



# Twin City Iris Society

## News and Views

### PRESIDENT'S MESSAGE

The growing season, this year, has been as long as we can expect in this Region. On the 15th of April Ralph Hintze had Iris danfordia in bloom and each week since we have been able to see a succession of types and cultivars ending with the double Japanese iris now in bloom here in Minneapolis.

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Good bloom, good increase and good garden iris for all of us to see and select. The local growers have been busy and we wish them each a good business year. The iris auction is at hand and the varieties available there will be premium stock for rounding out your collections, besides the fun and companionship. Those of you just starting can rest assured in the information given by the auctioneer to guide you. The members who supply iris for the table sales give each of us a second means of rounding out our collections and saving costs.

Time has become very important to all of us in the society. Recovery for Mrs. Bishop, Mrs. Netco, Mrs. Wright, Mrs. Ipsen, Mrs. Olson, Mrs. Mutterer, Mrs. Sindt, and Mrs. Stover with the help of time will give us a stronger society.

Time for division and planting of iris to insure good growth for next season. Time for planning and leisure. Enjoy yourselves and your summer for these days will never return again.

- Warren Johnson

### - MINN. HORT SLIDES -

Last winter Ken Fisher asked eight people to serve on a committee to review the Minn. Hort. Society Slides. Why did Ken form the slide review committee? That was the question I asked myself until we had our first meeting, and we saw why. Out of the 19 sets, most are faded and/or poor quality. In one set, "Minn. Arboretum Views and Plants", the pictures had such a large field that we could not distinguish one plant from another. We in the Cities are lucky to have a good source to draw on for our programs but the clubs in the rural parts of the state use the slide library for their programs.

What we need are good slides of plants and plant materials. Close up shots are best. Some field shots are needed to show the effect. We could use slides of daylilies and irises. We could also use set of almost anything. Good pictures are good advertisements for varieties and species. This is a chance for all of us to show off our best. We need everyone's help to help other clubs. We would like originals on Agfachrome film if possible, for we think it is the best in color and quality.

- R. Hintze

AUCTION TIME AGAIN!

Our annual Fund Raising and Funfest time is here, on August 8, 1969, at the Guaranty State Bank.

Bring your donation of irises to Mr. Stan Rudser, Chairman, 2548 Douglas Drive, No., Golden Valley, Minn., by Thursday evening, or earlier. BE sure all are properly labeled.

There will be tables of irises at half price that can be purchased from 5:30 on.

Auction will begin at 7:30. Refreshments of donuts and coffee available all evening at no charge.

Some fine irises already promised are CLAUDIA RENE, JILBY, HEARTBREAKER, ARCTIC FLAME, WINTER OLYMPICS, NIGHT SONG, NEW FRONTIER, TRUDY, and WESTERN WELCOME.

Many fine irises are already promised by several well-known growers.

Come for an enjoyable and profitable evening. Don't forget your checkbook and billfold!

Remember the date, August 8, beginning at 5:30, and on, and on.

- Alice Stencien

Plan to visit some of the flower shows in the area.

