Registration of ‘Clemson 201’
Soft Red Winter Wheat

‘Clemson 201’ soft red winter wheat (Triticum aestivum L.) (Reg. no. CV-818, Pl 585044) was developed by the South Carolina Agricultural Experiment Station and released in 1994. It is an increase of an F6 headrow selected from the cross Triticum sphaerococcum/8 Chancelor, CI 15887//Coker 78-27. The cross was made in 1979 and segregating populations were advanced by the pedigree method. CI 15887 possesses resistance to powdery mildew [caused by Erysiphe graminis DC. f. sp. tritici Em. Marchal; syn. Blumeria graminis (DC.) E.O. Speer] from Triticum sphaerococcum. Coker 78-27 is an unreleased breeding line with resistance to leaf rust (caused by Puccinia graminis Pers.:Pers.).

Clemson 201 was evaluated prior to release as SC850559. It was an entry in the Uniform Southern Soft Red Winter Wheat Nursery from 1990 through 1992.

Clemson 201 is moderately winter hardy and the same maturity as ‘Coker 916’. Plant height is about 0.8 cm taller than Coker 916. At maturity, stems are moderately stiff and white. Spikes are apically awnletted, middense, fusiform, and inclined. Tip awns are white and range from 9 to 20 mm in length averaging approximately 12 mm. Glumes are glabrous, midwide, and midlong to long, with smooth veins. Shoulders are narrow and wanting. Beaks are wide and obtuse. Kernels are red, midlong, and ovate; brush is midsized, midlong, and collared; crease is midwide and middeep; cheeks are rounded.

In South Carolina, Clemson 201 is moderately resistant to leaf rust and powdery mildew. It is listed by the USDA Cereal Rust Laboratory as having Lr9 and other, unidentified genes. It is susceptible to Biotypes E, L, B, and GP of the Hessian fly [Mayetiola destructor (Say)] as determined by the University of Illinois.

Clemson 201 demonstrated a 8% yield advantage to Coker 916 in South Carolina from 1990 through 1993. It was 8% greater than ‘Florida 302’ in the Testing period. Soft milling and baking qualities are similar to ‘Saluda’, with slightly higher than Florida 302 in the testing period. Milling and baking quality of IL 84-4046 was found to be acceptable.


IL 84-4046 has white coleoptiles, white auricles, and yellow anthers. Heads of IL 84-4046 are awnless, they remain erect at maturity. Glumes of IL 84-4046 are white, with a narrow shoulder and oblique shape; midlong to midmidwide, and medium short. Kernels of IL 84-4046 are smooth, with a narrow, shallow crease and a slight chevron.

IL 84-4046 is moderately resistant to wheat yellow mosaic virus and barley yellow dwarf virus. It is moderately susceptible to leaf rust (caused by Puccinia graminis Pers.:Pers.), moderately susceptible to stem rust (caused by Puccinia graminis DC. f. sp. tritici Em. Marchal). IL 84-4046 is susceptible to Biotypes L, B, and GP of the Hessian fly [Mayetiola destructor (Say)] as determined by the USDA-ARS at the Purdue University. Clemson 201 is resistant to leaf mildew (caused by Erysiphe graminis DC. f. sp. tritici Em. Marchal; syn. Erysiphe graminis DC. f. sp. tritici E.O. Speer) as determined by the USDA-ARS at the Purdue University.

Clemson 201 is adapted to North and South Carolina, Georgia, and Ohio. It has better than ‘HowelF and similar to, or slightly inferior to, ‘Cardinal’. Milling and baking quality of IL 84-4046 was found to be acceptable.

Breeder seed will be distributed by the South Carolina Foundation Seed Association, Clemson, SC 29634. Variety protection under the Variety Protection Act is not contemplated for Clemson 201.

References and Notes