



UNIVERSITY OF
DELAWARE®

Delaware Soybean Variety Trials 2024

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Acknowledgments

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Methodology

All trials were conducted in a randomized, complete block design with four total replications. The final plot length of all trials was 17 ft. More experimental details such as population, plot width, planting/harvest dates, and tillage or cultural practices can be found in the following table. Temperature and rainfall information for the growing season can be accessed at the nearest test locations from DEOS <http://www.deos.udel.edu/>

C.V. and L.S.D.

The coefficient of variation (C.V.) is a measurement of the amount of uncontrollable variability due to differences in the soil, weather, fertility, etc. The acceptable CV level is dependent on the field of the research. Medicine and pharmaceutical research have stricter CV ranges than research in agricultural sciences due to more control over outside variables. The American Association for Clinical Chemistry in *Clinical Chemistry, Volume 35, Issue 4* defines for agricultural studies that CV<10 is very good, 10-20 is good, 20-30 is acceptable. Please note that the C.V. is expected to be higher at dryland locations.

The least significant difference (L.S.D.; computed at a 5% level of probability) is a tool to determine if two average values are significantly different. The difference between two varieties must exceed the L.S.D. value to be considered significantly different from one another.

HOW TO BEST USE SOYBEAN VARIETY TRIAL INFORMATION

Information presented in this summary may be useful in selecting soybean varieties for production in Delaware. To maximize the usefulness of this information, follow these suggestions:

1. Select the test location that best represents your production location. Generally, varieties are adaptable across Delaware but certain soil or climatic conditions, cultural practices, or insect/disease problems may limit the choice.
2. Multiple-year average (means) across the greatest number of years are the best predictors of performance. Refer to previous test reports for information to evaluate soybean varieties which are of interest to you. Comparison between your selected variety and the grand mean for your closest test location will be helpful in identifying superior varieties for your area.
3. Check the grand mean for the long-term averages and compare with your own production experience. If your yields have been consistently below these grand mean levels, you should evaluate each part of your management system for potential areas of improvement.

2024 Delaware Soybean Variety Trial Entries

Brand	Variety	Traits	Seed Treatment	Maturity
AgVenture	AV47B2BE	Enlist E3	LumiGen/Ilevo	4.7
AgVenture	AV39B2E	Enlist E3	LumiGen/Ilevo	3.9
AgVenture	AV44B2E	Enlist E3	LumiGen/Ilevo	4.4
AgVenture	AV43B2BE	Enlist E3	LumiGen/Ilevo	4.3
AgVenture	AV38B2E	Enlist E3	LumiGen/Ilevo	3.8
AgVenture	AV45B2E	Enlist E3	LumiGen/Ilevo	4.5
AgVenture	AV48B2E	Enlist E3	LumiGen/Ilevo	4.8
Apex	AE3850	Enlist E3	Radius Premium	3.8
Apex	AE4341S	Enlist E3/STS	Radius Premium	4.3
Apex	AE4640S	Enlist E3/STS	Radius Premium	4.6
Benson Hill	C38HO52S	High Protein	untreated	3.8
Benson Hill	BH43Q207	High Protein	untreated	4.3
Benson Hill	C44HO54S	High Protein	untreated	4.4
Benson Hill	N35D950S	High Protein	untreated	3.5
Benson Hill	N44D923S	High Protein	untreated	4.4
Benson Hill	BX38C615	High Protein	untreated	3.8
Benson Hill	BH37Q218	High Protein	untreated	3.7
Catalyst	CT4413E3S	Enlist E3/STS	Radius Premium	4.4
Dyna-Gro	S40EN54	Enlist E3	PLTM	4
Dyna-Gro	S49XF43S	XtendFlex/STS	PLTM	4.9
Dyna-Gro	S45EN25	Enlist E3	PLTM	4.5
Dyna-Gro	S38EN75	Enlist E3	PLTM	3.8
FS HiSoy	HS 50E40	E3, LL, RR2Y E3,	untreated	5
FS HiSoy	HS 48E40	LL, RR2Y, STS E3,	untreated	4.8
FS HiSoy	HS 41E20	LL, RR2Y E3, LL,	untreated	4.1
FS HiSoy	HS 43E30	RR2Y, STS	untreated	4.3

