

2007 WSU EXTENSION SOFT WHITE SPRING WHEAT NURSERY AT HORSE HEAVEN, WA.

| Variety Name <i>*Club Italized</i> | 5 YEAR AVERAGE (BU/A) | 3 YEAR AVERAGE (BU/A) | 2 YEAR AVERAGE (BU/A) | 2007 | | | | |
|---------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------|---------------------|----------------|-------------|--------------|
| | | | | YIELD (BU/A) | TEST WT (LBS/BU) | PROTEIN (%) | PLANT HT | HEAD DATE |
| ZAK | 27.9 | 23.7 | 30.6 | 31.2 | 59.8 | 12.4 | 26.0 | 148.3 |
| WAKANZ | 33.3 | 29.6 | 36.7 | 31.0 | 59.0 | 12.4 | 24.7 | 149.0 |
| LOUISE | 34.0 | 29.9 | 37.7 | 30.3 | 61.6 | 12.0 | 27.3 | 147.0 |
| ALPOWA | 30.7 | 26.4 | 34.1 | 29.6 | 61.5 | 12.1 | 23.0 | 148.3 |
| NICK | 33.4 | 29.2 | 37.4 | 28.9 | 60.9 | 13.1 | 20.7 | 145.7 |
| WA008046 | | | | 28.9 | 60.5 | 12.7 | 23.0 | 147.0 |
| ALTURAS | 31.6 | 26.5 | 33.9 | 28.5 | 60.5 | 11.5 | 20.3 | 147.3 |
| <i>WA008047</i> | | | | 28.1 | 62.1 | 12.3 | 22.7 | 149.0 |
| WA008039 | | | | 27.8 | 61.2 | 12.2 | 21.7 | 148.0 |
| WA008041 | | | | 27.8 | 59.7 | 12.6 | 24.3 | 148.0 |
| WA008008 | | | 36.1 | 27.3 | 61.1 | 12.4 | 21.7 | 144.7 |
| WA008044 | | | | 27.0 | 61.1 | 12.9 | 22.7 | 148.0 |
| UI CATALDO | | | 33.4 | 26.6 | 61.1 | 12.2 | 20.0 | 145.0 |
| <i>EDEN</i> | 30.9 | 26.2 | 33.1 | 25.8 | 62.0 | 12.1 | 21.7 | 146.7 |
| WA008043 | | | | 25.7 | 61.9 | 12.3 | 19.3 | 148.0 |
| <i>WA007989</i> | | | | 25.3 | 59.1 | 12.6 | 18.7 | 150.0 |
| WA008059 | | | | 24.7 | 60.5 | 13.7 | 24.0 | 146.3 |
| ARS05S303 | | | | 24.4 | 58.2 | 13.0 | 21.3 | 149.0 |
| C.V. % | 7.2 | 7.3 | 7.0 | 7.7 | 0.7 | 4.3 | -- | -- |
| LSD '@ .10' | 1.4 | 1.6 | 2.2 | 3.0 | 1.1 | 0.8 | -- | -- |
| Average | 31.7 | 27.4 | 34.8 | 27.7 | 60.7 | 12.5 | 22.4 | 147.5 |
| Highest | 34.0 | 29.9 | 37.7 | 31.2 | 62.1 | 13.7 | 27.3 | 150.0 |
| Lowest | 27.9 | 23.7 | 30.6 | 24.4 | 58.2 | 11.5 | 18.7 | 144.7 |

