

## GLADIOLUS HISTORY

The gladiolus has quite a history, with many old species coming from Africa and Asia. Many consider the mention of lilies of the field in the Bible as the earliest written reference to the gladiolus. In St. Matthew, Chapter 6, Verse 28-29 it reads, *And why take ye thought for raiment? Consider the lilies of the field, how they grow; they toil not, neither do they spin: And yet I say unto you, That even Solomon in all his glory was not arrayed like one of these.*

Today most wild gladiolus survive in areas where the soil does not freeze and they bloom during the cooler African winter instead of the hot summer. African species tend to bloom following late Summer or Winter rains. All glads have long dormancy periods which are controlled by area climate conditions. Species especially, are controlled by rainfall, sunlight length, and soil and air temperatures, for they each have adapted to surviving in their specific location. Eurasians have even crossed the line to resist frost.

South Africa still have gladiolus shows which include many species cultivars. Species cultivars number somewhere around 200, with a few still being discovered today. Surviving in harsher conditions, some may hold the key to healthier gladiolus. With the growing population of man, some are close to extinction as their habitat is destroyed. A short list of some species is included in Chapter Thirteen. Hybridization and experimentation with glads started around 1800 in Britain with the earlier known African glad grown in Europe as early as the 1680's. There was some hybridizing being done in the early 1800's in Europe, but they really started going toward the mid 1800's.

The flower had been known to Europeans for centuries as an inhabitant of com (grain) fields in the areas around the Mediterranean Sea and further inland to the north and east. Nevertheless, it was just another wild flower.

The first South African gladiolus species were brought to Europe between 1739 and 1745 by Dutch and English ships in the India trade, which stopped for supplies and water at what is now Cape Town. These species included **G. alatus, blandus, recurvus and tristis**. Phillip Miller had the honor to first flower a South African gladiolus, **G. tristis**, in England in 1745.

William Herbert, in England, was one of the first to start (1806) hybridizing the gladiolus species, and while he did produce many hybrids, all proved sterile and never got into commerce. They were probably what we now call triploids. Knowledge of chromosomes and genes was nil at that time. Many plant breeders have since found that these *Cape* species are incompatible for blending into other cultivars. Interest in the wild gladiolus was growing and plant collectors began to fan out east of Cape Town searching for other species. The first hybrids to enter commerce were the work of James Colville, in England, who used **G. tristis var. concolor** and **G. cardinalis** to create his Colvillei Hybrids in 1823. While these hybrids did well in England, it was soon found that they required fall planting for spring bloom.

**G. psittacinus (natalensis)** came to Europe in 1825, **G. oppositiflorus** and **papilio** in 1830. These three species were found to differ from those previously known in that they bloomed in the summer of the northern hemisphere. Interest intensified when it was found that they could store the corms over winter for spring planting. **G. blandus** is one of the most variable of the South African species, due to the fact that it bloomed in the summer.

Hermann Josef Bedinghaus, head gardener to Due de Areberg at Engheim, Belgium, made the successful cross leading to the development of our present garden gladiolus. In 1837 he crossed **G. psittacinus (natalensis)** and **G. cardinalis** to produce what they later called Gandiensis (Candavensis) Hybrids.

Nurserymen became hybridizers and hundreds of glads were developed between 1840 and 1850. Names like Rykfogel and Souchet in France, Krelage in Germany, Schneevogt in Holland and Standish and William Hooker in England were hybridizing and developing new cultivars each year. As there were no cameras, the few pictures of early gladiolus were done by artist friends of hybridizers and royalty. By the 1850's botanists were searching Africa for more species to use in their

hybridizing program.

Eugene Souchet, royal gardener at Fontainebleau, in 1852 combined Gandavensis and Ramosus Hybrids with **G. blandus (floribundus)**, thereby starting a long line of somewhat different strains. His were the first hybrids to be imported into the United States. E. S. Rand, Jr., in the book *Corms* published in 1866 said, " All the world are raising seedling gladiolus."

Entire new strains were being developed in the last century, with many hybridizers keeping their crosses secret, as selling, trading, profit and pride were at stake.

Before we move onto the more modern glads of today, I would like to say that the African species were really responsible for the wide diversity of color, form and unique variations in our modern glad. Thousands of hybridizers and millions of crosses made by people long forgotten over the past 200 years have brought us to where we are today. Many species were not necessarily beautiful, most having small florets and low bud count. Many opened only one or two florets at a time, with a bud count of four or five. Who knows, maybe a species still undiscovered in Africa may hold the secret to a healthier glad or a color still not achieved. The elusive, highly scented glad may be growing right now in the mountains behind a rock, still to be discovered. The gene to make our modern cultivars hardy, still has yet to be found.

