

Shoulders

Ben R. Hager

There is nothing that can bring so much excitement to living as the creative drive. The urge to manipulate some element or group of elements into a new and possibly more satisfactory form can be an occupation of a lifetime. It can be an obsession. Such an obsession has been in charge of my life for the past 40 years, and if the activities connected with that obsession were to be denied me, it would be the end of everything else.

On one confining winter day, as happens on so many other dreary winter days, I was going through the Check List, tracing parentages to find what went into a particular iris to make it the glorious manifestation that it is. It is not surprising that the iris I was looking up that day was BEVERLY SILLS. The very first iris names I found that were the relatives of this iris were famous pink irises themselves: PINK TAFFETA (Nate Rudolph), ONE DESIRE (George Shoop), CHERUB CHOIR (Glenn Corlew)—all on the pollen parent's side. The iris that was the pod parent for this whole extended parentage, PINK PIROUETTE (William Newhard 1970), is an iris whose qualities were never fully recognized. Sometimes I wish that I had used it more; on the other hand, maybe I should be satisfied. It did produce its share of both BEVERLY SILLS and PINK BUBBLES.

The next group of breeders along the lines of the diagram can be honored as "The Great Pink Breeders." Three of them first brought the 'pink color' or the 'tangerine beards' to full expression from parents whose flowers showed no suggestion of these color patterns.

DR. P.A. LOOMIS of Colorado, presented the world of iris breeders with four widely used pink irises (used especially by DeForest and Muhlestein). His SEASHELL ((W. J. Fryer x Ricardi) X a plicata seedling) was possibly the very first true tangerine bearded PINK iris. It was not registered until 1940 but has recorded mentions that place its birthdate around the middle of the 1920's. "Type Dore" (not registered) was a SEASHELL seedling. MOROCCO ROSE (see complete parentage later in this article) was probably used more than any other single iris in the development of modern 'pink' lines, and SQ72 (later registered as PIKE'S PEAK PINK) was another SEASHELL seedling: Seashell X ? Purisima)*¹

ELIZABETH NESMITH in Massachussets, produced only one "T" bearded iris that was widely used with other tangerine bearded irises, MELITZA, but the petal color was a pastel ecru blend. It was introduced in 1940: ((Gold Stream x Cortez sib) X (Airy Dream x ?))*²

DAVE HALL Surely the greatest of the 'pink' developers and breeders: there are 16+ varieties and seedling numbers in the BEVERLY SILLS parentage. (Probably more of the seedling numbers could be attributed to him if we were certain). One of his first full pink colored varieties was OVERTURE: (((W. R. Dykes x (Moonlight x diploid ?) x ((Dolly Madison x (Lent A Williamson x ?))) x Morocco Rose) x (Dauntless x Rameses) X (W.R. Dykes x (Dolly Madison x Morocco Rose))). There are no "T" beards or pink color among its ancestors

that are visible. It was soon learned that the color pink and the "T" beards were recessives and could only find expression if both of the parents had two genes each for "T" bearded pink color. In other words, for OVERTURE to show up with the pink color each of the two parents had to have two genes for "T" bearded pink color. Who could tell? Who could even predict? The first blossom on OVERTURE must have been quite a shock.

ORVILLE FAY (9)*³ who added vigor and class to the pink line.

FRED DEFOREST (5) who introduced new colors and size to the pink family.

TELL MUHLESTEIN (6) who succeeded by bringing glamour to the pink generation.

Pushing still further back between the appearance of pink color and the actual wild species are a whole host of irises that formed the basis for the later pinks and the many breeders involved who hadn't even started to "think pink." H.P. SASS (10)*⁴ was one of the most prolific. His RAMESES appears 8 times in our parentage. GRACE STURTEVANT has 13 varieties added to the family tree. More came from across the Atlantic in France. FERDINAND CAYEUX upped our count by 8 more ancestor irises and M. LEMON with 5 varieties, all of them diploids, of course. His MMe. CHEREAU (1844) is one of 3 irises (SEASHELL had a plicata pollen parent, CHASSEUR, Vilmorin 1920, a suppressed plicata; many of its seedlings were full plicatas) in this history to be responsible for the plicata pattern that keeps popping up in 'pink' seedlings from time to time, also there are plicata genes, untraceable, that show up in the Hall pink line. (It is reported that Dave immediately got rid of any such traitors on the trash pile.)

