An Introduction to Bearded Irises

JEWELS OF THE GARDEN

© Historic Iris Preservation Society, 2017
Irices belong to one of two groups: **bearded** and **beardless**. Beardless irises include Spuria, Siberian, Japanese, and Louisiana irises.

This presentation focuses on **bearded irises**; the needs of beardless ones are very different.
Irises in History

- From the Greek goddess *Iris*, symbol of the rainbow and messenger of the gods.

- Ancient Egyptian kings decorated their palaces with iris drawings.

- The fleur-de-lis is based on the shape of an iris.

- For centuries the rhizome of some wild irises, called *orris root*, has been used to make perfume and medicinal remedies.
The Bearded Iris

Bearded irises are among the most popular and easy to grow flowers in the garden. They need relatively little care, multiply readily, and because they are clonal, each child plant is a genetic duplicate of the parent.

Bearded irises are so named because of their fuzzy beards, which look like caterpillars. This iris has bright yellow beards.

The beards are a distinguishing characteristic of each iris cultivar.
Basic Parts of an Iris

STANDARDS – they “stand up”

FALLS – they “fall down”

STYLE ARMS – small, stiff parts of the bloom that extend over the base of the beard

BEARD – the fuzzy, caterpillar-shaped appendage at the base of each fall

HAFTS – the narrow parts of the falls close to the base

SPATHE – the papery outer covering at the base of a bud
Iris Color Patterns

**Self** – the standards and falls are close to the same color.

**Bitone** – the standards and falls are in the same color range but one is distinctly lighter.

**Bicolor** – the standards and falls are two distinctly different colors.
Iris Color Patterns

**Plicata** – the falls (and sometimes the standards) are rimmed with speckles or “stitching”. The background color is known as the “ground”.

**Amoena** – the standards are white and the falls are a different color. A reverse amoena has colored standards and white falls.

**Blend** – several colors are blended together on the same flower.
Iris Color Patterns

**Variegata** – buff to yellow standards, falls red to near-black. The falls may be heavily veined or solid in color. This is one of the oldest color patterns.

**Neglecta** – blue or purple bitones with very light standards and much darker falls. A reverse *neglecta* has dark standards and light falls.

**Luminata** – white or yellow iris washed over with color, so the ground color shows through in the veining.
Iris Color Patterns

**Glaciata** - an iris with no purple anthocyanin pigment. These irises often seem to glow.

**Broken color** – the iris is splashed with color in an irregular pattern.

**Emma Cook pattern** – an amoena style with white falls rimmed in a darker color. Named after the iris ‘Emma Cook.’
Early Irises

- Bearded irises are native to areas around the Mediterranean. The earliest known irises were *species iris*, or wild irises. The first iris that was collected and named was probably *Iris florentina*, a natural hybrid growing in Italy and southern France by 1500. It is often called simply ‘Florentina’.

- One of several species iris that are a source of dried orris root due to its heavy, violet-like fragrance.

- Widely grown as a garden plant.
*Iris pallida* is a species irises that is part of the foundation of today’s tall bearded irises. It is native to the northern Mediterranean coast.

*Iris pallida* has numerous variations, but all are heavily scented. Many say the scent is reminiscent of grape soda. It is also a source of orris root.
Early Iris Breeders

Jean-Nicholas Lémon began hybridizing irises in France, and he began introducing new cultivars in 1840. They were milestones in iris history.

‘Jacquesiana’, 1840
Claret-red falls

‘Mme. Chereau’, 1844
A sensation for its plicata pattern

‘Faustine’, 1859
Bold veining
More by Lémom...

‘Victorine’, 1840
The purple-splashed standards were unique

‘Fries Morel’, 1840
An early variegata (yellow standards, purple or maroon falls)

‘Othello’, 1848
Purple bitone
England Joins In

English gardener John Salter introduced ‘Queen of May’ around 1859. It was important in breeding early orchid pinks.