FS HiSoy	HS 45E32	E3, LL, RR2Y, STS	untreated	4.5
FS HiSoy	HS 47E32	E3, LL, RR2Y, STS	untreated	4.7
Innvictus Seed	B4574E	Enlist E3	Revize PBI/Duvet ST	4.5
Innvictus Seed	B4553E	Enlist E3	Revize PBI/Duvet ST	4.5
Innvictus Seed	A6314XF	XtendFlex	Revize PBI/Duvet ST	6.3
Innvictus Seed	A5813XF	XtendFlex	Revize PBI/Duvet ST	5.8
Innvictus Seed	A5994XF	XtendFlex	Revize PBI/Duvet ST	5.9
Innvictus Seed	B3934E	Enlist E3	Revize PBI/Duvet ST	3.9
Innvictus Seed	B4904E	Enlist E3	Revize PBI/Duvet ST	4.9
Innvictus Seed	A5284XF	XtendFlex	Revize PBI/Duvet ST	5.2
Mid-Atlantic Seed	MAS4215E3	Enlist E3	MAS Proshield	4.2
Mid-Atlantic Seed	MAS3923E3/STS	Enlist E3/STS	MAS Proshield	3.9
Mid-Atlantic Seed	MAS4045E3	Enlist E3	MAS Proshield	4
Mid-Atlantic Seed	MAS4320E3/STS	Enlist E3/STS	MAS Proshield	4.3
Mid-Atlantic Seed	MAS4675E3/STS	Enlist E3/STS	MAS Proshield	4.6
Mid-Atlantic Seed	MAS4021E3	Enlist E3	MAS Proshield	4
Mid-Atlantic Seed	MAS4423E3	Enlist E3	MAS Proshield	4.4
Mid-Atlantic Seed	MAS4723E3	Enlist E3	MAS Proshield	4.7
Mid-Atlantic Seed	MAS4623E3/STS	Enlist E3/STS	MAS Proshield	4.6
Mid-Atlantic Seed	MAS3525E3	Enlist E3	MAS Proshield	3.5
Mid-Atlantic Seed	MAS3723STS	STS	MAS Proshield	3.7
Mid-Atlantic Seed	MAS4823E3/STS	Enlist E3/STS	MAS Proshield	4.8
NK Brand	NK44-Q5E3S	Enlist E3/STS	CruiserMaxx APX/Saltro	4.4
NK Brand	NK47-G5E3S	Enlist E3/STS	CruiserMaxx APX/Saltro	4.7
NK Brand	NK42-A6E3S	Enlist E3/STS	CruiserMaxx APX/Saltro	4.2
Perdue	P48MO21	non-gmo, high oleic	untreated	4.8
Perdue	P41MO21	non-gmo, high oleic	untreated	4.1
Revere	39-F94	XtendFlex	Radius Premium	3.9

Revere	44-F44	XtendFlex	Radius Premium	4.4
Revere	46-F57	XtendFlex	Radius Premium	4.6
Seed Consultants	SC7485E	Enlist E3	LumiGen/Ilevo	4.8
Seed Consultants	SC7465E	Enlist E3	LumiGen/Ilevo	4.6
Seed Consultants	SC7444E	Enlist E3	LumiGen/Ilevo	4.4
USG	7415ET	Enlist E3	Ipconazole/Carboxin Metalaxyl Imidicloprid	4.1
USG	7495XFS	XtendFlex/STS	Ipconazole/Carboxin Metalaxyl Imidicloprid	4.9
USG	7435ET	Enlist E3	Ipconazole/Carboxin Metalaxyl Imidicloprid	4.3
USG	7483XFS	XtendFlex/STS	Ipconazole/Carboxin Metalaxyl Imidicloprid	4.8
USG	7434XF	XtendFlex	Ipconazole/Carboxin Metalaxyl Imidicloprid	4.3
USG	7494ETS	Enlist E3/STS	Ipconazole/Carboxin Metalaxyl Imidicloprid	4.9
USG	7485ETS	Enlist E3/STS	Ipconazole/Carboxin Metalaxyl Imidicloprid	4.8
USG	7474XFS	XtendFlex/STS	Ipconazole/Carboxin Metalaxyl Imidicloprid	4.7
USG	7424ETS	Enlist E3/STS	Ipconazole/Carboxin Metalaxyl Imidicloprid	4.2
Xitavo	XO 4405E	Enlist E3	Poncho Votivo, Ilevo, Obvius Plus, Relenya	4.4
Xitavo	XO 4364E	Enlist E3/STS	Poncho Votivo, Ilevo, Obvius Plus, Relenya	4.3
Xitavo	XO 4255E	Enlist E3/STS	Poncho Votivo, Ilevo, Obvius Plus, Relenya	4.2
Xitavo	XO 4522E	Enlist E3	Poncho Votivo, Ilevo, Obvius Plus, Relenya	4.5
Xitavo	XO 4132E	Enlist E3	Poncho Votivo, Ilevo, Obvius Plus, Relenya	4.1

	Carvel Rec - Georgetown	Emerson Farms - Middletown
Number of Entries	73	73
Target Population	150,000 seeds/acre	150,000 seeds/acre
Plot Length	17 ft	17 ft
Plot Width	7.5 ft (3 rows harvested)	7.5 ft (3 rows harvested)
Spacing	4 rows, 30 inch	4 rows, 30 inch
Planter	SRES Monosem Air Planter	SRES Monosem Air Planter
Harvester	Almaco R1 combine	Almaco R1 combine
Grain Analysis	Harvest Master H2 Classic	Harvest Master H2 Classic
Number of Replications	4	4
Planting Date	5/21/2024	5/30/2024
Harvest Date	10/23/2024	10/25/2024
Soil Type	Pepperbox/Rosedale Loamy sand	Reybold- Queponco complex- Silt Loam
Previous Crop	corn	corn
Tillage Practices	ripped, turbo tilled	chisel plowed, disc
Fertilization	300lb/acre of 0-0-60 before planting, (180lb/acre of potash) 3 tons/acre of Chicken Manure	3 tons/acre of Chicken Manure
Herbicide	(Canopy 5oz/acre, Broadaxe 1qt/acre, Dual 1.5pt/acre) on 5/21 (Reflex 1.5pt/acre, Anthem Maxx 3.25oz/acre, Clethodim 1pt/acre) on 6/24	(Round-up 1qt/acre, Liberty 1qt/acre, Canopy 5oz/acre, Broadaxe 1qt/acre, Dual 1.5 pt/acre) on 5/30 (Reflex 1.5pt/acre, Anthem Maxx 3.25oz/acre, Clethodim 1pt/acre) on 7/4
Insecticide/Fungicide	Warrior 2oz/acre 6/24	Warrior 2oz/acre on 7/4
Irrigation	Linear Irrigation	Dryland (none)

