Reticulata Iris - More Magic

By Alan McMurtrie

Tequila Sunrise (09-LE-2) bloomed for the first time this year. I couldn't believe my eyes when I first saw it. I never would have imagined anything like this was possible. In case you don't realize, this is an incredible colour break. It's almost like someone took parts from two different flowers and glued them together. I hope people like it as much as I do. The Catch-22 is, it will be about 12 years before there are enough bulbs to start sales. The good news is, it exists, and does reasonably well. It's a touch on the small side at 45mm tip-to-tip, but I have put it into a lab for conversion to polyploid, of which a tetraploid version could be 20-25% larger. Typically I don't come up with a name until we're close to introducing a variety, but in this case **Tequila Sunrise** just seemed to fit.



Tequila Sunrise (09-LE-2)

It's been 12 years since I last wrote for the Year Book. A lot has happened since then – some good; some not so good. So-to-speak, it's been quite an uphill battle getting to this point. One piece of good news is my hybrids are, at long last, starting to become available. Another is, I've got a lot of really nice things in the pipeline.

My first article was in the 1986 Year Book: 'Have you Ever Thought of Going to Turkey?' It's amazing to see how far I've come since then. I could never have imagined what I've accomplished was even possible. I've also had articles in the 1991, 1992, 1994, 2000, and 2004 Year Books.

One of the biggest challenges has been working with the Dutch to get my hybrids out into the world. It takes more than 12 years to go from 1 flower to 30,000 at which point you can start sales of 5-10,000. The idea is of course to have enough in reserve to be able to supply the demand as it builds. For a variety that will be popular, it's a good idea to build the stock up even further before starting sales. The catch of course, not to overbuild the stock and end up with a surplus – which results with unsold bulbs having to be tossed, and hence, growing costs that take an unnecessary bite out of profits.

After all these years I am still just in the initial phase of getting people interested in my hybrids; though I am now addressing a bigger audience. I had tried a number of years ago by selling some through Janis Ruksans – starting in 2005 with some of my F1 *sophenensis* x *danfordiae* "Just Blues", and subsequently with the likes of **Orange Glow** (98-00-1), **Eye Catcher** (98-NP-4) [originally called **Avalanche**], **Sea**



Eye Catcher (98-NP-4)

Orange Glow (98-00-1)

Green (97-CQ-1), **Storm** (98-NP-2), etc. (varieties rejected by the original Dutch grower¹). From my point-of-view I wouldn't say I was successful. It didn't appear to me that people were sitting up and taking notice. In addition to the items written for the BIS, I've written for the American Iris Society, the North American Rock Garden Society, the Alpine Garden Society, the Species Iris Group of North America, and the Canadian Iris Society. So I was trying to "get the word out." It was only about 2015 that we had sufficient stocks to start large-scale sales. I got some throwback that **Spot On** (87-DQ-1) and Scent-sational (87-BB-1) are just purples (in a market with several cheap purples), and I felt firsthand how tough it is to try to sell into an existing market with established low priced varieties (our prices were quite reasonable for those two). I'm told wholesalers and exporters aren't interested in special markings, or colour details. It's simply a matter of, what is a customer glancing though a catalog going to think? The argument is, "if somebody wants a blue, they'll just buy the cheapest one." For me as a consumer. I want something different. For retailers, the suggestion is "they want known varieties. Those are the ones that sell." ...but, maybe overall sales would increase if they had something truly new. I do of course have a lot of interesting varieties with unique colours coming, but stocks are still being built up of many of those. This has been heavily impacted by all of the original Dutch grower's rejections (at a point it became very clear he wasn't truly testing my hybrids – he made numerous mistakes; the most obvious was his handling of **Eye Catcher**; which resulted in it being released as **Avalanche** by Janis Ruksans).

