# Basic Inis Culture

What Every Iris Grower Should Know

OF

Third Edition 2010 The American Iris Society

ICAN

# **BASIC IRIS CULTURE**

#### or

"What Every Iris Grower Should Know"



Third Edition 2011 The American Iris Society

#### **Table of Contents**

Classification of Irises by Tom L. Waters and 2011 editors	3
Color Patterns by E. Roy Epperson and 2011 editors	. 9
Buying Irises by Maryann Anning and 2011 editors	10
Bearded Iris Culture by E. Roy Epperson and 2011 editors	12
Medians and MTBs by 2011 editors	13
Aril and Arilbred Iris Culture by Tom L. Waters and 2011 editors	15
Spuria Iris Culture by Tom Abrego and 2011 editors	18
Siberian Iris Culture by Carol Warner and 2011 editors	21
Japanese Iris Culture by Bob Bauer and John Coble and 2011 editors	24
Louisiana Iris Culture by J. Farron Campbell and 2011 editors	27
Pacific Coast Native Iris Culture by Jay Hudson and 2011 editors	30
Species and Species Cross Iris Culture by Bob Pries	33
Pests and Diseases by Bob Brown, Terry Aitken and 2011 editors	34
Creating New Varieties (Hybridizing) by Betty Wood and 2011 editors	38
Showing Irises by Maryann Anning and 2011 editors	42
American Iris Society Awards	. 44

**III. BEARDLESS IRISES** are mostly native to Asia. The first four classes are commonly grown in gardens, and they all bloom after the TBs, extending the iris season even longer. The fifth class, Pacific Coast Natives, blooms before the TBs and is native to the Pacific Coast regions of the United States.



**1. SPURIAS** (SPU) are tall (2 ft. to 5+ ft. in height) and elegant with very attractive foliage. The shape of the bloom often suggests orchids and the colors range from white and yellow through blue, wine, pink, and brown, often with bright yellow signals.

**2. SIBERIANS** (SIB) are similar to the botanical Series *Sibiricae*. Some Siberian cultivars begin blooming with the SDBs but most bloom at the end of the TB season and later.

As the name suggests, Siberians need cold and wet conditions to perform well. The blooms are blue, vio-



let, white, pink, and yellow with large falls and smaller standards. They are most attractive in established clumps and grow to a height of 2 to 4 feet.



**3. JAPANESE** (JI) require a slightly acid soil and present some of the most spectacular flowers of all the Irises. Blooms are usually huge, ruffled and flat in form; some are marbled with gray or white. They bloom about a month after the TBs; JI hybridizers have worked with them for centuries in ancient Japan.



**4. LOUISIANA IRISES** (LA) are native to the American Gulf Coast; but given ample water in Spring and a hot summer they can be grown into Canada. They are similar to the botanical Series *Hexagonae*.

They are popular as water plants on the edges of ponds but can do well in a normal garden bed. The

blooms are usually very wide petaled and open, showing brightly colored style arms and sharp signal crests.

**5. PACIFIC COAST NATIVES** (CA) are similar to the botanical series *Californicae*, Outside of their natural range they can present a challenge to growers but their often unique colors and dazzling appearance drive many to try their luck. Where they can become established, they grow most attractively with graceful and dainty flowers held 1 to 2 ft. high.



**6. SPECIES** This garden class includes the 350+ botanical species and is the root of all the preceding classes. Since these wildflowers come from every type of environment from desert to swamp and mountain top to



grassland, the culture of each needs to be specified individually.

This horticultural class recognizes selections that have special garden value from out of the variable natural populations. For example Iris laevigata 'Colchesterensis' is strikingly different from the normal laevigatas and makes a great accent in water gardens.

## **COLOR PATTERNS**

#### E. Roy Epperson

The genus Iris is named for Iris, the goddess of the Rainbow because irises show a great range of colors and color patterns. There

are approaches to red, but no true red iris.



1. SELF. Standards (upper petals) and falls (lower petals) are the same color. A true self also has beards the same color.





- 3. BITONE. Flowers have standards and falls of different amounts of the same color. Ordinarily the falls are darker than the standards. When the standards are darker, it is called a "reverse bitone."
- 4. BICOLOR. Standards and falls are of different color, the falls usually being darker than the standards.
- 5. BLEND. A color pattern where a combination or mixture of two or more colors are present in the same parts of the flowers.