	Murray Brothers Farm - Dagsboro	Davis Farms - Kent
Number of Entries	73	73
Target Population	150,000 seeds/acre	150,000 seeds/acre
Plot Length	17 ft	17 ft
Plot Width	7.5 ft (3 rows harvested)	7.5 ft (3 rows harvested)
Spacing	4 rows, 30 inch	4 rows, 30 inch
Planter	SRES Monosem Air Planter	SRES Monosem Air Planter
Harvester	Almaco R1 combine	Almaco R1 combine
Grain Analysis	Harvest Master H2 Classic	Harvest Master H2 Classic
Number of Replications	4	4
Planting Date	6/3/2024	5/31/2024
Harvest Date	10/30/2024	10/29/2024
Soil Type	Mullica-Berryland Complex	Pineyneck Loam
Previous Crop	corn	corn
Tillage Practices	Disc	ripped/turbo tilled
Fertilization	n/a	n/a
Herbicide	(Canopy 5oz/acre, BroadAxe 1qt/acre, Dual 1.5pt/acre) on 6/3 (Reflex 1.5pt/acre, Anthem Maxx 3.25oz/acre, Clethodim 1pt/acre) on 7/8	(Canopy 5oz/acre, BroadAxe 1qt/acre, Dual 1.5pt/acre) on 5/31 (Reflex 1.5pt/acre, Anthem Maxx 3.25oz/acre, Clethodim 1pt/acre) on 7/8
Insecticide/Fungicide	Warrior 2oz/acre on 7/8	Warrior 2oz/acre on 7/8
Irrigation	Dryland (none)	Center Pivot

2024 Georgetown Full Season Soybean Variety Trial

<u>Brand</u>	<u>Rank</u>	<u>Variety</u>	<u>Yield (Bu)</u>	<u>Moisture</u>	<u>Test Weight</u>	<u>Gross Income/Acre*</u>
NK Brand	1	NK44-Q5E3S	94.3	10.5	55.1	\$910.00
Apex	2	AE4640S	93.6	10.1	55.6	\$903.24
AgVenture	3	AV48B2E	93.1	10.2	54.9	\$898.42
Seed Consultants	4	SC7444E	91.0	10.2	55.4	\$878.15
Dyna-Gro	5	S45EN25	90.9	11.0	55.3	\$877.19
Mid-Atlantic Seed	6	MAS4215E3	90.9	10.0	54.1	\$877.19
AgVenture	7	AV44B2E	90.8	10.7	55.8	\$876.22
NK Brand	8	NK42-A6E3S	89.9	10.4	54.9	\$867.54
Innictus Seed	9	B4553E	88.6	11.2	53.2	\$854.99
Innictus Seed	10	B4904E	88.5	10.7	54.4	\$854.03
Seed Consultants	11	SC7465E	88.2	10.2	55.8	\$851.13
AgVenture	12	AV45B2E	88.0	10.2	55.3	\$849.20
NK Brand	13	NK47-G5E3S	87.9	9.7	54.9	\$848.24
AgVenture	14	AV43B2BE	87.7	11.0	54.8	\$846.31
FS HiSoy	15	HS 47E32	86.7	11.5	55.1	\$836.66
Xitavo	16	XO 4405E	86.7	11.3	54.5	\$836.66
AgVenture	17	AV47B2BE	86.7	10.8	54.6	\$836.66
AgVenture	18	AV39B2E	86.3	11.1	53.4	\$832.80
Apex	19	AE3850	85.8	11.4	54.5	\$827.97
FS HiSoy	20	HS 41E20	85.3	10.6	54.2	\$823.15
Innictus Seed	21	B3934E	85.2	10.4	55.1	\$822.18
Mid-Atlantic Seed	22	MAS4423E3	84.5	11.4	54.8	\$815.43
Revere	23	44-F44	84.4	10.4	54.8	\$814.46
FS HiSoy	24	HS 50E40	84.2	10.8	54.7	\$812.53
Dyna-Gro	25	S38EN75	84.0	11.2	53.8	\$810.60
Catalyst	26	CT4413E3S	83.9	10.6	53.9	\$809.64

