

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

Variety Name <i>(Club Italicized)</i>	Grain Yield Bu/A		Yield Difference (protected-unprotected)	
	Protected	Unprotected	Bu/A	%
<i>WA 8160</i>	86	75	11	13
<i>WA 8161</i>	81	77	4	5
<i>Louise-G2</i>	80	75	5	6
<i>IDO599</i>	79	71	8	11
<i>WA 8162</i>	77	77	0	0
<i>Louise-0W</i>	77	70	7	9
<i>WA 8124</i>	77	80	-3	-3
<i>JD</i>	76	78	-2	-2
<i>ARS03173LS</i>	76	74	2	2
<i>Diva</i>	76	78	-3	-4
<i>Louise</i>	75	71	4	5
<i>IDO671</i>	73	62	11	15
<i>Whit</i>	72	63	9	13
<i>Wakanz</i>	72	70	2	3
<i>Zak</i>	71	66	5	8
<i>IDO686</i>	71	68	3	4
<i>ARS03174CS</i>	71	74	-4	-5
<i>IDO687</i>	70	64	6	9
<i>Alpowa</i>	70	58	11	16
<i>WB-1035CL+</i>	69	56	13	19
<i>Alturas</i>	68	65	3	5
<i>Babe</i>	68	60	8	12
<i>Nick</i>	68	52	15	23
<i>WA 8131</i>	64	62	3	4
C.V. %	8	5		
LSD (0.10)	6	3		
Average	74	69	5	7
Highest	86	80		
Lowest	64	52		

Pullman Soft White Spring Wheat

1. This summary includes duplicate soft white spring wheat trials except one was sprayed with fungicide and the other was not sprayed. Grain yield in these 2012 Pullman soft white spring wheat trials averaged 74 bushels/acre, 8 bushels/acre higher than the 5-year average in the fungicide sprayed trial, and the non-sprayed trial averaged 69 bushels/acre. The Pullman trial was located about two miles south of Pullman, WA on the WSU Spillman Experimental farm.
2. The 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. Spring seeding conditions were good and establishment was uniform. Quilt® fungicide at 14 oz/a was applied 11 June to the sprayed trial and stripe rust levels were low to moderate.
3. In the sprayed trial, yields ranged from 64 bu/a to 86 bu/a, while in the non-sprayed trial, yields ranged from 52 to 80 bu/a. Yield values within the LSD range of the highest yield are shown in bold and 3 of the 24 entries are in this group in the sprayed and 5 of the 24 are in the top group in the non-sprayed. ‘Louise’-G2 was the highest yielding named variety entry in the sprayed trial and is Louise with 2oz/100lbs seed of Gaucho® insecticide seed treatment. Louise at the standard seed treatment rate (0.75oz/100lbs seed), was 5 bu/a less, and Louise-0W without insecticide was 3 bu/a less than Louise-G2. ‘Diva’ and Louise were the highest yielding over 5 years of results at this site. Diva 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/a and ranged from -4 to 15 bu/a.
4. Test weights averaged 59.8 lbs/bu and ranged from 58.0 to 62.2 lbs/bu in the sprayed trial, and averaged 60.3 lbs/bu and ranged from 58.1 to 62.1 lbs/bu in the non-sprayed trial. Grain protein averaged 9.5% with a range of 8.8 to 10.9% in the sprayed trial, and protein averaged 8.9% with a range of 8.3 to 10.0% in the non-sprayed trail. The average plant height was 29 inches in the sprayed and 30 inches in the non-sprayed trial and there was no lodging in either trial.