particularly to last year's registrations - to the colors that are showing up; and also to the notice about the 1969 Convention in Milwaukee, if you have anything that might be shown there-seedling or fairly new variety. This latter is particularly important to us as Conventions are one place where we have the advantage over most of the 'other than TB' groups, in that our plants show off at the right time to catch the eye of the TB addicts and judges.

And please, how about notes, comments, articles for future issues?

Congratulations to Fred Cassebeer on his second Morgan Award, for Violet Flare!

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SIBIRICAS AT NELSON, NEW ZEALAND

Lucy Delaney

I have had this article on my conscience for a long time, so after ploughing through various bulletins, newsletters, letters, papers and rubbish, I have found the way to my desk and here we go.

I promised to write an article on sibiricas in New Zealand at least once a year. Now I could write plenty (too much perhaps) about the behaviour of the Dwarfs and Medians and the way they flowered last spring, but Sibiricas - NO. They looked well and still do. I had made a [illegible]ed for them too, but flower - they just didn't. I particularly wanted to see my Eric the Red seedlings with the idea that one, a red and white was to be named WAIMEA - the name of the local Rugby Club whose colours are red and white. Not ONE of those red or pink seedlings flowered, though two rather pretty lavender blues did, not very enthusiastically AND down in the foliage. I think the reason must have been shifting them in May - late autumn here.

Only one seedling flowered, that is the new ones - and that was really something. It was from chrysographes and its standards were deep orchid purple at the base shading to orchid lavender at the tip and were narrow and ruffled. The falls were deep orchid with a rich red purple spot and the styles were deep fuchsia with a red black ridge. Two small gold spots on each fall provided a contrast, and it was 12 inches in height.

A pretty ruffled bright blue opened and I thought, 'this is IT', but after one day the falls had dropped right back against the stem. Another bright blue from an earlier batch of seedlings, I am watching next year.

A visitor very excitedly told me I had a PLICATA - nothing doing. It was only speckled with dust I'd been using for aphis. That same visitor couldn't see a real plicata appearing in some Standard Dwarf seedlings from Knotty Pine x Brassie, though that wasn't surprising, as I must admit that she had on MY bifocals because she didn't have her own glasses with her. I don't think she had ever tried bifocals before either!

However, next season is not really so very far away now and I have some very healthy looking seedlings and surely some must flower this time. Dorothy Spofford and Maurice Kitton have both sent seed to me and it has germinated exceptionally well, and these I will have to look forward to in 1966.

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1. Advertising: Rates are - full page, $24.00; half page, $12.00; quarter page, $6.00; smaller ads $1.50 per column - inch (column is half the width of the page). We will accept no ads for swapping plants; these are strictly for commercial ads. AIS has ruled that advertising in The Siberian Iris does not constitute advertising for the purpose of introduction under the requirements of the Awards Committee; but this is a very good place to alert potential buyers of Siberian irises, and since we are frequently asked for sources of Siberians, especially in particular areas, an advertisement in these pages would put the advertiser on our list of sources.

2. Finances: Dues just about cover the cost of issuing this publication and the secretary's postage bill; officers and Board members have been paying for their own stationery and postage. We do not want to raise dues unless we find we have no other option, but we must find some source of funds. For this reason we are offering two additional classes of memberships: Family memberships at $1.50 a year, with one copy of The Siberian Iris to the family (if Mama and Papa each want a separate copy they can still have separate memberships at $1.00 each); and Sustaining Memberships at $5.00 a year for those generous souls who want to help out on our tight budget. We also hope that sale of ads will provide some additional income. We still have a debt to pay in connection with the Judging Handbook and we are looking forward to putting out a Check List.

3. Judging Handbook: The price of this has been set at 75¢ a copy; quantity prices are available on request. The question has been raised, understandably, of whether it is worth while getting ours in view of the new AIS Handbook being available. The information on judging Siberians in the AIS Handbook is basic; it covers what is essential for a judge to learn; but it necessarily cannot cover the subject in great detail, since the judging of so many kinds of irises had to be covered in a limited space. So we believe that our Handbook will still be useful to anyone, judge or not, who wants to learn how to select a really good Siberian.

4. AIS Collection of All Dues: This seems to be a real help. The cards sent with dues notices, listing Section memberships, seems to have brought us - and from what we hear, other Sections - quite a few new members, and it has considerably simplified collection of dues, for our Secretary and Treasurer. They will still, of course, have to send notices to members who have Triennial or Life Memberships in AIS. Our memberships have been adjusted to the semi-annual dues collection by AIS and no member will 'go short' a copy of The Siberian Iris because of this.

5. Photographs of Siberians: We need a file of good black-and-white and color photographs of Siberians available to fill requests from the Bulletin, other garden magazines, etc. We have had several requests for pictures to use in illustrating articles or news stories about our irises. For this reason we are appealing to members to take photographs (not slides) to send us duplicates of any good pictures they get, of individual flowers, clumps, or pictures of Siberians in the garden landscape. Naturally, we still want slides, color preferred, of the same range of subjects, for our slide set.

Peg Edwards

Notice: About color slides, Mr. Schreiner tells me that he has a place where he can have color slides copied with very good results and no damage to the original; if you have slides of Siberians you don't want to part with but that are good enough for the AIS slide sets why not write him about the possibility of having them copied? Mr. Robert Schreiner, Rte 2, Box 301, Salem, Oregon, 97303, will reach him.

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EXCERPTS FROM LETTERS

Mr. Francis Brenner, Route 1, Box 14, Dakota, Illinois, 61018, solicits good Siberian seedlings to help the Milwaukee Iris Club for their display bed of Siberians for 1969 AIS Convention. He also states 'We want any newly introduced Siberian - that is, in the last 10 years!'

Kathryn Chambers of Pennsylvania, comments on the variance of blooming time of Siberians throughout the country - 'Here the Siberians only begin as the TB's are over June 1st, while in Connecticut at Eleanor Westmeyer's both bloomed together, when I was there three years ago.'

