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The Siberian Iris

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The
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October 1968

C O N T E N T S

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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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PRESIDENT'S PAGE
Charlotte Withers

This was a very good year for the Siberians in my garden with a lot of rain and good growing weather. Only two clumps of those planted late last fall failed to come through the winter in good condition. Bloom was heavy and in spite of an unscheduled hail storm in early June the Siberians put on a wonderful display for a garden tour in late June.

This is a very good issue of the newsletter but after reading through our Spring issue I find two items mentioned in it did not receive even ONE letter of comment--namely, the idea of condensing back issues of this publication and new sources for the purchase of Siberians. Only 27 members took time to return the ballot on the second vice president--not a very good return from over 250 copies sent out, would you say? However, all those who did send in the ballot were in favor of adding the second vice president and for this reason we will do so.

Larry Harder, RVP for Region 21, has agreed to act as the Display Chairman for the Milwaukee Convention representing our Society and a recent letter assures me he is a busy man doing as much as he can to have us well represented next spring. If he writes to you, PLEASE cooperate with him.

I am sorry to report that Mr. Wayne Snook, our Nominating Chairman for the past several years has tendered his resignation since he is moving from New York state to the west coast. He has promised to take up his interest in our Society once he is moved and settled in his new location. We wish to express our thanks for his work in the past and will be eager to have him active in the future. So if anyone is willing to act on this committee please let me know.

Do you realize how long I have held the office of president? Too long, by regular standards but without a duly elected vice president it was (and continues to be) a problem as to who would take over this office. However, we now have two vice presidential prospects in Peggy Burke Grey and Dr. Currier McEwen, both of whom are very capable but doing more than their fair share in other sections of the American Iris Society. We thank them both sincerely for agreeing to act in these offices for our Society.

In the Spring issue I had asked that anyone attending the Berkeley meeting please write a little article for us--no article to date, I am sorry to state, except for comments in personal letters which do not give descriptions lengthy enough to create an article. Even tho we can't all attend each of the AIS Conventions we are all interested in what varieties and how they grew in each area. So share your experiences with the rest of us in the future.

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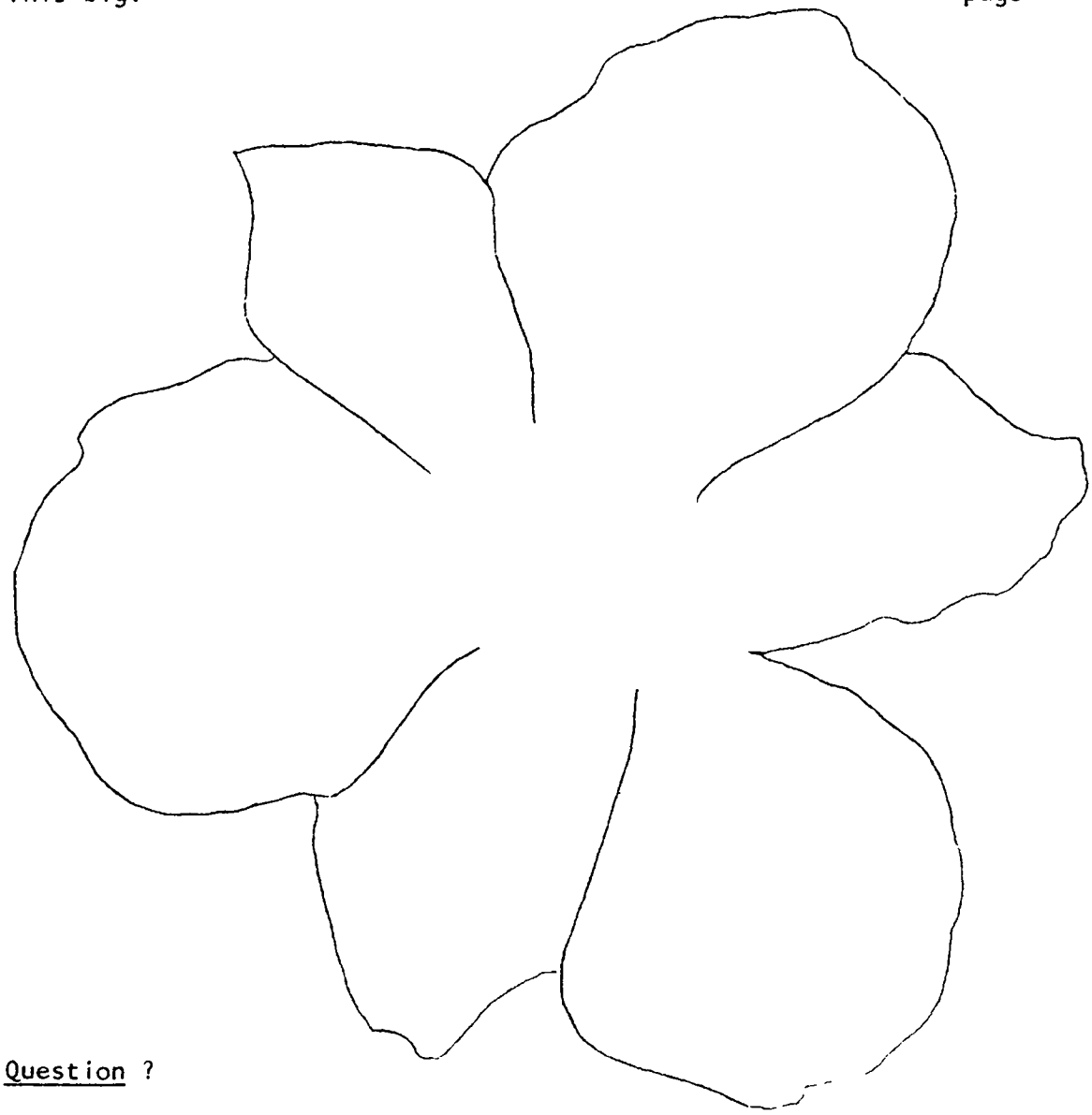
BIG SIBERIANS - ASSET OR LIABILITY ?

