

The 2017 University of Delaware Variety Trial Notes

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*Special thanks and appreciation is extended to the following people for whom this research would not have been possible: Rob Emerson and Emerson Farms, Middletown De., Thomas Family Farms, Marydel, De., and Murray Farms, Selbyville, De. In addition I would like to thank Gunnar Isaacs for his assistance with the trials and the University of Delaware farm staff; Brian Hearn, farm manager, Ward Harris, William Hawkins, George Willey, and Kyle Mitchell for their help and cooperation.*

The University of Delaware conducted a total of 14 soybean variety trials for the 2017 year. This consisted of five full season and one double cropped glyphosate resistant trials separated into two maturity groups III-mid IV and mid IV-V's. We conducted a full season and double crop trial of Liberty Link varieties in Georgetown. The full season glyphosate trials were conducted at four locations throughout the state to obtain a good representation of climate and soils found for this region. In addition, we conducted a direct comparison head to head trial of Liberty (glufosinate) and Glyphosate resistant varieties head to head. Weed control was considered excellent in all trials.

Double crop trials will not be reported due to too much emergence and population variability. The Middletown mid IV-V trial will not be reported for the same reason.

Reported trials consist of the following by location:

Georgetown (Irrigated): Full season Group III-mid IV Glyphosate Tolerant  
Full season mid IV-V, Glyphosate Tolerant  
Full season Group III-mid IV Liberty Link Tolerant  
Full season mid IV-V, Liberty Link Tolerant  
Full season Group III-mid IV, LL and RR Direct compare  
Full season mid IV-V, LL and RR Direct compare

Kent County (dryland): Full season Group III-mid IV Glyphosate Tolerant  
Full season mid IV-V, Glyphosate Tolerant

Selbyville (dryland): Full season Group III-mid IV Glyphosate Tolerant  
Full season mid IV-V, Glyphosate Tolerant

Middletown (dryland): Full season Group III-mid IV Glyphosate Tolerant

## Methodology

The full season seeding rate was 5 seeds/ft row (174,200 seeds/A) on 15" row spacing into a conventionally tilled field (except for Middletown). Each entry consisted of four replications planted in a randomized complete block.

The Middletown trial was planted on narrow rows with 7.5" row spacing into high residue conditions.

All yields were converted and reported at 13.0% moisture. Reported test weight, lodging, plant height and maturity date is the average of four reps.

Herbicides: Preemergence: Authority MTZ (sulfentrazone + metribuzin) 5 oz./A, plus Dual (metholochlor) 1 pt/A, Postemergence: Glyphosate or Liberty depending upon the trial plus Dual 1 pt/A. For the direct comparison trial, the preemergence was same as above, postemergence; Select (clethodim) plus Dual.

Lodging was scored on a scale of 1-5:

- 1.0= almost all plants erect
- 2.0= either all plants leaning slightly, or a few plants down
- 3.0= either all plants leaning moderately (45 degree angle), or 25-50% down.
- 4.0= either all plants leaning considerably, or 50-80% down
- 5.0= all plants down

Weather data may be summarized using the DEOS website; <http://www.deos.udel.edu>

Georgetown, Full Season, Glyphosate Tolerant, Group III-mid IV's (sorted x yield)

Variety	Company	*Yield bu/a		T.W.	Trial Rank x Yield	Relative Yield	Height (in.)	Lodging	Maturity (Julian date)
S43XS27	Dynagrow	87.16	a	52.63	1	111	37	1	283
7427XTS	USG	85.76	ab	52.93	2	110	36	1	276
S43RY95	Dynagrow	85.73	ab	53	3	110	36	1.3	281
4317R2X/SR	Channel	84.03	abc	53.85	4	107	37	1	278
HS 43X70	HiSoy (Growmark)	84.01	abc	52.2	5	107	45	1.5	279
S39-P5X	Syngenta	81.55	a-d	52.28	6	104	35	1	278
4216R2X/SR	Channel	81.52	a-d	53.28	7	104	37	1	277
S43-V3X	Syngenta	80.75	a-d	53.7	8	103	36	1	281
7447XTS	USG	80.1	a-e	52.83	9	102	36	1	281
TS3969R2X	T.A. Seeds	79.16	a-e	52.7	10	101	34	1	278
4181 RY	CZ (Bayer)	78.45	b-f	52.53	11	100	37	1	279
4417R2X/SR	Channel	78.16	b-f	52.5	12	100	37	1	283
RPM 39X8	Doebler's	77.57	b-f	52.73	13	99	35	1	277
S39XT08	Dynagrow	77.54	b-f	53.13	14	99	35	1.3	275
HS 44T60	HiSoy Growmark	76.13	c-f	52.58	15	97	34	1	286
73P93R	USG	74.57	def	52.23	16	95	33	1	274
3652	ProHarvest Seed	74.51	def	52.9	17	95	31	1	276
4366CR2Y	ProHarvest Seed	74.23	def	53.18	18	95	34	1	280
RPM 42X8	Doebler's	73.76	def	52.55	19	94	32	1	289
S39RY65	Dynagrow	71.73	ef	52.93	20	92	33	1	274
RPM 40R8	Doebler's	71.59	ef	53.75	21	92	37	1	283
RPM DB3517R	Doebler's	71.47	ef	53.28	22	91	32	1	272
3952	ProHarvest Seed	70.08	f	53.53	23	90	32	1	276

LSD P=.05

8.68

Planted 5/17/2017

CV

6.74

Harvested 10/21/2017

Grand Mean

78.24

\*Yield corrected to 13% moisture

Kent County, Full Season, Glyphosate Tolerant, Group III-mid IV's (sorted x yield)