Sir Michael Foster collected ‘Amas’ in Turkey around 1885. It was a tetraploid iris, having twice as many chromosomes. Most modern tall bearded irises are descended from ‘Amas’.
The Pace Quickens

‘Amas’ made its way to England in 1900 and the pace of iris hybridizing began to accelerate. French, English, and American breeders began developing larger irises in colors not seen before.

The following slides are a chronological gallery of some milestone irises.
‘Caterina’
(Sir Michael Foster, 1909)

An important advancement in breeding better blue irises.
‘Alcazar’
(Vilmorin, 1910)

At the time nearly every other garden iris of its day was a diploid, Alcazar was one of the first garden tetraploids.

This was a significant advance in iris breeding. The flowers of tetraploids were larger and the bloom stalks were taller.
‘Souv. de Mme Gaudichau’
(Millet et fils, 1914)

The very largest, finest and richest dark purple. Extremely popular for many years, and heavily used in breeding for dark purples and blacks.
'Dominion'
(Arthur Bliss, 1917)

Perhaps the single most important iris in the tetraploid revolution. It’s behind virtually all of today’s Tall Bearded irises.
‘Shekinah’
(Grace Sturtevant, 1918)

‘Shekinah’, a yellow pallida, was an important color breakthrough. Miss Grace Sturtevant was an American and the first woman iris breeder.
‘Aphrodite’
(William R. Dykes, 1922)

A clear violet pink, the pure, bright tone was a big advancement.
‘Aphrodite’ is still a popular garden iris today.
‘King Tut’  
(Hans P. Sass, 1926)

The Sass brothers of Nebraska introduced many important irises. ‘King Tut’ was the foundation for some of their breeding lines.

It led to wonderful new blends and color in reds, pinks, oranges, and browns. This iris was a parent of the Dykes Medal winner ‘Rameses’.
‘Purissima’
(William Mohr - Sydney B. Mitchell, 1927)

Known for its bloom size, height and purity of color, it is in the background of most white and blue irises around today.
'Alta California'
(Mohr-Mitchell, 1929)

‘Alta California’ was a breakthrough on the road to a strong yellow iris. It had good size and height, and great depth of color.
‘Jean Cayeux’
(Ferdinand Cayeux, 1931)

This French iris was a breakthrough in the brown color spectrum. It is still prized by historic iris lovers today.
'Tiffany'
(H.P. Sass, 1931)

‘Tiffany’ was a step forward for the *plicata* pattern in irises. Plicatas have speckled or “stitched” edging around the standards and falls. Plicatas on a yellow background were rare, and this led to new color patterns. This iris has a yellow ground with wine edging.
'Amigo'
(E. B. Williamson, 1934)

A *neglecta* is a color pattern with very light blue, almost-white standards and very dark blue or purple falls. ‘Amigo’ was the standard by which neglectas were measured for many years. It’s a rather short iris, but the blooms are exceptional.
‘Wabash’
(Mary Williamson, 1936)

One of the most famous irises ever bred, ‘Wabash’ is an outstanding example of the *amoena* color pattern: white standards and colored falls. With its beautiful form and vibrant color, it is probably the best-selling iris of all time and is still carried in many garden catalogs today. Winner of the Dykes Medal in 1940.
‘City of Lincoln’
(H.P. Sass, 1936)

This iris was considered the finest *variegata* of its time. The yellow standards and scarlet falls could be seen across the garden and appeared to glow.
‘Far West’
(Kleinsorge, 1941)

Dr. Rudolph Kleinsorge considered this to be his most important breeding iris, one he used over and over in his work with brown-toned irises. On the next slide is a sample of his introductions.
Kleinsorge irises

- Black and Gold
- El Paso
- Gypsy
- Sunset Blaze
- Grand Canyon
- Thotmes III
New Colors and Patterns Emerge

‘Moonlit Sea’
(Jacob Sass, 1942)

The *luminata* color pattern has no pigment in the veining, giving the flower the appearance of glowing from within. ‘Moonlit Sea’ was one of the first successful luminatas on the market.
White and purple amoenas, such as ‘Wabash’, were readily obtained. Some breeders shifted their focus to amoenas of other colors. Jean Stevens of New Zealand introduced several important breakthroughs.