HOW BIG ?
McGarvey Sdl. 63-63-2-2
This big.

OUTLINE OF FLOWER
placed on this
page



Question ?

Can we produce big siberians?

Answer: The outline above is of a diploid plant flower which is blooming in my garden as I write.

Question ? Do we want siberians as large as this one ?

Answer: From my point of view, the answer is NO.

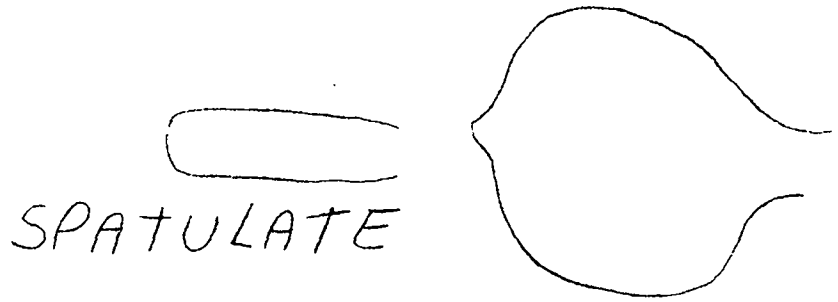
Reason: Siberians are attractive because of their airy grace which is lost when they become this large.

LINKED GENES IN THE SIBERIAN

William G. McGarvey

In the diploid species of the Siberian irises there are fourteen pairs of chromosomes and therefore only one chance in fourteen that two pairs of genes will be found on the same pair of chromosomes. But it is also very evident that every chromosome contains many genes and that when genes are found on the same chromosome they will not show the same random assortment which is shown when they are found on different chromosomes. So in spite of the chances against the event it is not too surprising to discover that two characteristics of siberian irises are determined by genes located on the same pair of chromosomes. When this is the case the genes are referred to as being LINKED which means to the hybridizer they will tend to be passed along together. It must be understood however, that genes found on the same chromosome can be separated from each other because of the operation of the process called CROSSING OVER which results when a group of genes on one of a pair of chromosomes changes place with a group of genes on the other chromosome of the pair. The chances that two genes on the same chromosome will become separated by the event of crossing over is a factor of how far they are apart on their chromosome. Those near opposite ends of the usually long chromosome structure are much more likely to be separated from each other than are those close together at the same end. This fact makes it possible to make a good estimate of the relative distance between the positions of particular genes which are linked by being found on the same chromosome since the more frequently linked genes are recognized to be separated the farther they must be apart. In a similar way, those recognized to be seldom separated must be close together on the chromosome.

With this in mind it was interesting therefore to discover that every time a siberian seedling had flowers whose falls were SPATULATE (my label for the left hand form shown in the illustration below) this form was found on a white flower where the color is known to be the white which is recessive to blue. Not a single one of many hundreds of siberian seedlings having flowers of other colors than white or with combinations of colors (for example, white and blue) was of the spatulate shape.



In an attempt to explain this spatulate shape, as many of the examples of collected forms as could be identified were examined and the scientific descriptions were read. The latter seem more useful than the former since no one seems to be able to say with certainty that collected forms are wild forms. But no evidence was found in any place which suggests that the spatulate shape is known in either collected or cultivated varieties.

Since the largest collection of siberian irises known to me is the one at the Presby Gardens in Upper Montclair, New Jersey, my examination of the plants grown there was a careful one which extended over a number of years. No examples of the spatulate fall was found on the flowers in that garden.

It would seem therefore, that the spatulate fall is an interesting, albeit unattractive, mutation. If, as I am suggesting may be the case, the double characteristics of white and spatulate are so closely linked that the latter never occurs without the former it is necessary also to wonder if the two characteristics are determined by a single gene or by two genes so close together as to occupy a single locus.

Crosses made to extend information on this specific condition were made and should result in bloom over the next two or three years.

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ODDS AND ENDS FROM MEMBERS

Note from Tom Heston, comment on some varieties not mentioned in his article:

Ron(Beattie) and I have both been enjoying SILVERTIP and a clump of a wide deep dark blue called CAESAR that I purchased at the dime store, different from CAESAR'S BROTHER. WHITE DOVE finally bloomed and it is a sort of a 'nothing'.

Note from Bob Schreiner:

--Incidentally, PLACID WATERS has given us a full second crop of bloom this year. In two different plantings. Makes a real combination with the yellow daylilies.

Note from Charlotte Withers:

The first two years that LOOKS MOHRISH bloomed I decided to use the space for something better to look at but the color and style seem to grow on me and this year I even used it at a flower show in an arrangement. So guess it will stay in my garden--all six plants of it.

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If a man could have half his wishes he would double his troubles.
Ben Franklin said it.

METHODS FOR INDUCING TETRAPLOIDY

Currier McEwen

This article has been written at the request of your president who reports that some of our members have asked for a detailed description of methods for inducing tetraploidy in Siberian irises.

