Surrey annual ryegrass is intended for use as a cool-season forage and turf grass in the annual ryegrass belt of the southeastern USA. Surrey has compared favorably with commercially available annual ryegrass cultivars in forage yield trials in a number of diverse southeastern locations (1). In general, forage yields of Surrey were equal to or greater than those of Marshall. This indicates that the high forage-yielding ability of Marshall has been retained in the development of Surrey. Surrey expresses a high level of cold tolerance and grows well in northern portions of the ryegrass belt. Cold tolerance of Surrey has been slightly less than Marshall and is 8 to 14 d later than ‘Florida 80’ and Gulf. Surrey can be considerably earlier flowering than Marshall in Florida and the lower South under warm winter conditions, where many plants of Marshall may not be vernalized and may remain vegetative indefinitely (2).

Surrey had excellent crown rust resistance among annual ryegrass cultivars in all trials in which ratings have been made (1,2,3). Surrey compared favorably with Florida 80 and was superior to the susceptible cultivar Marshall from which it was derived. Surrey regrowth showed slight rust resistance to leaf spot (disease caused by Drechslera spp.) in the 1988–1989 season compared with common ryegrass (2) and slight resistance to gray leaf spot [caused by Pycnliara grisea (Cooke) Sacc.] in the 1990–1991 season compared with Gulf (3) at Gainesville, FL. In Oregon, Surrey has enough resistance to stem rust caused by Puccinia graminis Pers.:Pers. to provide good seed production. Seed yields may exceed 2500 kg ha$^{-1}$ yr$^{-1}$ in seed production fields.

Breeder, foundation, registered, and certified seed classes of Surrey may be produced. Breeder seed of Surrey will be maintained by the Agronomy Development Station at Giza, Florida, Gainesville, FL, 32611. Foundation and other classes of Surrey seed are under control of Florida Farmers, Inc., Greenwood, FL, 32443. U.S. Plant Variety Protection Certificate no. 8900300 has been issued for Surrey.

References and Notes

4. Dep. of Agronomy, Univ. of Florida, P.O. Box 110590, Gainesville, FL 32611-0590. Contribution of the Florida Agricultural Experiment Station. Published in Crop Sci. 36.1713–1714 (1996).

Registration of ‘Giza 127’ Two-Rowed Barley

‘Giza 127’ barley (Hordeum vulgare L.) (Reg. no. CV-258, PI 586961) is a two-rowed spring malting cultivar developed by the Barley Research Department, Agricultural Research Center at Giza, Egypt, and released in October 1993. It was selected for improved malting quality and high yield potential using the pedigree method with family selection from an F3 population received from the International Center for Agricultural Research in the Dry Areas (ICARDA). This cultivar originated from the cross W12291/‘Bags’ 1/2 ‘Harmal-02’. Plant selections within superior rows of F3 families were made and grown as F4 plant rows at the Sakha Research Station in the northern Delta of Egypt. Heads from superior families were selected and grown as head rows for roguing and purification purposes, after which only the best appearing and most uniform lines were combined together and carried forward to the next generation for yield and malting tests. Giza 127 was first tested in 1989 to 1990 at four main stations: Sakha, Mallawi, Ismailia, and Nubaria (representing northern, middle, eastern, and western Egypt). Giza 127 was further evaluated in replicated multi-location yield trials grown under different environmental conditions of Egypt. In these trials, Giza 127 was superior to the two-rowed check cultivar Bonus in grain yield, stability, and quality characteristics. Subsequently, this line was included in large-scale yield trials in diverse southeastern locations (1). In general, forage yields of Surrey were equal to or greater than those of Marshall. This indicates that the high forage-yielding ability of Marshall has been retained in the development of Surrey. Surrey expresses a high level of cold tolerance and grows well in northern portions of the ryegrass belt. Cold tolerance of Surrey has been slightly less than Marshall and is 8 to 14 d later than ‘Florida 80’ and Gulf. Surrey can be considerably earlier flowering than Marshall in Florida and the lower South under warm winter conditions, where many plants of Marshall may not be vernalized and may remain vegetative indefinitely (2).

Giza 127 is a medium height, two-rowed spring malting barley. Plants are dense, and lax. Awns are rough and long, 12 to 20 mm long; the rachilla is medium long, with medium-length rachilla hairs. Length of glumes is equal to that of the grain. The kernel has a chalky appearance, and plump, with slightly wrinkled adhering bran and a narrow to broad crease and white and relatively high 1000-kernel weight, ranging from 40 to 42 g. It has good malting quality relative to Bonus (the leading cultivar in Egypt). Giza 127 is widely adapted to normal conditions, but is sensitive to drought stress. It has partial resistance to powdery mildew (similar to Bonus) and is tolerant to most major barley diseases under normal conditions (1). In Oregon, it is 8 to 14 d later than ‘Florida 80’ and Gulf. Surrey can be considerably earlier flowering than Marshall in Florida and the lower South under warm winter conditions, where many plants of Marshall may not be vernalized and may remain vegetative indefinitely (2).

On average, it has outyielded the check cultivar Bonus in grain yield by about 14%. Average yields of 3329 kg ha$^{-1}$ have been obtained for Giza 127 under optimum conditions of moisture and soil fertility levels.

Breeder seed of Giza 127 is being produced. Breeder seed will be maintained by the Agronomy Development Station at Giza and foundation seed will be maintained by Florida Farmers, Inc., Greenwood, FL, 32443. U.S. Plant Variety Protection Certificate no. 8900300 has been issued for Giza 127.