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SPRING WHEAT VARIETIES FOR SOUTHERN IDAHO

Soft White Spring Wheat

Soft, white spring wheat is the predominant class of wheat grown in irrigated areas along the Snake River in southern Idaho. It was planted on about 175,000 acres in 1973. Within the past 3 years, two new semi-dwarf varieties, Springfield and Twin, have essentially replaced Lemhi and Federation varieties in these areas. The new varieties are high-yielding, have short straw (about 36 inches), and are resistant to lodging. They are particularly well adapted to sprinkler irrigation.

Twin

Twin is a white-chaffed, awnless, semi-dwarf type with stiff straw. It is medium in maturity. It is resistant to the prevalent races of stripe and stem rust but is susceptible to leaf rust and powdery mildew. It is best adapted to irrigated lands in southern Idaho and irrigated or high-rainfall areas in surrounding states. Twin yields about 4 bushels per acre higher than Springfield and is slightly higher in yield than Fielder in 4 years of testing at Aberdeen and Twin Falls.

Springfield

Springfield is similar in appearance to Twin except that it has awnleted spikes. It is very resistant to the prevalent races of stripe rust and stem rust but is susceptible to leaf rust and mildew.

Fielder

Fielder is a soft, white, pastry-type wheat. It is a semi-dwarf, stiff-strawed, white-chaffed, awned selection with moderate resistance to leaf rust, resistance to the prevalent races of stripe rust, and moderate susceptibility to mildew. Twin and Fielder are about equal in yield. Fielder's major advantage is much better test weight per bushel with satisfactory pastry quality. It will probably replace Twin in some dryland and irrigated areas of the Pacific Northwest.

Hard Red Spring Wheat

Red spring wheat varieties have been developed that yield well under irrigation. When adequately fertilized with nitrogen, they will produce wheat at an acceptable protein level with milling and baking quality desired by the millers. Red spring wheat with acceptable protein levels usually commands premium prices. If you are considering growing red spring wheat, check with your local elevator regarding handling and marketing facilities. Red and white wheats must be kept separate because even small amounts of mixture may be discounted in price.

Red spring wheats do not yield as well as white wheats grown under irrigation in southern Idaho.

Borah

Borah is a semi-dwarf with moderately stiff straw. It averages about 3 inches shorter than Peak 72 and Fremont. It is intermediate in maturity, and has awned spikes and white glumes. It is very resistant to the prevalent Idaho races of leaf, stem, and stripe rust. Borah has had satisfactory test weight, milling yield, and baking quality. In 3-year averages for yield at two Idaho irrigated locations, Borah outyielded Peak 72 and Fremont by 6.1 and 4.5 bushels per acre, respectively. On dryland, it ranked second in yield to Bannock.

Summary of agronomic data obtained on hard red spring wheat varieties grown at Aberdeen, Twin Falls, and Tetonia, 1971-73.

Variety	Irrigated Nurseries						Tetonia-Dryland			
	Aberdeen		Yield		Avg.	Test Weight		Avg.	Yield	Test weight
	Date headed	Height	Aberdeen	Twin Falls		Aberdeen	Twin Falls			
	in.	bu./acre			lb./bu.		bu./A	lb./bu.		
Maxigene 1651	6/21	32	91.5	87.8	89.7	62.1	63.0	62.6	29.8	61.2
Peak	22	35	85.2	81.9	83.6	60.8	61.9	61.4	28.8	58.6
Peak 72	22	37	92.1	83.1	87.6	62.0	62.9	62.5	28.5	60.4
Borah	22	32	97.4	90.0	93.7	61.3	62.2	61.8	31.8	59.3
Fremont	22	35	92.3	86.1	89.2	60.6	61.3	61.0	30.7	59.2
Bannock	19	39	85.4	78.2	81.8	61.9	62.6	62.3	32.6	60.1
Twin (soft white)	26	36	121.2	98.4	109.8	58.3	57.6	58.0	31.9	58.2

Peak 72

Peak 72 is a hard, red, spring wheat adapted to irrigated high-production areas of southern Idaho. It averages 2 inches taller than Peak and has good, stiff straw. It is very resistant to the prevalent races of stripe and leaf rust found in Idaho.

Fremont

Fremont is a short, stiff-strawed, bearded, white-chaffed variety with unusually large heads. It was developed at Utah State University primarily for use under irrigation. Under these conditions and with high soil fertility, it has generally yielded as well or slightly better than Peak 72. Fremont is a bread-type wheat so will require special attention to soil fertility to retain suitable baking quality. Fremont has acceptable milling and

baking characteristics when grown under both irrigated and dryland conditions.

Bannock

Bannock has had the highest average yield of all recommended varieties tested on dryland in southern Idaho. It does not yield as well as Peak 72, Fremont, and Borah when grown under irrigation. Bannock is a moderately stiff-strawed, medium-height variety with good resistance to lodging and shattering. Bannock is awned, white-glumed, and early in maturity. It is moderately susceptible to the prevalent races of leaf and stripe rust found in Idaho.

Era, Shortana, Centana, Norana, and most recently released private varieties have been tested at Aberdeen and Twin Falls and have not yielded as well as Borah.

Wheat breeding programs at the University of Idaho Agricultural Experiment Station, Aberdeen, are conducted cooperatively by the Western Region, Agricultural Research Service, U.S. Department of Agriculture, and the Idaho Agricultural Experiment Station.

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