GENERAL: First let me emphasize that the induction of tetraploidy is entirely different from the induction of a mutation by atomic or other radiation. The latter evokes a basic change in one or more genes and results in a plant with new features--good or bad. A tetraploid plant on the other hand is basically the same as its diploid sister; it merely has twice the number of chromosomes, and hence of genes, and as a result each cell has twice the volume. This is reflected in larger flowers and richer colors. The foliage and scapes are usually thicker also but strangely enough are not taller. Indeed they often are lower than those of their diploid sisters. All methods in general use today are based on the action of colchicine. This drug, which has been used in the treatment of gout for more than 2000 years, is derived from the autumn crocus, Colchicum autumnale. Like essentially all drugs it is a poison if taken in too large an amount and should be kept out of the reach of children and pets. However, it is perfectly safe to be used as described below without any special precautions.

There are two general types of methods now employed to induce the tetraploid state: one based on the use of fairly mature plants and the other using newly sprouted seedlings. I have used various modifications of the latter exclusively with Siberian irises but plan to try the other (clonal) method also next spring. Both types will be described in this article.

1. Clonal Method: This method has been described by Arisumi for treating daylilies (1). Briefly the technic is as follows:

1. The plant must be actively growing so this method should be used when growth starts in the spring or when dormant plants have been started in a greenhouse or under lights.
2. Select a plant about $\frac{1}{4}$ to $\frac{1}{2}$ inch in diameter and cut it off about $\frac{1}{2}$ inch above the crown (where the above-ground part of the plant and the roots meet).
3. Dig out a cup in the stump about $\frac{1}{8}$ inch deep so the bottom of the cup is about $\frac{1}{4}$ inch above the crown where the growing point of the plant is situated. A small surgical or dermatological curette is ideal for this purpose but a small sharp knife with a steady hand will do just as well.
4. Every second day for a total of three treatments fill the cup with a 0.25 to 0.5% solution of colchicine. (See next to final paragraph for directions for making solutions).

After a day or two new growth will start from the edge of the cup. If it grows so rapidly that the cup is filled before three

treatments have been completed, the excess tissue can be scraped out. Tissue unaffected by the colchicine will grow rapidly whereas affected tissue will grow very slowly. Often a rapid (diploid) growth will occur from one side of the cup and slow (tetraploid or chimeral) growth from the other. These can be separated and rooted in suitable media when they are large enough if desired; or they can be allowed to grow undisturbed. Having both diploid and tetraploid forms of the same plant provides an excellent means of comparing the two.

II. Seedling Methods: A. The standard seedling method is that taught to me by Mr. Orville Fay and described by Griesbach, Fay and Horsfall for use with daylilies (2). Following is the way I have used this method:

1. Seeds are kept in the refrigerator (not the freezing compartment) for several months after harvest. About two weeks before the time selected for treatment (usually January to March) they are placed in a solution of Panodrench (Morton Chemical Co., 1010 North Wacher Drive, Chicago, Ill, 60606) for a week to kill fungi and then in sterile water for another week.

2. The water is then poured off and the seeds from each cross are dumped into separate sterile Petri dishes in which 2 or 3 sterile filter papers have been placed. Sterile precautions are used throughout. Petri dishes can be obtained from any laboratory supply store. One can buy disposable plastic ones already sterilized or glass ones which can be sterilized by heating in the oven at 300 degrees for an hour and then allowing them to cool. A size about $3\frac{1}{2}$ inches in diameter is handy. Filter papers the right size to fit them can be obtained at the same shop. If glass Petri dishes are used the filter papers can be put in first and sterilized with the dishes. Plastic dishes cannot be put in the oven; so if they are used the filter papers must be sterilized in a container in the oven at 300 degrees F. for an hour. The papers can then be put in the Petri dishes with forceps the end of which has been sterilized in the flame of an alcohol lamp or Bunsen burner.

3. The filter paper is made moist (but not sloppily wet) with sterile water. For this I use simple glass tubing pipettes about 4 inches long oven-sterilized in long test tubes plugged with cotton. When I am ready to use a pipette I put on a rubber bulb taken from a medicine dropper. This of course, does not have to be sterile since the water does not come in contact with it. With the sterile forceps I distribute the seeds on the filter paper so they do not touch each other. In this way, if mold appears, the good seeds can be moved to another dish without losing them all.

4. The Petri dishes are kept at about 68-70 degrees F. They are looked at daily. If too dry a little more sterile water is added.

5. After a variable time, from a few days to a month or more, a tiny white protrusion will appear from the "sharp end" of the seed. This is the primitive hypocotyl. After another day or two

the primitive root develops from this. The hypocotyl also increases in size and turns green. When a tiny "spike" one sixty-fourth to one sixteenth inch long appears near the top of the hypocotyl the seedling is ready to treat. From this point on sterile technic is no longer needed.

6. Seeds of appropriate size are placed in an empty Petri dish or test tube and just covered with a small amount of 0.025 to 0.05% solution of colchicine in water overnight (12 hours). They are then washed gently in running water for 4 to 6 hours. For this I have found small baskets made of aluminum window screening very handy in keeping the various crosses separate. While the seedlings are in the colchicine they are kept actively growing by being at 70 degrees F. and under Gro-lux or similar lights.

7. The seedlings are then planted in flats containing your preferred medium. Prepared potting soil mixtures can be used or a mixture of two-fifths garden type vermiculite and three fifths sifted compost or rotted leaves does very well. A small hole deep enough to hold the root of the seedling is made in the moistened soil mixture with the tip of your forceps, and the seedling is placed in this with the seed on the surface of the soil (or half under the surface if the root is very short). The soil is firmed about the root and it is watered well to be sure it is firmly in place. In the flats I plant them about 1 inch apart in rows 1 3/4 inches apart because so many die that the survivors have plenty of room.