FS HiSoy	27	HS 48E40	83.8	10.6	55.8	\$808.67
Mid-Atlantic Seed	28	MAS4045E3	83.8	9.6	54.7	\$808.67
USG	29	7495XFS	83.7	10.3	54.8	\$807.71
USG	30	7485ETS	83.3	9.7	53.9	\$803.85
Innvictus Seed	31	A5284XF	83.2	11.4	54.2	\$802.88
Dyna-Gro	32	S49XF43S	82.9	10.8	54.7	\$799.99
Mid-Atlantic Seed	33	MAS3723STS	82.9	10.8	55.4	\$799.99
FS HiSoy	34	HS 43E30	82.7	11.4	54.7	\$798.06
Mid-Atlantic Seed	35	MAS4823E3/STS	82.7	11.1	53.9	\$798.06
AgVenture	36	AV38B2E	82.3	12.0	53.7	\$794.20
USG	37	7424ETS	82.2	10.6	55.6	\$793.23
Xitavo	38	XO 4255E	82.1	10.6	55.5	\$792.27
Mid-Atlantic Seed	39	MAS4021E3	82.0	11.4	54.4	\$791.30
Mid-Atlantic Seed	40	MAS4723E3	81.9	10.5	54.5	\$790.34
USG	41	7435ET	81.8	9.4	55.9	\$789.37
Xitavo	42	XO 4132E	81.3	11.5	54.1	\$784.55
Benson Hill	43	BH37Q218	80.7	11.0	55.8	\$778.76
Revere	44	39-F94	80.7	10.1	55.3	\$778.76
Seed Consultants	45	SC7485E	80.6	11.1	54.5	\$777.79
FS HiSoy	46	HS 45E32	80.5	10.9	54.0	\$776.83
Benson Hill	47	N44D923S	80.2	11.3	55.2	\$773.93
USG	48	7415ET	80.1	10.8	55.1	\$772.97
Apex	49	AE4341S	80.0	11.4	54.9	\$772.00
USG	50	7434XF	79.5	9.8	55.1	\$767.18
Revere	51	46-F57	79.2	10.6	54.2	\$764.28
Innvictus Seed	52	A5813XF	78.6	16.6	53.6	\$758.49
Perdue	53	P41MO21	78.5	12.0	52.9	\$757.53
Innvictus Seed	54	A5994XF	78.3	17.6	54.0	\$755.60

Mid-Atlantic Seed	55	MAS3923E3/STS	78.3	11.2	54.0	\$755.60
Xitavo	56	XO 4364E	78.2	9.8	56.7	\$754.63
Innvictus Seed	57	A6314XF	78.2	18.6	53.9	\$754.63
USG	58	7494ETS	77.9	10.3	55.8	\$751.74
USG	59	7474XFS	77.1	10.9	53.8	\$744.02
Xitavo	60	XO 4522E	76.7	9.9	55.4	\$740.16
Dyna-Gro	61	S40EN54	76.0	10.3	54.7	\$733.40
USG	62	7483XFS	75.7	9.3	56.2	\$730.51
Perdue	63	P48MO21	75.1	10.7	55.1	\$724.72
Benson Hill	64	C38HO52S	74.3	10.2	54.0	\$717.00
Mid-Atlantic Seed	65	MAS4320E3/STS	73.9	10.4	56.1	\$713.14
Mid-Atlantic Seed	66	MAS4675E3/STS	72.8	10.5	54.9	\$702.52
Benson Hill	67	C44HO54S	72.3	11.8	53.5	\$697.70
Benson Hill	68	BX38C615	72.1	11.9	55.0	\$695.77
Mid-Atlantic Seed	69	MAS4623E3/STS	71.0	11.0	54.1	\$685.15
Benson Hill	70	N35D950S	70.1	11.2	55.1	\$676.47
Mid-Atlantic Seed	71	MAS3525E3	67.6	9.7	54.2	\$652.34
Innvictus Seed	72	B4574E	65.2	10.7	55.5	\$629.18
Benson Hill	73	BH43Q207	62.9	10.6	55.8	\$606.99

Bolded varieties do not statistically differ from top yielding variety

LSD P=.05

10.8

All yield data adjusted to 13.5% moisture

CV

8.49

Mean

81.7 (bu)

*Gross Income/acre is based off of commodity pricing for dry grain and does not factor in moisture/drying doc

Local Soybean Commodity Pricing as of report - \$9.65 (bu)

