



**THE OHIO STATE
UNIVERSITY**

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

THE 2019 OHIO SOYBEAN PERFORMANCE TRIALS

Wayde Looker, Matthew Hankinson, John McCormick, and Laura Lindsey
Department of Horticulture and Crop Science
Ohio State University Extension and OARDC

INTRODUCTION

The purpose of the Ohio Soybean Performance Trials is to evaluate soybean varieties for yield and other agronomic characteristics. This evaluation gives soybean producers comparative information for selecting the best varieties for their unique production systems.

FIELD PLOT DESIGN

The entries for each test site were planted in a randomized complete block design. Each entry was replicated four times and planted in plots 28 ft long and 5 ft wide containing four rows seeded at 15-inch row width. Seeding rate was 150,000 seeds per acre. At all locations, corn was the previous crop and no-till. Farmer cooperators sprayed preemergence herbicides (varied by location). Postemergence herbicides included: N1 and C1 = Select Max and Basagran; C2 = Select Max, Basagran, First Rate, Flexstar, Raptor; S1 = Alliance, Select Max, Basagran, First Rate, Flexstar; S2 = Alliance, Select Max, Basagran, Flexstar.

METHOD OF CONDUCTING TRIALS

Entries in Trials. Performance of entries in The Ohio Soybean Performance Trials are published if seed will be available to Ohio soybean producers for the following planting season. All 2019 entries were submitted voluntarily by seed companies. Entry fee charges were paid per entry and region.

Test by Maturity and Type. Varieties were grouped, tested and analyzed by maturity (early and late). Conventional (CV), Liberty Link (LL), Roundup Ready (RR1), Roundup Ready 2 Yield (RR2Y), Xtend, Enlist, glyphosate tolerant (GT), Liberty Link/glyphosate-tolerant (LL/GT27), and sulfonyl urea tolerant (STS) varieties were tested in the same block to allow for head-to-head comparisons. All herbicide traits are statistically comparable within a location and maturity grouping (early or late). Conventional herbicides were sprayed on all entries. Use the table below to find varieties by region, maturity, and type.

2019 Tables by Type, Region, Maturity Grouping		
North	Early (2.1-3.1)	Table 3
	Late (3.2-4.1)	Table 4
Central	Early (2.5-3.3)	Table 5
	Late (3.4-4.4)	Table 6
South	Early (2.7-3.6)	Table 7
	Late (3.7-4.4)	Table 8

MEASUREMENTS AND RECORDS

Relative Maturity. Relative maturity (RM) is a rating designed to account for all of the factors that affect maturity date and includes variety, planting date, weather, latitude, and disease. Maturity is defined as the "95% brown pods" stage. A variety with a RM rating of 3.5 should reach the 95% brown pod stage 5 days later than a variety with a rating of 3.0. RM was submitted by seed companies.

Lodging Score. There was no lodging in 2019.

Seed Size is reported as number of seeds per pound.

Yield. Each soybean variety was harvested when the moisture content was between 8 and 14 percent and yields reported in bushels per acre at 13 percent moisture.

Protein, Oil %. Analysis was determined by near infrared transmittance technology. The test was performed using a Foss NIR whole grain analyzer and is reported at 13 percent moisture.

LSD. A Least Significant Difference (LSD) for yield was computed for each location and maturity grouping. LSDs are reported in bushels per acre at 13 percent moisture. Yields of two varieties within a location and maturity grouping are significantly different 90% of the time if their yields differ by more than the LSD value shown for that maturity group. A double asterisk (**) is used to denote the variety with the highest yield within a region and maturity grouping. A single asterisk (*) is used to denote varieties with yield not statistically different than the highest yielding variety.

DATA USE. Inclusion of entries in the Ohio Soybean Performance Trials does not constitute an endorsement of a particular entry by the Ohio State University, Ohio Agricultural Research and Development Center, or Ohio State University Extension.



Table 1: The 2019 Ohio Soybean Performance Trials, Site Descriptions

	N1	N2	C1	C2	S1	S2
	Henry Co.	Sandusky Co.	Mercer Co.	Morrow Co.	Preble Co.	Clinton Co.
Soil texture	Clay		Clay loam	Silty clay loam	Silty clay	Silt loam
Soil pH	6.2	This location	6.8	6.3	6.5	6.4
Soil Test P-Mehlich (ppm)	60	was not plant-	68	21	65	113
Soil Test K (ppm)	177	ed due to	137	97	150	172
Plant date	June 12	weather condi-	June 8	June 4	May 16	May 16
Harvest date	Oct. 17 (early trial)	tions.	Oct. 20(early trial)	Oct. 15	Oct. 5	Oct. 10
	Oct. 18 (late trial)		Oct. 19 (late trial)			

Table 2. Directory by Company Listed by Variety/Brand, Maturity Rating, and Type

Physical characteristics and yield data for a variety can be found using the table number(s) associated with each entry in this directory.

