2014 WSU Variety Testing Hard Winter Wheat Trial, Reardan

2014 **5 YEAR** 3 YEAR 2 YEAR SPRING **PLANT HEAD** AVERAGE AVERAGE **AVERAGE YIELD TEST WT PROTEIN** Variety Name Hard White Italicized STAND* (BU/A) (LBS/BU) HT **DATE** (BU/A) (BU/A) (BU/A) (%) WA 8209 86 14.1 34 8 58.7 164 WA 8186 12.9 34 97 78 58.8 163 8 WB-Arrowhead 95 77 13.4 8 59.4 37 157 105 77 Keldin 60.3 13.7 35 157 8 LCS-Azimut 87 90 76 57.2 12.8 30 159 7 OR2100061H 32 76 58.7 13.1 159 6 IDO1101 94 75 8 60.4 12.7 34 158 LCS Allezy 75 57.0 33 162 5 13.5 WB-Rimrock 97 73 59.4 13.6 34 157 8 WA 8210 73 58.5 13.0 35 164 7 (SWW Check) Eltan 105 82 88 72 59.6 12.8 36 164 8 104 87 35 **Boundary** 93 71 59.2 13.5 161 7 LCS Evina 69 57.5 15.2 37 6 163 LCS Colonia 92 69 57.0 13.0 34 164 7 Bauermeister 100 82 84 68 59.5 12.6 40 165 8 86 67 37 8 DAS 2 59.1 14.3 157 NSA10-7208 67 58.2 13.9 32 160 7 IDO1103 86 67 59.5 13.2 35 160 8 Whetstone 84 66 60.8 14.4 34 155 9 Farnum 88 72 73 65 57.4 43 8 13.8 166 89 74 80 65 59.0 14.7 40 8 Sprinter (WA 8118) 155 AP503 CL2 78 64 61.4 14.1 33 157 7 OR2080156H 90 72 81 62 58.4 15.0 35 163 6 OR2080236H 83 83 62 57.7 14.7 35 165 5 OR2100081H 60 59.8 15.1 35 160 3 59 60.0 14.6 30 160 6 Norwest 553 90 72 75 DAS 1 82 59 57.0 14.5 38 156 9 Genesis 78 59 58.9 13.9 31 156 7 Finley 85 66 68 57 59.7 13.6 43 159 9 57 37 0 SAS W4 55.4 14.3 167 WA 8184 78 56 59.5 14.5 34 159 6 SAS W3 52 55.0 14.5 35 167 1 SAS 4B 52 53.9 15.5 33 165 1 SAS W7 Low Stand, No Data 0 WA 8189 Low Stand, No Data 0 WA 8211 ______ Low Stand, No Data ______ 0 C.V. % 9 12 3 9 8 0.7 2.6 1 16 LSD (.10) 4 4 5 8 0.4 0.4 1 1 1 **Average** 96 78 86 66 58.4 13.9 35 161 6 105 87 105 86 61.4 15.5 43 167 9 **Highest** Lowest 66 68 52 53.9 12.6 155 0

^{*}Spring Stand Rating: 0 (no plants) - 9 (full stand)

Reardan Hard Winter Wheat

- 1. Grain yield in the 2014 Reardan hard winter wheat trial averaged 66 bushels/acre, much less than the five-year average of 96 bushels/acre. The Reardan nursery was located seven miles west of Reardan, WA (H. Johnson, Cooperator).
- 2. This nursery was seeded on 19 September, 2013 following chem-fallow. Seed was placed at an 85#/ acre seeding rate using a no-till plot drill set on 12-inch spacing and equipped with cross-slot openers. Base fertilizer was 80#N/acre. Based on a spring soil test showing 244 #/acre available N, 62 #N/acre addition N was applied for hard wheat protein based on expected yields. Fall seeding and emergence were adequate. The crop emerged before fall dormancy and showed winter damage on several entries. Ratings of spring stands are presented in the data table as an evaluation range from 0 (all appeared dead) to 9 (full survival).
- 3. Yields ranged from 52 bushels/acre to 86 bushels/acre. 'WB-Arrowhead' and 'Keldin', were the highest yielding named entries in this trial. 'Boundary' had the highest overall yield across five years for hard wheat varieties. All yield values within the 10% LSD range of the highest yield are shown in bold and this included 2 of the 36 entries. There was no observed stripe rust at this location and no fungicide was applied.
- 4. Test weights averaged 58.4 lbs/bu and ranged from 53.9 to 61.4 lbs/bu. Grain protein averaged 13.9% with a range of 12.6 to 15.5% and lower than the 13.5% average protein in 2013. Plant height averaged 35 inches with no lodging.