2024 Dagsboro Full Season Soybean Variety Trial

<u>Brand</u>	<u>Rank</u>	<u>Variety</u>	<u>Yield (Bu)</u>	<u>Moisture</u>	<u>Test Weight</u>	<u>Gross Income/Acre*</u>
Revere	1	39-F94	87.4	12.8	55.2	\$843.41
AgVenture	2	AV38B2E	87.0	11.3	55.3	\$839.55
Dyna-Gro	3	S40EN54	86.6	11.2	55.5	\$835.69
Dyna-Gro	4	S38EN75	86.1	12.1	55.3	\$830.87
Xitavo	5	XO 4255E	85.2	12.5	56.0	\$822.18
AgVenture	6	AV39B2E	85.2	11.3	54.8	\$822.18
Mid-Atlantic Seed	7	MAS4423E3	85.0	11.9	55.8	\$820.25
Mid-Atlantic Seed	8	MAS4045E3	84.2	12.1	55.8	\$812.53
NK Brand	9	NK42-A6E3S	84.0	12.6	55.5	\$810.60
USG	10	7435ET	83.5	11.8	55.8	\$805.78
Apex	11	AE3850	83.3	12.5	55.8	\$803.85
USG	12	7424ETS	83.2	12.0	56.4	\$802.88
AgVenture	13	AV47B2BE	83.2	11.9	56.2	\$802.88
Dyna-Gro	14	S49XF43S	83.0	12.1	55.6	\$800.95
NK Brand	15	NK44-Q5E3S	82.9	11.2	55.7	\$799.99
Seed Consultants	16	SC7465E	82.6	11.5	55.9	\$797.09
Xitavo	17	XO 4522E	82.6	12.2	55.1	\$797.09
Apex	18	AE4341S	82.5	12.4	56.5	\$796.13
Seed Consultants	19	SC7444E	82.3	12.1	56.1	\$794.20
Xitavo	20	XO 4364E	82.2	11.3	56.0	\$793.23
Mid-Atlantic Seed	21	MAS3723STS	82.1	12.2	56.2	\$792.27
Catalyst	22	CT4413E3S	81.7	12.0	55.7	\$788.41
Mid-Atlantic Seed	23	MAS4215E3	81.7	12.0	56.3	\$788.41
AgVenture	24	AV43B2BE	81.3	11.8	56.1	\$784.55
USG	25	7434XF	81.1	12.5	56.5	\$782.62
FS HiSoy	26	HS 50E40	81.0	11.5	55.7	\$781.65

Mid-Atlantic Seed	27	MAS4723E3	81.0	12.1	55.6	\$781.65
AgVenture	28	AV48B2E	80.7	11.7	56.3	\$778.76
Revere	29	44-F44	80.3	11.4	55.8	\$774.90
Apex	30	AE4640S	80.2	12.1	56.1	\$773.93
AgVenture	31	AV45B2E	80.2	11.4	56.1	\$773.93
Xitavo	32	XO 4132E	80.0	12.0	55.4	\$772.00
FS HiSoy	33	HS 47E32	79.9	11.9	55.9	\$771.04
USG	34	7415ET	79.9	11.4	55.5	\$771.04
Dyna-Gro	35	S45EN25	79.4	11.9	56.3	\$766.21
Innvictus Seed	36	B4904E	78.3	11.7	55.7	\$755.60
FS HiSoy	37	HS 43E30	78.0	12.6	56.8	\$752.70
Benson Hill	38	BX38C615	77.7	11.6	55.0	\$749.81
FS HiSoy	39	HS 41E20	77.6	11.7	55.5	\$748.84
Xitavo	40	XO 4405E	77.1	12.1	56.1	\$744.02
USG	41	7483XFS	77.0	11.0	55.9	\$743.05
AgVenture	42	AV44B2E	77.0	11.4	55.5	\$743.05
Seed Consultants	43	SC7485E	76.6	10.9	55.5	\$739.19
Innvictus Seed	44	B3934E	76.6	12.7	55.9	\$739.19
Benson Hill	45	BH37Q218	76.4	11.0	55.7	\$737.26
USG	46	7494ETS	76.4	12.4	56.1	\$737.26
Mid-Atlantic Seed	47	MAS3923E3/STS	76.0	12.5	55.7	\$733.40
Mid-Atlantic Seed	48	MAS4021E3	75.3	12.8	56.0	\$726.65
NK Brand	49	NK47-G5E3S	75.1	11.9	55.5	\$724.72
Mid-Atlantic Seed	50	MAS4675E3/STS	74.4	12.2	55.5	\$717.96
FS HiSoy	51	HS 48E40	74.3	12.7	56.9	\$717.00
Mid-Atlantic Seed	52	MAS4623E3/STS	74.3	11.8	55.5	\$717.00
Benson Hill	53	N35D950S	73.8	12.6	59.3	\$712.17
Mid-Atlantic Seed	54	MAS4320E3/STS	73.1	11.9	58.6	\$705.42

USG	55	7485ETS	72.9	11.9	56.0	\$703.49
Perdue	56	P41MO21	72.7	12.4	54.6	\$701.56
Mid-Atlantic Seed	57	MAS4823E3/STS	72.7	11.7	55.7	\$701.56
Innvictus Seed	58	B4553E	72.6	12.2	55.6	\$700.59
USG	59	7495XFS	72.2	11.2	56.3	\$696.73
Benson Hill	60	C44HO54S	71.8	12.8	55.9	\$692.87
Benson Hill	61	C38HO52S	71.6	11.9	55.9	\$690.94
USG	62	7474XFS	71.6	12.0	55.7	\$690.94
Innvictus Seed	63	B4574E	71.5	11.6	56.3	\$689.98
Mid-Atlantic Seed	64	MAS3525E3	70.3	12.0	55.3	\$678.40
Innvictus Seed	65	A5284XF	70.2	11.5	56.0	\$677.43
Benson Hill	66	N44D923S	70.1	12.2	55.6	\$676.47
Benson Hill	67	BH43Q207	68.1	12.9	56.2	\$657.17
FS HiSoy	68	HS 45E32	67.5	12.3	55.1	\$651.38
Revere	69	46-F57	66.1	11.7	56.2	\$637.87
Perdue	70	P48MO21	64.5	11.3	55.3	\$622.43
Innvictus Seed	71	A5813XF	63.8	12.7	57.4	\$615.67
Innvictus Seed	72	A6314XF	58.0	12.2	57.7	\$559.70
Innvictus Seed	73	A5994XF	55.3	12.6	55.7	\$533.65

