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# NORTH CAROLINA MEASURED CROP PERFORMANCE SOYBEAN 2016



North Carolina State University  
College of Agriculture and Life Sciences  
North Carolina Agricultural Research Service  
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# ***North Carolina Measured Crop Performance***

***Soybean  
2016***

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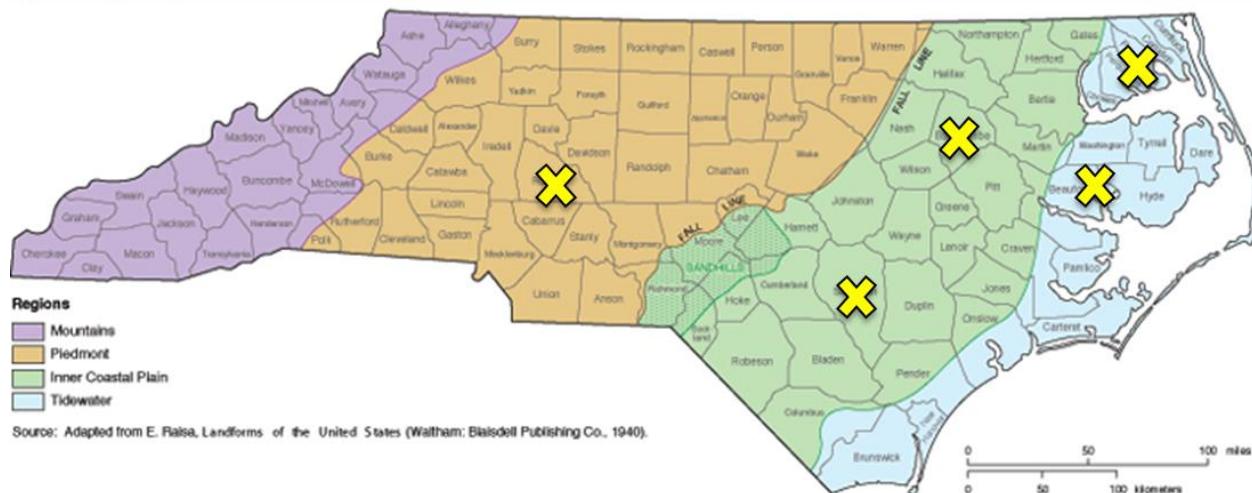
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## ACKNOWLEDGEMENTS

<b>Cooperator</b>	<b>County Extension Affiliate</b>
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	<b>Edgecombe</b>
Bert Pitt Macclesfield, NC	Art Bradley County Extension Director
	<b>Pasquotank</b>
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	<b>Rowan</b>
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## 2016 North Carolina OVT Testing Locations (Soybean)



## INTRODUCTION

There are many high-yielding soybean varieties available to the producer from which he may choose according to desired maturity date, lodging, pest resistance, etc. Information on the performance of commercial varieties and experimental lines grown in different locations in the state is provided in this report.

**Entries:** Experimental and commercial varieties developed by both public and private agencies are included in this program. Any public or private individual or firm may make application for having entries included. In early February of each year, trial instructions and applications for the upcoming season are distributed to all previous participants and to those who make an inquiry; they are also available on our website: [www.ncovt.com](http://www.ncovt.com). A fee is charged on an entry basis. Personnel of the testing program may include entries about which further information is desired. A list of participants in the 2016 NC OVT soybean tests can be found in [Table A](#), along with associated contact information.

**Test Locations:** Five full season tests and five late planted tests were conducted at the same locations across North Carolina. In 2016, the soybean trials were located in Beaufort, Edgecombe, Pasquotank, Rowan and Sampson counties. Cultural and management practices are located in [Table B](#), along with associated planting and harvest dates for all trials.

**Data:** Data were collected on yield, moisture, lodging, and plant height. Yields were calculated on plot weight and adjusted to 13% moisture. Lodging was scored on a scale of 1-5 with "1" being no lodging and "5" being completely lodged before harvest; this does not necessarily reflect harvest loss. Plant height was determined by measuring from ground level to the base of the uppermost node. Height was measured at all trials and reported as

statewide averages.

**Seasonal Conditions:** Planting for all trials was on time. The season was characterized with average to above average rainfall at all locations throughout the growing season (some locations received excessive rainfall due to Hurricane Matthew). Lodging was more evident this year due to Hurricane Matthew. Harvest was on time ([Table B](#)).

**Harvest Lodging:** Ratings were recorded prior to plot harvest. These values are reported as statewide averages. Lodging data does not necessarily correlate to harvest yield, as harvest equipment can capture most of the lodged crop. Lodging ratings are recorded on a scale 1 – 5, where:

- 1 = almost all plants are erect
- 2 = less than 25% of plants are lodged, or all plants lean  $>60^{\circ}$  from the ground
- 3 = 25 – 50% of plants are lodged, or all plants lean approximately  $45^{\circ}$  from the ground
- 4 = 50 – 85% of plants are lodged, or all plants lean  $<45^{\circ}$  from the ground
- 5 = almost all plants are lodged

**Results:** Soil test results are shown in [Table C](#). Glyphosate tolerant, Liberty Link and Conventional beans were tested in separate trials. Data are separated by trait (Glyphosate tolerant, Liberty, and Conventional), and reported by Maturity, Planting date, and Years of data available. See the [RESULT TABLES](#) page for a table of contents. Each table number is hyperlinked to the table location in the document, allowing for quick access to each trial and result. Yields are reported as an average across all replications at a location, with statewide averages weighted towards lower variability locations. Within each data table for Liberty and Glyphosate tolerant results, the commercially available variety names are hyperlinked. When the variety name is clicked, you will be taken to the associated technical sheet, seed guide, or company website for that variety.

**Interpreting Data:** Three, two, and one year yield results are reported below ([RESULT TABLES](#)). Research has shown that the best data to use in selecting varieties are multiple year or multi-location data, both for yield and reported agronomics (Height and Harvest Lodging). Location summary data for 2016 is included to show yield results by location, and for a summary of location quality. Data were good in terms of precision at locations reported.

## **COMPARING VARIETIES**

Performance of a variety cannot be determined with absolute precision. Even though the tests are conducted in a uniform manner, uncontrollable variability exists among experimental plots due to environmental differences in soil, fertility, moisture, insects, diseases, and other sources of variation. Because this variability exists, statistics are used as a tool to examine differences among varieties. A statistical method of spatial analysis has been used to allow for similarities between neighboring plots based on their location in the field in order to adjust for the unknown environmental variation (Brownie et al., 1993). The particular spatial model allows for correlations that decrease exponentially as distance between plots increases in both row and column directions.

