

Western Washington  
Hard Spring Wheat Variety Trial 2010

Hard red and hard white spring wheat varieties were planted at the WSU Mount Vernon Research Center on April 16, 2010. The nursery consisted of 6-row plots (7" spacing, 9 ft. harvest length), with three replicates of each variety. A 50:50 mixture of urea (46-0-0) and ESN (44-0-0), a slow-release urea from Agrium Technologies, was broadcast at a rate of 200 lbs N/acre on May 5, when the wheat was at the two-leaf stage. All other nutrients were brought to sufficient levels by preplant incorporation of granulated fertilizers based on a soil test. The herbicide Maestro (bromoxynil) was applied on May 15, but no fungicide was used. The grain was harvested on Aug. 24 and dried.

Several features of the trial are noteworthy. As a whole the nursery had low test weights, with no entry above 58 lbs/bu. Stripe rust disease pressure was high, with an average severity of 60%. There was a strong inverse correlation ( $r = -0.9$ ) between disease severity and yield, which highlights the potential for stripe rust to reduce wheat yields. For additional information, contact Steve Jones ([joness@wsu.edu](mailto:joness@wsu.edu)) or Steve Lyon ([slyon@wsu.edu](mailto:slyon@wsu.edu)).

Color	Name	Yield (bu/a)	Test Wt (lbs/bu)	Protein (%)	Heading Date <sup>1</sup>	Stripe Rust Severity <sup>2</sup>	Height (in)
White	WA8123	113	52.8	12.4	171	4	39
Red	WA8074	101	56.4	12.6	172	45	38
Red	BR7030	96	56.7	12.2	174	33	37
White	Patwin	95	52.6	14.0	181	8	33
Red	Lassik	93	53.8	11.7	174	4	33
White	WA8100	86	52.7	11.4	175	35	43
Red	Buck Pronto	81	57.4	14.2	170	13	39
Red	Winchester	81	54.3	12.8	173	53	38
White	Clear White	75	57.2	12.7	173	35	33
Red	Bullseye	71	50.5	12.4	175	55	33
Red	Scarlet	68	51.3	12.0	173	47	42
Red	Jefferson	65	56.1	12.1	173	45	40
Red	Hollis	58	44.9	13.5	175	53	47
White	WA8122	57	49.0	11.9	172	75	41
White	EM402	57	49.2	12.5	174	55	39
Red	WB-Fuzion	51	55.0	13.5			42
Red	Kelse	49	48.2	15.0	174	63	36
White	Macon	48	45.8	13.6	173	73	39
White	Otis	46	47.7	11.9	175	77	41
Red	Reliance	45	47.9	12.8	181	80	50
Red	Cadet	42	53.3	13.5	176	70	52
Red	Westbred 926	41	47.8	14.6	171	75	35
Red	OR4990114	41	45.7	13.9	172	80	36

Color	Name	Yield (bu/a)	Test Wt (lbs/bu)	Protein (%)	Heading Date <sup>1</sup>	Stripe Rust Severity <sup>2</sup>	Height (in)
Red	Tara 2002	33	41.5	14.9	170	90	39
Red	Canus	29		14.0	176	83	47
Red	Ruby	26		13.8	171	90	44
Red	IDO665	25		15.8	173	95	38
Red	IDO667	24		14.3	173	75	36
Red	Comet	22			177	95	37
Red	Hank	21			173	95	35
	Average	58	51.2	13.2	174	59	39
	CV (%)	10	2	2			
	LSD (p = 0.1)	8	1.5	0.4			

<sup>1</sup> Heading date is the number of days past January 1 when 50% of spikes were fully emerged.

<sup>2</sup> Stripe rust severity is the % necrosis observed on the top two leaves on July 2 (182 Julian days).

Note: The information in this document is provided for educational purposes only. Reference to commercial products or trade names does not imply an endorsement by Washington State University.