

# THE MEDIANITE

Volume 6 No. 1

January 1965

## CONTENTS

President's Patch . . . . .		2
Your Careful Attention Please! . . . . .		3
Personnel . . . . .		3
Invitation to Guest Edit Medianite . . . . .		4
The Round Robins . . . . .	Ellis . . . . .	4
The Social Side of the NEMIS Meeting . . . . .	Edwards . . . . .	5
Iris Design with Ceramic Tile . . . . .	Crist . . . . .	6
Iris Hybrids of Goos and Koeneman . . . . .	Review . . . . .	7
The Foundations . . . . .		8
The Pumila Story . . . . .	Davidson . . . . .	8
Northwest Median Iris Meeting . . . . .	Carter . . . . .	9
The New Look in Irises . . . . .	Gantz . . . . .	10
Re: Carriage of Show Plants . . . . .	Taylor . . . . .	10
More Re: Carriage of Show Plants . . . . .	Greatbatch . . . . .	11
Re: Wrapping Iris Buds for Shows . . . . .		11
New Mexico Iris Society's Early Show . . . . .	Yocum . . . . .	11
Roswell Iris Society's Fifth Annual Show . . . . .	McKinley . . . . .	11
Iris Show Approaching . . . . .	Rosenfels . . . . .	12
Varietal Comment... Midwestern MITG . . . . .	Roberts . . . . .	12
Re: Classification . . . . .	Ingham . . . . .	13
And, Don't Sell Them Down the River Please . . . . .	Witt . . . . .	14
Median Display Garden Report . . . . .	Richardson . . . . .	14
More on the Median Iris Display Garden . . . . .	Dabagh . . . . .	15
Excerpts from Letters . . . . .	Cook . . . . .	16
Green Spot Seedlings . . . . .	Cook . . . . .	17
Re: Lilli-Green X Green Spot . . . . .	Rosenfels . . . . .	17
Re: Green Spot Seedlings . . . . .	Edwards . . . . .	17
Karyotypes of Iris Species . . . . .	Review . . . . .	18
New Zealand Dwarf Group . . . . .		18
More Measurements . . . . .		19
Border Bearded . . . . .	Wright . . . . .	20
Omissions from Registrations . . . . .		20
Re: 1964 Season . . . . .	Greenlee . . . . .	20

Published by THE MEDIAN IRIS SOCIETY at Westborough, Massachusetts

## OFFICERS

President:	John E Goett, Rt 111, Monroe, Conn 06468
First Vice President:	Mrs R E Peterson, Hill Rd, Brentwood, Tenn 37027
Second Vice President:	Harry B Kuesel, 19 Mary Lane, Greenvale, NY 11548
Secretary:	Mrs Don R Holtz, PO Box 7, Kellogg, Idaho 83837
Treasurer:	William R Pierce, 8037 Mountain Ave, Orangevale, Calif.

## DIRECTORS

Immediate Past President:	Mrs F W Warburton, Rt 2, Box 541, Westboro, Mass 01581
Expire 1965:	Robert S Carney, 500 Colonial Rd, Memphis, Tenn 38117
	Mrs R C Ingham, 24795 Water St, Olmsted Falls, O 44138
Expire 1966:	Fred L Nacke, 1007 Long Ave, Richland, Wash 99352
	Mrs Paul E Dunbar, 928 N Rochester Ave, Indianapolis, Ind 46222
Expire 1967:	Mrs Louis Deru, 683 41st St, Ogden, Utah 84403
	Richard S Rosenfels, 1220 Potter St, Richland, Wash 99352

## SUBSECTION VICE PRESIDENTS

SDB (Standard Dwarf)	Mrs Roy Brizendine, 2214 Maryland, Topeka, Kans. 66605
IB (Intermediate)	Mrs R E Peterson, Hill Rd, Brentwood, Tenn 37027
BB (Border)	Keith Keppel, 517 Jesse Ave, Stockton, Calif 95205
MTB (Miniature Tall)	Mrs David K White, 429 W Acacia Ave, Hemet, Calif 92343

## STANDING COMMITTEES

Nominating-Expire 1965:	William H Peck, Jr, Yellow Cote Rd, Oyster Bay, NY 11771
Expire 1966:	Mrs Roy Brizendine, Kansas
Expire 1967:	Mrs J A Witt, Washington
Publications-Chairman:	Donald I Tufts, 73 North St, Grafton, Mass 01519
Editor:	Mrs F W Warburton, Rt 2, Box 541, Westboro, Mass 01581
Subsection Editors:	SDB: Mrs Roy Brizendine      BB: Keith Keppel IB: Mrs R E Peterson      MTB: Mrs J A Witt
AIS Bulletin Representative:	Mrs F W Warburton
Research:	Chairman, Earl R Roberts, 5809 Rahke Rd, Indianapolis, Ind 46217
Inter-Club Relations:	Chairman, Edwin A Rundlett, 1 Fairview Ave, Staten I, NY 10314
Pollen Supply:	Chairman, Mrs T D Wright, 10051 Brookside Ave, Bloomington, Minn

MEMBERSHIP:      Mrs P C Markham, Upland Ave, Lunenburg, Mass 01462

ROUND ROBINS      Chairman, Mrs R J N Gantz, Rt 1, Box 163, New Hope, Pa 18938

### Directors:

Friendship:	Albert H Ellis, 19 McClure Ave, Brantford, Ontario
Hybridizing:	Mrs R J N Gantz Mrs F W Warburton
International:	Mrs R J N Gantz
Standard Dwarf:	Mrs Roy Brizendine, 2214 Maryland, Topeka, Kans 66605
Intermediate:	Mrs R E Greenlee, Rt 3, Chrisman, Ill 61924
Border:	Keith Keppel, 517 Jesse Ave, Stockton, Calif 95205
Table:	Mrs J A Witt, 16516 25th NE, Seattle, Wash 98155
Editor:	Mrs R E Peterson, Hill Rd, Brentwood, Tenn 37027

## CHAIRMEN OF SPECIAL COMMITTEES

Display Gardens:	Mrs Don R Holtz, PO Box 7, Kellogg, Idaho 83837
Central Distribution:	Wayne Buchholz, Star Rt, Box 44, Lexington, Nebr 68850
Symposium:	Bernard Hobbs, Rt 1, Box 127-B, Noblesville, Ind 46060
Bylaws:	William H Peck, Jr, Yellow Cote Rd, Oyster Bay, NY 11771
Exhibitions:	Harry B Kuesel, 19 Mary Lane, Greenvale, NY 11548

LIBRARY:      Mrs Donald I Tufts, 73 North St, Grafton, Mass 01519

## NORTHEAST MEDIAN IRIS SOCIETY OFFICERS

President:	Mrs W E Chambers, 282 Forrest Rd, Merion Station, Pa 19066
Vice President:	Elston K Herrald, 20 E Oneida St, Baldswinvill, NY 13027
Secretary:	Mrs Fred Matzke, 714 Hannibal St, Fulton, NY 13069
Treasurer:	Frederic A Jacobs, 24 Sylvan Valley Rd, Meriden, Conn 06450

## PRESIDENT'S PATCH

As the year begins we can again look back to how our classes and our society progressed in the past year and what we can hope for this year.

Hybridizers continued to do well; we have reached our goal with most color classes having at least one good variety representing the standard dwarfs, intermediates and borders. Improvements are already in the seedling patches of many enthusiasts.

Additionally, more commercials are listing our classes, including some general nurserymen. Popularity with the gardening public is actually the only true criterion of our success. When the local garden clubs are aware of the quality of the medians and grow them and show them, then we can consider our job well done.

But unfortunately, as a Section of the AIS we have not done as well as we should have. Irisarians as a group are so engrossed with the flamboyant tallis that they do not actually appraise the newer varieties critically and constructively. We cannot blame them; we as a society and as individuals should awaken interest.

The Society suffers from having too few dedicated workers. In most organizations it is true that a handful do the real work. We need to instill enthusiasm and a sense of belonging and pride in the average member. If each of us will do a little it will be far better for the society. Get behind the chairmen of the various committees... contact them and let us have your recommendations.

*John E. Seck*

Editorial Comment: What our President means is that because we are a Section of AIS and almost all our members come to us through AIS, their interest in medians is likely to be secondary... and, in fact, many are already working in other vineyards usually over their top capacity. Many are judges, with us to learn their trade, a laudable reason for belonging, but we can hardly expect them to add more administrative work to their loads. Many are hybridizers, even purely tall bearded hybridizers who realize that a gene from a small package may create fireworks if you can get it into a big one. Most of our members love ALL irises, and some have discovered that they just plain like them smaller.

Most people hesitate to volunteer for specific jobs, but nobody can invite you without knowing what you would like to do for the Society. Your membership chairman will be delighted to hear from you, so


TELL IT TO LYNN!!

#### YOUR CAREFUL ATTENTION PLEASE!

As most of you know, the American Iris Society has agreed to handle dues-collection for all its Sections, AT THE SAME TIME THAT AIS DUES ARE COLLECTED. In order for this to work smoothly, our own billing schedule has been adjusted to coincide with that of AIS, which will affect YOU as follows:

1. If you normally pay AIS dues in December, you will now pay your MIS dues at the same time, direct to the St. Louis office.
2. If you normally pay AIS dues in June, your membership in MIS is automatically extended 6 months...ie., to the June following its present expiration date, at which time you may pay your AIS and MIS dues simultaneously, to the St Louis office.
3. If your MIS dues are already paid some years in advance, you will begin paying MIS dues to the St Louis office in December of the year your MIS membership expires, or the following June, as the case may be.
4. If your AIS dues are already paid in advance, PLEASE continue to send your MIS dues to YOUR MIS MEMBERSHIP CHAIRMAN, until the year in which your AIS membership expires. AIS does not wish to collect Sectional dues separately from its own! You will receive dues notices in the interim from MIS, and may renew either by the single year, or at once for the entire period up to the time your AIS membership will expire.
5. If you are a Life Member or an Affiliate of AIS, your dues notices will continue to come directly from MIS, and your dues should be sent to your MIS MEMBERSHIP CHAIRMAN.
6. Once you have begun renewing AIS and Sectional memberships simultaneously, it will help materially if all your memberships are of the same duration, so that they will continue to coincide.

If you have a special problem, or any questions, don't hesitate to write your MIS MEMBERSHIP CHAIRMAN:



Mrs Peter C (Lynn) Markham  
Upland Avenue  
Lunenburg, Massachusetts 01462

THANKS FOR YOUR COOPERATION!!!!

#### PERSONNEL

Here's what our new membership chairman has to say for herself:

Father was with Chrysler (still is) so we MOVED and MOVED. When we stayed in one place long enough, Mother had beautiful gardens, and was an avid irisarian and AIS member.

Peter and I both graduated from Middlebury in '55. Extracurriculum: we ski; I act, if time permits; time usually does NOT permit. I also pursue ballet and modern jazz a bit, write

a bit, knit, make rugs, raise a few violets, a few kids and a lot of Iri (Eye-rye, yes) and the cats. They raise me, I should say.

If I ever get another paying job I think I'd get into newspaper work, or radio. Or TV.

We moved here in '59, and launched the gardens the next spring. Started with 40 irises, and now have about 150, and 500 seedlings or so, which has to be about IT. Though we have an acre, every bed involves excavating either ledge or fill or both, and hauling in loam, and I have just about HAD it with ye olde wheelbarrow.

In the seedling patch, I owe Marilyn\* for most of the better ones. Only the brown are my own, from scratch. I'm working on New-England-proof browns, reds from odd-ball approaches, red-bearded blacks, and pink byproducts, in the tall. Joined MIS when I got interested in Iris aphylla's possibilities for tetra table material, and Marilyn's near-table seedlings from tetra tall. (\*Marilyn Sheaff of Illinois, is Lynn's cousin.)