Although **Spot On**, **Scent-sational**, and **Velvet Smile** (87-CQ-3) are, in the broad sense, just purples, they were my earliest hybrids, hybridized in 1987, and first blooming in 1992. They were given to the original Dutch grower in 1997 when we started working together. So while they are quite nice, they aren't earth shatteringly different like my current hybrids are, or in particular, like some of the ones I gave the grower starting around 2003. **Starlight** (94-HW-1), my first white with blue accents, was indeed earth shattering. It bloomed for the first time in 1999, and a few bulblets were sent to the original grower that year. In the broad scheme of things it was superseded a few years later by **Eye Catcher**, which first bloomed in 2003 from 1998 seed. One of the things the grower liked, is that it had "proper standards" (actually they are more ³/₄ standards). He also liked it better than my **Cantab** x *winogradowii* hybrid, 92-FB-1, that we were also building up stock of at the time. It had proper standards, but wasn't quite as striking ...but, it was nice.

So that I didn't have "all my eggs in one basket," over 10 years ago I gave some of my hybrids to a middleman to see what he could do with them. He would of course get a share of the profits, but I didn't want to be dependent on just one grower. This was just after two other Dutch growers, who had been testing my hybrids for a couple of years, dropped out. In 2013 the middleman dropped out and said I should work directly with the Dutch grower who was growing the bulbs: Ard Kroon. This is why we are now able to introduce **Mars Landing** (00-KV-3), **North Star** (00-BC-1), **Sea Breeze** (00-KN-5), **Splish Splash** (00-KN-6), and **Sunshine** (00-HW-1).



¹ A Dutch grower did buy some from Janis and was starting to build up stock, though he too rejected **Sea Green** and **Storm**, which allowed John Amand to buy them up and bring them to market. In total those two varieties were rejected by 3 growers.

Also in 2013 I met Jan Ligthart, a Tulip hybridizer, at the Lentetuin ("Spring Garden") flower show in Breezand, Holland. We "clicked" right away. He understands working with small stocks, etc. It was a little later that year that a legal battle began with the original grower. He had been selling small quantities of White Caucasus without having a Commercial Agreement. The Test Agreement, which the original grower had drawn up and signed, specifically stated a "Exploitation Rights" Agreement was required for sales.

Long story short, as of 2015, roughly speaking Jan had all my small stocks, and Ard had all the large stocks. Unfortunately towards the end of January this year, Ard announced he was closing his business. Luckily for me, Jan has agreed to take on the 1½ acres Ard had been growing. It means I'm now largely down to one grower. In an ideal world you want to have two or more growers for a variety. That way if one has crop failure the other(s) can help with filling orders. Crop failure can be as simple as one end of a field not draining properly and somewhat drowning the bulbs (yes, sadly, that did actually happen this Spring). Of course to do this there needs to be other growers who are interested in my hybrids, and are willing to buy portions of the stock(s) at a fair price. To-date this hasn't happened, however in August Jan mentioned there are two other growers interested in my hybrids.

I mention all of these things just so you get a bit of an appreciation to the realities / difficulties – one crisis after another. Just when you think the worst is over, POW... another crisis comes along.



Wow (05-GQ-3)

The trick now is getting the word out and getting the general public to realize Reticulata Iris aren't just blues and purples. For years, Reticulata Iris have been buried in catalogs under 'Miscellaneous Bulbs,' and it has been a case of "the same old, same old" (meaning there's nothing new). When a new variety has been introduced (assuming it's not an old variety being called "New" because the company hasn't carried it for a few years), it's just been another blue (e.g. Alida, Pixie, and now Rhapsody, Blue Note, Fabinola, Carolina, etc). And of course there is the issue with the commercial triploid Iris danfordiae that blooms for 2 years then "shatters" (the word people use to describe the fact when they dig the area where the bulbs had been, all they find is bulblets - and those

eventually disappear). People swear they'll never buy Iris *danfordiae* again [an improved yellow will happen – I now have several good ones]. In my garden this 2-year life span is also true for a number of traditional named varieties. So to a degree, Reticulatas don't have a good reputation with the public. I am hoping to change this. One saving grace is they are one of the first flowers to bloom each year ...they help get rid of the Winter blahs.

