



PennState Extension

Extension Team:	Plant Science	Tool Version:	
Author:	Mark Antle	Last Updated:	11/27/2019
Contact Email:	mea5@psu.edu		
Website:			

Description:

Results from the 2019 Soybean variety trials at Rock Springs, Centre County

User Instructions:

The sheets located within this file contain the results from the 2019 soybean variety trials conducted at the Rock Springs location in Centre County. The sheets are located at the bottom part of the Excel program and are labeled in respect to the trial they represent.

References:

*Prepared by Mark Antle, Department of Plant Science
These trials were partially supported with funds from the Pennsylvania Soybean Board.*

Acknowledgement of Risk:

This tool is provided for general informational purposes only and The Pennsylvania State University shall have no liability whatsoever for the use of or reliance on this tool.

Note: During the 2019 growing season, the month of May produced 8 inches of rain, which delayed planting somewhat. By mid June, rainfall had slowed and the remainder of the growing season turned out to have drier than normal growing conditions.

Early Maturity Group Soybean Variety Performance in Centre County, 2019 (MG 3.0 and earlier)

Source	Entry	Maturity Group	Traits	Seed Treatment	Yield, bu/A	TW (lbs/bu)	Height (in.)	Lodging (0-5, 0=best)	Maturity Date	% Protein @ 13.5% H2O	% Oil @ 13.5% H2O	2 Yr Avg. Yield, bu/A (2018-19)	3Yr Avg. Yield, bu/A (2017-19)
Dyna-Gro Seed	S28XT58	2.8	RR2XTEND	Equity VIP	74.5	54.7	28	0.0	23-Sep	34.0	18.6	64.2	68.5
Chemgro	C2752RX	2.7	RR2XTEND	Encase Excalibre	74.0	53.9	29	0.0	22-Sep	32.4	20.0		
BASF	CZ 3099GTLL	3.0	LLGT27	Poncho Votivo plus Illevo	73.5	55.0	29	0.0	28-Sep	34.3	18.9		
LG Seeds	LGS2321RX	2.3	RR2XTEND	AgriShield MAX w/LeVO	70.5	53.3	29	0.0	18-Sep	33.2	19.6		
Dyna-Gro Seed	S30XT96	3.0	RR2XTEND	Equity VIP	70.4	55.2	35	0.0	28-Sep	36.2	18.1	60.0	63.6
Seedway	SG2832XT	2.8	RR2XTEND		70.1	54.5	27	0.0	25-Sep	34.9	18.4	63.1	65.8
Dyna-Gro Seed	S28GL80	2.8	LLGT27	Equity VIP	69.8	54.9	25	0.0	23-Sep	33.8	19.6		
CHANNEL	2918R2X	2.9	RR2XTEND		69.4	54.8	28	0.0	29-Sep	34.5	17.9	62.0	63.3
LG Seeds	LGS3060RX	3.0	RR2XTEND	AgriShield MAX w/LeVO	69.2	54.9	26	0.0	26-Sep	33.2	18.9		
Chemgro	C3052GL	2.7	LLGT27	Encase Excalibre	69.1	54.3	29	0.0	29-Sep	35.6	18.4		
BASF	CZ 2889GTLL	2.8	LLGT27	Poncho Votivo plus Illevo	68.2	54.6	29	0.0	26-Sep	32.6	19.1		
LG Seeds	LGS2444RX	2.4	RR2XTEND	AgriShield MAX w/LeVO	68.2	54.4	23	0.0	22-Sep	34.4	18.6		
LG Seeds	C2888RX	2.8	RR2XTEND	AgriShield MAX w/LeVO	67.8	54.6	26	0.0	25-Sep	34.1	18.3		
Local Seed Company	ZS2898GL	2.8	LLGT27	Radius Premium	67.4	54.5	25	0.0	24-Sep	35.6	19.0		
Seed Consultants	SC 8279X	2.7	RR2XTEND		67.1	54.9	30	0.0	25-Sep	34.6	18.8		
FBN	22RL12026	2.9	RR		67.1	54.5	26	0.0	28-Sep	32.0	20.4		
BASF	CZ 2579GTLL	2.5	LLGT27	Poncho Votivo plus Illevo	64.8	55.3	28	0.0	22-Sep	34.4	18.7		
CHANNEL	2820R2X	2.8	RR2XTEND		64.4	54.1	24	0.0	24-Sep	34.5	18.4		
Growmark FS	29X80	2.9	RR2XTEND	CruiserMAXX Vibrance	63.8	55.2	27	0.0	26-Sep	35.1	18.3		
FBN	22RL12412	2.5	RR		62.3	54.6	29	0.0	26-Sep	36.2	18.1		
Hubner Seed	H24-38R2X	2.4	RR2XTEND	Acceleron FI+Nem	62.1	54.1	25	0.0	22-Sep	35.4	18.6	55.1	
Hubner Seed	H29-19R2X	2.9	RR2XTEND	Acceleron FI+Nem	60.9	54.8	27	0.0	28-Sep	33.7	18.6		
Local Seed Company	LS2685X	2.6	RR2XTEND	Radius Premium	60.4	53.9	29	0.0	24-Sep	36.6	18.2		
Local Seed Company	ZS3097E3	3.0	Enlist E3	Radius Premium	59.3	54.9	26	0.0	28-Sep	31.9	20.1		
Seed Consultants	SC 9299R	2.9	RR		58.6	54.7	27	0.0	25-Sep	36.0	18.6		
Syngenta	S27-M8X	2.7	RR2XTEND	Clariva Complete	57.7	54.2	22	0.0	23-Sep	35.2	18.7	51.1	
CHANNEL	2719R2X	2.7	RR2XTEND		57.4	54.1	28	0.0	25-Sep	34.9	19.0	53.6	
FBN	22RL12703	2.2	RR		55.3	53.8	26	0.0	21-Sep	34.5	19.5		
Mean					65.8	54.5	27	0.0	24-Sep	34.4	18.8	58.4	65.3
LSD (.05)					6.5								
LSD (.20)					4.2								
CV %					7.0								

