Response of Maturity Group IV Conventional, LibertyLink, and RoundUp Ready soybean cultivars to stem canker, 2020.

to stem canker, 2020.		Stem canker	Cultivar
Company/Cultivar		rating ^{1,2}	designation ³
J77-339 (check)		3.4 ab	MR
Univ. of Missouri S11-20242C (check)		3.7 bcd	MR
Univ. of Missouri S15-10434C (check)		2.3 bcd	R
Credenz CZ 4820 LL		0.0 f	R
GDM Seeds V 4520 S		0.0 f	R
GDM Seeds V 4720 S		0.0 f	R
GDM Seeds V 4921 S		0.0 f	R
Go Soy 46G19		0.0 f	R
Go Soy 48C17S		0.0 f	R
Go Soy 49G16		6.6 a	MS
Go Soy GT Ireane		0.0 f	R
Go Soy Ireane		0.2 ef	R
Local Seed Co. LSX3911GL		0.0 f	R
Local Seed Co. LSX4711GL		0.2 ef	R
Petrus Seed 4619 GTS		0.0 f	R
Petrus Seed 4916 GT		6.5 a	MS
Progeny Ag 4602LR		0.0 f	R
Univ. of Arkansas R15-2422		2.9 abc	R
Univ. of Arkansas R16-259		0.2 ef	R
Univ. of Missouri S15-10879C		4.0 bc	MR
Univ. of Missouri S15-3772RY		1.7 de	R
Univ. of Missouri S15-3847R		0.0 f	R
Univ. of Missouri S15-5904RY		1.1 cd	R
Univ. of Missouri S16-11644C		3.9 ab	MR
Univ. of Missouri S16-14379C		0.0 f	R
Univ. of Missouri S16-14730C		0.0 f	R
Univ. of Missouri S16-5540R		2.8 abc	R
Univ. of Missouri S16-7875C		1.2 bcd	R
Univ. of Missouri S16-7922C		0.0 f	R
	MSE	236.2	-
	CV (%)	26.3	-
	P-value for F-statistic	< 0.0001	-

¹Stem 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.

²Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (P=0.05).

³By 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 early Xtend soybean cultivars to stem canker, 2020.

		Stem canker	Cultivar
Company/Cultivar		rating ^{1,2}	designation ³
Agrigold G4440RX (check)		5.7 a	MR/MS
Mission Seed Solutions A4447N (check)		3.2 a	MR
Progeny P4255 (check)		5.7 a	MR/MS
AgriGold G4255RX		0.0 c	R
AgriGold G4620RX		0.0 c	R
Armor 44-D49		0.0 bc	R
Armor 44-D92		0.4 bc	R
Armor 46-D09		0.0 c	R
Asgrow AG43X0		0.0 c	R
Asgrow AG45X8		0.0 c	R
Asgrow AG46X0		0.0 c	R
Asgrow AG46X6		0.0 c	R
Credenz CZ 4280X		0.0 c	R
Credenz CZ 4341X		0.0 c	R
Credenz CZ 4570X		0.0 c 0.2 bc	R
Credenz CZ 4600X		0.2 bc 0.0 c	R
Delta Grow 46X05/STS		0.0 c	R
Delta Grow 46X65/STS		0.0 c	R
Dyna-Gro S43XS70		0.0 c	R R
Dyna-Gro S45XS37		0.0 c	R
Dyna-Gro S45XS66		0.0 c	R R
•		0.0 c	R R
Dyna-Gro S46XS60			
GDM Seeds DM 44X31 GDM Seeds DM 45X61		0.0 c	R R
		0.0 c	
Great Heart Seed GT-4677XS		0.2 b	R
LG Seeds LGS4464RX		0.0 c	R
LG Seeds LGS4632RX		0.0 c	R
Local Seed Co. LS3976X		0.2 bc	R
Local Seed Co. LS4299XS(LSX4301XS)		0.0 c	R
Local Seed Co. LS4407X		0.0 c	R
Local Seed Co. LS4407X (LSX4501X)		0.0 c	R
Local Seed Co. LS4565X		0.0 c	R
Local Seed Co. LS4583X		0.0 c	R
Mission A4448X		0.0 c	R
Mission A4618X		0.0 c	R
MorSoy MS 4616RXT/STS		0.0 c	R
NK S44-C7X		0.0 c	R
Pioneer P42A96X		0.2 bc	R
Pioneer P44A72BX		0.0 c	R
Pioneer P46A86X		0.0 c	R
Progeny Ag 4265RXS		0.0 c	R
Progeny Ag 4444RXS		0.0 c	R
Progeny Ag 4505RXS		0.0 c	R
Progeny Ag 4620RXS		0.0 c	R
Γerral REV4679X		0.0 c	R
USG 7447XTS		5.4 a	MR
USG 7461XTS		0.0 c	R
	MSE	342.4	-
	CV (%)	19.8	_
p_{-V_0}	ue for F-statistic	< 0.0001	_

¹Stem 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.

²Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (P=0.05).

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

Disease ratings of maturity group IV enlist soybean cultivars to stem canker, 2020.

		Stem canker	Cultivar
Company/Cultivar		rating ^{1,2}	designation ³
Delta Grow 48E49 (check)		0.2	R
Armor 46-E50		0.0	R
Armor 48-E81		0.2	R
Delta Grow 45E28XP		0.0	R
Delta Grow 47E20/STS		0.0	R
Delta Grow 47E80/STS		0.0	R
Delta Grow 48E10		0.0	R
Delta Grow 48E49/STS		0.0	R
Delta Grow 49E00/STS		0.2	R
GDM Seeds DM 48E73		0.0	R
Go Soy 463E20S		0.0	R
Go Soy 473E20		0.0	R
Go Soy 481E19		0.5	R
Go Soy 491E19S		0.0	R
Local Seed Co. ZS4694E3S (LSX4602ES)		0.0	R
MorSoy MS 4800E		0.2	R
Pioneer P49T62E		0.2	R
Progeny Ag 4241E3		0.0	R
Progeny Ag 4682E3		0.0	R
Progeny Ag 4775E3S		0.0	R
Progeny Ag 4807E3S		0.0	R
Progeny Ag 4902E3		0.0	R
Progeny Ag 4908E3S		0.2	R
Terral REV4731E		0.0	R
Terral REV4990E		0.0	R
USG 7491ETS		0.0	R
·	MSE	223.2	-
	CV (%)	28.4	-
	<i>P</i> -value for F-statistic	0.5072	-

¹Stem 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.

²Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (P=0.05).

³By 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, 2020.

C/C-14		Stem canker	Cultivar
Company/Cultivar		rating ^{1,2}	designation ³
LG Seeds LGS4931RX (check)		0.0	R
Petrus Seed 4916GT (check)		3.4	MR
AgriGold G4820RX		0.0	R
AgriGold G4995RX		0.0	R
AGS GS47X19		0.0	R
AGS GS48X19		0.0	R
AGS GS49X21		0.0	R
Armor 48-D25		0.0	R
Armor 49-D14		0.3	R
Asgrow AG48X9		0.0	R
Credenz CZ 4730X		0.2	R
Credenz CZ 4770X		0.0	R
Credenz CZ 4810X		0.0	R
Credenz CZ 4869X		0.2	R
Credenz CZ 4941X		0.5	R
Credenz CZ 4979X		0.0	R
Delta Grow 47X95		0.0	R
Delta Grow 48X05		0.5	R
Delta Grow 48X45		0.0	R
Delta Grow 49X15		0.0	R
			R
Delta Grow 49X25		0.0	
Dyna-Gro S47XT20		0.0	R
Dyna-Gro S48XT56		0.5	R
Dyna-Gro S48XT90		0.2	R
Dyna-Gro S49XT21		0.1	R
Dyna-Gro S49XT70		0.0	R
GDM Seeds DM 47X39		0.0	R
GDM Seeds DM 49X13		0.0	R
Great Heart Seed GT-4828X		0.0	R
Great Heart Seed GT-4833XS		0.0	R
Great Heart Seed GT-4979X		0.0	R
LG Seeds LGS4899RX		0.0	R
Local Seed Co. LS4795XS (LSX4601XS)		0.0	R
Local Seed Co. LS4999X (LSX4901X)		0.0	R
Local Seed Co. LSX4612XS		0.2	R
Local Seed Co. LSX4812XS		0.0	R
Mission A4828X		0.0	R
Mission A4950X		0.0	R
MorSoy MS 4846 RXT		0.0	R
NK S47-Y9X		0.0	R
NK S49-F5X		0.0	R
Pioneer P48A60X		0.0	R
Progeny Ag 4700RXS		0.0	R
Progeny Ag 4816RX		0.0	R
Progeny Ag 4821RX		0.5	R
Progeny Ag 4851RX		0.0	R
Progeny Ag 4970RX		0.0	R
Frigery Ag 4970KA Faylor Seed T4880XS		0.0	R R
Taylor Seed T4880XS Taylor Seed T4990XS			R R
•		0.0	
Terral REV4927X		0.2	R
Terral REV4940X		0.0	R
USG 7480XT		0.0	R
USG 7489XT		2.1	R
USG 7496XTS		0.2	R
	MSE	816.7	-
	CV (%)	26.3	-
	<i>P</i> -value for F-statistic	0.0704	-

¹Stem 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.

²Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (P=0.05).

³By 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 V Conventional, LibertyLink, and RoundUp Ready soybean cultivars to stem canker, 2020.

Company/Cultivar		Stem canker rating ^{1,2}	Cultivar designation ³
J77-339 (check)		3.4 ab	MR
Univ. of Missouri S15-10434C (check)		2.5 ab	R
Go Soy 50G17		2.5 b	R
Petrus Seed 5319 GT		0.0 c	R
Univ. Of Arkansas R13-14635RR		0.2 c	R
Univ. of Missouri S11-20242C		0.0 c	R
Univ. of Missouri S16-11651C		4.1 a	MR
Univ. of Missouri S16-15170C		0.0 c	R
Univ. of Missouri S16-15809C		4.8 a	MR
Univ. of Missouri S16-3739RY		1.7 b	R
Univ. of Missouri S16-3747RY		0.0 c	R
	MSE	47.9	-
	CV (%)	30.8	-
	<i>P</i> -value for F-statistic	< 0.0001	-

¹Stem 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.

²Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (P=0.05).

³By 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 V early Xtend soybean cultivars to stem canker, 2020.

response of maturity group vearly reco		Stem canker	Cultivar
Company/Cultivar		rating ^{1,2}	designation ³
Progeny P5688RX (check)		6.3 a	MS
Asgrow AG52X9		0.0 b	R
Asgrow AG53X0		0.0 b	R
Asgrow AG53X9		0.0 b	R
Asgrow AG55X0		0.4 b	R
Credenz CZ 5000X		0.0 b	R
Credenz CZ 5251X		0.0 b	R
Credenz CZ 5299X		0.1 b	R
Credenz CZ 5420X		0.0 b	R
Credenz CZ 5700		0.2 b	R
Delta Grow 52X05/STS		1.6 b	R
Delta Grow 54X25		1.5 a	R
Dyna-Gro GS5261X		0.0 b	R
Dyna-Gro S52XS39 (SX 18652XS)		0.0 b	R
Dyna-Gro S56XT99		0.2 b	R
GDM Seeds DM 51X61		0.0 b	R
Great Heart Seed GT-5214X		0.0 b	R
Great Heart Seed GT-5417X		0.0 b	R
Local Seed Co. LS5009XS		0.2 b	R
Local Seed Co. LS5087X		0.0 b	R
Local Seed Co. LS5386X		0.0 b	R
MorSoy MS 5398 RXT		0.0 b	R
NK S51-R3XS		0.0 b	R
NK S53-F7X		0.0 b	R
Pioneer P53A67X		0.0 b	R
Pioneer P55A49X		0.0 b	R
Progeny Ag 5016RXS		0.0 b	R
Progeny Ag 5170RX		0.0 b	R
Progeny Ag 5252RX		0.0 b	R
Progeny Ag 5554RX		0.0 b	R
Terral REV 5659X		0.0 b	R
	MSE	232.9	-
	CV (%)	24.4	-
	<i>P</i> -value for F-statistic	< 0.0001	-

¹Stem 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.

²Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (P=0.05).

³By 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 V Enlist soybean cultivars to stem canker, 2020

		Stem canker	Cultivar
Company/Cultivar		rating ^{1,2}	designation ³
Terral REV 5190E (check)		0.0	R
Armor 51-E53		0.3	R
Delta Grow 51E60		0.0	R
Delta Grow 52E15/STS		0.1	R
Delta Grow 52E22		0.2	R
Go Soy 512E21		0.0	R
Local Seed Co. ZS5098E3		0.0	R
MorSoy MS 5110E		0.0	R
Progeny Ag 5211E3		0.0	R
	MSE	29.3	=
	CV (%)	29.3	-
	<i>P</i> -value for F-statistic	0.6939	-

¹Stem 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.

²Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (P=0.05).

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