Many of my hybrids involve diploid Iris *danfordiae*, and produce bulblets. My hybrids aren't perfect, but they survived the harsh growing conditions of Toronto, Canada before being sent to Holland for testing and propagation. If you don't mind a small amount of work, the bulblets are an excellent way to build up stock. My hybrids will form clumps if you give the bulbs some room. Surprisingly I do find there are issues if you replant a clump. Perhaps part of my problem is growing the bulbs too close together / too intensely. It seems to actually be best to largely leave a clump alone and just take off a few bulbs from the side or a few loose ones



from the top, and replant them elsewhere. Invariably the clump will die out, so it is a good idea to move some of the bulbs to another spot or two. Alternative, if you buy enough bulbs, simply plant a few in two or three spots giving them room to expand. Keep in mind that in Holland Retics are grown on the same soil only every 7 years. Part of the problem in Holland is diseases in the soil, such as pithyum. This where bulb growers, like farmers, practice crop rotation. In my garden I find Tulips need to be replanted and thinned out about every 7 years. At a point you see them starting to do poorly. Replant them, and after a year of recovery (to get back up to bloom-size) everything is good for another 5-7 years. For Reticulatas would be good to move them to another spot in the garden, but who has time and spare space to do that. As I mentioned, it is good to give Retics a bit of space instead of trying to produce an instant clump by planting them close together.

Things are starting to happen. In part this is because I've been putting in the effort to "make it so." For example, contacting wholesalers / exporters, as well as alpine garden clubs. Some of it works; some of it doesn't. A portion may pay off in a year (or two, or three). This year I've had articles in The Garden, The Plantsman, the Alpine Garden Club of British Columbia's Bulletin, and Garden Making (a Canadian publication). Sales of **Eye Catcher** are "through the roof." We couldn't supply all of the orders: going from 9,500 last year to 47,000 this year. This is where its bulblets will come in very handy to build up the stock. Jan Ligthart is doing an excellent job of handling them properly. [Due to the exceptional demand, I'm expecting we'll need to limit sales somewhat next year, in order to boost the stock even further for future sales.]



White Caucasus

"Dry sales" of **White Caucasus** haven't taken off quite as well as I might have hoped, but "green sales" i.e. forcing in pots, are doing quite well. Overall this is good because it allows time to build the stock – meaning there isn't the same pressure that there will now be on **Eye Catcher**. Prices are good, so it's not costing me money out of my pocket to build the stock. I had always been lead to believe pure colours were the best sellers. Here in Toronto one firm sold out of **Eye Catcher**, and had **White Caucasus** left over. So from a catalog perspective, it would seem white and navy is more appealing to customers; though I'm sure if they tried **White Caucasus**, they'd love it too. Being a late blooming variety, it nicely compliments the early blooming whites from Iris *danfordiae*. And, being an excellent pure white variety, I do think sales could eventually

be at least 2,000,000 per year. For that to happen, prices will need to be closer to existing large-scale varieties.

In many ways it is mind blowing to think in these terms. You and I are use to thinking of 6-12 bulbs, with 100 being quite a large quantity. You might think 10,000 is a huge number, but if you have 300,000 to sell, 10,000 is just a small amount. You'd need 30 customers buying 10,000 each to sell all 300,000. When we're building stock, "small" can be almost anything. I might suggest 100 up to 5,000, with less



Fireworks (07-BQ-2)

Cool (03-FO-1)

than 100 being "very small." One really needs to qualify what small is. A slight complicating factor is a stock has small bulbs as well as large bulbs. When talking about sales, you are talking size 5-6 and up (i.e. 5 to 6 cm in diameter). For planted bulbs (i.e. all sizes), we talk about amount planted. Rows are 1.5 m wide between the centre of the tractor tires, so about 1.3m of planting width. You can then speak about how many metres were planted. In actual fact the Dutch use a unit of measure called Rijnlandse Roede (Rhenish rod) = 14.19 sq m, so there are actually 704.72 RR in a hectare. It is written as R.R. and when spoken it sounds like "Rew." One R.R. is then 9.46m in length of a row. So if you have 105 R.R. of White Caucasus planted, as we did last fall, it means 993m. Wow, essentially a kilometer of White Caucasus! Smile: on the other hand, that's **only** 0.15 of a hectare ...just a drop in the bucket (of getting to 2 hectares).