The oldest 'named' iris in the background of BEVERLY SILLS seems to be SAMBUCINA (1759)*⁵ a wild hybrid named by *Linnaeus* while he was classifying the species iris. But since it was collected growing wild, who knows how long the clone had been around?

By the time I had gotten this far into the research, a light began to dawn. I began to really appreciate the marvelous work that the AMERICAN IRIS SOCIETY had initiated and supported with these historically detailed and informative Check Lists, beginning in the early 1920's culminating in the 6 volumes now extant. The meticulous labor of the REGISTRARS*⁶ who brought it all together, organized and set it up for printing: a formidable task not often acclaimed as enthusiastically as it deserves. Celebrate also the breeders who had the foresight to carefully keep records of the crosses they made so that today we may have as clear a view of the development of our irises as we do. There are some blank areas (some in important places) for early-on there were breeders who used mixed pollen because they thought they would get better takes with fewer crosses in the difficult combinations they were trying for. There were records lost, and there were "Sunday Breeders" who were just playing around, not anticipating that the bit of pollen they put on such-and-such a stigma would prove to be an important parent iris.

It is truly amazing that we have as complete a history in these Check Lists as we do, thanks to the dedicated breeders and the sharing of their records. However, ALL of the information available did not reach the printed Check Lists. KEITH KEPPEL and PHIL EDINGER (our chief historians) have been

"digging" in the archives and, with direct correspondence with the breeders and their associates, have come up with many parentages and other statistics not before generally available. After I had my fun in checking out BEVERLY SILLS through the Check Lists, Keith took over the diagram and added many bits of information that I and the Check Lists did not know about. For instance, the full parentage of MOROCCO ROSE (Loomis) the iris most used in the backgrounds of the pink irises is: ((H22-Lent A. Williamson (Amas x Jaquesiana?) x ?) X (F-70-W.J. Fryer (W.E. Fryer 1917) x RICARDI (A collected form of *Iris mesopotamica*: 48 chromosome species) It would be interesting to know the parentage of W.J. FRYER. Phil tells us that it is thought to be out of GYPSY QUEEN (Salter before 1859) and that it is a diploid, which I could not discover elsewhere. (He still grows it!) Both of these irises have an obvious *Iris variegata* background. Add that to the "variegatas" in the SASS line and the argument that the genes for pink color originated with *Iris variegata* gains plausibility. After Keith's additions had been absorbed I sent the whole thing off to Phil—and guess what: he added more parentages, namely those for President Pilkington, Reverie and Sunlight and a correction for the parentage of Magnifica: (*Isoline* X ? Amas). Who ended up writing this article anyway?

We can count 37+ iris in the parental diagram that are diploids, which, in combination or separately produced 27 tetraploid offspring from the crossing of the diploids with the tetraploids. Such tetraploids from such crosses are not common since it takes an unreduced egg in the diploid at cell division for it to happen and that is not the normal state of affairs in natural reproduction. The tetraploid irises that do result from this hapenstance turned out to be among the most significant instruments in the revolution of iris breeding that was currently in progress for they brought the wider variation of color genes of the diploid species to combine with the closely related five tetraploid species collected at that time which had colors that mostly included lavender. (You will find all 5 of these tetraploid species along with the 37+ diploids (including the 2 species: *Iris pallida* and *Iris variegata*) in the background beginnings of BEVERLY SILLS!

It took 159 varieties of irises plus 52 breeders to produce BEVERLY SILLS. Almost ALL of the prominent 'pink' breeders donated their share.*7 Picture in your mind the gymnastic trick of building a pyramid of people by some standing on the shoulders of others—imagine that with 52 participants! (And there I am near the top standing on my own shoulder.) But it took all of them to make one beautiful flower, or for that matter, any of the favorite irises that grow in your garden today. Makes you feel humble, doesn't it?

*1I favor the question mark, however, Phil maintains he has a pale pink seedling out of the cross: *Purissima* X *Seashell*.

