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SOUTH DAKOTA STATE UNIVERSITY®
AGRONOMY, HORTICULTURE, & PLANT SCIENCE DEPARTMENT

2019 South Dakota Oat Variety Trial Results Beresford

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Cooperator: SDSU Southeast Research Farm, Peter Sexton, manager
Location: 43.043222°, -96.901606°
Soil Type: Egan-Clarno-Tetonka complex, 0-2% slopes
Previous crop: Soybeans
Tillage: Conventional till
Row spacing: 7"
Seeding Rate: 1.2 million PLS/acre
Fertilizer:
 -Starter: 60 lb/acre 30-10-10
 -Other: none
Herbicide:
 -Burndown: NA
 -Post: 1 pt/acre Bronate
Fungicide: none
Date seeded: 4/26/2019
Date harvested: 8/5/2019

Table 1. 2019 oat variety performance trial results (average of 4 replications) at Beresford, SD. Entries are sorted by overall 3-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) | 2017 (bu/a) | 2018 (bu/a) | 2019 (bu/a) | 2-year (bu/a) | 3-year (bu/a) |
|-----------------------|-------------|----------------|---------------|-------------|-------------|-------------|---------------|---------------|
| Deon | 43 | 4.0 | 34.7 | 127.5 | 126.6 | 116.6 | 121.6 | 123.6 |
| Warrior | 40 | 1.8 | 35.4 | 114.4 | 106.9 | 114.7 | 110.8 | 112.0 |
| SD140515 | 41 | 2.8 | 36.0 | 124.7 | 109.0 | 98.2 | 103.6 | 110.6 |
| Saddle | 40 | 2.0 | 36.8 | 114.8 | 95.4 | 115.3 | 105.4 | 108.5 |
| Antigo | 45 | 4.3 | 38.7 | 108.5 | 101.9 | 104.4 | 103.1 | 104.9 |
| Sumo | 41 | 2.5 | 38.1 | 94.8 | 91.8 | 118.6 | 105.2 | 101.7 |
| CS Camden | 41 | 4.5 | 28.2 | 127.3 | 86.9 | 68.6 | 77.7 | 94.3 |
| Natty | 41 | 4.0 | 35.7 | 113.8 | 83.3 | 77.5 | 80.4 | 91.5 |
| Goliath | 44 | 4.0 | 31.1 | 109.0 | 74.5 | 64.8 | 69.6 | 82.8 |
| Hayden | 39 | 4.8 | 30.6 | 104.3 | 58.9 | 54.6 | 56.7 | 72.6 |
| Newburg | 40 | 4.5 | 29.6 | 104.0 | 64.1 | 43.2 | 53.6 | 70.4 |
| Shelby427 | - | 5.0 | 32.3 | 99.1 | 64.2 | 44.2 | 54.2 | 69.1 |
| Jury | 42 | 3.8 | 33.3 | 94.5 | 65.1 | 47.7 | 56.4 | 69.1 |
| Jerry | - | 4.8 | 30.5 | 97.9 | 58.6 | 39.4 | 49.0 | 65.3 |
| Horsepower | - | 4.8 | 24.6 | 89.6 | 50.3 | 25.1 | 37.7 | 55.0 |
| MN Pearl | 43 | 2.8 | 33.9 | - | - | 111.3 | - | - |
| Trial Average# | 42 | 3.6 | 34.1 | 108.7 | 89.4 | 89.9 | 79.0 | 88.8 |
| LSD(0.05)† | - | - | 2.1 | 12.5 | 15.6 | 13.6 | - | - |
| C.V.%‡ | - | - | 3.6 | 7.5 | 10.6 | 10.8 | - | - |

* 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.