Variety	Company	*Yield bu/a		T.W.	Lodging Rating	Trial Rank	Relative Yield	Lodging
S43-V3X	NK Brand (Syngenta)	91.1	a	54	2	1	116	2
4317R2X/SR	Channel	88.71	ab	54	2	2	113	2
7447XTS	USG	87.21	abc	52.2	1.5	3	111	1.5
S43XS27	Dyna-Gro	83.94	bcd	53.7	1.8	4	107	2.8
HS 43X70	HiSoy (Growmark)	83.56	b-e	53.6	2.8	5	107	1
4417R2X/SR	Channel	82.52	b-f	55	1	6	105	1.8
S39-P5X	NK Brand (Syngenta)	81.13	c-g	51.83	1.3	7	103	1.3
4366CR2Y	ProHarvest Seed	80.22	d-g	50.25	1.5	8	102	1.5
4216R2X/SR	Channel	79.51	d-g	55.75	1.3	9	101	1
7427XTS	USG	78.8	d-g	54.73	1	10	100	1.3
TS3969R2X	T.A. Seeds	78.62	d-g	53.35	1.5	11	100	1.3
73P93R	USG	78.58	d-g	52.33	1.3	12	100	2
S43RY95	Dyna-Gro	77.99	d-g	53.25	2	13	99	1.5
RPM 40R8	Doebler's	77.11	d-g	52.03	1.3	14	98	1.5
4181 RY	CZ (Bayer)	77.03	d-g	54.55	1.5	15	98	1.8
S39RY65	Dyna-Gro	76.73	efg	53.47	1.8	16	98	1.3
RPM 42X8	Doebler's	75.96	fg	52.33	1.3	17	97	1.3
RPM 39X8	Doebler's	75.65	fg	46.9	1	18	96	1
HS 44T60	HiSoy Growmark	75.22	g	50.5	1	19	96	1
S39XT08	Dyna-Gro	74.51	gh	50.27	1.8	20	95	1.8
RPM DB3517R	Doebler's	68.03	hi	51.6	2	21	87	2
3652	ProHarvest Seed	67.26	i	51.4	1.5	22	86	1.5
3952	ProHarvest Seed	65.22	i	52.53	1.3	23	83	1.3

LSD P=.05

6.96

Standard Deviation

4.93

Planted 6/7/2017

CV

6.28

Harvested 11/10/2017

Grand Mean

78.46

\*Yield corrected to 13% moisture

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)

**Middletown, Full Season, Glyphosate Tolerant, Group III-Mid IV**

Variety	Company	*Yield bu/a		T.W.	Trial Rank	Relative Yield	Height (in.)	Lodging
S43RY95	Dyna-Gro	88.77	a	54.45	1	109	35	1.3
7447XTS	USG	88.32	a	54.9	2	108	36	1
S43XS27	Dyna-Gro	88.18	a	54.88	3	108	35	1
HS 43X70	HiSoy (Growmark)	87.53	a	55.03	4	107	40	1.3
RPM 40R8	Doebler's	86.43	ab	54.68	5	106	35	1.5
4417R2X/SR	Channel	85.56	ab	54.8	6	105	36	1
4366CR2Y	ProHarvest Seed	84.71	abc	54.25	7	104	33	1
RPM DB3517R	Doebler's	84.37	abc	54.4	8	103	33	1
HS 44T60	HiSoy Growmark	83.79	abc	54.88	9	102	31	1
4317R2X/SR	Channel	82.75	abc	55.3	10	101	33	1.5
S39-P5X	NK Brand (Syngenta)	82.04	abc	54.15	11	100	33	1
7427XTS	USG	81.94	abc	54.5	12	100	34	1
S43-V3X	NK Brand (Syngenta)	81.76	abc	54.58	13	100	33	1
73P93R	USG	80.79	abc	54.03	14	99	33	1
TS3969R2X	T.A. Seeds	80.12	a-d	54.35	15	98	33	1
4181 RY	CZ (Bayer)	79.83	a-d	54.08	16	98	34	1.3
S39RY65	Dyna-Gro	79.47	a-d	53.93	17	97	34	1
RPM 39X8	Doebler's	77.3	bcd	53.3	18	94	32	1
RPM 42X8	Doebler's	77.22	bcd	54.3	19	94	31	1
3952	ProHarvest Seed	77.21	bcd	53.55	20	94	32	1
3652	ProHarvest Seed	76.77	bcd	53.75	21	94	30	1
4216R2X/SR	Channel	75.77	cd	54.8	22	93	32	1
S39XT08	Dyna-Gro	70.63	d	53.95	23	86	35	1

**LSD P=.05**

**9.74**

**CV**

**8.43**

Plant 5/18/2017

**Grand Mean**

**81.80**

Harvest 10/26/2017

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)

Narrow rows (7.5" spacing) drilled

\*Yield corrected to 13% moisture

Selbyville, Full Season, Glyphosate Tolerant, Group III-Mid IV's

Variety	Company	Yield bu/a		T.W.	Trial Rank	Relative Yield	Hieght (in.)	Lodging
S43XS27	Dyna-Gro	79.1	a	51.7	1	117	35	1
4216R2X/SR	Channel	73.7	ab	52.83	2	109	35	1.3
4366CR2Y	ProHarvest Seed	73.6	abc	51.6	3	109	33	1.3
4417R2X/SR	Channel	72.2	abc	52.3	4	107	32	1
7427XTS	USG	72.2	abc	52.68	5	107	36	1.3
73P93R	USG	71.9	abc	51.45	6	106	29	1
7447XTS	USG	71.2	abc	52.23	7	105	33	1
RPM 39X8	Doebler's	70.1	abc	51.15	8	104	32	1.3
3652	ProHarvest Seed	69.9	abc	52.2	9	103	30	1.3
S39XT08	Dyna-Gro	69.5	abc	52.03	10	103	35	1.8
S43-V3X	NK Brand (Syngenta)	69.1	a-d	52.38	11	102	33	1
HS 43X70	HiSoy (Growmark)	68.3	a-d	52.15	12	101	39	1.5
HS 44T60	HiSoy Growmark	67.3	a-d	53.13	13	100	28	1
4317R2X/SR	Channel	66.7	a-d	53.35	14	99	31	1.3
S43RY95	Dyna-Gro	66.3	bcd	52.93	15	98	34	1
4181 RY	CZ (Bayer)	65.9	bcd	52.58	16	97	35	1.3
S39RY65	Dyna-Gro	63.7	bcd	51.28	17	94	30	1
S39-P5X	NK Brand (Syngenta)	62.8	bcd	50.08	18	93	32	1.3
RPM DB3517R	Doebler's	62.2	bcd	51.48	19	92	30	1
3952	ProHarvest Seed	61.4	bcd	52.5	20	91	30	1.3
RPM 40R8	Doebler's	61	bcd	52.28	21	90	32	1
TS3969R2X	T.A. Seeds	60.8	cd	50.6	22	90	30	1
RPM 42X8	Doebler's	56.4	d	51.8	23	83	28	1.5