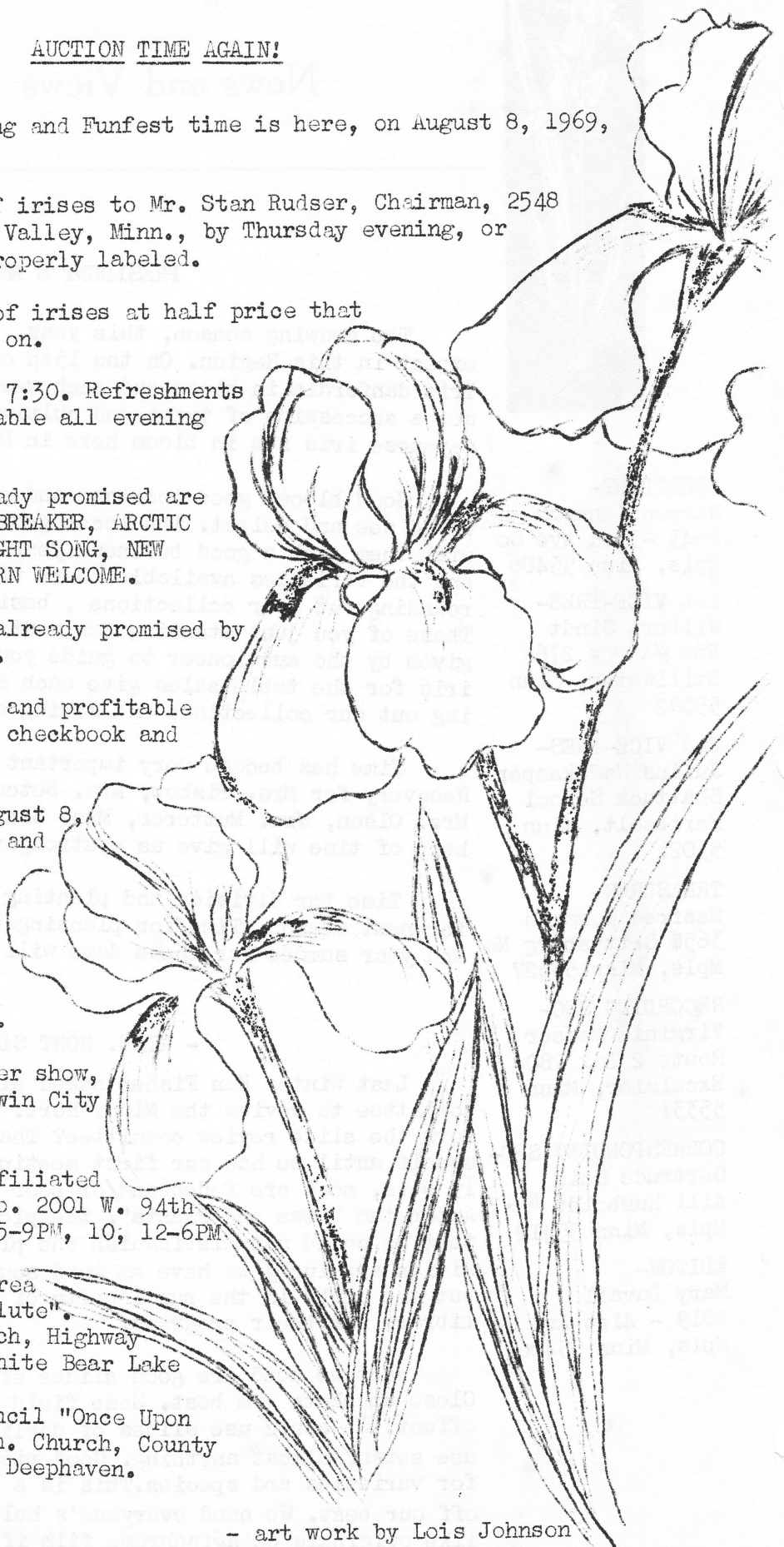
August 7, 8. Richfield flower show, "America So Beautiful". Twin City Federal, Southdale.

August 9, 10. Bloomington Affiliated flower show. John Deere Co. 2001 W. 94th St. Bloomington. Aug. 9, 5-9PM, 10; 12-6PM

August 21. Council of East Area Clubs of St. Paul. "WE Salute". 2:30-8PM First Luth. Church, Highway 61 and County Road "F". White Bear Lake

August 23. 'Tonka Garden Council "Once Upon A Lake". 2-8PM, Grace Luth. Church, County Road 5 and Highland Road, Deephaven.

- art work by Lois Johnson



## A GOLDEN OPPORTUNITY

By Charlotte Withers

An invitation to write an article on Siberian irises is a Golden Opportunity to me and one I intend to use to the fullest extent.

You, as iris growers, are also offered a Golden Opportunity--to learn of the many virtues and values of Siberian irises, as landscape plants and as cut flowers to be used by the artistic arrangers for show entries or just as growers interested in lovely irises extending the bloom season a little longer into the summer months. If you fit into one of these groups you will be interested in Siberians.

