

**2009 WSU HARD WINTER WHEAT TRIAL SUMMARY**  
**Precipitation Zone= >16"**

VARIETY NAME	DAYTON	PULLMAN	REARDAN	WALLA WALLA	AVERAGE YIELD
<b>Hard Red Winter</b>	<b>YIELD (BU/A)</b>				
NORWEST 553	145	131	79	132	122
ACS 52025	149	127	82	121	120
BC002-2	137	129	66	132	116
ML9W05-2506	128	121	79	127	114
WA008068	115	134	87	117	114
WHETSTONE	124	116	82	125	112
DECLO	119	125	80	118	110
ESPERIA	130	104	75	131	110
BOUNDARY	118	125	86	110	110
BAUERMEISTER	108	137	80	109	108
EDDY	116	115	78	121	108
NORRIS	127	118	69	115	107
ACCIPTER	113	127	73	117	107
WA008022	118	150	74	85	107
AGRIPRO PALADIN	122	100	71	121	103
PEREGRINE	115	112	76	105	102
WA008095	106	136	78	83	100
WA008098	101	116	90	94	100
FARNUM	93	121	72	88	94
FINLEY	105	113	72	71	90
HATTON	94	97	75	90	89
IDO683	96	98	65	82	85
WA008061	82	86	68	77	78
<b>Hard White Winter</b>					
NUDAKOTA	154	107	64	134	115
ML9W04-2543W	133	121	77	117	112
MDM	99	150	92	104	111
IDO658	117	132	75	113	109
WA008097	103	141	86	104	108
WA008096	104	135	78	112	107
UI DARWIN	127	111	54	121	103
WA008070	92	132	80	101	101
PALOMINO	123	106	52	123	101
IDO651	109	125	71	90	99
MOL	113	97	52	121	96
MIETI	97	117	53	104	93
<b>Soft White Common</b>					
ELTAN (Check)	91	148	75	104	104
	<b>STATISTICS</b>				
CV (%)	10	7	12	7	8
LSD (0.10)	15	11	12	10	6
Average	115	121	74	109	105
Highest	154	150	92	134	122
Lowest	82	86	52	71	78

DAYTON	PULLMAN	REARDAN	WALLA WALLA	AVERAGE TEST WEIGHT
<b>TEST WEIGHT (LBS/BU)</b>				
61.8	62.4	61.8	60.9	61.7
61.5	61.2	61.1	60.1	61.0
62.2	62.9	61.6	62.1	62.2
63.1	62.2	62.0	62.1	62.4
62.8	62.4	61.3	61.8	62.1
61.6	62.6	62.4	61.0	61.9
60.8	62.5	62.1	59.6	61.3
60.2	60.7	60.5	59.9	60.3
61.1	61.6	60.6	60.1	60.9
60.2	61.4	61.4	58.4	60.4
62.9	61.0	61.2	61.8	61.7
63.3	62.5	61.9	62.6	<b>62.6</b>
61.3	62.7	61.7	60.6	61.6
61.4	60.5	59.8	58.8	60.1
61.9	62.9	62.3	60.6	61.9
62.8	62.4	61.6	61.8	62.2
61.5	62.3	61.4	59.5	61.2
62.4	62.5	60.7	60.1	61.4
60.0	59.9	59.7	58.3	59.5
63.2	63.1	62.1	60.4	62.2
63.3	62.4	62.8	63.0	<b>62.9</b>
63.9	62.4	61.6	62.0	62.5
62.8	60.9	60.7	60.9	61.3
62.2	61.6	61.2	60.9	61.5
59.8	61.5	61.3	58.4	60.3
60.1	61.9	61.4	58.8	60.6
62.6	62.7	62.0	60.3	61.9
58.1	61.0	60.6	58.5	59.6
59.8	61.3	60.4	58.5	60.0
63.0	63.1	62.2	62.6	<b>62.7</b>
61.4	62.6	61.7	61.1	61.7
61.6	61.9	61.1	60.8	61.4
61.1	61.8	60.8	59.7	60.9
63.1	61.2	60.6	62.8	61.9
60.5	59.9	59.8	59.4	59.9
58.0	61.2	60.6	57.7	59.4
<b>STATISTICS</b>				
1.1	0.7	0.5	1.2	0.9
0.9	0.6	0.4	1.0	0.4
61.6	61.9	61.3	60.4	61.3
63.9	63.1	62.8	63.0	62.9
58.0	59.9	59.7	57.7	59.4

