Table A-29-a. Mean tipled and agronomic traits of 12 Maturity Group V Early (5.0 - 5.4) soybean varieties evaluated in small plot replicated trials without irrigation at the East Tennessee AgResearch and Education Center in Knoxville, Tennessee during 2023.

Variety	Herbicide Pkg [†]	Avg. Yield [§] (bu/ac)		Moisture at Harvest (%)		Plant Height (in.)		Lodging ^{II} (1-5)		Maturity (DAP)	
		1 yr	2 yr	1 yr	2 yr	1 yr	2 yr	1 yr	2 yr	1 yr	2 yr
NK 52-D6E3*	E3	75 A	75 A	12 CD	12 C	40 B-D	36 A	1.0 A	1.0 A	146 B	145 A
Progeny 5056XFS	XFS	72 AB	73 AB	12 AB	12 AB	43 A	38 A	1.3 A	1.2 A	146 B	147 A
Revere 5029XF	XF	71 A-C	72 AB	12 A-C	12 A	41 A-C	37 A	1.0 A	1.0 A	146 B	146 A
Innvictis A5003XF	XF	70 A-C		12 CD		37 DE		1.3 A		147 B	
Innvictis A5503XF	XF	67 B-D		12 B-D		39 B-E		1.0 A		146 B	
Asgrow AG53XF2	XF	67 B-D	64 BC	12 AB	12 B	41 A-C	36 A	1.0 A	1.0 A	146 B	144 A
USG 7503XF	XF	64 CD		12 B-D		38 C-E		1.0 A		144 C	
USG 7534GT	GT	64 C-E		12 A-C		41 A-C		2.0 A		146 B	
USG 7543XF	XF	63 DE		12 D		42 AB		1.3 A		152 A	
MO S18-6013	Conv	62 DE		12 A-C		28 F		1.0 A		151 A	
Innvictis A5813XF	XF	57 EF		12 A-C		36 E		1.0 A			
MO S18-6328	Conv	52 F	63 C	12 A	12 AB	31 F	31 B	1.7 A	1.4 A	146 B	145 A
Average		65	70	12.0	12.2	38	36	1.2	1.1	147	145
Standard Error				0.1	0.2	1		0.2	0.1	0	1
L.S.D. _{.05}		7	9	0.3	0.3	3	4	N.S.	N.S.	1	N.S.
C.V.		6	10	2	2	5	8	-		0	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

average for a given trait, Ms letters nignlighted in dark change are in the A group , indicating no statistical uniference 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.

Table A-29-b. Mean yield and quality of 12 Maturity Group V Early (5.0 - 5.4) soybean varieties evaluated in small plot replicated trials without irrigation at the East Tennessee AgResearch and Education Center in Knoxville, 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 (1-5)
		1 yr	1 yr	1 yr	1 yr	1 yr	1 yr
NK 52-D6E3*	E3	75 A	2	1.0	1	1.0 C	1.0 D
Progeny 5056XFS	XFS	72 AB	0	1.0	0	1.3 BC	1.3 B-D
Revere 5029XF	XF	71 A-C	0	1.0	0	2.0 B	1.7 A-C
Innvictis A5003XF	XF	70 A-C	0	1.0	0	1.0 C	1.0 D
Innvictis A5503XF	XF	67 B-D	0	1.0	0	1.3 BC	1.0 D
Asgrow AG53XF2	XF	67 B-D	0	1.0	0	1.0 C	1.0 D
USG 7503XF	XF	64 CD	0	1.0	0	1.3 BC	1.2 CD
USG 7534GT	GT	64 C-E	0	1.0	0	1.0 C	1.7 A-C
USG 7543XF	XF	63 DE	0	1.0	0	1.3 BC	2.0 AB
MO S18-6013	Conv	62 DE	0	1.0	0	1.0 C	2.0 A
Innvictis A5813XF	XF	57 EF	0	1.0	0	3.7 A	
MO S18-6328	Conv	52 F	0	1.0	0	1.3 BC	1.3 B-D
Average		65	0	1.0	0	1.4	1.4
Standard Error		2	0	0.0	0	0.2	0.2
L.S.D. _{.05}		7	N.E.	N.E.	N.E.	0.7	0.6
C.V.		6				-	-

[†] 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.

[‡] 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.
‡‡ Erogeye was evaluated visually at harvest using a 1 to 5 scale, with 1 indicating no leaves attautify.

I 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.