REGISTRATION OF CENTURA WHEAT

‘CENTURA’ WHEAT (Tritium aestivum L.) (Reg. no. 694), PI 476974, is a hard red winter wheat originating from an F1-derived line from the 1971 cross ‘Warrior’*5/‘Agent’//NE68457/3/‘Centurk 78’. Warrior*5/Agent is CO68FP6655. NE68457 is ‘Ponca’/2*Cheyenne/3/(Illinois No. 1/‘Chinese’*2/‘Triticum timopheevi’) (Cheyenne/‘Tenaq’/‘Mediterranean’/‘Hope’//Sando 60. Centura was tested as NE77682 in Nebraska Outstate Trials from 1981 through 1983, in the Southern Regional Performance Nursery, 1981-1983, and in the 1983 Northern Regional Performance Nursery.

Centura is a moderately early-maturing cultivar averaging about one day later in flowering than ‘Scout 66’, and has averaged about 7 cm shorter in plant height. It is similar to Centurk 78 in winterhardiness, lodges less, and is more productive in grain yield.

Spikes of Centura are awned, white, middense, and tapering to clavate or squareheaded. The degree and incidence of the tendency toward squareheadedness varies with environment. The spike, which is usually erect at maturity, is shorter, but wider than that of Scout 66. Awns are white and similar in length to those of Scout 66. Beaks are acuminate and short, but slightly longer than those of Scout 66. Glumes are glabrous, long, and medium in width. Shoulders are narrow and square to rounded. Kernels are red, hard, and elliptical with a medium-sized germ, and a brush of medium length without a collar. Cheeks are rounded and the crease is narrow and shallow. Kernels are similar to those of Scout 66 in size and weight. Test weights of Centura and Scout 66 are similar.

Grain of Centura has satisfactory hard wheat milling properties. Flour of Centura is similar to that of Centurk 78 in its bread-baking characteristics such as dough mixing time (strong), mixing tolerance and loaf volume potential.

In field tests, Centura has been moderately resistant to leaf rust (incited by Puccinia recondita Rob. ex Desm. f. sp. tritici Eriks.) and stem rust (incited by Puccinia graminis Pers. f. sp. tritici Eriks. and E. Henn.). It has been intermediate in field reaction to powdery mildew (incited by Erysiphe graminis DC. f. sp. tritici E. Marchal.) and to soilborne mosaic and wheat streak mosaic viruses. It has been intermediate to susceptible in reaction to the Great Plains Hessian fly biotype [Mayetiola destructor (Say)].

Centura was named and released jointly by the Nebraska Agric. Exp. Stn. and the USDA-ARS in 1983. Protection is being requested under the Plant Variety Protection Act, Public Law 91-577 with the certified seed option. Seed classes recognized are breeder, foundation, registered, and certified. Breeder seed will be maintained by the Nebraska Agric. Exp. Stn., Lincoln, NE 68583.

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References and Notes
1. George Holmes professor, Dep. of Agronomy, Univ. of Nebraska-Lincoln; leader, wheat research, USDA-ARS; professor, Dep. of Agronomy, Univ. of Nebraska-Lincoln, Lincoln, NE 68583; research plant pathologist, USDA-ARS, St. Paul, MN 55108; and research entomologist, USDA-ARS, Manhattan, KS 66506. Cooperative investigations of the Nebraska Agric. Exp. Stn. and USDA-ARS and supported in part by a grant from the Nebraska Wheat Development, Utilization, and Marketing Board. Published as Paper No. 7491, Journal Series, Nebraska Agric. Exp. Stn. Registration by Crop Sci. Soc. of Am. Accepted 5 Nov. 1984.

REGISTRATION OF COLT WHEAT

‘COLT’ WHEAT (Triticum aestivum L.) (Reg. no. 695), PI 476975, is a hard red winter wheat originating as an F1-derived line from the 1972 cross of ‘Agate’ Sib (NE69441) with Tx65A1503-1, a semidwarf line selected from 391-56-D8/‘Kaw’. Colt was developed cooperatively by the Nebraska Agric. Exp. Stn. and the USDA-ARS. It was tested as NE78696 in the Nebraska Outstate Yield Trials from 1981 through 1983, in the 1982 and 1983 Northern Regional Performance Nursery, and in the Southern Regional Performance Nursery in 1983.

Colt is midseason in maturity, averaging about 2 days later in flowering than ‘Scout 66’. Colt has averaged about 20 cm shorter in height than Scout 66 and has the shorter coleoptile associated with a reduced-height gene. Colt has significantly greater lodging resistance than Scout 66. It is similar to Scout 66 in winterhardiness and more productive in grain yield.