Table A-24-a. Mean[†] yield and agronomic traits of 30 Maturity Group IV Late (4.5 - 4.9) 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[T]	2 yr	3 yr	1 yr	2 yr	3 yr
Dyna-Gro S47XF23S	XFS	69 A	62 A		13.5 A-F	11.8 D-F		40 EF	39 CD		1.0 D	1.0 A		138 EF	137 CD	
Revere 4934XF	XF	68 AB			13.8 A-D			40 EF			1.0 D			141 B-D		
Revere 4826XF*	XF	67 A-C	60 A		13.6 A-E	12.0 C-F		41 D-F	38 D		1.0 D	1.0 A		138 EF	137 CD	
Don Mario DM48F53	XF	67 A-C			13.5 A-F			39 F			1.0 D			137 F		
USG 7496XTS**	R2XS	66 A-D	59 AB	61 A	14.0 A-C	13.2 A	13.3 A	41 D-F	42 A-C	42 AB	1.0 D	1.0 B	1.0 A	142 BC	143 A	141 A
Asgrow AG47XF2	XF	65 A-E	60 A		13.7 A-E	12.9 AB		40 EF	39 CD		1.0 D	1.0 A		138 EF	138 B-D	
USG 7463XF	XF	64 A-F	61 A		13.7 A-E	12.4 A-E		46 A-C	42 A-C		1.0 D	1.0 A		138 EF	136 D	
Innvictis A4862XF	XF	63 A-G	59 AB		13.6 A-E	12.0 B-F		42 C-F	41 A-D		1.0 D	1.0 A		140 C-E	139 B-D	
Dyna-Gro S49XF43S	XFS	62 A-G	56 A-C		13.2 C-H	12.1 B-F		38 FG	37 D		1.0 D	1.0 A		140 C-E	141 AB	
Progeny 4798XF	XF	62 A-G	55 A-D		13.7 A-E	12.0 C-F		45 A-E	41 A-D		1.3 CD	1.5 A		141 B-D	139 B-D	
USG 7474XFS	XFS	62 A-G			13.4 B-G			41 D-F			1.0 D			139 D-F		
USG 7461XFS**	XFS	62 A-H	56 A-D	60 A	13.1 C-H	12.1 B-F	12.2 BC	46 A-C	44 A	44 A	1.0 D	1.0 A	1.0 A	140 C-E	140 A-C	138 B
Asgrow AG48XF3	XF	61 A-H			12.9 D-H			45 A-D			1.0 D			142 BC		
Revere 4731XF	XF	60 A-H			13.4 B-G			39 F			2.3 AB			137 F		
Progeny 4691XFS*	XFS	60 B-H	58 AB		13.7 A-D	12.7 A-D		45 A-E	43 AB		1.3 CD	1.2 A		137 F	137 CD	
Revere 4795XS****	R2XS	60 B-I	61 A	63 A	12.4 H	11.5 F	11.7 C	39 F	40 B-D	39 B	1.0 D	1.0 A	1.1 A	139 D-F	139 B-D	138 B
Asgrow AG49XF3	XF	59 B-I			13.2 C-H			49 A			1.0 D			143 BC		
USG 7494ETS	E3S	59 B-I			14.2 AB			42 C-F			1.0 D			140 C-E		
Innvictis B4903E	E3	58 C-J			13.2 C-H			41 D-F			1.7 BC			140 C-E		
Revere 4727XF	XF	57 D-J	55 A-D		12.5 GH	11.6 EF		42 C-F	40 B-D		2.0 BC	1.5 A		141 B-E	139 B-D	
Progeny 4604XFS**	XFS	56 D-J	52 B-D	57 A	13.3 C-H	12.1 B-F	12.7 AB	44 B-E	43 AB	42 A	1.0 D	1.0 A	1.0 A	139 D-F	138 B-D	137 B
Dyna-Gro S48EN73	E3	56 E-J	55 A-D		13.9 A-C	12.2 B-F		42 C-F	38 D		1.3 CD	1.2 A		139 D-F	138 B-D	
Xitavo 4653E	E3	56 F-J			13.6 A-E			41 D-F			1.0 D			138 EF		
Progeny 4775E3S	E3S	54 G-J	48 D		14.3 A	12.8 A-C		47 AB	44 A		1.0 D	1.0 A		137 F	137 CD	
Innvictis B4603E	E3	53 H-K			12.8 E-H			40 EF			2.7 AB			139 D-F		
Xitavo 4894E	E3	50 I-L			13.7 A-E			44 A-E			1.3 CD			140 C-E		
Progeny 4806XFS	XFS	50 J-L	50 CD	55 A	12.6 F-H	11.9 D-F	12.1 BC	42 C-F	39 B-D	39 B	1.0 D	1.0 A	1.0 A	138 EF	137 CD	136 B
TN Exp TN18-4110b	Conv.	44 KL			13.9 A-C			26 I			1.3 CD			149 A		
MO S18-17644	Conv	44 KL			13.8 A-D			34 GH			3.3 A			147 A		