The following report was requested by Kathryn from the members - to recommend five of the best Siberians as follows:

1. Color - plain or patterned
2. Size of standards
3. Size of falls
4. How many branches
5. Height
6. Hardiness

This seemed like a very good way to gain the opinion of others, and at the same time learn more about Siberians.

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VARIETAL COMMENTS

BRYCE PHENIS: (Central California) Most things bloomed short this year, but with good flowers.

White Swirl was outstanding, producing about six stalks on a one-year plant. Certainly the best white Siberian with its lilting form. About half of the crosses I made with it set pods.

Blue Brilliant is another of Cassebeer's fine line. Well named as it is a very bright shade of medium blue.

Eric the Red was very nice and failed to show any of the difficulty in growth that has been reported. In my opinion much more red than any tall bearded 'red'.

Two of its children, Beth Ellen and Dark Marine, were among the best Siberians to bloom. Beth Ellen is an excellent shade of blue violet and Dark Marine is a slightly darker shade of the same color. Both have the same form as Eric and the color is patterned the same. Falls flare more than their parent.

Pirouette bloomed freely and is quite interesting with its lighter blue style arms. These lighter styles were also noted on Perry's Blue.

BEN HAGER: (Central California) Haven't a thing to say: Maybe it could be laid to the fact that the Siberians were bad this year. Sometimes they like us - sometimes they don't. You breeders please base your work on such things as Caesar's Brother, In spite of only two buds (which seems to carry through; Tealwood) Velvet Night and My Love are a couple of others which nothing can kill.

MRS. JOE BERGIN: (Texas) One of the really good performers is Caesar's Brother.

PEG EDWARDS: (Southern New York) Perry's Blue although slightly smaller than My Love has a more smoothly rounded white area on falls and also tends to branch. Vigorous.

Fairy Dawn, pale lilac pink falls, white standards and styles, is small, dainty, branched: falls tend to twist - rather interesting characteristic.

Summer Sky - 7.5 PB (purple-blue), 7/7 intensity, standards and falls, on Nickerson color fan; white styles; terminal and one branch, 3-4 buds. Flaring falls, upright standards; falls have small blades, standards are oval and slightly pointed. Very vigorous grower and takes moving better than almost any other Siberian.

Blue Brilliant - a slightly slow starter but takes hold fast and does well here. Color 10 PB 4/10, veined 3/10 (slightly darker), styles 10 PB 6/8; terminal and sometimes a branch; wide round falls, wide oval standards, fairly large flower.

Mrs. Rowe - slow to start but then increases quite fast. Three buds in terminal and taller stems are branched for a total of 5 buds. Height varied from 19 to 29 inches. 2.5 P 6/7, a medium-light violet but gives a pale effect with white styles and white area on falls. Falls round, small; standards round-oval.

Ann Stahlman - flower very similar in size and shape to Mrs. Rowe; standards a little narrower. 18-20" tall. Color 10 PB 6/8 veined 7.5 PB 6/9; white blaze on falls; white style marked 7.5 PB 6/9. Moderate increaser.

Mildred Stahlman - has terminal with 2 buds and a branch with one bud. 26" tall, pleasing shape, color 10 PB 5/9 with styles in lighter tint, 10 PB 7/6; white blaze on fall. Grows very well here, a nice attractive clump of pleasant medium violet.

Tunkhannock - a large white with thin, crepy texture, no branching, two buds. 27-30" tall, with a fair shape--one intriguing touch is that the falls curl into a heart shape. Though it looks so frail, it stands up to weather pretty well; a moderate increaser.

Yankee Trader - heavily veined falls, two buds in the terminal with one or even two side branches with a bud apiece. The shape is attractive, fairly large flower, 29-33" tall. The veining is 10 PB 4/10, a fairly dark blue-violet, on creamy white ground; standards and styles solid color slightly darker blue-violet. You either love this or hate it, I guess. The old variety Grandis is similar and I like the color better as the veining seems crisper and less blurred; on the other hand this is a much better doer, and with the tendency toward two branches, could be a very good parent.

Royal Ensign - three buds to the socket (terminal, no branches here); short shanked round falls, short oval standards - 10 P 4/10, a strong reddish purple, with white blaze veined 10 PB 4/10, a blue-violet; in sunlight it gives the effect of red-white-and blue. Very colorful and quite a good grower.

Velvet Night - considering that this was my own registration I haven't seen much of it; it has had quite a kicking around here. But this year I saw it not only in my own garden where the color impressed me all over again, but also at Cassebeer's where it has had much better care! - and made a handsome clump. I suspect it needs a richer soil than my plants get, or perhaps more steady moisture in spring. In both places it was a fine rich dark violet, almost black, velvety and smooth. Dagnab, I'm proud of the kid! (Pardon the brag)

Saw a number of Siberians at Memphis this spring, and all seemed to be doing quite well despite the dry weather they had had. Unfortunately neither Manday Morse nor Tealwood was blooming at the time I was in the gardens where they were growing; and I only had a glimpse of possibilities in Bob Carney's Siberian seedling (not numbered) as it had folded up shortly before I got there; but Our Bob carefully untwisted the flower to give me an idea what it was like. I would say it might be a slightly larger Summer Sky; judging by the clump it is a good grower, and I will be interested to hear more about it.

Dr. McGarvey sent me some seedlings to inspect; two bloomed. One, LgB, is a fairly big, shapely flower in a pleasant shade of violet (2.5 P 5/9) with veining on the fall and style midrib in a somewhat more reddish violet. But it was slow taking hold here and the veining on the falls is not clear and crisp. Another seedling, from White Swirl,

was a delightful color of medium blue with slight violet cast and a flower shape like White Swirl. On a first-year plant, together with the drought we have been undergoing, even one bloom was more than I would expect, and I'll be watching this one next spring.

