

Location	Eastern Virginia AREC
Soil Type	Kempsville loam
Row Spacing (in.)	30"
Cultivation Type	Turbo Till
Planting Dates	May 2, 2024
Harvest Dates	MG 3: Oct 7, 2024 MG 4E: Oct 10, 2024 MG 4L: Oct 17 & 24, 2024 MG 5E: Oct 28, 2024 MG 5L: Oct 29, 2024
Rows Planted/ Rows Harvested	4 planted/ 2 harvested
Harvested Row Length	12 feet
Fertilization	4/29/24 28.5-80-80-5.5
In-Season Applications	5/31/24 25.6oz/A Flexstar + 1qt/A Amaze Gold + 1qt Liberate Surfactant/100 gal Water 6/10/24 0.4oz/A FirstRate + 1qt Liberate Surfactant/100 gal Water 6/21/24 14oz/A Intensity One + 1 gal Herbimax Crop Oil/100 gal Water 6/27/24 2.5oz/A Zidua SC 7/3/24 1qt/A Quick Ultra + Awaken + 2oz/A Radiate 7/9/24 32oz/A Intensity One + 1 gal Herbimax Crop Oil/100 gal Water 7/11/24 2qt/A Maximum N-Pact K + 2oz/A Radiate 7/18/24 1Q/A Quick Ultra + Awaken + 2oz/A Radiate 8/22/24 6.8 oz/A Voltage Insecticide + 10.1 oz/A Avaris Fungicide + 61 oz/A Maximum impact 24-0-0
Rainfall (in.)	May: 5.24 June: 0.98 July: 6.15 Aug: 3.33 Sept: 4.88 Oct: 0.20

The experimental design was a randomized complete block design with three replications per site. Outliers were identified as any data point which exceeded 1.5 times the interquartile range and were removed from the analysis. Due to the number of entries, varieties were separated and tested by relative maturity group categories. To facilitate field operations and to allow for more accurate comparison, maturity group IV and V varieties were separated into early (RM 4.0-4.6; 5.0- 5.4) and late (RM 4.7-4.9; 5.5-5.9) relative maturity tests. Data were subjected to analysis of variance and means were separated with Fisher's Protected LSD test ($P = 0.05$).

Preliminary performance of full-season maturity group 3 entries at Warsaw, VA.

Brand	Variety	Herbicide	MG	Mature			Seed			Yield
				Date	Height	Lodging	PSS	Quality	Seed Size	
Golden Harvest	GH3994E3	E3	3.9	16.7	32.0	1.0	2.0	4.0	16.2	84.4
Pioneer	P38A28E	E3	3.7	16.3	32.7	1.7	1.0	4.0	16.3	83.0
Channel	3823RXF	RR	3.8	17.0	32.0	1.0	0.3	2.7	14.4	81.2
Golden Harvest	GH3774E3	E3	3.7	16.3	29.7	1.7	1.0	4.0	15.8	75.8
Revere	39-F94	XF / STS	3.9	16.3	28.7	1.3	1.7	2.7	15.8	74.7
Grand Mean				16.5	31.0	1.3	1.2	3.5	15.7	79.8
CV				0.0	0.1	0.4	0.8	0.2	0.1	0.1
LSD P<0.05				0.9	3.0	0.7	1.4	1.0	0.8	15.2

Preliminary performance of full-season early maturity group 4 entries at Warsaw, VA.