First, Siberians are relatively free of diseases and attacks by insects. Being fibrous rooted plants they are not subject to many of the ailments of the TBs. The foliage being of a tough texture apparently doesn't appeal to every transient insect and bug in the garden. It usually remains upright and vigorous looking until late in the fall, adding to the well kept look of your garden, especially if planted as background plants. The lovely shades of blues, lavenders and purples, along with the stately whites blend well with all colors of flowers in mixed borders and provide the shades and tones needed for a true "persian carpet" effect if your garden is like mine with an informal type of planting plan. Siberians also come in a wide range of heights--from the dwarf ones such as SUMMER SKIES, HELEN ASTOR, and VELVET NIGHT to the tall regal looking ones such as GATINEAU, SNOW CREST, and VIOLET FLARE. I haven't listed WHITE SWIRL in either category since it seems to grow different heights in different areas of the country. For me it is tall in one location and medium in another. It is very adaptable and seems happy anywhere.

You are also able to enjoy the results of many hours spent by our active hybridizers these last few years in the beautiful new siberians now being registered and introduced to the public. Since the organization of our Society For Siberian Irises in late 1960 there have been 87 new ones registered but only 18 introduced to commerce. This is a shame because a good many iris growers would love to purchase some of these new ones if they could only find them. So our project now is to convince commercial growers to stock and sell Siberians. In the last couple of years some of the new English registrations have found their way into the gardens of our Siberian members and we have hopes they will become acclimated enough to make themselves at home in our American gardens. Our idea is to try to obtain outlets in all parts of the country, for though the English Siberians may not be happy in our colder and dryer areas they may take to some of the more moderate areas and thus allow us to see them in bloom at some of our future AIS Conventions. We also hope to set up a "traveling display" with color photos of some of the best of the new ones so that though Siberians may not be in bloom at the time of conventions the visitors can at least see what the new ones look like. A small start has been made on this project by obtaining color photos of Bill McGarvey's EGO, SUPER EGO and DEWFUL, along with Ben Hager's SPARKLING ROSE, RUBY WINE and SWANK. If we could present about fifteen color photos each year, keeping them up to date, people would soon see just how much they are missing by not growing these lovely irises in their gardens.

Oh yes, it is truly a Golden Opportunity available to all to enjoy a longer iris season by growing the lovely, graceful and durable Siberians in your garden.

-- About the Author --

Charlotte Withers is president of the Society For Siberian Irises, a Section of the American Iris Society. She lives in Mandan, North Dakota.



## SIBERIAN IRIS CULTURE

By Steve Varner

Let me emphasize, the following comments on culture of Siberian irises, although proven valid here in Monticello, Illinois, may not apply in your soil and climatic conditions.

Transplanting successfully is usually easy in fall and very early spring, but newly transplanted Siberians, at any date, benefit from a good moisture-holding mulch as a 12 inch collar around the plant and from weekly waterings until the union of soil and roots is firmly accomplished. Established plants tend to make such a mulch as their leaves fall over and decay from year to year, but if you are bothered with iris borer, be sure to spray the clumps as they are a haven for the moths. Clumps of hemerocallis are also favorite protection of the iris borer.

My Siberians do not get the amount of water they like during non-winter months, yet perform reasonably well. Mine have good drainage so do have "dry feet" as Siberians are said to like. If I water a Siberian special before bloom time, the plant and flowers are increased at least 50% in height and size.

Hybridizing - how I do wish more introductions had parentage. This situation is improving and will be a boon to those making planned breeding. Physically, it is more difficult for me to make a Siberian cross than a tall-bearded cross. I forcibly open the flower about three hours before it would unfold by itself and pollinize it with fresh pollen. At times I use my thumbnail to lineally mascerate the anther to get the pollen on the stigmatic lip. Two personal goals have been to increase branching and bud count, and to increase the width and substance of the flower. Actually the two do not combine well, requiring separate programs with a third program of crossing the best of the two.

Siberian seeds are planted directly into the garden in October about one inch deep and the ground is later covered with an inch mulch of wheat straw. This compacts and disintegrates and is left for the seedlings to come up through. My seedlings stay right there one year or more and I transplant only when the plant has two or more rhizomes or fans. Old one inch by six inch, or wider, boards laid on each side of the rows of seedlings seem to aid transplanting survival. Such an old board placed over the seed bed after planting until early spring improves germination.

