Severn is an early maturing cultivar, equivalent to Arthur and about 5 to 6 days earlier than ‘Potomac’ in Maryland. Severn is medium in height (102 cm) and straw strength. The spike is apically awnless and relatively short (7.7 cm, range 5.6 to 9.1 cm) and erect. Glumes are generally white with a small percentage (4%) of brown chaff types. The kernels are medium-size, soft, and ovate. Winter survival in the Middle Atlantic region is excellent.

Yield performance from 24 tests conducted from 1976 to 1981 in Maryland shows Severn to average 458 and 141 kg/ha more than Arthur and Potomac, respectively. In the Uniform Southern Soft Red Winter Wheat Nursery, Severn has yielded 202 kg/ha greater than ‘Arthur 71’ in a total of 54 environments in 2 years of testing (1979-1980).

The grain of Severn is consistently excellent in test weight (76.1 kg/ha), and comparable to that of Arthur. Additionally Severn has exhibited outstanding soft wheat baking and milling quality characteristics in tests conducted at the USDA-ARS Soft Wheat Quality Laboratory in Wooster, Ohio. The laboratory observed that Severn has unusually high flour yield, averaging over 78% straight-grade flour yield over 2 years (1979-1980) of testing of composite samples from locations throughout the southeastern USA.

Severn is moderately resistant to powdery mildew (caused by Erysiphe graminis D.C. f. sp. tritici em. Marchal). It is also resistant to stem rust (caused by Puccinia graminis Pers.). Severn is susceptible to leaf rust (caused by Puccinia recondita Rob. ex. Desm.).

The Maryland Agric. Exp. Stn., College Park, MD 20742, will maintain breeder seed of Severn. Foundation seed was distributed to registered seed producers in 1981 by the Maryland Crop Improvement Assoc.

REGISTRATION OF ROSE WHEAT†
(Reg. No. 662)
D. G. Wells, J. J. Bonnemann, W. S. Gardner, K. F. Finney, H. A. Geise, and C. E. Stymiest†

‘Rose’ wheat, Triticum aestivum L., CI17795, is a hard red winter cultivar developed by the South Dakota Agricultural Experiment Station.

Rose was derived from the cross ‘Seu Seun’/‘Denton 8’// ‘Westmont’//‘Hume’/‘NE635265 (‘Seu Seun 27’// ‘Oro’// ‘Minhardi’//‘Hope’// ‘Red Chief’// ‘Pawnee’// ‘Cheyenne’). During testing, Rose was designated SD7279. The cross to Hume was made in 1968.

The winter survival of Rose has usually been as good or better than that of ‘Winoka’ but not as good as ‘Roughrider’ and ‘Froid’. Rose is harder than ‘Centurk’ and the ‘Scout’ types which may make it popular in parts of the northern Great Plains where insufficient hardness is a problem.

Rose shows about 2 days earlier than Roughrider but sometimes ripens later. It is 8 to 11 cm shorter in height than Roughrider. Rose has good lodging resistance. It is similar in height to Centurk or shorter. Spikes are awned, mid-long, mid-dense, fusiform, and nearly erect. Glumes are brown, glabrous, mid-long, and mid-wide, and mid-long with round to elevated shoulders with narrow beaks 7 to 17 mm long. Kernels are hard, red, mid-long ovate; the germ is mid-sized; cheeks are wide and angular; the crease is mid-wide; the brush is mid-sized and mid-long. The test weight of Rose is equal to that of Centurk and the Scout types.

Rose resists the prevalent races of the stem rust organism (Puccinia graminis Pers. f. sp. tritici Ericks. and E. Henn.). It is moderately resistant to prevalent races of the leaf rust organism (Puccinia recondita Rob. ex. Desm. f. sp. tritici). It is susceptible to wheat streak mosaic and to Hessian fly (Mayetiola destructor Say.).

Millling and breadmaking properties of Rose are very good. It has medium-strong physical dough properties that include a medium-long bake mixing time and very good mixing tolerance. Rose has greater loaf volume, stronger physical dough properties, and better overall functional properties than those of ‘Scout 66’.

In the main area for winter wheat production in South Dakota, Rose averaged 67, 202 and 404 kg/ha more than Scout 66, ‘Centurk 78’ and Roughrider respectively in 3 years of testing. At Brookings those advantages were 674, 606, and 943 kg/ha, respectively over the past 2 years. In the Northern Regional Performance Nurseries, Rose ranked 1st in 1978, 5th in 1979, and 14th in 1980.

Rose was named and released by the South Dakota Agric. Exp. Stn. in 1981. Breeder seed will be maintained by the Foundation Seed Stocks Division, South Dakota State Univ., Brookings, SD 57007. Rose is not being patented.

REGISTRATION OF LEADER WHEAT
(Reg. No. 663)
R.M. De Pauw, D.S. McBean, T.F. Townley-Smith, J.M. Clarke, T.N. McCaig, and S.R. Buzinski†

‘Leader’ hard red spring wheat (Triticum aestivum L.) was developed at the Research Station, Agriculture Canada, Swift Current, Saskatchewan. It received license number 2085 in Canada in March 1981.

Leader was selected from a cross between the cultivar ‘Foitone’, which has resistance to the wheat stem sawfly (Cephus cinctus Nort.), and the cultivar ‘Chris’, which has a long seed dormancy period. Leader was developed using the pedigree breeding method, tested as selection number 6903-57, and evaluated in the Western Bread Wheat Co-operative Tests as BW 535. Breeder seed was produced by bulkling the progeny from 311 uniform plant rows.

Leader is the first cultivar developed which combines resistance to cutting by the wheat stem sawfly with a long seed dormancy period. Leader has better resistance to damage by wet weather conditions prior to threshing than all other Canadian wheat cultivars except ‘Columbus’ (De Pauw et al. 1982).

In the drier prairie area where the wheat stem sawfly is likely to be a serious pest of wheat, Leader averages 5% higher yield than ‘Neepawa’ and 2% more than ‘Chester’ (De Pauw et al. 1982). In the moister parts of the prairies, Leader has no yield advantage over Neepawa.

†Registered by the Crop Science Society America Accepted 17 June 1982.
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