Coefficient of variation (**CV**) is a relative assessment of trial variability. It measures experimental error caused by variation in management practices and immeasurable factors in the environment as a percent of mean yield for the trial. Lower values generally indicate trials with less unexplained variation, hence, more reliable trials (though high mean yields also tend to produce lower CVs).

Standard error of the mean (**SEM**) is listed as a general indicator of precision since it measures how well a true variety mean was estimated. For individual trials, SEM varies across varieties (due to accounting for spatial variation within the site) and is summarized by reporting the average SEM (avg SEM). On average, this indicates how well variety means were measured across all replications within the trial. Where multiple trials were combined for regional and statewide data, **SEM** is reported. For combined datasets, the variety mean is an average over environments and replications within environments, weighted by precision associated with each environment. The SEM for averages over environments is the same for each variety and mainly reflects differences in performance of varieties across environments. Thus, lower values of SEM tend to indicate greater consistency in variety rankings across environments.

All reported trials meet an established criterion for precision by having an average value of the standard error of a difference between variety means (avg SEDiff) below a threshold value. Avg SEDiff is calculated as the square root of the average variance of a difference between two variety means. Threshold SEDiff values are based on OVT data from 1990 - 2013, and are calculated as the value twice as large as that predicted from the historical data following Bowman and Rawlings (1995).

In assessing variety performance, the Variety F-value reflects the magnitude of variation due to differences between varieties. Specifically, the F value for the variety effect indicates the strength of real yield differences. The size of difference between two varieties, which can reasonably be attributed to chance variation, is listed at the bottom of each table as the least significant difference (**LSD**). LSD accounts for variation across environments, where multiple trials were combined for statewide and multiple year data. However, for individual trials, this is

reported as the average LSD (**avg LSD**), and represents the difference of varieties within a trial. Varieties whose yields differ by less than the average LSD are not statistically different. Those varieties that are not different from the highest observed yield are denoted in the tables with an asterisk (\*); the highest yielding variety is denoted by a double asterisk (\*\*). The LSD for comparisons among variety means is applied at the 10% level, which indicates 90% confidence that yield differences are not due to chance variation. The degrees of freedom associated with the LSD (**df LSD**) are also reported in the tables.

Variety performance may appear inconsistent among environments within an area or among years at a particular location. Year-to-year variation in weather and pest pressure is sufficiently large enough to make predictions of varietal performance based on single-year data less reliable than predictions using multiple-year data. Research has shown that multiple-year means across environments provide the best prediction of variety performance. Thus it is important to examine results from more than one location and more than one year to obtain a more accurate picture of relative variety performance. When available, growers should examine 2- and 3-year multiple environment data provided in this report. If these data are not available, growers can use the single year, multiple location data provided in this report.

New varieties are being introduced each year and these varieties are potentially higher yielding or pest resistant than the current varieties. It is suggested that growers plant new varieties on a small number of acres to determine if it is adapted to their farm. Other agronomic characteristics may be as equally important as yield. Yield information presented in this report should be used in conjunction with other available information and personal experience when selecting varieties.

**TABLE A.** 2016 North Carolina OVT Soybean Sponsors

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**TABLE B.** Cultural practices for soybean performance trials - 2016.

Location	Row Width (in)	Fertilizer (Lbs/A)	Soil Type	Date of Planting	Date of Harvest
<b><u>EARLY PLANTED TESTS</u></b>					
Beaufort	Drilled (7.5")	0	Arapahoe fine sandy loam	May 26th	<b>Oct 25th (MG 4 - LL/RR). Nov 14th and 15th (Remaining).</b>
Edgecombe	Drilled (7.5")	300# (10-5-27)	Norfolk loamy sand	May 24th	<b>Oct 27th (MG 4 - LL/RR). Nov 28 and 29th (Remaining).</b>
Pasquotank	Drilled (7.5")	220# (7-18-36)	Bayboro loam	May 25th	<b>Oct 26th (MG 4 - LL/RR). Nov 18 and 19th (Remaining).</b>
Rowan	Drilled (7.5")	0	Davidson clay loam	May 28th	<b>Oct 17th (MG 4 - LL/RR, MG4/5 - Conv). Nov 25 and 26th (Remaining).</b>
Sampson	Drilled (7.5")	200# (4-11-35)	Goldsboro loamy sand	May 27th	<b>Oct 31st (MG 4 - LL/RR). Nov 22 and 23rd (Remaining).</b>
<b><u>LATE PLANTED TESTS</u></b>					
Beaufort	Drilled (7.5")	0	Arapahoe fine sandy loam	June 28th	<b>Nov 14 and 15th.</b>
Edgecombe	Drilled (7.5")	300# (10-5-27)	Norfolk loamy sand	June 22nd	<b>Nov 28 and 29th.</b>
Pasquotank	Drilled (7.5")	220# (7-18-36)	Bayboro loam	June 27th	<b>Oct 26th (MG 4 - LL/RR). Nov 18 and 19th (Remaining).</b>
Rowan	Drilled (7.5")	0	Davidson clay loam	July 1st	<b>Nov 25 and 26th.</b>
Sampson	Drilled (7.5")	200# (4-11-35)	Goldsboro loamy sand	June 23rd	<b>Oct 31st (MG 4 - LL/RR). Nov 22 and 23rd (Remaining).</b>

**TABLE C.** Soil test results for soybean performance trials - 2016.

Location	HM %	W-V	CEC	BS	Ac	pH	P-I	K-I	Ca %	Mg %	Mn-I	Zn-I	Cu-I
<b><u>Early Planted</u></b>													
Beaufort	9.21	0.78	16.6	66	5.7	5.2	94	71	45.0	19.0	37	377	69
Edgcombe	0.86	1.02	8.4	83	1.4	6.1	192	76	57.0	21.0	56	426	62
Pasquotank	3.57	0.90	13.7	83	2.3	5.9	104	109	57.0	22.0	49	63	77
Rowan	0.18	0.92	13.4	93	0.9	6.3	239	138	73.0	16.0	948	690	172
Sampson	1.14	1.21	6.3	73	1.7	5.9	57	75	50.0	17.0	35	68	54
<b><u>Late Planted</u></b>													
Beaufort	9.87	0.85	15.5	67	5.2	5.3	89	59	48.0	17.0	45	355	67
Edgcombe	0.86	1.02	8.4	83	1.4	6.1	192	76	57.0	21.0	56	426	62
Pasquotank	3.57	0.90	13.7	83	2.3	5.9	104	109	57.0	22.0	49	63	77
Rowan	0.18	0.92	13.4	93	0.9	6.3	239	138	73.0	16.0	948	690	172
Sampson	1.14	1.21	6.3	73	1.7	5.9	57	75	50.0	17.0	35	68	54