‘Pinnacle’, 1945

‘Sunset Snows’, 1965
James Gibson of the USA developed many important irises in the plicata pattern. He focused much of his work on developing brown plicatas.

- ‘Cayenne Capers’, 1961
- ‘Dream Spun’, 1961
- ‘Can-Can Red’, 1979
- ‘Going My Way’, 1971
‘Extravaganza’
(Geddes Douglas, 1942)

Sometimes irises were revered for attributes other than their color. This iris, while lovely, was also exceptionally hardy. To this day, it’s one of the last irises to bloom in any iris garden, and it’s a reliable and sturdy performer.
Pinks and Reds

The hunt was on for irises in the pink and red categories. Red pigment is not something that occurs naturally in irises, so breeders had much work to do. These early pink irises led to the creation of stronger colors.

‘Pink Formal’ (Tell Muhlestein, 1949)

‘Mary Randall’ (Orville Fay, 1951)

‘June Meredith’ (Tell Muhlestein, 1954)

‘One Desire’ (George Shoop, 1960)

‘Vanity’ (Ben Hager, 1974)
Red irises developed from the purple pigment found in the old species iris. Most red irises have a plum or bronze cast. A true scarlet red is the goal of many modern hybridizers.

‘The Red Douglas’ (Jacob Sass, 1934)

‘Bang’ (Tom Craig, 1955)

‘Ebony Echo’ (Chet Tompkins, 1948)

‘Red Hot Momma’ (Don Spoon, 2014)
Ruffles and Lace

In the 1950s, iris hybridizers began to experiment with changing the form of an iris, as well as the color. The smooth falls and standards became wider and wavier as ruffles were introduced.

The edges of many blooms became laced, or tightly rippled. Many of today’s bearded iris introductions exhibit these characteristics.

‘Madame Louis Aureau’ (Ferdinand Cayeux, 1934)

‘Just Witchery’ (Barry Blyth, 2011)
Also beginning in the 1950s, hybridizers like Lloyd Austin began developing irises with long beards that had *horns* at the tips. These evolved into *spoon* and *flounce* shapes and became known as *Space Age* irises. These are classified as *Novelty Irises*. 

‘Horned Rosyred’
(Lloyd Austin, 1958)
Horned iris

‘I’m So Confused’
(Cheryl Deaton, 2014)
Spooned iris
Novelty Irises: Broken Colors

Another type of novelty iris has *broken color*. These irises are speckled or splotched. Some have broken color and horns or spoons.

‘Batik’  
(Alan Ensminger, 1985)

‘Bewilderbeast’  
(Brad Kasperek, 1994)

‘Ziggy’  
(Virginia Keyser, 2007)
A bearded iris is a relatively easy perennial to grow. Irises need sun (at least 6 hours each day) and well-drained soil.

- Select a site with lots of sun. If the soil is heavy, add sand. If your soil is sandy, you won’t need to add much at all.
- A mix of 1/3 soil, 1/3 sand, and 1/3 compost works well in most areas.
- Plant your irises 18-24 inches apart to allow them space. They will grow into clumps in a short time.
- Irises can also grow quite happily in pots on a sunny balcony or patio. A five to seven gallon pot will allow your irises room to grow into a nice clump.
Choosing Your Irises

Bearded irises come in all sizes, from Miniature Dwarf Bearded (as short as 6 inches) to Tall Bearded (up to 42 inches tall or more). You will find them in every color of the rainbow. Bearded irises are winter-hardy. If you live in a hot climate, your irises might like some afternoon shade.

