

2018 SOYBEAN REGIONAL VARIETY TRIAL (SRVT)

| Name | PBR | Company Maturity Grouping1 | Herbicide tolerance type2 | Hilum Colour 3 | Years tested | Site years | Mean Yield (Kg/ha) | Yield rank | Mean yield % TH 33003R2Y | Days to Maturity4 (+/- TH 33003R2Y = 109.5 days) |
|------------------|---------|----------------------------|---------------------------|----------------|--------------|------------|--------------------|------------|--------------------------|--|
| TH 33003R2Y | | 00.3 | RR2 | BR | 7 | 38 | 2457 | 22 | 100 | 0 |
| P0007A43R | Upov 91 | 000.7 | RR1 | BR | 2 | 16 | 1943 | 59 | 79 | -12 |
| P0007A65R | | 000.7 | RR1 | BR | 1 | 8 | 2007 | 58 | 82 | -11 |
| P000A87R | | 000 | RR1 | TN | 1 | 8 | 2195 | 51 | 89 | -10 |
| NSC Leroy RR2Y | | 000.6 | RR2 | Y | 3 | 26 | 2351 | 30 | 96 | -9 |
| S0007-B7X | | 000.7 | RR2X | BF | 1 | 8 | 2302 | 42 | 94 | -9 |
| NSC Watson RR2Y | | 000.8 | RR2 | IY | 4 | 38 | 2547 | 9 | 104 | -9 |
| S0009-D6 | | 000.9 | RR2 | IY | 2 | 16 | 2673 | 5 | 109 | -8 |
| S0009-M2 | | 000.9 | RR2 | IY | 4 | 38 | 2495 | 17 | 102 | -8 |
| Dayo R2X | | 000 | RR2X | | 1 | 8 | 2306 | 41 | 94 | -7 |
| NocomaR2 | Upov 91 | 000.8 | RR2 | IB | 2 | 16 | 2517 | 16 | 102 | -7 |
| TH890005 R2XN | | 000.5 | RR2X | BL | 1 | 8 | 2335 | 34 | 95 | -7 |
| PV 17s0007 R2X | | 000.7 | RR2X | BL | 1 | 8 | 2229 | 49 | 91 | -7 |
| DKB0005-44 | | 000.5 | RR2X | BL | 1 | 8 | 2490 | 19 | 101 | -6 |
| S003-L3 | | 00.3 | RR2 | BR | 3 | 26 | 2691 | 3 | 110 | -6 |
| Barron R2X | | 000.8 | RR2X | BR | 2 | 16 | 2217 | 50 | 90 | -5 |
| PS 00095 R2 | | 000.9 | RR2 | BL | 3 | 26 | 2733 | 1 | 111 | -5 |
| NSC Melfort RR2X | | 00.1 | RR2X | BL | 1 | 8 | 2272 | 46 | 92 | -4 |
| LS TRI8XT | | 000.8 | RR2X | BL | 1 | 8 | 2384 | 29 | 97 | -4 |
| Dario R2X | | 000 | RR2X | BR | 2 | 16 | 2127 | 57 | 87 | -4 |
| LS TRI7XT | | 000.7 | RR2X | GY | 2 | 16 | 2181 | 53 | 89 | -3 |