Peter is in retail advertising; he is an irisarian by association, you might say. Or you MIGHT say he puts up with me. He has a good eye for all things artistic and has gotten very proficient at taking iris slides...his latest is color slides at night with electronic flash. With a little filtration (Kleenex, about two layers) you can get nifty closeups and no busy background. You can also get different effects by holding the flashgun below, or beside the flower, rather than head-on.

The children, everybody says, are the best seedlings on the place. They put up with me, too...they even take discarded seedlings and plant them among the ledge on this windy hill. Maybe something great will appear up there one day. If it does, it'll have to be rock-hardy, that's for sure.

Our new pollen exchange chairman is Mrs T D (May Belle) Wright, 10051 Brookside Ave, Bloomington, Minn 55431. May Belle is particularly interested in setting up an exchange for breeders of border irises. She says: "This would probably involve records of those irises known to breed small things and whether this had happened once or several times; a list of the BBs available and who grows them, where, and also a list of the hybridizers who have seedlings that breed BBs and who would be willing to share pollen and/or plants..."

See May Belle's further remarks about breeding border irises on page 20 of this issue.

This year and hereafter the lists of your Regional Representatives and Display Gardeners will be published in our April issue.

#### INVITATION TO "GUEST EDIT" MEDIANITE!

How would you like to be a guest editor for part or for all of a Medianite issue? You may reserve space for anything from a single guest-editorial to an entire issue for which you will procure and edit the articles except for the space reserved for matters customarily covered.

We can think of any number of special subjects that would make good issues...shows... we usually have a show issue in January, anyway; judging, aril medians, reblooming medians, arrangements, overseas growing of medians, culture and companion plants, new advances in any of the four median classes, advances in single colors or patterns...if YOU have a special angle, why not air it?

If you are interested, write your editor for further information; there are certain stipulations and obligations, having to do with timing and format, but they'll be as simple as possible.

#### THE ROUND ROBINS

Albert Ellis, Ontario

Ye Editor asked for a report on my Robins. A report would read... "they are doing excellently and are flying without any serious delays."

That, I fear, is not the type of report she wants. As she already knows this. So getting behind the eightball I shall attempt to report on their health and their reason for existence.

As I must of necessity start somewhere I shall start with the Robin I have been in for the longest time. This particular Robin has as members: artists, writers, hybridizers, gardeners, and a couple of editors. Then there is myself just a plain Joe. This robin is rather sedate as

you would expect. A cross between a certain iris of such and such chromosomes crossed to another of different chromosomes presents no problem to this group. Once in a while other things do get discussed. This of course happens in all of the robins... even this one.

The next Robin is different. As the people of the iris fraternity are a cross section of humanity this is to be expected. We are not all off the same press nor are we run-of-the-mill. The members of this Robin are a number of folk who are interested in collecting irises and other flora and fauna, along with Stamps-Matchbook covers-Pottery-Ashtrays, etc. I the director, try to save certain fishing holes for myself. Another wintertime hobby is Amateur Radio.

As stated above there are so many facets in this our Iris-growing hobby that we even have a Robin for a woman who raises certain type cats. In it we also have a woman who raises tropical fish... the fighting kind. Then another goes in for arrangements for the center of the table. The Director of this Robin is a bit of a nut. He has practically nothing but median and dwarf irises in his garden.

To summarize, not ONE of these Robins is a wasted effort. All are of interest to those who are members in them. Why do you think I sit out on the front porch waiting for the mailman every morning? Certainly not for the bills he brings!

If you can write a legible hand you can become a member of some robin. Should you be so well educated that your writing is undecipherable, get a typer and join us. You will have fun!

### THE SOCIAL SIDE OF THE NEMIS MEETING

Peggy Edwards, New York

To start with, it was just the right kind of day to go to a meeting; clear, crisp in the morning but warming up nicely as the sun got higher. Put me in the right frame of mind to start. And then we had Bill Peck for company on the way down from Long Island, and I had my jaws in fine shape for the talking, by the time we arrived.

After checking in we went to the lobby to see who was around and get the details on the program for the day. We found Bee Warburton with a draft of judging principles, bent on getting our comments and criticisms. My husband bowed out at that point. Irises aren't his racket... bowling is. Others drifted in, we all drifted over to the Horn and Hardart Restaurant where we were to hold our meeting and dinner, lined up outside the door for pictures (a big bash like this must be recorded for posterity) and then drifted downstairs to the meeting room. Bee's impromptu session on judging went to work in a corner, and the rest of us clumped into little groups to talk. Also to get acquainted with the many new faces. About 4:30 we straightened up and had a business meeting which lasted about an hour (details elsewhere) and then went off to tidy up for the dinner. The Man was back from the bowling alley by now and we returned to H & H to find a small gathering in the bar, where we took aboard no more than we could comfortably carry downstairs.

There were almost 50 of us: Six tables for 8 were waiting, decorated with lovely arrangements of yellow and white chrysanthemums; place cards were set to allow the New Yorkers and New Englanders to get acquainted with the Pennsylvanians and Delawarites; the folks from New Jersey being median were of course acquainted with both groups. The feature of the dinner was roast turkey, and very good too. Coffee and tea were available from the start of the meal, which I like; I hate to wait for my tea until I'm ready for the toothpick. The windup was pumpkin pie, and those who know believe that the H & H pumpkin pie is right up there with the best.

After dinner we all got up and wandered around while the tables were cleared (and The Man disappeared in pursuit of a little exercise, having eaten all of his dinner plus part of mine). Then we all settled down again, joined by a few more natives who had to wait till the kids were in bed before coming for the program. Quite a few local iris fanciers who are not Medianites came to learn about our pets, and I think we were able to show them something. Fitz Randolph started things off with a brief and interesting talk and then the slides began. LOTS of slides. From all over... West Coast, East Coast and all points between... SDB, Intermediate, Border and MTB... famous varieties, new introductions, seedlings. It was a lovely collection, and I could have watched all night, except that after approximately five hours the upholstery of the chairs was beginning to turn into concrete, so when the program proper was over, several of us left to find softer seats. The real diehards went on for some time, I believe. My husband joined us upstairs, and in ones and twos others did the same, and the party went on till midnight.

None of these things end with the one day. There is always the breakfast meeting, which is a lot of fun, though confusing to the waitresses as people get up to catch a train and others slip into their seats; to say nothing of the way we push tables together without regard to the waitresses' stations. But these were all nice gals and let us have our fun. So we talked more iris talk, and I would guess my breakfast took about two hours, most of which was not devoted to food.

There were a few garden visits, to see where the irises would be if they were blooming, but we decided to take advantage of the lovely weather and make tracks for home. Even my husband enjoyed the trip...he had bowled two games over 200.

Who-all was there? Don't ask me! I lost track after the first dozen new faces. Paul and Bonnie Dunbar came all the way from Indiana; Jack and Dagmar Goett were there; Harry Kuesel presided in his usual efficient manner. The real tribute must go to Charlotte Gantz, who set up the whole thing so beautifully.

## YE KRAFTE KORNER

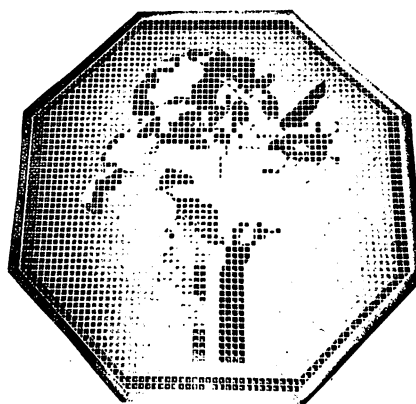
### IRIS DESIGN WITH CERAMIC TILE

Nancy Crist, Indiana

To start this project, I first decided on the object to use the tile on. For this my husband, Jim, and I chose an unfinished maple table...eight-sided (each side 13 inches), 31 1/2 inches across, 15 5/8 inches high, top 2 1/4 inches thick, round legs (12 inches) set in bronze caps. This table was originally made for an inset glass top, hence the 3/4 inch margin on the table top. Jim sanded and gave the table three coats of clear varnish (blonde finish).

The measurements of the top excluding margin were used to make a scaled drawing which was marked off in squares (each representing 1/2 inch). I sketched the iris design on this diagram adding shaded areas etc. Then each square was counted to find the total number of tile needed. Using an "Eagle Prismacolor Chart" for thick lead colored pencils, I will list the tile colors, areas used in, and number of each used.

GOLD	border decoration	8
LIGHT GREEN	background	1841
ULTRAMARINE	border, darkest	
	shadings on iris	483
ULTRAMARINE	medium shadings	
(lt. blue-gray all over markings)	on iris	236
LT. BLUISH GRAY	light color on iris	374
(faint ultramarine markings)		
LT. TAN (lt. to dk. brown markings)	added markings on iris	22
WHITE	beard	23
VERY LT. GREEN	bud	20
GREEN BICE	bud	16
PALE OLIVE GREEN	bud	15
Lt. CANARY YELLOW	bud and stem	27
(with sprinkling of lt. to dk. orange)		
DARK GREEN	stem and leaf	127
TOTAL		3, 192



These tiny 3/8 inch square tile do not always break where you want them to so always have extras available. The tile cutting was done by Jim using carpenters' pincers. As the tile were cut, I laid them in place on a card table. Elmer's GlueAll is what I used to glue each tile in place. One would think it would be a breeze to glue each piece in place, but it didn't work out that way. We glued on, then took tile off three times before completing this table top.

Each tile is spaced so as to leave a narrow opening around each piece. A special type of grout is used to fill in these openings. If you use regular grout you will have to work faster as it dries quickly and the excess is very hard to rub off. There is a sealer for the grout; but it is just as easy to refill chips and cracks with the grout.

Working on this project in my spare time, it took almost two years before it was completed. The picture shows the top of the finished project.

Any ideas for using iris designs in handicraft would be greatly appreciated by "Ye Olde Krafte Korner." If possible include a glossy print of picture, or a drawing or diagram in black on smooth paper. Send to Mrs J A Crist, Rt 5, Box 45, Franklin, Indiana 46131.

\*\*\*\*\*

## REVIEW: THE DWARF BEARDED IRIS HYBRIDS OF GOOS AND KOENEMAN

L F Randolph and Jyotirmay Mitra\* Caryologia, Vol. 15, No. 3, 1962

During the past several years the authors have published a number of papers concerned with the karyotypes of iris species. In this paper the knowledge acquired is used to evaluate the published parentages of a group of dwarf iris hybrids, with interesting results.

As the authors tell it: "In 1899 the well-known German horticultural magazine, "Die Gartenwelt" (Vol 4, p 112) reported that the Goos and Koeneman nursery of Niederwallof, Germany, and recently produced hybrids of Iris pumila and I. germanica, some of which were more like the tall bearded parent and others were more like the dwarf parent. This report stated that the five most beautiful of some thirty hybrids of this parentage were given the names Cyanea, Eburna, Excelsa, Florida and Formosa."

This statement roused Dr Randolph's curiosity, and he hunted up these old dwarf varieties and found them to have 40 chromosomes, apparently a confirmation that the stated parentage was correct. Although it was not known that Goos and Koeneman had, at that time, the true species Iris pumila, and all the dwarf irises were often referred to at that time as "pumila dwarfs," if the crosses in question had been actually crosses between such non-species "pumilas" and some so-called "germanica" of 48 chromosomes, these hybrids would have had 44 rather than 40 chromosomes.

Still not fully satisfied of the correctness of the recorded parentage, the authors once more scouted up the G&K dwarfs, checked them carefully by published descriptions, determined their karyotypes, and upon careful comparison with the karyotypes of various species previously studied, came to the conclusion that they are not pumila-tall hybrids but are derivatives of 40-chromosome dwarfs "having karyotypes like those of various dwarf bearded species indigenous to northern Italy, southern France, and Switzerland, as I. chamaeiris, olbiensis and biflora (subbiflora in part) and virescens."

Furthermore, the authors state that these hybrids are much like those developed during this same period by Caparne and introduced by him about 1903 as "New Hybrid Alpine Iris." There is evidence, cited in references by the authors, that Goos and Koeneman might have acquired some of Caparne's hybrids.