I want to dispel any illusion you might have about my getting rich off the sale of my hybrids. You see the large numbers, and you see what 10 bulbs retail for in nursery catalogs, or what a pot of flowers in bloom cost. Well it's not me, or the grower, that are getting rich. The grower of makes only a small portion of that. Typically, the bulbs wholesale for 3 Euro cents, or less, depending on the volume sold. "Take it or leave it" prices at the end of the wholesale buying season, can be 1.5 cents ($\in 15/1000$), which doesn't really cover the growing cost. Of course prices are higher for new varieties. It's a matter of how much demand there is, and how much wholesalers and exporters are willing to pay. Generally we're talking 10 Euro cents for reasonable volume purchases.



Pristine (03-FQ-1)

My aim is to split the profits with the grower. He gets half for building up the stock to the point where large-scale sales can begin. I get half for creating the hybrid in the first place. Profits are what you have left after paying costs, such as the growing cost. Keep in mind, unsold bulbs can eat into profits. If you have 170,000 bulbs that cost €3200 to grow, and you sell only 26,000 for €1200, there is no profit – you actually have a €2,000 loss! Think about that. You sell 26,000 and have a €2,000 loss. The grower takes on a significant risk in deciding how much to plant. Additionally there are some onetime costs, such as professional photos for retailers to use in catalogs, registration (€200), and Plant Breeder Rights (over €2,000). So as you can see, there are a lot of issues. So-to-speak "it's complicated," but the bottom line is: a lot of work, and little reward. I've been at this for over 30 years...

Hybridizing Goals

My overall goal, and the reason I went plant collecting in Turkey 30 years ago, was to create new colours and patterns; with Katharine Hodgkin being an inspiration. Ideally I wanted the colours and patterns to be quite diverse – to really break away from blues and purple. Of course it is one thing to be thinking



Pièce de Résistance (00-LZ-1)

06-IV-1

this in the back of my mind, and something completely different to actually make it happen. I say this having initially worked for a number of years with 2n=20 hybrids. Although you can create bicolours

and tricolours, at the end of the day they are really just blues and purples. One thing that I have done, through my use of collected varieties, is create mixed blue and purple colours. Although the average person will enjoy them, to retailers it's not something that really stands out. I have created some with two-tone fall blades (e.g. **Turkish Delight**), but that was a pattern already in some of the Turkish wild forms, so I really haven't truly done anything unique. White Caucasus is giving some interesting things, including hybrids with white style arms (e.g. **Holland Glory**).

A claim to fame for **Lilac Beauty** (03-AN-3) is large bulbs can give 3 flowers per bulb! This should make it extremely valuable for forcing. Large bulbs of other varieties give 2 flowers per bulb.



Turkish Delight (93-BY-7)



Holland Glory (98-YS-1)



Lilac Beauty (03-AN-3)

My original goal was to work with diploid Iris *danfordiae* (i.e. a fertile version) and create a pale yellow hybrid. This wasn't necessarily going to be easy, but it was something that I felt was achievable. The first was 97-CN-2, which bloomed in 2003, but I didn't really like it. There were others like the similar 00-CZ-2, and 98-MN-1. 99-BZ-1 bloomed in 2008 and was quite nice, but it was 2009 when **Smile** (03-CC-3) and 03-DX-2 bloomed that I said "Yes, that's it". Of those two I tend to favour **Smile** [its similar sibling, 03-CC-6, bloomed 2 years later]. And now I also have 08-BG-1.



Smile (03-CC-3)

What makes **Smile** (03-CC-3) so special, in addition to being pale yellow, is its slightly more intense yellow around the fall ridge.

My secondary goal is orange. **Orange Glow** (98-00-1), which bloomed for the first time in 2003, showed this was possible. It's actual more of an apricot colour whose intensity fades rather quickly. 98-EO-2 bloomed 2 years later, and is somewhat similar including brown accents. I was quite surprised when the original Dutch grower rejected both of them in 2010. Janis Ruksans sold **Orange Glow** in 2011 for €30 per bulb; then €20 in 2013. 98-EO-2 was given to a Dutch middleman and that stock disappeared. Both were put into a lab for polyploid conversion with the intent of intercrossing them to (hopefully) create an orange. I have intercrossed them at the diploid level (but no hybrids have yet resulted). 05-FD-1, which has 98-EO-2 as its pollen parent, is similarly coloured, except with green accents.