2007 WSU EXTENSION HARD WHITE SPRING WHEAT NURSERY AT HORSE HEAVEN, WA.

| Variety Name | 5 YEAR AVERAGE (BU/A) | 3 YEAR AVERAGE (BU/A) | 2 YEAR AVERAGE (BU/A) | 2007 | | | | |
|---------------|-----------------------------|-----------------------------|-----------------------------|-----------------|---------------------|----------------|-------------|--------------|
| | | | | YIELD (BU/A) | TEST WT (LBS/BU) | PROTEIN (%) | PLANT HT | HEAD DATE |
| WAIKEA | | 31.5 | 39.5 | 33.0 | 60.4 | 13.6 | 24.3 | 145.7 |
| BZ903-445WP-d | | | 40.0 | 32.3 | 60.9 | 15.0 | 25.0 | 145.7 |
| OTIS | 31.5 | 28.3 | 35.5 | 32.1 | 61.7 | 14.1 | 28.3 | 147.7 |
| LOLO | 31.4 | 28.1 | 36.4 | 30.8 | 61.9 | 14.3 | 26.3 | 146.7 |
| CLEAR WHITE | | | | 29.2 | 62.6 | 14.4 | 21.7 | 143.7 |
| MACON | 26.4 | 22.8 | 30.0 | 27.2 | 61.3 | 14.4 | 23.7 | 145.7 |
| WQL9HDALP | | | 32.6 | 27.1 | 62.3 | 12.8 | 23.3 | 147.3 |
| WA008036 | | | | 26.0 | 61.4 | 14.5 | 26.7 | 146.0 |
| PATWIN | | | | 25.1 | 59.3 | 15.4 | 19.7 | 148.7 |
| WA008038 | | | | 24.4 | 61.7 | 14.6 | 26.7 | 145.0 |
| WA008035 | | | | 22.0 | 60.0 | 14.8 | 22.0 | 144.3 |
| BLANCA GRANDE | 27.5 | 24.9 | 32.0 | 21.6 | 62.5 | 15.8 | 20.3 | 142.3 |
| C.V. % | 8.0 | 9.0 | 8.6 | 10.9 | 1.4 | 2.8 | -- | -- |
| LSD '@ .10' | 1.4 | 2.0 | 2.7 | 7.3 | 2.1 | 1.0 | -- | -- |
| Average | 29.2 | 27.1 | 35.1 | 27.6 | 61.3 | 14.5 | 24.0 | 145.7 |
| Highest | 31.5 | 31.5 | 40.0 | 33.0 | 62.6 | 15.8 | 28.3 | 148.7 |
| Lowest | 26.4 | 22.8 | 30.0 | 21.6 | 59.3 | 12.8 | 19.7 | 142.3 |

