

WESTBRED MEDALLION



SIX ROW SPRING FEED BARLEY

WestBred Medallion is a high yielding barley, and has shown better yield stability than WestBred Gustoe over a period of 6 years which includes 26 yield locations.

AGRONOMIC DATA

YIELD POTENTIAL	:	Excellent
STRAW STRENGTH	:	Very Good
PLANT HEIGHT	:	Semi-Dwarf, 3-7 inches shorter than Steptoe
UNIFORMITY	:	Excellent
AWNS	:	Awed - Blue Aleurone
STRESS TOLERANCE	:	Very Good
TEST WEIGHT	:	Excellent

DISEASE TOLERANCE:

Leaf Rust---- Susceptible	Powdery Mildew----- Susceptible
Stem Rust--- Susceptible	Bacterial Leaf Blight--- Moderately Tolerant
Net Blotch-- Tolerant	Barley Yellow Dwarf--- Tolerant
Scald----- Tolerant	

RELATIVE MATURITY: 3-5 days later than Steptoe in the Intermountain States.

SHATTERING RESISTANCE: Excellent
THRESHABILITY: Good

MANAGEMENT GUIDELINES:

PLANTING DATE: Same as all Spring Barley varieties in any particular geographic area

PLANTING RATE: Dryland -- 80-100 lbs. per acre
Irrigated -- 100-135 lbs. per acre

FERTILITY: Maximum Barley yields are obtained when the major fertility requirements are supplied in the proper ratio. In general, 150 units of nitrogen should be present in the ground for irrigated production along with adequate phosphorus levels. The amount of P_2O_5 required should be determined through a soil test. The best ratio has been found to be approximately 2 units of nitrogen for each unit of available P_2O_5 . The addition of sulfur may increase yields and protein. The best ratio is 4: 1 in the soil and 8: 1 in the plant for nitrogen to sulfur. Nitrogen and sulfur can be applied through the irrigation water during the growing season. Dryland fertility requirements will be less and depend upon available moisture. Potassium Chloride has been shown to decrease root rot and increase straw strength in barley.

AREA OF ADAPTATION: Northwest and West Central United States: Washington, Montana, Oregon, Idaho, Wyoming, Utah and Colorado.

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APPLICATION FOR REVIEW OF SMALL GRAIN VARIETIES FOR CERTIFICATION

Montana Seed Growers Association

Applicants' Name Western Plant Breeders, Inc. Date Feb. 20, 1989

Address 8111 Timberline Drive, Bozeman, Montana 59715

Sponsoring Institution Western Plant Breeders, Inc.

Breeder's Name (if other than applicant) Dr. Dale R. Clark & Craig R. Cook

Variety Name Proposed "WestBred Medallion" Exp. Designation BFP-78-77

WESTBRED MEDALLION

Breeding history:

WestBred Medallion is a six-rowed, semi-dwarf, spring barley that was developed from the cross of Western Plant Breeders' variety "Gus" with a line designated "399". The line "399" was selected from the short strawed, six-rowed, male sterile population CCXXXII-76.

WestBred Medallion was selected as a single F2 plant at WPB's nursery near Phoenix, AZ in the spring of 1977. Seed from the F2 plant was planted to produce an F3 row near Conrad, MT in May of 1977. A single F3 plant was selected from the F3 row and seed from this plant was used to plant an F4 plot near Phoenix, AZ in the fall of 1977. Twenty spikes from the F4 plot were selected in the spring of 1978, designated the experimental number BFP-78-77, and planted near Conrad, MT in the spring of 1978. Seed from uniform F5 rows was bulked and put into yield tests in Arizona and California in 1979. Successive generations of BFP-78-77 were grown in Arizona and California in 1980 and 1981, and in Montana, Idaho, Washington, Oregon, and Northern California from 1982 through 1988. Approximately 100 spikes were selected from the F12 bulk in 1986 and planted as head rows near Bozeman, MT in the spring of 1987. Uniform head rows were harvested individually and seed from each row was used to plant a family of eight plots near Phoenix, AZ in the fall of 1987. Uniform plots were harvested and bulked to produce Breeders seed. The Breeders seed was harvested the first week of May, 1988. This seed was used to plant 5 acres near Bozeman, MT in May of 1988. The resulting production was harvested as Foundation seed and designated "WestBred Medallion".

WestBred Medallion is a stable and uniform variety in agronomic appearance and performance across several generations and growing conditions. Agronomic data to support this stability are presented in Tables 1 through 3.

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Description of variety:

WestBred Medallion (experimental # BFP-78-77) is a semi-dwarf, six-rowed, spring barley that is primarily intended for use in the irrigated areas of the Pacific Northwest. The spike of WestBred Medallion is strap shaped and erect (but not dense), with kernels overlapping at the tip. The spike is slightly coated with wax and the rachis edges are covered with short hair. The kernels of WestBred Medallion are short to mid-long, hulled, and have a blue aleurone. The shape of the base of the kernel is a depression. The rachilla is long with short hairs. The glume length is more than one-half the length of the lemma with rough glume awns that are equal to the length of the glume. The glume is completely covered with long hairs.

WestBred Medallion is about 3 to 7 inches taller than WestBred Gustoe, about 2 to 5 inches taller than WestBred 501, and 2 to 7 inches shorter than Steptoe. The heading date of WestBred Medallion is approximately equal to WestBred Gustoe, 3 days later than WestBred 501, and 5 to 7 days later than Steptoe.

Breeder's seed will be maintained by Western Plant Breeders, Inc. by seeding head rows as needed. The classes of seed shall be Breeder, Foundation, Registered, and Certified. Application will be made to the Plant Variety Protection Office with the "Certification Option" elected.