DAYTON	PULLMAN	REARDAN	WALLA WALLA	AVERAGE PROTEIN
<b>PROTEIN (%)</b>				
11.4	10.7	12.7	12.6	11.9
11.4	10.6	12.1	12.2	11.6
12.0	11.0	13.6	12.7	12.3
11.7	11.3	12.2	12.5	11.9
12.8	11.4	12.3	13.0	12.4
11.8	11.0	12.8	12.8	12.1
11.9	10.7	12.8	13.2	12.2
12.2	11.1	12.0	13.1	12.1
11.4	10.5	12.7	12.4	11.8
11.7	10.5	11.2	12.8	11.6
11.7	11.0	11.8	12.6	11.8
11.5	10.7	11.8	11.9	11.5
11.7	10.3	11.8	12.5	11.6
11.7	9.9	10.6	12.8	11.3
12.0	11.6	12.6	13.0	12.3
11.4	10.2	10.8	12.5	11.2
12.2	11.2	11.5	13.5	12.1
12.2	10.7	12.2	13.1	12.1
12.6	10.5	12.2	13.8	12.3
12.0	11.1	11.7	13.0	12.0
10.9	9.3	12.4	12.0	11.2
12.4	11.8	13.5	12.9	12.7
13.3	12.4	12.9	13.9	13.1
10.8	10.5	11.3	11.6	11.1
11.3	10.2	11.7	12.1	11.3
11.6	9.9	11.1	12.6	11.3
10.2	10.5	11.2	11.8	10.9
11.9	10.0	11.7	12.3	11.5
11.1	10.1	12.1	12.0	11.3
10.8	11.3	11.9	11.9	11.5
11.9	10.2	11.2	12.4	11.4
11.9	11.8	13.4	13.1	12.6
11.6	10.1	12.1	13.3	11.8
13.5	12.5	14.3	14.4	<b>13.7</b>
11.9	11.0	13.3	13.8	12.5
11.9	9.5	11.2	12.8	11.4
<b>STATISTICS</b>				
3.3	3.5	4.5	3.5	3.7
0.9	0.5	0.7	1.0	0.3
11.8	10.8	12.1	12.8	11.9
13.5	12.5	14.3	14.4	13.7
10.2	9.3	10.6	11.6	10.9

## 2009 WSU Hard Winter Wheat Trial Summary

### Precipitation Zone >16" – Preliminary Data

1. Hard winter wheat (including red and white) grain yield across four locations and 36 entries in the >16" precipitation zone averaged 105 bushels/acre, just one bushel/acre lower than the 2008 average. These trials were analyzed as Alpha Lattice designs that overall helped to account for within replication variation and reduced LSD and CV values. The highest value and other values within the LSD range are shown in bold for yield, test weight, and protein.

2. Test weight averaged 61.3 lb/bu across locations and entries, with a range of 59.4 lb/bu to 62.9 lb/bu. Test weights averaged higher than last year. Grain protein averaged 11.9% with a range of 10.9% to 13.7 %, 1.0% lower than last year's value.

