

**Table A-3-a. Mean<sup>†</sup> yield and agronomic traits of 9 Maturity Group III (3.0 - 3.9) soybean varieties evaluated in small plot replicated trials with irrigation at the Highland Rim AgResearch and Education Center in Springfield, Tennessee during 2023.**

Variety	Herbicide Pkg <sup>‡</sup>	Avg. Yield <sup>§</sup> (bu/ac)			Moisture at Harvest (%)			Plant Height (in.)			Lodging <sup>  </sup> (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
Xitavo 3803E	E3	83 A			14 A			35 A-C			1.0			135 A		
Dyna-Gro S38XF22S*	XF	75 AB	49 A		14 A	12 A		38 AB	32 A		1.0	1.0	1.0	135 A	135 A	
Asgrow AG39XF3	XF	74 AB			13 A			34 BC			1.0	1.0		135 A		
Asgrow AG38XF1	XF	72 AB	47 A	52 A	13 A	12 B	12 A	36 A-C	31 A	31 A	1.0	1.0	1.0	136 A	134 AB	134 A
USG 7394XFS	XFS	68 B			14 A			38 AB			1.0			136 A		
Revere 3908XFS*	XFS	64 BC	48 A	55 A	13 A	12 AB	13 A	40 A	33 A	33 A	1.0	1.0	1.0	133 B	133 B	133 A
Innvictis A3992XF	XF	62 BC			13 A			35 A-C			1.0			134 B		
Perdue Agribusiness P30ILO22	Conv	54 CD			13 A			28 D			1.0			130 C		
Perdue Agribusiness P29ILO22	Conv	46 D			14 A			31 CD			1.0			126 D		
Average		67	48	54	13.5	12.2	12.4	35	32	32	1.0	1.0	1.0	133	134	134
Standard Error		5	22	13	0.1	1.2	0.8	3	6	3	0.0	0.0	0.0	0	1	1
L.S.D. <sub>.05</sub>		13	N.S.	N.S.	N.S.	0.3	N.S.	5	N.S.	N.S.	N.E.	N.E.	N.E.	1	1	N.S.
C.V.		12	14	15	2	2	2	9	10	10	-	-	-	0	1	1

<sup>†</sup> 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.

<sup>‡</sup> 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.

<sup>§</sup> All yields are adjusted to 13% moisture.

<sup>||</sup> Lodging was evaluated on a scale of 1 (no lodging) to 5 (complete lodging).

<sup>T</sup> 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-3-b. Mean† yield and agronomic traits of 9 Maturity Group III (3.0 - 3.9) soybean varieties evaluated in small plot replicated trials with irrigation at the Highland Rim AgResearch and Education Center in Springfield, Tennessee during 2023.**

Variety	Herbicide Pkg†	Avg. Yield§	SDS DI††	SDS DS††	SDS DX††	Frogeye‡‡	Leaf Holding
		(bu/ac)	(%)	(1-9)	(DI x DS/9)	(%)	(1-5)
		1 yr	1 yr	1 yr	1 yr	1 yr	1 yr
Xitavo 3803E	E3	83 A	10 CD	2.7 AB	3 BC	1.7 A	1.0
Dyna-Gro S38XF22S*	XF	75 AB	0 D	1.0 C	0 C	5.0 A	1.0
Asgrow AG39XF3	XF	74 AB	13 BC	2.3 AB	4 BC	5.3 A	1.0
Asgrow AG38XF1	XF	72 AB	23 B	2.7 AB	7 B	3.0 A	1.0
USG 7394XFS	XFS	68 B	8 CD	2.7 AB	2 C	3.3 A	1.0
Revere 3908XFS*	XFS	64 BC	47 A	3.3 A	22 A	4.0 A	1.0
Innvictis A3992XF	XF	62 BC	8 CD	1.7 BC	2 C	5.0 A	1.0
Perdue Agribusiness P30ILO22	Conv	54 CD	7 CD	1.7 BC	1 C	2.7 A	1.0
Perdue Agribusiness P29ILO22	Conv	46 D	7 CD	1.0 C	1 C	3.3 A	1.0
Average		67	14	2.1	5	3.7	1.0
Standard Error		5	5	0.4	1	1.1	0.0
L.S.D-.05		13	13	1.3	4	N.S.	N.E.
C.V.		12	-	-	-	-	-

† 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.