

2013 WSU Variety Testing Hard Winter Wheat Trial, Horse Heaven

| Variety Name <i>*Hard White Italicized</i> | 5 YEAR AVERAGE (BU/A) | 3 YEAR AVERAGE (BU/A) | 2 YEAR AVERAGE (BU/A) | 2013 | | | | |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------|---------------------|----------------|-------------|--------------|
| | | | | YIELD (BU/A) | TEST WT (LBS/BU) | PROTEIN (%) | PLANT HT | HEAD DATE |
| WA 8156 | -- | -- | -- | 51 | 60.1 | 10.9 | 28 | 146 |
| Eltan | -- | -- | -- | 50 | 61.8 | 9.9 | 29 | 145 |
| WA 8179 | -- | -- | -- | 48 | 62.7 | 10.7 | 29 | 139 |
| WA 8180 | -- | -- | -- | 48 | 62.7 | 11.0 | 29 | 141 |
| LCS Colonia | -- | -- | -- | 48 | 59.6 | 10.3 | 27 | 144 |
| <i>OR2080236H</i> | -- | -- | -- | 47 | 61.2 | 10.6 | 27 | 141 |
| Keldin | -- | -- | -- | 47 | 63.1 | 10.7 | 28 | 139 |
| Norwest 553 | -- | -- | -- | 47 | 62.2 | 11.5 | 24 | 140 |
| Bauermeister | -- | -- | -- | 47 | 61.7 | 10.2 | 28 | 144 |
| Boundary | -- | -- | -- | 46 | 61.3 | 10.8 | 26 | 141 |
| Farnum | -- | -- | -- | 46 | 60.4 | 10.9 | 32 | 147 |
| WA 8181 | -- | -- | -- | 45 | 61.6 | 10.8 | 29 | 144 |
| <i>OR2080227H</i> | -- | -- | -- | 45 | 62.5 | 10.1 | 28 | 139 |
| <i>OR2080229H</i> | -- | -- | -- | 45 | 61.9 | 11.2 | 28 | 140 |
| WB-Arrowhead | -- | -- | -- | 43 | 63.0 | 11.4 | 28 | 138 |
| WA 8119 | -- | -- | -- | 43 | 59.4 | 10.5 | 25 | 141 |
| <i>WA 8158</i> | -- | -- | -- | 43 | 61.6 | 10.6 | 30 | 141 |
| <i>JC1101</i> | -- | -- | -- | 42 | 63.4 | 11.2 | 23 | 139 |
| Genesis | -- | -- | -- | 42 | 59.2 | 12.0 | 21 | 140 |
| WA 8178 | -- | -- | -- | 42 | 60.5 | 11.0 | 29 | 145 |
| LCS-Azimut | -- | -- | -- | 42 | 58.7 | 10.2 | 23 | 139 |
| WA 8157 | -- | -- | -- | 42 | 61.5 | 10.8 | 26 | 138 |
| <i>UI Silver</i> | -- | -- | -- | 41 | 63.4 | 10.3 | 29 | 139 |
| <i>WA 8159</i> | -- | -- | -- | 41 | 60.6 | 10.6 | 30 | 144 |
| DAS 1 | -- | -- | -- | 41 | 60.8 | 11.5 | 23 | 138 |
| IDO816 | -- | -- | -- | 41 | 61.5 | 11.2 | 28 | 142 |
| UI SRG | -- | -- | -- | 40 | 61.7 | 11.4 | 30 | 140 |
| NSA06-4663 | -- | -- | -- | 40 | 58.8 | 10.0 | 23 | 139 |
| DAS 2 | -- | -- | -- | 40 | 62.0 | 10.9 | 25 | 139 |
| JC1103 | -- | -- | -- | 39 | 62.5 | 10.8 | 25 | 140 |
| <i>OR2080156H</i> | -- | -- | -- | 39 | 62.0 | 11.3 | 26 | 140 |
| AP503CL2 | -- | -- | -- | 37 | 64.5 | 12.5 | 25 | 138 |
| Whetstone | -- | -- | -- | 37 | 62.7 | 12.2 | 26 | 138 |
| Finley | -- | -- | -- | 37 | 63.5 | 10.7 | 30 | 139 |
| JC1102 | -- | -- | -- | 36 | 62.7 | 11.0 | 26 | 139 |
| Sprinter (WA 8118) | -- | -- | -- | 35 | 60.9 | 12.8 | 25 | 138 |
| C.V. % | -- | -- | -- | 10 | 1.1 | 5.4 | 5 | 1 |
| LSD (.10) | -- | -- | -- | 5 | 0.7 | 0.6 | 1 | 1 |
| Average | -- | -- | -- | 43 | 61.6 | 11.0 | 27 | 141 |
| Highest | -- | -- | -- | 51 | 64.5 | 12.8 | 32 | 147 |
| Lowest | -- | -- | -- | 35 | 58.7 | 9.9 | 21 | 138 |

Horse Heaven Hard Winter Wheat – Preliminary Data

1. Grain yield in the 2013 Horse Heaven hard winter wheat trial averaged 43 bushels/acre. The Horse Heaven nursery was located about 9 miles southeast of Prosser, WA (M. Schmidt, cooperator).
2. This nursery was seeded on 11 November, 2012 following fallow. Seed was placed at a 45#/acre seeding rate using a deep-furrow plot drill set on 15-inch spacing. Fall seeding conditions were dry early and thus this plot was later seeded after fall rainfall. Emergence and stand establishment were good. Base fertilizer was 40#N/acre. Based on a spring soil test showing 77 lbs./acre available N, 60 lbs./acre of additional N was applied for hard wheat protein based on expected yields.
3. Yields ranged from 35 bu/ac to 51 bu/ac. 'Eltan', a soft white check, was the highest yielding named entry in this trial. All yield values within the 10% LSD range of the highest yield are shown in bold and this included 11 of the 36 entries. It is probable that some plants at this site experienced damaging frost. There was a low amount of stripe rust potential at this location and no fungicide was applied.
4. Test weights averaged 61.6 lbs./bu and ranged from 58.7 to 64.5 lbs./bu. Grain protein averaged 11.0% with a range of 9.9 to 12.8%. Plant height averaged 27 inches with no lodging.