

THE MEDIANITE

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THE ARILMEDS — Herbert C Graves, Guest Editor

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THE PRESIDENT'S PATCH

Another successful iris season is past. Now we settle down to the less interesting interim work of preparation for 1971, robins, fall meetings, judging schools, etc. Next year, of course, will be a better one because as Medianites and gardeners we will make progress in medians, breeding, gardening, displaying, exhibiting and through our enthusiasm enlist others.

The season in the patch closed out with three days in a row of violent thunderstorms with rain and hail, mothball size; after one of these a patch is a sorry sight. Fortunately the first came the night after our local iris show.

Perhaps the most gratifying features of the season past were the increased number of excellent Median Iris shows, and more medians included in other shows. Median irises have show value, are interesting to both participants and visitors and provide show insurance. I cannot recall a report of a canceled median show.

Also it was very gratifying to see more young people, in the gardens, at the shows, meetings, and the New York Convention. AIS and MIS must get young people Iris involved. They are our organization future.

At New York 1970 over 125 people attended the median meeting. Three new members were added. Bee's Prodan and species publication were well received, and medians were evident in all the gardens.

On behalf of MIS and personally I would like to thank Editor Bee, Charlotte Gantz, and others concerned with developing the excellent new Prodan and species books. This was a monumental task well done, and provides a milestone in iris literature.

Regards

Lee Eberhardt

With thirty-two members and guests present, the Northeast Median Iris Society met on the evening of May 23 at the Driftwood Motel, Shrewsbury, Mass., for the spring meeting and to hear the renowned Dr Peter Werckmeister of Germany. Among those present were Dr Fitz Randolph and Miss Katherine Heinig of New York, and irisarians from New Jersey, Alabama, Colorado, and Ohio, as well as from New England and New York.

At the business meeting which followed the excellent roast beef dinner, it was announced that the fall meeting would be held on October 24 at the Mohonk Hotel in New Paltz, New York.

Bee Warburton introduced the two latest publications of the MIS, a new translation of Prodan (The Eupogon Iris Species), and Iris Species in Cultivation, which were published that day. They are priced at \$4.00 each and may be ordered directly from Bee Warburton, Rt 2, Box 541, Westboro, Mass. 01581.

Harry Kuesel told us all what we were wanting to hear—that iris bloom should be at peak in the New York area for the Golden Jubilee Convention, and he gave us a rundown on the activities planned for the occasion.

Promising not to be too scientific, explaining that his pursuits along that line were only tools to be used to further his plant breeding, Dr Werckmeister presented a series of slides which kept the audience spellbound. He first presented a series of historical slides including excerpts from the Codex of Vienna (512 AD). The Green text on a page representing what is probably I. germanica, states that the plant is "planted in holy places" which seems to prove that the iris has been in cultivation for at least 1450 years!

Then the Doctor showed slides of some of his own collected clones of pumilas and arils and of his hybrids. Outstanding (and it is very difficult to pick the best when all are so beautiful!) were slides of a brown onco which Dr Werckmeister called the "pride of my garden;" some hoogiana X stolonifera hybrids which interestingly enough will not intercross but have been crossed with other oncos; a Lilli-White X hoogiana seedling; a diploid regelia X pumila cross; onco-pumilas with blossoms about three times the size of pumilas; other hoogpum crosses; some tetraploid regelias involving stolonifera and hoogiana; and best of all, two hybrids involving Gatesii, some of whose seedlings we were fortunate enough to see, as he had brought them with him from Germany in bud, and they had opened in all their lovely majesty after his arrival.

All who were there thank Dr Werckmeister for a fascinating presentation.



THE NEW PUBLICATIONS



The two new publications copyrighted by the Median Iris Society which made their debut at the pre-convention meeting of the Northeast Median Iris Society represent a great deal of work by many people. The Prodan includes a repeat of the first translation, which was published in 1964, plus three further translations, and deals mostly with the irises of Romania, although Professor Prodan included some irises from other countries. The most important species used in median breeding are indigenous to Romania—that is, Irises pumila and aphylla—and they are found growing together in some parts of the country. In the famous "Turda Schucht" (canyon, or gorge) they grow together in thousands, and it is reasonable to speculate that the species named by Professor Prodan as being intermediate in physical characters may well be part of a hybrid swarm between these two species, which we know to be inter-fertile.

There was, after Prodan's death, a mixing-up of the labels in his collections, and what Dr Randolph was given as the "type" specimen of Iris binata Schur has been counted by Freeman Yendall as having 36 chromosomes, as though aphylla had been crossed with I. pumila, and those seedlings with I. pumila again. Such plants should have simpler stems than those of a direct aphylla/pumila cross, as Iris binata has been supposed to be. The first generation of aphylla X pumila offers some seedlings of the "binata" type, but some with less branching; in studying progenies from such a cross (Warburton Aphylla Wine-Red X Brownnet, Cook Aphylla Wine-Red X Carpathia) one notes that in the same plant will be stalks with no branches, with only one, or with two branches. This year pollen from one of these seedlings, 16D513, crossed onto two aphyllas, has set pods from every pollination, and all of the pollinations were made directly from the last flowers of D513 to the first flowers on the aphyllas—the bees could easily have done it.

A single cross won't tell us much, but we hope that some of our friends who have collected at the Turda Schucht will undertake a study of the population there. Helen von Stein-Zeppelin has collected there with Milan Blazek, and Dr Topa who assisted with the translation of the Romanian articles also collects there.

Attending the meeting were a number of people who had been concerned with these publications. Dr Fitz Randolph was there; the original Prodan translation was his idea, and he furnished the publication for it. His generous help with the species listing (without which there would be no species listing), went from A: furnishing the necessary data about his own collections, to Z: a complete review of the final text. Dr Katherine Heinig was there; she edited into readable English the translation made by one of her students of the monograph article, The Iris Species of Romania, which is reprinted as the first of four parts in the current publication. Dr Peter Werckmeister was there; his Catalogus Iridis, a list of the iris species, is the backbone reference for our list of collected clones of the bearded species. Harriet Segessemann was there; her husband did an excellent correction of the Romanian translation from the German version of one of the articles. Unhappily, Coauthor Charlotte Gantz suffered a broken wrist and was unable to attend.



PUBLICATIONS AVAILABLE

<u>New Publications:</u>	Prodan, <u>The Eupogon Iris Species</u>	to members	4.00
	<u>The Eupogon Iris Species in Cultivation</u> , a Clonal Listing	to members	4.00
<u>Back Issues:</u>	PACKAGE #1: Separately,	Yearbooks, THE MEDIAN, 1958	2.00
		1959	1.50
		Newsletter, July 1961	.50
		Medianite 1962 thru 1966, 5 yrs @ 1.50	<u>7.50</u>
		Total	11.50
		#1 Package price, while Supplies last	8.00
		PACKAGE #2: Separately,	Medianite, Vols 8, '67 and 9, '68 @ 1.50
		Medianite, Vol 10, 1969	2.00
		Checklist of Median Irises, four classes plus registrations '66, '67, '68	<u>2.50</u>
	Total		7.50
	#2 Package price		6.00
	<u>COMBINATION BARGAIN PRICE</u>		<u>12.00</u>

Make checks payable to THE MEDIAN IRIS SOCIETY. Please send all orders and checks to Publications Chairman, Bee Warburton, Rt 2, Box 541, Westboro, Mass 01581

INTRODUCING OUR GUEST-EDITOR

If Herby Graves called to say he was coming over to visit your seedling patch, he'd say that he planned to help you groom it of those horrid little water-melons. This startling sort of drollery is probably the result of teaching fifth and sixth graders in the schools of Friend, Kansas. It is rumored that Herby will be a grandfather by Christmas. That child is in for a memorable experience; moreover, he hasn't a chance. Herby will turn him into an irisarian before he can talk.

Herby has been growing irises for many years and crossing them for fifteen with his chief aims fertility and hardiness. As he says, "I can't see dead ends or things we all can't grow as having much value." His own Califa Kabang, grown here for the NEMIS meeting, is a beautiful clear yellow; others, named with his inimitable whimsy are Hunky Dory, Califa Dotsero, Dotwon, and Dotu.



Herby has done a magnificent job of assembling interesting material for his special guest-edited issue. We are proud to present this; but since we have vowed never to use the term ARILMED in our magazine, we must explain that unless the Aril and Median Societies can get together on a suitable term, we have no legitimate defense against it. Our dislike is based on pronunciation; seems to us any abbreviation of median should be pronounced mede, not med which sounds like something medical.

ARILMED, ARILmed, ArilMED, ArilMed, Arilmed, arilmed, ARIL-MED, Aril-Med, Aril-med, aril-med—just as there is no official class, so there is no proper way to print the word. The irises are lovely and extraordinarily promising, and they could care less! So, we turn the magazine over to Herby and the "arilmeds."