### References

- Christie-Miller C W, 1943: Caparne's Irises. The Iris Yearbook, 1943: 15-19.  
Heinig K, 1959: Iris Species Hybrids. In Garden Irises ed. L F Randolph, pp 405-438.  
Mitra J, 1956: Karyotype Analysis of Bearded Iris. Bot. Gaz. 117:265-293.  
Randolph L F and Mitra J, 1959a: Iris Chromosome Numbers. Amer. Iris Soc. Bull, 152:5-9.  
——, 1959b: Karyotypes of Iris Pumila and Related Species. Amer. Jour. Bot. 46:93-102.  
——, 1961: Karyotypes of Iris Species Indigenous to the USSR. Amer. Jour. Bot. 48:862-870  
Wister J, 1920. Notes on the History of Bearded Iris. Jour. New York Bot. Garden, 21:181-191.

\*Department of Botany, New York State College of Agriculture, Cornell University, Ithaca, NY

## THE FOUNDATIONS

Trying to describe Paul Cook's effect on the development of median irises is somewhat like describing the cellar construction of a house as though the house were not there. We can tell you how many stones, what sort of granite, how much mortar and of what it was compounded; how skillfully planned were all approaches, how solidly and how levelly it supports the superstructure... but this is all only salesman's talk until you have lived in the house and become familiar with every nook and cranny.

We made a beginning of our evaluation of Paul's work in the previous volume, the 1964 Medianite. Edwin Rundlett's article on page 45 deals with continuing work with and from the Iris reichenbachii clan. On page 60 we have tried to outline our hopes and plans for this Memorial to the man who was more than any other responsible for the development of modern dwarf and intermediate irises. On page 70 we started a discussion of late dwarf irises with a report from Paul himself and some further discussion taken from correspondence.

Hereafter we will mark each item in this series with a black dot before the title, as they will vary widely in all sorts of ways, and will of necessity be scattered throughout our future issues.

Bee to Paul, October 1962: It was good of you to comment on my projects. I hope you realize that you are responsible for just about every one of them, in one way or another... even to having encouraged me to raise far more seedlings than I could handle!

## THE PUMILA STORY

Excerpted from THE NORTHWESTERLY, Spring 1956

Roy Davidson, Washington

Bob Schreiner was raised in his father's iris nursery and cannot remember not knowing Iris as a boy. Upon his graduation from grammar school, he was given by his father a copy of Dykes' "Genus," and the effect was of inciting the young irisarian to begin a collection of all the species of Iris from their native habitats. The Schreiners lived at Saint Paul at the time, and soon packs of seed from all over the world began arriving at the post box at Riverview Station, not the least among them being the first Iris pumila to come to the United States, about 1931.

The earliest arrival of pumila seed was from an expedition sent out by the Garden Trust of Moscow and had been collected in the Crimea. All the plants grown from it were very slender, and similar to one another save one. This one was a bicolor with blue standards and claret falls, and was given the garden name of Yalta. Nana was selected as having the best form among the claret-colored remainder, being very pleasing in color and possessed of only a faint spot.

From the second lot of pumila seed, received from the University of Cluji, in Transylvania, a whole range of colors was raised. There were clear yellows and muddy yellows, all shades of blues and violets. From these plants, raised two years after the Crimean lot, Carpathia and Sulina were selected as being the finest yellow and the most intense blue of good form.

The third lot of pumila seed came as a most liberal packet from Dr Lemperg of Hortus Botanicus in Vienna, and resulted in over 200 plants from which about a dozen were saved as being the best in form and constituting a representation of the lot. None of these was ever given a name because they did not as a group possess the qualities of daintiness and dwarfness inherent in the Crimean and Transylvanian forms. Some of them were spotted and some were not, but on the whole they were not as pleasing as the other two strains.

Only a few plants of each of the three... Nana, Carpathia and Sulina... were ever sold. In Schreiner's words, "When offered to the public, they failed to strike a responsive chord, so it seemed rather pointless to offer more named varieties." Yalta proved to be a weak grower and died on the way to Oregon when the Schreiner garden was moved.

Paul Cook, in ordering plants of these named ones, asked if other forms were available, and received in his parcel a surprise of five plants of the Austrian forms which Bob thought constituted the best of them. It is from these plants that Cook's vast work with Iris pumila has come

and from which stems much of the subsequent work such as that of Geddes Douglas and his Lilliputs, Cook having sent the pollens of the Austrians to the more southern, earlier garden of Douglas in Nashville in exchange for pollen of the tall, and also having sent plants to Walter Welch and Doc Jonas from which further work has come.

Lack of help during the war years, coupled with the huge task of moving the garden resulted in the loss of all the Schreiner stock of Iris pumila, and it is only through the gift of these five plants to Cook that the Austrians are known today.\*

Bob Schreiner modestly says, "Full credit for the perpetuation of and work with the Austrian pumilas must go to Paul Cook, who is, in my humble estimation, one of our outstanding iris breeders, a Prince of a person, and a mine of information on Iris." Some little credit must surely go, however, to the man who had the foresight to gather together the hundreds of seed from faraway places, who raised the plants, and made the original selections.

\*More recently large numbers of Austrian pumilas have been sent to America by Rudolf Hanselmayer and Eckard Berlin.

#### NORTHWEST MEDIAN IRIS MEETING

Arboretum Clubhouse, Seattle, Washington... October 31, 1964

The meeting was called to order by Jean Witt. Reading of the minutes of the previous meeting was dispensed with. Since the Northeast Median Group has scheduled their meeting for the following week, it was requested that growers with slides should send them to Charlotte Gantz for viewing there.

Bennett Jones spoke to the group about the problems the amateur hybridizer encounters when he attempts to market his first introductions. The first thing you must do is accept the idea that there is no great monetary reward. Since these irises are not known outside the Median Society, there is no demand for them. For an unknown grower to advertise, even in the AIS Bulletin, is a waste of money. Commercial growers may be willing to introduce amateur hybridizers' irises on shares (for instance, 50% for the first three years). Perhaps the best way is to distribute the plants to display gardens and if there is a demand, the hybridizer may introduce it himself. Getting distribution and possibly getting awards is the only satisfactory reward.

It was suggested by Maxine Maynard that advertising in the National Garden Club's publication might be a good way to interest flower arrangers in the median irises.

Bennett suggested that it might be desirable to contact other median groups in order to form a committee to discuss the problems of getting median irises into commerce. Surely our favorite flowers are worth growing by more gardeners than just the society's members.

There was also some discussion of the price of introductions. It was generally agreed that the present prices tend to be so high that new medians are priced right out of their market.

Species hardiness and special growing problems (among the species) were discussed. Everyone with experience growing them contributed to the discussion. After the individual members of the group had explained the work that each had done with the median irises we adjourned briefly for a coffee break.

Resuming the meeting after the pause, late arrivals spoke about their work and accomplishments. Jean Witt told us of her work and announced proudly (with a twinkle in her eye) that she had finally, after 13 years of work, produced what she considered a real table iris... from a bee pod. (Applause).

Herb Parker reviewed his paper on the irradiation of irises which he had presented at the spring regional meeting, since many of us were unable to attend the regional. He convinced us that there are surely easier ways to achieve new patterns and colors and improvements in irises than by this method.

After the potluck dinner we had a short discussion of the rules drawn up to cover guesting of irises in our region. It was moved that Jean Witt write to the chairman of the regional guesting committee requesting the inclusion of median irises in the rules which they are preparing. Motion carried.

The Northwest Median Group will meet at the Arboretum Clubhouse on November 6, 1965. The dwarf meeting has been scheduled for April 24, 1965, in Leona Mahood's garden.

Topics for presentation and discussion at the next meeting were suggested:

Hybridizers might tell us how they go about setting and achieving their goals.  
Techniques and achievements in line breeding.  
Suggestions of good (and bad or hopeless) parents.  
Pedigrees of good median irises.

After viewing some of the best slides of median irises we have seen to date, the meeting was adjourned.



Grace Carter, Acting Secretary

## SHOW BIZZ

Publicity Release: THE NEW LOOK IN IRISES\*

Charlotte Gantz, Pennsylvania

The gardener of yesterday knew irises only as the flower of a fleeting period... a mere week or two in late May and early June. Today's gardener, though, hails the iris as one of his most dependable allies starting with the little reticulate Iris histrioides and its brilliant splash of sky blue in amongst the crocuses and snowdrops. Still in early spring come the miniature dwaafs with their new rich range of color (red, brown, orange, yellow, lavender, blackish-purple, orchid and many shades of blue) blooming among the primroses, forget-me-nots and grape hyacinths, set off, perhaps, by taller hyacinths and daffodils, with forsythia and spiraea bringing up the rear. No gardener who has seen that picture wants to dispense with the little irises.

More effective even than the littlest ones, however, are the standard dwarfs which follow close upon their heels sharing garden room with many of the same companion flowers. While the miniatures provide effective small notes in the early garden, the standard dwarfs offer masses of solid and brilliant color in the same wide range, and many are also charmingly patterned with a big "thumbprint" spotting the fall just below the beard.

For an unforgettable picture try Snow Elf beside a glorious early red tulip (Fosteriana Red Emperor, for instance), give the warm yellow Brassie a foreground of russet primroses, or put Royal Thumbprint (a rich reddish-purple with a brighter velvety spot accenting the blue beard) beside phlox divaricata or bleeding heart. Or grow Lillipinkput all by itself just for that incredibly glowing mass of apricot-pink.

The gap between standard dwarf and tall bearded iris (the chief and in most gardens the only iris of yesterday) is bridged by intermediates. And at the time of the tall bearded, two other classes have been added... those of border irises and of miniature tall bearded. For the most part the irises in these last four classes (standard dwarfs, intermediates, borders and miniature tall) which together form the median group, are the creation of the past decade. So new are they that good examples are still hard to come by in most commercial gardens.

A large number of the newest and best (in whatever classes you have scheduled) will be on display in.... (your show place and date... any further data). (Your local group, Region or Area, city or town, garden clubs, etc. etc.) is the home of such and such talent... such or so hybridizers of such or so varieties, etc. With such resources close at hand, it's no wonder that (your locale, etc) can offer an exciting opportunity to look at and find out where to obtain these "new irises."


\*Written for the 1964 Median Iris Show in Worcester, Mass... adapt it for your own uses, for show or open garden publicity... release it to your local papers, or to your radio or TV stations... mimeograph and distribute it among members of your local groups.

Re: CARRIAGE OF SHOW PLANTS

John Taylor, Hythe, England

With lilliputs the method I used was to get a large shallow bowl and fill it with peat, thoroughly wet it and press it down firm. Then cut the stems in bud (or fully out) and stick them in the peat making sure that the flowers do not touch. If they touch you can write them off. If you

put them in the boot, or on the car floor...not on the seat...they should do the journey and come out unscathed. You will have to have the car windows tight closed as a good blast through the window will put paid to them. Many people wrap in bud and bring up to the Show, but it is a chancy business and I always stick them upright in peat. IBs can be put in a deeper box and string woven between them over the top of the box to keep them apart. Another good dodge is to keep them sprayed with a fine pressure spray so they don't lose freshness.

More re: CARRIAGE OF SHOW PLANTS 

Renee Greatbatch, Maidenhead, England

The Brummits use a similar method with Californians; they use damp sand, I think. If it's a one-day show, which means traveling opened flowers, I use a long rectangular deep basket, or a box, pierced with holes along the sides...through these I push twigs as and where needed to make a series of racks, and arrange the short-stemmed medians on them, stalks pointing to the centre. If one can stage overnight, it's easy! Cut suitable stems the night before staging, paper up any buds that are due to open the following morning...put in deep water overnight. Next day take out and dry stems, arrange...all lying the same way...on top of the foliage, cornerwise on a large sheet of brown paper, putting some tissue paper sheets over the flowers and pinning down in places. Then roll up like a parcel, tie the base firmly and pin down the top triangle of paper to protect...result a long tapering sheaf, which travels well...I take mine by train and taxi. When unpapered the buds spring open, but take some hours to settle down to their proper shape...at first they have a slightly pinched look. As the Chelsea judging is not till after 4 PM it might work well there...and it's so much easier and no spraying needed.