Variety	Seed Trt	RM	Type	Table #	Variety	Seed Trt	RM	Type	Table #	Variety	Seed Trt	RM	Type	Table #	
Golden Harvest					Local Seed Company					Shur Grow					
11055 Wayzata Blvd. 1-800-445-0956					802 Rozelle St. 901-260-6000					11177 Township Rd. 133 937-418-9782					
Minnetonka, MN 55305 goldenharvestseeds.com					Memphis, TN 38104 localseed.com					W. Mansfield, OH 43358 heritagecooperative.com					
GH3088X	CC+M	3.0	Xtend	3, 5	LS2685X	RP	2.6	Xtend	3, 5	SG3229R2X	None	3.2	Xtend	4, 5	
GH3475X	CC+M	3.4	Xtend	4, 6	ZS2898 GL	RP	2.8	LLGT27	3, 5	SG3420R2X	None	3.4	Xtend	4, 6	
GH3546X	CC+M	3.5	Xtend	4, 6, 7	ZS3097 E3	RP	3.0	Enlist	3, 5	SG3440GTLL	None	3.4	LLGT27	4, 6	
GH3782X	CC+M	3.7	Xtend	8	ZS3399 E3	RP	3.3	Enlist	4, 5, 7	SG3450E	None	3.4	Enlist	4, 6	
GH3934X	CC+M	3.9	Xtend	8	ZS3496 GL	RP	3.4	LLGT27	4, 6, 7	SG3628R2X	W+I	3.6	Xtend	6, 7	
GROWMARK, Inc.					Rupp Seeds, Inc.					Stewart Seeds					
1701 Towanda Ave. 1-309-557-6000					17919 Co. Rd. B 877-591-7333					2230 CR E 300 N 800-365-SEED					
Bloomington, IL 61701 fsseeds.com					Wauseon, OH 43567 ruppseeds.com					Greensburg, IN 47240 stewartseeds.com					
HS 24X80	A+I	2.4	Xtend	3	LS4299XS	RP	4.2	Xtend, STS	8	2840R2X	AE+NS	2.8	Xtend	3	
HS 26X90	A+I	2.6	Xtend	3	LSX4487XS	RP	4.4	Xtend, STS	8	2949R2X	AE+NS	2.9	Xtend	3	
HS 27X90	A+I	2.7	Xtend	3, 5	RS 23BG30 RC 2.3 LLGT27 3					3120R2X	AE+NS	3.1	Xtend	3	
HS 28X70	A+I	2.8	Xtend	3, 5						RS 23EL93 RC 2.3 Enlist 3	3340R2X	AE+NS	3.3	Xtend	4, 5
HS 28C70	A+I	2.8	CV	3, 5	RS 25XT12 RC 2.5 Xtend 3	3450R2X	AE+NS	3.4	Xtend	4, 6, 7					
HS 28B90	A+I	2.8	LLGT27	3, 5	RS 27EL10 RC 2.7 Enlist 3	3527R2X	AE+NS	3.5	Xtend	4, 6, 7					
HS 32X90	A+I	3.2	Xtend	4, 5	RS 28BG90 RC 2.8 LLGT27 3.5	3830R2X	AE+NS	3.8	Xtend	4, 6, 8					
HS 32C80	A+I	3.2	CV	4, 5	RS 28XT37 RC 2.8 Xtend 3	4029R2X	AE+NS	4.0	Xtend	8					
HS 32B90	A+I	3.2	LLGT27	4, 5	RS 31XT40 RC 3.1 Xtend 3, 5	University of Missouri					PO Box 160, 147 St. Hwy. T 573-379-5431				
HS 33X80	A+I	3.3	Xtend	4, 5	RS 31EL46 RC 3.1 Enlist 3, 5						Portageville, MO				
HS 34C80	A+I	3.4	CV	4, 6	RS 33XT32 RC 3.3 Xtend 5	S13-2743C	IN	4.1	CV	8					
HS 34B90	A+I	3.4	LLGT27	4, 6	RS 35EL01 RC 3.5 Enlist 5	S13-10590C	IN	4.3	CV	8					
HS 35X90	A+I	3.5	Xtend	4, 6	Seed Consultants, Inc.					S13-3851C IN 4.4 CV 8					
HS 36B90	A+I	3.6	LLGT27	4, 6						648 Miami Trace Rd. 740-837-0364					
HS 38X70	A+I	3.8	Xtend	4, 6	Washington C.H., OH 43160 seedconsultants.com					Wellman Seeds, Inc.					
HS 39B80	A+I	3.9	LLGT27	4, 6	SC 9277R™ L+EV+G 2.7 RR1 3	23778 Jennings Delphos Rd. 800-717-7333									
LG Seeds					SC 8279X™ L+EV+G 2.7 Xtend 3	Delphos, OH 45833 wellmanseeds.com									
1122 E. 169th St. 800-257-7333					SC 8329X™ L+EV+G 3.2 Xtend 4, 5	W 5926X EN 2.6 Xtend 3									
Westfield, IN 46074 lgseeds.com					SC 3330L™ L+EV+G 3.3 LL 4, 5	W 296 EN 2.9 CV 3									
LGS2444RX	AS+I	2.4	Xtend	3	SC 9339R™ L+EV+G 3.3 RR1 4, 5, 7	W 6928E EN 2.8 Enlist 3, 5, 7									
C2888RX	AS+I	2.8	Xtend	3, 5, 7	SC 9359RR™ L+EV+G 3.5 RR2Y 4, 6, 7	W 5928X EN 2.8 Xtend 3, 5, 7									
LGS3060RX	AS+I	3.0	Xtend	3, 5, 7	SC 8379X™ L+EV+G 3.7 Xtend 6, 8	W 6030E EN 3.0 Enlist 3, 5, 7									
C3333RX	AS+I	3.3	Xtend	4, 5, 7	SC 9385RR™ L+EV+G 3.8 RR2Y 6, 8	W 6032E EN 3.2 Enlist 4, 5, 7									
LGS3600RX	AS+I	3.6	Xtend	6, 7	SC 3399L™ L+EV+G 3.9 LL 6, 8	W 5932X EN 3.2 Xtend 4, 5, 7									
LGS3777RX	AS+I	3.7	Xtend, STS	6, 8	SC 8399X™ L+EV+G 3.9 Xtend 8	W 5033X EN 3.3 Xtend 4, 5, 7									
C3985RX	AS+I	3.9	Xtend	6, 8	Seed Treatments: A=Acceleron I=ILeVO AE=Acceleron Elite IN=Innovate AL=Allegiance IS=Intego Suite+Rizolex Fungicide AS=AgriShield L=Lumisena C=Clariva M=Mertect CC=Clariva Complete NS=NemaStrike E=EclipseUS N=N-Hibit EN=Encase NF=N Force EQ=Equity VIP PV=Poncho/Votivo ER=EclipseUS-R RC=Rancona V100 Complete ET=EclipseUS Trio-R75 R=Reddigo EV=EverGol RP=Radius Premium Exp=Experimental					W 6034E EN 3.4 Enlist 4, 6, 7					
										W 5836X EN 3.6 Xtend 4, 6, 7					
					W 6037E EN 3.7 Enlist 4, 6, 8										
					W 6939E EN 3.9 Enlist 4, 6, 8										

TABLE 3: The 2019 Ohio Soybean Performance Trials, North Region - Early Varieties (RM 2.1-3.1)

