

MISSISSIPPI SOYBEAN PROMITON BOARD

**Response of maturity group IV and V Enlist soybean cultivars to stem canker, 2023.**

<b>Company/Cultivar<sup>1</sup></b>	<b>Stem canker rating<sup>2</sup></b>	<b>Cultivar designation<sup>3</sup></b>
J77-339 (check)	5.7	MS
Petrus 4916GT (check)	6.8	MS
Delta Grow 46E10	0.0	R
Delta Grow 46E30	0.5	R
Delta Grow 48E59	0.0	R
Delta Grow 49E30/STS	0.0	R
Delta Grow 49E80	0.1	R
Innvictis B4903E	0.0	R
Innvictis B5013E	0.0	R
Pioneer P38A28E	3.2	MR
Pioneer P42A84E	0.0	R
Pioneer P45A81E	0.0	R
Pioneer P48A14E	0.0	R
Pioneer P51A33SE	0.0	R
Pioneer P56A71E	0.2	R
	MSE	8.27
	CV (%)	28.04
	<i>P</i> -value for F-statistic	<0.0001

<sup>1</sup>An asterisk denotes an entry that was added to supplement the set of entries evaluated through toothpick inoculation. Information from the given entry will only be included in these data tables and may not represent the greater set of data generated by the Mississippi State University Official Variety Testing Program as this entry was not provided for comparison in the greater 2023 soybean OVT program conducted throughout Mississippi.

<sup>2</sup>Stem Canker Reaction-Ten plants per plot were inoculated with fungus-infested toothpicks. Ratings were given by individual plant reaction using a modified 0-9 scale based on lesion severity and are presented as the average for the ten plants. Where a lesion did not appear, a rating of 0 (Resistant) was assessed. Ratings were assessed based on the presence of a lesion whereby a reaction that produced a visible lesion that did not expand up the length of the stem was assessed as a 1. Dead plants with lesions that extended up most of the plant's length received a score of 9.

<sup>3</sup>By using the Mean Disease Rating, a standardized designation system is as follows: 1 = Resistant, 3 = Moderately Resistant, 5 = Moderately Susceptible and 7 = Susceptible.

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**Response of maturity group IV early Xtend soybean cultivars to stem canker, 2023.**

<b>Company/Cultivar<sup>1</sup></b>	<b>Stem canker rating<sup>2</sup></b>	<b>Cultivar designation<sup>3</sup></b>
J77-339 (check)	5.3	MS
Petrus 4916GT (check)	6.9	MS
Armor Seed 44-D49	0.0	R
Armor Seed 45-F02	0.0	R
Armor Seed 46-F96	0.0	R
Asgrow AG39XF3	0.0	R
Asgrow AG42XF4	0.2	R
Asgrow AG43XF2	0.0	R
Asgrow AG45XF3	0.0	R
Asgrow AG46XF3	0.0	R
Beck's 4337XF	0.0	R
Delta Grow 44XF75/STS	0.0	S
Delta Grow 46X65/STS	0.0	R
Delta Grow 46XF54	0.0	R
Don Mario DM45F23 (DM45F61)	0.0	R
Dyna-Gro S42XF93S	0.0	R
Dyna-Gro S43XS70	0.3	R
Dyna-Gro S46XF31S	0.0	R
Dyna-Gro S46XS60	0.0	R
Gateway Seed 457XFS	0.0	R
Gateway Seed 461XFS	0.2	R
Gateway Seed 469XF	0.0	R
Great Heart Seed GT-4255XS	0.0	R
Great Heart Seed GT-4366XFS	0.0	R
Great Heart Seed GT-4538XFS	0.0	R
Great Heart Seed GT-4677XS	0.0	R
Great Heart Seed GT-4681XFS	0.1	R
Innictis A4411XF	0.1	R
Innictis A4503XF	0.2	R
NK NK42-T5XF	0.0	R
NK NK43-Y9XFS	0.0	R
NK NK44-J4XFS	0.6	R
NK NK46-B4XFS	0.2	R
Pioneer P44A21X	0.0	R
Pioneer P45A70LX	0.0	R
Pioneer P46A90LX	0.1	R
Progeny 4200RXS	1.4	R
Progeny 4604XFS	0.1	R
Progeny 4623XFS	0.0	R
Progeny 4665XFS	0.1	R
Progeny 4691XFS	0.0	R
Revere 4415XF	1.3	R
Revere 4526XF	0.2	R
Revere 4606XF	0.1	R
MSE	26.13	-
CV (%)	29.70	-
P-value for F-statistic	<0.0001	-

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<sup>2</sup>Stem Canker Reaction-Ten plants per plot were inoculated with fungus-infested toothpicks. Ratings were given by individual plant reaction using a modified 0-9 scale based on lesion severity and are presented as the average for the ten plants. Where a lesion did not appear, a rating of 0 (Resistant) was assessed. Ratings were assessed based on

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the presence of a lesion whereby a reaction that produced a visible lesion that did not expand up the length of the stem was assessed as a 1. Dead plants with lesions that extended up most of the plant’s length received a score of 9.  
<sup>3</sup>By using the Mean Disease Rating, a standardized designation system is as follows: 1 = Resistant, 3 = Moderately Resistant, 5 = Moderately Susceptible and 7 = Susceptible.