LSD P=.05

12.77

CV

13.38

Grand Mean

67.62

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)

Plant 6/9/2017

Harvest 11/7/2017

\*Yield corrected to 13% moisture

Georgetown, Liberty Link, Full Season, Group III-mid IV

Variety	Company	Yield bu/a		T.W.	Trial Rank	Relative Yield	Height (in.)	Lodging	Maturity (Julian date)
3841 LL	CZ (Bayer)	88.44	a	52.73	1	109	32	1	275
SH 3814 LL	Southern Harvest	87.57	a	53.17	2	108	31	1	276
4222 LL	CZ (Bayer)	87.21	ab	53.4	3	108	32	1.5	276
4307LL	ProHarvest Seed	86.4	ab	53.7	4	107	33	1.3	276
3601 LL	CZ (Bayer)	85.71	abc	53.7	5	106	29	1	276
SH 3516 LL	Southern Harvest	83.75	abc	52.6	6	103	29	1	275
3945 LL	CZ (Bayer)	82.89	abc	52.1	7	102	32	1	276
4105 LL	CZ (Bayer)	81.77	bcd	53.53	8	101	29	1	275
4044 LL	CZ (Bayer)	80.38	cde	52.5	9	99	31	1	275
3737 LL	CZ (Bayer)	76	def	52.47	10	94	30	1	271
3233 LL	CZ (Bayer)	74.76	ef	52.53	11	92	27	1.3	271
3234 LL	CZ (Bayer)	71.24	fg	52.33	12	88	28	1.3	272
3443 LL	CZ (Bayer)	67.6	g	52.77	13	83	29	1.3	270

LSD P=.05

5.787

CV

4.98

Grand Mean

81.055

Plant 5/17/2017

Harvest 10/21/2017

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)

**Direct Comparison LL and Glyphosate tolerant Group III-mid IV**

Variety	Company	Yield		T.W	Trial Rank	Relative Yield
S43-V3X	NK Brand (Syngenta)	94	a	51.47	1	118
S43RY95	Dyna-Gro	90.61	ab	51.57	2	114
7447XTS	USG	88.3	abc	50.83	3	111
SH 3814 LL	Southern Harvest	86.6	a-d	51.57	4	109
S43XS27	Dyna-Gro	86.47	a-d	51.23	5	109
7427XTS	USG	86.09	a-e	51.87	6	108
3601 LL	CZ (Bayer)	83.3	b-f	52.03	7	105
4216R2X/SR	Channel	83.24	b-f	52.2	8	105
4307LL	ProHarvest Seed	83.23	b-f	51.27	9	105
S39RY65	Dyna-Gro	82.44	b-f	51.37	10	104
4417R2X/SR	Channel	82.11	b-f	50.07	11	103
HS 43X70	HiSoy (Growmark)	82.08	b-f	51.73	12	103
4222 LL	CZ (Bayer)	81.34	c-f	51.83	13	102
3841 LL	CZ (Bayer)	81.3	c-f	51.07	14	102
HS 44T60	HiSoy (Growmark)	80.69	c-g	51.17	15	101
SH 3516 LL	Southern Harvest	80.54	c-g	50.93	16	101
4366CR2Y	ProHarvest Seed	79.86	c-g	50.63	17	100
S39-P5X	NK Brand (Syngenta)	79.66	c-g	50.57	18	100
4317R2X/SR	Channel	79.58	c-g	52.5	19	100
TS3969R2X	T.A. Seeds	79.47	d-g	51.3	20	100
4044 LL	CZ (Bayer)	79.23	d-g	51.03	21	100
73P93R	USG	78.94	d-g	51.67	22	99
3952	ProHarvest Seed	78.63	d-h	51.23	23	99
3652	ProHarvest Seed	78.28	d-h	51.5	24	98
4181 RY	CZ (Bayer)	78.24	d-h	50.97	25	98
4105 LL	CZ (Bayer)	77.9	d-i	51.97	26	98
RPM 42X8	Doebler's	77.32	e-j	51.23	27	97
RPM 39X8	Doebler's	76.28	f-k	50.67	28	96



RPM 40R8	Doebler's	76.02	f-k	51.57	29	96
S39XT08	Dyna-Gro	75.39	f-k	51.67	30	95
RPM DB3517R	Doebler's	72.14	g-k	51.43	31	91
3945 LL	CZ (Bayer)	70.1	h-k	51.93	32	88
3234 LL	CZ (Bayer)	69.41	ijk	51.17	33	87
3233 LL	CZ (Bayer)	68.97	jk	51.53	34	87
3443 LL	CZ (Bayer)	68.92	jk	51.33	35	87
3737 LL	CZ (Bayer)	68.16	k	51.5	36	86

**LSD P=.05**

**8.794**

**CV**

**6.79**

**Grand Mean**

**79.58**

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)