Prepared by: Mark Antle, Department of Plant Science.
Page will be periodically updated as additional data becomes available.

Note: During the 2019 growing season, the month of May produced 8 inches of rain, which delayed planting somewhat. By mid June, rainfall had slowed and the remainder of the growing season turned out to have drier than normal growing conditions.

Late Maturity Group Soybean Variety Performance in Centre County, 2019 (MG 3.1 and later)

Source	Entry	Maturity Group	Traits	Seed Treatment	Yield, bu/A	TW (lbs/bu)	Height (in.)	Lodging (0-5, 0=best)	Maturity Date	% Protein @ 13% H2O	% Oil @ 13% H2O	2 Yr Avg. Yield, bu/A (2018-19)	3Yr Avg. Yield, bu/A (2017-19)
Local Seed Company	ZS3898E3S	3.8	STS, Enlist E3	Radius Premium	82.0	56.6	33	0.0	7-Oct	33.7	19.2		
Local Seed Company	ZS3496GL	3.4	LLGT27	Radius Premium	80.5	57.3	31	0.0	3-Oct	33.8	18.2		
BASF	CZ 3840GTLL	3.8	LLGT27	Poncho Votivo plus Illevo	79.8	57.0	34	0.0	9-Oct	33.1	18.4		
Chemgro	C3152RX	3.1	RR2XTEND	Encase Excalibre	79.4	56.6	31	0.0	1-Oct	34.5	18.9	67.4	
BASF	CZ 3519GTLL	3.5	LLGT27	Poncho Votivo plus Illevo	78.9	56.4	33	0.0	6-Oct	35.9	18.7		
Growmark FS	HS 32X92	3.2	RR2XTEND	CruiserMAXX Vibrance	77.7	56.2	31	0.0	2-Oct	34.0	18.9		
Local Seed Company	ZS3797GL	3.7	LLGT27	Radius Premium	77.7	56.6	31	0.0	7-Oct	36.2	18.2		
Syngenta	S33-D7X	3.3	RR2XTEND	Clariva Complete	77.7	56.1	37	0.0	2-Oct	34.6	18.3		
Syngenta	S35-K9X	3.5	RR2XTEND	Clariva Complete	77.7	56.5	34	0.0	5-Oct	32.1	19.2	66.7	69.1
LG Seeds	LGS3777	3.7	RR2XTEND	AgriShield MAX w/LeVO	77.5	56.7	33	0.0	5-Oct	34.3	18.9		
Chemgro	C3751RXS	3.7	STS, RR2XTEND	Encase Excalibre	77.1	56.6	33	0.0	4-Oct	34.1	18.7	65.1	
Seedway	SG3168XT	3.1	RR2XTEND		75.8	56.2	34	0.0	6-Oct	33.6	18.9		
Seedway	SG3494XT	3.4	RR2XTEND		75.8	55.9	36	0.5	3-Oct	34.9	18.2	63.5	
Dyna-Gro Seed	S31XT59	3.1	RR2XTEND	Equity VIP	75.7	56.3	31	0.0	2-Oct	34.4	18.8	66.9	
BASF	CZ 3660GTLL	3.6	LLGT27	Poncho Votivo plus Illevo	75.5	56.9	31	0.0	7-Oct	32.0	19.6		
BASF	CZ 3601LL	3.6	LL	Poncho Votivo plus Illevo	75.3	56.0	31	0.0	3-Oct	33.2	19.1	61.7	
Local Seed Company	ZS3399E3	3.3	Enlist E3	Radius Premium	74.2	56.1	28	0.0	4-Oct	33.1	19.9		
Chemgro	C3753E	3.7	Enlist E3		74.1	56.8	31	0.0	7-Oct	32.8	19.6		
Chemgro	C3453RX	3.4	RR2XTEND		73.5	56.2	33	0.0	6-Oct	34.6	18.3		
Growmark FS	HS38X80	3.8	RR2XTEND	CruiserMAXX Vibrance	72.9	56.6	34	0.0	9-Oct	34.3	18.4		