**Response of maturity group IV late Xtend soybean cultivars to stem canker, 2023.**

<b>Company/Cultivar<sup>1</sup></b>	<b>Stem canker rating<sup>2</sup></b>	<b>Cultivar designation<sup>3</sup></b>
J77-339 (check)	6.5	MS
Petrus 4916GT (check)	7.5	S
Asgrow AG47XF2	0.0	R
Asgrow AG48X9	0.5	R
Asgrow AG48XF2	0.3	R
Asgrow AG48XF3	0.0	R
Asgrow AG49XF4	0.0	R
Beck's 4887XF	0.0	R
Delta Grow 47XF38	0.7	R
Delta Grow 48X45	0.3	R
Delta Grow 48XF33	0.4	R
Delta Grow 48XF42	0.0	R
Delta Grow 49XF85/STS	0.0	R
Don Mario DM48F53 (210985)	0.0	R
Dyna-Gro S47XF23S	0.2	R
Dyna-Gro S49XF43S	0.0	R
Dyna-Gro S49XF82	0.0	R
Gateway Seed 473XFS	0.1	R
Great Heart Seed GT-4756XF	0.0	R
Great Heart Seed GT-4762XF	0.1	R
Great Heart Seed GT-4867XF	0.2	R
Innictis A4850XF	0.0	R
Innictis A4862XF	0.0	R
NK NK47-Z1XF	0.0	R
NK NK48-A8XFS	0.0	R
NK NK49-C2XFS	0.5	R
NK S49-F5X	0.3	R
Pioneer P47A64X	0.0	R
Pioneer P48A04LX	1.3	R
Progeny 4755XFS	0.1	R
Progeny 4778XFS	0.0	R
Progeny 4798XF	1.3	R
Progeny 4806XFS	0.0	R
Progeny 4947XFS	0.0	R
Revere 4727XF	0.0	R
Revere 4731XF	0.0	R
Revere 4795XS	0.4	R
Revere 4826XFS	0.0	R
Revere 4934XF	0.0	R
MSE	24.75	-
CV (%)	32.35	-
P-value for F-statistic	0.0002	-

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<sup>2</sup>Stem Canker Reaction-Ten plants per plot were inoculated with fungus-infested toothpicks. Ratings were given by individual plant reaction using a modified 0-9 scale based on lesion severity and are presented as the average for the

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ten plants. Where a lesion did not appear, a rating of 0 (Resistant) was assessed. Ratings were assessed based on the presence of a lesion whereby a reaction that produced a visible lesion that did not expand up the length of the stem was assessed as a 1. Dead plants with lesions that extended up most of the plant's length received a score of 9.  
<sup>3</sup>By using the Mean Disease Rating, a standardized designation system is as follows: 1 = Resistant, 3 = Moderately Resistant, 5 = Moderately Susceptible and 7 = Susceptible.

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**Response of maturity group V late Xtend soybean cultivars to stem canker, 2023.**

<b>Company/Cultivar<sup>1</sup></b>	<b>Stem canker rating<sup>2</sup></b>	<b>Cultivar designation<sup>3</sup></b>
J77-339 (check)	5.2	MS
Petrus 4916GT (check)	7.3	MS
Innictis A5813XF	0.0	R
Progeny 5751XF	0.0	R
	MSE	1.69
	CV (%)	19.99
	<i>P</i> -value for F-statistic	<0.0001

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J77-339 (check)	5.2	MS	
Petrus 4916GT (check)	6.0	MS	
Asgrow AG53XF2	0.0	R	
Asgrow AG56XF2	0.7	R	
Delta Grow 52XF22/STS	0.0	R	
Delta Grow 53XF95/STS	0.0	R	
Delta Grow 55X25	0.4	R	
Delta Grow 55XF23	0.0	R	
Dyna-Gro S51XF84S	0.0	R	
Dyna-Gro S52XT91	0.0	R	
Great Heart Seed GT-5214X	0.0	R	
Great Heart Seed GT-5320XF	0.0	R	
Great Heart Seed GT-5417X	0.0	R	
Innunctis A5003XF	0.0	R	
NK NK52-V1XF	0.0	R	
NK NK54-J9XFS	0.1	R	
NK NK55-T2XF	0.3	R	
NK Seeds NK56-Z6XFS	0.0	R	
Pioneer P50A08LX	0.4	R	
Pioneer P53A67X	0.9	R	
Pioneer P54A54X	0.3	R	
Progeny 5056XFS	0.2	R	
Progeny 5441XF	0.0	R	
Progeny 5641XF	0.0	R	
Revere 5029XF	0.0	R	
	MSE	13.97	-
	CV (%)	27.67	-
	<i>P</i> -value for F-statistic	<0.0001	-

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