Planted 5/17/2017

Harvested 10/23/2017

\*yield reported at 13% moisture

2017 Summary, Full Season Group III-mid IV Glyphosate Tolerant (sorted x company)

Variety	Company	Yield bu/a		T.W.	Trial Rank	Relative Yield	Avg Trial Yield bu/a	Trial Location
4216R2X/SR	Channel	81.52	a-d	53.28	7	104	78.24	Georgetown
4216R2X/SR	Channel	83.24	b-f	52.2	8	105	79.58	GT Direct Comparison
4216R2X/SR	Channel	79.51	d-g	55.75	9	101	78.46	Kent
4216R2X/SR	Channel	75.77	cd	54.8	22	93	81.8	Middletown
4216R2X/SR	Channel	73.7	ab	52.83	2	109	67.62	Selbyville
4317R2X/SR	Channel	84.03	abc	53.85	4	107	78.24	Georgetown
4317R2X/SR	Channel	79.58	c-g	52.5	19	100	79.58	GT Direct Comparison
4317R2X/SR	Channel	88.71	ab	54	2	113	78.46	Kent
4317R2X/SR	Channel	82.75	abc	55.3	10	101	81.8	Middletown
4317R2X/SR	Channel	66.7	a-d	53.35	14	99	67.62	Selbyville
4417R2X/SR	Channel	78.16	b-f	52.5	12	100	78.24	Georgetown
4417R2X/SR	Channel	82.11	b-f	50.07	11	103	79.58	GT Direct Comparison
4417R2X/SR	Channel	82.52	b-f	55	6	105	78.46	Kent
4417R2X/SR	Channel	85.56	ab	54.8	6	105	81.8	Middletown
4417R2X/SR	Channel	72.2	abc	52.3	4	107	67.62	Selbyville
4181 RY	CZ (Bayer)	78.45	b-f	52.53	11	100	78.24	Georgetown
4181 RY	CZ (Bayer)	78.24	d-h	50.97	25	98	79.58	GT Direct Comparison
4181 RY	CZ (Bayer)	77.03	d-g	54.55	15	98	78.46	Kent
4181 RY	CZ (Bayer)	79.83	a-d	54.08	16	98	81.8	Middletown
4181 RY	CZ (Bayer)	65.9	bcd	52.58	16	97	67.62	Selbyville
RPM 39X8	Doebler's	77.57	b-f	52.73	13	99	78.24	Georgetown
RPM 39X8	Doebler's	76.28	f-k	50.67	28	96	79.58	GT Direct Comparison
RPM 39X8	Doebler's	75.65	fg	46.9	18	96	78.46	Kent
RPM 39X8	Doebler's	77.3	bcd	53.3	18	94	81.8	Middletown
RPM 39X8	Doebler's	70.1	abc	51.15	8	104	67.62	Selbyville
RPM 40R8	Doebler's	71.59	ef	53.75	21	92	78.24	Georgetown
RPM 40R8	Doebler's	76.02	f-k	51.57	29	96	79.58	GT Direct Comparison

RPM 40R8	Doebler's	77.11	d-g	52.03	14	98	78.46	Kent
RPM 40R8	Doebler's	86.43	ab	54.68	5	106	81.8	Middletown
RPM 40R8	Doebler's	61	bcd	52.28	21	90	67.62	Selbyville
RPM 42X8	Doebler's	73.76	def	52.55	19	94	78.24	Georgetown
RPM 42X8	Doebler's	77.32	e-j	51.23	27	97	79.58	GT Direct Comparison
RPM 42X8	Doebler's	75.96	fg	52.33	17	97	78.46	Kent
RPM 42X8	Doebler's	77.22	bcd	54.3	19	94	81.8	Middletown
RPM 42X8	Doebler's	56.4	d	51.8	23	83	67.62	Selbyville
RPM DB3517R	Doebler's	71.47	ef	53.28	22	91	78.24	Georgetown
RPM DB3517R	Doebler's	72.14	g-k	51.43	31	91	79.58	GT Direct Comparison
RPM DB3517R	Doebler's	68.03	hi	51.6	21	87	78.46	Kent
RPM DB3517R	Doebler's	84.37	abc	54.4	8	103	81.8	Middletown
RPM DB3517R	Doebler's	62.2	bcd	51.48	19	92	67.62	Selbyville
S39RY65	Dyna-Gro	71.73	ef	52.93	20	92	78.24	Georgetown
S39RY65	Dyna-Gro	82.44	b-f	51.37	10	104	79.58	GT Direct Comparison
S39RY65	Dyna-Gro	76.73	efg	53.47	16	98	78.46	Kent
S39RY65	Dyna-Gro	79.47	a-d	53.93	17	97	81.8	Middletown
S39RY65	Dyna-Gro	63.7	bcd	51.28	17	94	67.62	Selbyville
S39XT08	Dyna-Gro	77.54	b-f	53.13	14	99	78.24	Georgetown
S39XT08	Dyna-Gro	75.39	f-k	51.67	30	95	79.58	GT Direct Comparison
S39XT08	Dyna-Gro	74.51	gh	50.27	20	95	78.46	Kent
S39XT08	Dyna-Gro	70.63	d	53.95	23	86	81.8	Middletown
S39XT08	Dyna-Gro	69.5	abc	52.03	10	103	67.62	Selbyville
S43RY95	Dyna-Gro	85.73	ab	53	3	110	78.24	Georgetown
S43RY95	Dyna-Gro	90.61	ab	51.57	2	114	79.58	GT Direct Comparison
S43RY95	Dyna-Gro	77.99	d-g	53.25	13	99	78.46	Kent
S43RY95	Dyna-Gro	88.77	a	54.45	1	109	81.8	Middletown
S43RY95	Dyna-Gro	66.3	bcd	52.93	15	98	67.62	Selbyville
S43XS27	Dyna-Gro	87.16	a	52.63	1	111	78.24	Georgetown
S43XS27	Dyna-Gro	86.47	a-d	51.23	5	109	79.58	GT Direct Comparison
S43XS27	Dyna-Gro	83.94	bcd	53.7	4	107	78.46	Kent
S43XS27	Dyna-Gro	88.18	a	54.88	3	108	81.8	Middletown
S43XS27	Dyna-Gro	79.1	a	51.7	1	117	67.62	Selbyville
HS 43X70	HiSoy (Growmark)	84.01	abc	52.2	5	107	78.24	Georgetown

