

**Table A-28-a. Mean<sup>†</sup> yield and agronomic traits of 12 Maturity Group V Early (5.0 - 5.4) soybean varieties evaluated in small plot replicated trials without irrigation at the East Tennessee AgResearch and Education Center in Knoxville, Tennessee during 2023.**

| Variety               | Herbicide Pkg <sup>†</sup> | Avg. Yield <sup>§</sup> (bu/ac) |        | Moisture at Harvest (%) |      | Plant Height (in.) |      | Lodging <sup>  </sup> (1-5) |       | Maturity (DAP) |        |
|-----------------------|----------------------------|---------------------------------|--------|-------------------------|------|--------------------|------|-----------------------------|-------|----------------|--------|
|                       |                            | 1 yr                            | 2 yr   | 1 yr                    | 2 yr | 1 yr               | 2 yr | 1 yr                        | 2 yr  | 1 yr           | 2 yr   |
| NK 52-D6E3*           | E3                         | 91 A                            | 69 A   | 13 B-D                  | 13 A | 41 CD              | 36 A | 1.2 C                       | 1.1 B | 152 CD         | 149 BC |
| Revere 5029XF         | XF                         | 81 B                            | 65 AB  | 14 A-D                  | 14 A | 45 A-C             | 38 A | 1.2 C                       | 1.1 B | 152 CD         | 149 BC |
| USG 7543XF            | XF                         | 81 B                            |        | 14 AB                   |      | 46 AB              |      | 1.8 BC                      |       | 157 A          |        |
| Innictis A5003XF      | XF                         | 78 BC                           |        | 14 A-C                  |      | 40 D               |      | 1.7 BC                      |       | 153 B          |        |
| Progeny 5056XFS       | XFS                        | 78 BC                           | 62 A-C | 15 A                    | 14 A | 46 AB              | 39 A | 1.5 BC                      | 1.3 B | 154 B          | 151 A  |
| Innictis A5503XF      | XF                         | 77 B-D                          |        | 13 B-D                  |      | 44 A-D             |      | 1.0 C                       |       | 152 CD         |        |
| Asgrow AG53XF2        | XF                         | 76 B-D                          | 56 C   | 13 CD                   | 13 A | 42 B-D             | 37 A | 1.0 C                       | 1.0 B | 151 D          | 148 C  |
| MO S18-6013           | Conv                       | 72 B-D                          |        | 14 A-D                  |      | 41 CD              |      | 2.2 AB                      |       | 156 A          |        |
| USG 7534GT            | GT                         | 71 B-D                          |        | 13 D                    |      | 48 A               |      | 1.3 BC                      |       | 151 D          |        |
| USG 7503XF            | XF                         | 71 CD                           |        | 13 B-D                  |      | 42 CD              |      | 1.5 BC                      |       | 153 BC         |        |
| MO S18-6328           | Conv                       | 67 D                            | 58 BC  | 13 B-D                  | 13 A | 41 D               | 37 A | 3.0 A                       | 2.0 A | 154 B          | 150 AB |
| Innictis A5813XF      | XF                         | 51 E                            |        | 39 <sup>a</sup>         |      | 45 A-C             |      | 1.5 BC                      |       | 157 A          |        |
| Average               |                            | 75                              | 62     | 13.3                    | 13.3 | 43                 | 37   | 1.6                         | 1.3   | 153            | 149    |
| Standard Error        |                            | 3                               | 17     | 0.4                     | 0.8  | 1                  | 6    | 0.4                         | 0.3   | 1              | 3      |
| L.S.D. <sub>.05</sub> |                            | 10                              | 8      | 1.2                     | N.S. | 4                  | N.S. | 0.9                         | 0.6   | 1              | 1      |
| C.V.                  |                            | 8                               | 11     | 5                       | 9    | 6                  | 7    | -                           | -     | 1              | 1      |

<sup>†</sup> 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.

<sup>‡</sup> 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.

<sup>§</sup> All yields are adjusted to 13% moisture.

<sup>||</sup> Lodging was evaluated on a scale of 1 (no lodging) to 5 (complete lodging).