Perdue Agribusiness P48MO21	Conv	41 L			13.9 A-C			33 H			3.3 A			143 B		
Average		59	57	59	13.5	12.2	12.4	41	40	41	1.4	1.1	1.0	140	138	138
Standard Error		3	5	5	0.3	1.3	0.6	2	3	1	0.4	0.1	0.0	1	1	1
L.S.D.$_{.05}$		9	7	N.S.	0.9	0.9	0.7	5	4	3	Sig.	N.S.	N.S.	3	3	2
C.V.		10	11	10	4	6	6	7	9	7	-	-	-	1	2	2

† 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-24-b. Mean[†] yield and quality of 56 Maturity Group IV Late (4.5 - 4.9) 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)	SDS DI[††] (%)	SDS DS[††] (1-9)	SDS DX[††] (DI x DS/9)	Frogeye[‡‡] (%)	Leaf Holding[ǁ] (1-5)
		1 yr	1 yr	1 yr	1 yr	1 yr	1 yr
Dyna-Gro S47XF23S	XFS	69 A	3 EF	1.3 EF	1 E	5.3 B-F	1.0 C
Revere 4934XF	XF	68 AB	27 B-E	4.0 A-C	12 B-E	1.7 J	1.0 C
Revere 4826XF*	XF	67 A-C	7 EF	2.7 B-F	4 DE	5.0 B-G	1.0 C
Don Mario DM48F53	XF	67 A-C	22 B-F	2.7 B-F	8 B-E	2.3 IJ	1.0 C
USG 7496XTS**	R2XS	66 A-D	17 C-F	3.3 B-E	6 B-E	4.0 E-I	1.0 C
Asgrow AG47XF2	XF	65 A-E	3 EF	1.3 EF	1 E	2.3 IJ	1.0 C
USG 7463XF	XF	64 A-F	12 D-F	2.7 B-F	5 C-E	6.0 A-E	1.0 C
Innvictis A4862XF	XF	63 A-G	12 D-F	2.3 C-F	3 DE	3.0 G-J	1.0 C
Dyna-Gro S49XF43S	XFS	62 A-G	37 B-D	3.7 B-D	20 B	3.0 G-J	1.0 C
Progeny 4798XF	XF	62 A-G	15 D-F	2.3 C-F	4 DE	4.3 D-I	2.3 B
USG 7474XFS	XFS	62 A-G	3 EF	2.3 C-F	1 E	5.3 B-F	1.3 C
USG 7461XFS**	XFS	62 A-H	17 C-F	2.7 B-F	4 DE	3.7 F-J	1.3 C
Asgrow AG48XF3	XF	61 A-H	18 C-F	1.7 D-F	4 DE	5.3 B-F	1.0 C
Revere 4731XF	XF	60 A-H	45 AB	3.0 B-F	17 B-D	2.7 H-J	1.0 C
Progeny 4691XFS*	XFS	60 B-H	42 A-C	3.0 B-F	13 B-E	6.3 A-D	1.0 C
Revere 4795XS****	R2XS	60 B-I	8 EF	3.3 B-E	3 DE	5.0 B-G	1.0 C
Asgrow AG49XF3	XF	59 B-I	7 EF	1.7 D-F	2 DE	7.0 AB	1.3 C
USG 7494ETS	E3S	59 B-I	0 F	1.0 F	0 E	6.7 A-C	1.7 B
Innvictis B4903E	E3	58 C-J	18 C-F	3.0 B-F	8 B-E	4.3 D-I	1.7 B
Revere 4727XF	XF	57 D-J	18 C-F	3.0 B-F	7 B-E	4.3 D-I	2.3 B
Progeny 4604XFS**	XFS	56 D-J	2 EF	1.3 EF	0 E	4.3 D-I	1.3 C
Dyna-Gro S48EN73	E3	56 E-J	3 EF	2.7 B-F	1 E	5.3 B-F	1.3 C
Xitavo 4653E	E3	56 F-J	15 D-F	3.0 B-F	6 B-E	4.7 C-H	1.0 C
Progeny 4775E3S	E3S	54 G-J	7 EF	2.0 C-F	2 DE	6.3 A-D	1.3 C
Innvictis B4603E	E3	53 H-K	22 B-F	3.7 B-D	13 B-E	3.7 F-J	1.0 C
Xitavo 4894E	E3	50 I-L	7 EF	1.0 F	1 E	6.0 A-E	1.7 B
Progeny 4806XFS	XFS	50 J-L	63 A	6.0 A	42 A	7.7 A	1.0 C
TN Exp TN18-4110b	Conv.	44 KL	5 EF	1.7 D-F	1 E	1.7 J	4.0 A
MO S18-17644	Conv	44 KL	37 B-D	4.7 AB	20 BC	4.0 E-I	3.7 A
Perdue Agribusiness P48MO21	Conv	41 L	12 D-F	1.7 D-F	4 DE	3.0 G-J	3.7 A
Average		59	17	2.6	7	4.5	1.5
Standard Error		3	10	0.8	5	0.7	0.3
L.S.D.₀₅		9	26	2.2	15	2.0	0.8
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 signifcant 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.
ǁ 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.