Bolded varieties do not statistically differ from top yielding variety

LSD P=.05

8.45

All yield data adjusted to 13.5% moisture

CV

7.85

Mean

77.3 (bu)

*Gross Income/acre is based off of commodity pricing for dry grain and does not factor in moisture/drying doc

Local Soybean Commodity Pricing as of report - \$9.65 (bu)

2024 Middletown Full Season Soybean Variety Trial

<u>Brand</u>	<u>Rank</u>	<u>Variety</u>	<u>Yield (Bu)</u>	<u>Moisture</u>	<u>Test Weight</u>	<u>Gross Income/Acre*</u>
Revere	1	39-F94	58.2	8.2	56.6	\$561.63
AgVenture	2	AV39B2E	53.0	7.9	56.6	\$511.45
Xitavo	3	XO 4364E	51.5	8.4	58.0	\$496.98
Mid-Atlantic Seed	4	MAS3723STS	51.4	8.1	57.2	\$496.01
Apex	5	AE3850	50.8	8.6	56.8	\$490.22
USG	6	7415ET	50.4	8.4	57.7	\$486.36
AgVenture	7	AV44B2E	50.2	8.1	57.3	\$484.43
Xitavo	8	XO 4522E	49.8	8.4	57.0	\$480.57
USG	9	7483XFS	49.6	8.1	57.4	\$478.64
FS HiSoy	10	HS 41E20	49.2	8.3	57.1	\$474.78
Dyna-Gro	11	S38EN75	48.9	8.2	56.7	\$471.89
Benson Hill	12	N35D950S	48.2	8.7	57.0	\$465.13
USG	13	7474XFS	48.2	8.5	57.3	\$465.13
Mid-Atlantic Seed	14	MAS3923E3/STS	48.2	8.2	57.0	\$465.13
USG	15	7495XFS	47.9	8.5	57.6	\$462.24
NK Brand	16	NK44-Q5E3S	47.7	8.4	57.5	\$460.31
Seed Consultants	17	SC7485E	47.6	8.1	57.4	\$459.34
Benson Hill	18	BH37Q218	47.5	8.9	57.6	\$458.38
Mid-Atlantic Seed	19	MAS3525E3	47.5	7.9	56.1	\$458.38
Seed Consultants	20	SC7444E	47.4	8.4	57.7	\$457.41
Catalyst	21	CT4413E3S	47.3	8.3	57.8	\$456.45
FS HiSoy	22	HS 47E32	46.8	8.5	58.2	\$451.62
Dyna-Gro	23	S45EN25	46.7	8.2	57.8	\$450.66
USG	24	7434XF	46.7	8.2	58.1	\$450.66
Innvictus Seed	25	B4904E	45.7	8.3	56.9	\$441.01
FS HiSoy	26	HS 43E30	45.3	8.3	58.8	\$437.15

Xitavo	27	XO 4132E	45.3	8.6	56.8	\$437.15
Mid-Atlantic Seed	28	MAS4320E3/STS	45.2	8.8	57.2	\$436.18
FS HiSoy	29	HS 45E32	44.9	8.1	57.3	\$433.29
Benson Hill	30	BX38C615	44.9	8.4	56.6	\$433.29
USG	31	7424ETS	44.7	8.4	58.3	\$431.36
Benson Hill	32	C38HO52S	44.4	8.2	56.8	\$428.46
FS HiSoy	33	HS 50E40	44.0	8.4	57.9	\$424.60
Seed Consultants	34	SC7465E	44.0	8.0	58.0	\$424.60
Innvictus Seed	35	B4553E	43.8	8.2	57.3	\$422.67
AgVenture	36	AV43B2BE	43.8	8.0	57.7	\$422.67
Innvictus Seed	37	B4574E	43.7	8.2	58.4	\$421.71
Revere	38	44-F44	43.6	8.5	57.3	\$420.74
AgVenture	39	AV45B2E	43.6	8.0	58.1	\$420.74
Mid-Atlantic Seed	40	MAS4623E3/STS	43.3	8.9	57.4	\$417.85
Mid-Atlantic Seed	41	MAS4045E3	43.2	8.4	57.3	\$416.88
AgVenture	42	AV48B2E	43.2	8.0	57.6	\$416.88
Xitavo	43	XO 4255E	43.1	8.1	57.9	\$415.92
Innvictus Seed	44	B3934E	42.9	8.6	57.8	\$413.99
USG	45	7435ET	42.8	8.4	58.6	\$413.02
Perdue	46	P41MO21	42.6	8.3	58.1	\$411.09
AgVenture	47	AV38B2E	42.6	8.1	56.9	\$411.09
AgVenture	48	AV47B2BE	42.3	7.9	57.9	\$408.20
Apex	49	AE4341S	42.1	8.5	58.4	\$406.27
Xitavo	50	XO 4405E	42.0	8.1	57.9	\$405.30
NK Brand	51	NK47-G5E3S	41.7	8.2	57.9	\$402.41
USG	52	7494ETS	41.7	8.5	58.2	\$402.41
Dyna-Gro	53	S40EN54	41.6	8.4	57.7	\$401.44
Mid-Atlantic Seed	54	MAS4021E3	41.6	8.5	57.1	\$401.44