| Torro R2 | | 00 | RR2 | BL | 2 | 16 | 2422 | 27 | 99 | -3 |
| PS 00078 XRN | | 000.7 | RR2X | BL | 1 | 8 | 2539 | 12 | 103 | -3 |
| S006-W5 | | 00.5 | RR2 | IY | 2 | 16 | 2294 | 44 | 93 | -3 |
| TH 87000 R2X | | 000.8 | RR2X | BR | 2 | 16 | 2252 | 47 | 92 | -3 |
| CFS18.50 | | | | | 1 | 8 | 2598 | 8 | 106 | -3 |
| LS TRI9R2Y | | 000.9 | RR2 | IY | 2 | 16 | 2241 | 48 | 91 | -3 |
| LS 001XT | | 00.1 | RR2X | BL | 1 | 8 | 2474 | 21 | 101 | -3 |
| CBZ916B2-C0DNN | | 00 | RR2X | BR | 1 | 8 | 2316 | 39 | 94 | -3 |
| P002A63R | Upov 91 | 00.2 | RR1 | TN | 2 | 16 | 2615 | 7 | 106 | -2 |
| PV 11s001 RR2 | | 00.1 | RR2 | Y | 2 | 16 | 2348 | 31 | 96 | -2 |
| RX000918 | | 000.9 | RR2X | BL | 1 | 8 | 2493 | 18 | 101 | -2 |
| DKB0009-89 | | 000.9 | RR2X | BL | 1 | 8 | 2529 | 13 | 103 | -2 |
| Fisher R2X | | 000.9 | RR2X | BL | 1 | 8 | 2301 | 43 | 94 | -2 |
| 22-60RY | | 000.9 | RR2 | BL | 5 | 38 | 2453 | 23 | 100 | -2 |
| Lassa R2X | | 000.9 | RR2X | | 1 | 8 | 2309 | 40 | 94 | -1 |
| PV 15s0009 R2X | | 000.9 | RR2X | BL | 1 | 8 | 2452 | 24 | 100 | -1 |
| S007-Y4 | | 00.5 | RR2 | IY | 5 | 38 | 2660 | 6 | 108 | -1 |
| Prince R2X | | 00.1 | RR2X | BL | 1 | 8 | 2339 | 33 | 95 | -1 |
| NSC Redvers RR2X | | 00.2 | RR2X | BL | 1 | 8 | 2340 | 32 | 95 | -1 |
| PS 0044 XRN | | 00.3 | RR2X | BL | 1 | 8 | 2444 | 26 | 99 | -1 |
| 23-11RY | | 000 | RR2 | BL | 3 | 30 | 2404 | 28 | 98 | -1 |
| TH 87003 R2X | | 00.3 | RR2X | BL | 1 | 8 | 2475 | 20 | 101 | -1 |
| P005A27X | | 00.5 | RR2X | BR | 1 | 8 | 2690 | 4 | 110 | -1 |
| TH 32004R2Y | | 00.4 | RR2 | BL | 8 | 38 | 2447 | 25 | 100 | -1 |
| DKB003-29 | | 00.3 | RR2X | BL | 2 | 16 | 2316 | 38 | 94 | 0 |
| P006T46R | Upov 91 | 00.6 | RR1 | BR | 3 | 26 | 2546 | 10 | 104 | 0 |
| Mahony R2 | | 00.3 | RR2 | BL | 5 | 38 | 2524 | 14 | 103 | 0 |
| Sunna R2X | | 00.1 | RR2X | | 1 | 8 | 2518 | 15 | 102 | 0 |
| McLeod R2 | | 00.3 | RR2 | BL | 7 | 38 | 2332 | 35 | 95 | 0 |