Entry			Physical Characteristics			North Region Yield (bu/ac)	
Variety	Brand/Company Name	Type	RM	% Protein	% Oil	N1	'18-'19 Mean
3101RX	Advanced Genetics, Inc.	Xtend	3.1			70.1**	
SC 8279X™	Seed Consultants	Xtend	2.7			67.9*	67.4
3002RX	Advanced Genetics, Inc.	Xtend	3.0			67.2*	
31LL01	Advanced Genetics, Inc.	LL	3.1			66.7*	
AG23X8	Asgrow	Xtend	2.3			66.1*	
HS 28X70	GROWMARK, Inc	Xtend	2.8			65.9*	65.3
HS 26X90	GROWMARK, Inc	Xtend	2.6			65.8*	
Ebberts 288R2X	Ebberts Field Seeds	Xtend	2.8			65.3*	
W 5928X	Wellman Seeds	Xtend	2.8			65.1*	
AG30X8	Asgrow	Xtend	3.0			65.0*	63.2
AG28X9	Asgrow	Xtend	2.8			64.7*	
LS2685X	Local Seed Company	Xtend	2.6			64.6*	
CZ 2760GTLL	Credenz	LL/GT27	2.7			63.9*	
RS 31XT40	Rupp Seeds, Inc	Xtend	3.1			63.9*	62.0
2840R2X	Stewart Seeds	Xtend	2.8			63.6*	
HS 28C70	GROWMARK, Inc	CV	2.8			63.3*	60.0
2602RX	Advanced Genetics, Inc.	Xtend	2.6			63.0*	
RS 25XT12	Rupp Seeds, Inc	Xtend	2.5			63.0*	
RS 28XT37	Rupp Seeds, Inc	Xtend	2.8			63.0*	65.1
Ebberts 2029 E3	Ebberts Field Seeds	Enlist	2.8			62.9*	
HS 27X90	GROWMARK, Inc	Xtend	2.7			62.5	
Ebberts 319R2X	Ebberts Field Seeds	Xtend	3.1			62.0	
2801RX	Advanced Genetics, Inc.	Xtend	2.8			61.9	
AG21X7	Asgrow	Xtend	2.1			61.3	61.1
C2888RX	LG Seeds	Xtend	2.8			61.1	62.4
RS 27EL10	Rupp Seeds, Inc	Enlist	2.7			61.0	
ZS3097 E3	Local Seed Company	Enlist	3.0			60.6	
W 296	Wellman Seeds	CV	2.9			60.6	
S28XT58	Dyna-Gro Seed	Xtend	2.8			60.5	60.8
RS 28BG90	Rupp Seeds, Inc	LL/GT27	2.8			60.2	
9-729AE	Advanced Genetics, Inc.	Enlist	2.9			59.9	
RS 31EL46	Rupp Seeds, Inc	Enlist	3.1			59.7	
LGS3060RX	LG Seeds	Xtend	3.0			59.6	
CZ 3099GTLL	Credenz	LL/GT27	3.0			59.4	
G2900RX	AgriGold	Xtend	2.9			59.2	61.7
W 6928E	Wellman Seeds	Enlist	2.8			59.2	
LGS2444RX	LG Seeds	Xtend	2.4			58.9	57.6
CZ 2550GTLL	Credenz	LL/GT27	2.5			58.4	
G3150RX	AgriGold	Xtend	3.1			58.3	
W 6030E	Wellman Seeds	Enlist	3.0			58.3	
ZS2898 GL	Local Seed Company	LL/GT27	2.8			58.0	
2949R2X	Stewart Seeds	Xtend	2.9			57.3	59.5
Key 1031GL	AGRA Solutions, LLC	LL/GT27	3.1			57.1	
CZ 2579GTLL	Credenz	LL/GT27	2.5			57.0	
3101 GL	Advanced Genetics, Inc.	GT	3.1			56.9	
CZ 3100GTLL	Credenz	LL/GT27	3.1			56.3	
SC 9277R	Seed Consultants	RR1	2.7			56.3	
2401 RX	Advanced Genetics, Inc.	Xtend	2.4			56.0	
RS 23BG30	Rupp Seeds, Inc	LL/GT27	2.3			56.0	

NOTE: North Region, Early Variety Trial Results are Continued on the Next Page.

**TABLE 3: The 2019 Ohio Soybean Performance Trials, North Region - Early Varieties (RM 2.1-3.1)
CONTINUED FROM PREVIOUS PAGE**

Entry			Physical Characteristics			North Region Yield (bu/ac)	
Variety	Brand/Company Name	Type	RM	% Protein	% Oil	N1	'18-'19 Mean
S31XT59	Dyna-Gro Seed	Xtend	3.1			55.9	59.3
HS 28B90	GROWMARK, Inc	LL/GT27	2.8			55.6	
GH3088X	Golden Harvest	Xtend	3.0			55.4	60.2
W 5926X	Wellman Seeds	Xtend	2.6			55.3	58.0
9-730AE	Advanced Genetics, Inc.	Enlist	3.0			54.4	
AG26X8	Asgrow	Xtend	2.6			54.1	58.1
AG25X9	Asgrow	Xtend	2.5			53.0	
S2908N	Dyna-Gro Seed	CV	2.9			52.9	56.9
HS 24X80	GROWMARK, Inc	Xtend	2.4			52.8	
9-728AE	Advanced Genetics, Inc.	Enlist	2.8			51.5	
RS 23EL93	Rupp Seeds, Inc	Enlist	2.3			50.1	
CZ 2889GTLL	Credenz	LL/GT27	2.8			49.8	
3120R2X	Stewart Seeds	Xtend	3.1			43.7	
		Min	2.1			43.7	
		Max	3.1			70.1	
		Mean	2.8			59.8	
		LSD (0.1)				7.3	
		CV				10.4	

Note: Min, max, mean, LSD, and CV values include experimental cultivars that were not printed in this publication.

