



2025 South Dakota Oat Variety Trial Results - Regional Summaries

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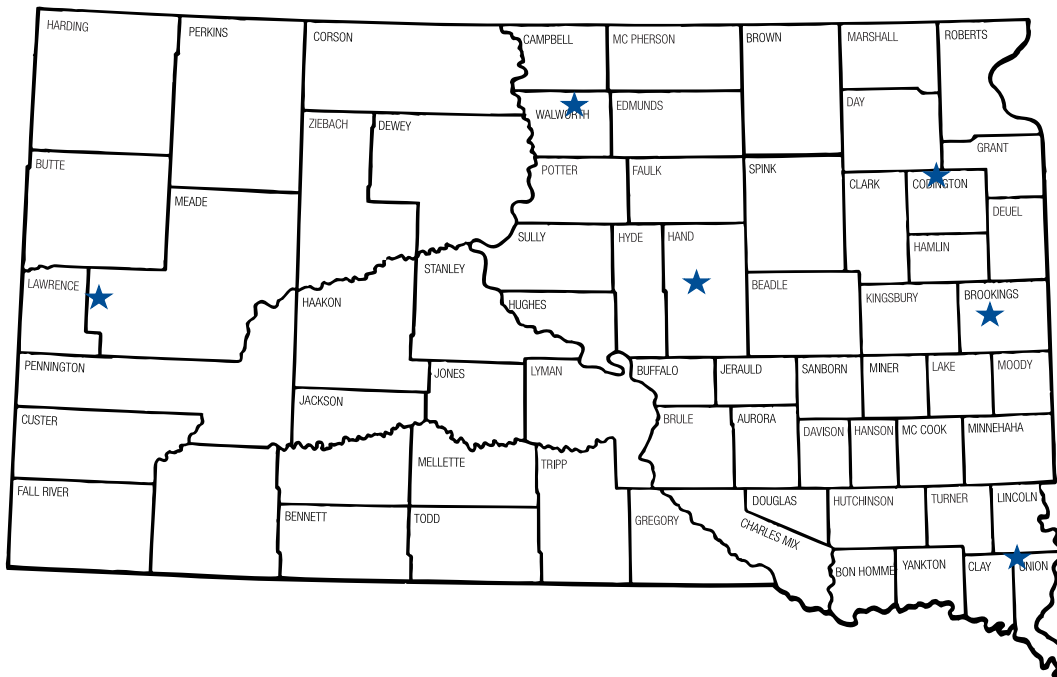
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Eastern trial locations: Beresford, South Shore, Volga

Central trial locations: Miller, Selby

Western trial locations: Sturgis

Individual trial location results can be accessed online at: <https://extension.sdstate.edu/oat-variety-trial-results>



Table 1. List of oat varieties tested in 2025 along with origin, agronomic, and grain quality characteristics.

