

Considerations for Cool Season Tall Bearded Reblooming Iris Judging

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A major distraction for cool season tall bearded reblooming iris hybridizers has been modern flower form. Whether intentional or not, some iris fanciers and AIS judges feel reblooming or remontant kinds should be comparable to their spring-only-blooming cousins. Based on current breeding trends, this comparison is **NOT** a fair one for many reasons.

Fall flowering, or remontancy, can be traced back to the American Iris Society's early years in the 1920s. Hans and Jacob Sass from Nebraska had early success with TB Re 'Autumn King' (H.P. Sass 1925). They were also finding rebloom in their median seedling rows. Some of their best efforts came from combining chamaeiris dwarfs with tetraploid tall bearded. Due to varying chromosome counts, the resulting reblooming intermediate bearded were infertile and a breeding dead end. The time investment was devastating.

Besides 'Autumn King', many future Sass tall bearded releases were rebloom carriers. Jim Gibson from California used TB 'Tiffany' (H. P. Sass 1938) to establish his signature TB Re 'Gibson Girl' (J. Gibson 1946). The mulberry-colored plicata had historic flower form, but it was known to rebloom in Zones 4-9. Due to his hybridizing strategies to minimize outcrossing, future Gibson plicata tall bearded introductions would carry varying remontant genetics. They would prove very useful for cool-season rebloom hybridizers.

Dr. G. Percy Brown from Barre, Massachusetts, had the good fortune to have Grace and Robert Sturtevant's summer residence in his hometown.

The Sturtevents were AIS charter members and important early hybridizers for improved tall bearded. It seems likely they were accumulating species and hybrids from around the world, including Sass introductions, to use in their breeding lines. Brown saw some of these irises or resulting seedlings in flower during spring and fall garden visits. Rebloom was probably NOT a high priority for Grace and Robert, so their neighbor decided to make fall flowering his breeding objective starting in 1930.

Unlike the Sass brothers, G.P. Brown's work started with diploid bearded irises. IB Re 'Autumn Elf' (G.P. Brown 1935) was a diploid classified as an intermediate bearded. To keep pace with spring only blooming tall bearded development, Brown had to convert his diploid hybrids to tetraploid. His efforts would take ten years to accomplish. TB Re 'September Sparkler' (G. P. Brown 1944) became the cool season rebloom breeder's progenitor for future hybridizing. The only problem was the deep blue self's flower form resembled its diploid roots.

Dr. Brown would continue his cool season rebloom breeding for another twenty years in Westport, Mass., before health issues ended his work. Brown's imaginative hybridizing strategies are hard to follow due to inconsistent recordkeeping. TB Re 'Fall Primrose' (G.P. Brown 1953) is a prime example. According to the 2012 Cumulative Checklist of Reblooming Iris, the pedigree for the primrose-yellow self is TB 'Redwyne' (McKee 1944) x red sdg. (Sdlg. listed as TB Re 'Autumn Twilight' (G. P. Brown, R. 1945). Please note: 'Autumn Twilight', a brownish-yellow and lavender bicolor, would become



'Autumn Twilight' (G. P. Brown 1945, TB)



'July Sunshine' (G. P. Brown 1965, TB)

a registration fiasco* in 1971. TB Re 'July Sunshine' (G.P. Brown 1965) was one of Brown's last rebloom introductions. The pale yellow self had summer flowers for me in 2016. The registration in the checklist reads "From two sdlg. of 'Fall Primrose'."

Besides obvious flower form concerns, G.P. Brown cool season tall bearded rebloomers also struggled height-wise to stay in class. Without seeing his garden diaries, indications are the Massachusetts breeder's aim was to retain remontancy at all costs. He did outcross, but there were likely few workable options to try.

Dr. Raymond Smith remarked in *World of Irises*, published in 1978, that Brown's rebloomers are characterized by vigor, dependability, disease resistance, floriferousness, and compound branching. Unfortunately, they are frequently marked by dirty hafts, poor substance, snaky stalks, narrow parts and muddy colors. Brown's introductions total 78 and remain today the most dependable rebloomers available for severe climates. Smith's comments likely discouraged any further use of G.P. Brown irises for cool season rebloom hybridizing. Thankfully, Frank P. Jones, Carol and Karl Jensen, and Dr. Lloyd Zurbrigg kept Brown bloodlines in their remontant breeding. Future pollen daubers like this author are forever grateful.

