

## 2011 WSU Variety Testing Hard Winter Wheat Trial, Horse Heaven

Variety Name <small>*Hard White Italized</small>	5 YEAR AVERAGE (BU/A)	3 YEAR AVERAGE (BU/A)	2 YEAR AVERAGE (BU/A)	2011					
				YIELD (BU/A)	TEST WT (LBS/BU)	PROTEIN (%)	LODGING (%)	PLANT HT	HEAD DATE
Farnum	38	40	54	<b>72</b>	60.8	9.3	0	36	150
MDM	39	40	52	<b>69</b>	61.9	8.4	0	34	150
Bauermeister	38	40	53	<b>66</b>	61.1	8.5	0	34	150
WA 8119			55	<b>66</b>	60.7	7.8	0	34	149
WA 8120			53	<b>66</b>	60.5	8.3	0	34	149
Eltan (SWW Check)	39	39	52	<b>62</b>	60.8	8.6	0	35	150
WB-Tucson		39		<b>62</b>	<b>63.9</b>	9.7	0	33	148
WA 8070		37	49	<b>62</b>	61.7	9.6	0	34	149
UI Silver		37	49	<b>62</b>	<b>63.3</b>	9.7	0	35	149
ML9W05-2501				<b>62</b>	63.1	10.3	0	36	148
Accipiter		36	47	<b>60</b>	62.7	8.8	0	34	149
OR2080111H				<b>60</b>	61.3	8.7	0	31	146
Norwest 553	34	35	46	<b>59</b>	62.3	9.8	0	31	148
Eddy	32	35	45	<b>59</b>	<b>63.6</b>	10.2	0	33	147
IDO835				<b>59</b>	62.3	8.4	0	31	149
WA 8118			46	<b>58</b>	61.8	10.3	0	35	146
Azimut				<b>57</b>	60.2	9.9	0	30	147
IDO656				<b>55</b>	62.6	9.3	0	39	149
Finley	34	35	45	<b>54</b>	<b>64.1</b>	9.5	0	39	148
WA 8096		35	46	<b>54</b>	60.8	8.7	0	33	150
Boundary	32	33	43	<b>53</b>	61.7	9.7	0	33	149
Genesi				<b>53</b>	61.7	11.0	0	28	147
UICF-Grace		34	43	<b>52</b>	61.7	10.1	0	41	148
Hatton	31	32	42	51	<b>64.1</b>	9.6	0	33	149
Whetstone	31	32	41	51	63.1	10.7	0	33	146
Altigo				50	59.4	10.0	0	32	148
Peregrine		33	41	47	62.6	10.3	0	37	148
AgriPro Paladin	29	31	39	45	<b>63.5</b>	11.2	0	32	148
OR2080156H			40	45	62.2	9.7	0	32	149
Esperia		27	33	41	62.4	10.5	0	28	145
C.V.	23	21	19	18	0.7	9.8	0	6	0
LSD	4	7	11	20	0.9	1.8	0	4	1
Average	34	35	46	57	62.1	9.6	0	34	148
Highest	39	40	55	72	64.1	11.2	0	41	150
Lowest	29	27	33	41	59.4	7.8	0	28	145

### Horse Heaven Hard Winter Wheat – Preliminary Data

1. Grain yield in the Horse Heaven hard winter wheat trial averaged 57 bushels/acre, 23 bushels/acre higher than the 5-year average. Higher yields were enabled by favorable spring precipitation and temperatures. The Horse Heaven nursery was located about seven miles southeast of Prosser, WA (D. Rosenberry, cooperater).
2. This nursery was seeded on 7 September, 2010 following summer fallow. Seed was placed at a 45#/acre seeding rate using a deep furrow plot drill set on 15-inch spacing. Base fertilizer was 50#N and a spring soil test analysis showed an adequate N supply for hard protein levels at projected, historic yield levels. Fall seeding conditions were favorable and emergence and stand establishment were good.
3. Yields ranged from 41 bu/ac to 72 bu/ac. Farnum was the highest yielding entry in this trial. All yield values within the 10% LSD range of the highest yield are shown in bold and this included 23 of the 30 entries. The cool and wet spring conditions along with local inoculum sources created early, high levels of stripe rust potential at this location. Fungicide was applied the beginning of April and again 30 May and controlled stripe rust across the trial. The Lattice design was 101% efficient compared to an RCBD.
4. Test weights were very good with an average of 62.1 lb/bu. Grain protein averaged 9.6% with a range of 7.8 to 11.2%. Protein overall was much lower than predicted because yield levels exceeded expectations by over 50%. Plant height averaged 34 inches with no lodging.