Table A-12-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 Highland Rim AgResearch and Education Center in Springfield, 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	89 A			13 B-G			37 D-G			1.0			141 A-D		
Dyna-Gro S41EN72	E3	84 AB	65 A	55 A	12 FG	12 A	13 A	41 A-E	34 B	30 A	1.0	1.0	1.0	141 B-E	138 A	135 A
Revere 4299XS	R2XS	81 A-C	61 A	55 A	13 B-G	12 A	13 A	42 AB	37 A	32 A	1.0	1.0	1.0	141 A-D	138 A	136 A
NK 44-Q5E3S	E3	79 A-C	57 A		13 B	12 A		32 H	27 C		1.0	1.0		141 B-E	140 A	
Xitavo 4522E	E3	79 A-D			13 E-G			37 D-G			1.0			141 A-D		
Dyna-Gro S45XF02	XF	79 A-D	65 A		13 B-E	13 A		39 B-F	34 B		1.0	1.0		140 C-E	140 A	
Innvictis B5013E	E3	79 A-D			13 C-G			42 AB			1.0			142 A-C		
Innvictis A4411XF	XF	77 B-D			13 B-D			38 C-G			1.0			141 A-D		
Innvictis A4503XF	XF	77 B-D			12 G			36 FG			1.0			140 DE		
Asgrow AG43XF2	XF	76 B-D	57 A		13 B-F	12 A		40 B-E	35 AB		1.0	1.0		141 B-E	138 A	
Xitavo 4084E	E3	76 B-D			13 B			36 FG			1.0			137 G		
Perdue Agribusiness P41IL022	Conv	76 B-E			13 D-G			37 E-G			1.0			139 EF		
Asgrow AG45XF3	XF	75 B-E			13 B-D			41 A-C			1.0			141 B-E		
Xitavo 4364E	E3	75 B-E			13 B-G			35 GH			1.0			138 FG		
Don Mario DM45F23	XF	74 B-E			13 B			38 C-G			1.0			141 A-D		
Revere 4237XFS	XFS	71 C-F			13 B-G			35 F-H			1.0			136 G		
Revere 4526XFS	XFS	69 D-F	58 A		13 BC	12 A		41 A-D	36 AB		1.0	1.0		140 DE	140 A	
MO S19-10701	Conv	66 E-G			13 B-G			44 A			1.5			142 AB		
Perdue Agribusiness P41MO21	Conv	63 FG			13 B-G			40 B-E			1.3			136 G		
Perdue Agribusiness P45XP421	Conv	58 G			14 A			42 AB			1.2			143 A		
Average		75	61	55	12.7	12.3	12.7	39	34	31	1.1	1.0	1.0	140	139	136
Standard Error		3	18	14	0.1	0.4	0.6	1	5	6	0.0	0.0	0.0	1	2	3
L.S.D.$_{.05}$		10	N.S.	N.S.	0.2	N.S.	N.S.	4	2	N.S.	N.E.	N.E.	N.E.	2	N.S.	N.S.
C.V.		8	10	12	1	2	3	6	6	10	-	-	-	1	1	0

† 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-12-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 Highland Rim AgResearch and Education Center in Springfield, Tennessee during 2023.

Variety	Herbicide Pkg†	Avg. Yield§ (bu/ac)	SDS DI††, T (%)	SDS DS††, T (1-9)	SDS DX††, T (DI x DS/9)	Frogeye‡‡, T (%)	Leaf Holding‖ (1-5)
		1 yr	1 yr	1 yr	1 yr	1 yr	1 yr
NK 42-A6E3S	E3	89 A	5 A	5.0 E	1 A-C	1.3 FG	1.0
Dyna-Gro S41EN72	E3	84 AB	8 A	8.3 E	1 AB	1.0 G	1.0
Revere 4299XS	R2XS	81 A-C	3 A	c B-E	1 A-C	3.0 B-E	1.0
NK 44-Q5E3S	E3	79 A-C	5 A	5.0 E	1 AB	1.0 G	1.0
Xitavo 4522E	E3	79 A-D	10 A	10.0 DE	2 BC	1.3 FG	1.0
Dyna-Gro S45XF02	XF	79 A-D	5 A	5.0 E	1 AB	1.3 FG	1.0
Innvictis B5013E	E3	79 A-D	0 A	0.0 E	0 C	4.0 A-C	1.0
Innvictis A4411XF	XF	77 B-D	8 A	8.3 A-D	2 A-C	3.7 A-D	1.0
Innvictis A4503XF	XF	77 B-D	43 A	43.3 A	14 A	2.0 D-G	1.0
Asgrow AG43XF2	XF	76 B-D	2 A	1.7 DE	0 BC	3.7 A-D	1.0
Xitavo 4084E	E3	76 B-D	2 A	1.7 E	0 BC	2.7 D-G	1.0
Perdue Agribusiness P41IL022	Conv	76 B-E	3 A	3.3 E	0 BC	2.7 C-F	1.0
Asgrow AG45XF3	XF	75 B-E	2 A	1.7 C-E	1 BC	5.3 AB	1.0
Xitavo 4364E	E3	75 B-E	0 A	0.0 E	0 C	5.3 A-C	1.0
Don Mario DM45F23	XF	74 B-E	27 A	26.7 AB	9 A	1.7 E-G	1.0
Revere 4237XFS	XFS	71 C-F	10 A	10.0 B-E	2 A-C	5.3 AB	1.0
Revere 4526XFS	XFS	69 D-F	2 A	1.7 E	0 BC	6.0 A	1.0
MO S19-10701	Conv	66 E-G	10 A	10.0 DE	2 A-C	1.3 FG	1.0
Perdue Agribusiness P41MO21	Conv	63 FG	8 A	8.3 C-E	2 AB	1.7 E-G	1.0
Perdue Agribusiness P45XP421	Conv	58 G	30 A	30.0 A-C	15 AB	1.3 FG	1.0
Average		**75**	**9**	**1.5**	**3**	**2.8**	**1.0**
Standard Error		**3**	**7**	**0.4**	**3**	**0.7**	**0.0**
L.S.D.$_{.05}$		**10**	**N.S.**	**Sig.**	**Sig.**	**Sig.**	**N.E.**
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 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.