HS 43X70	HiSoy (Growmark)	82.08	b-f	51.73	12	103	79.58	GT Direct Comparison
HS 43X70	HiSoy (Growmark)	83.56	b-e	53.6	5	107	78.46	Kent
HS 43X70	HiSoy (Growmark)	87.53	a	55.03	4	107	81.8	Middletown
HS 43X70	HiSoy (Growmark)	68.3	a-d	52.15	12	101	67.62	Selbyville
HS 44T60	HiSoy (Growmark)	80.69	c-g	51.17	15	101	79.58	GT Direct Comparison
HS 44T60	HiSoy (Growmark)	76.13	c-f	52.58	15	97	78.24	Georgetown
HS 44T60	HiSoy (Growmark)	75.22	g	50.5	19	96	78.46	Kent
HS 44T60	HiSoy (Growmark)	83.79	abc	54.88	9	102	81.8	Middletown
HS 44T60	HiSoy (Growmark)	67.3	a-d	53.13	13	100	67.62	Selbyville
S39-P5X	NK Brand (Syngenta)	81.55	a-d	52.28	6	104	78.24	Georgetown
S39-P5X	NK Brand (Syngenta)	79.66	c-g	50.57	18	100	79.58	GT Direct Comparison
S39-P5X	NK Brand (Syngenta)	81.13	c-g	51.83	7	103	78.46	Kent
S39-P5X	NK Brand (Syngenta)	82.04	abc	54.15	11	100	81.8	Middletown
S39-P5X	NK Brand (Syngenta)	62.8	bcd	50.08	18	93	67.62	Selbyville
S43-V3X	NK Brand (Syngenta)	80.75	a-d	53.7	8	103	78.24	Georgetown
S43-V3X	NK Brand (Syngenta)	94	a	51.47	1	118	79.58	GT Direct Comparison
S43-V3X	NK Brand (Syngenta)	91.1	a	54	1	116	78.46	Kent
S43-V3X	NK Brand (Syngenta)	81.76	abc	54.58	13	100	81.8	Middletown
S43-V3X	NK Brand (Syngenta)	69.1	a-d	52.38	11	102	67.62	Selbyville
3652	ProHarvest Seed	74.51	def	52.9	17	95	78.24	Georgetown
3652	ProHarvest Seed	78.28	d-h	51.5	24	98	79.58	GT Direct Comparison
3652	ProHarvest Seed	67.26	i	51.4	22	86	78.46	Kent
3652	ProHarvest Seed	76.77	bcd	53.75	21	94	81.8	Middletown
3652	ProHarvest Seed	69.9	abc	52.2	9	103	67.62	Selbyville
3952	ProHarvest Seed	70.08	f	53.53	23	90	78.24	Georgetown
3952	ProHarvest Seed	78.63	d-h	51.23	23	99	79.58	GT Direct Comparison
3952	ProHarvest Seed	65.22	i	52.53	23	83	78.46	Kent
3952	ProHarvest Seed	77.21	bcd	53.55	20	94	81.8	Middletown
3952	ProHarvest Seed	61.4	bcd	52.5	20	91	67.62	Selbyville
4366CR2Y	ProHarvest Seed	74.23	def	53.18	18	95	78.24	Georgetown
4366CR2Y	ProHarvest Seed	79.86	c-g	50.63	17	100	79.58	GT Direct Comparison
4366CR2Y	ProHarvest Seed	80.22	d-g	50.25	8	102	78.46	Kent
4366CR2Y	ProHarvest Seed	84.71	abc	54.25	7	104	81.8	Middletown
4366CR2Y	ProHarvest Seed	73.6	abc	51.6	3	109	67.62	Selbyville

TS3969R2X	T.A. Seeds	79.16	a-e	52.7	10	101	78.24	Georgetown
TS3969R2X	T.A. Seeds	79.47	d-g	51.3	20	100	79.58	GT Direct Comparison
TS3969R2X	T.A. Seeds	78.62	d-g	53.35	11	100	78.46	Kent
TS3969R2X	T.A. Seeds	80.12	a-d	54.35	15	98	81.8	Middletown
TS3969R2X	T.A. Seeds	60.8	cd	50.6	22	90	67.62	Selbyville
73P93R	USG	74.57	def	52.23	16	95	78.24	Georgetown
73P93R	USG	78.94	d-g	51.67	22	99	79.58	GT Direct Comparison
73P93R	USG	78.58	d-g	52.33	12	100	78.46	Kent
73P93R	USG	80.79	abc	54.03	14	99	81.8	Middletown
73P93R	USG	71.9	abc	51.45	6	106	67.62	Selbyville
7427XTS	USG	85.76	ab	52.93	2	110	78.24	Georgetown
7427XTS	USG	86.09	a-e	51.87	6	108	79.58	GT Direct Comparison
7427XTS	USG	78.8	d-g	54.73	10	100	78.46	Kent
7427XTS	USG	81.94	abc	54.5	12	100	81.8	Middletown
7427XTS	USG	72.2	abc	52.68	5	107	67.62	Selbyville
7447XTS	USG	80.1	a-e	52.83	9	102	78.24	Georgetown
7447XTS	USG	88.3	abc	50.83	3	111	79.58	GT Direct Comparison
7447XTS	USG	87.21	abc	52.2	3	111	78.46	Kent
7447XTS	USG	88.32	a	54.9	2	108	81.8	Middletown
7447XTS	USG	71.2	abc	52.23	7	105	67.62	Selbyville

Georgetown, Full Season, Glyphosate Tolerant, Mid IV-V

Variety	Company	Yield		T.W.	Trial Rank	Relative Yield	Height (in.)	Lodging	Maturity (Julian date)
RPM 50X8	Doebler's	90.25	a	51.83	1	109	38	1	278
RPM 48R8	Doebler's	87.81	ab	50.68	2	106	38	1	288
TS4889R2XS	T.A. Seeds	87.39	abc	51.83	3	105	36	1	276
MS 4846 RXT	MorSoy (Seedkoz)	87.05	abc	50.55	4	105	35	1	287
HS 46X60	HiSoy (Growmark)	86.79	abc	52.3	5	104	39	1	283
74K95RS	USG	86.74	abc	51.45	6	104	41	1	287
7496XTS	USG	86.22	a-d	50.73	7	104	41	1	289
HS 48X70	HiSoy (Growmark)	86.14	a-d	51.2	8	104	37	1	277
S48XS78	Dyna-Gro	85.19	a-e	51.73	9	103	37	1	276
7478XTS	USG	85.18	a-e	52.03	10	102	37	1	276
4517R2X/SR	Channel	83.44	b-f	52.1	11	100	36	1	276
4827	ProHarvest Seed	82.78	b-f	50.7	12	100	42	1	282
S46XS87	Dyna-Gro	82.54	b-f	51.03	13	99	38	1	281
S48XT56	Dyna-Gro	81.87	b-g	50.3	14	99	38	1	285
MS 4616 RXT	MorSoy (Seedkoz)	81.44	c-g	51.38	15	98	38	1	278
RPM 45R8	Doebler's	81.29	c-g	51.28	16	98	35	1	279
7458XT	USG	79.93	d-h	51.63	17	96	35	1	283
4590 RY	CZ (Bayer)	79.45	e-h	51.8	18	96	37	1	282
S45-K5X	NK Brand (Syngenta)	79.37	e-h	51.15	19	95	36	1	279
7478BGT	USG	77.66	fgh	51.38	20	93	37	1	283
S52-Y7X	NK Brand (Syngenta)	76.12	gh	51.93	21	92	37	1	289
5375 RY	CZ (Bayar)	74.06	h	48.03	22	89	35	1	294

