

Table A-14-a. Mean[†] yield and agronomic traits of 20 Maturity Group IV Early (4.0 - 4.4) soybean varieties evaluated in small plot replicated trials with irrigation at the AgResearch and Education Center at Milan in Milan, Tennessee during 2023.

| Variety | Herbicide Pkg [†] | Avg. Yield [§] (bu/ac) | | | Moisture at Harvest (%) | | | Plant Height (in.) | | | Lodging (1-5) | | | Maturity (DAP) | | |
|------------------------------|----------------------------|---------------------------------|--------|------|-------------------------|------|------|--------------------|-------|------|-----------------------------|--------|-------|----------------|--------|-------|
| | | 1 yr | 2 yr | 3 yr | 1 yr | 2 yr | 3 yr | 1 yr | 2 yr | 3 yr | 1 yr | 2 yr | 3 yr | 1 yr | 2 yr | 3 yr |
| Asgrow AG45XF3 | XF | 84 A | | | 12 A | | | 46 A-C | | | 1.0 E | | | 138 C-E | | |
| NK 42-A6E3S | E3 | 74 B | | | 12 A | | | 46 A-D | | | 1.0 E | | | 137 C-E | | |
| Revere 4526XFS | XFS | 73 BC | 72 A | | 13 A | 11 A | | 48 AB | 48 A | | 1.3 DE | 1.5 B | | 142 A-E | 140 A | |
| Revere 4299XS | R2XS | 73 B-D | 70 AB | 68 A | 13 A | 11 A | 12 A | 49 A | 47 A | 44 A | 1.7 C-E | 1.3 B | 1.3 B | 141 A-E | 140 A | 138 A |
| Innvictis A4503XF | XF | 69 B-E | | | 12 A | | | 43 C-G | | | 1.3 DE | | | 140 A-E | | |
| Xitavo 4522E | E3 | 68 B-E | | | 13 A | | | 42 D-G | | | 1.0 E | | | 140 A-E | | |
| Revere 4237XFS | XFS | 68 B-E | | | 12 A | | | 47 AB | | | 1.0 E | | | 135 E | | |
| Asgrow AG43XF2 | XF | 67 B-E | 65 BC | | 12 A | 11 A | | 45 A-E | 44 BC | | 1.3 DE | 1.2 B | | 135 E | 135 BC | |
| Innvictis B5013E | E3 | 66 B-E | | | 14 A | | | 48 AB | | | 1.3 DE | | | 143 A-E | | |
| Innvictis A4411XF | XF | 65 B-F | | | 13 A | | | 46 A-D | | | 2.3 B-D | | | 144 A-D | | |
| NK 44-Q5E3S | E3 | 65 C-F | 67 A-C | | 13 A | 11 A | | 41 G | 39 D | | 1.7 C-E | 1.8 AB | | 136 DE | 136 BC | |
| Dyna-Gro S45XF02 | XF | 64 D-G | 62 C | | 13 A | 11 A | | 45 B-F | 46 AB | | 1.7 C-E | 1.8 AB | | 141 A-E | 138 AB | |
| Xitavo 4364E | E3 | 64 E-G | | | 12 A | | | 41 FG | | | 2.7 A-C | | | 139 B-E | | |
| Don Mario DM45F23 | XF | 63 E-G | | | 13 A | | | 45 A-E | | | 1.7 C-E | | | 148 A | | |
| Dyna-Gro S41EN72 | E3 | 61 E-H | 61 C | 63 A | 13 A | 11 A | 12 A | 42 E-G | 43 C | 41 A | 2.3 B-D | 2.3 A | 2.6 A | 135 E | 134 C | 135 B |
| MO S19-10701 | Conv | 57 F-I | | | 13 A | | | 45 A-E | | | 2.0 B-E | | | 145 A-C | | |
| Perdue Agribusiness P41MO21 | Conv | 57 G-J | | | 13 A | | | 46 A-D | | | 3.0 AB | | | 135 E | | |
| Xitavo 4084E | E3 | 54 H-J | | | 14 A | | | 41 FG | | | 2.7 A-C | | | 135 E | | |
| Perdue Agribusiness P45XP421 | Conv | 51 IJ | | | 14 A | | | 39 G | | | 2.7 A-C | | | 147 AB | | |
| Perdue Agribusiness P41IL022 | Conv | 48 J | | | 12 A | | | 40 G | | | 3.7 A | | | 135 E | | |
| Average | | 65 | 66 | 66 | 12.8 | 11.1 | 11.6 | 44 | 44 | 43 | 1.9 | 1.7 | 1.9 | 140 | 137 | 137 |
| Standard Error | | 4 | 2 | 2 | 0.4 | 1.8 | 1.1 | 1 | 1 | 2 | 0.6 | 0.3 | 0.2 | 3 | 2 | 1 |
| L.S.D. _{.05} | | 9 | 6 | N.S. | N.S. | N.S. | N.S. | 4 | 3 | N.S. | 1.2 | 0.7 | 0.5 | 8 | 3 | 3 |
| C.V. | | 8 | 8 | 9 | 5 | 7 | 8 | 5 | 5 | 6 | 40 | 34 | 24 | 3 | 2 | 2 |

† Varieties that have any MS letter in common are not significantly different at the 5% level of probability. Values highlighted in light orange are above average for a given trait, MS letters highlighted in dark orange are in the "A group", indicating no statistical difference from the top-performing variety, for a given trait.
C.V. is only reported for variables evaluated on a ratio scale.
L.S.D. values are given for ANOVA that were significant at P<0.05. Variables in which minimal variation was observed were not subjected to ANOVA and are reported as N.E.
‡ For a full description of abbreviated biotech traits, see table 29.
* Asterisks after a name indicate the number of preceding consecutive years in the top-performing "A" group.
§ All yields are adjusted to 13% moisture.
|| Lodging was evaluated on a scale of 1 (no lodging) to 5 (complete lodging).
T Indicate data that were log transformed to meet assumptions of normality, raw means are reported and mean separation letters are given. L.S.D values are not reported as these would be relative to transformed mean values.

