panicle is 13. The rachis is erect. The second floret rachilla is hairless. The second floret rachilla segment is 4.0 mm long. Spikelet separation is by fracture. Floret separation is by disarticulation. There are usually two florets per spikelet. Glumes are white, 6 mm wide, 20 mm long, and have eight veins. The lemma of the primary kernel is 15 mm long, white, and hairless. Awns are absent. Kernels fluoresce under ultraviolet light, and have few to several basal hairs.

Variety protection will be applied for under the Plant Variety Protection Act, Public Law 91-577, in conjunction with Title V of the Federal Seed Act. If granted, the owners further specify that Porter may be sold for seed only by variety name. Breeder seed is maintained by the Purdue Univ. Agric. Exp. Stn., West Lafayette, IN 47907.

REGISTRATION OF REGAL
PERENNIAL RYEGRASS
(Reg. No. 76)

G. W. Pepin*

'Regal' perennial ryegrass (Lolium perenne L.) is a 3-clone synthetic cultivar developed by International Seeds, Inc. The parental clones were selected by turf testing open-pollinated progeny obtained from a population of turf-type perennial ryegrass spaced-plants assembled at Albany, Ore., in 1972.

The three parent clones included derivatives of clones selected for fine turf appearance from old turf areas in the mid-Atlantic region of the U.S. by C. Reed Funk and other workers at the New Jersey Agric. Exp. Stn.

Regal was released in 1977 and the first certified seed was harvested in 1977. PR. 731 was the experimental designation of this cultivar.

Regal is a low-growing, dark green, fine-textured cultivar with medium turf density and good turf performance in many areas of the USA. It has demonstrated particularly good turf performance compared to other ryegrass cultivars in areas having severe summer stress. It has the rapid germination and establishment characteristics of other perennial ryegrasses and is comparable to the majority of currently available turf-type ryegrasses.

Regal is moderately susceptible to brown blight incited by Helminthosporium siccans Drechsler and has good resistance to brown patch caused by Rhizoctonia solani Kuhn. It has demonstrated better tolerance to summer stress than other cultivars tested. It has good winter-hardiness compared to other cultivars such as Linn, NK100, and Game, and is comparable to most other turf-type cultivars.

Regal is commonly used for cool-season turf. It is used alone and also in blends with other cultivars and in mixtures with turf species such as Kentucky bluegrass (Poa pratensis L.). It is well suited and commonly used for fall overseeding of dormant turf areas such as golf greens, tees, fairways, and lawns in the southeastern U.S. None of the parental clones of Regal appear to carry the genetic factors for strong fluorescence in seedling roots.

Regal is very early in maturity and has demonstrated production in western Oregon. Seed propagation is limited to the breeder, foundation, registered, and certified classes of seed. Breeder seed is maintained by International Seeds, Inc., P.O. Box 168, Halsey OR 97348, United States Plant Variety Protection Application No. 7700110 is pending for Regal.

The 12 parent clones were derivatives of plants selected for fine turf appearance from old turf stands in New Jersey and Baltimore by C. R. Funk of the New Jersey Agric. Exp. Stn.

Derby was released in 1974 and the first certified seed was harvested in 1974. ISI-72E was the experimental designation for Derby. It has also been licensed for sale in Canada and in the European Economic Community.

1 Registered by the Crop Sci. Soc. of Am. Accepted 30 Nov. 1981.

REGISTRATION OF DUOCROP
(Reg. No. 157)

H. R. Boerma, E. D. Wood, and G. B. Barrett

'Duocrop' soybean [Glycine max (L.) Merr.] was developed by the Georgia Agric. Exp. Stns. in cooperation with the Illinois Agric. Exp. Stn. It is specifically adapted to plantings where lack of sufficient vegetative growth is of concern for efficient mechanical harvest and higher seed yields. Duocrop was released in 1977 and the first certified seed was harvested in 1978. PR. 726 was the experimental designation for Duocrop.

Duocrop originated from an F₃ plant selection from a cross of 'Davis' × 'Columbus'. The cross was made to combine the indeterminate growth habit, high yield of seed, and broad adaptability of 'Davis' with the determinate growth habit and low seed yield of 'Columbus'. The F₃ population was grown in Puerto Rico, where a number of F₄ plants were selected for high yield, good maturity, and indeterminate growth habit. These were advanced to F₅ generation, and a single F₅ generation was grown in Puerto Rico and the United States. The F₅ generation was grown in 1976, and the F₆ generation was grown in 1977. The F₆ generation was grown in the United States, and a number of F₇ plants were selected for high yield, good maturity, and indeterminate growth habit. These were advanced to F₈ generation, and a single F₈ generation was grown in the United States. The F₈ generation was grown in 1978, and the first certified seed was harvested in 1978.