2014 WSU Variety Testing Hard Winter Wheat Trial, Connell

Variety Name *Hard White Italicized*	5 YEAR AVERAGE (BU/A)	3 YEAR AVERAGE (BU/A)	2 YEAR AVERAGE (BU/A)	2014 YIELD (BU/A)	2014 TEST WT (LBS/BU)	2014 PROTEIN (%)	2014 PLANT HT	2014 HEAD DATE	2014 SURV*
Eltan (SWW Check)	42	32	33	**35**	61.5	11.9	28	143	8
Finley	39	27	30	**34**	62.7	12.9	31	139	9
Keldin			28	30	62.3	12.7	28	139	8
WB-Arrowhead			29	30	62.0	13.6	29	137	8
NSA10-7208				30	60.3	13.2	21	139	8
IDO816		32	33	29	62.9	13.1	28	141	8
WA 8158		33	33	29	62.2	13.4	26	142	6
UI Silver	40	30	31	29	62.6	12.9	30	140	7
IDO1101			31	28	63.7	13.1	25	138	8
Farnum	43	34	32	28	59.7	13.5	28	146	8
WA 8179			29	28	61.1	12.8	29	141	7
WA 8197				27	62.5	12.9	27	142	9
WA 8178			31	27	63.3	13.1	29	143	7
DAS 1			26	27	60.0	14.2	27	137	7
Whetstone			29	27	62.0	13.6	27	137	8
Boundary	38	28	29	26	61.7	13.3	25	141	8
LCS-Azimut		25	30	26	60.4	12.3	24	137	8
WA 8180			33	26	63.7	12.6	28	143	7
WA 8181			29	25	60.8	12.7	26	144	8
Sprinter (WA 8118)	31	19	22	25	60.9	14.3	28	137	7
DAS 2			22	25	60.9	14.0	26	138	7
Bauermeister	40	29	28	24	61.3	12.4	25	144	8
IDO1103			25	24	62.8	13.9	25	139	8
UI SRG		27	30	24	63.2	13.8	32	139	8
WA 8207				24	61.0	12.8	30	143	8
LCS Colonia			33	24	59.8	12.6	24	144	5
OR2100061H				23	61.7	12.3	26	139	7
AP503 CL2			27	22	**65.5**	13.5	26	137	8
WA 8208				21	59.8	12.6	28	144	5
WA 8184				20	63.3	13.6	25	138	6
OR2080156H	32	24	24	19	63.2	15.0	24	142	5
LCS Evina				17	60.8	14.7	26	143	4
LCS Allezy	---------- Winter Kill, Variety Lost ----------								3
OR2080236H	---------- Winter Kill, Variety Lost ----------								2
Norwest 553	---------- Winter Kill, Variety Lost ----------								0
OR2100081H	---------- Winter Kill, Variety Lost ----------								1
C.V. %	11	13	13	14	2.1	4.0	5	1	18
LSD (.10)	2	2	3	4	1.4	0.6	1	1	1
Average	38	27	28	24	62.0	13.3	26	141	7
Highest	43	34	33	35	65.5	15.0	32	146	9
Lowest	31	19	22	17	59.7	11.9	21	137	0

*Winter Survival Score: 0(complete plot death) - 9(full survival)

Connell Hard Winter Wheat – Preliminary Data

1. Grain yield in the 2014 Connell hard winter wheat trial averaged 24 bushels/acre, much less than the 2013 average of 38 bushels/acre. The Connell nursery was located about six miles east of Connell, WA (D. Bauermeister, cooperator).
2. This nursery was seeded on 20 September, 2013 following fallow. Seed was placed at a 50#/acre seeding rate using a deep-furrow plot drill set on 15-inch spacing. Base fertilizer was 80#N/acre spring applied. Based on a spring soil test showing 358 lbs./acre available N, no additional N was applied for hard wheat protein based on expected yields. Fall seeding conditions were dry early and thus this plot was later seeded after rainfall. Initial emergence and stand establishment were good. The crop emerged before fall dormancy and was vulnerable to the December cold conditions that contributed to winter injury on many varieties. Ratings of winter survival are presented in the table and range from 0 (no survival) to 9 (full survival). Four varieties with the lowest survival did not have adequate stands to evaluate agronomically in the trial. There were some seeding skips and lost plots in this trial, but adjustments for missed rows and missing plot values in the analyses allowed useful results from this trial. The statistical CV of 14 is typical for low rainfall sites and historically for this location.
3. Yields ranged from 17 bu/ac to 35 bu/ac. ‘Eltan’, a soft white check, was the highest yielding named entry in this trial followed closely by ‘Finley’. 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 stripe rust at this location and no fungicide was applied.
4. Test weights averaged 62.0 lbs./bu and ranged from 59.7 to 65.5 lbs./bu. Grain protein averaged 13.3% with a range of 11.9 to 15.0% and was lower than the 15.2% average protein in 2013. Plant height averaged 26 inches with no lodging.