Table A-5-a. Mean yield and agronomic traits of 9 Maturity Group III (3.0-3.9) soybean varieties evaluated in small plot replicated trials without irrigation at the Middle Tennessee AgResearch and Education Center in Spring Hill, Tennessee during 2023.

| Variety | Herbicide $\mathrm{Pkg}^{\dagger}$ | Avg. Yield ${ }^{\S}$ (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 |
| Xitavo 3803E | E3 | 76 A |  |  | 13 A |  |  | $32 \mathrm{~B}-\mathrm{D}$ |  |  | 1.0 |  |  | 136 AB |  |  |
| Revere 3908XFS* | XFS | 72 A | 56 A | 53 A | 13 B | 14 A | 14 A | 34 AB | 30 A | 29 A | 1.0 | 1.0 | 1.0 | 138 A | 136 A | 139 A |
| USG 7394XFS | XFS | 71 AB |  |  | 13 AB |  |  | 36 A |  |  | 1.0 | 1.0 | 1.0 | 137 A |  |  |
| Asgrow AG38XF1 | XF | 67 A-C | 47 B | 47 A | 13 C | 13 B | 14 A | 30 CD | 28 B | 27 B | 1.0 | 1.0 | 1.0 | 137 A | 135 A | 137 A |
| Dyna-Gro S38XF22S* | XF | 66 A-C | 47 B |  | 13 C | 13 AB |  | 33 BC | 29 AB |  | 1.0 | 1.0 |  | 136 A | 135 A |  |
| Innvictis A3992XF | XF | 62 BC |  |  | 13 B |  |  | 29 D |  |  | 1.0 |  |  | 138 A |  |  |
| Asgrow AG39XF3 | XF | 61 C |  |  | 13 BC |  |  | 30 CD |  |  | 1.0 |  |  | 136 A |  |  |
| Perdue Agribusiness P30ILO22 | Conv | 45 D |  |  | 13 BC |  |  | 23 E |  |  | 1.0 |  |  | 133 BC |  |  |
| Perdue Agribusiness P29ILO22 | Conv | 39 D |  |  | 13 BC |  |  | 22 E |  |  | 1.0 |  |  | 133 C |  |  |
| Average |  | 62 | 50 | 50 | 12.9 | 13.2 | 13.9 | 30 | 29 | 28 | 1.0 | 1.0 | 1.0 | 136 | 136 | 138 |
| Standard Error |  | 3 | 19 | 11 | 0.1 | 0.5 | 0.8 | 1 | 4 | 2 | 0.0 | 0.0 | 0.0 | 1 | 2 | 3 |
| L.S.D. 05 |  | 10 | 7 | N.S. | 0.3 | 0.7 | N.S. | 3 | 2 | 1 | N.E. | N.E. | N.E. | 3 | N.S. | N.S. |
| C.v. |  | 9 | 11 | 14 | 1 | 4 | 4 | 6 | 5 | 5 | - | - | - | 1 | 2 | 2 |

$\dagger$ Varieties that have any MS letter in common are not significantly different at the $5 \%$ level of probabiity. Values highlighted in light orange are above average for a given trait, MS letters highlighted in
dark orange are in the " " group", indicatiting no statistical difference from the top-performing variety, for a given trait.
C. $V$ is only reported for variables evaluated on a ratio
C.V. is only reported for variables evaluated on a ratio scale.
L.S.D. values are given for ANOVA that were signficant at $P<0$.
L.S.D. values are given for ANOVA that were signficant at $\mathrm{P}<0.05$. Variables in which minimal variation was observed were not subjected to ANOVA and are reported as N.E.
*Asterisks after a name indiciate the number of preceding conseccutive years in the top-performing "A" group.

* Asterisks after a name indicate the numb.

Lodging was evaluated on a a scale of 1 (no lodging) to 5 (complete lodging).
tansformed mean values . rransformed 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 ransformed mean values.

Table A-5-b. Mean yield and agronomic traits of 9 Maturity Group III (3.0-3.9) soybean varieties evaluated in small plot replicated trials without irrigation at the Middle Tennessee AgResearch and Education Center in Spring Hill, Tennessee during 2023.

| Variety | Herbicide Pkg ${ }^{\dagger}$ | Avg. Yield ${ }^{\S}$ (bu/ac) 1 yr | SDS DIt ${ }^{\text {tI }}$ (\%) 1 yr | $\begin{gathered} \text { SDS DS }{ }^{\text {H }} \\ (1-9) \\ 1 \mathrm{yr} \\ \hline \end{gathered}$ | $\begin{gathered} \begin{array}{c} \text { SDS DX } \\ (\mathrm{DI} \times \mathrm{DS} / 9) \\ 1 \mathrm{yr} \\ \hline \end{array}{ }^{2} \end{gathered}$ |  | Leaf <br> Holding" <br> $(1-5)$ <br> 1 yr <br> 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| Xitavo 3803E | E3 | 76 A | 2 | 1.0 | 1 | 1.7 C | 1.0 |
| Revere 3908XFS* | XFS | 72 A | 0 | 0.0 | 0 | 2.7 BC | 1.2 |
| USG 7394XFS | XFS | 71 AB | 0 | 0.0 | 0 | 2.7 BC | 1.0 |
| Asgrow AG38XF1 | XF | 67 A-C | 0 | 0.0 | 0 | 1.0 C | 1.0 |
| Dyna-Gro S38XF22S* | XF | 66 A-C | 0 | 0.0 | 0 | 6.0 A | 1.0 |
| Innvictis A3992XF | XF | 62 BC | 0 | 0.0 | 0 | 4.7 AB | 1.0 |
| Asgrow AG39XF3 | XF | 61 C | 0 | 0.0 | 0 | 2.3 BC | 1.0 |
| Perdue Agribusiness P30ILO22 | Conv | 45 D | 0 | 0.0 | 0 | 2.3 BC | 1.0 |
| Perdue Agribusiness P29ILO22 | Conv | 39 D | 0 | 0.0 | 0 | 1.7 C | 2.0 |
| Average |  | 62 | 0 | 0.1 | 0 | 2.8 | 1 |
| Standard Error |  | 3 | 0 | 0.0 | 0 | 0.9 | 0 |
| L.S.D. 05 |  | 10 | N.E. | N.E. | N.E. | 2.4 | N.E. |
| C.V. |  | 9 | - | - | - | - | - |

$\dagger$ 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
C.S. is only reported for variables evaluated on a ratio scale. 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.

* Asterisks after a name indicate the number of preceding consecutive years in the top-performing "A" group.
$\ddagger$ Aster a full description of abbreviated biotech traits, see table 29 .
§ All yields are adjusted to $13 \%$ moisture
It 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
"+ Leafeye whalding evaluated using a 1 to 9 scale, with 1 indicating visually at harvest disease. Evaluated in mid-September.
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.

