

2024 Performance Summary, Syngenta Data Eastern North Dakota and Minnesota

| Variety | 2024 Yield bu/ac | | | | | | | Test Wt. lbs/bu | Protein % | Heading 1-9 | Height 1-9 |
|-----------------|------------------|------------------|------------------|----------------|----------------|-------------------|---------------|--------------------|--------------|----------------|---------------|
| | Avg. | Crookston, MN | Casselton, ND | Drayton, ND | Langdon, ND | Park River, ND | Warren, MN | | | | |
| AP Elevate | 92.8 | 107.0 | 90.6 | 81.3 | 80.5 | 86.8 | 110.7 | 59.2 | 15.0 | 6 | 4 |
| SY Valda | 90.1 | 104.2 | 92.3 | 67.2 | 83.0 | 89.3 | 104.8 | 57.9 | 14.6 | 5 | 5 |
| SY Ingmar | 87.9 | 89.1 | 85.7 | 82.9 | 80.4 | 87.2 | 102.0 | 58.8 | 15.0 | 5 | 5 |
| AP Gunsmoke CL2 | 86.8 | 95.1 | 86.9 | 74.1 | 72.4 | 88.9 | 103.3 | 58.7 | 14.9 | 5 | 5 |
| AP Murdock | 85.9 | 96.3 | 90.5 | 65.3 | 79.2 | 76.5 | 107.9 | 58.8 | 14.1 | 4 | 4 |
| AP Smith | 84.9 | 87.1 | 88.3 | 75.1 | 75.9 | 82.6 | 100.6 | 58.7 | 15.0 | 6 | 4 |
| SY 611 CL2 | 84.3 | 103.4 | 87.9 | 62.4 | 74.1 | 82.6 | 95.4 | 57.1 | 15.0 | 5 | 4 |
| SY Longmire | 78.7 | 90.7 | 81.4 | 67.7 | 71.7 | 82.6 | 78.4 | 53.7 | 14.7 | 5 | 5 |
| MN-Rothsay | 90.2 | 97.2 | 85.8 | 71.7 | 88.9 | 92.1 | 105.6 | 60.2 | 14.6 | 6 | 5 |
| WB9606 | 89.3 | 93.4 | 92.9 | 74.5 | 90.3 | 84.8 | 99.5 | 60.0 | 14.1 | 5 | 6 |
| LCS Cannon | 87.7 | 95.0 | 92.4 | 82.4 | 78.3 | 84.7 | 93.2 | 60.9 | 14.2 | 2 | 5 |
| Shelly | 85.8 | 87.4 | 82.3 | 67.8 | 83.0 | 90.0 | 104.5 | 60.3 | 14.3 | 6 | 5 |
| MN-Torgy | 84.7 | 92.8 | 87.0 | 55.6 | 82.0 | 88.5 | 102.4 | 60.3 | 14.9 | 6 | 6 |
| WB9590 | 83.8 | 95.8 | 75.6 | 72.6 | 79.8 | 81.3 | 97.6 | 57.1 | 15.1 | 4 | 4 |
| Faller | 83.7 | 95.0 | 88.7 | 60.1 | 70.9 | 90.4 | 97.0 | 58.9 | 14.6 | 6 | 7 |
| Ascend-SD | 82.2 | 90.7 | 78.2 | 62.2 | 72.1 | 89.5 | 100.8 | 59.4 | 14.7 | 6 | 8 |
| WB9719 | 81.2 | 85.0 | 83.0 | 66.4 | 75.2 | 87.1 | 90.7 | 57.2 | 14.4 | 6 | 5 |
| ND Thresher | 76.1 | 89.7 | 75.9 | 53.4 | 65.3 | 84.4 | 88.2 | 55.3 | 14.8 | 6 | 5 |
| ND Frohberg | 75.5 | 86.8 | 79.6 | 49.3 | 61.9 | 73.7 | 101.7 | 59.3 | 15.1 | 5 | 6 |
| Mean | 82.7 | 89.8 | 83.0 | 65.5 | 75.4 | 85.1 | 97.7 | 58.1 | 14.3 | | |
| LSD (5%) | 7.0 | 14.3 | 9.8 | 10.9 | 14.4 | 13.6 | 18.5 | 2.1 | | | |
| CV (%) | 9.2 | 7.8 | 5.8 | 8.2 | 9.4 | 7.9 | 9.3 | 2.4 | 8.1 | | |
| No. of Locs. | 6 | | | | | | | 6 | 5 | | |

Numbers in **bold type** are in the top yielding group and considered statistically similar.

Numerical ratings: Heading: 1= early; Height: 1 = short; Lodging: 1 = no lodging; Disease 1 = tolerant

These agronomic assessments are made by Syngenta scientists and reflect each variety's relative performance within these characteristics through the 2024 crop year. Specific conditions may cause variations within those characteristics. These relative protection values are based on current pest and disease populations. These have been known to shift periodically and may cause changes in specific evaluations. Resistance to many other diseases and pests is sensitive to environmental conditions, plant development stages and the presence and intensity of other diseases which may result in specific evaluation inconsistencies. This chart is updated annually to reflect the most current trends.