| Variety | Testing and Origin | | Agronomic Characteristics | | | Grain Quality§ | | Disease Ratings¶ | | |
|-----------------------|---------------------------|--------------|---------------------------|-----------------|---------------------|----------------|-----------------------|------------------|------------|------|
| | Years tested in SD trials | Origin†-Year | Relative Heading (days) | Height (inches) | 2025 Lodging Score‡ | Grain Color | 2025 Test Wt. (lb/bu) | Smut | Crown Rust | BYDV |
| CDC ENDURE | 4 | MS-23 | 8 | 40 | 2.3 | White | 30.2 | R | 4 | 7 |
| CS CAMDEN | 5+ | MS-16 | 7 | 38 | 3.0 | White | 29.3 | MR | 5 | 7 |
| DEON | 5+ | MN-13 | 5 | 41 | 3.1 | Yellow | 32.1 | R | 5 | 4 |
| ESKER2020 | 3 | WI-19 | 2 | 37 | 3.2 | Yellow | 29.4 | R | 2 | - |
| Fred | 1 | ALS-25 | 2 | 41 | 2.6 | White | 33.9 | R | 2 | - |
| GMI2020Y2863 | 1 | GM-exp | 8 | 41 | 3.0 | White | 30.7 | R | 3 | 8 |
| GOLIATH | 5+ | SD-12 | 7 | 45 | 3.8 | White | 31.7 | MR | 7 | 2 |
| HAYDEN | 5+ | SD-14 | 6 | 40 | 3.8 | White | 33.4 | R | 8 | 1 |
| MN PEARL | 5+ | MN-18 | 5 | 40 | 3.7 | White | 29.9 | R | 9 | - |
| RUSHMORE | 5+ | SD-19 | 3 | 39 | 3.7 | White | 32.4 | MR | 8 | 2 |
| SADDLE | 5+ | SD-17 | 0 | 35 | 3.1 | White | 31.9 | R | 8 | 1 |
| SD Buffalo | 5+ | SD-21 | 4 | 39 | 3.8 | White | 31.8 | R | 7 | 1 |
| SD Momentum | 5 | SD-23 | 7 | 47 | 2.9 | White | 32.9 | R | 1 | 3 |
| SD Ranger | 4 | SD-24 | 4 | 40 | 3.6 | White | 32.7 | R | 4 | 3 |
| SD Titan | 5 | SD-23 | 5 | 44 | 2.5 | White | 32.4 | MR | 1 | 3 |
| SHELBY427 | 5+ | SD-09 | 2 | 38 | 3.6 | White | 33.9 | R | 8 | 3 |
| SUMO | 5+ | ALS-16 | 0 | 36 | 2.6 | White | 33 | R | 3 | - |
| WARRIOR | 5+ | SD-18 | 3 | 38 | 2.8 | White | 32.3 | R | 7 | 4 |
| Trial Average# | - | - | - | 40 | 3.2 | - | 31.9 | - | - | - |

† MN, Minnesota; MS, Meridian Seeds; SD, South Dakota; WI, Wisconsin; GM, General Mills, ALS (Albert Lea Seed) - (Year of Release)
‡ Lodging scores: 1, standing perfectly to 5, completely flat
§ Grain protein content and test weight statewide averages
¶ Disease ratings: 1, most resistant to 9, most susceptible (or traditional ratings MR, MS, etc.)
Trial averages may include values from experimental lines that are not reported.



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2025 South Dakota Oat Variety Trial Results Quality Characteristics

Table 2. Grain quality and milling characteristics.

| Variety | % Plump | % Mid | % Thin | 1000 Kernel Weight (g) | Groat % | NIR groat protein % | NIR groat beta-glucan % | NIR groat fat % |
|-----------------------|---------|-------|--------|------------------------|---------|---------------------|-------------------------|-----------------|
| CDCEndure | 72.1 | 24.0 | 3.9 | 33.2 | 76.0 | 17.4 | 5.62 | 6.07 |
| CSCamden | 54.1 | 40.9 | 5.0 | 31.6 | 72.2 | 18.3 | 5.70 | 6.74 |
| Deon | 42.5 | 50.5 | 6.9 | 32.6 | 73.8 | 17.7 | 5.21 | 7.01 |
| Esker2020 | 35.1 | 54.8 | 10.0 | 28.4 | 73.4 | 18.2 | 5.43 | 5.96 |
| Fred | 49.7 | 44.6 | 5.6 | 33.0 | 74.4 | 17.8 | 5.45 | 7.88 |
| GMI2020Y2863 | 66.4 | 29.4 | 4.2 | 32.0 | 76.1 | 17.2 | 5.74 | 6.24 |
| Goliath | 39.7 | 50.9 | 9.3 | 29.0 | 73.5 | 17.4 | 5.27 | 6.68 |
| Hayden | 40.4 | 52.8 | 6.7 | 32.0 | 72.8 | 16.7 | 5.31 | 7.55 |
| MNPearl | 48.8 | 42.0 | 9.1 | 28.4 | 74.9 | 15.2 | 4.87 | 7.27 |
| Rushmore | 45.5 | 46.6 | 7.8 | 29.4 | 73.1 | 17.5 | 4.93 | 6.49 |
| Saddle | 26.7 | 65.0 | 8.3 | 28.9 | 75.4 | 17.2 | 4.96 | 5.86 |
| SDBuffalo | 42.0 | 51.9 | 6.1 | 31.9 | 73.1 | 17.5 | 5.03 | 7.47 |
| SDMomentum | 53.6 | 42.0 | 4.4 | 32.9 | 73.8 | 16.5 | 5.01 | 7.94 |
| SDRanger | 70.9 | 25.6 | 3.4 | 30.3 | 74.6 | 16.9 | 4.92 | 5.85 |
| SDTitan | 47.5 | 45.2 | 7.2 | 31.0 | 73.6 | 18.1 | 4.89 | 6.04 |
| Shelby 427 | 36.4 | 54.8 | 8.8 | 27.7 | 74.9 | 18.0 | 5.09 | 7.08 |
| Sumo | 66.8 | 30.0 | 3.1 | 34.0 | 74.4 | 19.0 | 4.62 | 5.85 |
| Warrior | 40.4 | 52.4 | 7.0 | 30.0 | 74.5 | 18.1 | 5.28 | 6.52 |
| Trial Average# | 48.8 | 44.6 | 6.5 | 30.9 | 74.1 | 17.5 | 5.18 | 6.7 |
| LSD (0.05)† | 10.0 | 9.0 | 2.3 | 2.1 | 2.1 | 0.8 | 0.28 | 0.36 |
| C.V. %‡ | 17.4 | 18.3 | 32.8 | 5.8 | 2.4 | 3.8 | 4.6 | 4.5 |