Re: WRAPPING IRIS BUDS FOR SHOWS

 Bee

Cut facial tissues into 8ths. Wrap soft twine or yarn around a Digest size magazine as many times as you have buds to wrap, and cut on one side. Buds of irises are folded spirally counterclockwise, so wrap the tissue around in this direction. Wrap yarn around two or three times and tie. Scotch tape is okay but harder to remove. Don't forget a small pair of scissors in your show equipment. Remove wrappings in plenty of time for the flower to arrange itself after it opens, as it will look a bit shapeless at first. Jack Goett says four days is the most he can keep them tied up, but I have kept them in the refrigerator up to 10 days, though by this time they really don't look quite their dear little selves. A word of caution...don't try to wrap loose buds partly opened...they will bruise.

NEW MEXICO IRIS SOCIETY'S EARLY SHOW 

Jean Yocum, Albuquerque

The earlier show, a combination of arils and medians, was held on May third, a week later than scheduled because the season was so late. This was the first showing of dwarfs and medians in this area. It was a lovely display of good quality. I potted 20 dwarfs and Bonnie Lowenstein had a few. Hers were nearer pumila breeding and showed much better than the chamaeiris types. There were more in the lilliput classes than in any others...lots of Lilli-White, Green Spot, Orange Bantam and Dale Dennis; some Brassie, Golden Fair, Lemon Flare (it shows beautifully) and various older yellows. Derring-Do was very well liked and showed beautifully. Blue Denim, Knotty Pine and Zing looked awful and I was sorry I didn't take them out. The show was in the basement of a bank, not quite completed, all artificial lighting and the walls just unfinished cement and it just killed those colors. Congo Wine looked fine; so did Cloud Fluff, First Lilac and Blue Asterisk.

Eight people showed medians; of 162 specimens, 91 were dwarfs and medians. Of these, 22 were miniature dwarfs, 57 standard dwarfs and 12 intermediates. There were 11 blue ribbons in the lilliput classes and 5 in the intermediates.

Best intermediate and best median was Blue Asterisk exhibited by Mrs Earl Gould. Best in the lilliput classes was Congo Wine exhibited by Jean Yocum, who also won best in lilliput and median seedlings with her L-BB-1. Jean also won the lilliput sectional award and the bronze medal.

ROSWELL IRIS SOCIETY'S FIFTH ANNUAL SHOW



Lucille McKinley, New Mexico

For the first time irises were the only flower used in arrangements and the visitors (which numbered 325) were very pleased to see all iris arrangements; this we shall continue. The arrangement class for men only is very popular, this we have done for three years. There was more note taking and questions about median section this year.

(Editor's note: though elections are over for now, they'll come again; and we can't resist printing the cleverest topical arrangement schedule that's ever come over our desk):-

### "WE VOTE FOR IRIS"

1. Party rally...line mass
2. Stumping the country...featuring weathered wood
3. Campaign Spirits...a design in or using one or two bottles.
4. Dark Horse
5. The Straight Ticket
6. Split Ticket
7. Stuffing the Ballot Box...MEN ONLY
8. Crooked Politics...MEN ONLY. Arrangement using two containers.

The horticultural schedule for this show is also extremely well laid out, with Section B for Intermediates, Section C for Miniature Talls and Section D for Border irises, followed by the schedule of classes for these sections, a space-saving arrangement. The schedule provides for 12 classes in each of the Sections:

- |                                 |                                       |                            |
|---------------------------------|---------------------------------------|----------------------------|
| 1. White selfs                  | 5. White ground plicatas or fancies   | 9. Bitones, blue or violet |
| 2. Light blue or lavender selfs | 6. Other ground plicatas or fancies   | 10. Bitones, other colors  |
| 3. Dark blue or violet selfs    | 7. Bicolor, white standards           | 11. Blends                 |
| 4. Yellow selfs                 | 8. Bicolor, yellow or other standards | 12. Pinks                  |

?

DISPLAY GARDENERS, PEOPLE WITH HYBRIDIZING FRIENDS!!

!!

Why not put those seedlings you are guesting into the seedling section of your show? We would never have thought of it, but Art Nelson reports that AIS receives several reports each year of seedlings displayed by exhibitors IN THE NAME OF THE HYBRIDIZERS. Art thinks there is every argument in favor of such showing, and that it has about it an air of courtesy and cooperation which is pleasing, and we agree. It's a good idea...let's promote it!

### IRIS SHOW APPROACHING

Richard Rosenfels, Washington

Why does it rain, O Lord above?  
Our plans all made, arrangements done;  
Buds upreaching, rain-soaked, strain  
To unfold beauties hatched by sun.

The answer is, O little man  
Rain is a beauty as the bright

Sun; both weave spells of magic high  
And God holds all within His sight.

Ask not for special favors which  
Deprive another of his gift.  
The beauty's there come soon or late;  
Behold with thanks, thy soul uplift.

### VARIETAL COMMENTS...MIDWESTERN MITG...1964



Earl Roberts, Indiana

#### Short Report on Ed Zickler's new IBs

Pink Maker X May Hall gave 16 pinks, one pink standards and near yellowish falls.  
Pink Enchantment X Tangarose: 8 rose pinks, 2 refined Tally Ho pinks with the darker thumb-print on the falls, 3 flamingo pinks, 1 buff-pink.  
Happy Birthday X Pink Maker: all 28 pinks, nothing else but pinks.  
Starkist X I-8-11, lilliput plicata: greenish-yellow plicatas of an unusual color tone, quite nice, one violet plicata and one nice yellow plicata.  
June Meredith X Pink Maker: one pink with widest falls ever seen in an IB, bright color and red beard, looked even better than June Meredith.

Pink Maker may be introduced next year by Tell Muhlestein as a breeder. It apparently throws more pinks and of far better quality than does Tangarose. Some of Ed's seedlings:  
Zickler IG-22-28: 18 inches, has Mary Randall's color and form, two branches, four buds, tangerine beard.

Zickler IK-55-15: 20 inches, IB, June Meredith X Pink Maker, deep pink with June's color, widest falls, a rounded red beard, 3-4 buds, very wide at the haft, excellent substance. This is a better description of the pink mentioned earlier.

Zickler IH-19-10: IB, Top Flight X (Twilight Sky x white pumila), 18 inches, four buds. Stands white at tips, cream blended at hafts, white falls with heavy canary yellow thumbprints at the yellow-orange beard, flaring form.

#### Other Varietal Comment

Stevens K63-16: an odd antique gold with a faint blue beard. Very fine.

Brownie Troupe, Greenlee: Unusual brown-tan tone with greenish overall cast, brownish beard.

Bluekeeta, Greenlee: good form, a light blue with gray tone, pale blue beard.

Peplum, Peterson: a larger flowered peach-pink with tangerine beard. Excellent.

Arctic Ruffle, Brown: light blue-gray toned, with light blue beard, good but had pinched falls on first year bloom.

Dark Eden, Brown: flaring deep wine with dark lavender beard. Rated tops with 5xx.

Fairy Folk: light creamy-yellow self, lemon beard, ruffled, long-blooming.

Maroon Caper, Warburton: aphylla basal type branching, deepest wine-veined, lighter at the haft, purple to bronze beard, two branches. Another tops at 5 xx.

Moonblaze, Peterson: one of the oddest colors yet seen, a light gray tan with palest blue wash on the falls, pale blue beard, unusually heavy substance with longlasting flower. Again gets 5xx.

Gatty M-602: Chivalry X Sulina. Light blue amoena with white beard. Good.

Jones M58-1: tiny-flowered on first-year bloom, deepest orange-yellow with deeper color at the orange beard.

Arrangement, Goett: most unusual in colors, stands light olive-brown, falls deep olive-brown with a bright blue beard. Tops in this color. 5xx.

Little Lynn: standards pink, falls pale pink near white at the center, red beard, two branches but close to the stem. 18 inches, good form. Border bearded.

Dark Fairy, A Brown: wide red-purple with pale blue beard, two terminal buds.

Butterbit, Plough: a very bright yellow self, light orange beard, 5x form.

Royal Contrast, Brown: smooth velvety-purple, round falls, white beard.

Lichtelfe, van Nes: light grayed blue self with very smooth chartreuse hafts, few of any lines, dark orange beard, fine form.

Rosenfels 578-12: (Hi Time X Green Spot), lemon yellow, stands lined deeper at haft, lemon beard, fairly good form; one branch, three buds on small first-year plant.

Sugar, Warburton: cream standards, ivory falls edged cream, pale yellow hafts and beard, up to three branches and plenty of buds, very good.

Re: CLASSIFICATION

Rita Ingham, Ohio

I wonder if it would clarify matters any for us to do what the MTB robins have found valuable. In every robin they include the complete and exact specifications for MTBs, with names of some of the best. It's right on the route list, and is particularly valuable for the new member. Here it is:

#### Miniature Tall Bearded Iris

Keep Them Slender - Keep Them Small

Definition: Table irises are miniature replicas of tall bearded irises.

Standards: For evaluating contenders for the class:

1. The whole plant, flowers included, shall be quite small and in perfect proportion throughout.
2. Height of flower stalk, about 15 to 25 inches.
3. Flower no more than 2 1/2 x 3 1/2 (combination of 6 inches).
4. Stem slender, wiry, graceful.
5. There must be branching, as in TB, and numerous buds for bloom, 7-9 or more being very desirable.
6. Foliage narrow, graceful and in proportion to the rest of the plant.

Typical examples: as selected by Mary Williamson, Daystar, Kinglet, Nambe, Pewee, Warbler, Widget.

Alice White, (formerly) national director of MTB Robins (prime moving force in the present interest in table irises and originator of the term, miniature tall bearded) asks that these standards be copied and circulated in each flight of every robin...no changes in wording. Call attention to these.

AND, DON'T SELL THEM DOWN THE RIVER PLEASE!

Jean Witt, Washington

I have never felt that Ben Hager drew that list of MTB requirements too tight...difficult, yes, but the best MTB fit it. Sterility...not strict requirements...has been largely to blame for our slow progress. Things were different, this year. Our campaign to diversify the MTB breeding approach, using a variety of diploid and tetraploid species, has begun to show definite results...crosses that were planned to produce table irises actually produced them, and in considerable numbers.

One break appears in the making in the direction of Iris aphylla. Several of the aphylla-derived guests that Ben Hager sent fit the TI qualifications. They bloom a little ahead of the main TB season...but so do the cengialti-derived varieties. The flowers lack form, but arrangers raved over the stems on one of the soft, dusky blues. They may not be judges' TI, but they certainly are breeders' TI, and I hope he will introduce a couple of them.

Another break came from my little "headshrinkers." These are two Pixie bee seedlings about eight inches high, with the proportions of midget TI. Crossed with border-sized diploids they did what they were supposed to do...cut both the height and the stems to TI size. Best of the seedlings is a plicata with tan standards and ivory falls dotted and lined in brown.

A third break is insight from I. reginae. It too gives the sort of plant we want in the first generation. Since its petals are very narrow, it needs to be combined with wide-petaled varieties, preferably not too tall. Best of several crosses had tan standards and white falls daintily etched with brown line...and ten buds. I set a pod with reginae pollen on one of the illyricas; the form and smooth color of illyrica and the plant of reginae, hopefully will give us a new strain of better blues we so badly need.

Robin members are reporting table irises from many other crosses. Seed set is improving, with a considerable increase in the number of seedlings raised. I think we are finally over the hump.

#### MEDIAN DISPLAY GARDEN REPORT\*

Blooming Period May 17 to May 31 Alberta Richardson, Ontario

The first irises to bloom were Lemon Flare, Coreop, Lilli-Yellow, Lilliput, Blue Denim, Brassie, Wee Reggie and Orange Bantam. All of these did well this year, each being beautiful in its own right. Coreop had a particularly long season, but Brassie this year didn't get above the foliage, which has never happened here before, and I think will be overcome by a first year planting instead of a third year.