ARILMEDS

There is just no SINGLE form for them, no set height, nor any special pattern nor mark to be certain you are seeing an arilmed. Some hybridizers seek ARILmeds that show oncocyclis traits such as signals or bold spots below the beards, with large arched standards and smaller falls. Other hybridizers seek the delicate venations in both standards and falls. Some prefer to SEE the huge "woolly worm" beards in deep browns and full deep blues.

There are other hybridizers that prefer the regelias' arrowhead shape to the standards, or speckles and lines of tiny dots simply covering the entire falls. To some hybridizers a recurved or semirecurved fall is a sign of an ARILmed. Differently colored and more rounded crests can show the Aril blood and often enhance the flower to other hybridizers.

Yet there is another side to the arilMEDS that is often overlooked. That side is the influence the MDB, SDB, I pumila, or "what-have-you" has had upon the aril blood. These are the arilMEDS showing the pumila spot blended with the aril signal, or aphylla's branching, or an MDB's effect in reducing the aril plant's overall size.

Some good traits of ARILMEDS are: 1. Their winter hardiness over pure arils. 2. Their longer staying power over the pumilas. 3. The more exotic variations in the flower's color and shape. 4. Their ability to rise above the foliage; thereby allowing them to be viewed from the side as well as the top. 5. The more intense color saturation that is being found in some of these crosses. and 6. The lengthened bloom period. These are traits that appeal to most of those working with ARILMEDS.

Growers that have trouble keeping pumilas and the very tiny ones should find the ARILMEDS a little more apt to give them consistent bloom; while those that have never had much luck growing the pure Arils will find they can have some of the Arils' looks and not have quite the fear of losing their plants.

There are faults with the Arilmeds, though. Some of them are quite sterile, some are too Arilish so that they may not be as universally grown as we would like; some, like many of the Mohrs, will not show their venations each year, or will have flecks or chromosome breaks in them.

In contacting folks to write for this edition I quickly learned that many hybridizers love to write personal letters; but are reluctant to put into print their thoughts, ideas and personal likes or aims. They know the ARILMED is very apt to make a liar of them. Too many of their plants have unproven fertility, unadaptability, or too unsettled height for them to make public, positive statements about them. What I did glean from their private letters, though, is----YOU AIN'T SEEN NOTHING YET, NOHOW!!!

Herbert Graves, Guest Editor

ARIL-DWARFS AND ARIL-MEDIAN IRISES

Thomas M. Wilkes

Several factors have greatly emphasized the development of these two classes of irises. Aril species and aril hybrids are generally accepted as being amongst our most beautiful irises. Despite their beauty they have serious drawbacks which have greatly affected their development as garden irises. These drawbacks also quite generally to a degree have shown up in the arilbreds. The arils have no branching, and this tendency appears in the arilbreds which quite generally have only one or two branches. Since most arilbreds are over 30 inches in height they are usually considered inadequately branched. The arils are a difficult group of irises to handle in the garden and this property has been transmitted to the arilbreds. The combination of little branching on a tall stem, and difficulty in culture results for most growers in a lack of floriferousness.

Breeders will think and even dream a bit! Why not cross dwarfs or medians with the arils and arilbreds and get an iris possessing aril species' beauty on a dwarf or median type plant which clumps rapidly, is easily gardenable, and has the floriferousness of the better dwarfs and median irises? Better yet should this not bring the height of these hybrids down enough that poor or no branching would be acceptable? This is logical thinking, but is it possible in the doing?

One method of doing this was already well known to workers in arilbreds. By 1960 Dr. Peter Werckmeister had published his theories about the development of new "fertile families" of irises thru the amphidiploid approach (Aril Society Yearbook - 1961; and British Iris Society Year Book 1960). The certainty of ultimate success by this approach was even by then assured by experimental evidence, and by the breeding and cytological work of the late Dr. Marc Simonet of France. Even then Dr. Werckmeister was working with crossings of regeliocycli and pumila, and had already produced a partially

fertile triploid - the hybrid named "Miltonia." This work has proceeded and already he has developed the two parents necessary to develop "fertile families" of this type.

The aril-dwarf amphidiploids have proven highly gardenable in Dr. Werckmeister's difficult German climate, and very floriferous. The plants have the rapid clumping properties of the dwarfs as well as their floriferousness, and bloom on a short stem. At this stage of their development they unfortunately look more like dwarfs or medians than arils, although one can see the aril influence. In time this approach may be expected to lead to the desired aril type flower on a dwarf or median type plant.

Our American arilbred breeders, however, are impatient people and want results now - preferably in first generation crosses. Few have the patience to develop new and relatively unknown types of parental breeding stocks - a process which is very time consuming. Since one must have these parents in hand before they can even start developing the irises they are seeking most breeders turned to other alternatives. Most American and Australian breeders adopted the use of existing arilbreds with their dwarfs and medians. From theoretical considerations most knew that there was a decided risk of infertility, and this has actually been found. However, some proved fertile enough to use and second and third generation aril-dwarfs and aril medians are in existence from this approach. Despite the difficulties involved a few breeders are crossing these aril-dwarfs and aril medians with the regeliocyli and even oncocyclus hybrids, as well as others of the type.

What are these hybridizers looking for? In the light of the difficulties outlined above what do the arils and aril hybrids have that justifies all this work, and encourages breeders to enter this field?

One of the most sought after aril characteristics is the "signal patch" of the oncocycli and the "spot" of the regelias and most regeliocyli. These usually occur in colors nicely contrasting with the falls, and in a wide range of colors. Even greenish blue and truly red signals occur in arils or arilbreds. Maybe by further breeding these signals would cover the entire flower? An iris with a truly red fall? Hybridizers are incurable optimists, and can dream of the almost impossible - sometimes they even bring it off.

The aril forms are other characters sought by many. The oncocyclus form is globular and graceful and some oncos even have standards substantially larger than the falls. Some of the regelias and regeliocyli often have graceful conical forms, and are quite attractive. A few irisarians look with dismay at breeding trends which are gradually reducing the proportion between the standards and the falls of most bearded irises. Maybe these aril-dwarfs and aril-medians can be bred to have a better proportion between standards and falls?

Most arils are bicolors, and sometimes could be classed as amoenas with standards much lighter than the falls. These large rounded standards are usually delicately lined or veined, and sometimes lightly dotted or stippled in nicely contrasting colors. Standard colors of the arils cover the entire range of iris colors except for "pinks." Lavender pinks are known, and in, for example, I. lorteti, some specimens approach a true pink. Oncocyclus standards sometimes (and sometimes the entire flower) exhibit a very pure clear yellow color. This combination of attractions definitely are not being overlooked by hybridizers.

The falls of the oncocyclus and the regeliocyli besides sporting a contrasting signal or spot also are very often richly patterned. The patterning varies all the way from lightly veined and dotted to highly patterned often resembling a rich tapestry. The ground colors of the falls vary from a clear white all thru the spectrum of iris colors. The dotting, veining and stippling is often of nicely contrasting color, or similar to but deeper than the ground color. The coarse wide veining found in some oncobreds is rarely found in the arils and is believed to be a bearded trait derived from I. variegata.

So in general overall effect the arils vary widely from being delicately beautiful to flamboyantly rich and tapestried. Naturally breeders want to incorporate this beauty in their arilbreds which include the aril-dwarfs and aril-medians.

The regelias and regeliocyli also have their points of merit. Some are selfs and others are highly marked and patterned usually more so than the aril hybrids, of all oncocyclus ancestry. They also usually bloom later than the oncocycli and are much easier to handle in the garden especially in the colder and wetter areas. They often have a second terminal bud and sometimes even a branch (regelias, not R. C.'s). The colorations are interesting with such things as electric blues and interesting browns being known. I. hooqiana sometimes has a truly blue colorant altho most forms are blue-lavenders. The conical form on an aril-median or aril-dwarf is quite attractive.

These then are some, but not by far all of the many traits found in the arils (species) and their hybrids. Whereas there are not too many bearded iris species the "aril family" has about 60 known species. This represents a very large "gene pool." A decided plus is that altho not necessarily an easy thing the oncocyclus irises and the regelia aril irises cross fairly readily and their hybrids are usually quite interfertile. Hybrids with both regelia blood and oncocyclus blood generally are even more compatible in crossings than straight oncocyclus or regelia species. The famous C G White hybrids which are tri-species hybrids (oncos, regelias and bearded) are amazingly fertile with dwarfs and medians.

Many of these aril-dwarfs and aril-medians are quite acceptable as garden irises. Of easy culture they are hardy, fast multiplying and very floriferous. At present most do not have enough aril characteristics to please their creators completely. Most breeders in this area are optimistic and believe that future development will bring out the possibilities inherent in such an amazingly large gene pool.

Two new iris families have been created to grace our gardens. One cannot completely visualize what these will develop into in the future but we can predict that they will develop and that they will find a place in the iris scene.

ABOUT ARILS AND ARILBREDS - SMALL OR TALL

Jonnye Rich

First I will "define" some of the terms which in common usage have an uncommon number of meanings. These definitions are not to be construed as "official," they are only so you will understand what is meant when the terms are used in the following dissertation.

ARIL: ONCOCYCLUS, REGELIA, or any combination of the two.