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TREASURER'S REPORT
Dr. Wm. McGarvey

May 13, 1965	Balance		$173.23
Deposits:	Standards	7.75	
	Bulletin	.50	
	Dues	56.00	64.25
			237.48
Checks:	Service chgs	1.96	
	C. Withers	25.00	
	W. McGarvey	25.00	51.96
October 11	Balance		$185.52

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Balance for printing of Judging Standards	$200.00
Paid on account October 11th	50.00
Balance still due	$150.00

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DUES FOR SOCIETY FOR SIBERIAN IRISES

This is a short reminder that dues should again be paid by some of our members - BOTH TO AIS AND TO OUR SOCIETY. Remember not to fall behind with American Iris Society dues --- we would hate to lose any of our members because they are delinquent in AIS.

So many letters begin: "I'm not sure whether I have paid my dues this year. . . " so to get the records straight:
YOU LAST PAID YOUR MEMBERSHIP $1.00 2-2-65 Wesley
2.00 5-11-64 (6363864 Mark

You may include your dues to this Society with your AIS payments or directly to Mildred R. Johnson, 2275 Kensington Avenue, Salt Lake City, Utah 84108.

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Please keep your dues payments parallel with AIS payments:
if you pay AIS in January, pay Siberian dues at the same time.
if you pay AIS in June, pay Siberian dues at that time.

TETRAPLOIDY IN SIBERIAN IRISES

Currier McEwen

This is intended as a preliminary report of efforts which I started in 1960 to induce tetraploidy in Siberian irises. Very early that spring I had enjoyed the opportunity of a visit with Mr. Orville Fay in Northbrook, Illinois, during which he had told me of the very interesting and important work which he and Dr. Robert Griesbach were doing to induce tetraploidy in daylilies. Those efforts had been in progress for a number of years without success but finally they had developed a method which worked. Mr. Fay very generously gave me detailed directions for the method and later that year I made some crosses of Siberian and Japanese irises and of daylilies specifically for the purpose of trying my luck with it. This is not the place for a detailed description of the method used nor for a lengthy discussion of tetraploidy, but a brief mention of the latter will, perhaps, be helpful.

During recent years it has been discovered through brilliant scientific studies that heredity in all living forms, both plant and animal, is governed by a complex protein substance called desoxyribonucleic acid or D N A, which is contained in the genes of cells. The genes are so small that they cannot be seen even with a microscope but they lie in ribbon-like structures called chromosomes, which can be seen inside the nuclei of the cells with the aid of a microscope. Alterations in the chemical structure of genes (as by atomic radiation) can lead to fundamental changes, or mutations, in the plant or animal affected. On the other hand, changing the number of chromosomes (and hence, of the genes) does not alter the fundamental nature of the cells, but it does affect their appearance. Doubling the number of chromosomes, for example, doubles the size of each individual cell.

The cells of all plants as they occurred originally in nature probably contained two sets of chromosomes, or were diploid ("two times"). As the ages passed, some underwent spontaneous doubling and became tetraploid ("four times"). This happened, notably, in the case of the tall bearded irises among several species discovered in North Africa years ago and the modern, large-flowered tall bearded have been derived from the efforts of pioneering hybridizers using those tetraploids. In the case of many other plants, however, the tetraploid state has not come about spontaneously; and botanists worked for many years to find methods of inducing tetraploidy artifically because of the fact that the spontaneous tetraploids have almost invariably been superior to the diploids. The most effective method discovered to date involves the use of a drug named colchicine which is obtained from the Autumn Crocus (Colchicum autumnale) and which has been used since the time of Hippocrates for the treatment of gout. The various iris species, except the tall bearded ones, and daylilies are among the flowers which have not spontaneously achieved the tetraploid state.

In March 1961 I used the Fay-Griesbach method to treat freshly sprouted seeds of daylilies and of Siberian and Japanese irises which I had stored in the cold over the winter. The Siberian seeds numbered

about 30 were from a cross of (Tycoon x Eric the Red) x Placid Waters. Of these only four survived treatment and were planted in the garden. One produced a few flowers in 1962 and all bloomed in 1963. Of these four, two appear to be ordinary diploids but the others are chimeras - that is, the plants are partly diploid and partly tetraploid. Each year since 1961 larger numbers of sprouted seeds have been treated, and during the 1965 season approximately 30 plants were identified as either fully tetraploid or chimeral. The latter are of particular interest because they permit direct comparison of the diploid and tetraploid forms of a given seedling.

The characteristics of the tetraploid Siberians can be summarized as follows. The foliage is somewhat thicker but has not been taller than that of the diploid siblings. The scapes are very much stouter and are more stiff but, again, are not taller. Indeed, in several the scapes have been too short, placing the flowers below the top of the foliage. In every chimera the tetraploid flowers have been larger than the diploid ones, but in some pure tetraploids the flowers appear to be little if any larger than those of any good-sized Siberian. The individual reproductive parts of the tetraploid flowers are larger and more sturdy. The anthers, for example, are half again as large as those of diploids, and the ovaries are shorter and much greater in diameter. The substance of the flower segments has invariably been greater, and the form decidedly flaring. In one chimera the stiles of the tetraploid flower are delightfully lacy whereas those of the diploid are smooth. Perhaps the single most noteworthy improvement is a greater richness and purity of color. This is not surprising since each cell has twice the volume of the diploid cells and, presumably, contains double the amount of pigment.