Lastly, do not dig around or cultivate closely to the Siberian plants. Keep weeds and grass pulled and give the plant room to clump. Cut stalks of Siberians just before the bloom opens and take them inside to enjoy them more. Such stalks travel well if wrapped as a bundle with the cut ends kept moist. I took about half the stalks from a three year old clump of TEALWOOD to Milwaukee this year. After garden visiting all day on the way up, they arrived in good shape.

### --About the Author--

Steve Varner is Regional Vice-President of Region 9, American Iris Society. He lives in Monticello, Illinois.

He is the hybridizer of TEALWOOD, a very dark "flat" Siberian, winner of the Morgan Award in 1964.



# JUDGING SIBERIAN IRIS

By Julius Wadekamper

This material on garden judging Siberian iris is taken from Dr. William McGarvey's judging class at the National Convention of the Americal Iris Society in Milwaukee-69.

Dr. McGarvey proposes an interesting method for garden judging Siberian irises. One must actually locate or at least think of a known named variety. This variety must be the best one, in your estimation for the given trait you are judging. I would say that the only criticism to this system is that one must have at hand or know a large number of Siberians, but, it can be presumed that one who is garden judging seedlings does know a lot of Siberians. Our collection of some 30 varieties at the Arboretum should be of tremendous help in getting to know Siberians better. The Shattuck School Arboretum collection will have some 40 to 50 varieties this year. It will be a test garden and guest garden for the Siberian Iris Society. This will make two good collections where all can see and study good Siberians.

In judging, Dr. McGarvey suggests that you compare the seedling with the named variety that best portrays the given quality and rate it as + if it is superior to the named variety, = if it is the same as the named variety or - if it is inferior to the named variety. When a comparison cannot be made a U for unknown is written. This process is repeated for each quality.

A plant worthy of introduction should have no negative comparisons. For advanced awards a plant is worthy when it is better than named varieties in many qualities and at least equal to named varieties in other qualities. Here is the quality score sheet for judging Siberian irises.

Name or number of plant being judged _____	
<u>PERENNIAL QUALITIES:</u>	<div style="display: flex; justify-content: space-between;"> <div>Your decision</div> <div>Comparison plant NAMED VARIETY</div> </div>
<u>Blooms every year</u>	(   ) _____
<u>Vigor and hardiness</u>	(   ) _____
grows well, survives winters	
<u>Resistance to Disease</u>	(   ) _____
<u>Rate if increase, just right</u>	(   ) _____
Siberians multiply slowly	
<u>GARDEN EFFECT:</u>	
<u>Appearance in clump, graceful charm</u>	(   ) _____
<u>Appearance after bad weather, withstands</u>	
heat and rain	(   ) _____
<u>The Stalk, Appropriate to plant</u>	
and flower	(   ) _____
<u>Foliage, handsome throughout season</u>	(   ) _____
<u>The Flower, representative of species</u>	(   ) _____

(Con't - Judging Siberian Iris)

<u>Color</u> , pleasing	( )	_____
<u>Form and Size</u> , in proportion and attractive	( )	_____
<u>Falls</u> , good surface for display of color	( )	_____
<u>Posture</u> , in the right place in relation to the whole flower	( )	_____
<u>Standards</u> , appropriate in relation to the falls	( )	_____
<u>Style Arms</u> , erect and attractive	( )	_____
<u>Posture of entire plant</u> , all parts in good relation	( )	_____
<u>Substance</u> , deep tissue characteristic	( )	_____
<u>Texture</u> , surface characteristic	( )	_____
<u>Individuality</u> , different in a good way	( )	_____

Totals (+) \_\_\_\_\_ (-) \_\_\_\_\_ (=) \_\_\_\_\_ (U) \_\_\_\_\_

Dr. McGarvey talked at length on each of these individual characteristics. A complete summary on all he had to say would make this a lengthy article. Certainly there is nothing to compare with actually being at the judging session. I have written Dr. McGarvey and asked him for his comparison plant in each of these categories. If I hear from him we will then list what plant he thinks is superior in each of the given characteristics.