ARILBRED: Any combination of ARIL with any other bearded - dwarf, median, tall, etc. This term can be used to refer to Arildwarf, Arilmed, or Ariltall and includes such terms as Mohr, C G White, Regeliabred, Oncobred, and various combinations of these differing types. Many new types of these ARILBREDS are being seen now and they will increase rapidly in the years ahead as hybridizers produce more fertile hybrids in this field.

ARIL TRAITS: This term is quite flexible also as it refers to many things. Clear cut veining, dotting, sparse wide beard, and dark or contrasting signals are but a few. Lack of branching may or may not be an aril trait since other bearded irises also have this trait; branching is definitely NEVER an aril trait as NO ARIL branches. The two most difficult traits to transmit are the TRUE signal and the wide sparse beard which are to be found only in the ONCOCYCLUS irises.

ARIL FORM: again this has many meanings as you can find almost any form in ARIL irises but more often than not it refers to the rounded or globular form such as found in the larger ONCOCYCLUS irises which are used in almost all illustrations of ONCOCYCLUS irises. If those who "do not like tucked falls" will consider the overall balance and symmetry of this form I believe they will see the proportions are very good. The form of the flower should in all cases complement and blend with the overall plant it is a part of. If it does not do this, it has "poor" form for that particular plant. personally we cannot imagine combining tall bearded flower form with the narrow linear foliage of the ARIL, and only one such flower atop the slender stem of an aril would appear awkward.

However, I would be the first to admit that "Beauty is in the eye of the beholder." My personal "IDEAL" flower is an ARILBRED which looks like an ONCOCYCLUS complete with sharp veining, dotting, and a large signal, but grows and blooms like most standard dwarfs. It should also be fertile both ways, but I would forgive the lack of fertility if it multiplied well, was resistant to leaf spot, and could tolerate our soil and climate without rot. Most non-Californians tend to think of California as having ideal conditions for growing irises, but such is not always the case; and California irises are not all alike in their tolerance of adverse conditions. We have as much variation in soils and climate between northern and southern California as others have between Florida and Pennsylvania.

Here in the great central valley the growing conditions are far from "ideal." We often have long periods of constant moisture; rain or fog for as much as six weeks is hardly ideal. True, we do not have the degree of cold you have in the east or north, but we do have freezing after weeks of moderate "growing type" weather. This often happens when the buds are emerging and either kills them or damages them so they are malformed. This is an area of too much or too little and this applies especially to rainfall. Our soil is heavy clay type loam with an impervious underlay which prevents drainage so we are plagued with all sorts of rot and fungus due to the plants "standing" in water much of the winter season with normal rainfall - and often it is above normal. This situation affects not only arils and aril-breeds, but all bearded irises we grow. The intense summer heat is also far from ideal and this lasts for weeks at a time, often above 100 degrees.

Your editor suggested I define the terms "hardiness" and "toughness." Hardiness is generally used to designate "cold resistance" in reference to plants. A hardy plant is generally one which can survive, without protection, several degrees below freezing without damage. Toughness is a new term to me in relation to plants, but I would assume it referred to a plant's ability to adapt to adverse conditions. Our term for this is "liveability." We consider any ARIL which has lived over three years after maiden bloom, with no special care other than being kept dry in its dormant season, to have "Liveability." Arilbreds of course should be much more vigorous and relatively disease free to earn the term. Either Aril or Arilbred should have been divided and transplanted at least once before they can be said to have "liveability."

Now to get right to the subject at hand, my personal ARILDWARF or ARILMED hybridizing program. That sounds impressive, but I must admit to having made little progress toward the ideal iris which I hope eventually to achieve. I do have numerous plants from seeds set and cultured in 1969 which I hope will be a forward step, but that will be a later story assuming the plants live to bloom.

My first Arilmed cross, which produced the Kelita series, was just a lucky accident. I wished to use tall bearded pollen on the onco, but as no tallers were blooming, I tried Pogo because a little tall blood was better than none. I made the cross in 1962 and embryo cultured the seeds as soon as they were ripe. When you set seed on aril using other bearded pollen, the endosperm tissue is usually abnormal so the embryo would only die if planted in the normal manner. At least this is what results in this area. If you have other results, consider yourself very lucky. These grew quite well and most bloomed in 1964, although some were damaged by freezing. I was captivated by these "miniature" ARILMEDS and determined then and there to make more of this type intentionally!

They showed much more aril traits than any aril-talls we had. Alas, they showed about the same degree of fertility as their taller counterparts; almost none. They do have pollen, depending on weather, but it is not fertile on anything yet tried. Of course, they refused to pod at first but have now almost all produced one or more seedlings. Some of these are from chance-set pods and I have never gotten more than two plants from one pod. They appear to pod more easily with pumila or dwarf pollen. The seeds appear to have normal endosperm so could probably be germinated by natural planting, though I have not done so. These seedlings look somewhat like those from SDB X C G Whites, but they are much smaller than any of this type I have seen. They are not any more fertile than the Kelitas with those things I have tried, though they appear to have pollen regularly. One of these did produce a seedling by aril pollen.

Most of my later ARILMEDS are no more fertile than the Kelitas so my hybridizing program is proceeding rather slowly. I have only now begun to get crosses using pumila pollen. It remains to be seen if these will be any more fertile; hopefully, they will. First one must have ARILS to pod. then one must have pollen available at the correct time and hopefully the two elements combine to produce seeds containing embryos. More often than not I find they do not cooperate and all I get is "tired." This is definitely not an unusual commodity among those afflicted with IRISITIS, thus it is not desirable.

If this sounds as if I am discouraged, perish the thought! I have just been talking of those things already bloomed, and next year that fertile one may bloom. I am not scientist enough to know that what I am attempting has little chance of success, therefore, I continue trying. Only this year I bloomed the last sibling of the Kelitas. All the others bloomed in 1964 or 1965, but this one had abnormal "grassy" foliage and just increased but did not bloom. Everyone advised me to toss it but I kept replanting the most normal-appearing rhizomes because it looked more like pumila than any of the others. It was much smaller than its siblings when it bloomed last spring. I hope it will bloom again, but I know it is abnormal. Like the other Kelitas, it did not see fit to pod; it had only five blooms and three of those were malformed.

I find the crosses of ARIL by DWARF to be quite vigorous and disease resistant for the most part. Only an occasional "weakling" shows. A few tend to increase slowly at first but generally overcome this tendency on division. As very few others work along the same lines I do, I have very little for comparison. For this reason I hesitate to make decisions of what is good or bad. If it is fertile with ARIL, I consider that GOOD. If it is prone to problems of soil and climate, I consider that BAD. The other qualities one normally looks for in a seedling, such as form, color, substance, markings, etc., I tend to judge by ARIL standards. Since my ideal lies in that direction, the seedlings are selected because they show these traits. Perhaps one day I will produce that "IDEAL" Arilmed I dream of, but if I never do I will still continue trying and hoping. If I were a swimmer, I'm sure I would be swimming "upstream," just as I have elected to approach hybridizing from a different direction. It will not necessarily be a better direction, and it most certainly is not the fastest, but I hope it will produce a different type of ARILMED or ARILDWARF. I consider myself fortunate to have ARILS to use as pod parents and I hope this continues to be true. Otherwise that fertile ARILMED had best be growing now, or my program will come to a very unsuccessful end.

ARILMEDS - TO GROW OR NOT TO GROW?

Wilma Vallette

How often do you hear visitors at a garden or show, raving enthusiastically over the exotic beauty of the Arilbreds? "Oh," they say, "they are so beautiful. I do wish I could grow them! But I just never have any luck with things that are the least bit hard to grow, so I guess I'll have to be content with plain Iris."

If you belong in that class, dear reader, you do NOT have to be content with "just plain Iris." Only, there aren't many "plain Iris" any more. The modern varieties are so much improved over the irises of yesterday that there really isn't much comparison between them, and almost anyone can find true bearded irises to suit their tastes, either dwarfs, medians or tall! But even so, in a planting of True Bearded Iris (Eupogons) of any kind, a few Arilbreds add a lot of interest - and today many of them aren't at all hard to grow. At least, not hard enough to deter anyone from having them, who will give them growing conditions at all satisfactory.

True, the species ARE hard to grow, and many people find it impossible to keep them for more than a year or two. As I am among that number myself, I won't try to give any instructions how to grow them, except to mention that they CANNOT stand wet feet. No bearded iris likes wet feet, for that matter, but the Arils demand freedom from wetness during their dormant season. Natives of arid western Asia, from Iran into Syria and Palestine, they have evolved a growing and blooming season suitable to the climate, so that they go dormant soon after blooming, and die entirely to the ground, like the Tulip which also evolved under the same climatic conditions. Unlike the Tulip, which can stand considerable moisture in its dormant season, the Arils, both Regelia and Oncocyclus, must be kept dry while dormant - or else. In desert areas they might possibly be left in the ground the year around, but in the average garden, where things are watered regularly, they must as a rule, either be dug after blooming and put in safe place for replanting in the fall, or grown in a raised bed that will not get watered with the rest of the garden. Here, in irrigated country, where everything gets watered every week, digging seems to be the best thing to do; but even that doesn't always work as I learned to my sorrow when a friend sent me several onco-regelia hybrids imported from Holland. Some of them lasted as much as four years, and I think I have a piece of Thalia around somewhere yet, but most of them died out in a year or two; and as I have almost a city block planted to irises (or did, at the time), I didn't have time to fool with things that were so hard to keep, beautiful as they were.