LSD P=.05

6.325

CV

5.38

Grand Mean

83.123

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)

Planted 5/17/2017

Harvested 11/4/2017

\*Yield corrected to 13% moisture

**Kent, Full Season, Glyphosate Tolerant Mid Group IV-V's**

Variety	Company	Yield bu/a		T.W.	Lodging Rating	Trial Rank	Relative Yield	Lodging
RPM 48R8	Doebler's	87.46	a	56.63	1.5	1	112	1.5
S48XT56	Dyna-Gro	84.74	ab	57.08	1.3	2	108	1.3
S46XS87	Dyna-Gro	83.74	abc	57.45	1	3	107	1
74K95RS	USG	81.9	a-d	56.23	1.3	4	105	1.3
4517R2X/SR	Channel	81.28	a-d	56.1	1	5	104	1
7478XTS	USG	80.91	a-d	55.08	2	6	103	2
7458XT	USG	80.44	a-e	56.63	2	7	103	2
HS 48X70	HiSoy (Growmark)	80.34	a-e	55.93	1.3	8	103	1.3
S48XS78	Dyna-Gro	80.24	a-e	56.78	1.3	9	103	1.3
TS4889R2XS	T.A. Seeds	79.37	b-f	56.28	1.5	10	101	1.5
7496XTS	USG	78.53	b-f	57.85	1	11	100	1
MS 4846 RXT	MorSoy (Seedkoz)	78.4	b-g	56.75	1	12	100	1
HS 46X60	HiSoy (Growmark)	78.34	b-g	56.58	1.8	13	100	1.8
RPM 45R8	Doebler's	78.28	b-g	55.75	1.5	14	100	1.5
RPM 50X8	Doebler's	77.71	b-g	56.43	2.8	15	99	2.8
MS 4616 RXT	MorSoy (Seedkoz)	76.51	c-g	57.33	2.3	16	98	2.3
S45-K5X	NK Brand (Syngenta)	76.38	c-g	58.98	2.5	17	98	2.5
S52-Y7X	NK Brand (Syngenta)	75.91	d-g	57.18	1	18	97	1
7478BGT	USG	72.97	efg	55.33	1.8	19	93	1.8
4827	ProHarvest Seed	72.47	fg	56.85	1	20	93	1
4590 RY	CZ (Bayer)	70.92	gh	56.98	1	21	91	1
5375 RY	CZ (Bayar)	63.69	h	55.78	2.5	22	81	2.5

**LSD P=.05**

**7.586**

**CV**

**6.86**

Plant 6/7/2017

**Grand Mean**

**78.205**

Harvest 11/10/2017

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)

Selbyville, Full Season, Glyphosate Tolerant, Mid IV-V's

Variety	Company	Yield bu/a		T.W.	Trial Rank	Relative Yield	Height (in.)	Lodging
74K95RS	USG	84.43	a	52.2	1	113	43	1
S48XS78	Dyna-Gro	84.19	a	51.6	2	113	39	1
4827	ProHarvest Seed	83.28	ab	51.85	3	112	37	1.3
HS 48X70	HiSoy (Growmark)	81.31	abc	51.6	4	109	37	1
4517R2X/SR	Channel	79.19	a-d	53.13	5	106	35	1.3
7478XTS	USG	78.39	a-e	52.38	6	105	36	1
S46XS87	Dyna-Gro	77.12	a-f	52.82	7	104	38	1.3
MS 4846 RXT	MorSoy (Seedkoz)	76.54	a-g	51.8	8	103	31	1
RPM 48R8	Doebler's	75.11	a-g	52.18	9	101	33	1
HS 46X60	HiSoy (Growmark)	74.39	b-g	51.98	10	100	37	1
S52-Y7X	NK Brand (Syngenta)	73.8	b-g	51.7	11	99	34	1
4590 RY	CZ (Bayer)	73.52	c-g	52.5	12	99	34	1.3
RPM 45R8	Doebler's	71.5	d-g	52.58	13	96	31	1
MS 4616 RXT	MorSoy (Seedkoz)	71.36	d-g	51.8	14	96	35	1.8
7458XT	USG	70.99	d-g	52.1	15	95	32	1
S48XT56	Dyna-Gro	70.45	d-g	51.83	16	95	28	1
RPM 50X8	Doebler's	70.18	d-g	52.48	17	94	38	1.8
S45-K5X	NK Brand (Syngenta)	70.05	d-g	52.98	18	94	32	1
7496XTS	USG	69.06	efg	52.25	19	93	37	1
TS4889R2XS	T.A. Seeds	67.96	fg	52.58	20	91	34	1
7478BGT	USG	67.73	fg	51.82	21	91	31	1
5375 RY	CZ (Bayer)	67.31	g	49.35	22	90	37	2.5

LSD P=.05

9.66

CV

9.17

Plant 6/917

Grand Mean

74.45

Harvest 11/7/2017

\*Yield corrected to 13% moisture

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)



Georgetown, Full Season, Liberty Link, Mid Group IV-V's

Variety	Company	Yield bu/a		T.W.	Trial Rank	Relative Yield	Height (in.)	Maturity (Julian date)
SH 5215 LL	Southern Harvest	86.24	a	50.53	1	106	38	296
5150 LL	CZ (Bayer)	86.21	a	51.45	2	106	37	296
4791LL	ProHarvest Seed	84.72	ab	52.25	3	105	36	277
SH 4817 LL	Southern Harvest	82.27	ab	51.43	4	101	36	278
4748 LL	CZ (Bayer)	81.84	abc	51.88	5	101	36	278
4540 LL	CZ (Bayer)	80.2	bcd	50.95	6	99	40	286
4596LL	ProHarvest Seed	79.95	bcd	52.1	7	99	34	282
5242 LL	CZ (Bayer)	77.12	cd	50.33	8	95	38	295
4818 LL	CZ (Bayer)	76.58	d	49.85	9	94	39	289
5147 LL	CZ (Bayer)	75.57	d	51.98	10	93	36	293