TABLE 4: The 2019 Ohio Soybean Performance Trials, North Region - Late Varieties (RM 3.2-4.1)

Entry			Physical Characteristics			North Region Yield (bu/ac)	
Variety	Brand/Company Name	Type	RM	% Protein	% Oil	N1	'18-'19 Mean
SG3229R2X	Shur Grow	Xtend	3.2			69.3**	65.0
S3305N	Dyna-Gro Seed	CV	3.3			65.9*	68.5
SC 3330L™	Seed Consultants	LL	3.3			65.3*	
W 5932X	Wellman Seeds	Xtend	3.2			64.3*	64.1
3340R2X	Stewart Seeds	Xtend	3.3			64.1*	
HS 32X90	GROWMARK, Inc	Xtend	3.2			64.0*	
HS 32B90	GROWMARK, Inc	LL/GT27	3.2			63.5*	
S33XT79	Dyna-Gro Seed	Xtend	3.3			62.9*	62.3
3450R2X	Stewart Seeds	Xtend	3.4			62.9*	
Ebberts 330R2X	Ebberts Field Seeds	Xtend	3.3			62.3	
S33EN09	Dyna-Gro Seed	Enlist	3.3			62.0	
HS 34B90	GROWMARK, Inc	LL/GT27	3.4			62.0	
ZS3496 GL	Local Seed Company	LL/GT27	3.4			61.7	
31CN07	Advanced Genetics, Inc.	CV	3.1			61.5	62.2
SC 9339R™	Seed Consultants	RR1	3.3			61.4	65.3
S34GL79	Dyna-Gro Seed	LL/GT27	3.4			61.2	
24DC3	Blue River Organic Seed	CV	2.4			61.2	
3303RX	Advanced Genetics, Inc.	Xtend	3.3			60.8	61.6
SG3450E	Shur Grow	Enlist	3.4			60.6	
AG37X9	Asgrow	Xtend	3.7			60.2	
Ebberts 388R2X	Ebberts Field Seeds	Xtend	3.8			60.1	
SC 8329X™	Seed Consultants	Xtend	3.2			59.9	
S34XT69	Dyna-Gro Seed	Xtend	3.4			59.9	61.6
ZS3797 GL	Local Seed Company	LL/GT27	3.7			59.2	
S36GL10	Dyna-Gro Seed	LL/GT27	3.6			59.0	
9-734AE	Advanced Genetics, Inc.	Enlist	3.4			58.9	
AG32X8	Asgrow	Xtend	3.2			58.6	58.9

NOTE: North Region, Late Variety Trial Results are Continued on the Next Page.

TABLE 4: The 2019 Ohio Soybean Performance Trials, North Region - Late Varieties (RM 3.2-4.1)
CONTINUED FROM PREVIOUS PAGE

Variety	Entry Brand/Company Name	Type	Physical Characteristics			North Region Yield (bu/ac)	
			RM	% Protein	% Oil	N1	'18-'19 Mean
3527R2X	Stewart Seeds	Xtend	3.5			58.6	
CZ 3660GTLL	Credenz	LL/GT27	3.6			58.6	
W 6037E	Wellman Seeds	Enlist	3.7			58.5	
AG34X9	Asgrow	Xtend	3.4			58.2	
AG33X8	Asgrow	Xtend	3.3			58.1	57.1
G3520RX	AgriGold	Xtend	3.5			58.1	60.7
3801RX	Advanced Genetics, Inc.	Xtend	3.8			58.0	
W 6034E	Wellman Seeds	Enlist	3.4			57.9	
HS 33X80	GROWMARK, Inc	Xtend	3.3			57.5	60.2
W 5033X	Wellman Seeds	Xtend	3.3			57.4	
GH3475X	Golden Harvest	Xtend	3.4			56.9	
Ebberts 340R2X	Ebberts Field Seeds	Xtend	3.4			56.8	
Ebberts 1934 E3	Ebberts Field Seeds	Enlist	3.4			56.8	
AG38X8	Asgrow	Xtend	3.8			56.8	62.7
GH3546X	Golden Harvest	Xtend	3.5			56.7	60.9
Ebberts 368R2X	Ebberts Field Seeds	Xtend	3.6			56.5	60.6
HS 32C80	GROWMARK, Inc	CV	3.2			56.3	58.5
S32EN60	Dyna-Gro Seed	Enlist	3.2			56.2	
Ebberts 2037 E3	Ebberts Field Seeds	Enlist	3.7			55.9	
W 6032E	Wellman Seeds	Enlist	3.2			55.8	
CZ 3519GTLL	Credenz	LL/GT27	3.5			55.8	
3830R2X	Stewart Seeds	Xtend	3.8			55.8	
ZS3399 E3	Local Seed Company	Enlist	3.3			55.7	
W 5836X	Wellman Seeds	Xtend	3.6			55.7	59.4
9-732AE	Advanced Genetics, Inc.	Enlist	3.2			55.6	
3601RX	Advanced Genetics, Inc.	Xtend	3.6			55.6	59.6
32CN07	Advanced Genetics, Inc.	CV	3.2			55.5	59.2
W 6939E	Wellman Seeds	Enlist	3.9			54.7	
HS 34C80	GROWMARK, Inc	CV	3.4			54.6	56.5
Ebberts 2032 E3	Ebberts Field Seeds	Enlist	3.2			54.5	
3501RX	Advanced Genetics, Inc.	Xtend	3.5			53.8	
G3620RX	AgriGold	Xtend	3.6			53.6	
G3285RX	AgriGold	Xtend	3.2			53.3	57.1
HS 38X70	GROWMARK, Inc	Xtend	3.8			53.3	59.3
SG3440GTLL	Shur Grow	LL/GT27	3.4			52.9	
9-737AE	Advanced Genetics, Inc.	Enlist	3.7			52.8	
HS 39B80	GROWMARK, Inc	LL/GT27	3.9			52.7	
HS 35X90	GROWMARK, Inc	Xtend	3.5			52.6	
CZ 3309GTLL	Credenz	Liberty/GT27	3.3			52.5	
3401RX	Advanced Genetics, Inc.	Xtend	3.4			52.4	
C3333RX	LG Seeds	Xtend	3.3			52.0	
3502RX	Advanced Genetics, Inc.	Xtend	3.5			51.5	
HS 36B90	GROWMARK, Inc	LL/GT27	3.6			51.1	
AG36X6	Asgrow	Xtend	3.6			51.0	57.1
Key 1036GL	AGRA Solutions, LLC	LL/GT27	3.6			50.2	
SG3420R2X	Shur Grow	Xtend	3.4			47.2	
CZ 3930GTLL	Credenz	LL/GT27	3.9			46.8	
		Min	3.2			44.3	
		Max	4.1			69.3	
		Mean	3.5			57.3	
		LSD (0.1)				6.5	
		CV				9.7	

Note: Min, max, mean, LSD, and CV values include experimental cultivars that were not printed in this publication.