## **RESULT TABLES**

### **A. Glyphosate Tolerant**

#### **a. MG 4.0 – 4.9**

##### i. Early Planted

1. [TABLE 1](#) - Statewide (3 year)
2. [TABLE 2](#) - Statewide (2 year)
3. [TABLE 3](#) - Statewide (2016)
4. [TABLE 4](#) - Location Summary (2016)

##### ii. Late Planted

1. [TABLE 5](#) - Statewide (3 year)
2. [TABLE 6](#) - Statewide (2 year)
3. [TABLE 7](#) - Statewide (2016)
4. [TABLE 8](#) - Location Summary (2016)

#### **b. MG 5.0 – 5.5**

##### i. Early Planted

1. [TABLE 9](#) - Statewide (3 year)
2. [TABLE 10](#) - Statewide (2 year)
3. [TABLE 11](#) - Statewide (2016)
4. [TABLE 12](#) - Location Summary (2016)

##### ii. Late Planted

1. [TABLE 13](#) - Statewide (3 year)
2. [TABLE 14](#) - Statewide (2 year)
3. [TABLE 15](#) - Statewide (2016)
4. [TABLE 16](#) - Location Summary (2016)

#### **c. MG 5.5 – 5.9**

##### i. Early Planted

1. [TABLE 17](#) - Statewide (3 year)
2. [TABLE 18](#) - Statewide (2 year)
3. [TABLE 19](#) - Statewide (2016)
4. [TABLE 20](#) - Location Summary (2016)

##### ii. Late Planted

1. [TABLE 21](#) - Statewide (3 year)
2. [TABLE 22](#) - Statewide (2 year)
3. [TABLE 23](#) - Statewide (2016)
4. [TABLE 24](#) - Location Summary (2016)

**NOTE:** Table names above, and on the following sheets, are hyperlinked. Click the table name of interest (e.g. – “TABLE 1”), and you will be taken to that table in the document. Further, variety names for commercially available Liberty and Glyphosate tolerant lines are hyperlinked in each of the tables. Clicking on the name will take you to a technical sheet, seed guide, or company website that contains more information about that variety.

**d. MG 6.0 – 6.9**

i. Early Planted

1. [TABLE 25](#) - Statewide (3 year)
2. [TABLE 26](#) - Statewide (2 year)
3. [TABLE 27](#) - Statewide (2016)
4. [TABLE 28](#) - Location Summary (2016)

ii. Late Planted

1. [TABLE 29](#) - Statewide (3 year)
2. [TABLE 30](#) - Statewide (2 year)
3. [TABLE 31](#) - Statewide (2016)
4. [TABLE 32](#) - Location Summary (2016)

**di. MG 7.0 – 8.9**

i. Early Planted

1. [TABLE 33](#) - Statewide (3 year)
2. [TABLE 34](#) - Statewide (2 year)
3. [TABLE 35](#) - Statewide (2016)
4. [TABLE 36](#) - Location Summary (2016)

ii. Late Planted

1. [TABLE 37](#) - Statewide (3 year)
2. [TABLE 38](#) - Statewide (2 year)
3. [TABLE 39](#) - Statewide (2016)
4. [TABLE 40](#) - Location Summary (2016)

**B. Liberty Link**

**a. MG 4.0 – 4.9**

i. Early Planted

1. [TABLE 41](#) - Statewide (2 year)
2. [TABLE 42](#) - Statewide (2016)
3. [TABLE 43](#) - Location Summary (2016)

ii. Late Planted

1. [TABLE 44](#) - Statewide (2 year)
2. [TABLE 45](#) - Statewide (2016)
3. [TABLE 46](#) - Location Summary (2016)

**b. MG 5.0 – 5.9**

i. Early Planted

1. [TABLE 47](#) - Statewide (2 year)
2. [TABLE 48](#) - Statewide (2016)
3. [TABLE 49](#) - Location Summary (2016)

ii. Late Planted

1. [TABLE 50](#) - Statewide (2 year)
2. [TABLE 51](#) - Statewide (2016)
3. [TABLE 52](#) - Location Summary (2016)

**c. MG 6.0 – 8.0**

i. Early Planted

1. [TABLE 53](#) - Statewide (2 year)
2. [TABLE 54](#) - Statewide (2016)
3. [TABLE 55](#) - Location Summary (2016)

ii. Late Planted

1. [TABLE 56](#) - Statewide (2 year)
2. [TABLE 57](#) - Statewide (2016)
3. [TABLE 58](#) - Location Summary (2016)

**C. Conventional**

**a. MG 4.0 – 5.4**

i. Early Planted

1. [TABLE 59](#) - Statewide (2016)
2. [TABLE 60](#) - Location Summary (2016)

ii. Late Planted

1. [TABLE 61](#) - Statewide (2 year)
2. [TABLE 62](#) - Statewide (2016)
3. [TABLE 63](#) - Location Summary (2016)

**b. MG 5.5 – 8.0**

i. Early Planted

1. [TABLE 64](#) - Statewide (2 year)
2. [TABLE 65](#) - Statewide (2016)
3. [TABLE 66](#) - Location Summary (2016)

ii. Late Planted

1. [TABLE 67](#) - Statewide (3 year)
2. [TABLE 68](#) - Statewide (2 year)
3. [TABLE 69](#) - Statewide (2016)
4. [TABLE 70](#) - Location Summary (2016)

**NOTE:** Liberty and Conventional trials were combined in 2014, limiting our available data for 3 and 2 year combined yield analysis. Multiple year data (Early and Late planted) will be restored to both classes in 2017.

**TABLE 1. THREE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2014-2016)**

**Maturity:** 4.0 - 4.9

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Pioneer	RR	P49T80R	60.4 **	39.7	1.9
Pioneer	RR	P48T53R	59.1 *	37.2	1.8
RPM	RR	DB4715RR	58.6 *	38.9	1.9
Asgrow	RR2	AG4934	58.5 *	42.7	1.5
Progeny	RR2/STS	P 4613 RYS	53.5	40.3	2.2
Progeny	RR2	P 4788 RY	53.2	42.1	1.9
		<b>Mean</b>	57.2	40.2	1.8
		<b>Locations</b>	10	10	10
		CV (%)	8.5	.	.
		SEM	1.5	.	.
		LSD (0.1)	3.6	.	.
		DF LSD (0.1)	45	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 2. TWO YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2015-2016)**

**Maturity:** 4.0 - 4.9

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Southern States	RR2	SS 4915NS R2	61.9 **	41.5	1.6
Asgrow	RR2	AG4934	55.7	40.7	1.5
Pioneer	RR	P49T80R	54	39.3	1.8
Progeny	RR2	P 4757 RY	53.5	41.5	2.4
RPM	RR	DB4715RR	53	38.2	2.0
REV	RR	REV 49R94	52.3	37.3	1.9
Pioneer	RR	P48T53R	51.4	35.8	1.9
REV	RR	REV 47R34	50.9	38.5	2.7
Progeny	RR2/STS	P 4613 RYS	49.8	39.2	2.2
Progeny	RR2	P 4788 RY	46.8	39.7	2.0
Dyna-Gro	RR2	S43RY95	45.6	40.7	2.5
Credenz	RR	CZ 4590 RY	44.2	39.2	1.7
		<b>Mean</b>	51.6	39.3	2.0
		<b>Locations</b>	6	6	6
		CV (%)	9.6	.	.
		SEM	2	.	.
		LSD (0.1)	4.8	.	.
		DF LSD (0.1)	55	.	.