2007 WSU EXTENSION HARD RED SPRING WHEAT NURSERY AT HORSE HEAVEN, WA.

| Variety Name | 5 YEAR AVERAGE (BU/A) | 3 YEAR AVERAGE (BU/A) | 2 YEAR AVERAGE (BU/A) | 2007 | | | | |
|--------------|-----------------------------|-----------------------------|-----------------------------|-----------------|---------------------|----------------|-------------|--------------|
| | | | | YIELD (BU/A) | TEST WT (LBS/BU) | PROTEIN (%) | PLANT HT | HEAD DATE |
| JEFFERSON | 31.1 | 30.0 | 38.1 | 29.3 | 61.3 | 16.0 | 22.7 | 145.0 |
| WA008034 | | | | 29.2 | 59.4 | 14.9 | 25.0 | 147.3 |
| HOLLIS | 31.0 | 28.3 | 35.0 | 27.8 | 61.5 | 15.1 | 27.3 | 146.7 |
| WA008031 | | | | 27.6 | 60.2 | 17.3 | 24.0 | 146.7 |
| SCARLET | 28.9 | 24.7 | 32.0 | 26.9 | 59.5 | 15.9 | 24.3 | 147.3 |
| HANK | 31.1 | 28.8 | 35.4 | 26.7 | 61.1 | 15.9 | 22.3 | 145.3 |
| RSI50076 | | | | 26.6 | 59.9 | 13.7 | 19.7 | 146.7 |
| WA008030 | | | | 26.2 | 61.8 | 15.7 | 24.7 | 146.7 |
| GRANAR | | | | 25.8 | 60.3 | 15.2 | 24.0 | 148.3 |
| WA008013 | | | | 25.4 | 61.0 | 15.9 | 27.7 | 146.3 |
| CABERNET | | | | 24.6 | 62.0 | 16.4 | 19.3 | 146.0 |
| JEROME | 29.1 | 26.2 | 32.9 | 24.0 | 62.2 | 15.5 | 22.7 | 145.0 |
| BZ999-339 | | 26.8 | 34.0 | 23.6 | 60.6 | 16.0 | 22.0 | 144.7 |
| JEFF/PRONTO | | | 34.2 | 23.6 | 60.5 | 16.2 | 21.7 | 144.7 |
| ACS52610 | | | 32.8 | 23.4 | 61.4 | 14.8 | 21.3 | 148.0 |
| WA008027 | | | | 23.3 | 59.7 | 17.0 | 26.0 | 146.7 |
| JEDD | | | 32.4 | 22.4 | 61.8 | 15.9 | 20.7 | 144.7 |
| WA007954 | | | 32.2 | 22.0 | 60.7 | 16.8 | 25.7 | 147.7 |
| BUCK PRONTO | | 24.6 | 30.8 | 20.9 | 61.0 | 17.1 | 22.3 | 143.0 |
| WESTBRED 926 | 27.5 | 25.5 | 31.5 | 20.0 | 60.8 | 16.8 | 21.7 | 143.7 |
| TARA 2002 | 28.4 | 25.3 | 32.1 | 19.2 | 59.9 | 16.7 | 25.0 | 144.0 |
| C.V. % | 8.1 | 8.3 | 7.7 | 11.5 | 1.0 | 2.9 | -- | -- |
| LSD '@ .10' | 1.4 | 1.8 | 2.3 | 4.0 | 0.8 | 0.7 | -- | -- |
| Average | 29.6 | 26.7 | 33.3 | 24.7 | 60.8 | 15.9 | 23.3 | 145.9 |
| Highest | 31.1 | 30.0 | 38.1 | 29.3 | 62.2 | 17.3 | 27.7 | 148.3 |
| Lowest | 27.5 | 24.6 | 30.8 | 19.2 | 59.4 | 13.7 | 19.3 | 143.0 |

HORSE HEAVEN SPRING WHEAT – 2007 WSU VARIETY TESTING DATA

1. 2007 Spring Wheat **yield data** from the WSU Variety Testing nursery at the Horse Heaven, WA location averaged 27.7, 27.6, and 24.7 bu/ac for soft white spring, hard white spring and hard red spring wheat, respectively. The 2007 spring wheat **average yields were lower** by (13.2%), (11.5%) and (23.0%) for soft white spring, hard white spring and hard red spring wheat, respectively, compared to the previous historical 3-year average. Yield levels below historical averages is most likely a function of cold, dry weather patterns during the spring growing period from March through May 2007 that delayed early growth and development of root systems and crowns. This might be most evident in the HRS nursery where additional nitrogen coupled with higher and more timely precipitation in previous years provided both yield and protein 'boost' to HRS varieties. *NOTE: The Horse Heaven nursery was located on Cemetery Rd (S. Smith farm).*
2. This nursery was planted (22 March 2007) on chem fallow with a plot drill (hoe openers on 5-inch spacing) at a 60#/acre seeding rate. Base fertilizer was 20#N, 3#S. A 6 March 2007 soil test showed 71#N, 14#P, 10#S and 13# Cl (top 2-feet) availability. An additional (30#N, 4.5#S) and 50#N, 7.5#S) were applied to the hard white and hard red spring nurseries at planting, respectively.
3. **Stripe rust** was not a significant factor in the 2007 nursery even though traces of stripe rust were observed on susceptible varieties.
4. **TEST WEIGHT** values (average range across market classes was 60.7 lb/bu to 61.3 lb/bu) were fairly high, probably influenced most by 0.75 inch of precipitation on 5 June 2007 followed by a period of cooler temperatures during grain fill for about a 10-days.
5. **GRAIN PROTEIN** values were averaged 12.5%, 14.5% and 15.9% for soft white, hard white and hard red spring market classes, respectively. The fertility levels favored hard spring market classes.