But I do have several hundred Mohrs and other arilbreds - and while some are a bit difficult, many of them are almost as hard to raise as dandelions. These arilbreds, as everyone knows, are Arils crossed with Eupogons. At first, we had only crosses with tall bearded, and the very first ones were of oncos with diploid tall. Naturally, as the TB had 2 sets of chromosomes of 12 each, the offspring resembled the tall parent as its traits completely hid those from the onco parent, with its 2 sets of 10 each. I still have some of these old-timers, but am discarding them next year; things like Elan, Entre Nous, Due West, Jocund, and others of that ilk. They look like pure TB, and not very good TB, either. Later, various oncocycli were tried with tetraploid tall, and naturally, they too, for the most part were not-too-good TBs. As the cross was more easily made on the tall - especially since the oncos bloomed earlier than pure tall, so it was hard to use them for anything other than the pollen parent - this may have helped to explain why most of the offspring were pure TB for looks. Cytoplasmic inheritance may have helped in this, since after all, the actual flesh of the cell was not quite the same as that of the onco, and there is very little cell-flesh in pollen. Making the cross the other way gave slightly better results, but was much harder to make, both because of the difference in blooming season and because tetraploid pollen on a diploid flower did not take too well. One thing in its favor was that with the first cross, infertility was extremely high, while with an onco pod parent, the one set of chromosomes from it would occasionally double, giving an amphi-diploid offspring similar in nature to the dwarf species *I. chamaeir*, except that it had two sets each of 10 and 12, instead of two each of 8 and 12.

Infertility was still high, even after these hybrids appeared with 4 sets of chromosomes, and again, when they did set seed with Eupogons, either way, the offspring too often were Eupogon in appearance. The first one to reliably give onco traits, perhaps was old Ib-Mac (*iberica* X *Macrantha*). It had a definitely onco look, with onco markings, and best of all, many of its offspring showed their onco blood, too. The next reliable parent to give onco-type seedlings was Capitola. Tom Craig once told me that those two could be used with almost any tetraploid Eupogon and would give onco-looking seedlings. I never had much luck getting Ib-Mac to grow, and never used it either way, on that account. Like Capitola, it was good only as a pollen parent, as very seldom can either of them be persuaded to set seed - and also, with a Eupogon pod parent, seed is larger, germinates much better - and there are lots more of them.

We all know the Mohrs. Some people have asked me what is the difference between a Mohr and an Oncobred. None, really, to be exact...except that the Mohrs have all descended from the one original oncobred, William Mohr, while others are "Onco, bred with tall." Any onco, bred either way with any Eupogon variety, tall OR dwarf. Many of the Mohrs are as easy to grow as any Eupogon, and as a rule, the less onco traits they show, the easier they are to grow. Mohrloff or Zebulon, for instance, are both plicata Mohrs, but in looks they are pure TB, and not very good TB either. But this is not always true; BellaMohr, for instance, while it has no veining or onco signal, has a definitely rounded onco form, and it grows like a weed. William Mohr himself is very miffy, for me at least, and though I've had it for years, I still have only a very small clump of it. But among its hundreds of descendants (and I DO mean hundreds, as I have, or have had, some 3-400 of them myself), one can find any number of beautiful irises that show their onco blood, yet are not too hard to grow. However, the only white Mohr I have ever seen that looks the least bit onco-ish, is Any Time, though Purissimohr shows faint signs of onco. Things like Slick Chick or Sharksiana not only show no onco appearance, but are said never to give onco-type seedlings unless something like Ib-Mac, Capitola, Asoka of Nepal, or Jop-pa Parrot is used for the other parent. And if you're going to use these for the other parent, better use them on a pure TB to begin with, since fertility is better and there will be more chance of a "take" and of getting onco-type seedlings, not to mention you can use a better white to begin with!

These last are true oncobreds, and totally unrelated to William Mohr. They are a little harder to grow than most of the Mohrs, and for me, both they and their descendants are so prone to winter-rot (botrytis) that I no longer try to grow them. They do give onco-type seedlings, though, when used as pod parents, and today there are a number of others that will do so.

Another thing I found, while using Capitola pollen: it seems more compatible with 40-chromosome dwarfs than with 48-chromosome tall. Perhaps its two sets of 10 and 12 respectively are more like the two of 8 and 12 in the dwarf, so that the two sets of 12 can pair easily, with more pairing between the two sets of 8 and 10 than takes place between two of 10 and 12. Capitola is purple, a big, wide-petaled rounded thing with a small dark signal, and it does tend to throw a lot of purple offspring that, when used with chamaeiris, are sometimes too big for their height - unless you remember that oncos do have large flowers, and in a way, these large flowers are more typically onco than the smaller ones deemed proper for their height in pure Eupogon crossing. I only made a few crosses with Capitola, on the two yellow chamaeirises, Burchfield and Sound Money, yet from these few, I introduced three seedlings: Border Queen (BB), Water Nixie, and Lilli-Mohr, none of which was purple. The first is light blue, with lighter falls; the next has bright blue standards and falls of a peculiar tawny greenish-blue (that reminded me of an evil nixie lurking beneath the bright blue water to seize whatever prey came its way); and the last was an almost-white baby Mohr with nice flaring falls and a small signal, which the other two lacked. Lilli-Mohr had flowers a bit too large for a true Eupogon of its size, but to me, their size only emphasized the onco traits, shown by the signal. Both the other two were taller, and fit well in the Aril-med class, in size, height and looks.

Now for the Regelias. I. hoogiana seems to have been one of the first to produce hybrids, but all the I. hoogiana seedlings I have seen look much the same as pure TB. Most of them have the form of the hoogiana parent, but as hoogiana has no aril netting, veining, or signal, and a lot of TBs have much the same form, these hoogiana hybrids never appealed to me very much, though they are vigorous, fast to increase, and easy to grow. Blue Princess is typical of its offspring with smaller irises; Hoog-san and Ben Adhem with TBs; the two last are also among those I will discard next year, as they show no aril looks whatever, and are "just another blue TB" of rather poor quality for today.

I. korolkowi I have not tried with tall, and the only cross I made on chamaeiris resulted in Plum Cute, a typical little regelia hybrid, with one or two flowers atop a slender stem, dainty plum-colored little things with the falls veined darker, and olive green crests, anthers, and beard. It inherited the dainty stem, flower form and markings from the regelia parent, and its vigor and speed of increase from chamaeiris. In fact, it almost has a pumila type of growth. I. pumila, you know, has no stems, so to give any number of flowers, each tiny rhizome makes several "toes" that each send up a blossom, and later develop into rhizomes themselves, making for extremely rapid increase - and this seems to be exactly what Plum Cute does. In two years time, a rhizome will form a clump a foot across, and in two years more it will be three or four times that much. I have never tried it either way in crossing, but am told that it is fairly fertile. I tried I. korolkowi that same year, on several tall, with no results; apparently, like Capitola, it is more fertile on 40-chromosome dwarfs. Regelias, of course, have four sets of 11 chromosomes each, so Plum Cute, Little Lake, Blue Princess, etc., have two sets each of 11 and 12, suggesting that perhaps they might be more compatible with pure Eupogons than the oncobreds with two each of 10 and 12. The third regelia species, I. stolonifera, has produced a few hybrids, too, with dwarfs, such as Spring Capers, Mountain Pottery, and Little Master. Instead

of having netting, veining, or signals, these show their aril traits in the form of purple splashing or mottling on a contrasting ground, usually yellow, along with dainty form and small size in proportion to their height. There seem to be comparatively few hybrids of this species with tall, but Kalifa Gulnare is one, I believe - at least some of its seedlings show short "runners" (stolons) from the rhizome, with wee new rhizomes developing at the end of them.

To summarize, there ARE any number of aril hybrids quite easy to grow. The F₁ Regelia-Eupogon hybrids seem (for me at least) to be easier to grow than the F₁ Onco-Eupogons (such as Joppa Parrot, Asoka of Nepal, or William Mohr), but that the F₂ from these first-generation Oncobreds is usually easier to grow than the F₁. Most Mohrs are easy to grow, though a few are a bit miffy - easier on the whole than the F₂ Oncobreds. And nearly all the Aril-dwarfs are easy - Spring Capers, Mountain Pottery, Little Princess, Balroudour (Sass varieties), or things like Tantalizer and its seedling, Wilma V (another one that grows like a weed, and must be occasionally thinned to keep it from choking out its neighbors), Plum Cute, or two of my other "babies" - Border Queen and Water Nixie, though Lilli-Mohr doesn't increase so fast, but is still easy to grow.