Then Dear Love and Delicate Air followed and their blue coloring is very nice. Hilmteich followed, but away down in the foliage as was Lilli-Green. Dale Dennis was barely above, as well as sparse of bloom. Derring-Do has a nice dark color. Fairy Flax was good this year, with lovely color. Lilli-Blue was very pale. Little Rosy Wings is always good. Bloom on Little Shadow was scarce, while Nylon Rose is not rose but a purple. Patretica, Jack o'Hearts, Allah and Knotty Pine were good. Tinkerbelle's excellent blue color will always be a favorite. Pastel Gem, Baria and Easter Holiday are all pale, but good as garden subjects and on the show bench, too. Pogo and Green Spot too are nice, but Tan fantasy I couldn't appreciate. For abundant bloom the old Balroudour outdid itself on a clump so heavily covered with bloom that no leaves could be seen. All in all it was a pretty display, and so interesting to check day by day, but space is not available to describe each clump as should really be done...there are 100 of them in this one bed alone. I only hope the above is of some help in describing the varieties growing here.

No report is complete without lauding the good color and garden qualities of Lillipinkput, and I have to add that as cut flowers, Blue Denim, Golden Fair, Baria and Lemon Flare are my favorites. Last to make a good show was Little Cottage, then Donna D and Sultan's Armor, all outstanding in straightness and clear color.

\*From Canadian Iris Society Newsletter, Vol 6, No 21:16, July 1964.

#### MORE ON THE MEDIAN IRIS SOCIETY DISPLAY GARDEN, ARCADIA, CALIFORNIA

Peg Dabagh, in Region 15's Newsletter, September 1964

I think I have been remiss in not explaining to you more fully just what types of irises we do have in the Median Display Garden and I feel real guilty about it. I guess I just assumed you knew or something... and I do apologize to both them and you.

I think the most profound apology is due to Iris pallida. . . of which we have four lovely forms all of which have outdone themselves in growing and blooming. These are "those horrible gawky spindly tall old lavender things" which one judge whom I heard and probably many whom I didn't was indignant at having been sent clear "down in the Bottom of the Garden" to see. These are the irises from which many many bearded irises came. . . unfortunately I don't have enough background to tell you which ones. True. . . I guess they don't look like much growing in such close proximity to the modern TBs which are the results of years of careful hybridizing. . . or right among the Medians which are the results of far less years of careful breeding.

Neither would our California poppies look like much nor our lupin under similar conditions. But in their native habitat they are still incredibly lovely. . . along roadsides, great swatches in the fields and in the local gardens. Fitz Randolph in his usual generous way sent us a beautiful collection of species which to me anyhow are fascinating. . . yes. . . those "horrid little muddy things" and "I can't see why anyone likes those dwarfs." But then many years ago our ancestors weren't so pretty nor tall nor well groomed either.

I guess I just assumed you'd read the labels and be interested as you saw the progress the hybridizers are making. Yes. . . I know. . . all the Medianites do that.

There are never very many in bloom at one time yet. . . but our season began in late January and since then we have never had less than three plants in bloom. Some have bloomed for the third time. . . we have had bloom spread so far that that's the effect anyhow.

Our irises do not have as limited a season as the TBs because they come originally from far more varied beginnings. . . the species vary, the native climates vary and the hybridizers have worked for a long season.

You all know people who remember way back when many many people grew Medians, here before "they're lovely but they won't bloom here," that the MTBs were always included in the Aril Trek and the tiny dwarfs were just about over.

I am sorry if you expected a big display as you have with the TBs but I think you will all realize after having seen the Display Garden and noted the stalks coming and swelling fans on the other plants, to say nothing of the ones who have put up their little fans obviously at very different times, that they are doing fantastically well. After all, they came here only last summer from practically every part of the country. . . Washington State, the Middle West, Utah, Tennessee, New England and New York to name only a few. . . just in time for that record-breaking heat wave, and there they sit. . . looking like two-year plants. . . bloom, growth and all. And they'll continue to bloom as nearly as I can figure now, at least until the first part of June. (They did till June 23!)

I think that perhaps now that you realize that what we tried to do was make the planting interesting and give you as complete a picture of the Medians as possible and that we fully expect you to step into the beds (we have left foot room) and read the labels, maybe you'll be more inclined to accept my apology.

You can't imagine how delighted I and the members of the MIS who sent the plants are that the ones of you who have gone with me to the garden have been interested enough to do so and have liked them. We certainly hope you will continue to. . . and we thank you.

As you know there are four major subsections in the Median Iris Society all following different lines and with a completely different type of iris in mind which they eventually hope to achieve.

As I said at this year's show, you can't possibly judge the Medians with the Border and Miniatures by current TB standards. They aren't TBs and we don't try to make them so. They are themselves just as are Spurias, Louisianas, Arils or any other specialty and their forms and characteristics are in the process of being hybridized and worked out just as much as these others are, so bear that in mind when you look at them. . . and also the fact that TB patterns, too, vary. Remember "Tobacco Road" and how different that was and how we had a fad for that type? Well, we finally got stabilized to a form which pleases us ALL again. (I, personally, never could bear and abide that pancake form. . . it was a lovely flower, but to me not TB. Old fashioned old soul. . . am I not?)

## EXCERPTS FROM LETTERS

### September 1953: Fertility of Pumila Hybrids

....1546 is not pure pumila but it is practically a pumila for hybridizing purposes. Its pollen is highly potent.

The trouble with using pumila, including 1546, with other dwarfs except pumila itself is that we find a discouraging sterility in the hybrids, making their use in further breeding very difficult, and sometimes almost impossible. Some very nice dwarfs can be obtained from crossing the chamaeiris forms with pumila. Mostly such hybrids are smaller than chamaeiris and at the same time tougher growers under average conditions than pumila. This kind of cross is certainly worth repeating over and over again, using as many forms of chamaeiris and of pumila as are available.\* And the cross of chamaeiris x pumila is easily effected. It is when we try to make use of the chamaeiris-pumila hybrids in turn that we run into the block of sterility.

At this time I don't see any kind of dwarf hybrid having full fertility until we come up to the 40-chromosome level found in the first hybrids obtained from crossing tall with pumila. This kind of hybrid with its balanced chromosomal composition is as fertile as chamaeiris, also 40 chromosomes. Hence it is these tall-pumila hybrids that more and more look like the dwarf of the future. They permit a continuing development through selective breeding, as in the tall, ...and I am sure that we can get dwarfs as dwarf and early in these 40-chromosome tall-pumila strains as are now found in the hybrids from dwarf x dwarf and even in pumila itself.

\*To a large extent the pumila-talls have replaced the chamaeiris for use in such crosses.

### January 1954: Color Mix or Match

At the start I don't think I would pay much attention to which tall is mated with which pumila or other dwarf. In crosses of tall x pumila, or the reciprocal, it is likely the seedlings obtained will come mostly in colors of pumila, rather than in colors of the tall parents. I think you can make a good start by putting pollen of almost any good tall - those having substance, width of segment, etc - on any one of your pumila forms. Tetraploid whites ought to be fine material to use with pumila; I suggest you put this on blue pumila for blue hybrids. I think too that the tall plicatas can be used to advantage, though you can scarcely expect to get plicatas directly. If you are in doubt, however, why not make some matched-color crosses AND some between different colors?

The truth is, this whole field of breeding is so new, so experimental, that we have little definite knowledge to go on. From my own crosses between tall and pumila here, it looks as if pumila carries a dominant factor that keeps the color (the blue and purple sap colors) suppressed, allowing only the pumila colors to appear. There are exceptions to this general rule, as in Green Spot and some white seedlings that had blue spots. You can count on one thing. Pumila has a tremendous "pull" toward itself in height and size. You can count on the hybrids you obtain having a good degree of fertility among themselves and when mated with other things.

The matching of colors is the commonest way of breeding in the tall irises; some breeders do nothing else. But crosses of tall with pumila are quite different from crosses of tall with tall.

### March 1955: Parentages of Pumilas and Pumila Hybrids

Both Remnant and Sky Patch are plain pumila, and the pumila is the Austrian form of this species which Robert Schreiner gave me some 20 years ago. Both Remnant and Sky Patch are blues - blue selfs - and they resulted from selective breeding within this pumila strain. They contain no other genes. There are so few pumilas of blue color that it seemed worth while to send out a couple. There are some most lovely blue colors in pumila, indeed it is only in pumila and its hybrids that any really close approaches to real blue color are found. Some blue forms show a decided cast of green to the blue, a most delightful color effect.

Pumila is proving very susceptible to improvement by selective breeding, all the various color forms yielding to this method, and size, dwarfness and time of flowering as well.

Blue Lilt is more complicated in parentage. It is ((tall x pumila) x (tall x pumila) X pumila. More exactly, it is from 5348 x 5948, then the resulting seedling from that cross x blue pumila. 5348 was another sister seedling of Brite, Baria and Green Spot, while 5948 was a sister seedling of Fairy Flax. 5348 was a cream with a yellow fall blotch; 5948 was a light yellow with a dark olive blotch and an orange beard.

## December 1954: Crosses of Pumila with Talls

In crosses of pumila with talls I can't see that it makes the least difference whether pumila is made the ovule or the pollen parent. The same kind of hybrids will result in either case, the heredity being the same. Why the cross tall x pumila is more readily effected than the reciprocal I don't know. Possibly it is a matter of difference in diameter of pollen tubes and stylar canals.

I think there is no doubt that characters of the talls can be put in hybrids of lower chromosome number. The iris cytologists - Randolph and Simonet - have shown, and conclusively now, that in some hybrids pumila chromosomes (as many as four) will pair with the same number of chromosomes of the tall ancestor (in the absence of something more homologous). This situation permits exchange of chromosomes, or (in the event of crossing over) of parts of chromosomes, if a lay cytologist like myself understands the matter. It seems pretty certain that crossing a tall-pumila hybrid back through successive generations to pumila might very well produce a 32-chromosome near-pumila form, but having some slight chromosomal residue out of the tall ancestor.

Your view that things like 1546, April Morn, and the rest that are derivatives of Azurea may carry some trace of tall inheritance is the same as mine. I would add Violet Gem\* to the list. Violet Gem is Azurea x pumila, and it continually produces seedlings that are very different from anything that has ever come from pumila alone. This year I made a special effort to get seeds from Violet Gem because I had seen so many distinct things from it.

*Paul H. Cook*

\*Violet Gem was subsequently found to have 36 chromosomes, but proved far more fertile than the norm for 36-chromosome hybrids. In crosses with pumila it produced pumila-sized dwarfs of more finish in form and color than any of the straight pumilas... Ed.

### GREEN SPOT SEEDLINGS

I note your mention of whites with blue spots. This is a lovely combination and I am sure some continued breeding of these will lead to still finer forms. I had a hundred or so seedlings from Green Spot again this spring, and again I was pleased to see how wide a variation in this character appeared. Some blue and yellow spots always come out of this kind of work, indicating pretty plainly I think that green spot is a composite of the blue and yellow... Paul Cook, 1959.

Re: LILLI-GREEN X GREEN SPOT

Richard Rosenfels, Washington

Green Spot is an endlessly fascinating parent; it seems to produce something good or interesting or both from everything including its bee pods.

Lilli-Green X Green Spot has to be done this way because Lilli-Green has no pollen. So far I have planted seeds from two pods of LG X GS and have repeated the cross about a dozen times with numerous unplanted seeds on hand.

Pod 6012: 17 seeds, 6 seedlings.

One MDB bloomed in 1962. An inferior version of GS; discarded

Five bloomed in '63, all MDB:

Three green amoenas, two especially good with flaring, medium yellow-green falls; white, closed standards.

One pure white self with oval, flaring falls... a fresh, pleasing flower.