‘Spot of Tea’ (Paul Black, 1988) Miniature Dwarf Bearded, 7”

‘Broadway Baby’ (Joseph Gatty, 1989) Intermediate Bearded, 24”

‘Boo’ (Lynn Markham, 1971) Standard Dwarf Bearded, 12”

‘Mexico’ Rudolph Kleinsorge, 1943 Tall Bearded, 32”
Time to Plant

Step One: **LABEL YOUR IRISES.**

This is critical if you wish to keep track of them. **We recommend burying an extra label underneath the plant as an insurance policy.**

There are many commercial labels available, and many gardeners make their own by cutting strips from slats of old window blinds, plastic containers, or milk cartons.

**TIP:**

Don’t use a Sharpie, because the ink fades. The best thing to use is a soft #2 pencil, as graphite will remain on the tag for many years. If you rough up your tag with sandpaper, a pencil will write on plastic very well.

**TIP:**

If you use zinc garden markers, write on them with a charcoal pencil. It will etch into the metal and become permanent.
Into the Soil

Step Two: mound up a bit of soil where you want the bearded iris to grow. The top of the mound should be about level or a little higher than the surrounding garden area, to promote good drainage.

Then lay the iris on the mound, spreading out the roots.
Covering the Rhizome

Step Three: cover the roots with soil and tamp down. **Do not cover the top of the rhizome with more than 1/2 inch of soil.** It will eventually work its way to the top of the soil and the top of the rhizome will be exposed. This is normal.

If you are planting in a climate that gets cold winters, lightly covering the rhizome for the first winter will give it a bit of protection.
Watering Your Iris

After planting, water well to help the rhizomes develop their root systems, and continue watering until the first good rain. If lack of rain persists, watering should be deep enough to penetrate the shallow root system. Less-frequent, deep watering is better than frequent, shallow watering.

Once established, irises should be watered when the top three inches of soil dry out. Remember, irises are native to semi-arid climates, and over-watering them is a common mistake. When in doubt, err on the dry side.
A Word About Fertilizing...

Irises don’t like high-nitrogen fertilizers, because they encourage soft growth that is prone to rot. Use a balanced 10-10-10 or low-nitrogen 5-10-10 fertilizer, or a superphosphate. Apply lightly in the early spring and again about a month after blooming is done. Sprinkle it around the rhizome, not on top of it.

Alfalfa pellets or alfalfa meal are great additives to mix into the soil when planting. Bone meal is another good additive when planting, as it’s rich in phosphates.

A note on blooming: Don’t be discouraged if your iris blooms are sparse the first spring after planting. You should see noticeably more blooms the second spring, and even more in the third year.

'Spanish Fandango' (R. Kleinsorge, 1951)
Dividing Your Irises

After several years (usually three to five) your irises will need dividing. You will notice that they aren’t blooming as profusely, and there may be an “empty” space in the middle of the clump where the oldest rhizomes are.

Dig all around the clump with a spading fork or shovel, and lift out the clump. Shake off the loose dirt. You can hose off the clump if you like.
Labeling is critical! Once your irises are dug, they all look alike. Label the fans of each clump with your Sharpie to prevent accidental mix-ups.

The center rhizome is the “mother” and it is spent, as is the rhizome attached to the bloom stalk. Time to get rid of them. The red lines on the photo show one way you could divide this iris. See the “pup” on one side of the left rhizome? That will be a new iris fan next year. Watch for pups! They are worth keeping.

Then have fun sharing and replanting your irises!

You can cut the rhizomes apart with a knife or just break them off. Let the cut/broken end dry a bit before replanting them, and be sure to discard any rhizomes that are mushy or have a foul smell.
Saving Historic Irises

The Historic Iris Preservation Society is the preservation section of the American Iris Society.

- We work to save historic irises so future generations can enjoy them.
- We also help rescue iris gardens when gardeners can no longer care for them.
- Our Guardian Gardens Network is a group of HIPS members who adopt rare irises, grow them for division, and then share them with other members, public gardens, and commercial vendors.

‘Cherry Falls’ (G. Douglas, 1949)
One of the irises HIPS is saving.

We’d love to have you join us!
Visit us online at www.historiciris.org