Brand	Variety	Herbicide	MG	Mature			Seed			
				Date	Height	Lodging	PSS	Quality	Seed Size	Yield
HiSOY	HS 44E40	E3	4.4	25.0	38.7	1.7	3.7	3.0	14.5	85.8
FORTUS	4335E	E3	4.3	24.3	36.7	1.7	0.3	2.3	15.0	80.8
USG	7435XFS	XF,STS	4.3	29.3	36.7	2.0	1.7	2.0	15.1	80.2
USG	7415ET	E3	4.1	18.7	34.0	1.3	2.0	2.0	14.9	79.2
NK	NK43- W1XFS	XF / STS	4.3	30.7	33.3	1.3	7.0	2.3	13.9	78.9
Channel	4424RXF/SR	XF	4.4	31.7	40.7	2.0	5.0	2.3	15.6	78.6
NK	NK42-A6E3S	E3 / STS	4.2	29.0	37.0	1.7	2.3	3.0	15.7	77.7
Revere	44-F44	XF / STS	4.4	33.3	38.7	1.7	4.0	2.3	16.0	77.6
Virginia Tech	V18-3866	Conv	4.1	25.0	38.0	1.7	0.7	1.0	14.1	77.5
Asgrow	AG43XF5	XF / STS	4.3	33.0	34.7	1.3	3.7	2.3	15.1	76.4
Southern Harvest	SH 4024 E3	E3	4.0	19.7	34.0	1.0	1.0	2.7	14.6	76.3
USG	7434XF	XF	4.3	26.7	33.0	1.3	1.3	1.7	14.1	74.9
Golden Harvest	GH4214E3S	E3 / STS	4.2	30.7	38.0	1.7	4.7	2.3	15.9	74.8
Virginia Tech	V20- 1478R2DI	RR2Y	4.2	28.3	35.7	2.0	0.3	2.0	14.5	74.1
Virginia Tech	V18-2720R2	RR	4.3	31.7	45.3	3.0	3.0	2.0	13.0	71.8
Perdue	P41MO21	Conv	4.1	16.7	32.0	2.3	2.0	2.3	15.6	71.4
Univ of Arkansas	R19C-1012	Conv	4.4	35.7	45.0	1.7	0.0	1.3	14.5	69.5
Virginia Tech	V19-0064DT	Conv	4.2	32.3	39.7	1.3	0.7	2.0	14.8	67.6
Grand Mean				27.9	37.3	1.7	2.4	2.2	14.8	76.3
CV				0.2	0.1	0.4	1.1	0.3	0.1	0.1
LSD P<0.05				3.6	3.6	0.8	3.7	0.7	0.9	7.1

Preliminary performance of full-season late maturity group 4 entries at Warsaw, VA.

Brand	Variety	Herbicide	MG	Mature			Seed			
				Date	Height	Lodging	PSS	Quality	Seed Size	Yield
USG	7464ET	E3	4.6	39.0	37.0	1.0	4.0	4.0	18.5	96.9
Pioneer	P45A81E	E3	4.5	29.7	35.3	1.0	4.3	3.0	15.3	89.2
USG	7461XFS	XF,STS	4.6	34.7	45.3	1.0	4.3	2.0	16.9	88.8
NK	NK47-G5E3S	E3 / STS	4.7	37.0	45.0	2.0	4.5	3.0	14.8	88.3
USG	7483XFS	XF,STS	4.8	36.0	43.3	1.7	10.0	2.3	15.3	88.0
Revere	48-F72	XF	4.8	36.7	43.0	2.0	4.3	2.0	15.5	87.8
HiSOY	HS 48F40	XF	4.8	37.0	46.0	2.0	5.7	3.0	16.5	87.5
USG	7485ETS	E3,STS	4.8	36.3	42.3	1.0	7.0	3.0	15.6	86.8
HiSOY	HS 45E32	E3	4.5	31.3	36.0	1.7	4.7	4.0	15.5	85.9
Pioneer	P48A14E	E3	4.8	34.0	45.7	1.7	2.0	3.0	15.2	85.6
Revere	45-F92	XF / STS	4.5	33.3	47.3	2.0	5.3	3.0	18.0	85.4
Revere	46-F57	XF / STS	4.6	34.7	49.0	1.7	1.7	3.0	17.5	85.0
NK	NK49-N7XF	XF	4.9	31.3	39.7	1.0	3.0	3.0	16.2	84.6
USG	7494ETS	E3,STS	4.9	32.5	43.0	1.0	2.5	3.0	14.6	84.4
Golden Harvest	GH4775E3S	E3 / STS	4.7	34.5	42.5	1.5	7.5	4.0	14.8	84.2
USG	7474XFS	XF,STS	4.7	34.3	40.7	1.3	3.7	2.0	16.4	84.2
HiSOY	HS 47E30	E3	4.7	34.7	39.7	1.7	6.0	3.0	14.2	84.2
Asgrow	AG47XF5	XF / STS	4.7	35.3	48.3	2.3	4.7	2.3	16.1	83.6
Univ of Arkansas	R18-14502	Conv	4.9	36.7	48.0	2.3	13.0	2.0	15.9	83.0
Revere	4826XFS	XF / STS	4.8	34.3	41.0	1.7	2.7	2.0	16.0	82.8
Asgrow	AG49XF3	XF	4.9	38.0	47.3	1.7	4.7	2.0	14.2	82.4
Asgrow	AG48XF5	XF / STS	4.8	36.0	48.3	1.0	3.7	3.0	17.9	81.9
USG	7495XFS	XF,STS	4.9	37.3	49.3	2.7	2.7	2.0	13.9	81.7
HiSOY	HS 47E32	E3	4.8	31.3	41.0	1.7	7.0	3.0	14.7	81.2
Virginia Tech	V17-2447R	RR	4.9	39.3	53.7	2.0	1.7	2.0	15.2	80.8
Channel	4821RXF/SR	XF	4.8	40.0	52.7	2.0	2.7	2.0	17.2	80.0
Revere	49-F36	XF / STS	4.9	35.3	45.0	1.7	11.0	3.0	16.4	79.9
HiSOY	HS 46F40	XF	4.6	32.0	48.7	2.0	3.3	3.0	17.0	79.9
Univ of Missouri	S20-14129GT	RR1	4.5	34.3	43.7	2.0	3.7	2.0	16.5	79.4
Univ of Missouri	S20-7117	Conv	4.6	34.0	42.0	2.0	4.3	2.0	16.4	79.2
Univ of Missouri	S20-15411GT	RR1	4.5	37.0	35.3	1.0	2.0	3.0	11.7	78.8
Univ of Arkansas	R19C-1035	Conv	4.5	39.0	45.3	1.7	5.0	3.0	14.0	78.7
INTEGRA	XF4634S	XF, STS	4.6	33.0	47.3	2.0	2.3	3.0	16.6	77.8