Table A-14-b. Mean[†] yield and agronomic traits of 20 Maturity Group IV Early (4.0 - 4.4) soybean varieties evaluated in small plot replicated trials with irrigation at the AgResearch and Education Center at Milan in Milan, Tennessee during 2023.

| Variety | Herbicide Pkg [†] | Avg. Yield [§] | SDS DI ^{††, †} | SDS DS ^{††, †} | SDS DX ^{††, †} | Frogeye ^{‡‡} |
|------------------------------|----------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-----------------------|
| | | (bu/ac) | (%) | (1-9) | (DI x DS/9) | (%) |
| | | 1 yr | 1 yr | 1 yr | 1 yr | 1 yr |
| Asgrow AG45XF3 | XF | 84 A | 0 C | 1.0 C | 0 D | 1.7 A |
| NK 42-A6E3S | E3 | 74 B | 2 BC | 1.0 C | 0 CD | 1.0 A |
| Revere 4526XFS | XFS | 73 BC | 0 C | 1.0 C | 0 D | 3.0 A |
| Revere 4299XS | R2XS | 73 B-D | 5 A-C | 1.3 BC | 1 A-D | 1.3 A |
| Innvictis A4503XF | XF | 69 B-E | 7 BC | 1.3 BC | 1 B-D | 1.7 A |
| Xitavo 4522E | E3 | 68 B-E | 5 A-C | 1.0 C | 1 A-D | 1.0 A |
| Revere 4237XFS | XFS | 68 B-E | 7 AB | 1.7 BC | 1 A-C | 1.3 A |
| Asgrow AG43XF2 | XF | 67 B-E | 3 A-C | 2.0 BC | 1 A-D | 2.0 A |
| Innvictis B5013E | E3 | 66 B-E | 2 BC | 1.3 BC | 0 CD | 1.7 A |
| Innvictis A4411XF | XF | 65 B-F | 8 AB | 2.0 B | 2 AB | 1.3 A |
| NK 44-Q5E3S | E3 | 65 C-F | 3 BC | 1.0 C | 0 CD | 1.7 A |
| Dyna-Gro S45XF02 | XF | 64 D-G | 0 C | 1.0 C | 0 D | 1.0 A |
| Xitavo 4364E | E3 | 64 E-G | 2 BC | 1.3 BC | 0 CD | 2.3 A |
| Don Mario DM45F23 | XF | 63 E-G | 7 A-C | 1.7 BC | 1 A-D | 1.7 A |
| Dyna-Gro S41EN72 | E3 | 61 E-H | 0 C | 1.0 C | 0 D | 1.0 A |
| MO S19-10701 | Conv | 57 F-I | 25 AB | 2.7 AB | 11 A-C | 2.0 A |
| Perdue Agribusiness P41MO21 | Conv | 57 G-J | 3 A-C | 1.7 BC | 1 A-D | 1.3 A |
| Xitavo 4084E | E3 | 54 H-J | 0 C | 1.0 C | 0 D | 1.0 A |
| Perdue Agribusiness P45XP421 | Conv | 51 IJ | 20 A | 4.0 A | 9 A | 1.0 A |
| Perdue Agribusiness P41IL022 | Conv | 48 J | 2 BC | 2.0 BC | 1 B-D | 1.3 A |
| Average | | 65 | 5 | 1.6 | 2 | 1.5 |
| Standard Error | | 4 | 6 | 0.4 | 2 | 0.5 |
| L.S.D. _{.05} | | 9 | Sig. | Sig. | Sig. | N.S. |
| C.V. | | 8 | - | - | - | - |

[†] Varieties that have any MS letter in common are not significantly different at the 5% level of probability. Values highlighted in light orange are above average for a given trait, MS letters highlighted in dark orange are in the "A group", indicating no statistical difference from the top-performing variety, for a given trait.

C.V. is only reported for variables evaluated on a ratio scale.

L.S.D. values are given for ANOVA that were significant at P<0.05. Variables in which minimal variation was observed were not subjected to ANOVA and are reported as N.E.

* Asterisks after a name indicate the number of preceding consecutive years in the top-performing "A" group.

[†] For a full description of abbreviated biotech traits, see table 29.

[§] All yields are adjusted to 13% moisture.

^{††} SDS was evaluated as disease incidence (percentage), disease severity (1 to 9, with 1 indicating no disease), and disease index (DI x DS/9). Evaluated in mid-September.

^{‡‡} Frogeye was evaluated using a 1 to 9 scale, with 1 indicating no disease. Evaluated in mid-September.

^{||} Leaf holding was evaluated visually at harvest using a 1 to 5 scale, with 1 indicating no leaves at maturity.

^T Indicate data that were log transformed to meet assumptions of normality, raw means are reported and mean separation letters are given. L.S.D values are not reported as these would be relative to transformed mean values.