8. The flat is kept under Gro-lux or similar lights (a combination of one cool white and one warm white fluorescent tube has served me equally well) day and night with the lights about 12 inches above the surface of the soil mixture. The flats are watered daily - even twice daily at the beginning when the roots are very shallow and could dry out easily. It is recommended that the water be applied between the rows and not on the plants themselves and I have done so although I am not certain how important this is.

9. The unaffected seedlings grow rapidly but the affected ones very slowly for the first few weeks or longer and are stumpy, thick and apt to be misshapen. After about 3-4 weeks many affected seedlings begin to turn brown and die but the affected survivors eventually begin to grow well and after 8 to 12 weeks look about like the unaffected ones.

10. They are planted in the open ground when they are of sufficient size just as you normally line out seedlings. In New York and South Harpswell, Maine, a few Siberians will flower a year after planting but they will not be the affected ones, which take from two to three years to bloom. In the South I imagine they will bloom a year earlier.

B. Hypodermic Method. I was taught this method by Mr. Charles Blackmore who in turn had learned it from Mr. Andre Viette. The steps are exactly the same as those for the standard immersion method just described except for step 6. Instead of that step, the colchicine (o.025-0.05% as before) is injected directly into

the green hypocotyl using a dental syringe and 30 gauge dental hypodermic needle. The needle tip is inserted in a direction away from the root and when a drop of solution appears (ideally from the tip of the tiny green "spike") it is enough. The seedling is then swished through water for a few seconds and immediately planted.

This method has been convenient for me because seedlings can be treated and planted every night whereas the 12 hour immersion and 4 hour wash of the standard method have limited my use of it to week-ends when it would fit into my work schedule. Also it is less lethal, probably because the root is less affected. However, in my experience it has been far less effective in inducing tetraploidy than the standard Griesbach-Fay method described above.

C. Another method taught to me by Dr. Shuichi Hirao of Japan uses colchicine made up in agar instead of water. This forms a jelly-like material in which the seedling can be placed upside down with the growing point immersed but the root in the air. Covering with a slightly damp cloth prevents the roots from drying out. The seedlings are immersed overnight and washed as in the method of Griesbach and Fay. The purpose, of course, is to leave the roots out of contact with colchicine. In my hands it has given results similar to those with the hypodermic method.

A major problem today remains to be discussed, namely, that of obtaining colchicine, which is currently in short supply all over the world. Your druggist can provide colchicine tablets but in these the colchicine is mixed with inert material. Since the colchicine is soluble the tablets probably can be used after filtering out the insoluble residue but I have never done so. The druggist also can supply ampules of colchicine for intravenous use in patients but the strength of this solution is too low for the clonal method and their use would be very expensive for any large scale treatment of seedlings by the Griesbach-Fay method. The ampules, however, are ideal for the hypodermic method. If one can obtain pure colchicine in powder form there is no problem and the solution can be made up in any strength desired. I last obtained a supply in 1967 from Eimer & Amend, New York City. The price then was $7.00-8.00 per gram but a gram will go quite a long way. A 0.5% solution can be made by dissolving 500 milligrams of pure colchicine in 100 milliliters of water and a 0.25% solution by using 200 milliliters of water. These strengths are used only for the clonal method. For the seedling methods solutions 10 times more diluted are used: a 0.05% solution is made by dissolving 50 milligrams of colchicine in 100 milliliters of water and a 0.025% solution by using 200 milliliters of water. Since a gram contains 1000 milligrams it can be seen that it will make quite a large amount of solution especially using the seedling method. It is best to use sterile water in making the solutions and to keep the

stock solutions in the refrigerator to prevent increasing strength through evaporation or deterioration through growth of molds. Dry colchicine does not need to be kept refrigerated and keeps indefinitely.

I have tried to cover all essential points in these directions but I am sure I have left gaps. If so, please write to me and I will try to answer any questions. I hope many members of our Society will wish to try their hand at these efforts. It is a lot of work but it also can be great fun; and from results we have had to date I am confident that tetraploidy will contribute much to the improvement of Siberians just as it did years ago to that of tall bearded irises.

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J. Heredity, LV: 254-261, 1964 (and The Hemerocallis Journal. Vol. 20 no. 2, 59-67, 1966.

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GROWING SIBERIANS FROM SEED

Peg Edwards

Until recently I lined out my Siberian seedlings at the same time as I did the TB and other bearded seedlings--late spring or early summer of the year they germinated. Losses during that summer and the following winter ran quite high, even in wet years. But I have changed my habits as a result of an experience I had with some seedlings of the Californicae group.

These seeds, which included innominata, douglasiana, and two or three other species and hybrids, were planted in January in my coldframe (that was when I got the seeds) and in early summer they looked so frail I hesitated to move them. So they stayed over the second winter and came up very lush in spring--in fact some bloomed before I could move them. In the spring of 1966 a batch of Siberian seedlings came up in pots--fairly thickly--but such thin foliage! really grasslike. I decided to let them summer in the pots, sheltered from the drought by the frame and hand watered frequently. By fall they were looking much sturdier, but I was kind of busy and they stayed over winter. In April 1967 I lined them out-still with no increase, but very strong husky plants, and there was no indi-

cation of any losses. They still haven't bloomed- but they certainly will in 1969, while I am still waiting for some seedling lined out in 1966, of which more than half were lost the first year. They are just beginning to make increases. I imagine in a climate where there had not been several years of drought, in a soil where water did not drain off so readily (I have improved ours very much but it still is basically sandy) this problem might not exist; but if you have sandy soil and dry weather you might try holding seedlings in the pot over the second winter, as I am doing. I may have to wait longer for bloom but I have more seedlings come to bloom size--and after all, that counts too.