Dyna-Gro Seed	S33XT79	3.3	RR2XTEND	Equity VIP	72.8	43.6	29	0.0	2-Oct	33.3	19.3	60.8	
Chemgro	C3552GL	3.5	LLGT27	Encase Excalibre	72.6	55.7	33	0.0	3-Oct	35.2	18.9		
LG Seeds	LGS3600RX	3.6	RR2XTEND	AgriShield MAX w/LeVO	72.0	56.1	31	0.0	1-Oct	35.1	18.1		
Local Seed Company	ZS3296GL	3.2	LLGT27	Radius Premium	71.8	55.6	27	0.0	1-Oct	33.0	18.7		
BASF	CZ 3309GTLL	3.3	LLGT27	Poncho Votivo plus Illevo	71.7	56.3	34	0.0	4-Oct	32.8	19.6		
BASF	CZ 3929GTLL	3.9	LLGT27	Poncho Votivo plus Illevo	71.7	56.1	34	0.0	9-Oct	36.2	17.9		
Syngenta	S39-G2X	3.9	RR2XTEND	Clariva Complete	71.7	56.2	33	0.0	7-Oct	35.0	17.9		
LG Seeds	C3333RX	3.3	RR2XTEND	AgriShield MAX w/LeVO	71.6	56.0	27	0.0	30-Sep	35.3	17.6		
Blue River Organics ★	35DC2	3.5	non-traited	untreated	71.3	55.9	34	0.5	2-Oct	33.7	18.9		
Seed Consultants	SC 8399X	3.9	RR2XTEND		71.0	56.5	34	0.0	6-Oct	34.7	18.3		
Dyna-Gro Seed	S34GL79	3.4	LLGT27	Equity VIP	70.3	56.0	33	0.0	5-Oct	33.3	19.4		
BASF	CZ 3100GTLL	3.1	LLGT27	Poncho Votivo plus Illevo	69.9	56.1	30	0.0	5-Oct	33.5	18.5		
Dyna-Gro Seed	S34XT69	3.4	RR2XTEND	Equity VIP	69.9	55.9	28	0.0	2-Oct	35.9	18.0	59.6	
CHANNEL	3620R2X	3.6	RR2XTEND		69.8	56.2	31	0.0	1-Oct	33.9	18.1		
Growmark FS	HS33X80	3.3	RR2XTEND	CruiserMAXX Vibrance	69.8	56.0	28	0.0	5-Oct	36.0	17.4		
Seed Consultants	SC 9339R	3.3	RR		69.8	56.2	38	0.5	5-Oct	33.9	18.9		
Hubner Seed	H32-29R2X	3.2	RR2XTEND	Acceleron FI+Nem	69.4	56.6	29	0.0	1-Oct	33.3	18.1		
Seed Consultants	SC 8379X	3.7	RR2XTEND		69.1	56.0	29	0.0	6-Oct	36.3	17.5		
Seed Consultants	SC 9359R	3.5	RR		67.9	56.4	31	0.0	7-Oct	35.9	18.1		
CHANNEL	3320R2X	3.3	RR2XTEND		67.6	56.2	31	0.0	3-Oct	34.9	17.9		
Chemgro	C3253E	3.2	Enlist E3		67.2	56.1	31	0.0	2-Oct	33.4	19.3		
Seedway	SG3322XT	3.3	RR2XTEND		66.1	56.1	28	0.0	3-Oct	35.3	18.1		
Syngenta	S37-A4X	3.7	RR2XTEND	Clariva Complete	65.9	56.2	31	0.0	7-Oct	33.6	18.7		
CHANNEL	3519R2X	3.5	RR2XTEND		65.7	56.0	30	0.0	5-Oct	35.4	17.2	58.9	
Blue River Organics ★	32DC8	3.2	non-traited	untreated	64.3	55.1	29	0.0	30-Sep	35.4	18.1		
CHANNEL	3220R2X	3.2	RR2XTEND		64.2	56.1	26	0.0	1-Oct	33.9	18.4		
Hubner Seed	H34-37R2X	3.4	RR2XTEND	Acceleron FI+Nem	62.9	56.0	25	0.0	4-Oct	34.4	17.8	52.6	55.6
Growmark FS	HS35E80	3.5	Enlist E3	CruiserMAXX Vibrance	62.7	56.4	28	0.0	4-Oct	34.0	19.1		
Mean					72.3	56.0	31	0.0	4-Oct	34.3	18.5	62.3	62.3
LSD (.05)					8.5								
LSD (.20)					5.5								
CV %					8.4								

