2012 WSU Variety Testing Hard Winter Irr Wheat Trial, Moses Lake

Variety Name *Hard White Italicized	5 YEAR AVERAGE (BU/A)	3 YEAR AVERAGE (BU/A)	2 YEAR AVERAGE (BU/A)	2012 YIELD (BU/A)	2012 TEST WT (LBS/BU)	2012 PROTEIN (%)	2012 PLANT HT	2012 HEAD DATE	2012 LODGING (%)
OR2080229H		165		**140**	58.4	12.6	42	146	25
Genesis			164	**138**	58.5	12.1	36	141	25
Altigo			168	**137**	52.5	12.6	38	142	
WA 8061-10				**137**	56.3	14.0	41	144	
WA 8115			171	**136**	56.3	13.0	37	142	45
Norwest 553	163	160	161	**135**	58.3	13.4	37	145	25
Esperia		160	152	**132**	58.9	12.9	34	141	27
Finley				**131**	**62.1**	13.4	51	145	23
WA 8156				**126**	58.1	13.8	49	146	47
OR2080227H				**125**	54.3	13.5	40	145	70
Azimut			157	124	51.7	13.3	33	142	25
OR2080156H		161	158	123	57.8	13.9	41	145	
Boundary	153	145	142	122	56.8	13.8	41	146	43
Eddy	162	158	155	118	58.8	13.4	39	143	57
UICF-Grace	151	146	145	111	59.3	14.9	50	145	52
WA 8157				110	55.7	13.6	39	142	65
WA 8119				110	53.0	13.8	43	147	68
UI SRG				109	57.1	14.0	45	144	62
WA 8158				106	55.2	13.6	43	146	62
WA 8159				105	54.4	14.6	42	147	75
UI Silver		151	143	104	58.5	12.9	43	145	85
OR2080236H				103	52.4	15.0	40	147	22
WA 8139			152	99	58.1	15.0	40	143	65
IDO816				95	58.7	13.6	40	147	70
DH02-18-69				94	**61.7**	14.0	51	147	42
MDM				92	56.0	14.9	40	147	75
Bauermeister	142	133	134	90	54.8	14.5	38	148	92
DH02-18-88				86	57.2	11.9	46	146	83
Farnum				85	56.4	16.0	39	148	67
WA 8118			145	78	57.6	15.6	39	141	62
C.V. %	8	9	9	12	2.8	5.4	4	1	58
LSD (.10)	5	8	9	15	1.7	0.8	2	1	30
Average	154	153	154	113	56.8	13.8	41	145	49
Highest	163	165	171	140	62.1	16.0	51	148	92
Lowest	142	133	134	78	51.7	11.9	33	141	0

Moses Lake Irrigated Hard Winter Wheat – *Preliminary Data*

1. Grain yield in the 2012 irrigated Moses Lake hard winter wheat trial averaged 113 bushels/acre, 41 bushels/acre lower than the 5-year average. The Moses Lake nursery was located about 7 miles south of Moses Lake, WA (J. Heilig, cooperator).
2. This nursery was seeded on 18 September, 2011 following potatoes. Seed was placed at an 85#/acre seeding rate using a double-disc plot drill set on 6-inch spacing. Base fertilizer was 200#N/acre applied pre-plant. Based on a spring soil test showing 347 lbs./acre available N, 48#N/acre additional fertilizer was applied for hard wheat protein based on expected yields. Fall seeding conditions were good as were emergence and stand establishment.
3. Yields ranged from 78 bu/ac to 140 bu/ac. 'Genesis' 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 10 of the 30 entries. 'Norwest 553' was the top yielding hard entry across five years of results at this location. Stripe rust potential at this location was low/moderate and fungicide was applied with the herbicide on 20 April and again on 24 May. Soil and water variability at this site was high. This influenced grain filling, maturity, and lodging. We also believe that heat stress affected later maturity tillers.
4. Test weights were highly variable averaging 56.8 lbs./bu and ranged from 51.7 to 62.1 lbs./bu. Grain protein also was variable averaging 13.8% with a range of 11.9 to 16.0%. Plant height averaged 41 inches. Lodging was highly variable in this trial, averaged 49%, ranged from 0% to 92%, and influenced performance.