

Response of Maturity Group IV RoundUp Ready and Enlist soybean cultivars to stem canker, 2019.

Company/Cultivar¹	Stem canker rating^{2,3}	Cultivar designation⁴
USG 7447XTS (check)	5.5 a	MS
Mission Seed Solutions A4447NS (2018 check)	5.3 a	MS
Delta Grow 45E23	0.3 c	R
Delta Grow 46E29	1.2 c	R
Delta Grow 46E29	0.2 c	R
Delta Grow 47E19	0.6 c	R
Delta Grow 47E25	0.0 c	R
Delta Grow 48E10	0.2 c	R
Delta Grow 48E28	0.7 c	R
Delta Grow 48E39	0.7 c	R
Delta Grow 48E49	1.6 bc	R
Delta Grow 49E29	0.8 c	R
Don Mario 48D3E	0.3 c	R
Go Soy 463E19	0.1 c	R
*Go Soy 481E19	0.1 c	R
Go Soy 482E18	0.7 c	R
Local Seed LSX4503GLS	1.1 c	R
Local Seed LSX4602ES	0.8 c	R
Local Seed LSX4701E	0.5 c	R
Petrus Seed 4916 GT	3.3 b	MR
*Terral REV 4990E	0.5 c	R
Univ. of Missouri S14-15138R	0.0 c	R
Univ. of Missouri S14-15146R	0.3 c	R
USG 7480ET	0.7 c	R
LSD (0.05)	1.8	
CV (%)	121.5	
<i>P</i> -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.