*2Parentage furnished by Keith Kewppel.

*3(1) Numbers in parentheses indicate the number of varieties this breeder has in the BEVERLY SILLS parentage.

*4Jake Sass, brother of H.P. Sass, introduced an original pink iris, *FLORA ZENOR* (1941), which was used widely but does not appear in this particular parental drama.

*5*Iris sambucina* was the original appellation applied by Linnaeus, but the specific status was denied when it was discovered that a natural hybrid was the consideration. The Check List gives the name in CAPITAL letters which is used for a varietal entry, so it must have been so considered at the time of publication.

*6REGISTRARS of the American Iris Society:

Ethel S. Peckham
Charles E.F. Gersdorff
Fern Robinson
Minnie Colquitt

J. Arthur Nelson
Kathleen Kay (Negus) Nelson

*7One recent and prominent breeder of pink irises, Joe Gatty, did not make this parentage outline. But his pink irises do appear in BEVERLY SILLS seedlings.

NOTE: #1The discussion of scientific realms dealing with genes, chromosomes, inheritance etc. are here simplified. Quirks can and do put in an appearance on occasion, but the general rules apply most of the time and are simpler than going into long discussions of minor effects.

#2 There was also another iris by the introduced name of GOLDFISH (Wareham 1925) that had Tangerine Beards although the petal color gave no hint of pink. This iris was more or less contemporary with SEASHELL, but there is no record of its use in hybridizing. I once crossed it to BALLERINA and got 100% "T" pinks in the progeny, proving that it was probably the first "T" factor iris introduced.

IRIS BREEDERS IN THE PYRAMID OF THE BEVERLY SILLS PARENTAGE:

(1) = number of varieties from this breeder that appear in the over-all parentage.

Barr & Sons (1)	Loomis, Dr. P.A. (3)
Bliss, Arthur John (6)	Mead, Franklin B. (1)
Callis, Mrs. Ella E. (1)	Millet & Fils (2)
Cayeux, Ferninand (8)	Mitchell, Sydney B. (2)
Connell, Clarence Phillip (2)	Mohr, William (2)
Cook, Paul Howard (2)	Moore, Irving (1)
Corlew, Glenn (2)	Muhlestein, Tell (6)
DeForest, Fred (5)	Nesmith, Elizabeth (2)
Dykes, W.R. (3)	Newhard, William (1)
Edelman, Miss Violet F. (1)	Parker, R.P. (1)
Evans, Earl Ernest (1)	Rees, Clara (1)
Farr, Bertrand H. (4)	Reuthe, George (1)
Fryer, Willis E. (1)	Salter, John (2)
Gage, L. Merton (1)	Sass, H.P. (10)
Goos & Koenemann (2)	Shoop, George (2)
Hager, Ben R. (1)	Shull, J. Marion (1)
Hall, David (16)	Smith, L. (1)
Jacques (1)	Sturtevant, Grace (13)
Kerner, Anton Joseph (1)	Van Waveren & Son (1)
Kleinsorge, Dr. R.E. (1)	Vilmorin-Andreux Et cie (7)
Kohanki, Martin (1)	Washington, Thomas A. (1)
Lamarck, J.P.A.P.M. (1)	Weed, H.E. (1)
Lémon (5)	Williamson, E.B. (5)
Linnaeus, Carolus (2)	Yeld, George (1)







Ben Hager, the iris Beverly Sills, and Beverly Sills.



CONTRIBUTIONS AND MEMORIAL GIFTS

AMERICAN IRIS SOCIETY: Send to The American Iris Society, Jeane Stayer, Secretary, 7414 E. 60th St., Tulsa, OK 74145.

AMERICAN IRIS SOCIETY FOUNDATION: Send to AIS Foundation, Richard T. Pettijohn, Treasurer, 2510 S. 148th Avenue, Omaha, NE 68144. Donations to the Foundation and AIS are tax deductible.

Note: please include name and address of next-of-kin pertaining to memorial gifts, so that a card of acknowledgment may be sent. Checks should be payable to the American Iris Society or the American Iris Society Foundation.