So DON'T, I beg of you, be afraid to try growing the Arilbreds! Tall or short, Onco-breds, Mohrs, or Regelia-breds, most of them are as easy to grow as the average Eupogon, IF you will remember never to let water stand on them, and to keep them just a little drier than the pure Eupogons, if your garden gets thoroughly soaked at regular intervals. True, the tips of the leaves do brown back worse than Eupogons, due to their aril heritage - remember, they are natives of desert areas, and die back to the ground in their native habitat. But this is a very minor fault, that is more than made up for when they bloom" A few arilbreds are to a garden what dessert is to a dinner - they furnish just that little extra "something" that is needed to make the whole complete.

RANDOM THOUGHTS AND SPECULATION REGARDING ARILMEDS _____ Cleo Palmer

Arilmed, as discussed here, refers to the cross of a standard dwarf as pod parent, and the pollen parent being a 44-chromosome C G White arilbred hybrid. The cross is fairly easy to make this way, and will give fair germination the first year. The seedlings resulting from such a cross seem to grow well, transplant readily, and have good increase and vigor. They appear to remain greener through the summer months, appear to have more resistance to leafspot, rust, and rot, than do their arilbred parents. They will stand wet conditions for prolonged periods without rotting, will take late spring frosts and give a respectable amount of bloom; whereas the arilbred parents would be more severely damaged foliage-wise, and have little or no bloom. This should make arilmeds more adaptable to a much wider area than is now possible with the arilbred parents.

The flowers will range from typical standard dwarfs in form and color, to quite arilish form and colors, although the most aril looking flowers will appear in the minority in such a cross. New color patterns are apparent among those blooms more typical of the standard dwarfs. The pumila spot pattern appears modified in some, to the extent that the spot is not sharply defined, and exhibits points or rays emanating from the spot onto the surrounding area of the fall. This may or may not add interest, since the effect varies considerably. Although some spots resemble the aril signal spot, I doubt that it is, in fact, an aril spot or signal pattern. Possibly it is the pumila spot, modified to some extent by the aril signal spot pattern. Those exhibiting the most aril characteristics in the flowers would seem to be the most interesting, since it would make the exotic aril colors, pattern, and forms available to growers who cannot grow the arilbred parents successfully. Hopefully, these new arilmeds would grow with comparative ease in most areas, but will need widespread distribution to discover their full potential as garden subjects.

Heights can vary greatly, from 12 inches to over 32 inches, but most will fall between 14 and 28 ins. Stalk may vary from a single stem with up to three flowers, to one with two or more branches, with six or more buds; however, the average is two branches with three to four flowers per stalk. A first-year plant can have as many as five stalks, and often has two or three stalks. Flower size will vary from fairly small to rather large, and exhibit many variations in color and form.

In my limited number of crosses, Knotty Pine gave the most aril-looking flowers in color and form. Lilli-Var gave the most interesting spot patterns. I suspect that the more recessive the standard dwarf is genetically, the more aril looking the flowers are apt to be. The leaves of these arilmeds are generally narrower than on either parent, but a few may be wider.

I had only one cross where the arilbred was the pod parent, and this gave few seedlings. However, they were more aril looking, and closely resembled their pod parent. This could indicate that the aril spot or signal could be transferred by making the cross this way; or it may indicate contamination by selfing or by other arilbred pollen. Since they seem to favor the arilbred parent in most respects,

they may not be more adaptable than their arilbred parents.

There seems to be a potentially promising future for these arilmeds, so why not try a few crosses for yourself next spring. Happy pollen daubing!!

CROSSES INVOLVING ARILBREDS

Ray Monnie

Baria X Capitola

15 in, 3 blooms

S lavender-blue, slightly open

F same overlaid with tan, dark lines form signal.

No pollen. Small blooms, rounded form, heavy substance. Set pods to regelia pollen.

Baria X arilbred* (Sent by mistake for a CGW, identity unknown, potent pollen and spot pattern)

16 in, 3 small dainty blooms

S lavender blue, some maroon splashes

F same overlaid tan and light brown, splashed maroon.

Has some pollen but is difficult to pod at times.

Have sdgs from Decorated Giant pollen to bloom in 1970.

Baria X Kalifa Hirfa

1. 19 in. 1 branch, 3 blooms.

S pale blue brushed olive, slightly open.

F olive green darker at end of beard, olive hafts.

2. 18 in, 1 branch, 3 blooms.

S white with yellow midrib, F yellow

No pollen beard yellow. This sdg had over 20 bloomstalks the first year. Garden effect is a nice yellow amoena.

3. 18 in, 1 branch, 3 blooms.

S mauve; F mauve around beard, balance light chartreuse lined brown around beard.

Lots of pollen, pod fertile.

Beard yellow chartreuse, recurving falls.

Baria X Saffron Charm 1701-1F

18 in, 3 blooms.

S pale blue edged saffron, very ruffled and crimped.

F same, light olive at hafts, edged gold, ruffled edge. Beard long, pale blue.

Has some pollen, pod fertile. This cross is extremely hardy and in a normal season goes nearly dormant.

(Baria x Saffron Charm) X Jallah Effendi

18 in, 3 blooms

S light blue, F olive chartreuse. Blue blaze from beard to end of fall. Beard light blue.

Rounded form very heavy substance. Shows very little aril influence but is very nice.

Baria X Vera (regelia)

10 in, 0 to 2 branches, one to three blooms.

S amber and mauve, purple splashes.

F yellow overlaid with brownish tan. Splashed mahogany. Recurving.

Beard is a very long bright orange. Set some seed in 1969.

(Baria x I. chamaeiris) X Ib-mac

16 in, 2 blooms

S gold, tightly closed

F same lightly lined darker gold.

Beard is light mauve.

No pollen, no seed set in 1969.

(Baria x Arilbred*) X Kalifa Hirfa

28 in, 2-3 blooms.

S bright reddish violet

F dark red-violet with dark velvety overcast, satin textured.

Orange beard.

Has pollen. Pod fertile.

Brassie X Arilbred*

12 in, one to two blooms.

S mauve, lined brown.

F brownish chartreuse, marked darker brown.

Beard brown.

Arilbred form.

Has pollen. Podding not tested.

BREEDING FOR ARILMEDS



Mildred Brizendine

What can I say about Aril-Meds that might be interesting and helpful to someone else, since so little is known about them as yet? It takes many years to develop a new type of iris and we have barely begun.

In 1961, a cross of Carpathia X Capitola was made, and a little well-rounded dwarf appeared which is called 2-63. Crossing this to Korolkowii Concolor and still getting a dwarf has done much to give hardiness and small size. Having access to many Arils through my husband's efforts, crosses were made between SDB and CGW. Some very lovely irises resulted but not much progress has been made since the first bloom because of weather conditions and sterility. The Zing kids and Joy Bringer have again proved they are good breeders.

The most floriferous Aril-Med came from Zing X Kalifa Hirfa. The first year it bloomed with 40 stalks, all having at least three blooms to the stalk. The resemblance to Kalifa Hirfa was very clear, only its height was reduced to about 17 inches with flowers in proportion and nice fine foliage. Many

Pods with good seed have developed from this seedling but none have come into bloom yet. It seems we get frost or rain or both when the Aril-Meds are in bloom.

Another interesting cross was Shine Boy X Ib-Mac, 10 inches tall. Shine Boy never throws its own color so this was more to the Ib-Mac side with lilac standards and medium red falls, sort of muted oriental colors, very pretty, but so far sterile. Joy Bringer gave the best Aril form. It was crossed to Imam Salah X (Kalifa Gulnare x Imam Ahmid 18-1-9, 13 inches tall, a light yellow self with large domed standards, recurved falls with a small signal and two flowers to the stem. I have not been able to pod it as yet. It is a poor increaser so have only a few flowers to work with.

Then I decided that since no one was working with pumila X CGW, I would try this type of breeding. The reason I use CGW is because I have never been able to get pumilas or SDB X species to come up. The cross is too far out. Perhaps the tall bearded blood will be a hindrance in later generations but so far I haven't found any other way to get seed. Many crosses bloomed this year and much to our surprise all were from 10 to 15 inches tall, with many Aril characteristics, such as domed, pointed standards with heavy midribs and good substance. Most of them had wide, recurved falls, with clean colors, which bloomed above the foliage. They had pollen and set seed. Due to the extreme drouth we have had this spring, there may not be full pods, but they will cross both ways.

One thing noticeable was the Aril characteristics were dominant in the first generation. One row of (Cretica x Orchid Sheen) X Pali of Bactria, which to me is a holy horror, gave a row of the prettiest clean reds imaginable - no signals, nor even dotting or netting appeared from the pumila X CGW, but good clean colors, good size and proportion, good substance and height, and fertile pollen did appear. The best pod parents were Hanselmayer's Austrian lemon pumila, White Mite, MB-7-64 (Lemon Austrian X H-503) and (Jo Bol-5/Tatai B-) X (2-63 x korolkowii Concolor). The best pollen parents were Syrian Moon, Oberon, a regelio-cyclus, and B-10-66 (Haynei X CGW).

