



2018 South Dakota Oat Variety Trial Results Selby

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|------------------------|--|
| Cooperator: | Tom Fiedler |
| Location: | 45.488314°, -100.016894° |
| Soil Type: | Highmore silt loam, cool, 2-6% slopes |
| Previous crop: | soybeans |
| Tillage: | No-till |
| Row spacing: | 8" |
| Seeding Rate: | 1.2 million PLS/acre |
| Fertilizer: | |
| -Starter: | 90 lb/acre 30-10-10 |
| -Other: | 320 lb/acre 46-0-0; 100 lb/acre 11-52-0 preplant broadcast |
| Herbicide: | |
| -Burndown: | NR |
| -Post: | 1.5 pt Bromac |
| Fungicide: | none |
| Date seeded: | 4/30/2018 |
| Date harvested: | 8/17/2018 |
| Notes: | This location was hailed out in 2017. The reported three-year average is actually a two-year average from 2016 and 2018. |

Table 1. 2018 oat variety performance trial results (average of 4 replications) at Selby, SD. Entries are sorted by overall 2-year yield. Varieties yielding in the top 1/3 of the trial are shaded light blue.

| Variety | Height (in) | Lodging* (1-5) | Test Wt (lbs) | 2016 (bu/a) | 2017 (bu/a) | 2018 (bu/a) | 2-year (bu/a) | 3-year (bu/a) |
|-----------------------|-------------|----------------|---------------|-------------|-------------|-------------|---------------|---------------|
| Rockford | 38 | 2.8 | 37.7 | 154.6 | - | 184.2 | - | 169.4 |
| CS Camden | 38 | 1.8 | 34.4 | 147.1 | - | 190.5 | - | 168.8 |
| Hayden | 39 | 2.8 | 38.5 | 154.7 | - | 178.2 | - | 166.4 |
| Souris | 37 | 2.8 | 35.6 | 152.4 | - | 178.3 | - | 165.4 |
| Horsepower | 35 | 1.3 | 37.7 | 142.3 | - | 177.0 | - | 159.6 |
| Newburg | 43 | 3.0 | 34.9 | 145.9 | - | 173.0 | - | 159.4 |
| Deon | 40 | 2.5 | 36.5 | 141.3 | - | 176.8 | - | 159.1 |
| Natty | 40 | 3.5 | 37.7 | 147.5 | - | 167.6 | - | 157.6 |
| Goliath | 44 | 3.8 | 38.0 | 142.4 | - | 166.2 | - | 154.3 |
| Saddle | 36 | 1.5 | 35.1 | 155.0 | - | 146.0 | - | 150.5 |
| Jury | 42 | 3.3 | 36.9 | 135.0 | - | 159.4 | - | 147.2 |
| Jerry | 37 | 2.8 | 36.7 | 129.7 | - | 141.5 | - | 135.6 |
| Shelby427 | 37 | 1.8 | 37.0 | 112.1 | - | 148.4 | - | 130.2 |
| Sumo | 34 | 2.8 | 36.2 | 131.4 | - | 118.6 | - | 125.0 |
| Antigo | 35 | 2.3 | 38.5 | - | - | 131.9 | - | - |
| Trial Average# | 39 | 2.4 | 37.1 | 137.4 | - | 165.6 | - | 153.4 |
| LSD(0.05)† | 3.0 | 0.8 | 0.9 | 8.7 | - | 9.4 | - | - |
| C.V.%‡ | 5.5 | - | 1.9 | 4.5 | - | 4.0 | - | - |

* Lodging score: 1, perfectly standing; to 5, completely flat.

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.