ducted by major domestic cigarette manufacturers as part of the Regional Burley Variety Test.

Breeder's seed of TN 86 will be maintained and distributed by the University of Tennessee Tobacco Exp. Stn., Route 5 Box 113, Greeneville, TN 37743.

R. D. MILLER (3)

REGISTRATION OF 'NELSON' WHEAT

'NELSON', (Reg. no. 716) CI 17770, is a soft red winter wheat (*Triticum aestivum* L.) developed by the Arkansas Agric. Exp. Stn. and released in 1982. Nelson originated from the cross made in 1969 of 'Arthur'/‘Georgia 1123' (1,2). Progeny were grown as bulks at Fayetteville, AR, in the F1 to F4 generations. A single plant was selected in the F4 with reselections made in the F10. In F11, 32 increase strips from these 216 single plant selections were bulked to produce breeder seed.

Nelson was tested as AR 150-31 in the Uniform Eastern and Uniform Southern Soft Red Winter Wheat Nurseries from 1979 to 1980 and in the Arkansas yield trials from 1978 to 1982. In state-wide yield trials from 1978 to 1984, Nelson outyielded ‘Doublecrop’ by 14%. Under Arkansas conditions, Nelson usually matures 2 to 3 days later than Doublecrop and is about 1 cm taller.

Nelson closely resembles Doublecrop in appearance. Leaves are noticeably long and narrow; leaf color is lighter green than that of ‘Rosen’. Spikes are mid-dense, tan in color, awnletted with frequent tip awns, longer than those of Doublecrop and less tapering than those of Rosen. There is some variation in plant height and maturity with 0.4% or less tall or late. Rarely are spikes bronze (0.1% or less) or awned (0.1% or less). Under some conditions a few of the stems may become purple just prior to maturity. Glumes are mid-wide and mid-long, shoulders square to oblique, with shorter and less acute beaks than those of Rosen. Kernels are red and oval with a mid-deep crease and a small short brush. Milling and baking quality has been shown to be good although not as high as that of Rosen based on tests by the USDA-ARS Soft Wheat Quality Laboratory, Wooster, OH.

Nelson has winterhardiness similar to ‘Rosen’. Under Arkansas conditions it has shown good resistance to prevailing races of leaf rust (*Puccinia recondita*  Rob. ex Desm. *f. sp. tritici*) and moderate resistance to septoria tritici blotch (*Mycosphaerella graminicola* (Fuckel) Schroeter) and septoria nodorum blotch (*Leptosphaeria nodorum* E. Muller). It is moderately susceptible to powdery mildew (*Erysiphe graminis* DC. *f. sp. tritici* E. Marchal).

Nelson was released primarily for its high yield potential and resistance to leaf rust. Nelson was named in honor of the late Dr. Martin Nelson, the first agronomist at the University of Arkansas to work with small grains, who later served as Agronomy Department Head and Director of the Agricultural Experiment Station. Variety protection under the Plant Variety Protection Act is not anticipated. Breeder and foundation seed of Nelson are maintained by the Arkansas Agric. Exp. Stn., Fayetteville, AR 72701.

R. K. BACON, F. C. COLLINS, AND J. P. JONES (3)

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References and Notes

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