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SIBERIAN TEST GARDEN?

We have just received an offer from one of our members to give a part of his garden for the use of a test garden for Siberians. Mr. Kevin Vaughn of Athol, Massachusetts, writes to say he would be glad to set up this "eastern" test area, suggesting that some of the other members do the same for other weather regions.

The garden would start out as a 20' x 20' space to be enlarged as the number of Siberians increased. It would be an "open" garden on Region 1 tours and anybody from the Siberian membership would be welcome at all times. Kevin has 15-17 of the newer ones already in his garden so has had experience in planting and growing Siberians.

Those of you who live in Region 1 have been able to read articles written by Kevin about Siberians and know he is anxious to further the cause of our beloved Siberians.

How about it--are there some of the rest of you who would be interested in starting and maintaining Siberian test gardens in your areas--we know from articles written in the AIS Bulletin that there was a good showing of Siberians out in the Berkeley area for the convention this last May but do you suppose those varieties would grow in, say my area or down in Missouri or over in Utah? It would be nice to run tests on some of them and then write up the reports for our readers. Let's hear from some of you!

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When I go into my garden with a spade, and dig a bed, I feel such an exhilaration and health that I discover that I have been defrauding myself all this time in letting others do for me what I should have done with my own hands. Ralph Waldo Emerson said it.

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VARITAL NOTES, 1938
By Mrs. Herman E. Lewis

(From Bulletin of the American Iris Society, January 1939,No. 72)

Extracts.....MOUNTAIN LAKE. A Sib. of Mr. Gersdorff's; good color, substance and form, medium blue, making a most attractive garden picture.

SUNNYBROOK. A Siberian, primrose yellow with very low branching on stems slender and straight, just right for the flower.

VARITAL NOTES, 1938
By Elinor Hill, Northwestern, Oklahoma

....."Siberian irises do well in the perennial border. Although there is seldom sufficient rainfall for them to do their best, they seem quite drought resistant when once established. In dry springs they are watered well once a week and always receive an occasional soaking midsummer. As long as the foliage is lush and green water is withheld. I grow MISS DULUTH, CAESAR, CAESAR'S BROTHER, SNOWCREST, ZEST, TURQUOISE CUP, GATINEAU AND MORNING MAGIC in addition to many older varieties. Most people here call them little Japanese irises and I am frankly weary of explaining that they are not. Any plant so lovely certainly deserves to be called by its correct name.

NEW ENGLAND GARDENS, 1938
By Frank E. Chowning

Extract...We arrived at Over-The-Garden-Wall at 2:00 p.m. Tuesday, May 31st. The day was clear, and the garden at the height of its bloom. Our surprises began before we entered the main garden. Just as we entered the threshold, our eyes fell upon HELEN ASTOR, the exquisite rosy-red Siberian which represents the greatest color break in this division to date. Had I not seen this iris myself, it would have been difficult for me to visualize so remarkable a departure from the usual colors of this group. It was growing opposite kermesina and the two made striking groups for the border of the pool. Nearby were enormous clumps of CAESAR'S BROTHER, SNOW-CREST and GATINEAU, the very best dark blue, white, and porcelain blue Siberians, respectively. No garden should be without these."

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1968 COMMENTS
Peg Edwards

The hit of the year, for me, was Dr. McGarvey's EGO. Here, apparently, is a new shape in Siberians. The fall were fairly

large, round, carried just a bit below horizontal. The standards are fairly broad and carried at about 45 degrees up from the horizontal. The style arms - this is where the distinction comes in - are also wide, frilled along the edges, and fill the spaces between the standards quite precisely, with perhaps a slight overlap, and this results in a sort of cup shape. The overall effect is sort of like a small-cup daffodil in blue with three of the corolla lobes missing. Very attractive. The flowers are a nice clear blue, pleasantly shaded from light to medium, on about an 18-20" stem. Foliage stood up fairly well through most of the summer, though by mid-August it was falling down like most of the Siberians. EGO was slow to take hold; it did not bloom its first year here, and in 1967 it only produced one bloom on a 3-4" stalk, but this spring it more than made up for the delay.

BLUE BURN, which took hold faster, did very well this year, with about 15 stems. It is a nice blue and just enough different from BLUE BRILLIANT to justify keeping both of them.

I saw SUPER-EGO at Harry Kuesel's and as a result I am not totally heartbroken at having lost it. It is large - it is enormous! but it is not otherwise a particularly unusual flower. Of course its value as a parent is considerable; if it were crossed with some of the small-flowered Siberians such as SUMMER SKY, MRS. ROWE, GREY DOVE, we might get some of their elegance and uncommon colorings in a larger and showier flower. Beside SUPER EGO, TYCOON looks quite normal-sized. It certainly will appeal to the many iris fans who like size in their flowers. And it is pretty.

SUMMER SKY I rave about on all occasions including some where it isn't at all appropriate. It is the most prolific Siberian I have. In fact it is the only one that I find needs division almost as often as the tall beardeds.

I mentioned MRS. ROWE. This has a flower not much larger than SUMMER SKY, not as fast to increase, but very dainty and of an unusual tint. I can't find anything on the Nickerson Color Fan to match it; it is a sort of very smooth blend of light grey, orchid pink, pale blue, giving an overall effect of mauve.