Three-Year Performance Summary, Syngenta Data (2022-2024) Eastern North Dakota and Minnesota

| Variety | Yield Average bu/ac | | | Protein % 3-yr Avg | Economic Return ¹ | | | Agronomics and Disease | | | | |
|------------------------|---------------------|------|------|-----------------------|------------------------------|------------|------|------------------------|------------|-------------|---------|---------|
| | 3-yr | 2-yr | 2024 | | \$/Bu | Gross \$/A | Rank | Heading 1-9 | Height 1-9 | Lodging 1-9 | BLS 1-9 | FHB 1-9 |
| AP Elevate | 88.1 | 89.1 | 92.8 | 15.0 | 6.35 | 559 | 1 | 6 | 4 | 3 | 4 | 4 |
| SY Valda | 87.7 | 88.9 | 90.1 | 14.5 | 6.07 | 533 | 9 | 5 | 5 | 5 | 4 | 4 |
| AP Smith | 84.1 | 84.4 | 84.9 | 15.1 | 6.39 | 537 | 6 | 6 | 4 | 2 | 3 | 4 |
| SY 611 CL2 | 83.3 | 83.7 | 84.3 | 15.3 | 6.48 | 540 | 5 | 5 | 4 | 4 | 4 | 3 |
| AP Gunsmoke CL2 | 83.1 | 84.2 | 86.8 | 15.2 | 6.44 | 535 | 7 | 5 | 5 | 3 | 5 | 4 |
| AP Murdock | 83.0 | 84.1 | 85.9 | 14.6 | 6.12 | 508 | 15 | 4 | 4 | 4 | 4 | 4 |
| SY Ingmar | 82.8 | 83.6 | 87.9 | 15.4 | 6.56 | 544 | 4 | 5 | 5 | 3 | 3 | 3 |
| SY Longmire | 78.7 | 78.1 | 78.7 | 15.3 | 6.47 | 509 | 14 | 5 | 5 | 5 | 4 | 5 |
| WB9606 | 89.7 | 90.7 | 89.3 | 14.2 | 5.90 | 530 | 10 | 5 | 6 | 5 | 6 | 5 |
| MN-Rothsay | 88.7 | 90.6 | 90.2 | 14.9 | 6.28 | 557 | 2 | 6 | 5 | 4 | 4 | 4 |
| Shelly | 87.4 | 87.8 | 85.8 | 14.6 | 6.12 | 535 | 8 | 6 | 5 | 6 | 5 | 4 |
| Faller | 85.7 | 87.0 | 83.7 | 14.5 | 6.05 | 518 | 12 | 6 | 7 | 7 | 3 | 3 |
| MN-Torgy | 85.5 | 86.4 | 84.7 | 15.3 | 6.50 | 556 | 3 | 6 | 6 | 5 | 3 | 3 |
| LCS Cannon | 84.3 | 84.7 | 87.7 | 14.7 | 6.17 | 520 | 11 | 2 | 5 | 4 | 4 | 3 |
| ND Frohberg | 77.8 | 78.9 | 75.5 | 15.4 | 6.55 | 510 | 13 | 5 | 6 | 7 | 3 | 4 |
| WB9590 | | 86.1 | 83.8 | | | | | 4 | 4 | 2 | 6 | 6 |
| WB9719 | | 86.0 | 81.2 | | | | | 6 | 5 | 2 | 5 | 6 |
| Ascend-SD | | | 82.2 | | | | | 6 | 8 | 7 | 3 | 4 |
| ND Thresher | | | 76.1 | | | | | 6 | 5 | 7 | 3 | NA |
| Mean | 85.6 | 87.5 | 82.7 | 14.8 | | | | | | | | |
| LSD (5%) | 4.1 | 4.5 | 7.0 | 0.4 | | | | | | | | |
| CV (%) | 6.9 | 7.1 | 9.2 | 3.4 | | | | | | | | |
| No. of Locs. | 16 | 13 | 6 | 15 | | | | | | | | |

Numbers in **bold type** are in the top yielding group and considered statistically similar.

Numerical ratings: Heading: 1 = early; Height: 1 = short; Lodging: 1 = no lodging; Disease 1 = tolerant

2022 Locations: McVilleville, Thompson, and Park River, ND; Warren, MN

2023 Locations: Casselton, McVilleville, Park River, and Valley City, ND; Crookston, Glyndon, and Warren, MN

2024 Locations: Casselton, Drayton, Langdon and Park River, ND; Crookston, and Warren, MN

¹ Economic return calculated by using the three-year yield average multiplied by the average grain price (\$5.80/bu) on 10/8/2024 from 18 locations in ND/SD/MN. (+) 10.6 cents per 1/5th premium over 14% protein, (-) 12.0 cents per 1/5 discount under 14% protein.

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