The most promising Aril-Med in the patch was (Snow Flurry x Joppa Parrot) x self) x Blue Spot) x Artemis) x Susiana) which bloomed a beautiful blue but had no increase and promptly died, seed pods and all. Six years of work down the drain. As you can see, so far not much has been accomplished, others have had much more success, but we are trying to find a good breeder that will take species pollen and produce real Aril-Meds. So here's to the future.

SDBs X CGWs

Leda Christlieb

In 1964 some SDBs were pollinated with CGW pollen and the following fall seed of eleven pods was planted in a row in the garden. These were mulched with about 1/2 in of sand. The following spring the bed was kept damp and there was good germination. The second spring there were several bloom-stalks; one blossom opened and then a late freeze turned them all to mush.

The third year, a visiting AIS judge from Wichita was impressed enough with their bloom to ask to have some brought to their early show some eleven days hence. A few unbloomed stalks were cut, the buds carefully wrapped in squares of waxed paper and tied with string; each specimen stalk placed in a pop bottle of warm water and stored in the refrigerator. The evening prior to the show they were removed, unwrapped and allowed to open at room temperature overnight. One of them received an Exhibition Certificate and was later registered MYOWN JOY. (It is from Garnet Treasure X Kalifa Hirfa.)

The seedlings had grown so well in two years it was thought prudent to divide and line them out for a better look. Having several plants of each seedling gave a better opportunity to observe them.

The rhizomes differ in size and shape; some being rather turniplike and piled one on another, some having long necks or stolons. Blooms vary in form also, and bloomstalks range in height from dwarf to about 28 inches. Colors are varied and may differ in the same seedling from one year to the next. Falls often recurve upon first opening or in cool moist weather, but flare as the bloom ages or with hot, dry atmosphere. Dwarf, regelia and onco characteristics may be seen in different blooms.

Some of them are very floriferous, a measured 7 ft 1 in of row produced a counted 175 bloomstalks with 2 to 3 blooms per stalk (second year bloom). The blossoms were heavy of substance, rounded in form. There is a cream-yellow bitone from the cross Brassie X Imaret. Kalifa Hirfa pollen was most potent, giving takes on Garnet Treasure, Green Spot, Lilli Richtone, Orange Bantam, Pigmy Gold and Pogo.

I have not found these seedlings very fertile selfed, sibbed or recrossed to the CGWs. Neither are they sterile, being as individual in breeding behavior as in looks. The F₁ in this type of cross has produced the most exciting seedlings I have raised in nine years of hybridizing dwarfs, arilbreds and tall bearded, so I continue to make them as they have proved hardy, bloom with the SDBs and on into TB season, and have aril characteristics.

BREEDING ARILMEDS IN WALLA WALLA

Donald J Boen

Aril-meds are not a new phenomenon - we have had a few for years. The first I grew was old Zwanenburg. The parentage is recorded as *Lutescens Aurea* X *susiana*; however, some believe it more likely that the pollen parent was Ib-Mac. Its floriferousness and vigor were all that one could desire, but its weak stalks and muddy color detracted from its garden value. Of later vintage was Schreiner's Peshawar, equally vigorous, and of marvelously rich coloring. Its weak stems spelled disaster in my windy garden, but a nice clump still blooms beautifully in the garden of a neighbor, where a grapestake fence gives it the shelter it needs. Later I grew Wilma Vallette's Border Queen. This showed the garden possibilities of a quality aril-intermediate, rapidly forming a large clump completely smothered with bloom, and stalks sturdy enough to hold them up.

Up till 1964, I had attempted no arilbred-SDB crosses. I had concentrated on TBs, with an occasional Capitola cross, from one of which came Spring Nocturne. A correspondence with Wiloh Wilkes led to a gift of a few of her seedlings in 1963, to add to a few C G White oncobreds acquired the same year. Then, in 1964, she sent me pollen from several of her seedlings. As this arrived during SDB season, I used a good deal of it on them, and was amazed at the fertility of these crosses, later at the good germination and general vigor of the seedlings. Due to late frosts in 1960, I had to wait till 1967 to see the plants bloom. Here are some results:

Cross 4Y4: Brassie X Wilkes Salah x Imaret 1-5

The pollen parent is the most vigorous arilbred I grow—a huge bitoned yellow with a large purple signal and some veining over the upper falls. The seedlings were 100% yellows, with onco form, but little or no onco pattern (I do not consider flecking to be onco pattern). I saved three and still grow them for their brilliant and surprisingly long-lasting show, though the flowers are too large, and tend to bunch. 4Y4-7A is Brassie colored, a smooth self. 7B is lemon with a white blaze, like Elsa Sass. 7C was the only one with a signal: it is smooth greenish yellow with a tiny green signal and a suggestion of veining.

Cross 4Y-6: Green Spot X Bali Agha

Extremely vigorous plants of good proportions, but of wonderfully hideous coloring. These tended to be gray-lavenders wildly flecked and splashed with dull purples, browns, and greens. 4Y6-7A was different—a dainty pure white and pale yellow amoena with a raylike signal of green lines on a deeper yellow spot. Unfortunately this was discarded by mistake. 4Y6-7B was a lovely rich orchid with red-brown hafts and a showy orchid beard, poor substance and chronic foliage trouble spelled its doom.

Cross 4Y7: Lilli-Green X Ker-Im 1-25 (Jebal Kerak x Imaret).

These were white or creamy with blue or greenish flecking. Form was generally nice, rounded and ruffled, but plants were weak and never grew up. This is not uncommon in crosses involving aril-breds, but less frequent when using SDBs than with TBs.

Cross 4Y8: Lilli-White X Salah x Imaret 1-5

All creams or light yellow with nice round form on tiny, cranky plants that never got off the ground.

Cross 4Y-9: Truce X Asokah-Salah A

This produced blends in pastel colors, mostly cream or buff overlaid reddish or brownish. The most interesting were a few pale and clean gray-greens flushed red-purple over the hafts. Plants were good, but the narrowness of Truce carried over.

Cross 4Y-10: Truce X Sal 21-3-7 (Imam Salah X (Imam Ahmid x Kalifa Gulnare))

Rather like the above, but with better form. The best was pale yellow, with the round flaring falls delicately sanded greenish tan. Form and proportions were excellent, and I now regret not keeping it.

If you're wondering what happened to crosses 4Y-, 2, 3, and 5: they were all from miniature dwarfs crossed with arilbreds. It was not hard to get seed, but in two years only one seed germinated, and I won't nauseate you by trying to describe it!

Two neighbors, Mrs Constanze Harder, and Mrs Otilie Bieloh play with dwarfs and arilbreds in their lovely garden, and several years ago Mrs Harder bloomed a striking seedling from Pagan Midget X Capitola. Registered as Mohr Midget, but never introduced, it has proved to be a good parent. It should be intermediate, but actually is smaller than Pagan Midget; essentially it is a Mohr of SDB proportions, purple with a prominent darker spot and a bright blue beard. It will set seed with just about

anything that has fertile pollen, and though extremely dominant for color, has proved to be a fine parent for aril-meds. After seeing a batch from it x Ib-Mac, I began using it myself, with Mrs Harder's permission. The Ib-Mac batch were rich purples with huge signals, and vivid blue beards.

In 1967 I used Mohr Midget for the first time; I also had Bill Kellie's Almost, a pollen-fertile 3/4 bred from gatesii X Asoka of Nepal. Here are the results of the 1967 crosses:

Cross 7C-1: Brassie X Rojo Grande

I made the cross because of the tangerine beards on both sides. All seedlings were tiny, cranky versions of Brassie. I think a bee helped.

Cross 7C2: Green Halo X Capitola

Green Halo has lovely form and is a good parent. This is a cross guaranteed to give fascinating color. The flowers were generally wide and full, in delicate pastel tones of gray, blue, and green, often with rich blue or violet beards. The plants are vigorous, but flowers a bit too large for the height. These lovely colors tend to fade but are often exquisite when fresh.

Cross 7C-3: Easter Holiday X Almost

A word here about Easter Holiday. It is registered as Brownie x I. sari, which would make it a bit over 1/2 onco, due to the touch of onco from Brownie's parent Zwanenburg. However, Easter Holiday has never looked onco, except for the peculiar ruffling of the standards, it doesn't have foliage, roots, or rhizomes like an arilbred, and it grows too easily and is too fertile. However, I'm told that chromosome analysis has been done and the chromosomes are there, so---. Anyhow, one would expect this cross to produce very aril-looking flowers. It didn't. Most are quite narrow, somewhat rounded, in the dirty gray, greenish, and brownish colors, often bitoned, that so often come from arilbred crosses. One, however, was lovely. 7C3-9A is a lovely flower, a self of very rich old gold with a frosty satin sheen and a faint greenish cast. Beard is dark brown, and there is a conspicuous line signal of dark brown. Form is wide, round, and ruffled. As to vigor, it had five bloomstalks on the first-year plant! This is a good example of the growth habits of these hybrids. They inherit the pumila habit of producing many mature fans the first year, which means many bloomstalks.