NK Brand	55	NK42-A6E3S	40.7	8.4	57.8	\$392.76
Mid-Atlantic Seed	56	MAS4723E3	39.8	8.6	57.8	\$384.07
Revere	57	46-F57	39.1	8.4	57.6	\$377.32
Benson Hill	58	N44D923S	38.8	8.9	57.8	\$374.42
Benson Hill	59	BH43Q207	38.5	8.8	57.4	\$371.53
Dyna-Gro	60	S49XF43S	37.8	8.9	57.6	\$364.77
FS HiSoy	61	HS 48E40	37.5	8.4	58.8	\$361.88
Mid-Atlantic Seed	62	MAS4423E3	37.5	8.6	57.9	\$361.88
Mid-Atlantic Seed	63	MAS4675E3/STS	37.3	8.6	57.8	\$359.95
Benson Hill	64	C44HO54S	36.8	8.7	57.1	\$355.12
Apex	65	AE4640S	36.6	8.5	58.0	\$353.19
Mid-Atlantic Seed	66	MAS4215E3	36.0	7.8	58.5	\$347.40
USG	67	7485ETS	35.8	8.3	58.4	\$345.47
Innvictus Seed	68	A5284XF	34.8	8.6	57.8	\$335.82
Mid-Atlantic Seed	69	MAS4823E3/STS	34.8	8.6	58.3	\$335.82
Perdue	70	P48MO21	29.5	9.0	58.2	\$284.68
Innvictus Seed	71	A5994XF	27.6	11.0	57.9	\$266.34
Innvictus Seed	72	A6314XF	25.8	10.1	58.4	\$248.97
Innvictus Seed	73	A5813XF	23.9	10.8	57.4	\$230.64

Bolded varieties do not statistically differ from top yielding variety

LSD P=.05 10.19

All yield data adjusted to 13.5% moisture

CV 11.92

Mean 43.2

*Gross Income/acre is based off of commodity pricing for dry grain and does not factor in moisture/drying doc

Local Soybean Commodity Pricing as of report - \$9.65 (bu)

2024 Kent Full Season Soybean Variety Trial

<u>Brand</u>	<u>Rank</u>	<u>Variety</u>	<u>Yield (Bu)</u>	<u>Moisture</u>	<u>Test Weight</u>	<u>Gross Income/Acre*</u>
Seed Consultants	1	SC7485E	89.0	7.3	57.8	\$858.85
NK Brand	2	NK42-A6E3S	87.5	8.6	58.2	\$844.38
Dyna-Gro	3	S49XF43S	85.5	8.4	56.1	\$825.08
Apex	4	AE4640S	85.2	8.4	55.9	\$822.18
Dyna-Gro	5	S38EN75	84.7	8.3	55.4	\$817.36
Apex	6	AE3850	84.6	8.2	56.4	\$816.39
Innvictus Seed	7	A5284XF	84.0	8.7	57.5	\$810.60
Revere	8	39-F94	83.8	8.9	57.8	\$808.67
Catalyst	9	CT4413E3S	83.4	8.3	55.3	\$804.81
Apex	10	AE4341S	83.2	8.1	55.8	\$802.88
FS HiSoy	11	HS 47E32	82.8	8.6	56.8	\$799.02
Mid-Atlantic Seed	12	MAS3525E3	82.7	8.3	56.7	\$798.06
AgVenture	13	AV38B2E	82.6	8.0	57.2	\$797.09
Mid-Atlantic Seed	14	MAS4045E3	82.4	8.1	57.3	\$795.16
Dyna-Gro	15	S45EN25	82.3	8.2	57.1	\$794.20
USG	16	7474XFS	82.2	8.4	57.4	\$793.23
Xitavo	17	XO 4132E	82.1	8.2	55.3	\$792.27
Revere	18	44-F44	82.1	8.0	56.9	\$792.27
NK Brand	19	NK44-Q5E3S	82.0	8.4	56.2	\$791.30
USG	20	7415ET	82.0	8.2	56.0	\$791.30
Mid-Atlantic Seed	21	MAS4215E3	81.9	8.3	56.4	\$790.34
Mid-Atlantic Seed	22	MAS4021E3	81.9	7.6	56.3	\$790.34
AgVenture	23	AV39B2E	81.4	7.4	56.1	\$785.51
Seed Consultants	24	SC7444E	81.3	8.6	55.8	\$784.55
Xitavo	25	XO 4364E	81.2	8.5	55.4	\$783.58
USG	26	7483XFS	81.2	8.1	55.6	\$783.58

