Table A-30. Mean[†] yield and agronomic traits of 24 Maturity Group IV Early (4.0 - 4.5) soybean varieties evaluated in small plot replicated trials at the West Tennessee AgResearch and Education Center in Jackson, Tennessee during 2024.

			Moisture at		Plant	
		Avg. Yield [§]	Harvest	Maturity	Height	Lodging ^{††}
Variety	Herbicide Pkg [†]	(bu/ac)	(%)	(DAP)	(in.)	(1-5)
Pioneer P45Z75E	E3	60 A	10.8 A-F	124 B-E	42 C-E	1.0
Great Heart GT4538XFS	RR/LL-Synchrony	52 A	10.5 <mark>A-E</mark>	126 <mark>A-D</mark>	50 A	1.0
USG 7435XFS	XFS	51 A	10.7 <mark>A-D</mark>	129 A	41 D-F	1.0
Pioneer P43Z44SE	E3S	50 A	10.1 <mark>A-G</mark>	123 C-E	37 HI	1.0
Innvictis A4564XF	XF	50 A	10.3 <mark>A-F</mark>	126 <mark>A-D</mark>	49 A	1.3
MO S20-15411GT	RR	49 A	10.9 A-C	129 A	42 C-E	1.0
MO S20-5669	Conv	48 <mark>A</mark>	11.0 A	127 A-C	37 G-I	1.0
Revere 44-F44	XF	48 <mark>A</mark>	9.4 E-G	126 <mark>A-D</mark>	43 CD	1.0
Innvictis A4102XF	XF	47 <mark>A</mark>	10.3 <mark>A-G</mark>	125 <mark>A-E</mark>	41 D-F	1.3
Innvictis A4411XF	XF	46 <mark>A</mark>	10.9 A-C	127 A-C	45 BC	1.0
Asgrow AG42XF4	XF	46 <mark>A</mark>	10.3 <mark>A-F</mark>	124 B-E	43 CD	1.0
Benson Hill C44H054S	Conv	45 <mark>A</mark>	9.4 E-G	123 C-E	34	1.0
Dyna-Gro S41EN72	E3	45 <mark>A</mark>	11.1 A	126 <mark>A-D</mark>	39 E-H	1.0
Asgrow AG44XF4	XFS	44 <mark>A</mark>	9.0 G	122 DE	41 D-F	1.0
Dyna-Gro S43XF85S	XFS	43 <mark>A</mark>	11.0 AB	128 AB	41 D-G	1.0
Benson Hill BH43Q207	Conv	43 <mark>A</mark>	9.6 D-G	115 H	39 E-H	1.0
Xitavo XO 4364E	E3	43 <mark>A</mark>	9.8 B-G	122 DE	38 F-H	1.0
Xitavo XO 4405E	E3	42 <mark>A</mark>	9.3 FG	127 A-D	41 D-F	1.0
Pioneer P41Z80BLX	E3S-Bolt	42 <mark>A</mark>	9.4 E-G	118 F-H	48 AB	1.0
Benson Hill N44D923S	Conv	42 <mark>A</mark>	9.9 <mark>A-G</mark>	116 H	42 C-E	1.0
MO S20-14129GT	RR	39 <mark>A</mark>	10.4 <mark>A-F</mark>	125 <mark>A-E</mark>	42 C-E	1.0
Dyna-Gro S45EN25	E3	38 <mark>A</mark>	9.8 C-G	122 C-F	44 CD	1.0
MO S20-2227	Conv	38 <mark>A</mark>	9.6 D-G	117 GH	39 E-H	1.0
Xitavo XO 4255E	E3	36 <mark>A</mark>	9.3 FG	121 E-G	37 HI	1.0
Average		45	10.1	124	41	1.0
Standard Error		6	0.4	2	1	0.1
L.S.D. _{.05}		N.S.	1.2	4	4	-
C.V.		13	7	2	6	-

† Varieties that have any MS letter in common are not significantly different at the 5% level of probability.

- Values highlighted in orange are above average, values highted in dark orange are in the upper 25%. 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.S.

- 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.

‡ For a full description of abbreviated biotech traits, see table 23.

* 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).