Thus far I have judged tetraploidy on the basis of the size of the individual pollen grains using a microscope with a "yardstick" built into the eye-piece. In studying first generation (that is, induced) tetraploids this is much preferable to counting the number of chromosomes in root tips not only because it is easy and quick but also because a chromosome count in a chimera can be misleading. I have, therefore, reserved the counting of chromosomes for application to seedlings from tetraploid x tetraploid crosses, because in these all cells must be uniformly tetraploid and a count of chromosomes in any cell can be accepted as true of them all. I made my first tetraploid x tetraploid crossed last year but not a single such planned cross produced seeds. A number of "bee pods" were harvested from chimeral plants but I fear these will prove to be diploids rather than tetraploids when they bloom in 1966. During the 1965 season I made many more tetraploid x tetraploid crosses, a few of which have matured seeds. The lack of fertility I have encountered thus far is characteristic of induced tetraploids of all species; however, fertility returns to more normal levels in tetraploids of later generations. Whether I will yet bloom some second generation tetraploids remains to be seen. I am reasonably confident, however, because of the success I have had in this regard with the daylilies with which I have worked on a more extensive scale.

It will be appropriate to end this report with an answer to the question which might very reasonably be asked as to why one should 'meddle with nature' in this way. In fact I do not consider it really in that light because it is merely inducing by artifical means changes which have occurred naturally in the case of many other plants. The gains are potentially of two sorts: one, improvements in the beauty of the flowers and, two, advantages in the field of hybridizing. With regard to the former one need merely cite the experience with tall bearded irises in which the tetraploids now have so preponderently swept the field. One may hope that tetraploidy will lead to similar advances in the Siberians, and the preliminary results to date permit one to expect that this will be the case.

From the standpoint of the hybridizer the potential is even more important because the doubling of the number of chromosomes greatly enhances the possibilities for new characteristics to be developed within a given species. Of still greater potential is the possibility that inter-species crosses may prove feasible and give fertile offspring if the current diploid forms are converted to tetraploids. This would immediately open the way to new colors and forms. At present one can merely speculate about these possibilities but they are enough to encourage further efforts.

CONVENTION IN MILWAUKEE IN 1969

The Milwaukee Convention of the American Iris Society will be able to guarantee irises of many types all blooming on schedule, protected from weather and wind, if plans of the Milwaukee County Park Commission work out well. Mr. Clarence Protzmann, the Convention Chairman, has notified us that part of the plants to be displayed will be exhibited in the new Mitchell Park Conservatory which has three large display domes, plus a smaller dome to serve as receiving area for plants before they go on exhibition. These domes, built of concrete, aluminum and wire-glass, each with its own heating and ventilating system, should be able to provide climate-control that will allow all types of irises to be brought into bloom at the same time.

Mr. Protzmann points out that species which do not have large rhizomes should be particularly good for this display, as they lend themselves to pot culture better than the TBs - all plants are, apparently, to be pot-grown in the reception dome until they are ready to display in one of the three main domes. This is where we come in. Dr. McGarvey has agreed to work with Mr. Protzmann and the Park Commission on this and we hope that by next fall he will have detailed information on how we can cooperate in this very interesting project.

In addition to the Conservatory domes there will be display plantings of irises outdoors in the Park; these are to be donated for permanent planting and display. I hope that our hybridizers

and commercial growers will be generous in helping to establish this planting. The more places people can see your Siberians the more people will want to buy them. If you are concerned about the necessity for having plants inspected, Mr. Protzmann reports that he has reached an agreement with Mr. Arthur Rutz who is head of the Plant Industry Division of the State of Wisconsin, by which growers who do not have the usual commercial license can ship their plants to Mr. Protzmann (at 400 E. Van Norman Ave., Milwaukee, Wis. 53207) and the State agency will send an inspector to examine them as soon as he notifies them that plants have arrived. This should make things much simpler for amateur hybridizers.

I understand that the Spuria Society has already begun shipping plants, and the Botanical Supervisor at the Conservatory, Mr. Howard Brossman, feels that the sooner plants come for the Dome display plantings the more accurately they will be able to time the processes of bringing each plant to bloom at Convention time.

In connection with this and also with other Convention Display Gardens a word about packing and shipping might not be out of place. Commercial growers customarily ship Siberians in the summer and early fall, and for their methods of operation this is necessary. But in the more northerly part of the U. S., and in Canada, it is very possible that the plants might move even better in early spring, say when the foliage is showing above ground but not more than 3-4" tall. This should only be tried if the plants can be washed clean of earth and packed with their roots in damp (not wet) peatmoss or milled sphagnum in a plastic bag, with the foliage outside the bag, in a ventilated container - and shipped by air. I haven't tried shipping under these conditions but I have had reports from others and have had the same experience myself, that plants moved in spring will take hold quickly and even bloom that same season. I wouldn't advise this for plants being sent from the warmer parts of America to colder areas, as they might get too much of a chill in transit! You wouldn't want your little darlings to be frozen? But where normal Siberian bloom season is late May or June it might be worth trying. Check with whoever is to receive the plants to make sure they will be prepared to plant them when they arrive.

If spring shipping is not practicable, ship either soon after blooming or when the worst heat of summer is over; use the same method of packing, cutting back the foliage to 2-4". In any case make sure that the plants have had ample water during the days before you dig and pack them.

If you can ship in spring, you may still have time to get your seedlings and new introductions to the 1967 Convention, at Denver; check with Mr. Joseph O. Riley, 4284 Hooker St., Denver, Colorado, 80211, on whether he will still accept plants in the spring. (See p. 7 of the July Bulletin). And check your Bulletins for information about the 1968 and 1970 Conventions - they should be forthcoming before too long.

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SIBERIAN REGISTRATIONS 1964

BARBARA'S CHOICE (Kitton, 1964) Sdlg. 105. Sibirica subsection hybrid, 36", W2V. S. almost white, violet stitching; F. almost white, faint violet stitching. From two Sibirica subsection sdlgs. CC. BIS.

BLAUER ORIENT (Steiger, 1964) Sibirica, 20", Early, BlM. Medium blue self. Parentage unknown.

CAMBRIDGE (Mrs. L.W. Brummitt, 1964) Sdlg. 27-2. Sibirica, 36", Midseason; Bl. S., turquoise blue; F., same, white and yellow markings at base. White Swirl x Gatineau. Wisley Trial.