**\*\*Highest yielder.** \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale.

**CV** - coefficient of variation within environment.

**SEM** - standard error of variety mean within environment.

**LSD** - measured differences between varieties across reps within environment.

**TABLE 3. ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE**

(2016)

**Maturity:** 4.0 - 4.9**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Southern States	RR2	SS 4915NS R2	58.1**	42.0	1.7
Stine	RR2	48RI23	57.8*	41.0	1.7
Southern States	Xtend/STS	SS 4717NS X	57*	43.0	1.8
USG	Xtend/STS	USG 7487XTS	56.3*	40.4	1.8
USG	Xtend/STS	USG 7477XTS	56.3*	41.2	1.8
Stine	RR2	48R102	56.1*	41.2	1.9
USG	RR2/STS	USG 74K95RS	55.1*	41.4	1.8
Pioneer	RR	P49T80R	54.8*	39.6	1.9
Asgrow	Xtend	AG48X7	54.7*	40.8	1.7
Asgrow	Xtend	AG49X6	54.7*	38.2	1.4
Dyna-Gro	Xtend/STS	S46XS87	54.7*	40.2	1.8
RPM	RR2/STS	DB4914SR2	53.2	39.0	3.1
REV	RR	REV 48A76	52.5	38.2	2.3
Asgrow	RR2	AG4934	52.2	40.8	1.5
REV	RR	REV 48A26	51.7	39.0	2.3
REV	RR	REV 49R94	51.5	38.2	2.0
RPM	RR	DB4715RR	51.2	37.6	2.1
Progeny	RR2	P 4757 RY	50.7	41.4	2.7
Southern States	Xtend	SS 4918N X	50.3	37.4	1.5
Dyna-Gro	Xtend/STS	S49XS76	49.6	40.4	1.5
Pioneer	RR	P48T53R	49.1	37.0	2.1
Dyna-Gro	Xtend/STS	S48XT56	48.1	38.0	1.5
Progeny	RR2/STS	P 4613 RYS	47.7	39.2	2.3
NK	RR2	S49-B1	47.5	39.4	2.0
REV	RR	REV 47R34	46.6	39.0	2.9
NK	RR2	S45-W9	46.4	35.6	1.4
Credenz	RR	CZ 4656 RY	45.5	39.0	2.3
Dyna-Gro	RR2	S43RY95	44.6	41.6	2.5
Progeny	RR2	P 4788 RY	43.3	39.8	2.2
Credenz	RR	CZ 4898 RY	42.5	40.0	2.7
Credenz	RR	CZ 4590 RY	42.4	39.6	1.8
Progeny	RR2	P 4588 RY	36.3	38.0	2.6
		<b>Mean</b>	50.6	39.6	2.0
		<b>Locations</b>	5	5	5
		CV (%)	3.6		
		SEM	1.8	.	.
		LSD (0.1)	4.3	.	.
		DF LSD (0.1)	124.0	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale.

**CV** - coefficient of variation within environment.**SEM** - standard error of variety mean within environment.**LSD** - measured differences between varieties across reps within environment.

**TABLE 4. ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - LOCATION SUMMARY (2016)****Maturity:** 4.0 - 4.9**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Beaufort Yield (bu/a)</b>	<b>Pasquotank Yield (bu/a)</b>	<b>Edgecombe Yield (bu/a)</b>	<b>Sampson Yield (bu/a)</b>	<b>Rowan Yield (bu/a)</b>	<b>Statewide Average Yield (bu/a)</b>
Southern States	RR2	SS 4915NS R2	61.1	52.4	44.5 *	76.2 **	53 *	<b>58.1**</b>
Stine	RR2	48RI23	70.7 **	56.8 *	39.2 *	68.1	57.5 **	<b>57.8*</b>
Southern States	Xtend/STS	SS 4717NS X	64.7 *	53.7 *	39.5 *	72.4 *	53.1 *	<b>57*</b>
USG	Xtend/STS	USG 7477XTS	65.1 *	58.6 *	40.6 *	67.2	50.1	<b>56.3*</b>
USG	Xtend/STS	USG 7487XTS	60	56.3 *	45 **	70.2	48.7	<b>56.3*</b>
Stine	RR2	48RI02	67.2 *	54.3 *	38	66.9	57.5 *	<b>56.1*</b>
USG	RR2/STS	USG 74K95RS	61.6	58.6 **	34.5	69	46.4	<b>55.1*</b>
Pioneer	RR	P49T80R	60.7	55.1 *	34.6	67.2	55.7 *	<b>54.8*</b>
Asgrow	Xtend	AG48X7	63.7 *	52.2	35.7	69.5	50.9 *	<b>54.7*</b>
Asgrow	Xtend	AG49X6	58.2	50.5	43.4 *	68.3	55.3 *	<b>54.7*</b>
Dyna-Gro	Xtend/STS	S46XS87	55.9	55.4 *	34.3	72.8 *	45.7	<b>54.7*</b>
RPM	RR2/STS	DB4914SR2	61.8	52.5	34.5	68.3	45.7	<b>53.2</b>
REV	RR	REV 48A76	61	52.3	31.2	65.9	50.1	<b>52.5</b>
Asgrow	RR2	AG4934	54.9	47.4	32.6	67.8	57.3 *	<b>52.2</b>
REV	RR	REV 48A26	57.1	56.8 *	36.6	62.2	44.7	<b>51.7</b>
REV	RR	REV 49R94	59.6	52.1	36.7	60.2	53.6 *	<b>51.5</b>
RPM	RR	DB4715RR	59.6	48.1	28	67.7	48.7	<b>51.2</b>
Progeny	RR2	P 4757 RY	53.7	50.9	37.2	62.8	49.6	<b>50.7</b>
Southern States	Xtend	SS 4918N X	53.8	46.9	33.1	65.1	52 *	<b>50.3</b>
Dyna-Gro	Xtend/STS	S49XS76	56.6	44.5	37.5	65.4	43.4	<b>49.6</b>
Pioneer	RR	P48T53R	54.3	49.6	22.8	63.2	51.4 *	<b>49.1</b>
Dyna-Gro	Xtend/STS	S48XT56	53.5	48.2	34.9	60.7	43.1	<b>48.1</b>
Progeny	RR2/STS	P 4613 RYS	55.5	46.6	31.4	61.4	42.2	<b>47.7</b>
NK	RR2	S49-B1	56.6	46.9	27.2	60.3	45.7	<b>47.5</b>
REV	RR	REV 47R34	62.4	49.8	27.1	57.1	36	<b>46.6</b>
NK	RR2	S45-W9	57.2	40.6	22.8	59.2	55.4 *	<b>46.4</b>
Credenz	RR	CZ 4656 RY	58.6	42.3	25.9	55.8	49.6	<b>45.5</b>
Dyna-Gro	RR2	S43RY95	60.5	44.3	27.3	49.3	52.5 *	<b>44.6</b>
Progeny	RR2	P 4788 RY	53.9	38.8	25.2	54.1	50.2	<b>43.3</b>
Credenz	RR	CZ 4898 RY	52.9	38	17.6	56.1	48.4	<b>42.5</b>
Credenz	RR	CZ 4590 RY	49.4	35.8	22	55.5	52.8 *	<b>42.4</b>
Progeny	RR2	P 4588 RY	44.4	42.4	17.5	44.9	32.6	<b>36.3</b>
		<b>Mean</b>	58.3	49.3	32.5	63.5	49.3	
		CV (%)	12.8	11.3	22.1	7.6	13.5	
		SEM	3.3	2.5	3.6	2.2	3.3	
		LSD (0.1)	7.6	5.4	6.6	4.7	6.8	
		DF LSD (0.1)	126	126	94	126	94	

