REGISTRATION OF CROP CULTIVARS

REGISTRATION OF 'WAPITI' TRITICALE

‘WAPITI’ triticale (X Triticosecale Wittmack) (Reg. no. 6), PI 511870, was developed by Alberta Agriculture Crop Research, Lacombe, Alberta, Canada. Wapiti was selected in 1980 from the International Maize and Wheat Improvement Center (CIMMYT) line ‘Juanillo 90’ in the 11th International Triticale Screening Nursery. The selection was evaluated for 2 yr in preliminary yield trials (1981-1982) prior to 3 yr (1983-1985) of testing as T44 in national cooperative trials. Two hundred F2 headrows were grown and rogued to eliminate off-type material.

Wapiti is a hexaploid spring triticale similar in plant height, maturity, sprouting susceptibility, and lodging resistance to the triticale cultivar Carman. Wapiti demonstrates an improvement in seed yield of 69.0 kg ha\(^{-1}\) (14%) and test weight (2.0 kg hl\(^{-1}\)) relative to Carman, but has 1% lower protein.

Wapiti produces silage yields that are 8% higher than Carman and 4% higher than the barley cultivar Johnston. Comparisons for energy, protein, total digestible nutrients, lignin, and trace minerals indicate that the quality of Wapiti silage is similar to that of Johnston barley.

Wapiti has good resistance to leaf rust (caused by Puccinia recondita f. sp. tritici), stem rust (caused by Puccinia graminis f. sp. tritici), loose smut (caused by Ustilago tritici), and bunt (caused by Tilletia caries). Wapiti has good resistance to leaf blast (caused by Septoria tritici Rob.) and glume blotch (caused by Septoria nodorum Berk.).

Breeder seed will be maintained by the School of Agriculture, Alabama A & M University, Normal, AL 35762.

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References and Notes


REGISTRATION OF 'MARVAL' TRITICALE

‘MARVAL’, SD 9009 triticale (X Triticosecale Wittmack) (Reg. no. 7, PI 495869) was developed and released in 1986 by the South Dakota Agricultural Experiment Station, South Dakota State University, Brookings. It is an F2-derived head selection from a F2 bulk population (cross number X 27807) obtained from International Maize and Wheat Improvement Center (CIMMYT) in 1977. The pedigree is Goqui/4/Imperial Amber/Maya II-Armadillo/Phic 62/3/Beagle "S". The F2 was planted in the greenhouse, harvested in bulk, and grown as an F3 in the field at Brookings, SD. An individual head selection was advanced to a winter nursery in Mexico harvested and designated SD 9009. Head rows grown in the winter nursery in 1980 were harvested in bulk. SD 9009 was evaluated in South Dakota yield trials from 1981 to 1986. Marval is a hexaploid triticale cultivar with spring growth habit which has all seven pairs of rye chromosomes. The spikes are long, somewhat lax with white glumes, which are awnleted. Awns are 5 to 10 mm long at the base of the spike and 10 to 35 mm long at midspike. Marval’s awnleted spike is the primary distinguishing feature when compared to other triticale cultivars. Spike fertility is good, and frequency of ergot (caused by Claviceps purpurea) has been low. The glumes, lemma, and peduncle from the lowest spike internode for a distance of about 4 cm, are pubescent. Marval is mid-late maturing with a plant height of 105 cm when compared to ‘Marshall’ wheat at 76 cm, and ‘Krammer’ and ‘Karl’ triticales at 100 cm and 85 cm, respectively. Marval grain yield in South Dakota trials from 1984 through 1986 was 3090 kg ha\(^{-1}\) compared to 2870 and 2930 kg ha\(^{-1}\) for Karl and Krammer, respectively. Test weights in South Dakota trials were 62.7, 64.5, and 60.9 kg hl\(^{-1}\) for Marval, Karl, and Krammer, respectively. The grain yield for an average of ‘Butte’ and ‘Era’ wheat checks was 2930 kg ha\(^{-1}\). Grain protein content has been similar to medium level wheats, averaging 14.5%. In six forage trials Marval yielded 6730 kg ha\(^{-1}\) compared to 7622 kg ha\(^{-1}\) for an average of four oat cultivars. Marval is resistant to prevalent races of stem (incited by Puccinia graminis f. sp. tritici Eriks and Henn.) and leaf rust (incited by Puccinia recondita Rob. ex Desm. f. sp. tritici Eriks).

Marval was named and released by the South Dakota Agricultural Experiment Station in 1986. Breeder seed will be maintained by the Foundation Seed Stocks Project, South Dakota State Univ., Brookings, SD, 57007.

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References and Notes


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