## 2009 WSU HARD WINTER WHEAT TRIAL SUMMARY

### Precipitation Zone= 12"-16"

VARIETY NAME	YIELD (BU/A)			TW (LBS/BU)			PROTEIN (%)		
	ALMIRA	LAMONT	AVERAGE YIELD	ALMIRA	LAMONT	AVERAGE TEST WEIGHT	ALMIRA	LAMONT	AVERAGE PROTEIN
<b>Hard Red Winter</b>	<b>YIELD (BU/A)</b>			<b>TW (LBS/BU)</b>			<b>PROTEIN (%)</b>		
<b>BOUNDARY</b>	105	102	<b>103</b>	61.1	62.0	61.6	10.7	12.5	11.6
<b>WA008068</b>	101	97	<b>99</b>	62.5	62.4	62.5	10.3	13.3	11.8
<b>ACS 52025</b>	114	83	<b>99</b>	61.2	62.2	61.7	9.7	12.9	11.3
ESPERIA	97	93	95	60.1	60.8	60.5	11.1	12.7	11.9
EDDY	97	91	94	61.8	62.7	62.3	10.2	13.2	11.7
WA008098	99	88	93	60.9	62.5	61.7	10.1	13.2	11.7
WA008095	99	87	93	61.7	62.6	62.2	10.5	12.7	11.6
DECLO	104	82	93	62.6	63.2	62.9	10.3	13.7	12.0
NORWEST 553	101	85	93	61.0	62.9	62.0	10.4	13.8	12.1
BAUERMEISTER	103	82	93	59.9	62.6	61.3	10.7	13.3	12.0
PEREGRINE	98	87	93	62.0	63.3	62.7	9.9	12.2	11.1
ACCIPITER	99	86	92	61.1	63.0	62.1	10.3	12.9	11.6
BC002-2	103	79	91	62.3	62.7	62.5	11.3	13.4	12.4
WA008022	97	81	89	60.2	61.5	60.9	10.1	12.5	11.3
HATTON	99	77	88	64.0	63.8	<b>63.9</b>	9.9	14.1	12.0
WHETSTONE	88	88	88	61.2	63.0	62.1	10.8	13.6	12.2
FARNUM	95	78	87	60.1	60.6	60.4	10.8	13.9	12.4
NORRIS	102	68	85	62.3	63.0	62.7	10.3	14.1	12.2
AGRIPRO PALADIN	93	76	84	61.5	62.6	62.1	11.2	13.3	12.3
ML9W05-2506	92	76	84	61.8	62.7	62.3	11.2	13.3	12.3
FINLEY	89	78	83	61.9	63.0	62.5	10.8	13.2	12.0
WA008061	88	75	81	61.7	62.1	61.9	10.8	14.7	12.8
IDO683	89	62	75	63.1	63.1	63.1	10.6	14.6	12.6
<b>Hard White Winter</b>									
<b>MDM</b>	99	99	<b>99</b>	60.7	62.5	61.6	9.9	12.4	11.2
ML9W04-2543W	104	86	95	60.5	62.1	61.3	9.5	11.9	10.7
IDO658	102	77	90	61.4	63.6	62.5	9.5	13.0	11.3
WA008096	98	78	88	59.6	61.5	60.6	9.8	12.9	11.4
WA008070	92	84	88	61.4	62.6	62.0	10.8	13.0	11.9
NUDAKOTA	100	75	88	61.2	61.6	61.4	9.6	13.0	11.3
WA008097	100	67	84	60.4	61.8	61.1	9.6	12.8	11.2
PALOMINO	95	65	80	61.2	61.8	61.5	10.9	13.4	12.2
IDO651	88	64	76	59.9	62.3	61.1	10.4	13.5	12.0
UI DARWIN	86	64	75	62.8	63.0	62.9	10.7	14.0	12.4
MIETI	92	51	71	60.6	60.6	60.6	10.2	14.3	12.3
MOL	67	56	62	61.1	61.7	61.4	12.5	16.1	<b>14.3</b>
<b>Soft White Common</b>									
ELTAN (Check)	109	75	92	59.7	62.3	61.0	10.0	12.4	11.2
	<b>STATISTICS</b>			<b>STATISTICS</b>			<b>STATISTICS</b>		
<b>CV (%)</b>	7	12	9	0.8	0.4	0.6	6.0	3.7	4.7
<b>LSD (0.10)</b>	9	13	8	0.7	0.3	0.4	0.9	0.7	0.5
<b>Average</b>	97	79	88	61.3	62.4	61.8	10.4	13.3	11.9
<b>Highest</b>	114	102	103	64.0	63.8	63.9	12.5	16.1	14.3
<b>Lowest</b>	67	51	62	59.6	60.6	60.3	9.5	11.9	10.7

## 2009 WSU Hard Winter Wheat Trial Summary Precipitation Zone 12-16" – Preliminary Data

1. Hard winter wheat (including red and white) grain yield across two locations and 36 entries in the 12-16" precipitation zone averaged 88 bushels/acre, nine bushels/acre higher than the 2008 average of 79 bushels/acre. These trials were analyzed as Alpha Lattice designs that overall helped to account for within replication variation and reduced LSD and CV values. The highest data value and other data values within the LSD range are shown in bold for yield, test weight, and protein.

2. Test weight averaged 61.8 lb/bu across locations and entries, with a range of 60.3 lb/bu to 63.9 lb/bu. Test weights averaged higher than last year. Grain protein averaged 11.9% with a range of 10.7% to 14.3 %, 0.6% higher than last year's 11.3% value.