Trial averages may include values from experimental lines that are not reported.
† Value required (\geq LSD) to determine if varieties are significantly different from one another.
‡ C.V. is a measure of variability or experimental error



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2025 South Dakota Oat Variety Trial Results Eastern Summary

Table 3. 2022-2025 oat variety performance trial results for testing sites in eastern South Dakota. Varieties yielding in the top 1/3 of the trial are bold and shaded light blue.

| Variety | 2023 | 2024 | 2025 | | 2-year | | 3-year | |
|-----------------------|--------------|--------------|--------------|------------------|--------------|------------------|--------------|------------------|
| | Yield (bu/a) | Yield (bu/a) | Yield (bu/a) | Test Wt (lbs/bu) | Yield (bu/a) | Test Wt (lbs/bu) | Yield (bu/a) | Test Wt (lbs/bu) |
| SD Titan | 122.6 | 129.5 | 111.0 | 32.0 | 120.3 | 33.0 | 121.1 | 33.5 |
| SD Ranger | 120.8 | 120.1 | 109.1 | 32.5 | 114.6 | 33.4 | 116.7 | 34.3 |
| SD Momentum | 111.8 | 126.7 | 110.3 | 33.0 | 118.5 | 34.0 | 116.3 | 34.5 |
| CDC ENDURE | 124.9 | 108.8 | 95.5 | 30.3 | 102.1 | 30.4 | 109.7 | 31.5 |
| CS CAMDEN | 118.7 | 96.3 | 100.2 | 28.7 | 98.2 | 28.6 | 105.1 | 29.6 |
| DEON | 108.5 | 103.3 | 102.9 | 32.0 | 103.1 | 32.3 | 104.9 | 32.9 |
| WARRIOR | 109.9 | 95.2 | 106.0 | 32.1 | 100.6 | 32.3 | 103.7 | 32.9 |
| HAYDEN | 111.9 | 85.3 | 95.0 | 33.0 | 90.2 | 32.6 | 97.4 | 33.4 |
| GOLIATH | 108.8 | 101.5 | 79.9 | 30.7 | 90.7 | 31.5 | 96.8 | 33.0 |
| SD Buffalo | 101.8 | 90.8 | 89.0 | 31.2 | 89.9 | 31.4 | 93.9 | 32.2 |
| SHELBY427 | 101.5 | 78.7 | 87.6 | 33.9 | 83.2 | 33.9 | 89.3 | 34.1 |
| RUSHMORE | 98.0 | 78.3 | 82.2 | 31.6 | 80.3 | 32.4 | 86.2 | 33.6 |
| MN PEARL | 104.5 | 68.8 | 82.0 | 29.2 | 75.4 | 27.9 | 85.1 | 30.5 |
| ESKER2020 | - | - | 110.0 | 29.4 | - | - | - | - |
| Fred | - | - | 109.3 | 33.9 | - | - | - | - |
| GMI2020Y2863 | - | - | 106.3 | 30.7 | - | - | - | - |
| SADDLE | - | - | 83.9 | 31.3 | - | - | - | - |
| SUMO | - | - | 91.5 | 32.8 | - | - | - | - |
| Trial Average# | 112.2 | 103.8 | 103.2 | 32.4 | 32.4 | 101.4 | 33.4 | 98.4 |
| LSD (0.05)† | 6.8 | 15.1 | 14.9 | 1.9 | 1.9 | 16.9 | 2.2 | 16.7 |
| C.V. %‡ | 6.1 | 10.2 | 9.2 | 2.5 | 2.7 | 8.8 | 2.7 | 8.5 |