TABLE 5: The 2019 Ohio Soybean Performance Trials, Central Region - Early Varieties (RM 2.5-3.3)

Entry			Physical Characteristics			Central Region Yield (bu/ac)			
Variety	Brand/Company Name	Type	RM	% Protein	% Oil	C1	C2	'19 Mean	'18-'19 Mean
SC 3330L™	Seed Consultants	LL	3.3			71.1**	62.7**	66.9	
SC 9339R™	Seed Consultants	RR1	3.3			65.8*	61.7*	63.8	64.6
RS 33XT32	Rupp Seeds, Inc	Xtend	3.3			63.5	61.8*	62.7	
3340R2X	Stewart Seeds	Xtend	3.3			65.8*	57.6*	61.7	
3101RX	Advanced Genetics, Inc.	Xtend	3.1			60.7	61.6*	61.2	
W 5928X	Wellman Seeds	Xtend	2.8			66.5*	55.4	61.0	
Ebberts 330R2X	Ebberts Field Seeds	Xtend	3.3			63.3	57.8*	60.6	
Ebberts 319R2X	Ebberts Field Seeds	Xtend	3.1			58.5	62.1*	60.3	59.7
SG3229R2X	Shur Grow	Xtend	3.2			62.5	58.0*	60.3	59.3
S33XT79	Dyna-Gro Seed	Xtend	3.3			61.5	59.0*	60.3	60.5
RS 31XT40	Rupp Seeds, Inc	Xtend	3.1			61.3	58.7*	60.0	57.4
AG32X8	Asgrow	Xtend	3.2			65.3*	54.5	59.9	59.3
CZ 2550GTLL	Credenz	LL/GT27	2.5			63.6	56.0	59.8	
S31XT59	Dyna-Gro Seed	Xtend	3.1			61.2	58.4*	59.8	61.0
HS 28X70	GROWMARK, Inc	Xtend	2.8			66.8*	52.7	59.8	62.0
S28XT58	Dyna-Gro Seed	Xtend	2.8			61.3	57.9*	59.6	62.0
SC 8329X™	Seed Consultants	Xtend	3.2			60.5	58.4*	59.5	
W 5932X	Wellman Seeds	Xtend	3.2			64.0	54.8	59.4	
HS 33X80	GROWMARK, Inc	Xtend	3.3			62.9	55.8	59.4	59.3
3303RX	Advanced Genetics, Inc.	Xtend	3.3			58.0	59.8*	58.9	57.0
Ebberts 288R2X	Ebberts Field Seeds	Xtend	2.8			60.1	57.1*	58.6	
G2900RX	AgriGold	Xtend	2.9			61.2	55.7	58.5	61.3
RS 28BG90	Rupp Seeds, Inc	LL/GT27	2.8			60.5	56.3	58.4	
HS 32X90	GROWMARK, Inc	Xtend	3.2			57.9	58.4*	58.2	
AG30X8	Asgrow	Xtend	3.0			60.9	54.7	57.8	57.0
Ebberts 2029 E3	Ebberts Field Seeds	Enlist	2.9			61.3	53.9	57.6	
HS 32B90	GROWMARK, Inc	LL/GT27	3.2			59.5	53.6	56.6	
2801RX	Advanced Genetics, Inc.	Xtend	2.8			57.8	55.2	56.5	
9-732AE	Advanced Genetics, Inc.	Enlist	3.2			56.6	56.1	56.4	
W 5033X	Wellman Seeds	Xtend	3.3			61.5	51.0	56.3	
AG28X9	Asgrow	Xtend	2.8			54.9	57.4*	56.2	
ZS3097 E3	Local Seed Company	Enlist	3.0			60.9	51.4	56.2	
AG33X8	Asgrow	Xtend	3.3			57.4	54.9	56.2	57.3
W 6030E	Wellman Seeds	Enlist	3.0			56.1	55.8	56.0	
W 6928E	Wellman Seeds	Enlist	2.8			55.8	55.3	55.6	
CZ 3309GTLL	Credenz	LL/GT27	3.3			57.9	53.2	55.6	
2602RX	Advanced Genetics, Inc.	Xtend	2.6			55.8	55.2	55.5	
ZS2898 GL	Local Seed Company	LL/GT27	2.8			54.7	55.9	55.3	
ZS3399 E3	Local Seed Company	Enlist	3.3			56.1	54.4	55.3	
C2888RX	LG Seeds	Xtend	2.8			60.2	50.1	55.2	58.5
C3333RX	LG Seeds	Xtend	3.3			55.7	54.2	55.0	
HS 28C70	GROWMARK, Inc	CV	2.8			60.6	48.4	54.5	
Key 1031GL	AGRA Solutions, LLC	LL/GT27	3.1			60.0	48.8	54.4	
AG25X9	Asgrow	Xtend	2.5			57.1	51.6	54.4	
LS2685X	Local Seed Company	Xtend	2.6			54.4	53.5	54.0	
9-730AE	Advanced Genetics, Inc.	Enlist	3.0			56.6	51.3	54.0	
9-728AE	Advanced Genetics, Inc.	Enlist	2.8			55.6	52.2	53.9	
G3150RX	AgriGold	Xtend	3.1			55.7	51.9	53.8	
GH3088X	Golden Harvest	Xtend	3.0			54.0	53.3	53.7	56.8
W 6032E	Wellman Seeds	Enlist	3.2			52.4	54.9	53.7	

NOTE: Central Region, Early Variety Trial Results are Continued on the Next Page.

