



2018 South Dakota Grain Sorghum Hybrid Trial Results Pierre

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Cooperator: Dwayne Beck
Location: Dakota Lakes, SD
Soil Type: Silt Loam
Fertilizer: 60 lbs N/ac (28-0-0)
Previous crop: Winter Wheat
Tillage: No-till
Row spacing: 30"
Seeding Rate: 60,000 PLS/acre
Herbicide: Dual
Fungicide: NA
Date seeded: 5/16/2018
Date harvested: 10/15/2018

Table 1. 2018 grain sorghum hybrids tested at Pierre, SD§.

| Hybrid Name | Company | Germ. (%) | Maturity Group (E, M/E, M)† | Days to 50% Bloom | Grain Color (B, C, R, Y)‡ | Panicle Type (SC or SO)§ | Resistance to greenbug biotype: C, E, I, K, or none |
|-------------|----------------------------|-----------|-----------------------------|-------------------|---------------------------|--------------------------|-----------------------------------------------------|
| 251 | Chromatin/Sorghum Partners | 85 | VE | 52 | R | O | NA |
| 88Y47 | Dupont Pioneer | 85 | E | 61 | W | SC | None |
| 89Y79 | Dupont Pioneer | 85 | E | 59 | W | SC | None |
| ADV XG001 | Advanta | 85 | ME | 63 | B | SC | None |
| ADV XG251 | Advanta | 40 | ME | 63 | B | SO | None |
| ADV XG602 | Advanta | 85 | ME | 63 | B | SO | None |
| ADV XG629 | Advanta | 85 | E | 58 | C | SC | None |
| AG1101 | Advanta | 85 | E | 55 | R | SC | None |
| AG1201 | Advanta | 85 | E | 60 | B | SC | None |
| AG1203 | Advanta | 85 | ME | 63 | B | SO | None |
| AG1301 | Advanta | 85 | ME | 63 | C | SC | None |
| AS 216 | Arrow | 90 | E | 50 | B | SO | N/A |
| AS12X | Arrow | 90 | ME | 62 | R | SC | N/A |
| AS248FG | Arrow | 90 | ME | 58 | W | SC | N/A |
| AV6R01 | AgVenture | - | - | - | - | - | - |
| AVSR31 | AgVenture | - | - | - | - | - | - |
| DKS28-05 | Dekalb/Monsanto | - | E | 57 | B | SC | E,I |
| DKS29-07 | Dekalb/Monsanto | - | E | 59 | C | I | None |
| GS 750 | Sokota | - | - | - | - | - | - |
| GS 852 | Sokota | - | - | - | - | - | - |
| GX17912 | Dyna-Gro | 85 | ME | 60 | C | SO | C,E |
| M57GB19 | Dyna-Gro | 85 | E | 58 | B | SO | C,E,I |
| GX17917 | Dyna-Gro | 85 | E | 58 | R | SO | C,E,I |
| GX18919 | Dyna-Gro | - | - | - | - | - | - |
| LGS 5001 | Legend Seeds | 85 | E | 52 | B | SO | N/A |
| LGS 5508 | Legend Seeds | 85 | ME | 59 | W | SC | N/A |
| LGS 5808 | Legend Seeds | 85 | E | 58 | R | SC | N/A |
| LGX 5002 | Legend Seeds | 85 | E | 53 | R | SO | N/A |
| M59GB57 | Dyna-Gro | 85 | E | 59 | B | SO | C,E |
| M60GB31 | Dyna-Gro | 85 | ME | 60 | B | SO | C,E,I |
| M60GB88 | Dyna-Gro | 85 | ME | 60 | B | SO | C,E |
| M71GB01 | Dyna-Gro | 85 | VE | 54 | B | SO | C,E |
| SP 31A15 | Chromatin/Sorghum Partners | 85 | E | 58 | Br | SO | NA |
| SP 68M57 | Chromatin/Sorghum Partners | 85 | M | 65 | Br | SO | NA |
| SP 25C10 | Chromatin/Sorghum Partners | 85 | VE | 52 | Br | SO | NA |

† Maturity: E=Early, M/E = Medium Early, M = Medium

‡ Grain Color: B = Bronze, C = Cream, R = Red, Y = Yellow

§ Panicle type: SC = Semi-Closed, SO = Semi-Open

Table 2. 2018 grain sorghum hybrid performance trial results (average of 4 replications) at Pierre, SD§.

| Hybrid | Height (in) | Test Wt (lbs) | 2018 (bu/a) | 2 year (bu/a) |
|----------------------|-------------|---------------|-------------|---------------|
| 251 | 40 | 51.5 | 56 | - |
| 88Y47 | 55 | 52.7 | 90 | - |
| 89Y79 | 46 | 50.5 | 66 | - |
| ADV XG001 | 48 | 52.8 | 83 | - |
| ADV XG251 | 42 | 53.4 | 86 | - |
| ADV XG602 | 48 | 52.5 | 80 | - |
| ADV XG629 | 37 | 56.1 | 90 | - |
| AG1101 | 36 | 50.4 | 69 | 77 |
| AG1201 | 40 | 54.0 | 94 | 105 |
| AG1203 | 48 | 55.8 | 113 | - |
| AG1301 | 42 | 55.2 | 100 | - |
| AS 216 | 48 | 50.4 | 72 | - |
| AS12X | 50 | 54.4 | 86 | - |
| AS248FG | 47 | 55.6 | 89 | - |
| AV6R01 | 47 | 52.8 | 88 | - |
| AVSR31 | 42 | 48.3 | 69 | - |
| DKS28-05 | 48 | 51.8 | 95 | - |
| DKS29-07 | 50 | 53.6 | 89 | - |
| GS 750 | 47 | 55.0 | 92 | - |
| GS 852 | 52 | 52.4 | 78 | - |
| GX17912 | 52 | 53.0 | 91 | - |
| M57GB19 | 53 | 53.8 | 101 | - |
| GX17917 | 45 | 52.5 | 91 | - |
| GX18919 | 50 | 51.4 | 88 | - |
| LGS 5001 | 46 | 50.8 | 67 | 81 |
| LGS 5508W | 45 | 55.8 | 89 | 88 |
| LGS 5808 | 51 | 53.7 | 89 | 99 |
| LGX 5002 | 46 | 53.5 | 73 | - |
| M59GB57 | 43 | 53.6 | 98 | - |
| M60GB31 | 49 | 56.5 | 110 | - |
| M60GB88 | 51 | 54.5 | 92 | - |
| M71GB01 | 48 | 51.5 | 67 | - |
| SP 31A15 | 42 | 50.0 | 82 | 92 |
| SP 68M57 | 45 | 54.8 | 92 | - |
| SP25C10 | 38 | 49.1 | 70 | 85 |
| Trial Average | 46 | 53.1 | 86 | 90 |
| LSD (0.05)† | - | 1.4 | 9.1 | - |
| C.V. %‡ | - | 1.7 | 6.6 | - |

§ Values in bold rank in the top third of all varieties for each category

† 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 acceptable.