

Table A-15-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 AgResearch and Education Center at Milan in Milan, 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
Revere 4237XFS	XFS	74 A			13 BC			46 B			1.0 E			134 E		
NK 42-A6E3S	E3	74 AB			13 B			44 B-D			1.2 E			134 E		
Asgrow AG45XF3	XF	72 A-C			13 CD			44 B-D			1.0 E			138 B-E		
Xitavo 4522E	E3	70 A-D			13 B-D			39 G-I			1.0 E			138 B-E		
Innvictis A4503XF	XF	69 A-D			12 D			42 C-F			1.0 E			134 E		
Asgrow AG43XF2	XF	69 A-D	60 A		13 BC	11 A		44 B-D	38 CD		1.0 E	1.0 A		135 DE	134 A	
Revere 4299XS	R2XS	68 A-D	59 A	62 A	13 B-D	11 A	11 A	49 A	42 A	42 A	1.0 E	1.0 A	1.1 A	138 B-E	137 A	136 A
NK 44-Q5E3S	E3	68 A-D	57 A		12 CD	11 A		38 HI	34 E		1.0 E	1.0 A		134 E	134 A	
Revere 4526XFS	XFS	67 A-D	66 A		12 CD	11 A		46 B	41 AB		1.0 E	1.0 A		136 C-E	136 A	
Dyna-Gro S45XF02	XF	66 A-D	62 A		13 BC	11 A		43 C-E	40 BC		1.0 E	1.0 A		134 E	134 A	
Dyna-Gro S41EN72	E3	66 A-D	59 A	59 A	12 D	11 A	11 A	42 C-F	37 D	37 B	1.3 DE	1.2 A	1.6 A	138 B-E	135 A	135 B
Xitavo 4084E	E3	65 B-D			12 CD			40 E-H			1.3 DE			133 E		
Xitavo 4364E	E3	65 B-D			12 CD			39 F-H			1.0 E			134 E		
Innvictis A4411XF	XF	64 CD			13 B-D			45 BC			1.7 CD			141 BC		
Innvictis B5013E	E3	62 DE			12 CD			46 B			1.0 E			141 B-D		
Don Mario DM45F23	XF	62 DE			13 BC			42 D-G			2.0 BC			143 AB		
MO S19-10701	Conv	55 E			13 BC			49 A			2.3 AB			148 A		
Perdue Agribusiness P41MO21	Conv	54 E			13 B-D			39 F-H			2.7 A			136 C-E		
Perdue Agribusiness P41IL022	Conv	54 E			12 CD			38 HI			1.0 E			136 C-E		
Perdue Agribusiness P45XP421	Conv	39 F			14 A			36 I			1.0 E			135 DE		
Average		64	60	61	12.7	10.8	11.2	43	39	40	1.3	1.0	1.3	137	135	136
Standard Error		3	7	5	0.2	1.7	1.0	1	5	3	0.2	0.1	0.3	2	1	1
L.S.D. _{.05}		9	N.S.	N.S.	0.6	N.S.	N.S.	3	2	2	0.5	N.S.	N.S.	6	N.S.	1
C.V.		8	12	9	3	4	6	4	5	5	-	-	-	3	2	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 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-15-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 AgResearch and Education Center at Milan in Milan, Tennessee during 2023.

Variety	Herbicide Pkg [†]	Avg. Yield [§]	SDS DI ^{††}	SDS DS ^{††}	SDS DX ^{††}	Frogeye ^{‡‡}
		(bu/ac)	(%)	(1-9)	(DI x DS/9)	(%)
		1 yr	1 yr	1 yr	1 yr	1 yr
Revere 4237XFS	XFS	74 A	20 C	1.7 CD	4 C	2.0 A
NK 42-A6E3S	E3	74 AB	7 C-E	1.0 D	1 C	1.0 A
Asgrow AG45XF3	XF	72 A-C	3 E	1.3 D	1 C	1.3 A
Xitavo 4522E	E3	70 A-D	5 DE	1.3 D	1 C	1.0 A
Innvictis A4503XF	XF	69 A-D	43 B	2.7 BC	14 B	1.7 A
Asgrow AG43XF2	XF	69 A-D	8 C-E	1.3 D	1 C	1.0 A
Revere 4299XS	R2XS	68 A-D	7 C-E	1.0 D	1 C	1.0 A
NK 44-Q5E3S	E3	68 A-D	5 DE	1.3 D	1 C	1.0 A
Revere 4526XFS	XFS	67 A-D	8 C-E	2.0 B-D	2 C	2.0 A
Dyna-Gro S45XF02	XF	66 A-D	18 CD	2.0 B-D	5 C	1.3 A
Dyna-Gro S41EN72	E3	66 A-D	13 C-E	1.3 D	2 C	1.0 A
Xitavo 4084E	E3	65 B-D	3 E	1.7 CD	1 C	2.0 A
Xitavo 4364E	E3	65 B-D	7 C-E	1.7 CD	2 C	2.3 A
Innvictis A4411XF	XF	64 CD	13 C-E	1.3 D	2 C	1.7 A
Innvictis B5013E	E3	62 DE	0 E	1.0 D	0 C	1.7 A
Don Mario DM45F23	XF	62 DE	10 C-E	1.7 CD	2 C	1.0 A
MO S19-10701	Conv	55 E	47 B	3.0 B	16 B	1.0 A
Perdue Agribusiness P41MO21	Conv	54 E	2 E	1.0 D	0 C	1.3 A
Perdue Agribusiness P41IL022	Conv	54 E	18 CD	2.0 B-D	5 C	1.3 A
Perdue Agribusiness P45XP421	Conv	39 F	87 A	5.0 A	48 A	1.0 A
Average		64	16	1.8	5	1.4
Standard Error		3	6	0.4	2	0.3
L.S.D. _{.05}		9	15	1.1	6	N.S.
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 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.