

**2022 WSU Variety Testing Hard Red Winter Wheat Trial, Horse Heaven**

Variety Name	2022					2 Year	3 Year	5 Year*
	Yield (Bu/A)	Test WT (Lbs/Bu)	Protein (%)	Plant HT (In)	Head Date	Average (Bu/A)	Average (Bu/A)	Average (Bu/A)
<i>Released Varieties</i>								
Scorpio	79	62.1	9.9	31	150	50	48	
Whistler	65	64.7	9.4	30	148	41		
LCS Jet	62	61.1	9.1	29	150	44	41	41
Keldin (1,050,000)	62	64.3	9.7	33	147			
Guardian	62	65.2	9.6	32	148	41		
Battle AX	60	63.2	9.1	30	146	45		
WB4510CLP	59	65.0	9.3	32	148			
Keldin (900,000)	59	64.0	9.4	33	148			
Keldin (750,000)	56	64.6	9.6	33	149			
WB4303	56	63.5	9.4	32	145	37	36	
Keldin (350,000)	55	63.9	10.4	33	152			
Keldin (500,000)	53	64.5	10.1	33	149	38	42	43
Sequoia	53	62.4	9.3	40	156			
LCS Helix AX	52	64.6	9.1	31	146			
WB4394	51	64.1	9.6	35	150	37	36	
WB4311	47	64.0	10.9	29	149	35	34	35
<i>Experimental Lines</i>								
LWH19-1103	62	63.1	10.2	31	151			
LWH19-5691	61	62.7	8.9	29	151			
PN13001002-04	60	62.6	9.2	34	151			
LWH19-5663	58	61.7	9.7	33	154			
WA8338	57	62.0	9.6	32	152	37		
WA8367	57	63.0	9.8	30	154			
WA8318 CL+	57	62.4	8.8	35	156	37	40	
LWH19-0192	56	61.8	9.2	28	152	37		
LWH18-0122	55	61.7	10.1	27	148	36		
WA8310	54	63.0	9.8	32	152	35	35	
YSC-1001	52	61.5	9.9	35	153	34		
OR2170199R	52	61.6	9.3	29	153	35		
YSC-1002	49	63.5	10.2	29	145	29		
GHR10	43	64.1	10.8	32	146			
C.V. %	8	0.8	4.9	4	1	15	13	13
LSD (0.05)	8	1.1	1.0	3	2	6	5	4
Average	57	63.2	9.7	32	150	38	39	40
Highest	79	65.2	10.9	40	156	50	48	43
Lowest	43	61.1	8.8	27	145	29	34	35

\*5 year average does not include 2019 data.

**Agronomic Information**

Planting Date:	9/16/2021
Harvest Date:	7/25/2022
Seeding Rate (seeds/ft <sup>2</sup> ):	12.5
Previous Crop:	Fallow
Spring soil test:	
N (lb/ac) 4-ft sample	82
P <sub>2</sub> O <sub>5</sub> (lb/ac) 1-ft sample	100
S (lb/ac) 2-ft sample	14
pH (top 6 inches)	6.6

Herbicides: Zidua (4oz) was applied on November 10.

**Trial Notes:**

1. The nursery was located approximately 6 miles southwest of Benton City, Wa.
2. The nursery was fertilized at planting at a rate of 11N, 27P, 7K, 7S, 5 Cu. An additional 51N was applied on November 22.
3. Overall yield was 185% greater and test weight was 3.9 lb/bu more than in 2021.
4. Significant cheatgrass pressure likely reduced yield and/or grain protein.

**Cooperator: Chad Smith**