One interesting bitone resembling Exotic Blue in color. Standards faint blue-gray; falls veined and blue-gray. Good form.

Pod 611: 21 seeds, 7 seedlings.

One bloomed on Easter morning 1963. A most beautiful six inch white iris with a white beard; falls oval, flaring, and carrying faint pumila blue veins radiating out from the end of the beard.

Re: GREEN SPOT SEEDLINGS

Peg Edwards, New York

The Green Spot X italica I-7-A seedlings have all bloomed now, and every last one is some shade of violet. About 50-50 on beards, some white, some yellow. Some selfs, but more have a spot pattern in deeper violet. Form not really bad in any of them and a couple are really nice. Height ranges from 8 1/2 to 17 inches, and the tallest has a branch and a total of 4 buds. I intend to self any that have pollen and see what segregation shows up.

## REVIEW: KARYOTYPES OF IRIS SPECIES INDIGENOUS TO THE USSR

Randolph and Mitra: American Journal of Botany, Vol 48, No 10: 862-870, Nov - Dec. 1961

In 1959 we were privileged to publish in our Yearbook, THE MEDIAN, a preview by Dr Mitra of an article, then in press, concerning differences in karyotype between the Austrian and the Russian pumilas. The article reviewed here covers not only an expansion of these studies, but also some further studies of diploid species of 24 chromosomes of particular interest to breeders of small bearded irises. These included the tall bearded species, *I. albertii*, *I. imbricata* and *I. sulfurea*, possibly not distinct from *imbricata*; and the dwarf bearded species *I. furcata*, *I. scariosa* and *I. timofejewii*. Interesting facts were discovered about each of these dwarf species. *I. furcata*, which Dykes classed as synonymous with *I. aphylla*, was found to have chromosomes so unlike those of *I. aphylla* that it couldn't be considered as a diploid ancestor of *I. aphylla*, which is an autotetraploid. *I. scariosa*, which was classed with *albertii* and *imbricata* by Dykes, was found to have a karyotype sufficiently distinct so that it would definitely be considered a distinct species; and *Iris timofejewii* was found to have as sharply distinct a karyotype as it does a phenotype; it should therefore prove a source of valuable new genes to use in producing new sorts of dwarf hybrids.

The studies of the Russian pumilas are of particular interest, and especially the description of the Randolph collection numbered 1574. "...the plants of the No. 1574 collection have stems from 2 to 5 inches in length and much narrower, more erect leaves (than *I. taurica*) that may surpass the blooms which are on unbranched stems at a height of 8-10 inches. Greenish-yellow flowers of attractive, smoothly tailored form are characteristic of these plants. The beard is orange-tipped and conspicuous."

Of interest to aril specialists is some description of *Iris longiscapa*, the first account of a regelia with 18 chromosomes, and some studies of the oncocylus species *I. elegantissima* and *I. paradoxa*, species from a colder climate than the usual habitat of oncocylus species, and therefore with potential for developing hardier garden hybrids for cold winter climates.



### NEW ZEALAND DWARF GROUP



It was a particular pleasure to receive the first newsletter of the New Zealand Dwarf Iris Group, of which Mrs L E Delany is Convenor, Mrs C E Watson is Secretary-Treasurer, and Mrs A T Malcolm is Seed Distributor. "When the N Z Group was formed in 1961, it was decided that the scope of the Group would embrace BEARDED irises that qualify for both Dwarfs and Medians. Broadly speaking this means all bearded irises whose height is 28 inches and under." It is an enthusiastic group, and we offer our congratulations for this first publication. It contains a detailed account by Lucy Delany of the year's seedling bloom from American seed along with some of her own work. We quote a small part of her story, omitting some most important observations on the timing of seedsowing, germination and bloom because it would have to be unscrambled into a seasonal timetable before we could really grasp its significance! This includes some reports on fall bloom (April), such as the following which had previously bloomed on September 16th:

"...on a seedling from (Green Spot x Pogo) X Orange Glint, a flower with lavender standards, well held together, grayish lavender falls, flared, with a spot apparently inherited from Green Spot. Its height is six inches.

"A seedling of Knotty Pine X Brassie...flowered in January 1964...It was a yellow with a brownish flush on the falls and the beard was at least for a third of its length lavender.

"Tinkerbelle X Pogo gave a beautiful lavender seedling...no blue in it at all, with a clean white spot around the white beard. Is Pogo responsible for the lavender?

"Pigmy Gold X Green Spot seedlings were all good form, one especially was a very good dwarf.

"The tall bearded X *I. balkana* hybrids have very poor form, with large wide open standards and small very tucked falls, but beautiful thick beards. Their seedlings lose this poor form but retain the beards which are in all colours but mostly lavender.

"Three seedlings from a bee pod on Green Spot were three beautiful pale blue intermediates. One of these was crossed with Snow Elf, a white standard dwarf. Incidentally, there are other seedlings from crosses that had Snow Elf as pollen parent.

"Seedlings of Little Rosy Wings come in many colours, flower well and increase well."

Report from Erica Gamlin, Taranaki:

Among my own seed planted the following were interesting:

Of four plants from (Watchfire x Golden Dream) X Green Spot two were of Pogo type, one with pleasing form and a large reddish brown spot, a third was a Pinnacle type with frilled petals, and the last had a yellow bud which opened to reveal creamy white falls with a blended brownish green spot and yellow standards. All were about 10 to 12 inches high and had at least three buds per stem. The last one has yielded one pod to Exotic Blue.

One plant from (Watchfire x Golden Dream) X Pogo gave an intriguing creamy-yellow, with flaring falls, five inches high. On the falls was a smoky greenish brown halo. Incidentally, there are two fat pods set to Pogo and Green Spot pollen. Infertile? We shall see! All of these odd crosses have short slender leaves.

The most exciting seedlings this year were from Swan Ballet X Green Spot. Not all of them flowered, but there were several lovely ones among those which obliged. One was a pale blue-white, flowers a trifle large for the height (22 inches) perhaps, but I loved it. Another, a pale and almost midblue was about 20 inches high with a white beard. Also one slightly paler blue. Both of these were in good proportion to the stem height. Two whites had blue halos. The last two, both white, I really liked. One was about 10 inches high, rather frilled; has set a pod to Frost and Flame pollen. The other, 20 inches high, had a touch of yellow at the center of the flower and pert flaring form. All these stand well above the foliage and I have several pods set to Azure Haven and Frost and Flame.

MORE MEASUREMENTS

This is so easy to do with Ben Benson's gadget, we wish more of you would make one, and get those measurements to us... see Vol IV, p. 93. Note that the measurements are made with the long end of the tape, which is the starting end, and long enough to measure the height of the stalk. \* Alternatively, measure the diameter of an imaginary circle touching the fall tips.

These measurements begin to have a meaning after enough of them can be studied. Here are a few more from the '64 season: height of flower, width of flower, height of stalk to top of flower:

Little Cottage:	3 x 4 1/4 x 18.
Twilight Time:	3 1/2 x 3 3/4 x 24. 3 branches, 7 buds, white with yellow at hafts.
Warburton 56E10:	3 x 3 3/4 x 21. Three buds, many stalks, stands yellow sanded 10P5/10, falls creamy, sanded brown at hafts, lighter below, beard tipped 2.5Y8/12. IB, and LOOKS well proportioned.
Little Gem:	4 x 4 3/8 x 21. 5RP8/5
Little Sir Echo:	4 3/4 x 5 3/8 x 26. This was definitely too big, actually about same size flower as that of Ebony Echo, as it grows here.
Arctic Flare:	3 1/2 x 4 x 25. 5 buds.
Lace Valentine:	3 x 4 3/4 x 26. Warburton '65, from Golden Flash X Yellow Dresden; 2.5R9/3 on opening, somewhat paler pink later, 5-6 buds. Many from this cross have been overlarge, this looks in fair proportion.
Fred Gadd 94-84:	3 3/4 x 6 x 23. Although this flower is definitely too large, it was much admired in Fred's garden this past season. From Frances Kent X Miss St Louis, it has stands of yellow edged pink, falls white with yellow border, soft tangerine beard... lovely coloring.

It is our opinion from observation of these varieties in connection with their measurements, that in the border or intermediate height, a flower over eight inches in combined height and width begins to be out of proportion. If you remember the small black in Dr Loomis' Colorado garden and which he promptly dubbed "Colorado Jet," this impressed a number of us as being in good proportions. It measured 2 7/8 x 4 7/8 x 17 1/2; Lady Kay, which I measured at 4 1/8 x 6 1/4 x 18 1/2, very definitely looked too large-flowered.

\* \*About making this gadget, Ben says that when he went down to the toolshed to make one for Mildred Brizendine, he found that he hadn't given enough detail in the robin. It took him more than half a day to get one made that would work; so while he was at it, he made a couple extra for patterns. He says that if anybody tries to make one and has trouble, he will be glad to help out. Write to: Z G Benson, 2211 Denver, Wichita Falls, Texas 76301

## BORDER BEARDED

May Belle Wright, Minnesota

I was surprised and pleased when Bee Warburton asked me to write up my thoughts on BB breeding for the Medianite. I was surprised because I have been a member of the Median Iris Society less than one year and I am a "johnny-come-lately" to this type of breeding.

Until 1961 I ruthlessly rogued out all of my smallish TB seedlings, in their first summer, feeling that they didn't have sufficient vigor to be worth keeping until they bloomed. That year I missed one and this proved to be the happiest mistake of my gardening career. This little "accident" was the hit of my seedling patch in the succeeding three years and is now being tested in various climates under the name "Miss Ruffles." Whether or not it proves worthy of introduction, it has given me a new goal... my own line of BBs... and has set a standard of proportions for them that I HOPE to adhere to. It has bloomed consistently here at from 4 x 3 x 18 to 4 1/2 x 3 1/2 x 21. I want to use these figures as a general guide in judging any future BB seedlings. Of course, they will vary, but at all times I would like my BBs enough shorter than the TBs so there can be no mistaking them and they MUST have small flowers and all other parts in proportion or I won't consider them.

I have three more, also from TB breeding, under observation and each has the same general proportions. Although none of my BBs may prove to be "good enough" they do prove to me that my goal is attainable.

Re: BBs from TB crosses, I think much promising material is being discarded by our hundreds of hybridizers because they have not become aware of the very real value of BBs. I am sure Bennett Jones is correct in saying the best way to produce them is crossing BB x BB but we have a limited amount of material for this type of breeding which could be greatly enlarged if this lost breeding stock from TBs were saved. How can we get the breeders to save the little ones?

Not all of my small plants have produced beautiful, well-proportioned BBs. Many times, with the "throw-back" to smallish size they also seem to "throw-back" to their species ancestors in other respects. I had one 18 inch Snow Flurry seedling that I am sure reverted to I. canineii, and another six inches high with a large blossom and every other imaginable fault, clearly showing its I. doggiensis blood.

This interest in BBs has added an exciting new dimension to an already absorbing hobby. I hope many of you will join me. This type of breeding is a real challenge to the hybridizer.

## OMISSIONS FROM REGISTRATIONS, 1963

DAINTY FLAIR (Gatty '63) Sdlg M621. SDB, 12", B1P, Silver-blue self, pale blue beard. Blue Denim X Dainty Delight.  
DAINTY ROYAL (Gatty '63) Sdlg M601. SDB, 12", E-L, V1D. Plum-purple self, deeper around orchid-tipped brown beard. (Lovelace x Cascade Splendor) X Cretica.

Re: 1964 SEASON

Wilma Greenlee, Illinois

Fi-Lee X Brassie family gave very fine satin reds, the same in near red amoena with satin. Fi-Lee gives narrow foliage and slim stem. I feel Cretica is an important breeder when we overcome its bad faults by crossing and selection.

I am naming two whites with blue beards: one near white from Black Forest X Pearl Shell seedling, and one (Daisy Chain) from diploid lines, an early dwarf from (Pixie x Mourning Dove) X self. The F<sub>1</sub> was a dainty border iris in pale blend of yellow and lavender with blue beard. F<sub>2</sub> was a different white, with some ivory green, deep bright blue beard, very much a sparkler, so clean and bright. The falls are long, but turn up on each corner with a flippant look and appear nearly round.

