

Rebloom Looks For New Avenues

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Cool season bearded iris rebloom development has slowed in recent memory. Many factors have contributed to this decline. Unrealistic expectations are high on the list. The genetic trait for bearded rebloom is recessive. If fickle microclimate growing conditions are considered, the odds do not favor finding reliable parents to use for future cross pollinations. Unlike spring bloom only bearded iris breeders, cool season reblooming iris pollen daubers are truly an endangered species. Patience, determination and a thick skin are key traits for any serious player.

Dr. G. Percy Brown was an early rebloom trailblazer. Beginning in the 1920s, Dr. Brown's early work was truly remarkable. Breeding options were very limited in the early years. The Barre, Massachusetts breeder successfully converted a promising diploid seedling (24 chromosomes) to a tetraploid (48 chromosomes) through cross pollinations. The diploid heritage behind his innovative work is not totally clear, but it did influence the creation of 'September Sparkler' (G.P. Brown, R.1943). The deep blue tall bearded provided a platform for future Brown introductions including 'Autumn Sensation' (G.P. Brown, R.1961). Thanks to Sass' breeding in Nebraska, 'Autumn King' (H.P. Sass, R. 1925) could be a capable parent. 'Autumn Elf' (G.P. Brown, R. 1935) assumed that 'Gracchus' (Ware, 1884) component could spark rebloom in its children.

The next important player in cool season rebloom development was **Dr. Raymond G. Smith**. The Indiana University speech professor found great value in establishing rebloom lines using 'Tiffany' (H.P. Sass, R. 1938) through 'Gibson Girl' (James Gibson, R. 1946). The light pinkish mulberry and deep rose mulberry plicata from the west coast was a vital ingredient in Dr. Smith's 'Purple Duet' (R.G. Smith 1966) and 'Replicata' (R.G. Smith 1966) lineages.

Lloyd Zurbrigg's arrival from Listowel, Ontario, Canada to pursue a postgraduate degree in music at University of Illinois in 1963 would be extremely beneficial to both hybridizers and rebloom. As Lloyd would later recall, "What a trick of fate." During his time in Bloomington, spring weather calamities convinced Zurbrigg to make rebloom the focus of his hybridizing.

Raymond Smith's presence and collaboration probably influenced his decision. After he was awarded his doctorate, Lloyd accepted a teaching position at Radford College in Virginia. The Shenandoah Valley location would prove to be an ideal growing environment to develop and promote rebloom in bearded irises.

'Grand Baroque' (Zurbrigg, 1969) was Lloyd's first introduction at Radford. The slightly ruffled yellow amoena had Smith's 'Replicata' behind it. 'Amy' (Zurbrigg, 1974), a 'Purple Duet' child, was combined with 'Grand Baroque' (Zurbrigg, 1968) to create 'I Do' (Zurbrigg, 1974). The ruffled white is capable of flowering in summer and fall in Central Virginia. Its impact can be seen in Zurbrigg's best tall bearded rebloomers. 'Immortality' (Zurbrigg, 1982) (I Do X English Cottage), 'Clarence' (Zurbrigg, 1991) (unknown) and 'Daughter of Stars' (D. Spoon, 2001) (Clarence X Mind Reader) were finalists for the prestigious Dykes Medal. 'Gate of Heaven' (Zurbrigg, 2004) (Clarence X St. Petersburg) was the last tall bearded rebloom seedling Zurbrigg introduced. The flared and ruffled medium blue has established a stellar fall flowering profile here plus exciting breeding possibilities.

As important as 'I Do' was to Zurbrigg rebloom breeding, the same can be said for 'Violet Miracle' (Zurbrigg, 1979). Another 'Purple Duet' child, its fall flowering reliability and breeding potential have been sensational. 'Suky' (Mahan, 1991) and 'Matrix' (E. Hall by Zurbrigg, 1991) addressed nagging flower form issues and rebloomed. 'Violet Miracle' made Walter Moores' list in Progenitors in Modern Reblooming Iris. Walter stated, "This is the only reblooming progenitor which has a score of one hundred percent. All seventeen registered cultivars from it have been registered as rebloomers."

Jane McKnew tried 'Violet Miracle' with 'Titan's Glory' (Schreiner's 1981). 'Rosalie Figge' (J. McKnew R. 1993) acquired the best flower qualities from each parent and remains a popular rebloom selection for novice gardeners. 'Titan's Glory' reflects an important philosophy helpful for rebloom hybridizing. "Contemporary thinking is that *I. aphylla* carries a factor that intensifies color in its seedlings." (Schreiner, 1958, *The World of Irises*, page 70) The Sass brothers,

Top to Bottom:
'Tiffany' (H.P. Sass, R. 1938) by Mike Unser
'Gibson Girl' (James Gibson, R. 1946)
'Gracchus' (Ware 1884) by Mike Unser
'Autumn Elf' (G.P. Brown, R. 1939) by Mike Lowe
'Purple Duet' (R.G. Smith 1966)



Paul Cook and **Robert Schreiner** incorporated *I. aphylla* derivatives into their blue, black, violet and purple lines to achieve darker colored seedlings. Since rebloom has been observed in *I. aphylla*, could 'Titan's Glory' have inherited the species' fall flowering genetics from 'Navy Strut' (Schreiner 1974) or 'Prince Indigo' (Schreiner 1964)? Despite the odds, pairing 'Violet Miracle' with the 1988 Dykes Medalist 'Titan's Glory' resulted in rebloom magic.