**2009 WSU HARD WINTER WHEAT TRIAL SUMMARY**  
Precipitation Zone= <12"

VARIETY NAME	CONNELL	HORSE HEAVEN	LIND	RITZVILLE	ST. ANDREWS	AVERAGE YIELD
<b>Hard Red Winter</b>						
	<b>YIELD (BU/A)</b>					
BAUERMEISTER	49	12	32	59	29	<b>36</b>
WA008068	47	13	29	61	30	<b>36</b>
PEREGRINE	39	15	35	56	31	<b>35</b>
FINLEY	42	15	34	59	25	<b>35</b>
FARNUM	38	13	33	58	30	<b>34</b>
WA008095	39	12	24	60	34	<b>34</b>
BC002-2	38	16	--	53	28	<b>34</b>
HATTON	49	12	23	54	26	<b>33</b>
ML9W05-2506	40	15	25	57	29	<b>33</b>
ACCIPITER	39	13	23	50	38	<b>33</b>
WA008098	38	12	32	52	28	<b>32</b>
NORWEST 553	40	13	--	43	32	<b>32</b>
WA008061	37	13	24	56	28	<b>31</b>
WHETSTONE	35	15	26	55	25	<b>31</b>
ACS 52025	34	15	25	52	27	<b>30</b>
BOUNDARY	39	13	25	50	25	<b>30</b>
EDDY	37	14	--	50	19	<b>30</b>
AGRIPRO PALADIN	38	15	25	51	21	<b>30</b>
NORRIS	28	16	22	56	26	<b>30</b>
IDO683	29	14	24	54	24	<b>29</b>
ESPERIA	46	15	13	51	19	<b>29</b>
WA008022	36	11	22	46	25	<b>28</b>
DECLO	29	10	--	35	26	<b>25</b>
<b>Hard White Winter</b>						
MDM	48	16	32	62	22	<b>36</b>
WA008097	43	12	32	63	29	<b>36</b>
WA008070	39	12	33	59	28	<b>34</b>
UI DARWIN	44	13	30	57	24	<b>34</b>
WA008096	46	11	30	60	20	<b>33</b>
IDO658	31	14	27	64	29	<b>33</b>
IDO651	39	15	27	53	28	<b>32</b>
NUDAKOTA	38	17	19	56	28	<b>32</b>
PALOMINO	32	15	21	51	24	<b>29</b>
ML9W04-2543W	35	11	13	53	29	<b>28</b>
MOL	24	10	--	34	21	<b>22</b>
MIETI	21	10	--	--	18	<b>16</b>
<b>Soft White Common</b>						
ELTAN (Check)	48	13	32	72	27	<b>38</b>
	<b>STATISTICS</b>					
CV (%)	14	12	19	13	12	15
LSD (0.10)	7	2	7	10	4	3
Average	38	13	26	54	26	32
Highest	49	17	35	72	38	38
Lowest	21	10	13	34	18	22

CONNELL	HORSE HEAVEN	LIND	RITZVILLE	ST. ANDREWS	AVERAGE TEST WEIGHT
<b>TEST WEIGHT (LBS/BU)</b>					
59.4	58.8	60.0	61.1	58.8	59.6
60.5	60.8	61.7	62.2	60.6	61.2
60.3	60.4	62.5	62.0	60.8	61.2
61.7	62.0	62.1	63.3	61.5	62.1
58.7	59.6	59.8	60.5	57.5	59.2
59.1	59.9	60.5	61.5	59.4	60.1
61.1	59.6	--	62.0	60.5	60.8
63.2	63.2	61.9	64.0	62.6	<b>63.0</b>
61.1	59.5	61.5	62.4	60.9	61.1
59.5	58.2	61.2	61.7	60.0	60.1
59.5	59.7	60.9	61.0	58.9	60.0
61.6	62.2	--	60.6	61.1	61.4
61.2	62.6	60.5	62.5	60.2	61.4
60.0	59.6	61.2	62.3	61.4	60.9
61.8	61.7	61.0	62.1	61.0	61.5
60.1	60.1	60.2	61.0	59.4	60.2
61.2	62.1	--	62.3	59.9	61.4
61.5	61.8	61.4	62.7	61.5	61.8
61.4	61.3	61.8	62.7	61.5	61.7
62.7	63.6	62.9	63.9	62.1	<b>63.0</b>
60.2	58.8	60.0	60.6	59.9	59.9
60.2	61.0	57.4	61.0	58.6	59.6
60.7	60.7	--	61.8	61.0	61.1
59.6	59.4	61.0	61.8	59.7	60.3
57.6	58.5	59.6	61.4	59.1	59.2
60.3	61.8	60.6	62.3	59.8	61.0
62.6	62.8	62.1	62.9	61.9	<b>62.5</b>
57.4	58.1	58.1	61.2	57.8	58.5
61.3	62.0	62.2	62.9	60.8	61.8
58.8	57.7	59.8	61.4	58.9	59.3
60.2	59.1	60.4	61.7	60.7	60.4
61.3	59.2	60.6	62.2	60.9	60.8
60.1	59.7	60.5	61.6	60.0	60.4
60.9	61.5	--	61.6	60.1	61.0
60.7	N/A	--	--	58.3	59.5
59.0	59.2	59.1	61.6	58.2	59.4
<b>STATISTICS</b>					
0.8	--	1.6	0.9	0.9	1.5
0.7	--	1.3	1.3	0.8	0.6
60.5	60.5	60.8	62.0	60.2	60.8
63.2	63.6	62.9	64.0	62.6	63.0
57.4	57.7	57.4	60.5	57.5	58.5