2018 Yields (% TH 33003R2Y) by Location

| Short season: Northern Black & Grey Soil Zones | | | Mid-season: Central Dark Brown Soil Zone | | | Long season: SE Dark Brown & Black Soil Zone | |
|---|---------|---------|---|-------------|-----------|---|---------|
| Rosthern | Melfort | Kamsack | Outlook IRR | Outlook DRY | Saskatoon | Halbrite | Redvers |
| 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 91 | 81 | 107 | 68 | 70 | 80 | 101 | 69 |
| 92 | 96 | 119 | 67 | 67 | 80 | 85 | 73 |
| 104 | 90 | 128 | 76 | 65 | 86 | 122 | 87 |
| 121 | 100 | 135 | 80 | 84 | 89 | 115 | 87 |
| 134 | 94 | 111 | 71 | 93 | 93 | 99 | 97 |
| 123 | 114 | 126 | 89 | 90 | 98 | 114 | 101 |
| 135 | 110 | 144 | 98 | 102 | 95 | 114 | 107 |
| 127 | 116 | 141 | 73 | 92 | 94 | 116 | 99 |
| 100 | 103 | 136 | 77 | 79 | 88 | 97 | 100 |
| 125 | 98 | 140 | 92 | 91 | 100 | 129 | 92 |
| 121 | 99 | 129 | 83 | 95 | 91 | 92 | 86 |
| 114 | 96 | 113 | 75 | 73 | 94 | 91 | 97 |
| 131 | 102 | 125 | 88 | 88 | 100 | 107 | 104 |
| 137 | 109 | 144 | 89 | 104 | 108 | 118 | 113 |
| 118 | 97 | 95 | 69 | 73 | 86 | 111 | 99 |
| 140 | 113 | 138 | 99 | 100 | 107 | 126 | 105 |
| 102 | 102 | 112 | 76 | 72 | 88 | 107 | 99 |
| 111 | 100 | 110 | 84 | 76 | 95 | 99 | 114 |
| 99 | 91 | 92 | 79 | 78 | 77 | 92 | 92 |
| 104 | 87 | 97 | 79 | 83 | 91 | 109 | 86 |
| 115 | 108 | 121 | 81 | 91 | 98 | 113 | 92 |
| 138 | 105 | 137 | 90 | 90 | 112 | 93 | 101 |
| 99 | 100 | 76 | 80 | 82 | 101 | 112 | 100 |
| 98 | 100 | 112 | 76 | 82 | 81 | 107 | 96 |
| 131 | 109 | 134 | 90 | 93 | 97 | 122 | 106 |
| 98 | 106 | 104 | 75 | 84 | 80 | 106 | 91 |
| 127 | 99 | 101 | 86 | 89 | 99 | 118 | 110 |
| 104 | 99 | 124 | 81 | 87 | 84 | 100 | 100 |
| 122 | 108 | 127 | 94 | 94 | 102 | 118 | 112 |
| 108 | 99 | 124 | 86 | 87 | 84 | 100 | 99 |
| 119 | 106 | 136 | 86 | 91 | 100 | 109 | 101 |
| 102 | 106 | 143 | 89 | 99 | 102 | 95 | 112 |
| 114 | 89 | 114 | 78 | 70 | 86 | 101 | 121 |
| 124 | 101 | 134 | 91 | 93 | 85 | 89 | 106 |
| 118 | 80 | 122 | 85 | 93 | 85 | 104 | 102 |
| 116 | 102 | 96 | 76 | 95 | 102 | 121 | 111 |
| 112 | 112 | 112 | 95 | 101 | 101 | 114 | 125 |
| 91 | 90 | 113 | 92 | 82 | 91 | 103 | 109 |
| 96 | 96 | 76 | 86 | 88 | 88 | 112 | 115 |
| 122 | 93 | 119 | 86 | 90 | 93 | 114 | 110 |
| 124 | 92 | 123 | 87 | 83 | 98 | 104 | 106 |
| 121 | 101 | 124 | 81 | 87 | 101 | 105 | 117 |
| 121 | 111 | 116 | 101 | 111 | 100 | 125 | 106 |
| 101 | 99 | 78 | 96 | 95 | 95 | 109 | 114 |
| 107 | 84 | 98 | 79 | 90 | 92 | 125 | 108 |
| 114 | 107 | 94 | 91 | 95 | 104 | 122 | 111 |
| 129 | 91 | 128 | 87 | 100 | 106 | 115 | 110 |
| 129 | 100 | 98 | 93 | 98 | 103 | 107 | 107 |
| 108 | 86 | 95 | 79 | 95 | 101 | 108 | 110 |

