Registration of 'Maverick' Pinto Bean

'Maverick' pinto bean (Phaseolus vulgaris L.) (Reg. no. CV-142, PI 595894) was developed by the North Dakota Agric. Exp. Stn. and released in January 1996. Maverick, tested as 88-048-03, was derived from the cross PX-087/87-049-01. PX-087 was an F₆ selection from the cross 83-003/83B229. 83-003 was an F₄ line from the cross 'Fiesta'/Black Magic', selected for erect plant growth habit and pinto seed type; 83B229 is a germplasm release from the University of Idaho (1). 87-049-01 was an F₄ line derived from the cross CO81-12034/T295, advanced selections from Colorado State University and Michigan State University, respectively. Line 88-048-03 was selected from the F₂ generation grown at Hatton, ND, in 1989. The F₃ and F₄ generations were grown in Puerto Rico in 1989-1990 winter nurseries, with preliminary yield tests beginning in 1990 on F₂.₅ lines. F₄.₅ lines were grown simultaneously for selection purposes. 88-048-03 was further selected as a bulk of 100 F₅.₈ lines selected in 1993 for similar phenotype, with final selection occurring among 200 F₆.₉ lines for uniform seed characteristics and rust resistance.

Maverick was tested for 6 yr (1990-1995) in 29 environments in North Dakota and other bean growing regions of the USA as an entry in the Midwest Regional Performance Nursery (2). In these environments, the seed yield of Maverick was 13% higher than the commercial pinto bean 'Othello'. At 24 North Dakota environments from 1990 to 1995, Maverick yielded 14.5 and 17.6% more than Othello and 'Topaz', respectively. Yield data from 21 environments in North Dakota indicate that Maverick outyields Fiesta by 28%.

In North Dakota, Maverick is medium-early in maturity, with the same maturity as Othello (95 d). It is 3 d later than Topaz, and is well within the maturity range of other pinto cultivars grown in the northern Great Plains. Maverick has a semi-prostrate indeterminate architecture (Type IIIa), with pods well distributed throughout the plant profile. In this respect, Maverick is most similar to Topaz (Type IIIa), rather than Othello or Fiesta, both of which possess strict Type III architecture. When erect, plant height is similar to the erect Type IIb pinto bean 'Sierra'.

Maverick is homozygous dominant for the Ur₃ rust resistance gene, which confers resistance to prevalent races of bean rust [caused by Uromyces appendiculatus (Pers.:Pers.) Unger] in North Dakota, but is susceptible to bean common mosaic virus ( BCMV). Maverick is susceptible to infection by Sclerotinia sclerotiorum (Lib.) de Bary, the causal organism of white mold disease, and the plant response is similar to that of other commercially grown pinto bean cultivars.

The seed of Maverick has traditional pinto size, shape, and color. Seeds are moderately large, with a mean weight of 36.8 g 100 seed⁻¹ (vs. 36.3 g 100 seed⁻¹ for Topaz, 33.7 g 100 seed⁻¹ for Othello, and 38.3 g 100 seed⁻¹ for Fiesta). In canning tests at the North Dakota State University Bean Quality Lab, Maverick was rated as very good, with excellent appearance. Washed drained weights averaged 18.6 kg 100 g⁻¹ (vs. 18.3 kg 100 g⁻¹ for Topaz, and 17.9 kg 100 g⁻¹ for Fiesta). In canning tests at the North Dakota State University Bean Quality Lab, Maverick was rated as very good, with excellent appearance. Washed drained weights averaged 18.6 kg 100 g⁻¹ (vs. 18.3 kg 100 g⁻¹ for Topaz, and 17.9 kg 100 g⁻¹ for Fiesta). In canning tests at the North Dakota State University Bean Quality Lab, Maverick was rated as very good, with excellent appearance. Washed drained weights averaged 18.6 kg 100 g⁻¹ (vs. 18.3 kg 100 g⁻¹ for Topaz, and 17.9 kg 100 g⁻¹ for Fiesta).

Registration of 'Tatanka' Buffalograss

'Tatanka' buffalograss (Buchloe dactyloides var. galapagoensis (McKee) McVaugh, Reg. no. CV-190, PI 595095) was developed through a collaborative effort of the Native Turfgrass Group and the University of Nebraska. Tatanka was released in March 1995 by the University of Nebraska, Agricultural Research Division, Natural Resources, Agricultural Research Division, University of Nebraska. Tatanka was evaluated under the experimental designation NTDG-1.

Tatanka is a turf-type buffalograss with improved turfgrass quality, density, and leaf spot (caused by Helminthosporium spp.) resistance compared with other currently available seeded buffalograss cultivars when grown in central and northern portions of the USA. Tatanka exhibits dwarf character and reduced vertical growth rate and female flower development, making it well adapted to the northern Great Plains. Male plants developed from this crossing block were selected based on similar burs, reduced vertical growth rate and female flower development, and quality, density, and leaf spot resistance compared with other currently available seeded buffalograss cultivars when grown in central and northern portions of the USA. Tatanka exhibits dwarf character and reduced vertical growth rate and female flower development, making it well adapted to the northern Great Plains. Male plants developed from this crossing block were selected based on similar burs, reduced vertical growth rate and female flower development, and improved turfgrass quality, density, and leaf spot resistance compared with other currently available seeded buffalograss cultivars when grown in central and northern portions of the USA. Tatanka exhibits dwarf character and reduced vertical growth rate and female flower development, making it well adapted to the northern Great Plains. Male plants developed from this crossing block were selected based on similar burs, reduced vertical growth rate and female flower development, and improved turfgrass quality, density, and leaf spot resistance compared with other currently available seeded buffalograss cultivars when grown in central and northern portions of the USA. Tatanka exhibits dwarf character and reduced vertical growth rate and female flower development, making it well adapted to the northern Great Plains. Male plants developed from this crossing block were selected based on similar burs, reduced vertical growth rate and female flower development, and improved turfgrass quality, density, and leaf spot resistance compared with other currently available seeded buffalograss cultivars when grown in central and northern portions of the USA.