LSD P=.05

5.135

CV

4.37

Grand Mean

81.07

Plant 5/17/2017

Harvest 11/4/2017

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)

**Georgetown, Full Season, Direct Comparison Liberty Link and Glyphosate Tolerant, Mid Group IV-V's**

<b>Company</b>	<b>Variety</b>	<b>Yield bu/a</b>		<b>T.W.</b>	<b>Trial Rank</b>	<b>Relative Yield</b>
USG	7478XTS	90.8	a	51.43	1	112
MorSoy (Seedkoz)	MS 4846 RXT	89.3	ab	50.77	2	111
HiSoy (Growmark)	HS 48X70	88.6	abc	52.03	3	110
Southern Harvest	SH 5215 LL	88.2	a-d	49.8	4	109
Doebler's	RPM 48R8	87.9	a-d	51.5	5	109
Dynagrow	S48XS78	86.9	a-e	51.43	6	108
USG	7496XTS	86.5	a-f	51.27	7	107
CZ (Bayer)	5150 LL	85.9	a-f	50.67	8	106
CZ (Bayer)	4590 RY	84.2	a-g	51.73	9	104
HiSoy (Growmark)	HS 46X60	83.4	a-h	52	10	103
NK Brand (Syngenta)	S45-K5X	83.3	a-h	51.6	11	103
Southern Harvest	SH 4817 LL	82.9	a-i	51.67	12	103
Dynagrow	S46XS87	82.4	a-i	51.57	13	102
MorSoy (Seedkoz)	MS 4616 RXT	82	a-j	52.03	14	102
Channel	4517R2X/SR	81.8	a-j	51.83	15	101
NK Brand (Syngenta)	S52-Y7X	81.7	a-j	51.9	16	101
USG	7458XT	81.5	a-j	51.43	17	101
Doebler's	RPM 50X8	80.5	b-k	51.97	18	100
T.A. Seeds	TS4889R2XS	79.6	b-k	51.97	19	99
ProHarvest Seed	4596LL	78.9	c-k	51.8	20	98
Dynagrow	S48XT56	78.5	d-k	50.3	21	97
USG	74K95RS	77.8	e-k	51.23	22	96
CZ (Bayer)	4748 LL	76.5	f-k	50.87	23	95
ProHarvest Seed	4827	75.9	g-k	51.3	24	94
CZ Bayer	5375 RY	75.7	g-k	48.93	25	94
Doebler's	RPM 45R8	74.6	g-k	52.13	26	92
USG	7478BGT	74.4	g-k	51.93	27	92
ProHarvest Seed	4791LL	74.3	g-k	51.33	28	92

CZ (Bayer)	5147 LL	73.7	h-k	50.73	29	91
CZ (Bayer)	4540 LL	73	ijk	50.37	30	90
CZ (Bayer)	5242 LL	72.2	jk	50.1	31	89
CZ (Bayer)	4818 LL	70.6	k	50.87	32	87

**LSD P=.05** **10.04**

**CV** **7.62**

**Grand Mean** **80.73**

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)

Planted 5/17/17

Harvest 11/4/17

Summary. Full Season, Glyphosate Tolerant, Mid Group IV-V's. All Trials. (sorted x company)

Variety	Company	Yield		T.W.	Trial Rank	Relative Yield	Avg. Trial Yield	
4827	ProHarvest Seed	82.78	b-f	50.7	12	100	83.11	Georgetown
4827	ProHarvest Seed	72.47	fg	56.85	20	93	78.21	Kent
4827	ProHarvest Seed	83.28	ab	51.85	3	112	74.45	Selbyville
4827	ProHarvest Seed	75.9	g-k	51.3	24	94	80.73	GT Direct Comparison
4517R2X/SR	Channel	83.44	b-f	52.1	11	100	83.11	Georgetown
4517R2X/SR	Channel	81.28	a-d	56.1	5	104	78.21	Kent
4517R2X/SR	Channel	79.19	a-d	53.13	5	106	74.45	Selbyville
4517R2X/SR	Channel	81.8	a-j	51.83	15	101	80.73	GT Direct Comparison
4590 RY	CZ (Bayer)	79.45	e-h	51.8	18	96	83.11	Georgetown
4590 RY	CZ (Bayer)	70.92	gh	56.98	21	91	78.21	Kent
4590 RY	CZ (Bayer)	73.52	c-g	52.5	12	99	74.45	Selbyville
4590 RY	CZ (Bayer)	84.2	a-g	51.73	9	104	80.73	GT Direct Comparison
5375 RY	CZ (Bayer)	74.06	h	48.03	22	89	83.11	Georgetown
5375 RY	CZ (Bayer)	63.69	h	55.78	22	81	78.21	Kent
5375 RY	CZ (Bayer)	67.31	g	49.35	22	90	74.45	Selbyville
5375 RY	CZ Bayer	75.7	g-k	48.93	25	94	80.73	GT Direct Comparison
7458XT	USG	79.93	d-h	51.63	17	96	83.11	Georgetown
7458XT	USG	80.44	a-e	56.63	7	103	78.21	Kent
7458XT	USG	70.99	d-g	52.1	15	95	74.45	Selbyville
7458XT	USG	81.5	a-j	51.43	17	101	80.73	GT Direct Comparison
7478BGT	USG	77.66	fgh	51.38	20	93	83.11	Georgetown
7478BGT	USG	72.97	efg	55.33	19	93	78.21	Kent
7478BGT	USG	67.73	fg	51.82	21	91	74.45	Selbyville
7478BGT	USG	74.4	g-k	51.93	27	92	80.73	GT Direct Comparison
7478XTS	USG	85.18	a-e	52.03	10	102	83.11	Georgetown
7478XTS	USG	80.91	a-d	55.08	6	103	78.21	Kent
7478XTS	USG	78.39	a-e	52.38	6	105	74.45	Selbyville
7478XTS	USG	90.8	a	51.43	1	112	80.73	GT Direct Comparison