Brand	Variety	Herbicide	MG	Mature Date	Height	Lodging	PSS	Seed Quality	Seed Size	Yield
FORTUS	4655ES	E3, STS	4.6	33.3	40.7	1.7	8.0	3.0	15.4	77.7
Virginia Tech	V18-4246R	RR	4.9	39.3	48.3	2.3	1.3	2.3	14.4	76.7
Virginia Tech	V18-3788	Conv	4.5	32.3	46.7	2.7	2.0	2.0	13.3	75.8
Univ of Arkansas	R18C-13665	Conv	4.9	38.3	52.3	2.0	2.3	2.0	16.3	75.0
Southern Harvest	SH 4622 E3/STS	E3/STS	4.6	34.7	37.0	1.0	1.0	2.0	13.1	73.5
Virginia Tech	V18-3081HP	Conv	4.7	26.7	39.3	2.0	4.7	2.0	17.6	72.2
Perdue	P48MO21	Conv	4.8	37.7	34.3	2.0	12.3	3.0	14.0	65.9
Grand Mean				35.0	44.0	1.7	4.7	2.6	15.6	81.8
CV				0.1	0.1	0.3	0.7	0.2	0.1	0.1
LSD P<0.05				3.1	4.5	0.7	3.7	0.3	1.2	11.6

Preliminary performance of full-season early maturity group 5 entries at Warsaw, VA.

