

Response of Maturity Group IV early Xtend soybean cultivars to stem canker, 2019.

Company/Cultivar¹	Stem canker rating^{2,3}	Cultivar designation⁴
AgriGold G4440RX (check)	4.5 c	MR
USG 7447XTS (2018 check)	5.9 ab	MS
AgriGold G4579RX	0.1 d	R
AgriGold G4605RX	0.4 d	R
Armor 42-D27	0.1 d	R
Armor 44-D92	0.5 d	R
Armor X45D51	0.5 d	R
Asgrow AG43X0	0.0 d	R
Asgrow AG43X8	0.2 d	R
Asgrow AG45X8	0.2 d	R
Asgrow AG46X0	0.0 d	R
Asgrow AG46X6	0.4 d	R
Delta Grow 46X25	0.4 d	R
Delta Grow 46X65	0.0 d	R
*Dyna-Gro S43XS70	0.1 d	R
Dyna-Gro S45XS37	0.2 d	R
Dyna-Gro S45XS66	0.3 d	R
Dyna-Gro S46XS60	0.0 d	R
Great Heart GT-4255XS	0.2 d	R
Great Heart GT-4616X	0.0 d	R
Great Heart GT-4677XS	0.0 d	R
LG Seeds LGS4420RX	0.2 d	R
Local Seed LS3976X	0.8 d	R
Local Seed LS4487XS	0.1 d	R
Local Seed LS4565XS	0.0 d	R
Local Seed LS4583X	0.1 d	R
Local Seed LS4677X	0.7 d	R
Local Seed LSX4301XS	0.4 d	R
Local Seed LSX4501X	0.9 d	R
Local Seed LSX4601XS	0.0 d	R
Mission Seed A4448X	0.0 d	R
Mission Seed A4618X (MEX4618)	0.1 d	R
Mission Seed Solutions A4447NS	5.4 bc	MS
MorSoy MS 4616	0.2 d	R
NK S39-G2X	0.2 d	R
NK S44-C7X	0.1 d	R
Pioneer P42A96X	0.3 d	R
Pioneer P44A72BX	0.1 d	R
Pioneer P46A57BX	0.2 d	R
Progeny Ag P4255RX	7.0 a	S
Progeny Ag P4265RXS	0.5 d	R
Progeny Ag P4444RXS	0.6 d	R
Progeny Ag P4620RXS	0.2 d	R
Terral REV 4679X	0.0 d	R
LSD (0.05)	1.3	
CV (%)	129.5	
P-value for F-statistic	<0.0001	

¹An asterisk (*) denotes a variety that was supplemented for the purposes of gaining additional information on varieties that may be planted in the MS soybean production system but were not a part of the 2019 MSU OVT program.

²Stem canker reaction-10 plants per plot were inoculated with 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 eight 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.

³Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD ($P=0.05$).

⁴By using the Mean Disease Rating, a standardized designation system is as follows: 1 = Resistant, 3 = Moderately Resistant, 5 = Moderately Susceptible and 7 = Susceptible.