

WestBred Vanna

Origin and Breeding History

WestBred Vanna is a soft white Spring wheat selected by Western Plant Breeders from a male-sterile facilitated, recurrent selection population (MSFRSP). This soft white spring MSFRSP was developed by crossing Fielder, Fieldwin, and Twin onto male sterile plants in Western Plant Breeders' basic MSFRSP's in 1981 near Conrad, Montana. The F1 seed was planted near Phoenix, AZ in the fall of 1981. The F2 seed was harvested in early May of 1982 and space planted near Conrad in late May of 1982. Seed of selected spikes were bulked and space planted as an F3 bulk near Bozeman, MT in the spring of 1983. Several F3 plants were selected in the fall of 1983 and seed of plants producing white seed was planted in seven foot plots near Bozeman in the spring of 1984. One such F4 plot was harvested and given the experimental number BZ 684-23. The resultant F5 seed (and successive generations) was used for yield testing in Montana, Idaho, and Washington from 1985 to 1991.

Heads were selected from the F9 plots grown in 1989 and planted near Phoenix, AZ in the fall of 1989. Uniform F10 rows were harvested individually in May of 1990 and seed from each selected row was used to plant a plot near Bozeman in May of 1990. Uniform F11 plots were individually harvested in the fall of 1990 and seed of each plot was used to plant a separate strip near Bozeman in the spring of 1991. Uniform F12 strips were individually harvested. Equal portions of seed from each of the harvested strips was bulked and designated Breeders seed. This Breeders seed was used to plant a four acre field near Bozeman in the spring of 1992 for the purpose of producing seed of the Foundation and Registered class. The production from this field was harvested in September, 1992 and designated "WestBred Vanna".

WestBred Vanna is a stable and uniform variety is agronomic appearance and performance across several generations and growing conditions. Agronomic data to support this stability are presented in Tables 1 through 6.

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C. (2) Objective Description

WestBred Vanna is a semi-dwarf, white chaffed, soft white spring wheat. The leaves and stems of WestBred Vanna do not have a waxy bloom, but the leaf sheaths do have a waxy bloom and the auricles are purple and slightly hairy. The spikes are lax, awned, and strap shaped. The awns and glumes are white at maturity. The glumes are long, medium in width with a square shoulder, and the beak is acuminate. Seed of WestBred Vanna is mid-long, mid-wide, and ovate with rounded cheeks. The brush is long and not collared. The crease is narrow and shallow and the germ is medium in size. WestBred Vanna is similar in height and straw strength to Penawawa and has better grain quality than Penawawa. WestBred Vanna is resistant to the prevalent races of stripe rust and leaf rust in the Pacific Northwest and shows susceptibility to the Hessian fly in Northern Idaho.

A tall variant (approximately one head length taller than the norm) occurs in WestBred Vanna at the frequency of approximately 2 per 10,000 plants.

E. Area of Adaptation

WestBred Vanna is best adapted to the irrigated and high rainfall areas in the Pacific Northwest and Intermountain states.

G. Breeders seed will be produced by planting a bulk of uniform line rows. Line rows will be maintained by planting a portion of the original line rows and rouging these for off-types.