Table A-13-a. Mean† yield and agronomic traits of 20 Maturity Group IV Early (4.0 - 4.4) soybean varieties evaluated in small plot replicated trials without irrigation at the Middle Tennessee AgResearch and Education Center in Spring Hill, 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	83 A			13 BC			34 A-F			1.0			144 AB		
Xitavo 4084E	E3	71 B			12 E-G			33 A-F			1.0			138 FG		
Asgrow AG45XF3	XF	70 B			13 BC			35 A-C			1.0			144 AB		
Revere 4237XFS	XFS	70 BC			13 B-E			34 A-D			1.0			138 FG		
Dyna-Gro S41EN72	E3	70 B-D	56 A	58 A	12 G	13 A	13 A	31 C-G	28 CD	29 B	1.0	1.0	1.2	141 CD	137 C	139 B
Revere 4299XS	R2XS	70 B-D	55 A	59 A	12 B-F	13 A	13 A	34 A-F	31 AB	31 A	1.0	1.0	1.2	143 A-C	141 B	143 A
NK 44-Q5E3S	E3	70 B-D	56 A		12 FG	13 A		30 E-G	27 D		1.0	1.0		144 AB	142 AB	
Innvictis A4503XF	XF	69 B-D			12 D-G			34 A-F			1.0			140 DE		
Xitavo 4522E	E3	69 B-D			12 B-F			31 D-G			1.0			143 BC		
Xitavo 4364E	E3	68 B-D			12 B-F			32 B-G			1.0			139 EF		
Innvictis B5013E	E3	67 B-D			13 BC			37 A			1.0			143 AB		
Asgrow AG43XF2	XF	67 B-D	52 A		13 B-D	13 A		32 B-F	29 BC		1.0	1.0		144 AB	142 AB	
Don Mario DM45F23	XF	66 B-D			12 C-F			33 A-F			1.0			141 DE		
Innvictis A4411XF	XF	66 B-D			12 B-F			34 A-E			1.0		1.0	141 DE		
Perdue Agribusiness P41IL022	Conv	64 B-D			13 B			30 FG			1.0			139 EF		
Revere 4526XFS	XFS	63 CD	59 A		12 C-F	13 A		36 AB	33 A		1.0	1.0		144 AB	142 AB	
Dyna-Gro S45XF02	XF	63 D	53 A		13 BC	13 A		34 A-F	30 BC		1.0	1.0		145 A	143 A	
Perdue Agribusiness P41MO21	Conv	56 E			12 B-F			31 C-G			1.0			137 G		
MO S19-10701	Conv	52 E			12 B-F			32 B-G			1.3			143 A-C		
Perdue Agribusiness P45XP421	Conv	50 E			15 A			28 G			1.0			143 BC		
Average		66	55	58	12.5	13.0	13.4	33	30	30	1.0	1.0	1.1	142	141	141
Standard Error		3	12	9	0.1	0.7	0.6	2	3	2	0.0	0.0	0.0	1	3	3
L.S.D.$_{.05}$		7	N.S.	N.S.	0.4	N.S.	N.S.	4	2	1	N.E.	N.E.	N.E.	2	2	2
C.V.		6	11	11	2	4	4	8	6	4	-	-	-	1	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-13-b. Mean† yield and agronomic traits of 20 Maturity Group IV Early (4.0 - 4.4) soybean varieties evaluated in small plot replicated trials without irrigation at the Middle Tennessee AgResearch and Education Center in Spring Hill, 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	83 A	0	1.0	0	1.0 F	1.0 C
Xitavo 4084E	E3	71 B	0	1.0	0	1.0 F	1.2 BC
Asgrow AG45XF3	XF	70 B	0	1.0	0	5.7 A	1.0 C
Revere 4237XFS	XFS	70 BC	0	1.0	0	4.0 BC	1.0 C
Dyna-Gro S41EN72	E3	70 B-D	0	1.0	0	1.0 F	1.2 BC
Revere 4299XS	R2XS	70 B-D	0	1.0	0	1.7 EF	1.0 C
NK 44-Q5E3S	E3	70 B-D	0	1.0	0	1.0 F	1.0 C
Innvictis A4503XF	XF	69 B-D	0	1.0	0	2.0 D-F	1.0 C
Xitavo 4522E	E3	69 B-D	0	1.0	0	3.3 B-D	1.2 BC
Xitavo 4364E	E3	68 B-D	0	1.0	0	3.3 B-D	1.0 C
Innvictis B5013E	E3	67 B-D	0	1.0	0	4.7 AB	1.0 C
Asgrow AG43XF2	XF	67 B-D	0	1.0	0	4.0 BC	1.0 C
Don Mario DM45F23	XF	66 B-D	0	1.0	0	1.3 EF	1.2 BC
Innvictis A4411XF	XF	66 B-D	0	1.0	0	3.7 BC	1.5 AB
Perdue Agribusiness P41IL022	Conv	64 B-D	0	1.0	0	2.7 C-E	1.0 C
Revere 4526XFS	XFS	63 CD	0	1.0	0	5.7 A	1.0 C
Dyna-Gro S45XF02	XF	63 D	0	1.0	0	2.0 D-F	1.0 C
Perdue Agribusiness P41MO21	Conv	56 E	0	1.0	0	2.7 C-E	1.0 C
MO S19-10701	Conv	52 E	0	1.0	0	2.0 D-F	1.7 A
Perdue Agribusiness P45XP421	Conv	50 E	0	1.0	0	1.0 F	1.2 BC
Average		**66**	**0**	**1.0**	**0**	**2.7**	**1.1**
Standard Error		**3**	**0**	**0.0**	**0**	**0.6**	**0.1**
L.S.D.$_{.05}$		**7**	**N.E.**	**N.E.**	**N.E.**	**1.6**	**0.4**
C.V.		**6**	**-**	**-**	**-**	**-**	**-**

† 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.
* 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.