6. AMOENA. Standards are white and falls are a different color. A reverse amoena has white falls and standards of a different color.



7. VARIEGATA. A bicolor with yellow standards and darker usually red falls.



8. NEGLECTA. A blue or violet bicolor with darker colored falls.



9. LUMINATA. The falls have a brushed pattern, with paler veins and a clear, unmarked area (spot) around the beards.



Irises, like most garden perennials, will grow in any good garden soil. Choose a sunny, well -drained location Bearded Irises do not like wet feet! At least 6 to 8 hours of full sun is needed for maximum bloom. At least 2 to 3 weeks before planting, prepare the bed by digging to a depth of 10-12 inches, adding soil conditioners, (organic compost, aged manure) and a low nitrogen fertilizer, and thoroughly water in the bed. A high nitrogen fertilizer or young manure will lead to rot. The soil pH should be 6.1 to 7.2. The symbol pH expresses the relative acidity or alkalinity of the soil. The neutral point of the scale is 7.0. Soil testing below a pH of 7.0 is acid; soil testing above pH 7.0 is alkaline. If your soil tests are too alkaline, add aluminum

sulfate or agricultural sulfur; if the soil tests too acidic, add hydrated lime.

When you receive your rhizomes from the supplier or at the sale, they will look like the illustration for planting on the next page. The rhizome should be planted on a ridge with space for the roots on each side. In sandy loam, just cover the rhizome; In heavier soil, the top of the rhizome should be just above the soil level. Be certain that the roots are well seated Rhizomes should be planted at least 12 to 18 inches apart. Closer planting will require more frequent digging and replanting. Usually bearded irises are re-planted every 3 to 4 years. If you have 3 or more rhizomes of the same variety, they can be



**Spurias** are known as very tough, hardy beardless irises that form magnificent clumps. Their rhizomes grow in a way that keeps the clumps from becoming crowded, presenting a sense of casual elegance. Gardeners value them as garden specimens because of their dramatic architectural qualities, whether planting them alone or in mixed perennial borders.

Their tall strong stems and longlasting flowers are sought after by florists and arrangers. Their elegant clumps grow slowly, but eventually span from five to six feet in diameter and from four to five feet in height. The leaves are sword-shaped, and indeed are sword-sized. Spuria rhizomes are fleshy and fibrous. Their new roots, produced in the fall, are large and succulent, while the old roots are tough, wiry and difficult to work with.

Spurias are among the last irises to bloom in the Spring, blooming after the Tall Beardeds. Their strong stems are either unbranched or with several short close branches, giving a spike appearance. Spuria flowers resemble those of the Dutch Irises. The form of the species includes long thin petals with elongated hafts and prominent style arms.

Modern hybrids feature rounder petals, with flaring falls and standards held vertically, at 45 degree angles, or flat. Colors include white, yellow, lavender, rose, red, brown, blue-violet and dark



Siberian irises are well known as outstanding perennial landscape plants. They are excellent in mixed borders where their grasslike foliage is an asset throughout the growing season. The delicate flowers extend the bloom season and can be used in flower arrangements. They will grow under a wide range of climatic conditions. Most widely grown are the 28-chromosome group and the tetraploids derived from them. These Siberians are extremely cold hardy. However, they can be challenging to grow in the South due to their need for a cold dormant period to perform well. 40-chromosome varieties of Siberian irises grow best in the Pacific northwest. Although their culture is in many ways similar to

that of the group described above, they require a more constant moisture level and are generally less tolerant of extremes of heat and cold.

Siberian irises grow and bloom well when planted in full sun. However, they will tolerate shade for less than half a day. Bloom will be directly proportional to the amount of sun received. All beardless irises prefer a rich soil with ample organic matter. If the soil is clay, the addition of organic matter will loosen it. If the soil is sandy, the organic matter will help in water and nutrient retention. Depending on what is available, till in an ample amount of well-rotted manure, hay, straw, peat moss, compost, etc. If using



Japanese iris (Iris ensata) produce some of the largest iris blooms at 6 - 8 inches in diameter on 3 - 4 foot branched stalks when grown properly. They bloom about a month after the Tall Bearded iris in USDA Zones 4-9. They grow best in an organic-rich, slightly acid soil that can be kept damp-to-moist year round. Mulching, 2 - 3 inches, is also recommended year round. Six hours of full sun is needed for good bloom.