\*\*Highest yielder. \*Not significantly different from highest yielder.

CV - coefficient of variation within environment.

SEM - standard error of variety mean within environment.

LSD - measured differences between varieties across reps within environment.

**TABLE 5. THREE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE (2014-2016)**

**Maturity:** 4.0 - 4.9

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Pioneer	RR	P49T80R	59.8 **	36.0	1.1
RPM	RR	DB4715RR	55 *	34.3	1.2
Pioneer	RR	P48T53R	54.3	34.0	1.0
Progeny	RR2/STS	P 4613 RYS	51.9	35.8	1.2
Progeny	RR2	P 4788 RY	51.8	35.2	1.2
Asgrow	RR2	AG4934	49.8	37.0	1.1
		<b>Mean</b>	53.8	35.4	1.1
		<b>Locations</b>	6	6	6
		CV (%)	10.3	.	.
		SEM	2.3	.	.
		LSD (0.1)	5.3	.	.
		DF LSD (0.1)	25	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 6. TWO YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2015-2016)**

**Maturity:** 4.0 - 4.9

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Pioneer	RR	P49T80R	61.7 **	36.0	1.2
Progeny	RR2	P 4757 RY	57.9 *	35.6	1.3
Southern States	RR2	SS 4915NS R2	55.8	40.2	1.1
RPM	RR	DB4715RR	54.8	34.2	1.2
REV	RR	REV 49R94	54.6	37.6	1.4
REV	RR	REV 47R34	54.5	34.6	1.5
Progeny	RR2/STS	P 4613 RYS	53.8	35.8	1.3
Pioneer	RR	P48T53R	53.5	34.0	1.0
Asgrow	RR2	AG4934	53.4	37.4	1.1
Progeny	RR2	P 4788 RY	52.7	35.0	1.2
Dyna-Gro	RR2	S43RY95	49.2	34.6	1.5
Credenz	RR	CZ 4590 RY	44.7	36.0	1.2
		<b>Mean</b>	53.9	35.9	1.2
		<b>Locations</b>	5	5	5
		CV (%)	7.9	.	.
		SEM	1.9	.	.
		LSD (0.1)	4.4	.	.
		DF LSD (0.1)	44	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 7. ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2016)**

**Maturity:** 4.0 - 4.9

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Stine	RR2	48RI23	63.4**	37.3	1.3
Pioneer	RR	P49T80R	63*	36.5	1.2
Progeny	RR2	P 4757 RY	60.4*	36.3	1.3
Stine	RR2	48RI02	59.5*	37.3	1.1
USG	RR2/STS	USG 74K95RS	59.2	41.0	1.4
RPM	RR2/STS	DB4914SR2	59.2	35.8	1.5
USG	Xtend/STS	USG 7477XTS	59.1	39.3	1.2
REV	RR	REV 48A76	58.7	33.8	1.3
Southern States	Xtend/STS	SS 4717NS X	58.0	41.0	1.2
Asgrow	Xtend	AG48X7	57.8	37.8	1.3
Asgrow	Xtend	AG49X6	57.6	35.8	1.1
RPM	RR	DB4715RR	56.7	35.8	1.3
Progeny	RR2/STS	P 4613 RYS	56.5	36.8	1.3
REV	RR	REV 49R94	56.0	38.5	1.4
Southern States	RR2	SS 4915NS R2	56.0	42.0	1.2
REV	RR	REV 47R34	55.9	34.8	1.6
Pioneer	RR	P48T53R	55.6	35.0	1.1
REV	RR	REV 48A26	55.5	36.8	1.7
USG	Xtend/STS	USG 7487XTS	55.4	38.5	1.2
Dyna-Gro	Xtend/STS	S46XS87	55.4	35.8	1.3
Progeny	RR2	P 4788 RY	54.0	36.3	1.3
Asgrow	RR2	AG4934	53.7	38.8	1.1
NK	RR2	S49-B1	53.5	37.8	1.2
Credenz	RR	CZ 4656 RY	53.4	35.8	1.5
NK	RR2	S45-W9	53.2	35.0	1.0
Southern States	Xtend	SS 4918N X	53.1	33.0	1.1
Dyna-Gro	RR2	S43RY95	50.5	35.3	1.6
Dyna-Gro	Xtend/STS	S49XS76	49.9	38.8	1.2
Credenz	RR	CZ 4898 RY	49.3	35.3	1.5
Dyna-Gro	Xtend/STS	S48XT56	48.8	34.0	1.1
Credenz	RR	CZ 4590 RY	47.1	37.3	1.2
Progeny	RR2	P 4588 RY	43.6	37.0	1.7
		<b>Mean</b>	55.3	36.9	1.3
		<b>Locations</b>	5	5	5
		CV (%)	3.1		
		SEM	1.7	.	.
		LSD (0.1)	4.1	.	.
		DF LSD (0.1)	93.0	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale.