Trial averages may include values from experimental lines that are not reported.
† Value required (≥LSD) to determine if varieties are significantly different from one another.
‡ C.V. is a measure of variability or experimental error, 15% or less is considered acceptable.



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2025 South Dakota Oat Variety Trial Results Central Summary

Table 4. 2022-2025 oat variety performance trial results for testing sites in central South Dakota. Varieties yielding in the top 1/3 of the trial are bold and shaded light blue.

| Variety | 2023 | 2024 | 2025 | | 2-year | | 3-year | |
|-----------------------|--------------|--------------|--------------|------------------|--------------|------------------|--------------|------------------|
| | Yield (bu/a) | Yield (bu/a) | Yield (bu/a) | Test Wt (lbs/bu) | Yield (bu/a) | Test Wt (lbs/bu) | Yield (bu/a) | Test Wt (lbs/bu) |
| CS CAMDEN | 154.9 | 139 | 157.2 | 30.4 | 148.1 | 31.8 | 150.4 | 32.1 |
| SD Ranger | 144.8 | 135.0 | 163.3 | 33.2 | 149.2 | 34.0 | 147.7 | 34.7 |
| CDC ENDURE | 152.3 | 139 | 143.9 | 30.0 | 141.3 | 32.0 | 144.9 | 32.9 |
| DEON | 141.6 | 132 | 153.1 | 32.3 | 142.7 | 34.0 | 142.3 | 34.4 |
| SD Buffalo | 152.2 | 128 | 143.7 | 33.1 | 135.8 | 34.6 | 141.3 | 34.9 |
| SD Momentum | 144.2 | 128 | 145.1 | 32.7 | 136.5 | 34.8 | 139.0 | 35.5 |
| SD Titan | 137.7 | 123 | 152.2 | 33.3 | 137.6 | 34.3 | 137.6 | 34.9 |
| MN PEARL | 142.9 | 123 | 142.4 | 31.4 | 132.5 | 33.1 | 136.0 | 33.8 |
| HAYDEN | 131.0 | 124 | 143.3 | 34.4 | 133.5 | 35.2 | 132.7 | 35.3 |
| WARRIOR | 130.8 | 118 | 145.7 | 32.7 | 131.6 | 33.8 | 131.4 | 33.9 |
| RUSHMORE | 136.4 | 117 | 127.6 | 34.1 | 122.4 | 35.4 | 127.1 | 35.5 |
| GOLIATH | 137.4 | 113 | 129.1 | 33.6 | 121.1 | 34.6 | 126.5 | 35.3 |
| SHELBY427 | 126.5 | 109 | 118.8 | 34.0 | 113.9 | 35.3 | 118.1 | 35.3 |
| ESKER2020 | - | - | 140.9 | 29.4 | - | - | - | - |
| Fred | - | - | 139.0 | 33.9 | - | - | - | - |
| GMI2020Y2863 | - | - | 151.2 | 30.7 | - | - | - | - |
| SADDLE | - | - | 134.7 | 32.9 | - | - | - | - |
| SUMO | - | - | 121.7 | 33.3 | - | - | - | - |
| Trial Average# | 140.7 | 127.4 | 144.6 | 32.9 | 141.7 | 34.3 | 147.1 | 34.9 |
| LSD (0.05)† | 6.5 | 11.7 | 18.3 | 1.6 | 16.4 | 1.3 | 16.9 | 1.2 |
| C.V. %‡ | 5.8 | 6.4 | 8.7 | 3.0 | 8.5 | 2.9 | 7.6 | 2.5 |