Cross 7C4: Little Redskin X Arjuna Aga

This showed the usual poor germination expected when an MDB is crossed with an arilbred. Of 30-odd seed, none germinated the first year, and 6 the second. These are rather smaller plants than SDB X arilbred, some quite within SDB limits. Colors are delightful, as the pumila spot is carried over and reinforces the onco signal, giving combinations such as smoky maroon overlaid black around the beard, pink-lavender with deep red-purple spot, and gold with brown spot. Form, however, is narrow and strappy. Use of the MDB might be rewarding if it had wide falls.

Cross 7C5: Mohr Midget X Almost

The predominant type here was rich purple or violet with darker signal and blue to brown beard. Some were quite nice, but this is a common pattern in arilbreds. Three were selected as of more than usual interest.

7C5-9A: Rich violet standards, falls of red-purple lightening at the edges, and apparently with a bit of yellow undertone, as there is a distinct red glow. Beard is bronze tipped with pale blue. Showy and vigorous, but just a bit coarse. The strong red tone has led me to use Almost in crosses with red-toned dwarfs, to bloom next year.

7C5-9B: Rich mulberry standards, very dark, satiny falls of red-purple, with a blackish overlay around the dark brown beard. Fine form, with closed standards and round, flaring falls, which curve down just enough to give an aril look. A rich and lovely flower.

7C5-70A: The tallest and most vigorous of the cross, and a surprising color pattern considering the parentage. Essentially a creamy white and light yellow amoena, it has a one-inch signal of dull red purple, which gives a very striking appearance. The yellow beard is set in a wide V of bright yellow which cuts deeply into the signal. All the seedlings of this cross show good branching—this is the best, with two widely spaced branches, which, with the terminal, give 4-6 buds. It's also a good example of the combined effect of pumila spot and onco signal, as its signal is larger than that of any other arilbred I grow.

7C6: Mohr Midget X Arjuna Aga

A poor combination. One seedling was brownish, all the others dull red-purple to violet, with narrow parts. Size of flower, wiry stems, neat, narrow foliage, however, were all in the best tradition of aril-meds. Arjuna Aga may be a parent to be used with caution.

As to future use of these seedlings—this is an unanswered question. Two or three may have commercial possibilities. Few of them ever have any pollen, so interbreeding them successfully seems unlikely. They will frequently set seed, however, and here seems to be the answer. This year I plan to try backcrossing with pollen of some of the shorter, smaller "tall" arilbreds. Hopefully, one might retain in at least a few seedlings the small size, thin, wiry, rather well-branched stalks, while reinforcing the onco look. If such seedlings are themselves fertile, it might be possible to establish breeding lines.

From my limited experience, I have formulated a few general rules to help me make these crosses more wisely. For what they are worth, I'll pass them on:

1. In general, using the SDB as seed parent seems to work better. I've never done it any other way, but others who have report that seed setting and germination are poorer.
2. Some of the lighter blends and yellows among the arilbreds carry dominant inhibitor. If used with SDBs in yellow or white, the chances of aril pattern are much reduced.
3. Seed is relatively easy to obtain on miniature dwarfs, but difficult to germinate. From my results with Little Redskin, I would feel the crosses to be worth trying if the MDB has very wide falls and strong spot pattern.
4. Choose a dwarf with neat, compact foliage, to counteract the rather scraggly foliage of the arilbred.
5. Dwarfs with the bud placements spaced down the stem give better branched aril-meds than those with the buds near the top of the stem. Mohr Midget is of this type, and gives nice branching.
6. Forget all the above rules and have fun.


ONCO-PUMILA CULTIVATION IN ENGLAND

Laurence Neel

I was asked to write a few lines on the subject of Onco-pumila cultivation in England but as yet these are not being grown here. It is possible, of course, that a few enthusiasts are trying them but if so I haven't learned of them. I have grown four such hybrids which were raised by Dr Peter Werckmeister of Geisenheim-am-Rhein, Germany, but after a couple of years they had practically disappeared. Luckily one of the seedlings did flower sufficiently well for me to exhibit it on a British Iris Society's exhibit at a spring Royal Horticultural Society show from which it was selected for trial at Wisley. As yet it has not been judged but should flower well in 1970. However, I shall be very surprised if oncopumilas prove to be any more successful in England than onco-TBs have been. Over the years a large number of oncobreds, including the C G White hybrids, have been tried out in English gardens but when I mention that the only oncobred today listed in English nursery catalogues is Lady Mohr, it will give you some idea of how unsuccessful they have proved in our climate. Elmohr also grew well and received catalogue listing but has now been dropped.

New forms of iris breeding are always interesting and from what I have read, new colour combinations are appearing in the onco-pumila hybrids. I doubt if they would do much in our climate, any more than previous oncobreds have done, although they may be fine for a very dry or high climate. Unfortunately the oncocyclus as a species is extremely difficult to grow and though it thrives in its own particular habitat, once it is moved away it becomes most recalcitrant. Even hybrids from them seem to require the right climate before they will succeed. Thus I can only hope that you growers and hybridizers of oncopumilas can somehow breed strength into what appears to be a weak combination.

(We have taken the liberty of reserving the remainder of this article, which is about "lilliputs," for the special SDB issue in October. BAW).



GOLDEN JUBILEE - AIS CONVENTION 1970

The purpose of convention gardens is obviously not that of making beautiful plantings available to be seen, although that is a much-appreciated bonus, but of making as many iris varieties as possible available for all levels of appraisal, including the mandatory one of judging for those who must. For this reason, though an arguable point, we believe it is better at conventions to have the border and table irises in beds apart from the TBs, as they are, of course, at Presby.

Border irises are not always "right," that is, small overall and of good proportions, but one that IS right is a very good plant. Such a one was Ellen Q at the New York convention, and rightly a runner-up for the President's Cup. Tulare, the lacy golden-yellow award winner, was also close to ideal size and proportion at the Watts', but Fairy Jewels, of the lovely cream and gold flowers, was TB size. There Yellow Dresden was growing smaller and looking better than it does for me, and Frank Hutchings' Small Favor, a pink amoena, was well proportioned. Dorothy Guild's table iris, Bit o'Afton, brought Ethel Shepherd and me running around to the opposite side of a bed, in a full clump with its slender stems and dainty small flowers like tiny orchid amoenas; this one showed how a table iris really ought to look.

The lovely white intermediate, Gwyneth, had one last perfect flower at the Watts' and June Prom was pretty as always, shapely in pale blue with blended hafts. Actually, there were median irises in nearly all of the gardens. If a convention committee is lucky enough to catch the season in its first prime, as this one was, there will always be a few intermediates and even stray dwarfs left to see; in Peck's beautiful rock garden Pamela Ann showed two of its clean ivory and gold flowers. Some intermediates regularly carry over into TB season, and this should not be a detriment as long as they start well before the TBs. In the Kuesel garden my old Sugar was quite a full clump, and this is prime show material because of its branching. Incidentally, it bore a label which said "Sugar is sweet and so are you, Bee." Thank you, Harry!

There is always a great showing of medians in Presby's upper garden, although this year it was difficult to distinguish individual varieties because the plants have grown together - they will be transplanted this year - and because a car careened off the road and across the top of the planting, sending many of the labels flying. The table irises look particularly at home there, and the roster of familiar flower faces is always a pleasure to greet. Tom Tit is still a fine blue iris, and Widget a cute plicata. I feel personally that there are too many of the variegata types with variously patterned and colored falls, but Painted Rose gives an interesting effect in a good clump. Here Emma Cook's pink, Ring-bearer, conformed exactly to the class; elsewhere the flowers may grow too large, although not larger than those of Chewink which was once considered a standard for the class, or of Ice Fairy, which is considered one of the best of the newer table irises. (BAW)

THE PRESBY MEMORIAL GARDENS

Constance Russell

To one who was experiencing her first Iris Convention, the 1970 garden tours in New York, New Jersey and Connecticut were a tremendous thrill—especially since conditions for viewing the irises were ideal this year. Presby Memorial Gardens, like all the others, were at peak bloom, and were indeed a lovely sight. We were made to feel most welcome, being greeted by officials of Montclair, New Jersey, the various garden clubs and the New Jersey Iris Society. We were even serenaded by a little band of "wandering minstrels" who sang "Happy Birthday, dear AIS."

It is impossible for me to say which part of the gardens I liked best. In the beds of historical irises, it was interesting to contrast Sans Souci (1840) or Dominion (1917), for instance, with our modern tall bearded creations. Siberian and Japanese irises were nicely laid out alongside a dry streambed, where some of the Siberians were coming into bloom.

In the species bed, I. tectorum alba, I. spuria, I. versicolor, I. pallida and I. cypriana were blooming. Up on top of the slope were the beds of medians. The dwarfs, and almost all of the SDBs, had gone by, but Alta Brown's IB Blue Vision and the BBs Tangerine Tango (Sheaff), pink Sugar Pie (Cassebeer), apricot Dashing Deb (A Brown), and the blues Mini-Sapphire (Kuesel) and Clarendon Springs (Buttrick) were in bloom and were among those I especially liked.