TABLE 5: The 2019 Ohio Soybean Performance Trials, Central Region - Early Varieties (RM 2.5-3.3)
CONTINUED FROM PREVIOUS PAGE

Entry			Physical Characteristics			Central Region Yield (bu/ac)			
Variety	Brand/Company Name	Type	RM	% Protein	% Oil	C1	C2	'19 Mean	'18-'19 Mean
AG26X8	Asgrow	Xtend	2.6			57.1	50.1	53.6	
Ebberts 2032 E3	Ebberts Field Seeds	Enlist	3.2			52.5	54.6	53.6	
RS 31EL46	Rupp Seeds, Inc	Enlist	3.1			55.3	51.7	53.5	
HS 27X90	GROWMARK, Inc	Xtend	2.7			57.7	49.1	53.4	
HS 32C80	GROWMARK, Inc	CV	3.2			53.9	52.2	53.1	
9-729AE	Advanced Genetics, Inc.	Enlist	2.9			58.6	47.4	53.0	
CZ 2760GTLL	Credenz	LL/GT27	2.7			60.0	45.6	52.8	
LGS3060RX	LG Seeds	Xtend	3.0			56.4	49.0	52.7	
G3285RX	AgriGold	Xtend	3.2			58.7	46.6	52.7	55.4
S32EN60	Dyna-Gro Seed	Enlist	3.2			57.7	47.4	52.6	
S33EN09	Dyna-Gro Seed	Enlist	3.3			59.1	46.0	52.6	
CZ 2579GTLL	Credenz	LL/GT27	2.5			54.9	49.9	52.4	
HS 28B90	GROWMARK, Inc	LL/GT27	2.8			53.2	49.5	51.4	
CZ 3099GTLL	Credenz	LL/GT27	3.0			49.1	52.8	51.0	
CZ 3100GTLL	Credenz	LL/GT27	3.1			53.6	46.1	49.9	
CZ 2889GTLL	Credenz	LL/GT27	2.8			40.9	46.7	43.8	
		Min	2.5			40.9	45.6	43.8	
		Max	3.3			71.1	62.7	66.9	
		Mean	3.0			58.5	54.1	56.3	
		LSD (0.1)				5.9	6.4		
		CV				8.6	10.0		

Note: Min, max, mean, LSD, and CV values include experimental cultivars that were not printed in this publication.

TABLE 6: The 2019 Ohio Soybean Performance Trials, Central Region - Late Varieties (RM 3.4-4.4)

Entry			Physical Characteristics			Central Region Yield (bu/ac)			
Variety	Brand/Company Name	Type	RM	% Protein	% Oil	C1	C2	'19 Mean	'18-'19 Mean
Ebberts 2037 E3	Ebberts Field Seeds	Enlist	3.7			60.5*	63.0*	61.8	
S34GL79	Dyna-Gro Seed	LL/GT27	3.4			58.2	64.9**	61.6	
Ebberts 1939 E3	Ebberts Field Seeds	Enlist	3.9			61.8*	58.9*	60.4	
SC 8379X™	Seed Consultants	Xtend	3.7			62.0*	58.1*	60.1	57.2
SC 3399L™	Seed Consultants	LL	3.9			60.1*	58.2*	59.2	
SG3440LLGT	Shur Grow	LL/GT27	3.4			59.0*	59.0*	59.0	
CZ 3930GTLL	Credenz	LL/GT27	3.9			59.7*	57.4	58.6	
S37XS89	Dyna-Gro Seed	Xtend/STS	3.7			60.8*	56.1	58.5	58.5
Ebberts 388R2X	Ebberts Field Seeds	Xtend	3.8			57.4	59.4*	58.4	59.0
CZ 3519GTLL	Credenz	LL/GT27	3.5			57.9	58.5*	58.2	
AG41X8	Asgrow	Xtend	4.1			63.6*	52.5	58.1	
GH3546X	Golden Harvest	Xtend	3.5			56.1	59.8*	58.0	55.7
35DC2	Blue River Organic Seed	CV	3.5			56.9	58.5*	57.7	
3450R2X	Stewart Seeds	Xtend	3.4			60.5*	54.6	57.6	
ZS3797 GL	Local Seed Company	LL/GT27	3.7			60.1*	55.0	57.6	
3527R2X	Stewart Seeds	Xtend	3.5			55.3	59.7*	57.5	
SG3750E	Shur Grow	Enlist	3.7			58.1	56.9	57.5	
SC 9385RR™	Seed Consultants	RR2Y	3.8			61.5*	53.4	57.5	57.5
Ebberts 368R2X	Ebberts Field Seeds	Xtend	3.6			61.4*	53.0	57.2	58.3
S34XT69	Dyna-Gro Seed	Xtend	3.4			59.2*	55.0	57.1	56.5
S37EN39	Dyna-Gro Seed	Enlist	3.7			59.2*	53.9	56.6	

NOTE: Central Region, Late Variety Trial Results are Continued on the Next Page.

TABLE 6: The 2019 Ohio Soybean Performance Trials, Central Region - Late Varieties (RM 3.4-4.4)
CONTINUED FROM PREVIOUS PAGE