Prepared by: Mark Antle, Department of Plant Science.
Page will be periodically updated as additional data becomes available.

Production Details

Location:	Russell E. Larson Agricultural Research Center (Centre County)
Planting Date:	22-May
Harvest Date:	Early MG harvested on Oct 29; Late MG harvested on Nov 3.
Row Spacing	15 inches
Planted Plot Size:	5 rows wide x 20 feet length (replicated 4 times)
Harvested Plot Size:	3 middle rows x 18.5 feet length
Herbicide:	3.5 oz per acre Envive (pre); Clethodim plus Classic (post-emergence)
Seeding Rate:	175,000 Seeds per acre
Previous Crop	Corn
Tillage:	Conventional

Soybean Company Contact Information**2019 Soybean Entries**

BASF https://www.basf.com/us/en.html	CZ 2579GTLL, CZ 2889GTLL, CZ 3099GTLL, CZ 3100GTLL, CZ 3309GTLL, CZ 3519GTLL, CZ 3660GTLL, CZ 3601LL, CZ 3841LL, CZ 3929GTLL, CZ 4105LL
Blue River Organic Seed http://www.blueriverorgseed.com/ (800)-370-7979	32DC8, 35DC2
CHANNEL https://www.channel.com/Pages/default.aspx	2719R2X, 2820R2X, 2918R2X, 3220R2X, 3320R2X, 3519R2X, 3620R2X, 3919R2X, 3920R2X
Chemgro Seeds http://www.chemgro.com/home.html (800)-374-3326	C2852RX, C3052GL, C3152RX, C3253E, C3453RX, C3552GL, C3751RXS, C3753E, C3952GL
Dyna-Gro Seed https://www.dynagroseed.com/	Dyna-Gro S28GL80, Dyna-Gro S28XT58, Dyna-Gro S30XT96, Dyna-Gro S31XT59, Dyna-Gro S33XT79, Dyna-Gro S34GL79, Dyna-Gro S34XT69, Dyna-Gro S36GL10, Dyna-Gro S37EN39, Dyna-Gro 37XS89, Dyna-Gro S39EN19, Dyna-Gro S39XT68, Dyna-Gro S40GL59
Farmers Business Network https://www.fbn.com/	22RL12703, 22RL12412, 22RL12026
Growmark FS https://www.growmarkfs.com/ (800) 787-2767	HS 29X80, HS 32X92, HS 33X80, HS 35E80, HS 38X80, HS 39E80
Hubner Seed https://www.hubnerseed.com/en-us.html	H24-38R2X, H29-19R2X, H32-29R2X, H34-37R2X, H35-27R2X, H36-28R2X, H39-28R2X
LG Seeds lgseeds.com (800)-544-6310	LGS2321RX, LGS2444RX, C2888RX, LGS3060RX, C3333RX, LGS3600RX, LGS3777RX, C3985RX, C4227RX
Local Seed Company https://www.localseed.com/ (901)-260-6000	LS2685X, ZS2898GL, ZS3097E3, ZS3296GL, ZS3399E3, ZS3496GL, ZS3797GL, ZS3898E3S, ZS4295GLS, LS3976X
Mid-Atlantic Seeds http://midatlanticseeds.com/ 800-854-6251	MAS3419GT/LL, MAS3600E3/STS, MAS3718RR2/X, MAS3818GT/LL/STS, MAS3884GT/LL, MAS4200GT/LL/STS, MAS4355RR2/STS
Seed Consultants Inc. https://www.seedconsultants.com/ (800) 708-2676	SC 8279X, SC 9299R, SC 9339R, SC 9359R, SC 8379X, SC 8399X
Seedway LLC http://www.seedway.com/ 800-836-3710	SG2832XT, SG3168XT, SG3322XT, SG3494XT
Syngenta Seeds http://www.syngenta-us.com/seed	S27-M8X Brand, S33-D7X Brand, S35-K9X Brand, S37-A4X Brand, S39-G2X Brand