| | | | | | | | | | | | | | | | | | |
|---------------------------|------|------|----|---|----|-------------|----|-----|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| PS 0035 NR2 | 00.3 | RR2 | BL | 6 | 38 | 2542 | 11 | 103 | 0 | 125 | 91 | 112 | 89 | 102 | 111 | 118 | 114 |
| Kosmo R2 | 0 | RR2 | IY | 2 | 16 | 2325 | 36 | 95 | 1 | 114 | 85 | 129 | 86 | 88 | 98 | 99 | 97 |
| PV 16s004 R2X | 0.4 | RR2X | BL | 1 | 8 | 2322 | 37 | 94 | 1 | 97 | 86 | 93 | 88 | 95 | 105 | 99 | 104 |
| Akras R2 | 0.3 | RR2 | IB | 5 | 38 | 2726 | 2 | 111 | 1 | 126 | 105 | 144 | 97 | 107 | 125 | 124 | 104 |
| NSC Newton RR2X | 0.3 | RR2X | BR | 1 | 8 | 2167 | 56 | 88 | 1 | 96 | 84 | 90 | 74 | 89 | 90 | 105 | 98 |
| CFS18.06 R2D | 0.3 | RR2X | | 1 | 8 | 2184 | 52 | 89 | 1 | 106 | 82 | 84 | 87 | 82 | 88 | 98 | 94 |
| TH 37004 R2Y | 0.4 | RR2 | BL | 2 | 16 | 2181 | 54 | 89 | 2 | 96 | 80 | 86 | 82 | 86 | 100 | 90 | 101 |
| Foote R2 | 0.5 | RR2 | IY | 1 | 8 | 2275 | 45 | 93 | 3 | 98 | 96 | 83 | 88 | 88 | 95 | 82 | 104 |
| PV 10s005 RR2 | 0.5 | RR2 | BL | 1 | 8 | 2178 | 55 | 89 | 4 | 101 | 56 | 91 | 91 | 91 | 96 | 95 | 110 |
| GRAND MEAN (kg/ha) | | | | | | 2389 | | | | 1634 | 3791 | 1324 | 3520 | 2014 | 1848 | 1828 | 3161 |
| Yield (bu/ac) | | | | | | 35.5 | | | | 24.3 | 56.4 | 19.7 | 52.3 | 30.0 | 27.5 | 27.2 | 47.0 |

2018 maturity data sites:

Halbrite
Kamsack
Outlook DRY
Outlook IRR
Redvers
Rostern
Saskatoon

| | | | | | | | | |
|--------------|------------|------------|-------------|------------|------------|------------|------------|------------|
| CV5 | 9.8 | 5.9 | 15.0 | 9.7 | 7.5 | 7.9 | 9.1 | 6.9 |
| LSD (%) | 17% | 11% | 28% | 18% | 15% | 15% | 18% | 14% |
| Sig. diff | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Seeding date | May-21 | May-22 | May-23 | May-23 | May-23 | May-21 | May-28 | May-21 |
| Harvest date | Sep-27 | Oct-18 | Sep-28 | Oct-12 | Oct-12 | Sep-20 | Sep-27 | Sep-28 |

5 CV = Coefficient of variation is a measure of relative variability. It is the ratio of the standard deviation to the mean (or average). It shows the extent of variability in relation to the mean or average of a population. For variety trials, a CV of 15% is usually the maximum allowed for a site to be included in the analysis. Higher CVs mean there is too much variability in the data. The lower the CV, the less variability in the data.

6 LSD - Least Significant Difference allows comparisons between the means of two varieties. For two varieties to be statistically different the difference in their means must be larger than the LSD. For example - with an LSD at 10% and a yield difference between two varieties of 5% equate to no statistical difference between those two varieties. If the yield difference was 15% then there would be a statistical difference and one variety would be ranked higher than another.

1 Maturity Groups are assigned by individual companies to assist growers select varieties suitable for their area; growers should not rely on only one source of information for judging maturity.

2 All varieties in this table have tolerance to glyphosate herbicide:

RR1 = Roundup Ready 1 soybeans with glyphosate herbicide tolerance
RR2 (R2Y) = Genuity® Roundup Ready 2 Yield® soybeans with glyphosate herbicide tolerance
RR2X = Roundup Ready 2 Xtend® soybeans with dicamba and glyphosate herbicide tolerance

3 Hilum is the point where seed attaches to the pod. BR-Brown, Y-Yellow, IY-Imperfect Yellow, IB Imperfect Black, BL-Black, GR-Grey, TN-Tan

Four year mean yield of the check variety TH 33003R2Y was 44 bushels/acre: 35.5 bu/ac in 2018; 46 bu/acre in 2017; 44 bu/acre in 2016 and 51 bu/acre in 2015. Typical on-farm yields are 25-38 bu/acre.

4 Days to maturity indicates days from seeding to 95% mature pods (+/- mean of the check TH 33003R2Y = 109.5 days). Only sites which reached maturity prior to a killing frost were used for calculating days to maturity. From past experience, moist growing seasons result in delayed maturity. Data is from SK sites from 2016, 2017 & 2018 (not all varieties included in trial each year).

Soybeans are not native to the Canadian Prairies and so crop must be inoculated with soybean inoculant that contains *Bradyrhizobium japonicum* bacteria.