No other iris is influenced to as great a degree by culture as are the Japanese iris. Good culture will increase height, branching, flower size, and quantity and quality of bloom. No other factor will be a greater influence than the amount of water and its quality (pH and/or salts). A lack of moisture will stunt the plants and produce miniature blooms. An abundance of water and manure can produce 4 - 5 foot tall bloomstalks! Depending on your soil and climate, 1 - 2 inches of water and/or rain per week is required. Older clumps form dense root systems and will need more water than new divisions. But Japanese iris are not water plants. They should not be planted in the water where the water freezes over in the winter. Beside a stream or pond can be ideal where the roots can always reach moist soil with water borne nutrients.

JI prefer a rich soil with ample organic matter to help in water retention as well as adding nutrients and some aeration. The soil pH should be slightly acid, 5.0 to 6.5. Peat moss will help lower



Louisiana irises are perfectly suited for water and bog culture, but readily adapt to most garden situations. Adaptability is the factor that makes for a great garden plant. LA irises have proven themselves to be extremely adaptable. Today, LA irises are grown around the world under a very wide range of climates, soils, and cultural practices.

LOCATION: A full-sun location is ideal unless you live in an area where summers tend to be long, hot, and dry. In this case, some afternoon shade may be beneficial. Irises bloom best when they receive a maximum amount of sunlight - 6 to 8 hours per day during the active growing season is considered ideal. Locating plantings where water tends to stand after it rains are excellent for locating beds if the light requirements are met.

SOIL: Know your soil (pH, friability, etc.) before planting or making amendments for garden use. Several excellent organic amendments include finished compost, brown Canadian peat moss, mushroom compost, alfalfa pellets and shredded leaves. (Avoid fresh grass clippings unless you also add a nitrogen fertilizer.) Avoid fresh manures, fresh sawdust or wood chips, and domestic black peat moss from the northern United States. The assumption that Louisiana irises have to be grown in



## **Species** Irises

Since there are species of Iris indigenous to practically every type of environment in the northern Hemisphere there is undoubtedly an iris that would enjoy any garden situation that you have.

Since most Iris like sun, perhaps the most restrictive niche is in the shade. But even in dense shade there is iris cristata that forms a beautiful, woodland ground cover. Many other species enjoy part to almost full shade. Species such as I. confusa, odaesanensis, verna, japonica, formosana, and many Pacific Coast Natives can handle some shade. Some irises such as I. graminea, I foetidissima, and Iris fulva will grow in some shade but given adequate moisture perhaps do better in sun. Another given is that most Iris like well drained soil but there are some that like having lots of water in the Spring like many spurias species, Japanese Iris and some other beardless. Other Irises tolerate being in water or moist soil for the entire growing season, most Louisiana Iris and species fit this situation. Other iris demand water throughout the year such as Iris virginica, laevigata, and pseudacorus and are often sold as pool plants.

For those with access to the internet, the American Iris Society sponsors an online Encyclopedia that is being developed by Irisarians around the world. More specific information about Species iris can also be found there.

# SHOWING IRISES

Maryann Anning



If you grow and care for your irises properly, you have the same chance as anyone else to bring home a ribbon, even from your first show. It takes good culture, a good iris, careful handling and grooming and some knowledge of what iris judges will be looking for. The most important thing to remember is that your specimen is judged on how it looks at the time it is being judged, not when it was cut or what it might look like the next day. Here are some pointers on what judges look for, as well as a few "how to's" and "don'ts" on handling and grooming.

Judges must pass judgment in two areas: (1) Cultural perfection [how well the specimen is grown] and (2) Condition and Grooming [how well the specimen was prepared for entry.]

1. BLOOMS should all be fresh and in perfect condition. Choose a stalk with 2 or 3 freshly opened flowers. There should be no fading or oldness (carefully remove old blooms with a sharp knife, razor or scissors); no sign of insects (remove them with a cotton swab or soft bristle brush) or signs of insect damage; no bruises or breaks from careless handling.



2. STEMS should be cut straight and as long as possible. The stalk should stand vertically in the container. Use the material permitted by the show schedule as a wedge to hold the stem firmly in position. Fingerprints should be removed from the stem with a cotton ball or swab.



## **Basic Iris Culture**

### "What Every Iris Grower Should Know"