There was so much to see in the TB beds that one becomes a little confused, but I did note with pleasure Emma Cook's dark Nighttime, Gaulter's Elegant Farmer in blended tan, and his raspberry pink ruffled seedlings 66-68 and 68-99; Watkins' blue Brother Ed, Tompkins' Camelot Rose, Terrell's pink Winona H, and his seedling T63-41, a ruffled yellow. There were just a few scattered arilbreds in bloom, among them Vio, a Foster seedling 67-18-3, Imam Salah, Kalifa Kashan, Jallah Effendi.

The most valuable thing about a collection like that at Presby Gardens is, I think, the fact that it has good and representative specimens of almost every type of iris which has ever been grown. A visit there is a real education to the iris buff and to the novice alike, and I would like to have stayed much longer.

IN MEMORIAM

Many years ago, Region I sent out cards asking members if they would like an AIS visitor. One of the affirmative answers on my list came from Frances Winkler. The visit to her garden was the start of a long friendship.

The Connecticut Iris Society was in its infancy and she became an active member, behind the scenes at first, as she had a small son. She was its third president, had one of the Display Beds for Connecticut breeders and a popular garden to visit.

She has been greatly missed these last few years when her health kept her from much activity. The shock of her sudden death was even more poignant because, at last, she was with her iris friends again enjoying and judging new irises.

NEW MEMBERS — MEMBERSHIP REPORT AS OF APRIL 1970

NEW "C" GROUP (June 1969):

Mrs Tim H Bates, Jr, 202 Forest Rd, Davenport, Iowa 52803
Mrs Ann Branstetter, Rt 1, Box 215, Laurel, Mont 59044
Miss Charlotte Easter, 2289 Lambourne Ave, Salt Lake City, Utah 84109
Philip Edinger, PO Box 637, Cloverdale, Calif 95425
Mr Allen Ensminger, RFD #3, Lincoln, Nebr 68507
Mrs Eva Ford, 2230 Edison Ave, Sacramento, Calif 95821
Mr George A Galer, 1765 N E Holman St, Portland, Ore 97211
Mr Joseph J Ghio, 1201 Bay St, Santa Cruz, Calif 95060
Mr Andrew P Gordon, Jr, 202 N Market St, Marginsburg, Pa 16662
Mrs A Y Hayes, 18884 Idaho Ave, Lemoore, Calif 93245
Mrs Avis T Jasmin, 2209 Canyon Rd, Arcadia, Calif 91006
Mrs Edith N Kimber, 2524 S Austin, Milwaukee Wisc 53207
Dr Anne L. Lee, 3505 White Chapel Rd, Norfolk, Va 23509
Mt Diablo Iris Society, PO Box 62, Antioch, Calif 94509
Mrs Hunt Nenon, PO Box 105, Chatham, Va 24531
Miss Mary Penberthy, 3829 N Gove St, Tacoma, Wash 98407
Mrs Anne Presby, 3111 South E Chestnut St, Portland, Ore 97222
Mr and Mrs J Donald Puett, 2305 Cleveland Ave, Baxter Springs, Kans 66713
Mr W A Rhoads, 5852 Stow Canyon Rd, Galeta, Calif 93017
Mr E P Sawyer, 305 E Florida Ave, Urbana, Ill 61801
Miss Mary Ann Scheidler, Rt 3, Box 717, Glendale, Ariz 85301
Mrs Jake E Smith, 415 Main St, Waitsburg, Wash 99361
Mrs Joe Smith, Rt 7, Hot Springs, Ark 71901
Mr Earl T Stanley, Rt 2, Carmi, Ill 62821
Mr F G Stephenson, 5608 Merriman Rd, Roanoke, Va 24018
D Steve Varner, N State St Rd, Monticello, Ill 61856
Mr and Mrs John H Weiler, 1146 West Rialte, Fresno, Calif 93705
Rev Robert C Wiederaenders, Wartburg Theological Sem, Dubuque, Iowa 52001
Mr and Mrs Orwin Wilhelmson, 14700 Sunbury, Livonia, Mich 48154
Mrs Robert L Zellman, 14 Daniels Pl, White Plains, NY 10604

NEW "A" GROUP (January 1970)

Mrs Margaret Brodylo, Midnapore, Alberta, Canada
Mr Walter Carlock, 3039 Colfax Ave S, Minneapolis, Minn 55408
Clara B Rees Iris Society, Mrs John D Nelson, 19887 Merribrook Ave, Saratoga, Calif 95070
Dr Reuben David, 3414 Arbor Lane, Hopkins, Minn 55343
Mr B LeRoy Davidson, 911 Western Ave #200, Seattle, Wash 98104
Mrs T E Davis, 505 N Iuka, Pratt, Kans 67124
Misses Lura and Dorris Emig, 1878 Demorest Rd, Columbus, Ohio 43228
Mrs Robert E Ewing, 737 S Pershing St, Wichita, Kans 67218
Mrs Alice H Fargo, 1802 Langley Way, Adelphi, Md 20783
Dr Frank Halleck, 16 Forest Hills Dr, Madison, Conn 06443
Mrs Una Hamilton, 1832 N Market St, Wichita, Kans 67214
Mr and Mrs Glenn F Hanson, 7124 Riverdale Rd, Minneapolis, Minn 55430
Mr Wayne Hinderliter, 1432 S Waco St, Wichita, Kans 67213
Mr and Mrs Delbert Long, PO Box 353, Madison, Kans 66860
Mr Robert Mullin, Rt 4, Marlow, Okla 73055
Mr Stanton Rudser, 2548 Douglas Dr N, Minneapolis, Minn 55422
Mrs M L Russell, Eminence Star Rt, Garden City, Kans 67846
Mrs Francis R Stotts, 608 Tama St, Boone, Iowa 50036
Mrs Virginia Thurlow, 91 Bruce Hill Rd, RFD #1, Cumberland Center, Maine 04021
Mr and Mrs James S Tucker, 1424 S Perrine, Centralia, Ill 62801
Mrs Rose W Turner, 151 Gillette Rd, Spencerport, NY 14559
Mrs Barbara Whitehouse, 158 W Bacon St, Plainville, Mass 02762

Every once in a while we like to remind MIS members that we have a library - currently in the care of Connie Russell. The postage rate for library material is minimal, and books and periodicals may be kept for two or three weeks - we're flexible!

Although our library is not extensive, we have iris books, genetics books, and publications of various iris groups, AIS bulletins, DIS Portfolios, and publications of the Median Iris Society including the new Prodan and species lists. We also have sets of the Historical Chronicles.

A mimeographed list of books and publications available will be sent upon request.



PREMIO FIRENZE 1970

Miniature Dwarf Bearded:

- 1st: with 74 points, Fiorellino, white with blue spot, J D Taylor, Great Britain. Premio Vincenzo Howells.
2nd: with 72 points, Marhabe, blue with yellow beard, J D Taylor, Great Britain. Fiorino silver and gold.

Standard Dwarf Bearded:

- 1st: with 77.1 points Little Vanessa, red-violet, J D Taylor, Great Britain. Premio Piero Bargellini.
2nd: with 72.5 points, Slumber Party, blue, Mrs F W Warburton, USA. Fiorino silver and gold.
3rd: with 70.8 points, Jane Taylor, ivory with blue beard, J D Taylor, Great Britain. Fiorino silver.

Intermediate Bearded:

- 1st: with 71 points, Lycaena, azure with gold haft, P Werckmeister, Germany. Premio Carlo Ginori.
2nd: with 69.2 points, Natasha, Azure and blue, P Werckmeister, Germany. Fiorino silver and gold.
3rd: with 68.2 points, Curlew, yellow, J D Taylor, Great Britain, Fiorino silver.

EPILOGUE

If you have finished this Medianite issue with some questions about median arilbreds still unanswered, that is because no answers have been evolved. There is no aril-median class; the best that we can tell you about registering your seedlings, for instance, is that if they have aril characteristics they should be reregistered with the Aril Society and will then become eligible for the William Mohr Award of AIS. It is unlikely that irises of this type of breeding would have enough aril traits to qualify for the C G White Award; and if, as there will be, there are beautiful irises from this type of breeding without enough aril traits to qualify them for either award, then they should become good and legitimate and desirable members of whatever median classes they conform to, without favor or prejudice.

This is the status quo, and it hardly seems that any fall-outs from recognition by the Aril Society would be sufficiently distinct to warrant a special median class. We would welcome opinions and discussion on this point. We have been hoping to make an "arilmed" section for our median check list, but have been quite unable to determine which ones fitted where, so we have very unfairly omitted them all.

Classing the arilbreds for shows is a very controversial question. We recall one instance when Moonchild, which had even then won the Hans and Jacob Sass Award, the top award for intermediates, was disqualified from the intermediate section of a show because it was "obviously an arilbred."

What do you do about classing these in shows? Let us hear from you, please.

BAW