#### THE SIBERIAN PLANTING AT THE ARBORETUM

Those of you who attended the July meeting at the Arboretum had a chance to see the Siberians. They are doing well. Many have bloomed and all are making good growth. The area around the pond has been cleaned up and an attractive fence has been added. The irises are labeled with clear easy to read labels and the collection is very attractive with a wide chipped wood walk around the pond....

#### WINTER AND SUMMER

In winter when she goes to town,  
She dons a dainty silken gown.  
Her heels are high as Babel's tower,  
She is as fragrant as a flower.  
While unconsidered moments pass,  
She stands before her looking-glass,  
To paint the lily, gild the rose  
And put more powder on her nose.

But when the sun is shining down,  
She doesn't give a thought to town.  
Wearing a cotton over-all,  
She trains the roses on the wall.  
Her shoes have got the flattest heels;  
Beside the lily-pond she kneels,  
And, as the golden moments pass,  
She needs no other looking-glass.  
She doesn't think about her clothes,  
There is no powder on her nose....

-- Reginald Arkell in "Green Fingers"

ARTISTIC ARRANGEMENT SHOW

By Charlotte Sindt

One feature of the annual meeting of the American Iris Society in Milwaukee was the artistic arrangement show at the Concordal Domes of Mitchell Park. Sponsored by the Wisconsin Iris Society in conjunction with the county park commission, the show gave evidence of good planning under the direction of Mrs. Melvin Bausch. Theme of the show was "This State Wisconsin", and classes included data of historical interest to viewers and exhibitors alike. Screens, niches, and backgrounds were provided and entries were limited by their number. The large preparation room and its excellent facilities contributed to an ease of participation, so that the efficient show committee was ready when judging time came, without the hectic rush that is often a part of these events.

The show would have to be characterized as of good quality, with the exhibits well done for the most part. While many of the arrangements were modern in feeling, the general tenor appeared fairly traditional. There were 65 entries in 18 classes including sections for junior exhibitors and for men. There were 28 exhibitors, 15 of them from the Wisconsin Iris Society. Two members from the Twin City Iris Society exhibited four arrangements, receiving ribbons on all four.

THE GARDEN OF MR. AND MRS. JOHN E. TROKA

By Julius Wadekamper

Friday noon brought us to the Bavarian Inn for dinner of delicious wiener schnitzel. I think this has been the best "eating" convention I have attended. After dinner the second garden our bus tour visited was that of 2511 East Denton Drive, owned by Mr. and Mrs. John Troka in St. Francis, Wisconsin. Mr. and Mrs. Troka were on hand to greet us with coffee and cookies.

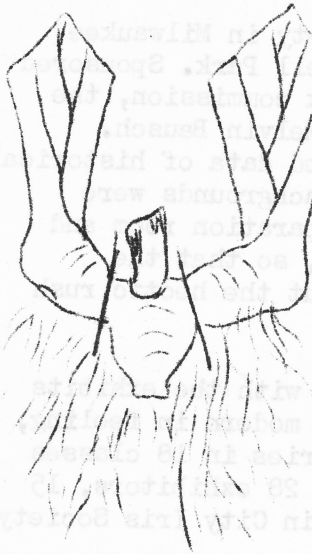
One thing I really appreciated seeing was a fine clump of the old ELSA SASS, beautifully grown. This is the first time I'd seen this attractive yellow variety. Among the newer ones was a magnificent clump of NIGHT HERON. This put the final touch on my decision to vote it for the Franklin Cook Memorial Cup. It was also the iris I decided to buy from this years convention viewings. NIGHT HERON is a clear blue with a deep blue base. It is dark where an iris should be dark. It has a heavy look where heaviness belongs, making it a well balanced flower for color. It is the creation of Jim Tucker.