**CV** - coefficient of variation within environment.

**SEM** - standard error of variety mean within environment.

**LSD** - measured differences between varieties across reps within environment.

**TABLE 8.** ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - LOCATION SUMMARY (2016)

Maturity: 4.0 - 4.9

Planting: Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Beaufort Yield (bu/a)</b>	<b>Edgecombe Yield (bu/a)</b>	<b>Sampson Yield (bu/a)</b>	<b>Rowan Yield (bu/a)</b>	<b>Statewide Average Yield (bu/a)</b>
Stine	RR2	48RI23	71 *	61.5 **	59.3 **	64.6 *	<b>63.4**</b>
Pioneer	RR	P49T80R	72.4 **	58 *	56.2 *	62.3	<b>63*</b>
Progeny	RR2	P 4757 RY	68	54.8 *	52.5	68.5 *	<b>60.4*</b>
Stine	RR2	48RI02	64.8	56.5 *	59 *	66 *	<b>59.5*</b>
RPM	RR2/STS	DB4914SR2	67.9	47.7	57.8 *	58.7	<b>59.2</b>
USG	RR2/STS	USG 74K95RS	65.3	45.8	58.1 *	70.1 **	<b>59.2</b>
USG	Xtend/STS	USG 7477XTS	67.2	53.2 *	55.6 *	60.3	<b>59.1</b>
REV	RR	REV 48A76	67.1	45.5	50.8	69.2 *	<b>58.7</b>
Southern States	Xtend/STS	SS 4717NS X	65.2	55.7 *	58.1 *	55.8	<b>58.0</b>
Asgrow	Xtend	AG48X7	65.6	55.5 *	53.1	58.9	<b>57.8</b>
Asgrow	Xtend	AG49X6	64.7	49.6	55.7 *	62.2	<b>57.6</b>
RPM	RR	DB4715RR	65.5	45.4	44.9	69.2 *	<b>56.7</b>
Progeny	RR2/STS	P 4613 RYS	65.2	53.8 *	51.9	54.5	<b>56.5</b>
REV	RR	REV 49R94	62.8	44.6	55.6 *	61.7	<b>56.0</b>
Southern States	RR2	SS 4915NS R2	62.8	50.5	53.7 *	59.8	<b>56.0</b>
REV	RR	REV 47R34	66.1	42.9	47.8	59	<b>55.9</b>
Pioneer	RR	P48T53R	63.4	39.7	49.8	67.2 *	<b>55.6</b>
REV	RR	REV 48A26	63.1	50	48.3	63.2	<b>55.5</b>
Dyna-Gro	Xtend/STS	S46XS87	62.4	49.5	55.1 *	56.7	<b>55.4</b>
USG	Xtend/STS	USG 7487XTS	61.4	47.2	56.9 *	59.8	<b>55.4</b>
Progeny	RR2	P 4788 RY	64	44.1	43.9	58.6	<b>54.0</b>
Asgrow	RR2	AG4934	62.8	44.6	52.2	51	<b>53.7</b>
NK	RR2	S49-B1	60.4	49.1	49.3	59.4	<b>53.5</b>
Credenz	RR	CZ 4656 RY	61.5	53	44.9	57.5	<b>53.4</b>
NK	RR2	S45-W9	64.4	54.6 *	37.7	52.8	<b>53.2</b>
Southern States	Xtend	SS 4918N X	62.3	43.2	47.6	55.1	<b>53.1</b>
Dyna-Gro	RR2	S43RY95	56.5	46	49.2	56.2	<b>50.5</b>
Dyna-Gro	Xtend/STS	S49XS76	56.3	42.2	45.9	59.4	<b>49.9</b>
Credenz	RR	CZ 4898 RY	56	40.2	47.9	55.2	<b>49.3</b>
Dyna-Gro	Xtend/STS	S48XT56	59.1	33.9	38.6	55.8	<b>48.8</b>
Credenz	RR	CZ 4590 RY	58.2	32.9	36.6	50.6	<b>47.1</b>
Progeny	RR2	P 4588 RY	51	41.5	36.7	49.3	<b>43.6</b>
		<b>Mean</b>	63.3	47.9	50.3	59.6	
		CV (%)	5.7	16.4	12.5	10.6	
		SEM	1.6	4.1	2.8	3.1	
		LSD (0.1)	3.6	8.4	6.1	6.2	
		DF LSD (0.1)	125	94	126	94	

\*\*Highest yielder. \*Not significantly different from highest yielder.

CV - coefficient of variation within environment.

SEM - standard error of variety mean within environment.

LSD - measured differences between varieties across reps within environment.

**TABLE 9. THREE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE (2014-2016)**

**Maturity:** 5.0 - 5.5

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Southern States	RR2	SS 5511N R2	57.4 **	38.4	1.4
Pioneer	RR	P52T50R	55.4 *	39.1	1.4
Dyna-Gro	RR2	32RY55	55.2 *	38.9	1.4
Progeny	RR2	P 5555 RY	54.7 *	40.6	1.7
Pioneer	RR/STS	P53T73SR	50.9	37.7	1.2
		<b>Mean</b>	54.7	38.9	1.4
		<b>Locations</b>	12	12	12
		CV (%)	7.5	.	.
		SEM	1.2	.	.
		LSD (0.1)	2.7	.	.
		DF LSD (0.1)	44	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 10. TWO YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2015-2016)**

**Maturity:** 5.0 - 5.5

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Progeny	RR2/STS	P 5226 RYS	55.4 **	39.4	1.9
Southern States	RR2	SS 5511N R2	51.5 *	36.1	1.5
Dyna-Gro	RR2	32RY55	49.8	38.8	1.5
Pioneer	RR	P52T50R	49.3	35.5	1.5
Progeny	RR2	P 5555 RY	48.2	39.0	1.8
RPM	RR	DB5416R	47.4	40.5	1.9
Pioneer	RR/STS	P53T73SR	46.7	35.5	1.3
Stine	RR2	51RH20	43.8	39.9	1.5
(Public)	RR	UA 5414RR	42.3	36.3	2.0
		<b>Mean</b>	48.3	37.9	1.6
		<b>Locations</b>	8	8	8
		CV (%)	10	.	.
		SEM	1.7	.	.
		LSD (0.1)	4	.	.
		DF LSD (0.1)	56	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale.

