

2012 WSU Hard Spring Wheat Trial, Pullman
Impact of Foliar Disease on Grain Yield

Variety Name <i>(Hard White Italicized)</i>	Grain Yield Bu/A		Yield Difference (protected-unprotected)	
	Protected	Unprotected	Bu/A	%
<i>WA 8123</i>	81	78	3	4
<i>WA 8163</i>	79	77	2	2
<i>WA 8165</i>	79	77	2	2
<i>Glee (WA 8074)</i>	78	73	5	7
<i>Otis</i>	78	66	12	15
<i>Bullseye</i>	78	70	8	10
<i>WA 8167</i>	77	79	-2	-3
<i>V272</i>	77	68	9	11
<i>WB Hartline</i>	76	77	-1	-1
<i>WA 8166</i>	76	72	3	4
<i>Scarlet</i>	76	74	2	3
<i>Tara 2002</i>	75	68	8	10
<i>WA 8168</i>	75	71	5	6
<i>LCS-Buck Pronto</i>	75	68	7	9
<i>Jefferson</i>	74	67	8	10
<i>LCS-Powerplay</i>	73	69	4	5
<i>SY605 CL</i>	72	70	2	2
<i>Hollis</i>	72	66	6	8
<i>IDO694</i>	71	68	3	5
<i>Kelse</i>	70	67	4	5
<i>WA 8164</i>	70	68	2	3
<i>Lassik</i>	68	63	5	8
<i>BR7030</i>	68	66	2	3
<i>LCS-ALbany</i>	67	61	7	10
<i>Espresso</i>	67	65	2	3
<i>Patwin 515</i>	66	63	3	5
<i>Jedd</i>	65	51	14	22
<i>WB-Fuzion</i>	65	56	8	13
<i>Hank</i>	61	49	12	20
<i>Clear White 515</i>	55	52	4	6
C.V. %	4	4		
LSD (0.10)	3	3		
Average	72	67	5	7
Highest	81	79		
Lowest	55	49		

Pullman Hard Spring Wheat

1. This summary includes duplicate hard spring wheat trials except one was sprayed with fungicide and the other was not sprayed. Grain yield in these 2012 Pullman hard spring wheat trials averaged 72 bushels/acre, 10 bushels/acre higher than the 5-year average in the fungicide sprayed trial, and the non-sprayed trial averaged 67 bushels/acre. The Pullman trial was located about two miles south of Pullman, WA on the WSU Spillman Experimental farm.
2. These trials were seeded on 25 April, 2012 following winter barley. Seed was placed at a 90#/acre seeding rate using a double-disc plot drill set on 6-inch spacing. Base fertilizer was 100#N/acre applied pre-plant and a soil test showed 72#N/acre available, an additional 46#N/acre was applied to make protein in these hard trials based on yield projection. Spring seeding conditions were good and establishment was uniform. Quilt® fungicide at 14 oz/acre was applied 11 June to the sprayed trial and stripe rust levels were low to moderate.
3. In the sprayed trial, yields ranged from 55 bu/a to 81 bu/a, while in the non-sprayed trial, yields ranged from 49 to 79 bu/a. Yield values within the LSD range of the highest yield are shown in bold and 6 of the 30 entries are in this group in the sprayed and 5 of the 30 are in the top group in the non-sprayed. 'Otis', 'Glee' and 'Bullseye' were the highest yielding named entries in the sprayed trial and 'LCS-Buck Pronto' was the highest yielding over 5 years of results at this site. The hard white 'WB Hartline' was the highest yielding named variety in the non-sprayed trial. Yields in both trials and the difference in yield and percentage difference between sprayed and non-sprayed for each entry are in a separate comparison table. Yield advantage in the sprayed trial averaged 5 bu/acre and ranged from -2 to 14 bu/a.
4. Test weights averaged 61.0 lbs/bu and ranged from 58.1 to 62.9 lbs/bu in the sprayed trial, and averaged 60.7 lbs/bu and ranged from 56.3 to 62.9 lbs/bu in the non-sprayed trial. Grain protein averaged 11.4% with a range of 10.4 to 12.7% in the sprayed trial, and protein averaged 11.0% with a range of 10.2 to 12.2% in the non-sprayed trail. The average plant height was 30 inches in both trials and there was no lodging in either trial.