It was last year, 2015 when 08-FW-2 bloomed for



the first time. It has an orange ground that is truly orange. It stayed orange for two days before fading. Now all we need to do is get rid of the purple, and come up with a better flower shape.

My third goal is a much more elusive one: pink. In theory it should be possible. After all, look what happened with bearded Iris. It is just a matter of time and making the right crosses...



08-FW-2

It would be quite nice to have a white with cherry-red accents (i.e. purple accents). This should be possible, but so far purple hasn't shown up as an "accent" colour.

It's good to have goals to work towards, but of course special, unexpected things come up along the way. ...things you couldn't have imagined were possible. One of these was **Wow** (05-GQ-3). The previous year the first purple and yellow bloomed (05-EP-2), but it was in 2012 that **Wow** really knocked me off my feet. You never know for certain which variety will be the best. Just because something looks beautiful doesn't mean it's going to be a good doer in all respects. At the time I held it back, because I was looking for a new grower and hoped to attract him with it. At the same time I was so confident with it, that I put it into the lab that year for polyploid conversion. I now have a tetraploid bulb large enough



It's Magic (05-HW-1)

to bloom – in Spring 2017 (i.e. five years later).

Another that really stands out is **It's Magic** (05-HW-1). The name answers, "Where did such wonderful markings come from?" Of course in truth, part of the answer is from Çat ANMc2375. It has an interesting personality that comes out as the flowers mature.

This year's **Dream Catcher** (10-AX-2) is from spilled seed. It seems fairly clear that one of its parents is **It's Magic**.

05-GT-1 is also magical – its standards have a rim! I've never seen anything like it before. Naturally I'm looking forward to seeing where I can take this.



05-GT-1

Dream Catcher (10-AX-2)

Sometimes it's hard to tell which varieties will be the best. 03-BK-2 is one of those. I liked it, but it may be that in subsequent years the green has been more striking. The past couple of years I think its been standout. It just seems to "Pop."

Another is 03-JM-2. It's quite an interesting green, yellow, and blue combination. This year its colours were amazingly bright in Holland.



10-BL-1

03-HW-1

In 2015 the most stunning new hybrid was 10-BL-1. Its pod parent is **Storm**, and its pod parent is 03-HW-1.

Back in 2010 when 03-HW-1 bloomed for the first time, another special hybrid also bloomed: 03-AQ-1. It's quite "orange" when it first opens, but that completely fades away.

09-CZ-1 is quite striking. Prior to seeing it for the first time I had quite liked 05-GQ-4

I'm not quite sure what to make of 09-0D-1. It's definitely different.



Cute As A Button (06-CT-2) is just that. At 42mm tip-to-tip it's on the small side, but I think that's a perfect size for it. Just to be on the safe side I put it into the lab. A tetraploid version could be 50mm. So we'll see which size people prefer.



Tiger Eye (02-ID-1)

Sports

Earlier this year when I was in the field in Holland, I wondered if some day a sport of one of my hybrids would be found. Little did I know that I was actually about to find one. In fact I found two bulbs with light yellow falls. Presumably it had sported a couple of years ago, and increased without being noticed. I do like it, and wonder what other people will think. If this trait is recessive it might be a perfect partner for **Tequila Sunrise**.

I also found a plant in the process of sporting. Notice in the close-up that a portion of the standard is yellow. I am hoping a bulblet right at the point where the sporting is occurring will have yellow standards and falls. Its style arms would likely still be white with navy markings. Some Reticulata expressions change as the flowers age. You can wonder, are there actually two closely related siblings mixed together? One of these is **Tiger Eye** (02-ID-1). Its flowers have falls with tightly spaced dark brown veining. As the flowers age the space between opens up, showing a yellow ground. Also, the vein colour appears to change and become more of a green.