Variety	Entry Brand/Company Name	Type	Physical Characteristics			Central Region Yield (bu/ac)			
			RM	% Protein	% Oil	C1	C2	'19 Mean	'18-'19 Mean
ZS3496 GL	Local Seed Company	LL/GT27	3.4			57.6	55.2	56.4	
3801RX	Advanced Genetics, Inc.	Xtend	3.8			59.3*	53.5	56.4	57.5
AG34X9	Asgrow	Xtend	3.4			57.0	55.7	56.4	
9-737AE	Advanced Genetics, Inc.	Enlist	3.7			55.5	56.9	56.2	
29DC5	Blue River Organic Seed	CV	2.9			59.4*	52.6	56.0	
HS 34B90	GROWMARK, Inc	LL/GT27	3.4			58.2	53.5	55.9	
ZS3898E3S	Local Seed Company	Enlist	3.8			55.9	55.6	55.8	
HS 36B90	GROWMARK, Inc	LL/GT27	3.6			57.8	53.6	55.7	
AG36X6	Asgrow	Xtend	3.6			58.7*	51.6	55.2	55.1
3601RX	Advanced Genetics, Inc.	Xtend	3.6			63.9**	46.2	55.1	58.3
W 6034E	Wellman Seeds	Enlist	3.4			56.9	52.6	54.8	
Ebberts 1934 E3	Ebberts Field Seeds	Enlist	3.4			57.2	52.1	54.7	
W 5836X	Wellman Seeds	Xtend	3.6			62.9*	46.4	54.7	57.9
LGS3777RX	LG Seeds	Xtend/STS	3.7			62.4*	46.8	54.6	58.2
AG38X8	Asgrow	Xtend	3.8			59.9*	48.9	54.4	57.5
AG37X9	Asgrow	Xtend	3.7			58.2	50.2	54.2	
3830R2X	Stewart Seeds	Xtend	3.8			57.8	50.4	54.1	
SG3640LLGT	Shur Grow	LL/GT27	3.6			56.4	51.2	53.8	
HS 34C80	GROWMARK, Inc	CV	3.4			58.0	49.3	53.7	
3401RX	Advanced Genetics, Inc.	Xtend	3.4			56.6	50.1	53.4	
G3722RX	AgriGold	Xtend	3.7			58.2	48.5	53.4	55.8
S36GL10	Dyna-Gro Seed	LL/GT27	3.6			56.5	50.0	53.3	
W 6037E	Wellman Seeds	Enlist	3.7			57.8	48.5	53.2	
Key 1036GL	AGRA Solutions, LLC	LL/GT27	3.6			61.6*	44.6	53.1	
HS 39B80	GROWMARK, Inc	LL/GT27	3.9			55.3	49.5	52.4	
G3620RX	AgriGold	Xtend	3.6			57.5	46.9	52.2	
LGS3600RX	LG Seeds	Xtend	3.6			59.3*	45.1	52.2	
HS 38X70	GROWMARK, Inc	Xtend	3.8			61.7*	42.6	52.2	56.3
G3520RX	AgriGold	Xtend	3.5			50.6	53.3	52.0	54.9
SC 9359RR™	Seed Consultants	RR2Y	3.5			55.6	48.0	51.8	
Ebberts 340R2X	Ebberts Field Seeds	Xtend	3.4			57.8	45.5	51.7	
CZ 3929GTLL	Credenz	LL/GT27	3.9			57.1	46.0	51.6	
9-734AE	Advanced Genetics, Inc.	Enlist	3.4			57.3	45.6	51.5	
W 6939E	Wellman Seeds	Enlist	3.9			57.4	45.5	51.5	
S35EN99	Dyna-Gro Seed	Enlist	3.5			62.2*	40.3	51.3	
CZ 3660GTLL	Credenz	Liberty/GT27	3.6			55.8	45.7	50.8	
GH3475X	Golden Harvest	Xtend	3.4			55.4	43.9	49.7	53.9
SG3450E	Shur Grow	Enlist	3.4			53.5	45.8	49.7	
HS 35X90	GROWMARK, Inc	Xtend	3.5			57.4	41.8	49.6	
RS 35EL03	Rupp Seeds, Inc	Enlist	3.5			58.5	40.1	49.3	
SG3628R2X	Shur Grow	Xtend	3.6			61.8*	36.8	49.3	54.2
3501RX	Advanced Genetics, Inc.	Xtend	3.5			56.4	41.5	49.0	
AG42X9	Asgrow	Xtend	4.2			61.0*	36.8	48.9	
C3985RX	LG Seeds	Xtend	3.9			55.4	41.7	48.6	51.9
G3850RX	AgriGold	Xtend	3.8			52.3	41.6	47.0	
SG3420R2X	Shur Grow	Xtend	3.4			53.4	33.4	43.4	
		Min	3.4			40.3	33.4	40.3	
		Max	4.4			63.9	64.9	61.8	
		Mean	3.7			57.7	50.5	54.1	
		LSD (0.1)				5.3	7.2		
		CV				7.9	12.0		

Note: Min, max, mean, LSD, and CV values include experimental cultivars that were not printed in this publication.

TABLE 7: The 2019 Ohio Soybean Performance Trials, South Region - Early Varieties (RM 2.7-3.6)

Entry			Physical Characteristics			South Region Yield (bu/ac)			
Variety	Brand/Company Name	Type	RM	% Protein	% Oil	S1	S2	'19 Mean	'18-'19 Mean
GH3546X	Golden Harvest	Xtend	3.5			60.9	61.7**	61.3	68.5
CZ 3519GTLL	Credenz	LL/GT27	3.5			65.3*	56.8*	61.1	
SG3628R2X	Shur Grow	Xtend	3.6			65.8*	55.8	60.8	64.5
ZS3399 E3	Local Seed Company	Enlist	3.3			59.9	59.4*	59.7	
ZS3496 GL	Local Seed Company	LL/GT27	3.4			64.9*	53.3*	59.1	
G3620RX	AgriGold	Xtend	3.6			63.9*	53.9*	58.9	
CZ 3100GTLL	Credenz	LL/GT27	3.1			61.1	56.4*	58.8	
Ebberts 368R2X	Ebberts Field Seeds	Xtend	3.6			66.4*	51.0	58.7	66.1
CZ 3309GTLL	Credenz	LL/GT27	3.3			59.4	57.4*	58.4	
AG36X6	Asgrow	Xtend	3.6			66.3*	50.4	58.4	63.9
3450R2X	Stewart Seeds	Xtend	3.4			67.6*	48.9	58.3	
W 5033X	Wellman Seeds	Xtend	3.3			64.4*	51.5	58.0	
SC 9339R™	Seed Consultants	RR1	3.3			60.8	55.0*	57.9	62.9
Ebberts 1934 E3	Ebberts Field Seeds	Enlist	3.4			60.9	54.6*	57.8	
CZ 3099GTLL	Credenz	LL/GT27	3.0			58.6	56.5*	57.6	
LGS3600RX	LG Seeds	Xtend	3.6			68.0**	47.0	57.5	
W 5932X	Wellman Seeds	Xtend	3.2			68.0**	46.9	57.5	
W 5928X	Wellman Seeds	Xtend	2.8			60.4	54.2*	57.3	
SC 9359RR™	Seed Consultants	RR2Y	3.5			57.9	56.3*	57.1	
W 5836X	Wellman Seeds	Xtend	3.6			64.9*	48.7	56.8	63.2
AG34X9	Asgrow	Xtend	3.4			65.5*	47.9	56.7	
S34XT69	Dyna-Gro Seed	Xtend	3.4			63.7*	49.2	56.5	63.7
AG30X8	Asgrow	Xtend	3.0			58.8	52.4*	55.6	
CZ 2760GTLL	Credenz	LL/GT27	2.7			61.9	48.3	55.1	
LGS3060RX	LG Seeds	Xtend	3.0			62.3	47.7	55.0	
W 6034E	Wellman Seeds	Enlist	3.4			56.7	52.9*	54.8	
AG32X8	Asgrow	Xtend	3.2			64.0*	45.4	54.7	60.9
G3285RX	AgriGold	Xtend	3.2			60.5	48.5	54.5	
Key 1031GL	AGRA Solutions, LLC	LL/GT27	3.1			58	49.9	54.0	
Ebberts 340R2X	Ebberts Field Seeds	Xtend	3.4			62.6	44.7	53.7	
W 6032E	Wellman Seeds	Enlist	3.2			58.6	48.3	53.5	
S36GL10	Dyna-Gro Seed	LL/GT27	3.6			51.7	54.8*	53.3	
3527R2X	Stewart Seeds	Xtend	3.5			65.9*	40.2	53.1	
C2888RX	LG Seeds	Xtend	2.8			63.2*	42.3	52.8	
C3333RX	LG Seeds	Xtend	3.3			65.3*	40.0	52.7	
SG3640LLGT	Shur Grow	LL/GT27	3.6			54	50.0	52.0	
G3520RX	AgriGold	Xtend	3.5			63.4*	40.4	51.9	64.1
W 6030E	Wellman Seeds	Enlist	3.0			56.9	45.7	51.3	
CZ 2889GTLL	Credenz	LL/GT27	2.8			54.5	48.0	51.3	
W 6928E	Wellman Seeds	Enlist	2.8			53.1	48.2	50.7	
CZ 3660GTLL	Credenz	LL/GT27	3.6			56.8	43.7	50.3	
Key 1036GL	AGRA Solutions, LLC	LL/GT27	3.6			54.4	45.7	50.1	
AG33X8	Asgrow	Xtend	3.3			56.7	39.7	48.2	57.2
		Min	2.7			38.1	24.9	31.5	
		Max	3.6			68.0	61.7	61.3	
		Mean	3.3			60.4	49.0	54.7	
		LSD (0.1)				4.84	9.68		
		CV				6.85	14.42		