Bill Bledsoe's COTTON CLOUD was not open but the buds all along the stem revealed an interesting distribution. I heard Mr. Bledsoe comment favorably on this type of arrangement, especially for shows. His GOLDEN OPPORTUNITY was very good with nine buds. The deep gold color of WEST COAST by Maynard Knopf was also outstanding. Kathryn Miller had two plants that I liked. One was an orchid with a red beard GRACEFUL LADY and the other a very good blue seedling 65-29-M. Lavonne Ney's TOMTEBO was a very good brown with a lavender streak. It branched very well. RASPBERRY RIPPLES by Dave Niswonger has excellent color and form. It is a new shade. I also like his SAPPHIRE FUZZ which has put on a good show in Denver, California and Wisconsin. GOLD CITATION by Marvin Olson was a good lacy yellow, perhaps the falls were a little strappy.

As usual Bob Schreiner had a good display of fine iris. My favorite of his this year was OCTOBER ALE. It's large flowers, maybe a little too large, are an attractive light brown with good bud count and good branching. Others that were attractive were PEBBLES, a light blue by Tucker, FASHION FLAIR by Wilma Vallette and PINK TAFFETA by Rudolph Tate. ROBIN REDBREAST by Gaskill is also attractive.



## Transplant Your Irises Now



The best time for planting irises in this area is July and August, so that new plantings have time to develop a well-established root system before winter. I have found that planting the rhizomes just below the surface, even in heavy soil, gives that margin of protection needed during the winter months. I have sustained fewer bloomstalk losses by completely covering the rhizome. In very sandy soil, deeper planting is recommended, at least one inch deep.

Select a spot that is well drained. Avoid low spots where water might stand over the rhizomes in winter. If necessary, raise the level of the bed slightly. Any good garden soil will grow good irises. They do need sunshine for at least half a day. Prepare the soil as for any planting. I use compost, bonemeal, and a low-analysis fertilizer, (according to the package directions) well mixed into the top six inches of soil.

Using a spading fork, dig the over-grown clump of iris, being careful not to injure the roots, and wash the soil off with the garden hose. Separate the plants by cutting the rhizomes apart, as pictured, using a sharp knife. Discard the central rhizome, as it will not bloom again (the rhizome without leaves.) Cut leaves to 6".

Don't replant diseased plants. I routinely disinfect all plants before re-planting. Using a solution of Chlorox, one cup to six quarts of water, I soak the rhizomes for one-half hour, then spread them out to dry.

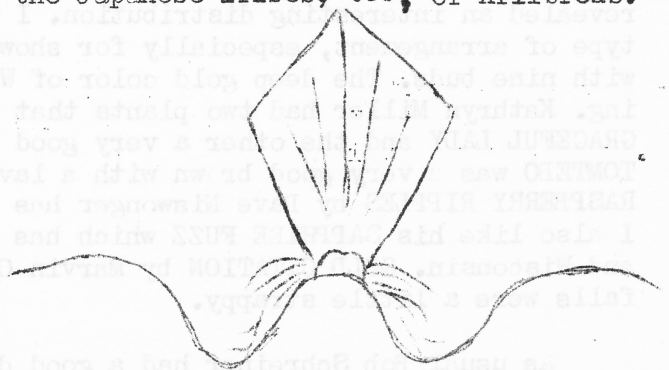
When ready to plant, dig two planting holes, leaving a ridge in the center. Place the rhizome on the ridge (as pictured below), and spread the roots out on the sides. Cover with soil. To make sure there are no air pockets under the rhizome, step on it to make it firm. Water well. Space rhizomes at least eight inches apart. If planting in a mixed perennial bed, plant the irises in drifts, facing all rhizomes in the same direction. Another method is to plant in groups of three or more, placing the fan on the outside, the fleshy portion toward the inside. In excessively dry weather, water the planting occasionally.

Extend your iris season next year by adding a few Dwarfs, Intermediates, Siberians and Spurias, - along with some of the lovely new Tall Bearded varieties. If you are looking for a challenge, plant the Japanese irises, too, or Arilbreds.

There are many different and lovely irises that will fit into any size flower budget, whether large or small. By planting them now, and giving them reasonable care, you will be amply rewarded next spring.



drift



Membership in the Twin City Iris Society - only \$1.50 per year. If you are not already a member, we invite you to join.