CHARM OF FINCHES (Hansford, 1964) Sdlg. C2-63. Sibirica, 26", Midseason, Y2. S., pale gold; F., gold and black markings. F_1 sdlg. x F_2 sdlg. (Sibirica x ?)

COURT WHITE (Kitton, 1964) Sibirica hybrid, Wl. White self. From two Sibirica seedlings.

DREAMING SPIRES (Mrs. L. W. Brummitt, 1964) Sdlg. 19-6. Sibirica, 36", Midseason V3VB. S. lavender; F. deep royal blue. White Swirl x Tycoon.

JAPANESE WHITE (Kitton, 1964) Sibirica hybrid. Wl, White self. From two Sibirica seedlings.

LEOPARD SPOTS (Hansford, 1964) Sdlg. C1-63. Sibirica, 26", Late, Y2. S., pale chrome-yellow; F. medium yellow, black spots. F_1 sdlg. x F_2 sdlg. (Sibirica x ?)

MITSOU (Ziepke, 1964) Sibirica, 34", Early, VlL. Light lavender-pink self. I. sibirica alba x Towanda Redflare.

PUGET POLKA (Mizer-Ruggles, 1964) Sibirica, 24", midseason, B2W. S., light blue, dotted dark blue; F. ivory dotted light blue, light blue style arms, light yellow signal. Parentage unknown.

SEA SHADOWS (Mrs. L. W. Brummitt, 1964) Sdlg. 19-1. Sibirica, 36". Midseason, B3. S., medium blue; F., mixed shades of blue, turquoise style arms. White Swirl x Tycoon.

WHITE CAPE (Kitton, 1964) Sibirica, Wl. White self. From two Sibirica seedlings.

WHITE HORSES (Kitton, 1964) Sibirica; Wl. White self. From two Sibirica seedlings.

WHITE MAGNIFICENCE (Kitton, 1964) Sibirica, Wl. White self. From two Sibirica seedlings.

WHITE RABBIT (Kitton, 1964) Sibirica, Wl. White self. From two Sibirica seedlings.

YELLOW APRICOT (Kitton, 1964) Sdlg. 102. Sibirica subsection hybrid, 30" Y5. S., yellow, suspicion of apricot, slight brown striations; F., yellow, hint of apricot. From two Sibirica subsection seedlings.

TETRAFOR (Steiger, 1964) I. forrestii, 8", Very early, Yl. Yellow self. Colchicine-treated yellow self.

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SOME COMMENTS ON THIS YEAR'S REGISTRATIONS

Peg Edwards

This year we list seventeen new Siberians; only one from America. Three come from Germany, and 13 come from England - from three breeders. Now I wouldn't want to rouse any feelings of ill-will---but cou'dn't we work up a little friendly rivalry here? Or are all our American hybridizers just going through a little lull between the introduction of one generation and the culling out of the next?

Enough of my pathetic moans. Let's consider what this year has brought us. Herr Steiger's TETRAFOR is perhaps the first real break in this area, though Dr. McEwen hopes to have something to report soon about tetraploidy in the 28-chromosome group. I have seen slides of some seedlings of his which had been treated to induce doubling of chromosomes and which looked as though he may have succeeded, but until he has a definite report that they are tetras we won't go into details. But doubled or not, a couple of those seedlings are lovely to look at. If it should prove that he has tetra 56-chromosome seedlings, these could be crossed with Herr Steiger's tetra 80-chromosome TETRAFOR to produce a new line of breeding. These should be fairly fertile when seedlings are crossed among themselves, as the chamaeiris and the 40-chromosome SDBs are in the bearded group. TETRAFOR may prove to be a landmark.

Mr. Kitton's registrations include two from his work with I. delavayi x I.forrestii - Barbara's Choice and Yellow Apricot - both 40-chromosome. Mrs. Hansford has written me that her two introductions, Charm of Finches and Leopard Spots, come from two plants of I.bulleyana, also 40-chromosome; she writes: 'The parents were two rather ordinary looking bulleyanas. Typical as in the Dykes monograph The Genus Iris. One is a slightly paler mauve than the other. I had no other, yellow, irises (other than the wild pseudacorus growing in a nearby meadow) but chrysographes was growing next to them.' It appears faintly possible that some of this pollen might have gotten into the cross. 'The offspring contained some yellow ones, including Leopard Spots. The F_3 (this would pretty well rule out the possibility of pseudacorus being involved) produced Flight of Finches. The row of seedlings each year have been interesting variants of the originals with about one yellow to ten mauves. I have not emasculated them and the bees will not leave them alone. Flight of Finches is in every way equal in vigor to the old Sibirica Heavenly Blue and has two or three branches; the flowers are clean pale yellow with light foliage. The F_4 will be hand

pollinated.' So here we have another source of yellow on a vigorous plant.

To move on to the 28-chromosome registrations: Mr. Kitton's work in breeding whites seems to be paying off, with six new whites.' Mrs. Brummitt's work with White Swirl interests me - those touches of turquoise in two of the registrations reinforce a suspicion of mine that Turquoise Cup is somewhere in the background of White Swirl. Mr. Cassebeer says he did not have Turquoise Cup at the time that the seed from which White Swirl developed was produced, but it is possible, it seems to me, that Turquoise Cup, a 1927 registration, could well have been a parent or grandparent of one of the parents of White Swirl (what a pity we don't know the parentage of this, or so many other Siberians of the last 20 or 30 years!) Turquoise Cup is the only Siberian I am acquainted with which has a form like that of White Swirl (of the older varieties, that is) and it is one of very few older ones that has a real tinge of turquoise. It also has, in my garden, a very similar habit of growth and a similar reluctance to bloom until it is completely settled in! However, this doesn't constitute 'legal evidence'. Merely a hunch. It would be interesting to see what would result from crossing the two.

