

Table A-16-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 West Tennessee AgResearch and Education Center in Jackson, 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	81 A			15 A-E			42 A-D			1.0 D			137 A-C		
Dyna-Gro S45XF02	XF	69 B	62 A		16 A-C	14 A		42 A-E	37 BC		1.0 D	1.0 B		140 A	139 A	
Dyna-Gro S41EN72	E3	68 B	57 A	60 A	14 EF	14 A	13 B	40 C-F	36 CD	36 A	2.3 B	1.8 A	1.6 A	131 G	130 B	129 A
Revere 4299XS	R2XS	65 BC	59 A	62 A	16 A-C	15 A	14 A	40 C-G	39 AB	38 A	1.0 D	1.2 B	1.2 A	133 D-G	135 A	133 A
Don Mario DM45F23	XF	65 BC			16 AB			40 C-G			2.3 B			140 A		
Innvictis A4503XF	XF	65 BC			14 EF			38 F-H			1.0 D			133 E-G		
Xitavo 4522E	E3	64 B-D			15 A-F			40 C-G			1.0 D			134 D-F		
Asgrow AG43XF2	XF	63 B-D	53 A		14 D-F	14 A		41 B-F	38 BC		1.0 D	1.0 B		135 C-E	136 A	
NK 44-Q5E3S	E3	62 B-E	55 A		15 A-F	14 A		35 H	33 D		1.0 D	1.0 B		140 A	137 A	
Asgrow AG45XF3	XF	62 B-E			14 D-F			43 A-C			1.0 D			138 AB		
Revere 4237XFS	XFS	60 B-E			15 A-E			39 D-G			1.3 CD			127 H		
Revere 4526XFS	XFS	59 C-E	57 A		15 A-D	14 A		45 A	41 A		1.0 D	1.0 B		136 B-D	136 A	
Innvictis A4411XF	XF	58 C-E			15 A-E			38 F-H			1.0 D			132 FG		
Xitavo 4084E	E3	57 C-E			16 A			38 E-H			3.7 A			123 I		
Xitavo 4364E	E3	57 C-E			15 A-D			39 C-G			1.0 D			132 FG		
Innvictis B5013E	E3	56 D-F			14 D-F			44 AB			1.3 CD			140 A		
MO S19-10701	Conv	54 EF			15 B-F			41 B-F			2.0 BC			134 D-F		
Perdue Agribusiness P41IL022	Conv	48 FG			14 F			37 GH			3.7 A			133 E-G		
Perdue Agribusiness P45XP421	Conv	43 GH			15 A-F			30 I			1.7 B-D			140 A		
Perdue Agribusiness P41MO21	Conv	38 H			15 C-F			38 F-H			4.3 A			133 D-G		
Average		60	57	61	14.9	14.1	13.5	39	37	37	1.7	1.2	1.4	135	136	131
Standard Error		4	8	6	0.4	1.0	1.0	1	3	2	0.4	0.2	0.3	1	1	2
L.S.D. _{.05}		9	N.S.	N.S.	1.2	N.S.	0.7	3	3	N.S.	0.9	0.6	N.S.	3	4	N.S.
C.V.		9	12	9	5	5	5	5	6	7	-	-	-	1	3	3

[†] 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).

^{††} 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-16-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 West Tennessee AgResearch and Education Center in Jackson, Tennessee during 2023.

Variety	Herbicide Pkg [†]	Avg. Yield [§]	SDS DI ^{††,†}	SDS DS ^{††}	SDS DX ^{††,†}	Frogeye ^{‡‡}	Leaf Holding
		(bu/ac)	(%)	(1-9)	(DI x DS/9)	(%)	(1-5)
		1 yr	1 yr	1 yr	1 yr	1 yr	1 yr
NK 42-A6E3S	E3	81 A	17 A	1.7 A	5 A	4.0 C-F	1.3
Dyna-Gro S45XF02	XF	69 B	18 A	3.3 A	6 A	3.7 D-F	1.0
Dyna-Gro S41EN72	E3	68 B	20 A	1.3 A	3 A	2.7 F	1.0
Revere 4299XS	R2XS	65 BC	22 A	1.7 A	4 A	3.3 EF	1.0
Don Mario DM45F23	XF	65 BC	35 A	2.7 A	11 A	2.7 F	1.0
Innictis A4503XF	XF	65 BC	42 A	3.3 A	14 A	5.0 B-F	1.0
Xitavo 4522E	E3	64 B-D	17 A	2.0 A	5 A	3.0 F	1.0
Asgrow AG43XF2	XF	63 B-D	27 A	2.0 A	6 A	5.7 B-E	1.0
NK 44-Q5E3S	E3	62 B-E	3 A	1.7 A	1 A	2.7 F	1.0
Asgrow AG45XF3	XF	62 B-E	2 A	2.0 A	1 A	6.7 AB	1.0
Revere 4237XFS	XFS	60 B-E	12 A	2.0 A	3 A	5.7 B-E	1.0
Revere 4526XFS	XFS	59 C-E	2 A	2.3 A	1 A	8.3 A	1.0
Innictis A4411XF	XF	58 C-E	28 A	2.3 A	9 A	5.0 B-F	1.0
Xitavo 4084E	E3	57 C-E	20 A	1.7 A	5 A	2.7 F	1.7
Xitavo 4364E	E3	57 C-E	23 A	1.7 A	5 A	6.0 A-D	1.0
Innictis B5013E	E3	56 D-F	0 A	1.0 A	0 A	6.3 A-C	1.3
MO S19-10701	Conv	54 EF	17 A	2.3 A	6 A	2.7 F	1.7
Perdue Agribusiness P41IL022	Conv	48 FG	22 A	1.3 A	4 A	4.3 B-F	1.0
Perdue Agribusiness P45XP421	Conv	43 GH	52 A	4.7 A	29 A	2.7 F	2.3
Perdue Agribusiness P41MO21	Conv	38 H	25 A	1.3 A	6 A	5.0 B-F	1.3
Average		60	20	2.1	6	4.4	1.2
Standard Error		4	12	0.7	6	0.9	0.0
L.S.D. _{.05}		9	N.S.	N.S.	N.S.	2.5	N.E.
C.V.		9	-	-	-	-	-

[†] 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.

[†] 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.