

2011 Winter Wheat Variety Trial - Continuously Cropped - No-till

Mandan

Cooperator: USDA-ARS, Northern Great Plains Research Lab., Mandan

This trial was partially funded by Ducks Unlimited, Bismarck

| Variety | ----- No Foliar Fungicide ----- | | | | ----- Foliar Fungicide*----- | | | | Grain Yield | | Average Yield | |
|-------------|---------------------------------|-------------|-----------|-------------|------------------------------|-------------|-----------|------------------------------|-------------|------|---------------|------|
| | Plant Ht | Test Weight | Grain Pro | Grain Yield | Plant Ht | Test Weight | Grain Pro | Grain Yield | 2009 | 2010 | 2 yr | 3 yr |
| | inch | lbs/bu | % | bu/A | inch | lbs/bu | % | ----- bushels per acre ----- | | | | |
| Decade | 34 | 50.6 | 12.9 | 25.0 | 33 | 51.4 | 12.9 | 30.0 | 92.3 | 49.6 | 39.8 | 57.3 |
| Overland | 33 | 50.5 | 12.3 | 22.8 | 35 | 52.9 | 12.5 | 34.0 | 84.4 | 51.4 | 42.7 | 56.6 |
| Lyman | 33 | -- | 13.4 | 14.7 | 35 | 52.2 | 13.7 | 25.8 | 87.5 | 47.3 | 36.6 | 53.5 |
| Millennium | 39 | 49.9 | 12.4 | 17.6 | 36 | 52.9 | 12.3 | 33.0 | 77.7 | 51.1 | 42.0 | 53.9 |
| Art | 33 | 49.4 | 12.8 | 20.7 | 32 | 51.9 | 13.1 | 31.9 | 80.4 | 44.7 | 38.3 | 52.3 |
| Peregrine | 34 | 51.9 | 12.6 | 19.3 | 34 | 52.1 | 12.8 | 22.7 | 86.0 | 44.5 | 33.6 | 51.1 |
| Boomer | 36 | -- | 13.0 | 9.6 | 33 | 50.1 | 13.6 | 22.1 | 81.8 | 48.3 | 35.2 | 50.7 |
| Wesley | 32 | -- | 13.5 | 12.6 | 32 | 48.8 | 13.8 | 19.6 | 81.7 | 50.1 | 34.8 | 50.5 |
| Hawken | 31 | 48.7 | 12.7 | 17.1 | 26 | 50.4 | 13.8 | 20.1 | 83.2 | 45.9 | 33.0 | 49.7 |
| Darrell | 37 | -- | 13.0 | 13.7 | 33 | 50.9 | 13.3 | 21.9 | 77.1 | 48.9 | 35.4 | 49.3 |
| Radiant | 39 | -- | 12.1 | 13.6 | 36 | 51.5 | 12.6 | 20.6 | 85.7 | 38.4 | 29.5 | 48.2 |
| Accipiter | 36 | -- | 12.6 | 13.5 | 36 | 51.6 | 12.5 | 19.2 | 80.8 | 44.4 | 31.8 | 48.1 |
| Jerry | 33 | -- | 13.5 | 9.3 | 35 | 50.0 | 13.7 | 19.7 | 76.3 | 47.0 | 33.4 | 47.7 |
| Falcon | 34 | -- | 13.2 | 13.7 | 36 | 51.1 | 12.3 | 23.9 | 78.7 | 40.7 | 32.2 | 47.8 |
| Striker | 28 | -- | 13.3 | 11.1 | 32 | 51.5 | 13.2 | 22.4 | 74.0 | 41.4 | 31.9 | 45.9 |
| Yellowstone | 34 | -- | 13.0 | 2.7 | 32 | 46.8 | 13.3 | 11.4 | 75.7 | 47.5 | 29.4 | 44.9 |
| Carter | 31 | -- | 13.4 | 12.0 | 33 | 50.5 | 13.7 | 19.5 | | 40.0 | 29.8 | |
| SY Wolf | 29 | 52.3 | 11.7 | 31.9 | 33 | 51.7 | 12.7 | 32.2 | | | | |
| SY503CL2 | 31 | -- | 13.2 | 16.0 | 33 | 52.3 | 12.2 | 31.2 | | | | |
| Expedition | 33 | 48.2 | 12.8 | 18.3 | 34 | 52.0 | 13.2 | 29.4 | | | | |
| WB Matlock | 32 | -- | 13.3 | 13.8 | 34 | 52.9 | 13.8 | 21.4 | | | | |
| Ideal | 33 | 50.1 | 12.6 | 17.4 | 34 | 51.8 | 12.4 | 31.5 | | | | |
| Trial Mean | 33 | 49.6 | 12.9 | 15.4 | 33 | 51.1 | 13.1 | 23.5 | 81.3 | 45.1 | -- | -- |
| C.V. % | -- | -- | -- | -- | 6.4 | 1.9 | 2.7 | 24.2 | 7.1 | 15.4 | -- | -- |
| LSD .05 | -- | -- | -- | -- | 4 | 1.6 | 0.6 | 9.3 | 8.1 | 9.8 | -- | -- |
| LSD .01 | -- | -- | -- | -- | 4 | 2.1 | 0.8 | 12.4 | 10.8 | 12.9 | -- | -- |

*Foliar fungicides: 5 oz/A Stratego applied on June 4 (jointing) and 8.2 oz/A Prostaro on July 1 (flowering).

Planting Date: September 28, 2010

Harvest Date: August 22, 2011

Seeding Rate: 1 million live seeds / acre (approx. 1.4 bu/A).

Previous Crop: hrsw.

Note: The 2011 trial sustained severe foliar and head disease infestations. The 2010 trial sustained significant nitrogen deficiency causing relatively poor yields.