Pixie we can see has something in it very like aphylla by the foliage. The dwarfness and beard must have come from Pixie. All of my Pixie lines are small and neat, many far earlier than Pixie, which is my latest iris to bloom.

I wonder what we can do to breed fast color in the diploids? My amoena with red beard is a flashy beauty in the morning and fades duller by noon. I have a sib of yellows with white falls which really is best. There are several I'm thinking of naming, all fine table iris size. One is a golden yellow satin with pinkish orange to orange to red beard in various years... a very fine thing. These I have worked into various crosses, one an orchid with the same beard, and several neglectas and amoenas where Playboy was used. Bosniaca is in the gold with red beard, and Daystar and Pixie are in many.

# MEDIAN REGISTRATIONS FOR 1964

Minnie Colquitt

## STANDARD DWARF BEARDED

- AMETHYST TREASURE (G Saxton '64) Sdlg 62A2. SDB 12" M. V1, amethyst-purple self. Garnet Treasure X unknown.
- BLACK CONTRAST (M Brizendine '64) Sdlg 68-63. SDB 10" E. V1D, dark purple self, white beard. Lilli-White X (black pumila x Blazon).
- BLUE FLECKS (Goett '64) Sdlg 9D6. SDB 10" E. W2BV, stands white, heavy blue violet markings; falls same. Dale Dennis X Knotty Pine.
- CUMBERLAND GOLD (Motsch '64) SDB 12" E. Y4, stands gold; falls gold overlaid light tan. ((Sunset Serenade x Bryce Canyon) x Carpathia) X Carpathia.
- DAINTY DALE (Vallette '64) SDB 12" VE. V3, stands flesh-pink edged orchid pink; falls orchid rose, white hafts dotted rose, white beard tipped lemon. Dale Dennis X unknown.
- DAISY CHAIN (Greenlee '64) Sdlg 64-2. SDB E W1G, white, milk green and white, deep medium blue beard. (Pixie x Mourning Dove) X self. (Mourning Dove 1932 IB reg.)
- FLAMING DAWN (Guenther '64) Sdlg G-14-1. SDB 11" ME. R3, stands rose, falls red edged rose, yellow beard. ((TB pink sdlg x Nana) x sib) X Garnet Treasure.
- GOLD BUTTONS (Hamblen '64) Sdlg H8-113-2. SDB 13" EM. Y1F, golden-yellow self, orange beard. Fashion Lady X Butterscotch Kiss. Mission Bell '64.
- GOLDEN JEWEL (Gladys Saxton '64) Sdlg 62A3. SDB 12" M. Y1, golden-yellow self. Garnet Treasure X unknown.
- GRAND ATLANTIC (Willard Rogers '64) Sdlg 46203. SDB 11" B3, stands dark blue; falls medium blue, blue beard. (Snow Flurry x aphylla Geneva S-2) X Blue Denim.
- GREEN FROST (A. Brown '64) Sdlg M78-1. SDB 11" E. Y4G, stands greenish-ivory, falls, uranium green, greenish beard. Green Spot X unknown.
- HASSANEMISCO (J. Tufts '64) Sdlg D27. SDB 12" E-EM. V3, stands purplish-red; falls, strong reddish-purple, white line from beard, yellow beard tipped red. Damerine X Hanselmayer pumila #19.
- JOY BRINGER (M. Brizendine '64) Sdlg MB-5-62. SDB 12" E. W1, white self, chartreuse hafts. (Snow Flurry x Cook 1546) X Green Spot.
- LAUGHTER (H. Stevens '64) Sdlg K63-16. SDB 12" M. Y1L, yellow self, light blue beard. Knotty Pine X Brassie.
- LENNA M (Roberts '64) Sdlg 64R13. SDB 10" E. O1P, stands pink; falls pink, deeper beige spot, wide pink border, white beard tipped red. (TB orchid sdlg x Barium Gold) X Zickler sdlg: ((Twilight Sky x white pumila) x (Desert Song x white pumila)).
- LITTLE LULU (Helen Rogers '64) Sdlg 64-7-7. SDB 13" Re. W4, stands white; falls white tinted green, pale blue bud, yellow beard tipped white. Parentage unknown.
- MAGIC SECRET (Sarro '64) Sdlg S-64-1. SDB 13" V3, stands orchid; falls orchid texture-veined in violet, lavender beard, clean hafts. Emma Frances X (Happy Birthday x red-violet pumila).
- MAY TROLL (Goett '64) SDB 10". V4Y, stands lavender; falls buff, light beard. Sdlg X Knotty Pine.
- MOONBRIGHT (Keppel '64) Sdlg 60-23A. SDB 13" E. Y3, stands light yellow falls, rich yellow, light yellow border, blue-white beard. Cloud Fluff X Garnet Treasure.
- NIPMUC (J. Tufts '64) Sdlg A49-2. SDB 12" E. V1, medium violet self, reddish-violet spot, violet beard tipped gold. Great Lakes X (April Morn x Carpathia sdlg).
- PAMELA ANN (Goett '64) Sdlg 7E1. SDB 11" E. Y3, stands light yellow; falls medium to dark yellow. Golden Fair X Lilli-Bright. HC 1964.
- PASTEL CHARM (Bonnie Dunbar '64) Sdlg 61-2B. SDB 13" EM. W4, stands blue-white; falls pastel red plum blend, chartreuse hafts and border, white beard. (Lilliput x Pigmy Gold) X Welch K-521.
- PEPITA (Schreiner '64) Sdlg T-1797A. SDB 14" E. B3D, deep flaxen-blue self, deeper blue blaze, beard white - blue. Fairy Flax X Tinkerbell.
- PINOCCHIO (Reath '64) Sdlg A-22-64. SDB 12" E. Y1, lime-yellow self, yellow-brown haft marks Baria X Nylon Ruffles.
- PLATINUM GOLD (Roberts '64) SDB 11" E. Y4W, stands deep lemon-yellow, white reverse; falls white, deep lemon spot at white beard, lemon edge and reverse. (Orchid TB sdlg x Barium Gold) X Zickler's sdlg: ((Twilight Sky x white pumila) x (Desert Song x white pumila)).
- ROSY TREASURE (A. Brown '64) Sdlg M-80-10. SDB 12" M-L, V3, stands rose-amethyst; falls, deeper velvety rose, lighter edges, wisteria blue beard. Garnet Treasure X unknown.

RUBY ROCK (Stanley Street '64) Sdlg B-159A. SDB 12" M-L. V1D, red-purple self. Red Rockette X ((Blazon x S-20-3) x (Fior del Mondo x Andromache)).

RUBY TREASURE (G. Saxton '64) Sdlg 62A1. SDB 12" M. R1, ruby-red self. Garnet Treasure X unknown.

RUFFLED GOLDSTRIKE (Reath '64) Sdlg A24-64. SDB 14" E. Y3, stands yellow; falls yellow, old-gold overlay, yellow beard tipped white. Nylon Loveliness X unknown.

SCOT CREAM (Warburton '64) Sdlg 7E353. SDB 10" E. W5Y, stands blended ivory-white; falls greenish-yellow, lavender-blue beard. Dessert X Sdlg B-305 (AM-5 blue pumila x Frost Glint).

SPUN HONEY (Bonnie Dunbar '64) Sdlg 61-20. SDB 14" M-L. W1, warm white self, light yellow hafts, white beards, green buds. Baria X aphylla hungarica.

SUDDEN MUSIC (H. Stevens '64) Sdlg. 62-21. SDB 12" M. V1D, red-purple self, blue beard. TB X unknown pumila.

SUN CHILD (Housley '64) Sdlg Q-154-A. SDB 10" E-EM. Y1, aureolin-yellow self, yellow beard shading to orange. Helen's Child X unknown.

SUN SYMBOL (B. Jones '64) Sdlg M58-1. SDB 12" M. Y1, medium yellow self, tobacco brown hafts. Golden Fair X unknown.

TIFFY (Goett '64) Sdlg 4D6. SDB 14" E. Y3, stands light yellow; falls light yellow, faint violet stippling on edge, faint stippling in stands. Knotty Pine X Rundlet C-345 (Pat's Pal). Goett '64.

VELVATINE (Roberts '64) Sdlg 64R15. SDB 13" EM. Y4M, stands bright yellow; falls mahogany bordered bright yellow, tangerine-orange beard. (Brownlett x Fay pink TB 54-93) X Sib.

VELVET TOUCH (Dennis '64) Sdlg 6007. SDB 14" EM. V1R, reddish-purple self, lavender beard. (TB medium blue x purple pumila) X Garnet Treasure. HC '63.

ZIP (Goett '64) Sdlg 4D7. SDB 11" E. W2V, stands white, violet markings; falls white, violet markings, brown haft. Knotty Pine X Rundlet C-345 (Pat's Pal). Goett '64.

#### INTERMEDIATE BEARDED

ARCTIC BEACON (A. Brown '64) Sdlg M-125-3. IB 22" E. Y3, stands bright canary-yellow; falls slightly deeper, tangerine-orange beard. Baria X Cotlet.

ARCTIC FANCY (A. Brown '64) Sdlg M-506-1. IB 20" E. W2V, stands white stitched violet; falls white stitched violet wisteria-blue beard. Dale Dennis X Rococo.

ARCTIC KISS (A. Brown '64) Sdlg M-305-3. IB 18" E. W4VB, stands white; falls lavender-blue, lighter edges, white beard. (Fairy Flax x Drop o' Blue) X Whole Cloth.

ARCTIC MYST (A. Brown '64) Sdlg M-358-4. IB 20" E. B1, wisteria-blue self, touch of tan at haft edge, light yellow beard. (Snow Elf x blue sib) X Flyaway.

BEEBOP (Plough '64) Sdlg 61-187-11. IB 25" M-L, W4B, stands blue-white; falls gentian-blue blended, white hafts veined olive, orange beard. Green Spot X Whole Cloth.

DILLY DILLY (Warburton '64) Sdlg 30G-1. IB 20" E. B1L, light blue self. Blue Whisper X Blue Denim.

DRESDEN CANDLEGLOW (Reath '64) Sdlg BA-15-62. IB 20" E. Y1, yellow self, white blaze below yellow-tipped beard. Baria X Yellow Dresden.

EBONY EMBERS (M. Brizendine '64) Sdlg MB-39-60. IB 17" EM. N1, black self, bronze beard. Sable Night X Black Baby.

ILLIANA (Greenlee '64) Sdlg 60-210. IB 20" E. V3, stands light gray-orchid; falls darker gray-orchid. Charmaize X Pearl Shell.

LE SABRE (Plough '64) Sdlg 60-5-2. IB 27" EM. G4V, stands uranium-green; falls Dauphins violet, grayed blended border, brownish hafts, orange beard. Mixed Emotions X Progenitor.

LITTLE BIT BLUE (Plough '64) Sdlg 61-211-14. IB 22" M-L, B3, stands Gentian blue; falls near gentian blue with purple cast, campanula violet spot pattern, inconspicuous orange beard. Striped Butterfly X sdlg 59-159-14.

PING PONG (Plough '64) Sdlg 60-57-17. IB 26" EM. V3, stands pastel lavender blended greenish veining; falls dauphin's violet, beard tipped orange. Kiss Me Kate X Pastel Gem.

PIONA (J D Taylor '64) Sdlg D-45-3. IB 19" EM. V1D, deep violet self, gold beard. Alfred Edwin X ((Clear Sailing x Sulina) x sib). Wisley Trials '64.

PRETTY PHYLLIS (Housley '64) Sdlg Q-153-F. IB 15" E-EM. V1, red-purple self. Little Rosy Wings X unknown.

SLUMBER TIME (Guenther '64) Sdlg H-34-3. IB 17" ML. B1N, bluish-black self, brownish beard tipped blue. Back Taffeta X (Snow Flurry x Cook 1546).