I had a chance to compare MATANE and the plant circulating in Canada - perhaps elsewhere - as MONTANE. I have no doubt they are the same. Same shape of flower, same size, same height, same flower. Has anyone else compared them? Under either name, a nice white.

TURQUOISE CUP was a little sulky this year, only 7 bloomstalks. But the flowers seemed even more charming than ever. Perhaps it was the season, but the flash of turquoise seemed larger. This is one of the less accomodating varieties in my garden but it is always worth having.

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PORTLAND SIBERIANS

Tom L. Heston

Things are looking up for the Siberians in the Northwest this year as there have been a lot of favorable verbal comments about them.

In Gordon Plough's Eden Road Iris Garden in Wenatchee I overheard a conversation that was not intended for me, but my ears perked up anyway as some garden visitors that had attended the Region 13 Convention in the Oregon area were talking about the beautiful Siberians growing in Cooley's display garden next to their main office and garage where they had the Tall Bearded display in the garage. They were raving about them.

I did not get to see them this year in Cooley's but have seen them there in past years. They are good older varieties, none of them named, but they are quite ample in this garden and make an excellent backdrop.

A clump of HELEN ASTOR in Ron Beattie's yard in Canby really had the Regional visitors that saw his garden aghast. It was really going to town there and I would bet this clump had around 60 to 70 blooms out on it. It actually is the most spectacular clump of Siberians I have ever seen.

This year was the first year that the reluctant-to-grow TOWANDA REDFLARE decided that it finally was going to like it here in the webfoot country and bloomed. It bloomed at both Ron's and my yard. After all the battling with it and buying new plants that replaced the ones that died over the years, I was deflated when I saw it bloom because it was hardly worth the battle because our friends HELEN ASTOR and ERIC THE RED were very busy upstaging this poor little starlet as it was trying to make its debut.

There are quite a few varieties growing around including my yard that we still don't have the vaguest idea of what in the world they are as they were collected here and there from some very unlikely places. A deep blue one with light blue standards was very busy upstaging everything in my backyard this year and was a first bloomer.

Ron and I decided that seeing it for the first time in bloom in my back yard that VELVET GOWN was really something.

The clump of TYCOON and MOUNTAIN LAKE which have grown into each other in my back yard did not bloom at all this year but both are still growing robustly. I took a gob of TYCOON off of it for Ron last year and he planted it in Canby and it bloomed the first year down there. Therefore, I am led to believe that the reason these two varieties did not bloom was that I did not give them any

fertilizer at all for the last three years and they have fairly exhausted the soil. I guess I will move them and give them a fresh start, but it will be a major moving job as these two clones cover an area 3' by 5'. This is the only thing I can attribute their lack of bloom to.

Ron's clump of WHITE SWIRL did its stuff this year later in the season and I guess nobody got to see that one. In writing this.. (at this point I played Niagara Falls with my washing machine for an hour--what a sopping wet mess!)

I still do not grow WHITE SWIRL in my yard and maybe I am playing things too conservative but the prices on some of the newer things are a little bit too rich for me and still am having a grand time with the older varieties.

In the seedling division down at Ron Beattie's they are coming along fine and all are about 1 foot tall. If I recollect correctly this is a cross of WHITE SWIRL x HELEN ASTOR. For years you will remember we grew HELEN ASTOR and thought it was ERIC THE RED. We finally got straightened out through the Seattle Iris Society show on which was which. It will be several years before we see these seedlings bloom I am sure. Maybe we will have them in bloom for you all to see at the 1972 National Convention in Salem.

Down at Schreiner's Garden in Salem we got to see some new varieties that we had never seen before:

PLACID WATERS - Light blue with wide falls, light blue sepals, graceful with pollen.
BLUE BRILLIANT - Wide deep blue with haft marks.
VIOLET FLARE - Onco-like violet - wide.
PIROUETTE - Deep blue twisting falls, very pleasing.

Then there was WHITE SWIRL - huge flaring falls, yellow hafts, branched with pollen.

Schreiner's have some new Fothergill varieties that were planted last year but this was not their year to bloom. I will be looking forward to seeing these in the future.

As I stated before, things are picking up here in the area of Siberian interest. After seeing the clumps in Cooley's that had them talking and the spectacular clump of HELEN ASTOR in Ron's garden that had them oh-ing and ah-ing, all things can do in Siberians is to go forward at full speed.

This epistle is optomistic and guess who wrote it--yes, the pessimist (as I have been called) so you can take it from there, things MUST be really good.

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A LETTER TO AN EDITOR, WITH SOME COMMENTS REGARDING NAMES

Peg Edwards

Some while back I received a letter from one of our members handing me a problem. I quote the parts dealing with it:

Dear Editor:

I have a problem. This I am aware has been brought up before. But WHEN is someone going to get out a list of existing Siberians? I will buy one now, if you have one.

I was handed a letter by a neighbor who lives up the street, who grows acres of dahlias for the frost to cut down just as they really get to blooming. You see why I feel he is a bit odd. Have tried to convert him to irises but with little luck so far. He, having introduced a couple of dahlias, is a bit obstinate.

But about this letter. It came to him from a man in the Midwest who was anxious to buy some Siberians and thought the dahlia man, being a gardener, might know, or would know someone who did. I was the someone. I had never heard of a number of those on the list. So out came the AIS Check Lists. This is where a Siberian list would have been invaluable.