Lloyd Zurbrigg came to the U.S. from Canada in the early sixties to pursue a music doctorate at Indiana University. Prior to arriving in Bloomington,

Zurbrigg was making bearded iris cross pollinations and growing seedlings in Listowel, Ontario. Late spring hard frosts would decimate bloom in some years. Such discouragement inspired Lloyd to pursue rebloom as a breeding goal. Study at Indiana University was a fateful one since fellow cool season rebloom hybridizer Dr. Raymond Smith was on the faculty. Smith allowed Lloyd to use space in his garden to make cross pollinations and grow seedlings. Their cooperation had a huge impact on future rebloom breeding, particularly in the tall bearded class.

My eventual mentor used Smith's 'Gibson Girl' seedlings, TB Re 'Purple Duet' (R.G. Smith, 1966) and 'Replicata' (R.G. Smith 1966) in his early hybridizing. This effort would capitalize on previous Sass remontant breeding. A second worthwhile approach involved TB Re 'Autumn Sensation' (G.P. Brown 1961) with TB 'Crinkled Ivory' (R. Schreiner 1958). Fortunes for Zurbrigg would improve after he accepted a professorship at Radford College in Virginia. Despite favorable growing conditions, progress was still painfully slow. Twenty-five years would pass before Lloyd Zurbrigg succeeded in obtaining cool season reliable rebloom and attractive flowers with wide petals and ruffling on the same seedling.

Reviewing published articles and breeding records, it appears Lloyd Zurbrigg realized the pod and pollen parent in each cross pollination HAD to possess modern flower form to advance cool season



'Victoria Falls' (Schreiner 1977, TB)



'Total Recall' (Ben Hager 1992, TB)

breeding. Which variety to use?

TB 'Victoria Falls' (R. Schreiner 1977), a Dykes Medalist, proved to be the perfect parent. Lloyd knew Robert Schreiner was using *I. aphylla* clones in his blue tall bearded lines. This species iris was known to contain rebloom genetics. My mentor reselected three 'Victoria Falls' seedlings in the early eighties. TB Re 'Sugar Blues' (Zurbrigg 1984) or 'Victoria Falls' x unknown (probably 'Summer Holidays' (Zurbrigg 1979)) proved to be the most reliable rebloomer, but all three seedlings would figure in important cross pollinations for 1986.

My article "The Great Clarence Mystery Revisited" published in the April 2011 AIS *Bulletin* sought to build on a previous Don Spoon (Winchester, VA) piece to further define the unknown pedigree of TB 'Clarence' (Zurbrigg 1991). My effort was in no way meant to diminish Don's earlier analysis. The intent was to encourage more pollen daubers to try Lloyd's signature iris in cool season rebloom breeding. Based on my mentor's studbook entries, Don was correct to assume TB Re 'I Do' (Zurbrigg 1974) through 'Brother Carl' (Zurbrigg 1984) was part of the winning formula. My theory is the other main contributors were 'Victoria Falls' and 'Summer Holidays'. Clarence would prove Sass and G.P. Brown breeding lines could be intermingled with a warm season variety such as 'Victoria Falls' to obtain seedlings with reliable rebloom and coveted modern flower form.

While Lloyd Zurbrigg was trying to combine cool season and warm season rebloomers in the East, Ben Hager was tackling the same issue in California. Ben used Lloyd's 'I Do' (Sass rebloom breeding) with his own warm season remontant seedlings. The result was three noteworthy TB Re introductions, 'Bonus Mama' (Hager 1990), 'Anxious' (Hager, 1992) and 'Total Recall' (Hager 1992). Unlike Zurbrigg's result with 'Clarence', Hager managed to get reliable remontant seedlings with one parent possessing modern flower form. Even though the odds were probably less than one percent, the ultimate cool season reliable tall bearded rebloomer could still be found.

TB Re 'Soda Fountain Shuffle' (Lockatell 2015) also unintentionally used one parent to improve flower form. The cross pollination was made in 2004 for cool season rebloom and purple based foliage. Thirty-six seedlings were planted. Only one of them had vigor, acceptable bloomstalks, flower form and consistent fall bloom. TB Re 'Soap Opera' (Ghio 1982) transferred its best qualities to my seedling. Long shots do happen. This author got lucky.