## THE WHEREFORE AND WHY OF POLLEN (MICROSPOROGENESIS)

By Warren Johnson

There are many terms which sound strange to our ears in this age of technology. Even in dealing with a plant such as the Iris, which is common to most gardens, the hidden phases of development and structure would surprise many by the terms which describe them. We do and can culture our plants, display their bloom and even propagate and hybridize between them without knowing any long words. Plant anatomy and taxonomy terms are seldom mentioned in our association with each other.

Interesting as these divisions of the field of botany are, they both require study and time. Meristem development, imbibition, apical dominance and growth substances are things we know exist without the exact names or without really understanding why or when they occur. We understand that both light and temperature affect floral initiation but exactly how is not understood completely.

To those of us who read the old testament of the Bible, the Book of Genesis is familiar. The miracle of creation described there is also present within the iris we value so much. We know of the formation of the seed following pollination (fertilization) and we know of the development of the seedling following imbibition (histogenesis). Yet much before seed formation creative processes are taking place. As the flower is first initiated in the plant meristem, (growing point), there is a differentiation of cells within the flower primordia that fortells a creative process called microsporogenesis.

If you like to take words apart; this beautiful term describes both pollen and ovule generation; micro - for small, spore - for the male and female gametes, and genesis - for the creation. The male half of this story is my concern, for without the development of pollen there can be no fertilization of the ovules and no seed for continued creation. The story of Adam and Eve is another Biblical similarity for without Adam's rib there would be no female and seed creation for the most part comes from the pollen to the female gametes. So on to the development of the pollen (Adam) and the why and wherefore of its being.

According to Dr. Katherine Esau, the initiation of inflorescences on the growing points of the plant is easily detected on low power microscopic examination. These floral apices are markedly changed from the vegetative growth to which they are attached and derived. The differentiation of various floral parts is established long before we can detect them by eyesight. Among the earliest parts to be formed are the sepals, petals, stamens and carpels. In the iris these are always in three parts or three united parts. The stamens have a single-veined filament which holds the anther.

This anther is made up of two lobes, each of which is long and narrow and easily discerned when the flower is open. Each lobe actually contains two cavities called locules. It is in these locules that the birth of pollen grains takes place through a series of cell divisions. When we see a locule it is the cavity containing the pollen grains. The tissue surrounding these locules is usually in four layers of cells but again by the time we see the anthers two of these layers and sometimes three have broken down into fragments. For the record these are epidermis, endothecium, parietal, and most important, the inner lining or tapetum.

Let's return to the locule cavity and the cell layers that surround them. Each is termed a microsporangium with two microsporangia in each lobe - one each side of the anther. Within each of the locules there are a series of large cells called

(Con't - The wherefore and why of pollen. (Microsporogenesis))

pollen mother cells, (P.M.C.), these are all through the locule. These cells divide at an early bud stage twice (meiosis) and become surrounded by a gelatinous pollen mother cell wall. The second division results in the formation of four nuclei and a cytokinetic cell wall formation. Surprise, you have the tetrad which develops its own cell walls consisting of the exine and intine. This cell wall has pores or openings for the growth of the pollen tube when the pollen grains separate from the tetrad. Malfunction or malformation of part or all of this process leads to a male sterile plant by reason of absence of viable pollen. The exine of the pollen grain may have spines or lattice ground work. A botanical researcher, Mr. Heslop-Harrison, now at the University of Wisconsin and formerly from England has been able to photograph the grains of pollen with all of their odd appendages and I hope someday we can see microphotographs of iris pollen. The shapes of many other pollen grains are very surprising.

Now back to the anther with its two lobes pointing at us not unlike an arrowhead. These long narrow containers of pollen open along the top lengthwise, like a pea pod. They dehise (open) when the endothelium modifies its growth, becoming very thin at a central joining point. There may be inside pressure from the pollen grain development or there may be a natural maturation allowing freedom for the pollen grains and their removal by the bee pollinators or by those who wish to daub pollen where the bee won't go.

Lily anther cross section -

