Registration of ‘Bobcat’ Triticale

‘Bobcat’ (Reg. no. CV-17, PI 608011) is a winter triticale (*Triticosecale Wittmack*), released in 1999 by the Field Crop Development Centre, Alberta Agriculture Food and Rural Development, Lacombe, Alberta, Canada (Canadian Reg. no. 4945). Bobcat was derived from the cross 7631-ED4B//RL4137//7431A-68E4/3/Panther ‘S’//87ED01. The first cross was made in 1983 in Lacombe, Alberta. 7631-ED4B is a sprouting tolerant (1) triticale line introduced from the Agriculture & Agri-Food Canada at Swift Current, Saskatchewan, Canada. RL4137 is an apically awnletted spring wheat intro-duced from Agriculture & Agri-Food Canada, Winnipeg, Manitoba, Canada. The F1 was topcrossed in 1984 to 7431A-68E4, a sprouting tolerant triticale line developed at Swift Current. The F2 of the topcross was subsequently crossed with Panther ‘S’, a triticale line with sprouting tolerance that was developed by the International Maize and Wheat Improvement Center (CIMMYT), Mexico. A short awnletted F3 selection from the spring population was crossed with the winter hardy germplasm triticale line 87DE01 in 1988. Bobcat was tested as 88DL01076 which was selected from F3 headrows in 1991. Bobcat was evaluated in winter hardiness nurseries for yield and agronomic performance in the Western Canadian trials from 1994 to 1998. Breeder seed of Bobcat was derived from a bulk of 60 F3 lines.

Bobcat is awnletted, short stature, with semi-erect growth habit. Bobcat has good winter hardiness similar to ‘Pika’ (2). Leaves are medium green, medium wide, and medium long with glabrous sheaths and blades. The flag leaf is erect, medium green, medium wide and medium long. Spikes are tapering, medium dense, erect, medium long, and waxy with very fine short awnlettes. Glumes are yellow at maturity, medium wide and medium long. Glume shoulders are oblique. The beak is short with an acute tip. Kernels are light red, medium wide and medium long. Glume shoulders are oblique. The brush is midlong. Cheeks vary from angular to round shape; the crease is mid-wide and middeep. In 13 location-years, in the Canadian prairies, Bobcat yielded 7049 kg ha⁻¹, 110% of the winter triticale check, Pika, and 113% of the winter wheat Norstar. In the same test, in 12 location-years, the test weight of Bobcat was 66 kg hl⁻¹ compared to 67 kg hl⁻¹ for Pika and 78 kg hl⁻¹ for Norstar. The average height of Bobcat was 102 cm, 20 cm shorter than Pika and 2 cm shorter than Norstar. Maturity of Bobcat is 228 d, similar to Pika and 3 d later than Norstar. Bobcat has excellent lodging resistance comparable to Pika and Norstar. Protein content of Bobcat is similar to Pika. It is intended as a feed grain and for livestock market.

Under field conditions, Bobcat is resistant to stem rust (caused by *Puccinia graminis* Pers.:Pers. f. sp. tritici Eriks. & E. Henn.), and leaf rust (caused by *Puccinia recondita* Robere ex Desmaz. f. sp. tritici). Bobcat is best adapted to the Parkland area of the Canadian prairies where it has a good winter survival. Bobcat has very short awnlettes which may make it more suitable for greenfeed production. This cultivar is also easy threshing.

Breeder seed of Bobcat will be maintained by the Field Crop Development Centre. Distribution rights were granted to Progressive Seeds, Ltd., 155-4752 Ross St., Red Deer, AB, T4N 1X2 Canada.

References and Notes

3. Alberta Agriculture, Field Crop Development Ctr., 5030-50 St., Lacombe, AB, T4J 1W8 Canada. The technical assistance of Dave Dyson, Michael Oro, Sandra Spence, and William Stewart is gratefully acknowledged. Registration by CSSA. Accepted 31 Dec. 1999. *Corresponding author (corz2@agric.gov.ab.ca).

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Registration of ‘Sandy’ Oat

‘Sandy’ Oat (Avena sativa L.) (Reg. no. CV-360, PI 501524) is a spring oat developed by the South Dakota Agricultural Experiment Station. It was tested experimentally as SD 790188 and was released in March 1986.

Sandy was derived from a ‘Dal’//‘Nodaway 70’//‘Moore’ cross made in the greenhouse in 1976. It traces to an F2 line derived from an F1 plant. Bulk seed was used for testing and was increased without further purification or selection. Sandy was selected primarily for good disease resistance which it combined with high grain yields and good grain quality having high test weight and good milling yields.

Replicated yield evaluations of Sandy were begun in 1982. sandy was tested statewide and in the Uniform Midseason Oat Performance Nursery in 1984 and 1985. Sandy averaged 3725 kg ha⁻¹ in 11 sites in regional and state tests over eastern South Dakota in 1984–1985. This compares with 3450 kg ha⁻¹ for ‘Wright’ and 3723 kg ha⁻¹ for Moore.

Sandy had good field resistance to crown rust (caused by *Puccinia coronata* Corda. var. *avenae* W.P. Fraser & Ledingham) at the time of release, with field resistance similar to Dal. Seedling tests for crown rust showed Sandy to be susceptible to races 264 A and B. Sandy was rated as having a trace of crown rust at Brookings, SD, in 1984. In this same trial, Wright, Moore, and ‘Porter’ were rated 5, 14, and 50, respectively, by the Cobb scale. Sandy is susceptible to barley yellow dwarf virus. Loose smut (caused by *Ustilago avenae* (Pers.) Rostr.) resistance for Sandy is good with a rating of resistant to moderately resistant.

Sandy is tall and has very good straw strength. Height is often 5 to 10 cm taller than Moore, but lodging is less than Moore. Some shorter plants are present. Sandy heads 1 d later than Moore and 2 d later than Wright. Panicles are large, equilateral, and have spreading branches. Panicles having some kernels with awns are common. Most of the awns are small, but some are midsized. The base of some awns is dark.

Grain of Sandy has high test weight, good milling yields, and a light cream color. The kernels are predominately fluorescent under ultraviolet light, but Breeder seed contained about 0.15% nonfluorescent variants. These nonfluorescent kernels are usually yellow in color. Milling yields are excellent. Test weights are good, averaging 474 kg m⁻³ for Sandy, compared to 462, 444, and 551 kg m⁻³ for Moore, ‘Ogle’, and ‘Hytest’, respectively over 23 location-years in 1984 and 1985 in South Dakota. Groat protein and oil are in the medium range averaging 15.6 and 7.4% for Sandy in 1984–1985 in eastern South Dakota. This compared with 15.9% protein for Moore and 14.7% protein for Sandy.