SMALL RIPPLE (Hamblen '64) Sdlg H8-117. IB 22" EM. W1, cool white self, pale yellow beard. Crispy X Frilly Fringes. HC '63. Mission Bells '64.

SOLENT SUN (J D Taylor '64) Sdlg D-63-1. IB 25" M. Y1P. Pale yellow self. Serin X ((Sylvia Murray x Sky Song) x Welch H-503)) x Green Spot. Orpington '64.

TAMINO (Schreiner '64) Sdlg DF-5. IB 22" EE. W4B, stands pure white; falls white, thumb-print of blue, gold throat, yellow beard. (Blue pumila x Jane Phillips) X Schortman sdlg. Schreiner '64.  
 VELVET GOLD (Muhlestein '64) IB, 16" E. Y1F, cadmium to deeper gold self. Pigmy Gold X Pink Fulfillment.

#### BORDER BEARDED

APRICOT LACE (Florence Clark '64) Sdlg 5-58-7. BB 24" L. YO1, apricot self. Party Dress X Beech Leaf.  
 BABY DOVE (Ellyson '64) Sdlg X11-51-28. BB 27" M. Y5, golden-tan with slight rose overlay. Amandine X (Stardom x Sentinel).  
 BIRTHDAY PARTY (D. Hansford '64) Sdlg B3-53. BB 22" M. O1P, shell pink self. Happy Birthday X Party Dress. HC-BIS.  
 BORDER BELLE (A. Brown '64) Sdlg 59-44-3. BB 25" M-L. Y4W, stands light yellow, falls white, 1/4" border of yellow lace, yellow beard. Seafair Princess X Seafair Queen.  
 BROWN FLARE (F R Judy '64) Sdlg 5712-1. BB 24" M-L. O3D, stands dark orange-yellow; falls strong brown - brownish orange, yellow haft and beard, light purple blaze. Master Neil X Red Chieftain.  
 BROWN RINGS (A. Brown '64) Sdlg 59-66-3. BB 26" EM. O4V. Stands plum brown; falls violet, border of plum brown, amber beard. (Moon Rings x Leading Lady) X self.  
 BUTTERFLOWER (Harden '64) BB 20 E. Y1F, golden yellow self, orange-yellow beard. (Jake x Wabash) X Party Dress.  
 CANDY SWEET (Plough '64) Sdlg 58-72-7. BB 24" M-L. O3P, stands azalea pink; falls lighter, deeper pink around beard, coral-pink beard. Parentage unknown.  
 CARNIVAL GLASS (B. Jones '64) Sdlg 575-1. BB 20" M. YO5, stands brown; falls carmine, some blue. Sdlg 286 X Perique.  
 CREME DE MENTHE (Wolff-Hildenbrandt '64) Sdlg 62-97-15. BB 20" L. W1G, greenish-white self, mint-green hafts and throat, beard white to orange. L'lita X Perfect Love.  
 DREAM WHIP (Wolff-Hildenbrandt '64) Sdlg 62-117-60. BB 26" L. W1G, green-white self. Perfect Love X Pretty Carol.  
 ELLEN Q (Wm Peck Jr '64) Sdlg D-102-K. BB 27" M. Y4W, stands yellow falls white, yellow center. Starshine X Whispers.  
 EMILY SAUNDERS (Peach '64) Sdlg 61-27-1. BB 24" M. V5M, orchid-pink self, yellow beard. Lady of Shalott X Mary Randall.  
 FLOWER GIRL (Alma Norton '64) Sdlg 61-1. BB 17" M. V3, stands pastel lilac; falls near mineral violet, pale yellow beard tipped white. Melodrama X Steel Haven. HC '64.  
 GAY SONG (Gene Simon '64) Sdlg S-963-4. BB 27" M-L. Y4W, stands yellow; falls clear white, yellow border like stands. Summer Sun X Pinnacle.  
 ICH LIEBE DICH (Myrtle Wolff '64) Sdlg 62-162-2. BB 19" M-L. Y1, empire yellow self, lighter below self beard. Yellow Dresden X Maid of Honor.  
 JULIE MARIE (Les Peterson '64) Sdlg 58-7. BB 15" E-M. Y5, pale olive-buff self, darker area at hafts. (Pink Lace x Premier Peach) X (Ruffled Bouquet x (Happy Days x Depute Nomblot))  
 LA BONITA (Schmelzer '64) Sdlg 26-3-4. BB 24" M. W1, snow white self. Lime Joy X Dale Dennis.  
 LACE VALENTINE (Warburton '64) Sdlg 8G-1. BB 24" EM. O1P, light yellowish-pink self. Golden Flash X Yellow Dresden.  
 LATE SHOW (Horace Wright '64) Sdlg 6301. BB 22" E-M-re. VB1P, pale purple-blue self. Mount Washington X Martie Everest.  
 LITTLE CLOUD (Hinkle '64) Sdlg S-19-2. BB 19" M. W1, white self, self beard. Involving Curl'd Cloud sdls X Regina Maria sdls.  
 MARY CROOKSTON (Usher '64) Sdlg 28-30. BB 16" M. W1Y, ivory-white self, yellowish area around beard. Helen McGregor X Maisie Lowe.  
 MISS RUFFLES (May Belle Wright '64) Sdlg 62-36. BB 19" M-VVL. B3, stands gentian blue; falls cream overlaid gentian, blue beard tipped orange. Lula Marguerite X Chivalry.  
 MUSTARD CREAM (Plough '64) Sdlg 60-52-25. BB 25" EM-L. Y3, stands straw yellow; falls centered mustard, border of blended cream, straw edging, white beard tipped yellow. Green Quest X sdlg 53-96-2: involving Butterfly Wings, Pink Lace, Gold Ruffles and sib to Riviera.  
 NANCY HUSTLER (Hustler '64) Sdlg 24-10. BB 20" M. O3P, stands coral-pink falls paler, deeper coral edges, deep tangerine beard. Palomino X Courtier.  
 NATIVE DAUGHTER (Noyd '64) Sdlg N59-16-25. BB E-L. O1P, medium pink self, coral beard. Golden Flash X Garden Gold.  
 NEBRASKA CENTENNIAL (Wolff-Hildenbrandt '64) Sdlg 62-161-5. BB 23" M. YO5, antique bronze self, bronze beard. Yellow Dresden X Edenite.

NIGHT TRAIN (Varner '64) Sdlg 320. BB 27" EM. V1N, stands deep purple-black, falls black. Storm Warning X Dark Stranger.

NORMA AVERETT (Muhlestein '64) Sdlg 92. BB 28" M-L. O5P, stands peach-pink, falls lighter in center, border pinkish-tan. Native Dancer X June's Sister. HC '63.

ORIENTAL SNOW (Wolff-Hildenbrandt '64) Sdlg 62-135-11. BB 25" L. W1, warm white self, bearded and flat form. Swan Princess X Perfect Love.

PAMELA KAY HILDENBRANDT (Wolff-Hildenbrandt '64. Sdlg 62-11-7. BB 23" M. V1, pale sea-lavender violet self, beard white to cream. Because X Yellow Dresden.

PEBBLES (James Tucker '64) Sdlg 955B. BB 26" M-L. B3, stands light blue flushed deeper blue; falls white heavily pebbled blue. South Pacific X Wide World. Southern Meadow '64.

PETITE SIREN (Palmer '64) Sdlg 5760A. BB 20" EM. V1L, Light violet self, pinkish beard. ((Gold Ruffles x Cherie) x Branch 52-12)) X Riviera.

PLUM PUDDING (Goodrick '64) Sdlg 58-27. BB 27" M-L, O5V, stands blended dark brown and purple-plum; falls darker, dark brown border, red-purple blaze below brassy beard. (Sunray x Susitna Sunset) X Dark Chocolate.

QUAINT ELF (Gene Simon '64) Sdlg S-617-1. BB 19" L. B1F, deep blue self, bright blue beard. Black Forest X (Blue Shimmer x Cahokia)

ROSIE O'TEE (James Tucker '64) Sdlg 948A. BB 24" EM. V1 bengal rose self. Mary Randall selfed. Southern Meadow 1964.

SNOW AND AMBER (Dougherty '64) BB 25" M. Y4W, stands honey-yellow; falls white, narrow yellow edge. (Courtier x Hit Parade) X (Chantilly x Snow Flurry)

SPURRED PREMIERE (Austin '64) Sdlg 213. BB 26" E. V1, mauve self, creamy bronze spurs. Capricorn X DeForest 13-46. Rainbow '64.

SWING LOW (Fred Crandall '64) Sdlg 59-5F. BB 26" L. Y1, yellow self, white blaze, yellow beard. Swingtime X sib to Crinkled Sunset. HC '64.

TOY SHOP (Gay '64) Sdlg 60-45. BB 19" L. W1, white self, red beard, hint of green on first opening. Cashmere X New Arrival.

VIOLET FLIRT (Reinhardt '64) Sdlg 61-14. BB 28" M. V3, stands light violet-blue; falls, red-purple, creamy white beard. Oyster Pearl X Melodrama.

WALTZING MATILDA (Porreca '64) Sdlg 303. BB 26" L. Y4, stands apricot-tan; falls white, apricot-tan hafts and picotee edge, light tangerine beard. Frances Kent X Pleasant Dreams.

WHEAL UNY (Mrs A O McWilliam '64) Sdlg 52-1. BB 20" M. V1D, violet-black self. Black Taffeta X Deep Black.

WICCA (Mrs A O McWilliam '64) Sdlg 558-1. BB 28" M-L. B1D, navy blue self. Wheal Vor X Rehobeth.

WILD PEACOCK (Muhlestein '64) Sdlg 166. BB 24" M-VL. YO4, stands rosy-brown; falls, amaranth flushed claret red and rosy -violet, red-brown hafts. Jungle Bird X Bang. HC '63.

#### MINIATURE TALL BEARDED (TABLE)

DOODLE BUG (McHugh '64) Sdlg 6131A2. MTB 22" M. Y2R, light yellow ground plicata, fancy marked pink Majorette X Dotted Swiss.

PAINTED ROSE (E. Roberts '64) Sdlg 61-R45. MTB 22" L. Y4L. stands golden-yellow; falls yellow overlaid rosy pink edged yellow, yellow beard. Kaleidoscope X Wild Canary.

PRECIOUS CHILD (Rees '64) MTB 28" M. W2, white plicata, ruffled heliotrope border Madam Chereau X small purple-edged plicata.

#### 1964 INTRODUCTIONS (with year of registration)

ARCTIC BLUE '63	CRYSTAL MINT '63	IMPISH VIXEN '63	PINKETTE '58
ARCTIC DREAM '63	DARK SPANGLE '63	INDEED '63	PINK PRIDE '63
ARCTIC MYSTERY '63	DOLL TYPE '63	LICHTELFE '60	PROPER LEMON '63
ARCTIC ROSE '63	DREAM MAKER '63	LITTLE DEMON '62	SERENITY '63
ARCTIC WINE '63	EASTER BEST '63	LITTLE GRACKLE '63	SPRING FERN '63
BLACK FLOUNCE '60	ELFIN ANTIQUE '63	LITTLE LYNN '61	SPRING JEWEL '63
sd BLUE ACE '63	ELFIN SMOKY '63	MAMA MIA '63	SUNLIT CHARM '63
BLUE MILLER '63	EYE SHADOW '62	MARINKA '63	SUNNY HEART '63
BLUE SPARKS '63	FLAME SPOT '63	MAROON CAPER '63	TOPSY TURVY '63
BORDER FRILLS '63	FOLDEROL '63	MEXICAN DANCER '63	TWILITE TIME '60
BRONZE BANTAM '63	GADGET '63	MOONBLAZE '63	VELVET CAPER '63
CHILTERN GOLD '61	GAILY GOLDEN '63	ORIENTAL BABY '63	WHISPERYLLA '63
CHIT CHAT '63	GREEN FLARE '63		