<sup>T</sup> 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.

<sup>a</sup> Not included in analysis due to being an extreme outlier. All three reps had similar values, mean is reported here, but was not included in ANOVA.

**Table A-28-b. Mean yield and quality of 12 Maturity Group V Early (5.0 - 5.4) soybean varieties evaluated in small plot replicated trials without irrigation at the East Tennessee AgResearch and Education Center in Knoxville, Tennessee during 2023.**

| Variety               | Herbicide Pkg <sup>†</sup> | Avg. Yield <sup>§</sup> | SDS DI <sup>††</sup> | SDS DS <sup>††</sup> | SDS DX <sup>††</sup> | Frogeye <sup>‡‡, †</sup> | Leaf Holding <sup>  </sup> |
|-----------------------|----------------------------|-------------------------|----------------------|----------------------|----------------------|--------------------------|----------------------------|
|                       |                            | (bu/ac)                 | (%)                  | (1-9)                | (DI x DS/9)          | (%)                      | (1-5)                      |
|                       |                            | 1 yr                    | 1 yr                 | 1 yr                 | 1 yr                 | 1 yr                     | 1 yr                       |
| NK 52-D6E3*           | E3                         | 91 A                    | 0 A                  | 1.0 A                | 0 A                  | 1.0 B                    | 1.0                        |
| Revere 5029XF         | XF                         | 81 B                    | 8 A                  | 1.7 A                | 2 A                  | 1.3 B                    | 1.0                        |
| USG 7543XF            | XF                         | 81 B                    | 15 A                 | 1.7 A                | 3 A                  | 1.0 B                    | 1.3                        |
| Innictis A5003XF      | XF                         | 78 BC                   | 10 A                 | 1.7 A                | 2 A                  | 1.0 B                    | 1.0                        |
| Progeny 5056XFS       | XFS                        | 78 BC                   | 3 A                  | 1.0 A                | 0 A                  | 3.7 A                    | 1.0                        |
| Innictis A5503XF      | XF                         | 77 B-D                  | 7 A                  | 1.3 A                | 1 A                  | 1.0 B                    | 1.0                        |
| Asgrow AG53XF2        | XF                         | 76 B-D                  | 3 A                  | 1.0 A                | 0 A                  | 1.0 B                    | 1.0                        |
| MO S18-6013           | Conv                       | 72 B-D                  | 3 A                  | 1.0 A                | 0 A                  | 1.0 B                    | 1.5                        |
| USG 7534GT            | GT                         | 71 B-D                  | 13 A                 | 1.7 A                | 3 A                  | 1.3 B                    | 1.0                        |
| USG 7503XF            | XF                         | 71 CD                   | 3 A                  | 1.7 A                | 1 A                  | 1.0 B                    | 1.0                        |
| MO S18-6328           | Conv                       | 67 D                    | 0 A                  | 1.0 A                | 0 A                  | 1.7 B                    | 1.0                        |
| Innictis A5813XF      | XF                         | 51 E                    | 2 A                  | 1.3 A                | 0 A                  | 4.7 A                    | 3.0                        |
| Average               |                            | 75                      | 6                    | 1.3                  | 1                    | 1.6                      | 1.2                        |
| Standard Error        |                            | 3                       | 4                    | 0.3                  | 1                    | 0.6                      | 0.0                        |
| L.S.D. <sub>.05</sub> |                            | 10                      | N.S.                 | N.S.                 | N.S.                 | Sig.                     | N.E.                       |
| C.V.                  |                            | 8                       | -                    | -                    | -                    | -                        | -                          |

<sup>†</sup> 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.

<sup>†</sup> For a full description of abbreviated biotech traits, see table 29.

<sup>§</sup> All yields are adjusted to 13% moisture.

<sup>††</sup> 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.

<sup>‡‡</sup> Frogeye was evaluated using a 1 to 9 scale, with 1 indicating no disease. Evaluated in mid-September.

<sup>||</sup> Leaf holding was evaluated visually at harvest using a 1 to 5 scale, with 1 indicating no leaves at maturity.

<sup>†</sup> 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.