Table A-9-a. Mean[†] yield, agronomic traits, and quality of 20 Maturity Group IV Early (4.0 - 4.4) soybean varieties evaluated in small plot replicated trials without irrigation at the Northeast Tennessee AgResearch and Education Center in Greeneville, 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
NK 42-A6E3S	E3	120 A			8 E-G			45 C-H			2.3 C-F			147 AB		
Revere 4299XS	R2XS	112 AB	94 A	91 A	8 F-H	11 BC	11 A	46 B-E	46 A	44 A	2.3 C-F	1.9 A	1.8 A	145 B-F	136 A	-
Revere 4526XFS	XFS	111 A-C	90 AB		9 B-D	11 B		47 B-D	46 A		2.2 D-F	1.8 A		147 A-C	137 A	
Asgrow AG45XF3	XF	107 A-D			8 C-E			47 BC			2.2 D-F			147 A-C		
Xitavo 4522E	E3	106 A-D			8 D-G			43 D-I			2.0 EF			146 A-D		
Invictis A4503XF	XF	104 B-E			8 F-H			40 IJ			2.5 C-F			145 C-F		
Revere 4237XFS	XFS	97 B-F			8 E-G			44 C-H			2.8 B-E			146 B-E		
Dyna-Gro S45XF02	XF	96 C-F	82 BC		9 A	12 A		45 C-G	44 AB		2.5 C-F	2.0 A		147 A-C	137 A	
Asgrow AG43XF2	XF	96 D-G	84 A-C		8 C-F	11 B		42 E-J	43 BC		1.7 F	1.3 A		146 B-E	137 A	
Invictis A4411XF	XF	93 D-H			8 C-F			42 F-J			2.2 D-F			146 B-E		
Don Mario DM45F23	XF	93 D-H			9 A-C			44 C-H			3.2 A-C			146 A-D		
NK 44-Q5E3S	E3	92 D-H	74 C		8 G-I	11 BC		39 J	38 D		2.7 C-E	1.8 A		148 A	138 A	
Dyna-Gro S41EN72	E3	89 E-I	77 C	75 B	8 J	11 C	11 A	41 G-J	41 C	40 B	2.5 C-F	1.9 A	1.8 A	145 B-F	136 A	-
Invictis B5013E	E3	84 F-J			8 C-E			45 C-F			2.0 EF			146 A-D		
Perdue Agribusiness P41MO21	Conv	82 F-K			8 H-J			45 C-F			2.7 C-E			145 D-F		
Xitavo 4364E	E3	80 G-K			8 GH			40 IJ			3.0 B-D			146 B-F		
Xitavo 4084E	E3	79 H-K			8 IJ			40 IJ			2.8 B-E			144 EF		
MO S19-10701	Conv	76 I-K			8 C-F			55 A			4.0 A			147 A-C		
Perdue Agribusiness P41IL022	Conv	71 JK			8 F-H			41 H-J			3.7 AB			144 F		
Perdue Agribusiness P45XP421	Conv	68 K			9 AB			50 B			4.0 A			148 A		
Average		93	83	83	8.2	11.0	11.4	44	43	42	2.7	1.8	1.8	146	137	-
Standard Error		5	16	9	0.1	2.8	1.8	1	1	1	0.3	0.5	0.3	1	10	-
L.S.D..05		16	11	8	0.3	0.3	N.S.	4	2	3	0.9	N.S.	N.S.	2	N.S.	-
C.V.		10	11	8	2	3	2	5	5	6	-	-	-	1	1	-

† 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 signficant 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 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-9-b. Mean† yield, agronomic traits, and quality of 20 Maturity Group IV Early (4.0 - 4.4) soybean varieties evaluated in small plot replicated trials without irrigation at the Northeast Tennessee AgResearch and Education Center in Greeneville, Tennessee during 2023.

Variety	Herbicide Pkg†	Avg. Yield§ (bu/ac)	SDS DI†† (%)	SDS DS†† (1-9)	SDS DX†† (DI x DS/9)	Frogeye‡‡ (%)	Leaf Holding‖ (1-5)
		1 yr	1 yr	1 yr	1 yr	1 yr	1 yr
NK 42-A6E3S	E3	120 A	0	1.0	0.0	1.0	1.5 B
Revere 4299XS	R2XS	112 AB	0	1.0	0.0	1.3	1.7 B
Revere 4526XFS	XFS	111 A-C	0	1.0	0.0	1.3	1.5 B
Asgrow AG45XF3	XF	107 A-D	0	1.0	0.0	1.3	1.5 B
Xitavo 4522E	E3	106 A-D	0	1.0	0.0	1.0	1.5 B
Innvictis A4503XF	XF	104 B-E	0	1.0	0.0	1.0	1.5 B
Revere 4237XFS	XFS	97 B-F	0	1.0	0.0	1.3	1.5 B
Dyna-Gro S45XF02	XF	96 C-F	0	1.0	0.0	1.0	1.5 B
Asgrow AG43XF2	XF	96 D-G	0	1.0	0.0	1.0	1.5 B
Innvictis A4411XF	XF	93 D-H	2	1.0	0.6	1.0	1.5 B
Don Mario DM45F23	XF	93 D-H	0	1.0	0.0	1.0	2.0 A
NK 44-Q5E3S	E3	92 D-H	0	1.0	0.0	1.3	1.5 B
Dyna-Gro S41EN72	E3	89 E-I	0	1.0	0.0	1.0	1.5 B
Innvictis B5013E	E3	84 F-J	0	1.0	0.0	1.3	1.7 B
Perdue Agribusiness P41MO21	Conv	82 F-K	0	1.0	0.0	1.3	1.7 B
Xitavo 4364E	E3	80 G-K	2	1.7	1.7	1.0	1.5 B
Xitavo 4084E	E3	79 H-K	0	1.0	0.0	1.0	1.5 B
MO S19-10701	Conv	76 I-K	0	1.0	0.0	1.0	2.0 A
Perdue Agribusiness P41IL022	Conv	71 JK	0	1.0	0.0	1.3	1.5 B
Perdue Agribusiness P45XP421	Conv	68 K	0	1.0	0.0	1.3	2.2 A
Average		93	0	1.0	0	1.1	1.6
Standard Error		5	0	0.0	0.0	0.0	0.1
L.S.D..05		16	N.E.	N.E.	N.E.	N.E.	0.2
C.V.		10	-	-	-	-	-

† 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