~ Many of our lines today can probably trace their roots to Central and Southern Africa, where the summer flowering species were discovered. More colors and variations were achieved around 1880 by Victor Lemoine of France, extending the color range into the browns, greens and deep reds. Many of these descendants are where we get our color range today.

At this time I should mention William Pfitzer and his son Paul, who were hybridizers from 1840 to 1930, covering almost 100 years. William created the first giant red flowered cultivars and was able to elude many problems in culture and breeding in the 1880's. From 1890 to 1900, Pfitzer Strains formed the backbone of German creations and were known for large flowers widely opened and unicolored glads in bright shades. Other characteristics were well blending colors and harmonious rows of florets, not crowded, but forming a sturdy, fine, panicle spike. Their work raised the number of open florets on a single spike from one-quarter to a half of all buds blooming at one time.

They further extended the color range in the late 1890's, including most veining, yellow and orange. By the early 1900's, red, orange, salmon, cream and ivory was more common. In 1920 the large flower gladiolus were being grown in the United States in large numbers. A. E. Kunderd did much of the hybridizing in the United States during the 1920's. In 1923 he actually sold **G. lacinatus** for \$1000.00 per corm. Although \$10.00 to \$25.00 per corm was common at that time, most sold for less than \$4.00.

Not much new progress was attained in the 1930's, except for the introduction of **Picardy**, introduced in 1931 by Professor E. F. Palmer. Picardy was a large, outstanding shrimp pink, that is still being grown today. This was a big step in improving our modern gladiolus, and was considered a world champion top show glad for years.

By 1940 and early 1950's, glads were at their glory with thousands of members in societies. I have heard mention that there were as many as 5000 in the New England Gladiolus Society at that time. Shows would include thousands of spike entries and hundreds of basket and other entries. Some of the important stepping stones during this era were **Elizabeth the Queen (560)** introduced by D.W.White in 1941 ~ **Burma (556)** introduced by Palmer in 1943; **Spic & Span (446)**, by Carlson in 1946 followed by **Friendship (442)** introduced in 1949 by Carl Fischer.

In the 1950's several hybridizers were introducing three quarters of the new cultivars of that decade. They were: Ralph E. Baerman, Dr. Robert A. Griesbach, Carl Fischer, Edwin Frazee, JR. & C. T. Larus, Winston Roberts, Henry Turk and Don Walker. There were a few introductions in the 1950's that were also stepping stones. **King David (556)** introduced by Anton Carlson in 1951 and **Peter Pears (423)** by Konynenburg and Mark in 1958, were two notable cultivars. **Peter Pears**, imported from Holland, is still sold in chain stores in 1996. In the 1960's through the present time, more energy was spent to achieve the *perfect* show glad. **Parade 534**, introduced in 1970 by Larus, lead the way, and is

still a very important show glad today. Crossing existing cultivars has been strong, with little reintroducing of species being done and hybridizing for commercial cultivars, at a slower pace. Carl Fischer, of Minnesota, during his 67 years of growing gladiolus, has had eighty eight All America selections from the 1950's through the 1990's and has published fifty-one consecutive gladiolus catalogs.

Two more important introductions in the 1980's are the last notable stepping stones. **Ice Cap (400)** introduced in 1981 by A. G. Carnefix and **White Ice (300)** in 1987 by Dr. Jack Jones, were important introductions for the hybridizing and the showing of gladiolus today. There are a few showmen and catalogers that have brought the glad to its caliber of today. Dr. Earl Hamilton brought the showing of glads to a fine art and catalogers like Alex Summerville and Ed Squires were responsible for introducing many show quality glads, while many other notable catalogers have been responsible for introducing decorative and commercial cultivars.

Looking into the future, the next century may be the most exciting. With technology in place to implant genes into the gladiolus corms, there may be no limitations as to what we can do. Faster and more reliable than hybridizing for certain characteristics, it may be possible in the next century to have disease free, highly scented and select colors now next to impossible to achieve by normal hybridizing. There may be no boundaries to this technology. Implanting genes to make all glads hardy, is a possibility. We must look and dream of the future, for the visions in our dreams may be our only limitations.

By: Cliff Hartline