Note: Min, max, mean, LSD, and CV values include experimental cultivars that were not printed in this publication.

TABLE 8: The 2019 Ohio Soybean Performance Trials, South Region - Late Varieties (RM 3.7-4.4)

Variety	Entry Brand/Company Name	Type	Physical Characteristics			South Region Yield (bu/ac)				
			RM	Seeds/lb.	% Protein	% Oil	S1	S2	'19 Mean	'18-'19 Mean
LSX4487XS	Local Seed Company	Xtend/STS	4.4				74.1*	68.0*	71.1	
CZ 3930GTLL	Credez	LL/GT27	3.9				70.2	69.8*	70.0	
S37XS89	Dyna-Gro Seed	Xtend/STS	3.7				75.1*	64.7*	69.9	69.8
SC 3399L™	Seed Consultants	LL	3.9				68.3	71.2**	69.8	
AG41X8	Asgrow	Xtend	4.1				72.4*	67.0*	69.7	67.1
LS3976X	Local Seed Company	Xtend	3.9				71.4	67.8*	69.6	
Ebberts 1939 E3	Ebberts Field Seeds	Enlist	3.9				67.7	68.8*	68.3	
S37EN39	Dyna-Gro Seed	Enlist	3.7				66.3	70.0*	68.2	
S41XS98	Dyna-Gro Seed	Xtend/STS	4.1				71.1	64.5*	67.8	66.2
AG42X9	Asgrow	Xtend	4.2				70.0	65.5*	67.8	
4029R2X	Stewart Seeds	Xtend	4.0				71.8*	63.2*	67.5	68.3
GH3728X	Golden Harvest	Xtend	3.7				76.2**	57.3	66.8	
GH3934X	Golden Harvest	Xtend	3.9				68.3	64.7*	66.5	
SC 8399X™	Seed Consultants	Xtend	3.9				71.0	61.9*	66.5	
S39EN19	Dyna-Gro Seed	Enlist	3.9				69.2	63.5*	66.4	
SC 8379X™	Seed Consultants	Xtend	3.7				72.8*	59.6	66.2	68.7
W 6939E	Wellman Seeds	Enlist	3.9				69.7	62.2*	66.0	
ZS3898 E3S	Local Seed Company	Enlist	3.8				67.9	63.5*	65.7	
CZ 3929GTLL	Credez	LL/GT27	3.9				66.2	63.8*	65.0	
S13-2743C	University of Missouri	CV	4.1				64.3	64.3*	64.3	
ZS3797 GL	Local Seed Company	LL/GT27	3.7				66.5	61.7*	64.1	
C3985RX	LG Seeds	Xtend	3.9				70.5	57.6	64.1	67.6
S40GL59	Dyna-Gro Seed	LL/GT27	4.0				64.4	63.2*	63.8	
Ebberts 388R2X	Ebberts Field Seeds	Xtend	3.8				74.6*	53.0	63.8	65.0
Ebberts 2037 E3	Ebberts Field Seeds	Enlist	3.7				66.1	60.2	63.2	
G3722RX	AgriGold	Xtend	3.7				71.3	54.3	62.8	66.8
W 6037E	Wellman Seeds	Enlist	3.7				62.2	62.6*	62.4	
LS4299XS	Local Seed Company	Xtend/STS	4.2				70.3	54.2	62.3	
SC 9385RR™	Seed Consultants	RR2Y	3.8				64.5	60.0	62.3	61.5
AG37X9	Asgrow	Xtend	3.7				70.8	52.8	61.8	
LGS3777RX	LG Seeds	Xtend/STS	3.7				71.3	52.1	61.7	67.6
G4255RX	AgriGold	Xtend	4.2				69.8	53.4	61.6	
AG38X8	Asgrow	Xtend	3.8				68.6	53.4	61.0	63.3
G3850RX	AgriGold	Xtend	3.8				67.4	53.5	60.5	
3830R2X	Stewart Seeds	Xtend	3.8				71.6	46.5	59.1	
S13-3851C	University of Missouri	CV	4.4				54.1	59.0	56.6	54.4
S13-10590C	University of Missouri	CV	4.3				58.1	54.7	56.4	
S42EN89	Dyna-Gro Seed	Enlist	4.2				53.4	56.9	55.2	
SG3750E	Shur Grow	Enlist	3.7				57.3	53.0	55.2	
		Min	3.7				49.8	37.9	51.5	
		Max	4.4				76.2	71.2	71.1	
		Mean	3.9				66.4	58.7	62.6	
		LSD (0.1)					4.36	10.00		
		CV					5.6	12.51		

Note: Min, max, mean, LSD, and CV values include experimental cultivars that were not printed in this publication.