CONNELL	HORSE HEAVEN	LIND	RITZVILLE	ST. ANDREWS	AVERAGE PROTEIN
<b>PROTEIN (%)</b>					
12.6	15.5	12.6	11.7	10.1	12.5
13.5	16.8	14.1	11.2	10.1	13.1
12.5	15.8	12.1	11.1	9.7	12.2
12.4	15.5	13.5	11.2	10.6	12.6
13.5	15.8	12.9	11.9	10.5	12.9
13.1	16.1	13.5	11.7	11.4	13.2
13.4	17.0	--	11.7	11.6	13.4
12.4	15.5	13.4	11.6	10.3	12.6
12.7	16.1	14.1	11.3	11.0	13.0
12.7	16.9	13.3	10.8	10.4	12.8
13.3	16.1	13.1	11.8	11.1	13.1
12.7	16.1	--	11.3	11.1	12.8
14.0	16.4	14.5	12.2	11.4	13.7
12.8	15.6	14.3	11.9	11.3	13.2
12.4	14.9	13.5	12	10.5	12.7
12.6	15.6	13.4	11.3	10.4	12.7
13.0	16.1	--	12.0	12.9	13.5
13.1	15.5	14.1	11.5	12.8	13.4
13.0	14.9	13.9	11.2	10.8	12.8
13.4	15.7	14.4	11.8	11.2	13.3
13.0	15.9	15.3	11.1	12.7	13.6
12.3	14.9	13.0	11.6	10.6	12.5
13.6	16.6	--	12.9	11.4	13.6
11.9	14.6	12.1	9.8	9.5	11.6
13.1	15.8	12.4	11.0	10.4	12.5
12.5	15.8	13.2	10.8	10.7	12.6
12.8	14.6	13.1	12.4	10.5	12.7
12.7	15.7	12.7	10.6	10.3	12.4
11.7	15.2	12.7	10.5	10.9	12.2
13.2	16.1	13.4	11.4	9.6	12.7
12.5	14.8	14.0	10.9	11.6	12.8
13.1	16.5	13.8	12.6	12.4	13.7
12.0	15.7	13.5	10.6	10.8	12.5
15.5	15.6	--	13.4	15.5	<b>15.0</b>
14.2	14.4	--	--	13.8	14.1
11.7	15.3	11.6	10.2	9.7	11.7
<b>STATISTICS</b>					
3.2	3.0	3.2	7.2	5.6	4.4
0.6	0.7	0.6	1.1	0.9	0.3
12.9	15.7	13.4	11.5	11.1	12.9
15.5	17.0	15.3	13.4	15.5	15.0
11.7	14.4	11.6	9.8	9.5	11.6

## 2009 WSU Soft White Winter Wheat Trial Summary

### Precipitation Zone <12" – Preliminary Data

1. Soft white winter wheat grain yield across five locations and 58 entries in the <12" precipitation zone averaged 32 bushels/acre, two bushels/acre higher than the 2008 average of 30 bushels/acre. The CV for the average data was 13 and that was lower than the CV of 18 in 2008. The CVs in these experiments are higher than desired, but the trials still provide useful data. There was a lot of variability in fall establishment in the zone due to dry planting conditions and some of that variability carried through the trials. These trials were designed and all except Lind were analyzed as Alpha Lattice designs that overall helped to account for within replication variation and reduced LSD and CV values.

2. Test weight averaged 59.1 lb/bu across locations also slightly higher than last year. Grain protein averaged 12.8% nearly equaling last year's 12.7% value. Protein was higher than desired for soft white wheat, and hopefully will not adversely affect marketing of the 2009 crop.