Brand	Variety	Herbicide	MG	Mature			Seed			
				Date	Height	Lodging	PSS	Quality	Seed Size	Yield
Pioneer	P50Z95E	E3	5.0	41.0	42.3	1.0	3.7	3.0	15.3	95.4
Revere	51-F31	XF	5.1	39.0	41.7	2.3	2.0	2.0	14.8	91.0
HiSOY	HS 50F40	XF	5.0	35.7	40.3	1.7	5.3	2.3	13.5	89.9
HiSOY	HS 48E40	E3	5.0	32.3	43.7	1.7	2.7	3.0	15.0	87.9
HiSOY	HS 50E40	E3	5.0	34.7	41.3	1.7	2.3	3.3	14.3	86.2
Catalyst	CT5293E3	E3	5.2	37.5	45.0	2.0	4.0	3.5	15.0	84.3
Asgrow	AG50XF5	XF	5.0	39.3	44.7	1.3	2.3	2.0	17.1	83.3
Revere	53-F84	XF / STS	5.3	47.0	48.0	2.0	0.0	2.0	14.0	81.8
HiSOY	HS 54E10	E3	5.4	47.5	55.5	2.0	0.5	2.0	14.6	80.8
Virginia Tech	V19-0546	Conv	5.3	39.3	34.3	1.0	0.3	2.0	13.6	80.8
Channel	5024RXF	XF	5.0	39.0	52.3	1.3	3.0	2.7	17.8	79.3
Southern Harvest	SH 5124 E3	E3	5.1	42.0	43.7	1.3	6.3	3.0	14.1	78.8
Univ of Missouri	S20-13179LL55	LL	5.3	45.7	54.7	1.7	0.3	2.0	17.0	77.6
Univ of Missouri	S20-1492	Conv	5.0	39.7	49.7	2.0	0.0	2.0	14.9	77.4
HiSOY	HS 54F30	XF	5.4	44.0	57.0	1.7	0.0	2.0	16.6	77.4
Virginia Tech	V19-1626	Conv	5.1	42.7	32.3	1.3	0.0	2.3	14.8	76.9
Univ of Missouri	S20-4428	Conv	5.3	42.7	52.0	1.3	0.3	2.0	15.8	69.5
Virginia Tech	V19-1453STS	Conv	5.4	39.0	37.3	2.0	1.3	1.7	21.1	68.1
Grand Mean				40.2	45.1	1.6	1.9	2.4	15.6	81.4
CV				0.1	0.2	0.3	1.2	0.3	0.1	0.1
LSD P<0.05				2.7	4.6	0.7	2.2	0.6	0.8	8.1

Preliminary performance of full-season late maturity group 5 entries at Warsaw, VA.

Brand	Variety	Herbicide	MG	Mature			Seed			
				Date	Height	Lodging	PSS	Quality	Seed Size	Yield
Virginia Tech	V18-1255	Conv	5.5	45.5	31.0	1.0	0.5	2.0	16.2	85.3
Virginia Tech	V19-0519	Conv	5.6	46.0	33.3	1.0	0.0	2.0	17.4	85.0
Virginia Tech	V19-1409RR	RR	5.6	44.5	39.0	1.0	0.5	3.0	15.3	83.9
Channel	5723RXF/SR	XF	5.7	52.3	40.7	1.0	0.7	2.3	17.9	82.4
Pioneer	P56A71E	E3	5.6	48.3	35.0	1.0	0.0	3.0	17.4	81.0
Southern Harvest	SH 5523 E3	E3	5.5	50.3	55.0	1.7	0.0	3.0	15.3	79.4
Perdue	P60GO21	Conv	6.0	53.0	42.0	2.0	0.0	2.0	14.0	78.1
Virginia Tech	V16-1706R2	RR2Y	5.5	45.3	37.0	1.0	3.3	3.0	17.0	76.9
Southern Harvest	SH 5724 E3	E3	5.7	50.7	53.7	2.7	0.0	2.0	12.7	76.5
Virginia Tech	V19-0496HP	Conv	5.5	45.0	27.0	1.0	0.3	3.0	18.1	75.8
Virginia Tech	V19-0861	Conv	5.6	44.3	32.0	1.0	0.3	2.0	14.0	75.6
Revere	5735XFS	XF / STS	5.7	52.7	38.0	1.0	0.0	3.0	17.5	74.4
Virginia Tech	V19-1493	Conv	5.8	47.3	37.7	1.0	0.7	2.0	14.4	73.8
Asgrow	AG55XF5	XF	5.5	46.7	34.7	1.3	2.3	2.0	17.2	72.7
Grand Mean				47.9	38.3	1.2	0.7	2.5	16.1	78.3
CV				0.1	0.2	0.4	1.9	0.2	0.1	0.1
LSD P<0.05				2.1	4.8	0.5	1.5	0.3	0.7	8.1