KINGFISHER, from away back in the Model T days, I found in the Check List. Also the DUKE OF YORK and his DUCHESS: she is a Siberian, he isn't. I knew there was a lot of crossbreeding in royalty but didn't know it went this far. Miss Preston's White seedling and CHINA BLUE, I know of, also SNOW BUNTING and ABITIBI, and Mr. Kitton's SNOWFALL presented no problem. I looked for LIGHTS OF PARIS; found LIGHTS ON and LIGHTS OUT, both TB, but not from Paris. CAPE DAZZLE, described in the list as a yellow Siberian, I found no track of--must be a garden name, unlisted. KOOTENAY I have but wasn't selling; WHITE CRYSTAL CHARM is undoubtedly CRYSTAL CHARM.

Having gone through the Check List I tackled some catalogs. Little help in this problem. I wrote the man explaining the situation and recommended a lady living near him as a possible source, if not of plants then at least of information. I struck while the iron was hot in hopes of 'selling' him before he had a time to lose interest and perhaps regain his senses.

First I'll mention a couple of things about Check Lists in general. They are no help in locating things that have been registered since the last Registration List came out, as was the case with LIGHTS OF PARIS, for instance. And they are not much more useful with very old varieties; they tell you that such a plant was registered, and usually indicate when it was introduced - if it ever was - but they can't tell you for sure whether it is available, or where, if it is. A plant may have been registered, never introduced, but passed around among friends and used in breeding. The Check List can't tell you that.

For another thing, a Check List is only good if it is well put together in the first place and then kept up to date. And it should be supplemented by a full list of sources.

The Board of the Society For Siberian Irises has been trying for some time to assemble a Check List of Siberians, and we have had help from a couple of members. But it is becoming evident that what we really need is a full-time worker on this job - somone who has no other duties in the organization to distract his/her attention - a Check-List Editor, in short. This Editor should have several assistants, each of whom should go through one section of one volume of the AIS Check List and extract from that one portion <u>everything</u> dealing with Siberians. This should not only include anything properly registered as Siberian, but also hybrids having a Siberian species or named variety or seedling; any names that have been improperly applied to a Siberian; any plants belonging to other Apogon groups that have been described as Siberians; reports of introduction of Siberians registered earlier. Names and addresses of registrants and introducers would be useful too, as would a listing of any catalogs that have carried Siberians in the past, provided, at least, that the issuer of the catalog is still in business. He might still have a little stock in a back corner of the field.

The Editor would then have the delightful task of copying all this out on file cards, arranging them in alphabetical order, checking through the Check Lists again in case something was missed the first time, and then typing up the whole business neatly and correctly on <u>one side</u> of sheets of white bond paper for duplicating. Is there anyone among the members who would be interested in tackling this job? I have some of the needed information but I kind of got sidetracked by a few dozen other jobs. I would be only too happy to unload. Of course, if the Society felt it could afford to wait a while, maybe I could get back to it in another two years, after the 1970 convention is over. But I do think the gentleman from Brantford is right; we need a list now.

And while we are at it, why not a Sources Editor - someone to whom any iris grower could send his catalog or price list? Then when someone asks you where to get some Siberian you could refer him to the Sources Editor.

Look at the work you would save yourselves. Urge your best friend to volunteer. You notice I am not asking <u>you</u> to do so. Of course, if you did.....

(Comment from C. Withers: I have some hold-over copies of the List of Siberians as Printed in the past issues of the Siberian Newsletter which I tried to condense for distribution at Denver in 1967--if anyone wants a copy, send me a 6¢ stamp and I will mail a copy to you.)

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SIBERIANS IN MICHIGAN

Lawrence D. Englerth

We had light sand on our place near Grand Rapids, and the Siberians grew well, but blooms were small when we had a dry spring. Borers in them were never noticeable until the past few years, and where they did get in they seemed to destroy whole clumps, as they ate the entire rhizome.

In late summer of '65 we acquired our farm, with just about all varieties of soil, and in October we moved a large planting of the Siberians out here onto a spot where soil was dark and looked dry enough at the time. But with late fall rains and winter snows a part of that field was under water until late in spring and then very wet for a long time. In spite of some heaving, about the only plants we lost were a few that were under water the longest. Because we could not get on the ground, the weeds grew large and healthy, but the irises still held their own. This spot has since been improved by having a bulldozer in to doze out a drain into a nearby swale.

In the fall of '66 we set a large planting of tall bearded irises, moving more Siberians with them. But the Siberians were planted on the side of a hill in heavy clay where they did not grow as we thought they should, so those have been moved this spring to a better spot.

As all these plants were moved out here in late fall we hope we left the borers in Grand Rapids. We have not seen any in the two years they have been here.

The ones we moved this spring were planted near the house in rows very wide apart, and this summer we will plant Oriental poppies in rows between them as they bloom together beautifully.

So for us the Siberians have proved to be hardy, lovely, and most satisfactory garden subjects.

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OUR SECRETARY SAYS: "Please note the date typed on the mailing label of this issue of The Siberian Iris--it is the date of expiration of your dues. So if you don't wish to miss the next issue PLEASE REMIT TO ME."

Mrs. M. R. Johnson
2275 Kensington Ave.
Salt Lake City, Utah 84108

QUESTIONS FROM THE MEMBERSHIP

Here are several questions received in a letter from a Canadian member. The first one is answered in detail in Dr. McEwen's article in this issue, however, someone else may like to answer the others:

1. Exactly how are some of your members inducing tetraploidy with colchicine. Could someone explain step-by-step?

2. Hybrids between 28 chromosome and 40 chromosome Siberians are said to be sterile. Has anyone produced fertile hybrids?