If Herr Ziepke's Mitsou is really lavender-pink it could be a real addition to the pinks, and with Towanda Redflare this seems quite possible. Herr Steiger's Blauer Orient may be an addition to a potential Median class of Siberians. I am sure we will be very interested to hear more of our lone American registration for this year. Perhaps Miss Mize or Mrs. Ruggles will come forward in our Spring issue to tell us more about the polkadots. Are they a new pattern in Siberians? Or does this perhaps come from the 40-chromosome group, with spots like those of the Mirza seedlings? For that matter, does Mr. Kitton's Barbara's Choice show a new pattern? Stitching? Like plicatas?

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AN ENGLISHMAN'S VIEWS ON IRISES

Some time ago your editors received a nice fat envelope with about ten pages of typed material --HORT ON IRISES -- which proved to be some excerpts from articles by Sir Arthur F. Hort, Bt., V. M. H., as they appeared in MY GARDEN, An Intimate Magazine for Garden Lovers. Edited and Owned by Theo. A. Stephens. These had been compiled by one of our members, Robert Rolland Smith of Pleasant Hill, California. Our thanks to him for the time and labor involved in this compilation. As space permits we will print these excertps for your information and pleasure.

HORT ON IRIS

Volume 1, No. 1, January 1934. Pages 27-31. IRISES ON CHALK SOIL

My modest domain, some two acres, comprises two separate plots, one on a steep slope, in fact a piece of down-land, facing south, which we may call the "hill-garden"; the other flat (except for a bank on one side), converted a few years since from meadow into garden; this we may distinguish as the "valley-garden". It lies in a river valley, being separated only by a field from a bed of "winter-bourne", viz., a chalk-stream which only flows normally from February to June. Hence, as the whole bottom is full of springs, there is always water not far below the surface. In both plots the soil is shallow, a light friable loam resting ultimately on chalk, though in the valley-garden a gravelly stratum intervenes; and many parts of both gardens give colour to the local belief that flints grow spontaneously.

As then the soil in both gardens is more or less strongly impregnated with lime, some groups of irises are out of the question, especially the Kampferi tribe, and I am debarred from growing laevigata, which (unlike Kampferi) is actually aquatic. According to orthodox opinion the Californian section should be excluded also, but I have not found these impossible, provided they had plenty of humus. It may be the lime that has caused my failure with the dainty Japanese gracilipes, and with those charming American dwarfs cristata and its variety lacustric: of this I am not sure. With these exceptions it may be said that no iris requires a lime-free soil, while lime is essential to a large proportion of the genus.

But it does not follow that a chalk sub-soil is the best way of providing lime. In spite of my recollection of Sir Michael Foster's superb iris-garden on a chalk hill near Cambridge, and in spite of the fact that my plants seldom develop the dreaded "rhizome-rot", the bearded section (which are what most people think when irises are mentioned) have not, except in spring, the bright healthy foliage which I see in other gardens.

Every summer they suffer more or less, after flowering, from the disfiguring "leaf-spot", which, though it does not kill the plants, must impair their vigour. Moreover, paradoxical as it may sound, on my hot southerly slope, except in the very driest summers, moss forms

about the rhizomes; this little trouble, however, has much diminished since the ground was thoroughly trenched and the underlying chalk broken up.

The fact is that the chalk acts as a sponge; it retains moisture in a drought (which on the whole is a thing to be thankful for), but it exudes more of it than such droughty souls as the bearded irises require. The moral is that this tribe (which some even now persist in planting in shady or damp ground) can hardly be kept too dry, provided that they get rain when they are making growth, i.e., just before and just after flowering; and that a chalky soil is really not dry enough for their complete happiness. I am convinced that the iris-grower should in general grow irises AS DRY AS HE DARE: of this more anon, it certainly applies to the "beavers" without exception. Apart from the effect of the chalk sponge, the very light soil which one finds with such a sub-soil is not the best medium for some of the tall bearded kinds, expecially those which have in them the blood of the Eastern forms of iris pallida such as cypriana or Ricardi.

Dykes, the author of the great monograph on the genus, held that the best soil for these is of a rather heavy clayey consistence, of course also limy, in fact, a sort of marl. It is, I expect, for this reason that in my present garden I have little success with some hybrids which I raised years ago in a garden the basis of whose soil was London clay. Thus to my annoyance, Ann Page (a grand-daughter of cypriana) the first seedling for which I received the R.H.S.'s Award of Merit, and which I may say has won esteem in two continents, is in my own patch hardly worth growing; and I have discarded several fine things with enormous flowers raised from Ricardi: I am perforce now content to admire them in my friends' gardens.

So much for the "tall bearded", sometime absurdly called "germanicas". The same applies to the dwarf bearded kinds. Most of those usually grown come under the group-names aphyllea and Chamaeiris. The latter mouth-filling appellation covers the dwarfs of many colours to be seen in the South of France. To these or their garden offspring the name pumila is often mis-applied; the true pumila also a name covering a number of local forms (such as attica, bosniaca) belongs to EASTERN Europe and is less amenable to cultivation than its Western allies. I have done little good with it, and Dykes says that it needs a rather rich loam: so here again a chalky garden as such is probably not the best place.

Let it be understood that this disparagement of chalk for bearded irises is only relative: there are many worse soils. I have written in this vein because in my simplicity I once thought that a slope of chalk down facing south was the ideal place for these lime-loving, sun-loving creatures. How after a trial of eleven years, in some of which I have had no cause to grouse about the display of flowers, I have learnt to qualify my optimism. Again, if I had a free choice, I should not now, at all events in a southern county, choose a southerly aspect. If one could be certain that winter was over by (say) the end of March, all

would be well. As it is, a few bright days at that season hurry on the formation of flower-buds, and too often in April, or even May, frosts punish this precocity, and the buds wither and perish: and this may happen even as they emerge from their sheathing leaves.

But there is another side to the picture.