USG	27	7435ET	80.9	7.8	56.0	\$780.69
USG	28	7424ETS	80.7	8.7	57.0	\$778.76
AgVenture	29	AV48B2E	80.7	7.8	57.1	\$778.76
NK Brand	30	NK47-G5E3S	80.5	8.1	57.5	\$776.83
FS HiSoy	31	HS 50E40	80.5	8.3	55.5	\$776.83
Xitavo	32	XO 4522E	80.5	8.2	56.7	\$776.83
Seed Consultants	33	SC7465E	80.4	8.6	55.9	\$775.86
Mid-Atlantic Seed	34	MAS4723E3	80.2	8.1	54.6	\$773.93
Innvictus Seed	35	B3934E	80.1	8.3	56.5	\$772.97
Mid-Atlantic Seed	36	MAS4423E3	80.1	8.8	55.8	\$772.97
FS HiSoy	37	HS 43E30	80.0	8.2	56.2	\$772.00
USG	38	7494ETS	79.9	8.7	54.6	\$771.04
Benson Hill	39	BX38C615	79.6	7.8	54.8	\$768.14
Dyna-Gro	40	S40EN54	79.5	8.6	54.4	\$767.18
AgVenture	41	AV44B2E	79.5	8.4	55.8	\$767.18
AgVenture	42	AV43B2BE	79.5	8.1	55.5	\$767.18
Mid-Atlantic Seed	43	MAS4823E3/STS	79.0	8.4	56.8	\$762.35
Mid-Atlantic Seed	44	MAS3723STS	78.9	8.3	57.8	\$761.39
AgVenture	45	AV47B2BE	78.6	8.1	57.5	\$758.49
FS HiSoy	46	HS 41E20	78.3	8.7	54.6	\$755.60
Xitavo	47	XO 4405E	78.3	8.3	56.5	\$755.60
Innvictus Seed	48	B4904E	78.3	8.4	55.8	\$755.60
Benson Hill	49	C38HO52S	78.1	8.3	55.9	\$753.67
USG	50	7485ETS	78.0	8.0	56.3	\$752.70
Innvictus Seed	51	B4553E	77.7	8.5	56.8	\$749.81
AgVenture	52	AV45B2E	77.6	8.2	56.4	\$748.84
Revere	53	46-F57	77.5	8.5	55.9	\$747.88
FS HiSoy	54	HS 48E40	77.2	8.7	55.1	\$744.98

Benson Hill	55	N44D923S	76.7	9.0	55.8	\$740.16
Benson Hill	56	N35D950S	76.4	8.5	56.1	\$737.26
Benson Hill	57	BH37Q218	76.4	8.6	55.1	\$737.26
Mid-Atlantic Seed	58	MAS3923E3/STS	76.3	8.8	55.6	\$736.30
Xitavo	59	XO 4255E	75.9	8.3	53.4	\$732.44
Benson Hill	60	C44HO54S	74.5	8.1	55.1	\$718.93
USG	61	7434XF	74.2	8.2	55.2	\$716.03
Benson Hill	62	BH43Q207	73.8	8.4	56.0	\$712.17
Mid-Atlantic Seed	63	MAS4623E3/STS	73.5	8.6	55.8	\$709.28
FS HiSoy	64	HS 45E32	72.1	8.8	56.1	\$695.77
Perdue	65	P41MO21	71.8	8.3	54.8	\$692.87
Mid-Atlantic Seed	66	MAS4675E3/STS	71.8	8.8	55.6	\$692.87
Innvictus Seed	67	A5813XF	70.6	9.6	54.6	\$681.29
Innvictus Seed	68	B4574E	68.5	8.8	55.3	\$661.03
Perdue	69	P48MO21	68.3	8.7	55.1	\$659.10
USG	70	7495XFS	66.4	8.4	54.6	\$640.76
Mid-Atlantic Seed	71	MAS4320E3/STS	64.0	8.7	54.8	\$617.60
Innvictus Seed	72	A5994XF	57.3	12.9	55.6	\$552.95
Innvictus Seed	73	A6314XF	56.6	9.7	55.3	\$546.19

Bolded varieties do not statistically differ from top yielding variety

LSD P=.05

7.61

All yield data adjusted to 13.5% moisture

CV

6.96

Mean

78.5

*Gross Income/acre is based off of commodity pricing for dry grain and does not factor in moisture/drying doc

Local Soybean Commodity Pricing as of report - \$9.65 (bu)

Summary of Results

In 2024, the Delaware Soybean Variety Trial's yield averages were 82, 77, 43, and 79 Bu/acre across four statewide testing locations compared to the 2023 yields which averaged 78, 75, 53, and 80 Bu/acre. The grain yield average across all four locations in 2024 was almost identical to 2023 yields, with less than a 2% difference.

However, this is somewhat misleading without data analysis and can primarily be contributed to the overall yield performance at the Middletown dryland location. Yields at this location in 2024 were 10 Bu/acre lower and down 23% than in 2023 which brought the overall statewide average down significantly. This dryland location received a total of 0.22 inches of rain from June 7 to June 29 and 0 inches of rain from July 1 to July 10. This earlier extended drought affected early growth development and vigor of the soybeans. Another dry stretch occurred with this location only receiving 0.16 inches of rainfall from August 10-31 during the key reproductive stage of development. The Middletown location only received 1.63 inches of rain total for the entire month of August while the daily high temperature average for August was 83.9 degrees. This combination of weather events certainly affected the flowering and pod development stages of the soybeans negatively.

2024 yield averages across the two irrigated sites in Georgetown and Harrington were 2.4% higher than 2023, with a 2 Bu/acre increase. The Dagsboro location yield average remained relatively unchanged between 2024 and 2023.