average seasonal dry matter yield for AU Robin was 3935 kg ha\(^{-1}\), vs. 3861 kg ha\(^{-1}\) for Tibbee. The difference is statistically nonsignificant. However, AU Robin’s yield distribution is earlier than Tibbee’s. In Alabama, the major dry matter accumulation of AU Robin occurs in March, vs. April for Tibbee. In seed yield trials in Alabama (3 trials) and South Carolina (1 trial), AU Robin yielded 418 kg ha\(^{-1}\), Dixie 422 kg ha\(^{-1}\), and Tibbee 381 kg ha\(^{-1}\). These differences are statistically nonsignificant. Sorghum [Sorghum bicolor (L.) Moench] grain yields following AU Robin were equivalent to sorghum yields following Tibbee, or winter-fallowed plots receiving 130 kg ha\(^{-1}\) N fertilizer. AU Robin is expected to be adapted to the entire southeastern USA. It is suited for use as an early grazing source by livestock, and is well suited for use in double-cropping systems. The earlier maturity of AU Robin will allow more timely seeding of double-cropped species such as sorghum, corn (Zea mays L.), or cotton (Gossypium spp.).

Breeder seed of AU Robin is produced and maintained by the Alabama Agricultural Experimental Station, Auburn, University. Foundation seed will be produced under the direction of the Alabama Crop Improvement Association. Certified seed of AU Robin will be produced on an exclusive basis by Smith Seed Service under direction of the Alabama Crop Improvement Association. Foundation seed will be authorized. Foundation seed will be available from USDA-SCS, Plant Materials Center, Bismarck, ND 58502. Breeder seed of AU Robin is produced and maintained by USDA-ARS, Northern Great Plains Research Laboratory, Mandan, ND 58554.

REGISTRATION OF ‘RELIANT’ INTERMEDIATE WHEATGRASS

‘RELIANT’ intermediate wheatgrass [Thinopyrum intermedium (Host) Barkw. & Dewey subsp. intermedium] (Reg. no. CV-20, PI 556987) was tested as Mandan 11813 and released 20 Mar. 1991 by the USDA-ARS in cooperation with the USDA-SCS and the North Dakota Agricultural Experiment Station.

Reliant, a six-clone synthetic, traces to a source population of 2500 individually spaced plants. The source population was derived by intermating plants from 24 different intermediate wheatgrass cultivars and experimental strains and bulking equal quantities of seed from each parent plant. Eighty-one clones were selected from this source population based on visual observations of plant vigor, heading date, and resistance to leaf-spot disease caused primarily by Cochliobolus sativus (Ito & Kuribayashi) Drechs. ex Dastur. These 81 clones were then evaluated for 3 yr using replicated clonal tests and half-sib progeny tests to select for resistance to leaf-spot and root-rot diseases (C. sativus), spring recovery, heading date, laboratory measurements of nutritive quality, lodging resistance, and dry matter and seeds yields. Six of the 81 clones were selected as parents for Reliant.

Reliant has had high hay yields relative to other intermediate wheatgrass cultivars, particularly in tests where lodging resistance is a concern. Heading date, heading percent, and anthesis dates averaged 2 and 4 d later, respectively, for Reliant than for Oahe and Chief. Reliant had higher levels of resistance to leaf-spot disease caused by Cochliobolus sativus than other current intermediate wheatgrass cultivars under low to moderate levels of natural infection.

Reliant is recommended in mixtures with Medicago sativa L.) for hay in regions of the Northern Great Plains where annual precipitation averages >350 mm. Although no grazing data are available, persistence of Reliant under grazing is expected to be as good or better than other current intermediate wheatgrass cultivars and to sustain productivity of Reliant under hay management.

Breeder seed of Reliant intermediate wheatgrass will be maintained by USDA-ARS, Northern Great Plains Research Laboratory, Mandan, ND 58554. Breeder seed is maintained on an exclusive basis by Smith Seed Service. Foundation seed will be produced under the direction of the Alabama Crop Improvement Association. Foundation seed will be produced and distributed by USDA-SCS, Plant Materials Center, Bismarck, ND 58502. Foundation seed will be available from USDA-SCS, Plant Materials Center, Bismarck, ND 58502.

References and Notes

2. E. van Santen and J.T. Touchton, Agronomy J., 85(2, 1993). The highest seed yields. At Mandan, ND, in vitro di-
3. sorghum, corn (Zea mays L.), or cotton (Gossypium spp.).