It is when we turn to the two most important "beardless" sections that underlying chalk is seen to have its value. Here too my expectations have not been realized, but the result has been gratifying, not disappointing. When I started, I had only the hill-garden, and, as I could not live without "sibirica" irises or those classed under spuria (spurious" no one knows), viz., aurea, ochroleuca, Monnieri, good forms of spuria itself, and the cross-bred progeny of these, a place had to be found for them somewhere. They were put lower down the slope than their hirsute relatives, but still in a hot, dry bed, devoted otherwise mainly to peonies and delphiniums. And here they have thriven and flowered in a way in which I have never seen them thrive and flower in the boggy or water-side conditions which they are supposed to want. And I can have no doubt that this is because, while their rhizomes get well ripened, their roots suck up moisture from the sponge below. Of course in such a place they do better when they have had a decent allowance of what the Old Testament writers call the "latter" rains, viz., those of early spring. And I should add that in autumn they, like the peonies and delphiniums, receive a good mulch from the refuse pit mixed sometime with old cow manure--treatment which the bearded tribe would strongly resent. Wherefore I say confidently that, though such irises may spread faster under more conventional treatment, they will not produce such an abundance of bloom. So, at least, if your garden lies over chalk, plant them fearlessly in the dry border--and feed them well. Of the two sections concerned the sibiricas are by nature meadow plants, the spurias (except spuria itself) plants of the bog: but then, as I have repeatedly urged elsewhere, an Anatolian or Himalayan bog is probably baked to a brick during part of the year.

Since I added a valley-garden, I have planted all these things there too: and though, as I have said, this probably has underground moisture generally within reach, they do not, to speak roundly, do noticeably better than on the hill. There are however some exceptions: of the sibirica group chrysographs and the two yellow species Wilsonii and Forrestii, certainly prefer the low-lying ground, and so emphatically does delavayi, which indeed hardly reaches its true stature except at the water's edge. And of the spurias I incline to think that the noble canary-yellow Monnieri likes its feet damper than most.

Volume 1, No. 2, February 1934. Pgs 205-209. Article II

A former article considered the reactions to chalk of the three most popular sections of the genus iris--the bearded, tall and dwarf, the spuria group, and the sibirica group. Before turning to certain other members of the clan, we may revert for a moment to the two groups last mentioned. In speaking of the spurias we had in view, besides

spuria itself, chiefly the tall (3-5 ft.) sword-leaved flags, of which ochroleuca is the commonest in our gardens. But a word is due to two humbler allies, both from Southern Europe. Graminea is an old favourite and seems to have no fads as to soil or situation: but many who grow it cannot give it a NAME; I have been very frequently asked to name it. It is unlike any other kind, hiding its modest flowers among the leaves. Its chief charm is its delicious scent, which is just that of ripe plums. (Some forms however are scentless.) When asked to identify this plant from description, I always refer to the scent, and often find that the enquirer has not discovered it: hence the mention of it here. Sintenisii is also rather pretty than showy, making up for its somewhat undistinguished flowers by the profusion of them. Here are two nice irises which are at least indifferent to chalk. One does not want masses of either, but both are pleasing additions to the mixed border.

Let us also glance back at the sibirica section in order to clear up a muddle as to names, which is of some import to the gardener. The species sibirica is European, not Asiatic, and probably got its name from confusion with the nearly allied species orientalis, which IS Siberian. The two are readily distinguished: in orientalis the flower-stem only just tops the leaves, whereas in sibirica it rises some inches above them: also the flowers are larger and the spathes whence they emerge are reddish, whereas in sibirica they are green. Now most of the finest garden forms are hybrids between the two, combining the large flower of the oriental with the stature of the European. An endless variety of pretty things can be raised by sowing some of the abundant seed of the best forms, whether species or hybrids: grown in a nursery-bed the seedlings should flower in two or three years, when the best can be picked out. A lovely Japanese white form or orientalis is called Snow Queen. Emperor is presumably an extra fine (purple) orientalis seedling, which should give good offspring. I have raised from it a white seedling, quite different in effect from Snow Queen, which I call White Admiral.

Let us turn away now from what I have called the three most popular groups of this vast genus to consider some other kinds, for the most part less familiar. The tall bearded group in particular is now enormous, and has in the last few years become so much of a cult that one is apt to ignore the claims of other interesting and worthy kinds. Yet Dykes who, following the great pioneer Sir Michael Foster, did such splendid work on the genus, both literary and practical, was much concerned to promote a more catholic taste. It is noteworthy that in his indispensable HANDBOOK OF GARDEN IRISES only 50 pages out of 239 are devoted to The Pogoniris Section! (Perhaps one should add that this alarming and hideous word is a general term for the bearded irises, the beardless being distinguished, poor things, as Apogons.) So, making a humble effort to support this high authority, let me indicate a few irises which I think ought to be more popular. I will mention only those which my chalky garden will grow, and will dismiss with a caution any whose cultivation present special difficulty, such as the strange and strangely named Oncocyclus and Regelia groups.

There is a small section called the crested, because the beard, instead of lying flat on the fall, rises into a toothed ridge or crest. It includes the two charming American, cristata and lacustris, of which, as I have said, my present garden can give but a poor account. But they are delightful rock-plants, which, given the right conditions, spread into broad mats; and they are easily propagated by pulling off "fingers" with a bit of fibrous root attached. My thirsty soil suits better the oriental members of the group--except indeed the Japanese gracilipes, a woodland plant which I have failed to satisfy. The others are japonica, Wattii, Tectorum, Milesii, of which the last, named from Frank Miles, who used to draw pictures of pretty girls in Mid-Victorian days, is the least valuable, its flowers on a tall stem being rather petty. Japonica is often seen in cool greenhouses: but the hardy form known as Ledger's Variety, thrives and blooms abundantly now in many an English garden, for choice under a south wall. Let me here be a little egotistic: many years ago the late Mr. Walter Ledger on a visit to me produced from his pocket a scrap of rhizome, which he said was an iris from China. I planted it out of doors, and it spread rapidly. I have given it to many and in some of my friends' gardens it makes a patch yards wide. (For all that I know my bit was not the ONLY one Mr. Ledger gave away.) The delicate, fairy-like flowers last only a day, but each branching stem carries literally dozens of them, so that the season, which begins in April, is prolonged to June. Wattii, whose flower is like that of japonica, I have found not hardy enough, though it is fine in warmer places; the flower stems develop in the autumn, which is asking for trouble. I dug up my plants and sent them out to a correspondent in California, where, I understand, Wattii is, as one might expect, a great success.