Overall I'm very happy with what I have accomplished. I think the smartest thing is simply to continue applying my knowledge and see what comes. This is where the various colour breaks I've had to-date, plus other special hybrids, speak for themselves saying, "Alan, you are on the right track."



'Yellow' Eye Catcher

Notice in this case the yellow is bright yellow, vs. being light yellow as in the first sport.



Eye Catcher in the Process of Sporting

Close-up Showing Yellow On the Standard

<u>Shows</u>

This was my 3rd year at the RHS early spring show in London. Each year more and more of my hybrids are on display at the Jacques Amand stand, including ones to be released in coming years. It was my first time at the Scottish Rock Garden Society's 'Early Dwarf Bulb Display' in Dunblane, Scotland



RHS Early Spring Show, London England



Dunblane, Scotland

Jan Ligthart had a lovely display of his Tulip hybrids, along with some of my Reticulatas, at this year's Lentetuin (Dutch for 'Spring Garden') at the beginning of March.



Lentetuin Show in Breezand, Holland

My Reticulata Iris Hybrids



2014 10-20m Small Stocks



2015 Initial Stocks & Eye Catcher (98-NP-4)



Planting 2016/17

10-AX-1

97-EQ-2

Awards 2016

PristinePreliminary Commendation, Royal Horticultural Society Early Spring Show, London Feb 16Scent•sationalPreliminary Commendation, Scottish Rock Garden Club, Dunblane Scotland Feb 20Spot OnAward of Merit, Scottish Rock Garden Club, Dunblane Scotland Feb 20Velvet SmilePreliminary Commendation, Royal Horticultural Society Early Spring Show, London Feb 16White CaucasusPreliminary Commendation, Alpine Garden Society Loughborough Show, London Mar 5

Awards 2015

Eye CatcherPreliminary Commendation, Royal Horticultural Society Early Spring Show, London Feb 20Sea GreenPreliminary Commendation, Royal Horticultural Society Early Spring Show, London Feb 20Spot OnAward of Merit, Royal Horticultural Society Early Spring Show, London Feb 20StormPreliminary Commendation, Royal Horticultural Society Early Spring Show, London Feb 20SunshinePreliminary Commendation, Royal Horticultural Society Early Spring Show, London Feb 20Vivacious BeginningsPreliminary Commendation, Royal Horticultural Society Early Spring Show, London Feb 21

Cultivation

It is hard to give advice because everyone's situation is different. Although Retics like moisture in the Spring (just as they would get in the wild from melting snow), there's a point where they can get too much. The soil needs to be well drained. So I tend to recommend using raised beds, which can be as simple as dumping a wheelbarrow full of soil on the garden. Ideally you want to keep your bulbs growing as long as you can since a new bulb is forming at the base of each leaf. If you do have problems, one solution is to dig the bulbs just as the leaves are starting to turn brown. This is the point at which they are most susceptible to diseases such as ink spot. Store the bulbs in mesh bags in your garage, then replant in the Fall



10-DF-1

Don't plant too close together. It's always tempting to do

that because you want an instant clumping effect. They need room to be able to expand into, and it also a good idea to plant some in a second spot in case something happens to the first.

With varieties from Iris *danfordiae*, I find in my soil I can get a faster rate of increase by planting their bulblets near the soil surface. Otherwise, only a small percentage are able to get a leaf up.

Conclusion

I mentioned, "I could never have imagined what I've accomplished was even possible." Smile: I wonder what the future holds?

Picture for a moment a bed of seedlings with buds coming up, ready to bloom for the very first time. To paraphrase Dave Bowman from the movie 2010: The Year We Make Contact, "Something wonderful is going to happen." Indeed, several times each bloom season when a special hybrid opens for the first time, it brings a very big smile to my face and I think, "Yes, this is what makes all of the effort worthwhile" – the beauty of nature.

The Dutch would say, "Alan, you have too many." To me, "Variety is the spice of life."

For full information including parentage, check out Reticulatas.com



Cute as a Button (06-CT-2)

05-EV-2