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 11. ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE (2016)****Maturity:** 5.0 - 5.5**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Mycogen	RR2/STS	Mycogen 5N523R2	60.5**	39.8	1.9
Progeny	RR2/STS	P 5226 RYS	58.5*	42.0	2.3
Dyna-Gro	RR2/STS	S52RS86	55.9*	39.0	1.9
Pioneer	RR	P55T81R	52.0	38.8	1.6
USG	Xtend	USG 7536XT	50.0	37.0	2.1
Asgrow	Xtend	AG55X7	49.5	34.8	1.7
Southern States	Xtend/STS	SS 5016NS X	49.4	39.0	1.8
Progeny	RR2	P 5555 RY	48.0	37.0	2.1
Credenz	RR	CZ 5375 RY	47.9	35.6	1.7
Pioneer	RR	P52T50R	47.9	36.4	1.7
Southern States	RR2	SS 5511N R2	47.9	36.4	1.7
Asgrow	Xtend	AG53X6	47.4	37.2	1.9
RPM	RR/STS	DB5317SR	46.9	40.8	2.0
Southern States	Xtend	SS 5517N X	46.7	36.2	1.9
Dyna-Gro	RR2	32RY55	46.5	39.4	1.9
Pioneer	RR/STS	P53T73SR	46.1	35.4	1.5
RPM	RR	DB5416R	45.7	40.6	2.2
USG	Xtend	USG 7557XT	45.0	42.4	1.8
REV	RR	REV 51A56	43.9	41.2	2.0
Stine	RR2	51RH20	43.8	41.2	1.8
(Public)	RR	UA 5414RR	43.5	36.0	2.5
Progeny	RR2	P 5289 RYS	43.3	40.2	2.1
(Public)	RR	+V11-3485	42.1	35.8	2.1
REV	RR/STS	REV 52A94	40.3	36.6	2.4
		<b>Mean</b>	47.9	38.3	1.9
		<b>Locations</b>	5	5	5
		CV (%)	4.4		
		SEM	2.1	.	.
		LSD (0.1)	4.9	.	.
		DF LSD (0.1)	92.0	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale. +Experimental

**CV - coefficient of variation within environment.****SEM - standard error of variety mean within environment.****LSD - measured differences between varieties across reps within environment.**

**TABLE 12. ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - LOCATION SUMMARY (2016)**

**Maturity:** 5.0 - 5.5

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Beaufort Yield (bu/a)</b>	<b>Pasquotank Yield (bu/a)</b>	<b>Edgecombe Yield (bu/a)</b>	<b>Sampson Yield (bu/a)</b>	<b>Rowan Yield (bu/a)</b>	<b>Statewide Average Yield (bu/a)</b>
Mycogen	RR2/STS	Mycogen 5N523R2	64.7 **	56.1 *	51.8	71.9 **	56.2 **	<b>60.5**</b>
Progeny	RR2/STS	P 5226 RYS	60.3 *	57.1 **	63.2 **	70.2 *	45.7	<b>58.5*</b>
Dyna-Gro	RR2/STS	S52RS86	56.9	50.4 *	57.7 *	67.9 *	50.6 *	<b>55.9*</b>
Pioneer	RR	P55T81R	55.8	44.6	59.3 *	63.5	43.1	<b>52.0</b>
USG	Xtend	USG 7536XT	64.5 *	43.5	35.1	58.7	42	<b>50.0</b>
Asgrow	Xtend	AG55X7	51.9	42.2	53	60	46.1	<b>49.5</b>
Southern States	Xtend/STS	SS 5016NS X	55.3	42.2	46.4	60.7	43.4	<b>49.4</b>
Progeny	RR2	P 5555 RY	56.9	47.1	49.3	60.6	24.5	<b>48.0</b>
Southern States	RR2	SS 5511N R2	54.2	45.2	56.8 *	56.7	32.4	<b>47.9</b>
Pioneer	RR	P52T50R	48.9	43.5	48.5	59.3	42.8	<b>47.9</b>
Credenz	RR	CZ 5375 RY	50.7	46.4	49.9	62.3	30.3	<b>47.9</b>
Asgrow	Xtend	AG53X6	56.1	43.8	41.2	54.9	41.3	<b>47.4</b>
RPM	RR/STS	DB5317SR	52.2	54.2 *	30	56	34.3	<b>46.9</b>
Southern States	Xtend	SS 5517N X	52.7	43.6	36.5	60.5	34.7	<b>46.7</b>
Dyna-Gro	RR2	32RY55	51.9	43.6	47.1	56.9	34.8	<b>46.5</b>
Pioneer	RR/STS	P53T73SR	52	41.7	49.5	55.6	35.7	<b>46.1</b>
RPM	RR	DB5416R	46.5	41.6	43.1	58.1	40.6	<b>45.7</b>
USG	Xtend	USG 7557XT	44.2	42.5	41.3	62.8	31	<b>45.0</b>
REV	RR	REV 51A56	44.9	49	40.1	51.4	35.8	<b>43.9</b>
Stine	RR2	51RH20	40.7	43.8	43.3	57.3	36.1	<b>43.8</b>
(Public)	RR	UA 5414RR	45.5	42.2	32.2	59.4	31.9	<b>43.5</b>
Progeny	RR2	P 5289 RYS	41.5	45.1	34.5	60.1	29.9	<b>43.3</b>
(Public)	RR	+V11-3485	49.1	35.4	45	57.1	23.4	<b>42.1</b>
REV	RR/STS	REV 52A94	41.9	37.3	34.3	55.7	29.1	<b>40.3</b>
		<b>Mean</b>	51.6	45.1	45.4	59.9	37.3	
		CV (%)	13.2	15.9	21.4	10.3	19.9	
		SEM	3	3.2	4.9	2.8	3.8	
		LSD (0.1)	7.1	7.3	10.2	6	7.7	
		DF LSD (0.1)	93	94	70	94	70	

+Experimental.

\*\*Highest yielder. \*Not significantly different from highest yielder.

**CV** - coefficient of variation within environment.

**SEM** - standard error of variety mean within environment.

**LSD** - measured differences between varieties across reps within environment.

**TABLE 13. THREE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2014-2016)**

**Maturity:** 5.0 - 5.5

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Southern States	RR2	SS 5511N R2	54.2 **	35.2	1.3
Progeny	RR2	P 5555 RY	50.3	36.6	1.4
Pioneer	RR	P52T50R	50.1	33.1	1.2
Dyna-Gro	RR2	32RY55	49.6	34.7	1.3
Pioneer	RR/STS	P53T73SR	48.6	32.3	1.2
		<b>Mean</b>	50.6	34.4	1.3
		<b>Locations</b>	9	9	9
		CV (%)	7.5	.	.
		SEM	1.3	.	.
		LSD (0.1)	3	.	.
		DF LSD (0.1)	32	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale.