Tectorum (the iris " of the roofs" because the Japanese grow it in their thatch), is everybodys plant who has a reasonably warm light soil and can give it some shelter from cutting winds. Some forms, presumably of mountain origin, are hardier than others: I have acquired by gift a tall robust variety for which I have discarded others. There is an adorable white form, which comes true from seed: it is distinctly tenderer than the type and I keep it dry in winter with a pane of glass. This species needs pulling to pieces and re-planting now and again. Grown from seed, which generally abounds, it will flower in two years. Colour apart, the roof-iris has an almost unique charm in the marvelous design of the well-balanced flower, a charm which might almost be called "architectural". The crested lot, or such of them as I can grow, are emphatically for the hill-garden, and the driest parts of it.

Then there is a small batch of American swamp irises from the southern states, for which we will decend to the valley. Of these hexagona--which knows me no more--is probably the finest; but, being from rather far south (Florida, etc.,) it is hardly for our climate. According to Dykes' big book (THE GENUS IRIS), it has only once been known to flower in England. In reviewing the book I claimed that I also had practically flowered it, since it once produced in my former garden a flower stem with buds--which a slug, with the unerring flair of his kind for anything unusual, incontinently devoured. This I held

was an accident, for which the plant was not responsible; but Dykes would have none of it. The similar but dwarfer foliosa, being less southern in origin, is quite another story; it is indeed a rampageous grower. Its whim is to hide its flowers among the luxuriant foliage which gives it its name; they are very large, set on a curious short zigzagging stem, and of entrancing colour, soft lavender patched with apple-green. This species moreover is welcome for its late flowering; except for those who grow Kampferi, it closes the summer succession. The third, fulva, is perhaps rather a collector's plant, but it challenges attention by its unique colour, best described as terra-cotta; the flower has a somewhat sad, floppy appearance. Between this and foliosa Dykes raised a remarkable hybrid with coppery-purple flowers, which unluckily lose some of their brilliance in a hot sun. To be egotistic, again, I was with Dykes in his garden when he espied its first flower, and it was rather thrilling. He oddly christened it fulvala (viz., fulva x la, the first syllable of Lemercei, a synonym for foliosa.) Now these three, foliosa, fulva and their descendant, are quite at home in my valley-garden. Though born of the swamps, they should certainly not have bog treatment in England; in fact, the best fulva I have had was grown under a south wall--and occasionally watered. There is an odd thing about fulvala, which I should be glad to see explained: whereas both her parents are completely decidious, she generally retains her leaves through the winter.

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(Editor's Note: Though very little of the previous articles concerns the Siberians, the articles themselves give us an idea of the types of irises grown in certain areas in England and so of interest to all of us. In previous issues of our newsletter we have read about the irises being grown in New Zealand, both North and South Islands.

If you enjoyed reading these articles, why don't you drop a line to Robert Rolland Smith and SAY SO!)

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NEW MEMBERS 1965

* Gardens Open To Visitors

Bauman, Mrs. William H.	2612 East 18th Street Davenport, Iowa 52803	
* Boy, Mr. Owen H.	Route # 2 Box 338 Waupaca, Wisconsin 54981	June 15
Dimick, Mrs. Anita	316 Washington Street Montpelier, Idaho 83254	
* Englerth, Mr. L. D.	4652 Davison Ave. South Grand Rapids, Michigan 49508	Early June
Garvan, Mrs. Francis P. Jr.	308 Bellaire Drive Hot Springs, Arkansas 71901	
* Grant, Mr. Ford L.	2125 Sturdevant Davenport, Iowa 52804	May 30
Hamilton, Mrs. Milton E.	Box 509 Beverly Farms, Mass. 01920	
Jackson, Mary Jane	1009 26th Street Lubbock, Texas 79411	
Jordan, Mrs. Erwin	2327 Monroe Street Alexandria, Louisiana 71303	
Julien, Mr. Carl V.	145 Village Circle West Paramus, New Jersey 07653	
Kutylowski, Director R.	ul. Plowce 6 Warsaw 44, Poland	
Lee, Goldie H.	2541 Carlsbad Avenue Sacramento, California 95821	
McConnell, Mrs. J. B. (Velma)	1916 East 35th Street Tulsa, Oklahoma 74105	
McEwen, Mrs. (Family-addition	to Dr. McEwen's membership) Palisade Ave at 255th, New York, N.Y.	
* Och, Mrs. William R.	3591 Templeton Road, N. W. Warren, Ohio 44481	May 25 to June 10
Sellers, Mrs. Louise D.	308 Threadgill Street Wadesboro, North Carolina 28170	
Shute, Mrs. George	104 Third Street, Rockland County New City, New York 10956	
Slessman, Mrs. Harold	Route # 2 Willard, Ohio 44890	
Sutton, Mrs. Elmer Sutton's Iris Garden	3806 Nazareth Road Kalamazoo, Michigan 49004	
Turlington, Mrs. S. E.,	P. O. Box 195 Melfa, Virginia 23410	
Wissbaum, Mrs. John	601 West 8th Street Lexington, Nebraska 68850	
Zezelic, Mrs. Phyllis	219 McKinley Place Massapequa Park, N. Y. 11762	