

Table A-22-a. Mean[†] yield and agronomic traits of 30 Maturity Group IV Late (4.5 - 4.9) soybean varieties evaluated in small plot replicated trials with 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 4727XF	XF	84 A	75 A-D		10 A	11 A		41 J-L	40 H		1.0 E	1.2 A		136 L	138 E-G	
Revere 4795XS****	R2XS	83 AB	78 A	77 A	10 A	12 A	12 C	45 F-H	45 C-F	43 B	1.0 E	1.2 A	1.1 A	145 B-F	141 C-E	141 B
Revere 4826XF*	XF	80 A-C	78 AB		10 A	12 A		45 F-I	44 D-G		1.0 E	1.2 A		137 KL	137 E-G	
Asgrow AG48XF3	XF	79 A-D			11 A			49 A-D			1.0 E			144 C-H		
USG 7461XFS**	XFS	78 A-D	76 A-C	74 A	10 A	12 A	12 BC	51 A	50 A	47 A	1.3 DE	1.2 A	1.1 A	144 C-G	141 B-E	140 B
Progeny 4691XFS*	XFS	77 A-E	72 A-D		11 A	12 A		49 A-C	48 AB		2.0 B-D	1.8 A		139 G-L	138 E-G	
Progeny 4798XF	XF	77 A-E	73 A-D		10 A	12 A		45 F-H	45 C-E		1.0 E	1.5 A		148 A-D	144 A-C	
Dyna-Gro S47XF23S	XFS	77 A-E	74 A-D		12 A	12 A		44 F-J	43 E-G		1.0 E	1.2 A		137 KL	136 G	
USG 7474XFS	XFS	76 A-E			10 A			46 C-G			1.3 DE			142 E-K		
Progeny 4604XFS**	XFS	75 A-F	73 A-D	73 A	10 A	12 A	12 C	49 A-C	48 AB	46 A	1.3 DE	1.3 A	1.3 A	146 B-F	143 A-D	141 B
Don Mario DM48F53	XF	75 A-F			11 A			41 J-L			1.3 DE			143 C-I		
Asgrow AG49XF3	XF	75 A-F			10 A			50 AB			1.0 E			149 A-C		
Xitavo 4894E	E3	74 A-G			10 A			45 F-H			1.3 DE			143 D-J		
Dyna-Gro S48EN73	E3	73 A-G	72 A-D		10 A	12 A		43 H-K	42 F-H		1.0 E	1.7 A		139 G-L	140 D-F	
Xitavo 4653E	E3	73 A-G			10 A			44 F-J			1.0 E			139 G-L		
USG 7463XF	XF	72 A-H	69 C-E		10 A	12 A		46 D-H	46 B-D		1.0 E	1.2 A		139 G-L	139 E-G	
Progeny 4806XFS	XFS	71 B-H	70 B-D	71 A	10 A	12 A	13 AB	46 E-H	44 D-F	43 B	1.0 E	1.2 A	1.1 A	150 A-D	145 A	144 A
USG 7494ETS	E3S	70 C-I			10 A			46 E-H			1.3 DE			147 A-F		
Revere 4934XF	XF	70 C-I			10 A			42 I-L			1.3 DE			148 A-E		
Dyna-Gro S49XF43S	XFS	69 C-I	68 C-E		10 A	12 A		40 L	40 H		1.3 DE	1.5 A		145 B-F	144 A-D	
Innvictis A4862XF	XF	69 C-I	71 A-D		11 A	12 A		45 E-H	44 D-G		2.0 B-D	1.5 A		148 A-D	145 AB	
USG 7496XTS**	R2XS	69 C-I	70 B-D	69 A	12 A	12 A	13 A	48 A-E	48 AB	46 A	1.7 C-E	1.7 A	1.4 A	148 A-D	146 A	146 A
Innvictis B4903E	E3	67 D-I			10 A			45 F-I			2.3 BC			145 B-F		
Asgrow AG47XF2	XF	65 E-I	67 DE		11 A	12 A		43 H-K	42 GH		1.0 E	1.2 A		141 F-L	138 E-G	
Progeny 4775E3S	E3S	63 F-I	62 E		11 A	12 A		47 B-F	47 BC		1.3 DE	1.3 A		138 H-L	137 FG	
Perdue Agribusiness P48MO21 Conv	Conv	62 G-I			11 A			39 LM			1.3 DE			151 AB		
Revere 4731XF	XF	59 H-J			12 A			41 KL			2.7 AB			141 F-L		
Innvictis B4603E	E3	57 IJ			10 A			44 G-K			2.7 AB			137 J-L		
MO S18-17644	Conv	57 IJ			11 A			36 M			3.3 A			138 I-L		
TN Exp TN18-4110b	Conv.	47 J			10 A			32 N			1.3 DE			153 A		
Average		71	72	73	10.6	11.9	12.5	44	45	45	1.4	1.4	1.2	143	141	143
Standard Error		5	3	2	0.5	1.3	1.0	1	1	2	0.3	0.2	0.1	2	2	2
L.S.D. _{.05}		13	8	N.S.	N.S.	N.S.	0.7	3	3	2	0.8	N.S.	N.S.	6	4	2
C.V.		11	9	8	8	6	6	4	5	5	-	-	-	2	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 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).

