perennial solutions

By Paul Pilon

Iris germanica 'Fall Fiesta'

Photo: Brighton Park Iris

The bearded iris, also known as German iris, is one of the most majestic and popular perennials used in landscape settings. Bearded irises have three petals that grow upward, referred to as standards; and three petals, known as falls, that grow downward. The flowers are exceptionally beautiful, giving perennial gardens and landscapes an elegant, delicate appearance.

Though German iris has been grown for decades, breeders are developing exciting new hybrids with fabulous color combinations each year. *Iris germanica* 'Fall Fiesta' is the result of recent breeding and variety selection at Schreiner's Iris Gardens in Salem, Ore. 'Fall Fiesta' is a uniquely colored iris with ruffled, amber-tan falls, white standards and gold beards, the fuzzy-looking hairlike parts on each of the falls. (The common name, bearded iris, refers to these flower parts.)

'Fall Fiesta' has outstanding garden performance and grows well in sunny locations throughout USDA Hardiness Zones 3 to 10. Bearded iris grows best in full sun but will also perform well under partial shade; excessive shade will reduce or prevent flowering altogether. They should be planted in areas with well-drained soils; planting them in locations with poor drainage may keep the rhizomes too wet and will often lead to poor plant performance and even mortality.

'Fall Fiesta' produces fan-shaped clumps of semi-evergreen, sword-like leaves reaching 18-24 inches across at maturity. In the late spring to early summer, they produce stately, showy blooms on 24- to 36-inch stalks. Bearded iris is commonly used in containers, in border and mass plantings, and as cut flowers. Additionally, German iris is drought tolerant and resistant to deer and rabbit feeding. With their ease of growth and colorful displays, irises are ideal perennials for most gardeners.

Availability

Iris 'Fall Fiesta' was bred and introduced to the market by Schreiner's Iris Gardens (www.schreinersgardens.com). Three-inch liners are available from Walter's Gardens, Inc. (www.waltersgardens.com).

Photo: Schreiner's Gardens

Propagation

Bearded iris is vegetatively propagated. The foliage comes from thick, fleshy underground stems called rhizomes. New plants grow along the underground stems and are divided or cut from the "mother" rhizome to produce identical plants. It takes several years to size up and produce irises of suitable size for reproduction; therefore, most commercial growers do not propagate their own German irises. In most cases, growers obtain starting materials of iris as bareroot or rooted liners.

Production

'Fall Fiesta' is suitable for production in 2-quart to gallon-sized containers. Iris performs best when grown in a well-drained growing medium. Many commercially available peat- or bark-based growing mixes work well, provided there is adequate drainage. They should be planted high enough so the top one-third of the rhizome is exposed above the media surface after the initial irrigation has been applied. Planting them too deeply will result in reduced plant vigor and increase the likelihood of soft rots.

Bearded irises perform best when they are grown at light to moderate fertility levels and a neutral to slightly acidic pH (6.0-7.0). Growers can apply water-soluble fertilizers using 100 ppm of nitrogen as needed or constant liquid fertilization at 50- to 75-ppm nitrogen with every irrigation. Controlled-release fertilizers can also be used to deliver nutrients by incorporating 0.75-1.0 pounds of elemental nitrogen per cubic yard of growing mix prior to potting.

German irises require slightly below-average irrigation. Irises are susceptible to soft rots of the rhizomes during extended wet periods. When irrigation is necessary, water them thoroughly, then allow the soil to dry slightly between waterings. The best quality is achieved when plants are grown in full sun or in greenhouses with high light intensities (2,500-3,500 foot-candles). To reduce undesirable expansion of the leaves, produce a strong plant and reduce the incidence of fungal diseases, provide adequate ventilation and air circulation during production.

Most growers do not use plant growth regulators to reduce the height of the foliage and blooms of bearded irises. But in some cases, it might be desirable to control plant height. From my experience, foliar applications of PGRs provide minimal to no height reduction. If height control is necessary, drench applications of paclobutrazol (Bonzi, Paczol or Piccolo) at 6-10 ppm will provide satisfactory results.

Insects and Diseases

Numerous insect pests may be observed feeding on bearded iris, including aphids, caterpillars, grasshoppers, iris borer, leafhoppers, slugs, snails and spider mites. Of these insect pests, the iris borer (*Macronocutua onusta*) has the potential to cause the most injury. It is much more prevalent in the landscape and outside production areas, but occasionally they are observed in container production.

The occurrence of iris borers can be greatly reduced by removing and destroying all plant debris (which may contain their eggs) in the fall.

The foliar diseases most likely to infect bearded iris include leaf spots caused by Didymellina, Heterosporium, Puccinia (rust) and Xanthomonas. Several diseases are known to infect the rhizomes and/or roots, including soft rots caused by Erwinia, Fusarium, Pectobacterium, Rhizoctonia and Sclerotium.

To reduce the frequency and severity of soft rots, it is beneficial to dip the rhizomes in 10 percent bleach solution for 15 to 30 minutes and allow the rhizomes to dry thoroughly before planting. Additionally, the occurrence of soft rots can be reduced by planting them properly (top one-third of the rhizome exposed) in a growing mix with adequate drainage, and practicing good water management. Foliar diseases can be reduced with proper plant spacing, good air circulation and, if necessary, preventive spray programs with products effective in controlling these bacterial and fungal diseases.

Routine scouting is useful and recommended to detect insect pests and plant diseases early and implement appropriate control strategies before significant crop injury or mortality occurs.

Forcing

For commercial growers, the best results are obtained when the rhizomes are received and planted in the late summer or early fall. Place them in a location with sufficient air movement and protection from significant rain events that frequently occur in the autumn. During the winter months, protect them from cold similar to other perennial varieties being produced.

As spring approaches, keep them at temperatures similar to outdoors until several weeks before desired flowering. Keep them at 40° F for as long as possible to prevent them from flowering too early. Throughout much of the country, they flower outside naturally in early June (late April to early May in Southern locations). Producing them in unheated but well-ventilated structures (Quonsets) will result in blooming plants several weeks earlier: early to mid-May in most locations and late March to early April in the South. They can be forced into bloom for earlier sales by providing heat (60 to 65° F) for eight to nine weeks before the desired flower date. GPN

Paul Pilon is a horticultural consultant, owner of Perennial Solutions Consulting (www.perennial-solutions.com) and author of* Perennial Solutions: A Grower's Guide to Perennial Production*. He can be reached at paul@perennial-solutions.com or (616) 366-8588.

LearnMore
For more information related to this article, go to www.gpnmag.com/lm.cfm/gp041004