3. Has anyone successfully crossed a garden tetraploid and a 40 chromosome species?

4. To whom could I send a slide of the only Siberian that is commonly grown here for identification?

This letter received from Diane Whitehead, 85 King George Terrace, Victoria, British Columbia, Canada, also says she is working with a Siberian x innominata cross and will report to us when she is able to give more information.

Since we know from past items that Jean Witt, of Seattle, is hybridizing Siberians and species, she probably can furnish some information and answer questions nos. 2 and probably 4. If anyone can answer questions, I assure you Jean can!

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- SLIDES -

Have you used the Siberian Slide set during the past year? I used some of my personal garden slides for our spring flower show and used a projector with an attachment which allowed continual showing. This method was a proven attention-getter, let me assure you. People who were not even gardeners stopped to LOOK and then commented that they were unaware of the wide variety of colors in Siberians. Of course, it pleased our show chairman to get a special news coverage on this part of the show. Why don't you use this method of publicizing the Siberians? If you can convince even TWO people to try growing Siberians in their gardens we are the ones to gain.

If you are growing the newest of the Siberians, PLEASE SEND A SLIDE TO OUR SLIDE CHAIRMAN, Mrs. Elizabeth Rowe, so she can add it to the Siberian Slide set. The newest Siberians need publicity --let's give them some.

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AN AREA REPORT FROM ILLINI IRIS GARDENS
Steve Varner

How do Siberians grow in my garden? Speaking in generalities, Siberians do not grow as well here in Illinois as do the bearded irises; my climate is not cool or moist enough, and my soil has too high a pH. Too many named varieties have foliage that flops, insignificant flowers, lack of branching, and small increase under my conditions. Few seedlings survive to bloom for me and I have never been troubled with bee pods.

Since I am interested in hybridizing Siberians, all these handicaps cut down the volume, but cull out the weaker irises. I know of ways to alleviate all the adverse comments above, but prefer to let nature take its course. ILLINI ENCORE grows to my satisfaction under these conditions. When we have more Siberians that will perform well under adverse conditions, their popularity will increase in direct proportion.

Given supplemental watering, or mulching, or shade, the following named Siberians bloomed well for me last year:

COURT VIOLET with its plush, rich violet flowers borne on many short stalks is unique to me.

WHITE MAGNIFICENCE is a vigorous, tall white with size enough to attract attention.

PIROUETTE performs much better here than VIOLET FLARE.

PLACID WATERS surprised me by reblooming last fall, and was magnificent in the cool weather.

Mrs. Westmeyer's flat purple seedling has two and three blooms per stalk, but is good in most other departments. I am anticipating enjoying increased branching in seedlings blooming this year, including fourteen guests of Cloyd Sensenbach's that will be well established. Come share their beauty with us when in our area.

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Editor's P.S. Steve lists the following in his For Sale List: BLUE BRILLIANT, CANFORD, COURT VIOLET, DREAMY SPIRES, ILLINI ENCORE, PIROUETTE, PLACID WATERS, SEA SHADOWS, VIOLET FLARE, WHITE MAGNIFICENCE, WISLY WHITE, WHITE CAPE, WHITE HORSES, and last but not the least --TEALWOOD. So if you are looking for some of the new ones!!!

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OUR SYMPATHY

As this issue was being prepared for the printer we received word of the death in an automobile accident of the young son of our Fred and Marcia Cassebeer, John. Our sincerest sympathy is extended to both of them - words alone cannot express our thoughts but we are all thinking of them and wishing we could comfort them in their grief.

COMMENTS ON SOUTH AUSTRALIA COMMENTS

It does sound to me as though the Society is very fortunate to have found such a person as Mr. R. S. Chandler of Gleneig North, South Australia. His range of interests within the siberian species seems to cover the whole group. We need such persons.

He did make one comment that requires special attention. "I got ---some seed called White Swirl X--I don't know whether this is a self cross or not - but I rather suspect it is." is what he is quoted as saying.

From a very considerable experience in attempting to get WHITE SWIRL to self (hundreds of tries) I have never had a single pod formed and still WHITE SWIRL is one of the easiest plants on which to get takes by use of foreign pollen. May I suggest that Mr. Chandler had better "suspect" just about anything except that his seed from WHITE SWIRL is a result of selfing.

Selfing is a very important technique when one is interested in the genetics of diploids and I will continue to try to get pollen from WHITE SWIRL (this is very difficult also) and when I can get it I will continue to put it back on WHITE SWIRL because persistance in such tasks does pay off at times. But when and if I do get a take I will write a special note to this publication and that note will be a boasting one.

In passing, I do hope that if any member of the Society does get a WHITE SWIRL x self cross (that he is really sure of) that he will take good care of the seed and seedlings and make a good record of all progeny. (Hopefully, pictures as well as descriptions) This would make a very valuable addition to the information we are building about the Siberian irises.

William G. McGarvey
Oswego, New York 13126

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REGISTRATIONS OF SIBERIAN IRISES, 1967

RUBY WINE (Ben R. Hager,R. 1967) Sdlg. SB1, Sib. 36", M,RV1F Rosy wine self with large white half circle signal marked brown. TOWANDA RED FLARE x RED EMPEROR

SPARKLING ROSE (Ben R. Hager, R. 1967) Sdlg SB2,Sib. 38" M, RV1Lcm, rose mauve self; veined signal tip, flash of blue. TOWANDA RED FLARE x ERIC THE RED.

VIOLET REPEAT (Mrs. L. W.Brummitt, R. 1967) Sdlg 22/14 Sib. 36" M & re, V1F. Bright violet self. WHITE SWIRL x ERIC THE RED.

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