I. aphylla can also transmit improved branching to its offspring. If early Sass Brothers' work tried to fold this quality into their breeding lines, it is reasonable to assume Robert Schreiner saw the benefit too. Lloyd Zurbrigg may have concluded the rebloom carrier in 'Crinkled Ivory' (Schreiner, 1955) came from the species. If *I. cengialtii* is behind Ware's 'Gracchus', then a pairing with G.P. Brown's 'Autumn Sensation' created an interesting cool season rebloom line for Lloyd to explore. 'English Cottage' (Zurbrigg, 1976), 'Key Lime' (Zurbrigg, 1977), 'Latest Style' (Zurbrigg, 1979) and 'Earl of Essex' (Zurbrigg, 1980) have this unique combination in their lineage.

Flower form has been a major issue for AIS judges evaluating rebloom varieties for awards. The knock on rebloomers was dirty hafts, poor substance, narrow petals, muddy colors and snaky bloomstalks. If *I. aphylla* was present in 'Sister Helen' (Zurbrigg, 1977) through 'Crystal Blue' (Schreiner 1964) and 'Tyrolean Blue' (Schreiner 1963), Zurbrigg could address flower color and form and retain some rebloom genetics in his blue lines. A willingness by Lloyd Zurbrigg and Clarence Mahan to use 'Victoria Falls' (Schreiner, 1977) would finally take cool season rebloom hybridizing to the next level. Zurbrigg used second generation children from the award winning Schreiner's tall bearded irises heavily in crosses in the mid-1980s.

Lloyd Zurbrigg had to delicately weave G.P. Brown, R.G. Smith and Robert Schreiner rebloom varieties and carriers into his various lines. The gene pool for out crossing was extremely restrained. Flower color, form, branching and vigor issues influenced parental choices. After leaving Radford for Durham, North Carolina in the early 1990s, Zurbrigg's best irises hit the iris marketplace.

Inspired by Zurbrigg's earlier work, Monty Byers, Ben Hager, Earl Hall, Clarence Mahan and Jane McKnew released tall bearded rebloom introductions. In addition to reliable fall flowering, flower form greatly improved.

The late **Sterling Innerst** used 'Renown' and 'Anxious' (Hager, 1992) to create 'Again & Again' (Innerst, 1999). Blocky ruffled medium yellow blooms have appeared at J. Sargeant Reynolds Community College in Goochland, Virginia from June to November during the past two years. To date, the early 1990s were tall bearded rebloom's finest hour.

Tom Silvers (source) is a species breeding specialist from Rohrerstown, Maryland. He found rebloom success crossing a *I. cengialtii* clone with SPEC-X 'Clown Pants' (Silvers, T. 2006) or *I. variegata* X *I. suaveolens* var. *mellita*. *I. cengialtii*, a diploid alpine iris species with rebloom genetics, was collected in the mountains of Northern Italy. *I. suaveolens* var. *mellita* is another diploid alpine iris species rebloom carrier. The cross produced reblooming MTBs 'Cricket Song' (Silvers, T. 2012) and 'Easy Smile' (Silvers, T. 2006). They have reliably flowered for Tom in October.

Even though my presence in the field of reblooming iris hybridizing has been a short one, there seems to be no absolutes or magic bullets in finding seedlings with late summer or fall flowering tendencies. Lloyd Zurbrigg's winning strategy was adding more rebloom parents to each generation of seedlings. With limited options, line breeding became important and successful.

Unknown parentage continues to hamper rebloom investigation and development. This problem is particularly keen in tracing fall flowering origins in the AIS registrations before 1940. The biggest setback, however, is the lost 'Clarence' heritage. Ten years passed before Don Spoon released 'Daughter of Stars'. 'Gate of Heaven' and 'Just Call Me' (Wilkerson, 2008) appeared later in the decade. Like Zurbrigg's last tall bearded rebloom release, 'Gate of Heaven', 'Just Call Me' has been an outstanding performer in my central Virginia garden.

Lloyd Zurbrigg's stud book lists cross pollinations dating back to the 1970s. There are also reselect notes to identify some seedlings. No commentary, however, was found to explain his breeding motivation. Since his passing in 2005, I have used instinct, hunches and garden observation to continue his work for improved cool season rebloomers. Seedlings have refined my knowledge, but time is becoming an obstacle. Tom Silvers' work may give rebloom hybridizers more future breeding options to uncover reliable summer flowering for colder climates. Who will rebloom's next G.P. Brown, Raymond Smith or Lloyd Zurbrigg be? 🌸

References and Resources:

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4. Moores, Walter, "Progenitors In Modern Rebloomers," *Bulletin of the American Iris Society*, 82-1: p28-30, January 2001.
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Ed. note: The Spring 2004 issue of The Rebloomers Iris Society Recorder features articles by Mike Lockett, "Rebloom Shines at the Region 4 Fall Meeting" and Thomas Silvers, "Rebloom's Alpine Connection."



J. Sargent Reynolds Community College Fall Rebloom display beds at J. Sargent Reynolds Community College
by Mike Lockett