Trial averages may include values from experimental lines that are not reported.

† Value required (\geq LSD) to determine if varieties are significantly different from one another.

‡ C.V. is a measure of variability or experimental error, 15% or less is considered acceptable.



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2025 South Dakota Oat Variety Trial Results Western Summary

Table 5. 2022-2025 oat variety performance trial results for testing sites in western South Dakota. Varieties yielding in the top 1/3 of the trial are bold and shaded light blue.

| Variety | 2023 | 2024 | 2025 | | 2-year | | 3-year | |
|-----------------------|--------------|--------------|--------------|------------------|--------------|------------------|--------------|-------------------|
| | Yield (bu/a) | Yield (bu/a) | Yield (bu/a) | Test Wt (lbs/bu) | Yield (bu/a) | Test Wt (lbs/bu) | Yield (bu/a) | Test Wt (lbs/bu)§ |
| CS CAMDEN | 143.3 | 92.3 | 103.2 | not available | 97.7 | not available | 112.9 | 36.1 |
| CDC ENDURE | 148.2 | 82.6 | 103.8 | available | 93.2 | available | 111.5 | 37.4 |
| SD Ranger | 99.1 | 92.7 | 121.6 | - | 107.1 | - | 104.4 | 37.2 |
| SD Momentum | 120.1 | 56.7 | 122.6 | - | 89.7 | - | 99.8 | 37.1 |
| HAYDEN | 82.5 | 81.7 | 115.2 | - | 98.5 | - | 93.2 | 35.1 |
| SD Titan | 113.6 | 61.0 | 99.1 | - | 80.0 | - | 91.2 | 35.8 |
| GOLIATH | 93.5 | 64.2 | 113.9 | - | 89.0 | - | 90.5 | 37.5 |
| WARRIOR | 89.9 | 83.4 | 97.2 | - | 90.3 | - | 90.2 | 34.2 |
| RUSHMORE | 111.1 | 71.4 | 86.2 | - | 78.8 | - | 89.6 | 36.7 |
| SD Buffalo | 84.8 | 80.0 | 100.6 | - | 90.3 | - | 88.5 | 35.4 |
| MN PEARL | 80.6 | 80.7 | 100.2 | - | 90.4 | - | 87.2 | 33.9 |
| SHELBY427 | 97.7 | 81.5 | 78.2 | - | 79.8 | - | 85.8 | 37.1 |
| DEON | 79.3 | 78.3 | 96.9 | - | 87.6 | - | 84.8 | 34.9 |
| ESKER2020 | - | - | 84.9 | - | - | - | - | - |
| Fred | - | - | 92.1 | - | - | - | - | - |
| GMI2020Y2863 | - | - | 119.3 | - | - | - | - | - |
| SADDLE | - | - | 82.4 | - | - | - | - | - |
| SUMO | - | - | 66.4 | - | - | - | - | - |
| Trial Average# | 97.6 | 76.7 | 106.1 | - | 89.7 | - | 91.7 | - |
| LSD (0.05)† | 13 | 12.9 | 22.1 | - | 30.1 | - | 35.1 | - |
| C.V. %‡ | 9.4 | 11.9 | 15.3 | - | 14.3 | - | 12.9 | - |

Trial averages may include values from experimental lines that are not reported.
† Value required (≥LSD) to determine if varieties are significantly different from one another.
‡ C.V. is a measure of variability or experimental error, 15% or less is considered acceptable.
§ average of 2023 and 2024