Despite the Zurbrigg and Hager breakthroughs in the early nineties, there has not been any major uptick in new cool season rebloom introductions or more hybridizers working for the trait. Remontancy is still a numbers game. To date, the Clarence pathway has enjoyed the best success over the past 25 years. TB Re 'Daughter of Stars' (D. Spoon 2001), TB Re 'Gate of Heaven' (Zurbrigg 2004), 'Just Call Me'



'Soda Fountain Shuffle' (Mike Lockatell 2015, TB)



'Metro Blue' (Mike Lockatell 2015, TB)

(Wilkerson 2008), 'Starring Encore' (D. Spoon 2008) and 'Metro Blue' (Lockatell 2015) can hold their own with spring only bloomers. There will be more.

Clarence breeding is NOT the sole avenue to meet AIS judging demands for modern flower form on cool season rebloom introductions. Betty Wilkerson from Scottsville, Kentucky, has also capitalized on Sass and Brown hybridizing by using Zurbrigg tall bearded remontants in her breeding lines. Betty's best effort to date appears to be TB Re 'Summer Honey' (Wilkerson 2013). Flowers are light yellow with a honey overlay. For the past two years, this Eastern bred introduction with wide petals and attractive ruffling has rebloomed in summer and fall for me in multiple Central Virginia garden locations. Its pedigree promises more interesting colors and patterns in future seedlings.

Since 'Daughter Of Stars' presence on the Judges' Ballot, has any recent cool-season rebloom tall bearded introduction won even an HM? They have been AIS convention guests over that time span. Here is a chilling fact to consider. The best pink in the category is TB Re 'Pink Attraction' (E. Hall 1988), TB Re 'Rosalie Figge' (McKnew 1993) for purple, TB Re 'My Friend Jonathan' (B. Miller 1996) for red and TB Re 'Lunar Whitewash' (Innerst 2003) for pure white. Where are the bicolors, blends, neglectas and amoenas in cool season rebloom? They simply don't exist.

New theories to develop future cool season

rebloomers are constantly being presented in AIS sponsored publications. Where's the avalanche of new releases? Rebloom breeders need three to five years to establish a reasonable summer and or fall flowering profile for accurate registration. Nothing is a sure thing particularly with fickle Eastern weather conditions. Buried on a judges' ballot with more than 800 worthy entries, what is the likelihood deserving cool season reblooming tall bearded will be overlooked? It has already happened.

Rebloom reliability (distinctiveness) is best observed in the summer and fall garden. According to the AIS judge's handbook, "An iris deserving of awards should have individual appeal and personal charm. It should possess individuality and exhibit unique qualities which draw the observer from across the garden." Rebloomers may not get noticed during spring flowering, but what about the summer or fall? Central Virginia had an early spring in 2016. Two April hard frosts decimated tall bearded bloom. The silver lining was rebloom from August until early November. With everything else being equal, reliable summer and fall flowering should be the tiebreaker. Is it?

After reblooming irises were highlighted in *Martha Stewart Living* magazine in the late nineties, Dr. Lloyd Zurbrigg lived long enough to see his unique cool season tall bearded irises accepted by a large public audience. By giving programs and doing plant sales throughout Central Virginia, this



'Rosalie Figge' (Jane McKnew 1993, TB)

author's retail customers remain fascinated by bearded irises flowering twice in the same growing season. Additional proof can be seen in azalea culture and distribution. The Encore® azalea rebloomers have resonated with both the nursery trade and the public. Richmond-area landscapes lost spring azalea flowering in 2016. The salvation was fall flowering on many reblooming azalea varieties.

Despite overwhelming odds, Hans & Jacob Sass, G. P. Brown and Lloyd Zurbrigg stayed the course. They surely did not have the gene pool, hybridizers and thorough knowledge of rebloom's expression to make rapid progress comparable to spring only bloomers. There are now strong indications cool season tall bearded development may have indeed finally turned the corner. Since his passing in 2005, this author has tried to keep Dr. Lloyd Zurbrigg's marvelous cool season rebloom legacy alive for future hybridizers. It is too bad continuing resistance in some iris circles may spell eventual doom for this appealing iris trait.

*Ed. note: 'Autumn Twilight' was not listed in the AIS Checklists until 1971 though noted in the Brown's Everblooming Iris catalog or list in 1958. It is the hybridizer's responsibility to provide registration information and introduction proof in a timely manner to the AIS Registrar.

DEFINITIONS

Cool season rebloom (Summer & Fall Flowering in Zone 7 and below).

Warm season rebloom (Summer, Fall & Winter Flowering in Zones 8 & 9).

Modern flower form (wide flower petals and ruffling).

SUGGESTED READING

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