7496XTS	USG	86.22	a-d	50.73	7	104	83.11	Georgetown
7496XTS	USG	78.53	b-f	57.85	11	100	78.21	Kent
7496XTS	USG	69.06	efg	52.25	19	93	74.45	Selbyville
7496XTS	USG	86.5	a-f	51.27	7	107	80.73	GT Direct Comparison
74K95RS	USG	86.74	abc	51.45	6	104	83.11	Georgetown
74K95RS	USG	81.9	a-d	56.23	4	105	78.21	Kent
74K95RS	USG	84.43	a	52.2	1	113	74.45	Selbyville
74K95RS	USG	77.8	e-k	51.23	22	96	80.73	GT Direct Comparison
HS 46X60	HiSoy (Growmark)	86.79	abc	52.3	5	104	83.11	Georgetown
HS 46X60	HiSoy (Growmark)	78.34	b-g	56.58	13	100	78.21	Kent
HS 46X60	HiSoy (Growmark)	74.39	b-g	51.98	10	100	74.45	Selbyville
HS 46X60	HiSoy (Growmark)	83.4	a-h	52	10	103	80.73	GT Direct Comparison
HS 48X70	HiSoy (Growmark)	86.14	a-d	51.2	8	104	83.11	Georgetown
HS 48X70	HiSoy (Growmark)	80.34	a-e	55.93	8	103	78.21	Kent
HS 48X70	HiSoy (Growmark)	81.31	abc	51.6	4	109	74.45	Selbyville
HS 48X70	HiSoy (Growmark)	88.6	abc	52.03	3	110	80.73	GT Direct Comparison
MS 4616 RXT	MorSoy (Seedkoz)	81.44	c-g	51.38	15	98	83.11	Georgetown
MS 4616 RXT	MorSoy (Seedkoz)	76.51	c-g	57.33	16	98	78.21	Kent
MS 4616 RXT	MorSoy (Seedkoz)	71.36	d-g	51.8	14	96	74.45	Selbyville
MS 4616 RXT	MorSoy (Seedkoz)	82	a-j	52.03	14	102	80.73	GT Direct Comparison
MS 4846 RXT	MorSoy (Seedkoz)	87.05	abc	50.55	4	105	83.11	Georgetown
MS 4846 RXT	MorSoy (Seedkoz)	78.4	b-g	56.75	12	100	78.21	Kent
MS 4846 RXT	MorSoy (Seedkoz)	76.54	a-g	51.8	8	103	74.45	Selbyville
MS 4846 RXT	MorSoy (Seedkoz)	89.3	ab	50.77	2	111	80.73	GT Direct Comparison
RPM 45R8	Doebler's	81.29	c-g	51.28	16	98	83.11	Georgetown
RPM 45R8	Doebler's	78.28	b-g	55.75	14	100	78.21	Kent
RPM 45R8	Doebler's	71.5	d-g	52.58	13	96	74.45	Selbyville
RPM 45R8	Doebler's	74.6	g-k	52.13	26	92	80.73	GT Direct Comparison
RPM 48R8	Doebler's	87.81	ab	50.68	2	106	83.11	Georgetown
RPM 48R8	Doebler's	87.46	a	56.63	1	112	78.21	Kent
RPM 48R8	Doebler's	75.11	a-g	52.18	9	101	74.45	Selbyville
RPM 48R8	Doebler's	87.9	a-d	51.5	5	109	80.73	GT Direct Comparison
RPM 50X8	Doebler's	90.25	a	51.83	1	109	83.11	Georgetown
RPM 50X8	Doebler's	77.71	b-g	56.43	15	99	78.21	Kent

RPM 50X8	Doebler's	70.18	d-g	52.48	17	94	74.45	Selbyville	
RPM 50X8	Doebler's	80.5	b-k	51.97	18	100	80.73	GT Direct Comparison	
S45-K5X	NK Brand (Syngenta)	79.37	e-h	51.15	19	95	83.11	Georgetown	
S45-K5X	NK Brand (Syngenta)	76.38	c-g	58.98	17	98	78.21	Kent	
S45-K5X	NK Brand (Syngenta)	70.05	d-g	52.98	18	94	74.45	Selbyville	
S45-K5X	NK Brand (Syngenta)	83.3	a-h	51.6	11	103	80.73	GT Direct Comparison	
S46XS87	Dyna-Gro	82.54	b-f	51.03	13	99	83.11	Georgetown	
S46XS87	Dyna-Gro	83.74	abc	57.45	3	107	78.21	Kent	
S46XS87	Dyna-Gro	77.12	a-f	52.82	7	104	74.45	Selbyville	
S46XS87	Dynagrow	82.4	a-i	51.57	13	102	80.73	GT Direct Comparison	
S48XS78	Dyna-Gro	85.19	a-e	51.73	9	103	83.11	Georgetown	
S48XS78	Dyna-Gro	80.24	a-e	56.78	9	103	78.21	Kent	
S48XS78	Dyna-Gro	84.19	a	51.6	2	113	74.45	Selbyville	
S48XS78	Dynagrow	86.9	a-e	51.43	6	108	80.73	GT Direct Comparison	
S48XT56	Dyna-Gro	81.87	b-g	50.3	14	99	83.11	Georgetown	
S48XT56	Dyna-Gro	84.74	ab	57.08	2	108	78.21	Kent	
S48XT56	Dyna-Gro	70.45	d-g	51.83	16	95	74.45	Selbyville	
S48XT56	Dynagrow	78.5	d-k	50.3	21	97	80.73	GT Direct Comparison	
S52-Y7X	NK Brand (Syngenta)	76.12	gh	51.93	21	92	83.11	Georgetown	
S52-Y7X	NK Brand (Syngenta)	75.91	d-g	57.18	18	97	78.21	Kent	
S52-Y7X	NK Brand (Syngenta)	73.8	b-g	51.7	11	99	74.45	Selbyville	
S52-Y7X	NK Brand (Syngenta)	81.7	a-j	51.9	16	101	80.73	GT Direct Comparison	
TS4889R2XS	T.A. Seeds	87.39	abc	51.83	3	105	83.11	Georgetown	
TS4889R2XS	T.A. Seeds	79.37	b-f	56.28	10	101	78.21	Kent	
TS4889R2XS	T.A. Seeds	67.96	fg	52.58	20	91	74.45	Selbyville	
TS4889R2XS	T.A. Seeds	79.6	b-k	51.97	19	99	80.73	GT Direct Comparison	