

## Western Washington State Hard Winter Wheat Variety Trial 2010

A hard winter wheat nursery was planted at the [WSU Mount Vernon Research Center](http://www.wsu.edu/~cruce/WSU_Mount_Vernon_Research_Center) on October 7, 2009, at a seeding rate of 110 lbs/ac. The nursery consisted of 6-row plots (7" spacing, 7 ft. harvest length), with three replicates for each variety. An application of sulfur-coated urea (39-0-0-14) was made on April 12, 2010, at a rate of 50 lbs N/acre. An additional 50 LBS/A of N was applied as urea on April 30, 2010 to boost protein. All other nutrients were deemed sufficient based on a soil test. Weeds were controlled by hand and fungicides were not used. The trial was harvested on August 19, 2010.

Stripe rust was severe in the nursery, greatly impacting susceptible varieties. The disease lowered the trial average yield and test weight.

For additional information, contact Steve Jones ([jones@wsu.edu](mailto:jones@wsu.edu)) or Steve Lyon ([slyon@wsu.edu](mailto:slyon@wsu.edu)). More resources on Western Washington small grain production are available at: <http://plantbreeding.wsu.edu>.

Name	Class <sup>1</sup>	Yield <sup>2</sup> (bu/a)	Test Wt <sup>3</sup> (lbs/bu)	Heading <sup>4</sup> (days)	Plant Ht (in)	Protein <sup>3</sup> (%)	Lodging (%)
<b>NORWEST 553</b>	HRW	<b>173.8</b>	61.3	140	32	11.6	0
<b>WA008119</b>	HRW	<b>159.2</b>	58.3	146	37	9.2	13
<b>WA008120</b>	HRW	<b>152.1</b>	58.8	146	35	9.9	32
OR2080229H	HDWH	134.4	58.4	146	40	9.5	38
OR2080156H	HDWH	128.8	58.9	140	37	10.8	0
ELTAN	SWH	110.0	51.5	150	38	10.7	63
BOUNDARY	HRW	109.6	59.6	146	36	11.0	13
WA008096	HDWH	101.5	52.4	150	35	10.6	23
WA008097	HDWH	100.3	53.9	150	37	10.2	40
ACS 52025	HRW	99.2	54.7	134	36	11.6	50
MDM	HDWH	95.7	53.2	153	36	10.2	50
WHETSTONE	HRW	91.7	57.9	134	35	12.5	15
WA008070	HRW	88.1	59.0	146	44	10.5	10
IDO651	HDWH	86.9	58.3	140	41	12.6	80
FARNUM	HRW	85.1	56.7	157	43	10.4	78
WA008121	HRW	82.6	57.7	129	36	12.3	75
WA008118	HRW	82.5	58.2	129	37	11.6	77
BAUERMEISTER	HRW	79.7	54.0	146	36	10.2	77
ESPERIA	HRW	77.7	57.3	129	26	12.9	0
BAU-RT1	HRW	76.9	55.9	150	35	10.5	78
IDO658	HDWH	71.8	54.0	146	37	11.8	65
PEREGRINE	HRW	71.5	53.5	146	43	11.5	30
FINLEY	HRW	68.0	-	146	40	-	20
WA008095	HRW	68.0	-	146	42	-	62
IDO683	HRW	64.0	-	140	40	-	90
DECLO	HRW	53.1	-	146	36	-	0
EDDY	HRW	49.8	-	134	37	-	0
ACCIPITER	HRW	48.6	-	146	38	-	0

AGRIPRO							
PALADIN	HRW	26.8	-	134	29	-	0
HATTON	HRW	22.2	-	157	35	-	27
	<b>C.V. %</b>	<b>26.4</b>	<b>2.3</b>	-	-	<b>5.3</b>	-
	<b>Average</b>	<b>86.6</b>	<b>56.5</b>	<b>143.4</b>	<b>37.0</b>	<b>11.0</b>	<b>36.9</b>
	<b>Highest</b>	<b>173.8</b>	<b>61.3</b>	<b>157.0</b>	<b>44.0</b>	<b>12.9</b>	<b>90.0</b>
	<b>Lowest</b>	<b>22.2</b>	<b>51.5</b>	<b>129.0</b>	<b>26.0</b>	<b>9.2</b>	<b>0.0</b>

1. Class definitions: (1) HRW = Hard Red, (2) HDWH = Hard White.
2. Fisher's LSD at  $p = 0.1$  is 32.9 bu/a. Yield values within the LSD range of the highest yield are shown in bold and included 3 cultivars. Grain moisture was 12-13% at the time of measurement.
3. Test weight and protein were not measured on varieties yielding below 70 bu/a.
4. Number of days after January 1, 2010 that 50% of the heads were fully emerged.