hard winter was observed at Rosemont, MN (1). Resistance to rust caused by Puccinia spp. often has been superior when compared to other cultivars tested. Piedmont appears to be adapted from northern Alabama to Indiana and to orchardgrass-growing areas in and west of the Piedmont region.

Breeder seed will be maintained by the South Carolina Agricultural Experiment Station to produce foundation seed. Certified seed will be produced from foundation seed.

EUGENE F. MCCAIN (2)

References and Notes

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REGISTRATION OF ‘FLORIDA 401’ RYE

‘Florida 401’ rye (Secale cereale L.), (Reg. no. 12) was developed by the Florida Agricultural Experiment Station and was released in 1984. Florida 401, which was tested as FBLSRR, was derived by phenotypic recurrent selection using ‘Florida Black’ as the original base population. Five selection cycles involving hundreds of individual spaced plants grown under field conditions at Gainesville, FL, were used. In each cycle, selection was based on early seedling vigor and establishment, regrowth after mechanical clipping, resistance to leaf rust (Puccinia recondita Rob. ex Desm. f. sp. tritici), grain yield, and large seed size.

Florida 401, which is a diploid, semi-spring type, has an early upright growth habit with larger and lighter green leaves than other cultivars commonly grown in its area of adaptation. Its heading date is 1 to 2 weeks earlier. The seed weight of Florida 401 averages 20 mg, with a high percentage of light-brown seeds. Its test weight is similar to other cultivars and, depending on the environment, ranges between 67 and 72 kg hL$^{-1}$ (1). Florida 401 is slightly taller than other adapted cultivars but has satisfactory lodging resistance. It has excellent leaf rust resistance and good combined resistance to other diseases.

In the semitropical area of the southeastern USA, the major advantages of Florida 401 are its early forage production in the critical winter grazing period and its superior adaptation to southern conditions. The cultivar matures in midseason (1). The digestibility and crude protein content of the forage from Florida 401 were similar to other adapted cultivars early in the season and about equal to Florida Black and other adapted cultivars but has satisfactory lodging resistance. It is easily killed with herbicidal and/or mechanical methods. Thus, the following spring crop can be planted and established without undesirable rye competition. The grain production of Florida 401 was about equal to Florida Black and check cultivars ‘N.C. 95’ and ‘N.C. 2326’. Yield and quality of the new cultivar compare favorably with the check cultivars ‘N.C. 95’ and ‘N.C. 2326’. Florida 401 is extremely early and, as a result, can be grown under field conditions at Gainesville, FL, were used. In each cycle, selection was based on early seedling vigor and establishment, regrowth after mechanical clipping, resistance to leaf rust (Puccinia recondita Rob. ex Desm. f. sp. tritici), grain yield, and large seed size.

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REGISTRATION OF ‘PD 279’ TOBACCO

‘PD 279’ is a flue-cured tobacco cultivar (Nicotiana tabacum L.) (Reg. no. 93), developed and released by the Carolina Agriculture Experiment Station in 1984. PD 279 was developed from a cross between flue-cured cultivar ‘Coker 347’ and breeding line PD 5. It was tested in the Tobacco Regional Small Plot Test in 1982 and the Regional Farm Test in 1984 (2); it was released in the F$_9$ generation at the time of its release.

The cultivar was developed by the pedigree system of breeding in which initial screening was for disease resistance. Greenhouse and field screenings were conducted to identify disease resistance levels and final selections were based on yield and quality trials. PD 279 has high resistance to black shank (Phytophthora parasitica var. nicotianae Tucker) and moderate resistance to bacterial wilt (caused by Pseudomonas solenacearum F.E. Smith) and to the common species of the southern root-knot nematode [Meloidogyne incognita (Kofoid and White)]. When topped, the cultivar is about 105-cm tall and produces about 18 harvestable leaves per plant. The leaf type and remain on the stalk longer after ripening. They cure well with a predominately orange color. It has a strong root system and a medium sized stalk. PD 279 is adapted to the flue-cured tobacco growing region of the USA. Breeder seed will be maintained by the Pee Dee Research and Education Center and foundation seed will be distributed by the South Carolina Foundation Seed Producers, P. O. Box 309, Greenwood, SC 29649. Seed Producers, P. O. Box 309, Greenwood, FL 32611. Enquiries concerning the availability of foundation seed should be addressed to the Florida Foundation Seed Producers, P. O. Box 309, Greenwood, FL 32611.

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References and Notes


2. Professor, Agronomy Dep., Univ. of Florida, Gainesville, Fl. 32611. Contribution of the Florida Agricultural Experiment Station to produce foundation seed. Certified seed will be produced from foundation seed. University of Florida, Agronomy Department, Gainesville, FL 32611. Enquiries concerning the availability of foundation seed should be addressed to the Florida Foundation Seed Producers, P. O. Box 309, Greenwood, SC 29631.