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-22-b. Mean[†] yield and agronomic traits of 30 Maturity Group IV Late (4.5 - 4.9) soybean varieties evaluated in small plot replicated trials with 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 4727XF	XF	84 A	7 A	2.0 A	2 A	1.0 D
Revere 4795XS****	R2XS	83 AB	5 A	1.0 A	1 A	1.7 B-D
Revere 4826XF*	XF	80 A-C	2 A	1.7 A	1 A	2.3 B
Asgrow AG48XF3	XF	79 A-D	3 A	1.7 A	1 A	1.3 CD
USG 7461XFS**	XFS	78 A-D	7 A	1.3 A	1 A	1.3 CD
Progeny 4691XFS*	XFS	77 A-E	2 A	2.0 A	1 A	1.7 B-D
Progeny 4798XF	XF	77 A-E	3 A	1.0 A	0 A	1.7 B-D
Dyna-Gro S47XF23S	XFS	77 A-E	0 A	1.0 A	0 A	1.0 D
USG 7474XFS	XFS	76 A-E	2 A	1.0 A	0 A	1.3 CD
Progeny 4604XFS**	XFS	75 A-F	3 A	1.3 A	1 A	1.0 D
Don Mario DM48F53	XF	75 A-F	5 A	2.3 A	2 A	1.3 CD
Asgrow AG49XF3	XF	75 A-F	3 A	1.0 A	0 A	1.3 CD
Xitavo 4894E	E3	74 A-G	3 A	1.0 A	0 A	3.7 A
Dyna-Gro S48EN73	E3	73 A-G	0 A	1.0 A	0 A	1.7 B-D
Xitavo 4653E	E3	73 A-G	5 A	1.3 A	1 A	1.7 B-D
USG 7463XF	XF	72 A-H	10 A	1.0 A	1 A	1.3 CD
Progeny 4806XFS	XFS	71 B-H	3 A	1.0 A	0 A	1.3 CD
USG 7494ETS	E3S	70 C-I	3 A	1.7 A	1 A	1.3 CD
Revere 4934XF	XF	70 C-I	5 A	1.0 A	1 A	1.0 D
Dyna-Gro S49XF43S	XFS	69 C-I	0 A	1.0 A	0 A	2.0 BC
Innervictis A4862XF	XF	69 C-I	5 A	1.7 A	1 A	2.3 B
USG 7496XTS**	R2XS	69 C-I	5 A	1.0 A	1 A	1.0 D
Innervictis B4903E	E3	67 D-I	8 A	2.7 A	4 A	1.0 D
Asgrow AG47XF2	XF	65 E-I	3 A	1.3 A	1 A	1.7 B-D
Progeny 4775E3S	E3S	63 F-I	0 A	1.0 A	0 A	1.0 D
Perdue Agribusiness P48MO21 Conv		62 G-I	7 A	2.3 A	3 A	1.0 D
Revere 4731XF	XF	59 H-J	2 A	1.3 A	0 A	1.3 CD
Innervictis B4603E	E3	57 IJ	3 A	1.3 A	1 A	1.0 D
MO S18-17644	Conv	57 IJ	12 A	1.7 A	4 A	1.7 B-D
TN Exp TN18-4110b	Conv.	47 J	8 A	1.3 A	1 A	1.3 CD
Average		71	4	1.4	1	1.5
Standard Error		5	4	0.5	1	0.3
L.S.D. _{.05}		13	N.S.	N.S.	N.S.	1.0
C.V.		11	-	-	-	-

[†] 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.

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.