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 14. TWO YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2015-2016)**

**Maturity:** 5.0 - 5.5

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Progeny	RR2/STS	P 5226 RYS	49.6 **	32.8	1.2
Pioneer	RR	P52T50R	48.6 *	29.2	1.3
Southern States	RR2	SS 5511N R2	48.5 *	33.4	1.6
Progeny	RR2	P 5555 RY	48.2 *	32.4	1.8
RPM	RR	DB5416R	47 *	33.4	2.1
Pioneer	RR/STS	P53T73SR	46.1 *	29.8	1.3
Dyna-Gro	RR2	32RY55	45.9 *	32.2	1.6
Stine	RR2	51RH20	44.9	34.2	1.3
(Public)	RR	UA 5414RR	43.1	31.2	2.2
		<b>Mean</b>	46.9	32.1	1.6
		<b>Locations</b>	5	5	5
		CV (%)	7.7	.	.
		SEM	1.6	.	.
		LSD (0.1)	3.8	.	.
		DF LSD (0.1)	32	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 15. ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE (2016)****Maturity:** 5.0 - 5.5**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Pioneer	RR	P55T81R	53.1**	32.5	1.7
Mycogen	RR2/STS	Mycogen 5N523R2	51.1*	35.3	1.2
Progeny	RR2/STS	P 5226 RYS	50.7*	34.3	1.3
Asgrow	Xtend	AG53X6	50.5*	32.0	1.7
Pioneer	RR	P52T50R	50*	30.3	1.4
USG	Xtend	USG 7536XT	50*	33.8	1.9
Dyna-Gro	RR2/STS	S52RS86	49.5*	32.8	1.3
Progeny	RR2	P 5555 RY	49*	32.0	2.0
Southern States	RR2	SS 5511N R2	48.7	34.3	1.7
Asgrow	Xtend	AG55X7	48.5	30.5	1.0
Credenz	RR	CZ 5375 RY	48.4	32.3	1.7
Southern States	Xtend	SS 5517N X	47.3	30.3	1.6
Dyna-Gro	RR2	32RY55	46.6	32.5	1.8
REV	RR	REV 51A56	46.1	36.0	1.6
USG	Xtend	USG 7557XT	46.0	35.3	1.2
Pioneer	RR/STS	P53T73SR	46.0	31.0	1.4
Stine	RR2	51RH20	45.9	35.5	1.4
RPM	RR	DB5416R	45.7	33.0	2.4
RPM	RR/STS	DB5317SR	45.2	33.0	1.9
(Public)	RR	UA 5414RR	44.5	31.8	2.4
Southern States	Xtend/STS	SS 5016NS X	44.3	33.3	1.4
Progeny	RR2	P 5289 RYS	40.1	32.0	1.3
(Public)	RR	+V11-3485	40.1	32.3	1.7
REV	RR/STS	REV 52A94	39.6	32.8	2.4
		<b>Mean</b>	47.0	32.8	1.6
		<b>Locations</b>	4	4	4
		CV (%)	3.8		
		SEM	1.8	.	.
		LSD (0.1)	4.2	.	.
		DF LSD (0.1)	69.0	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale. +Experimental

**CV - coefficient of variation within environment.****SEM - standard error of variety mean within environment.****LSD - measured differences between varieties across reps within environment.**

**TABLE 16.** ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - LOCATION SUMMARY (2016)

Maturity: 5.0 - 5.5

Planting: Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Pasquotank Yield (bu/a)</b>	<b>Beaufort Yield (bu/a)</b>	<b>Edgecombe Yield (bu/a)</b>	<b>Sampson Yield (bu/a)</b>	<b>Statewide Average Yield (bu/a)</b>
Pioneer	RR	P55T81R	42.7 *	63.7 **	50.2	55.3 *	<b>53.1**</b>
Mycogen	RR2/STS	Mycogen 5N523R2	40.4 *	61.6 *	46.3	56 *	<b>51.1*</b>
Progeny	RR2/STS	P 5226 RYS	41.3 *	59.8 *	58.3 **	44.8	<b>50.7*</b>
Asgrow	Xtend	AG53X6	44.7 **	56.7	50.6 *	51.3 *	<b>50.5*</b>
Pioneer	RR	P52T50R	41.9 *	56.5	54.9 *	49.8	<b>50*</b>
USG	Xtend	USG 7536XT	41 *	59.1 *	48.4	51.8 *	<b>50*</b>
Dyna-Gro	RR2/STS	S52RS86	42 *	60.3 *	45.4	47.2	<b>49.5*</b>
Progeny	RR2	P 5555 RY	37.5	57.7	50.6 *	52.9 *	<b>49*</b>
Southern States	RR2	SS 5511N R2	36.5	57.8	50.9 *	52.7 *	<b>48.7</b>
Asgrow	Xtend	AG55X7	35.9	58.2	52.1 *	50.3	<b>48.5</b>
Credenz	RR	CZ 5375 RY	43.4 *	58.7 *	40	47	<b>48.4</b>
Southern States	Xtend	SS 5517N X	38.5	57	45.5	47.6	<b>47.3</b>
Dyna-Gro	RR2	32RY55	42.4 *	52.4	41.7	49.7	<b>46.6</b>
REV	RR	REV 51A56	39.2 *	56.3	43.2	42.9	<b>46.1</b>
Pioneer	RR/STS	P53T73SR	39.8 *	53.8	47.6	42.2	<b>46.0</b>
USG	Xtend	USG 7557XT	31	51.9	51.1 *	58.4 **	<b>46.0</b>
Stine	RR2	51RH20	37.4	52.1	48.7	48.5	<b>45.9</b>
RPM	RR	DB5416R	35	56.1	45.3	46.7	<b>45.7</b>
RPM	RR/STS	DB5317SR	39.9 *	53.3	43.8	42.2	<b>45.2</b>
(Public)	RR	UA 5414RR	36.3	57.6	31.8	46.7	<b>44.5</b>
Southern States	Xtend/STS	SS 5016NS X	39.2 *	52.6	42.7	41	<b>44.3</b>
Progeny	RR2	P 5289 RYS	30.1	51.1	38.6	39.6	<b>40.1</b>
(Public)	RR	+V11-3485	33.3	50	38.6	36	<b>40.1</b>
REV	RR/STS	REV 52A94	34.3	46.9	36.5	39.8	<b>39.6</b>
		<b>Mean</b>	38.5	55.9	45.9	47.5	
		CV (%)	14.9	9.5	15.4	15.9	
		SEM	2.6	2.4	3.6	3.4	
		LSD (0.1)	5.9	5.4	7.9	7.3	
		DF LSD (0.1)	94	94	70	94	

+Experimental.

\*\*Highest yielder. \*Not significantly different from highest yielder.

CV - coefficient of variation within environment.

SEM - standard error of variety mean within environment.

LSD - measured differences between varieties across reps within environment.

**TABLE 17. THREE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE (2014-2016)**

**Maturity:** 5.5 - 5.9

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
RPM	RR	DB5710RR	57.2 **	40.7	2.1
REV	RR	REV 57R21	55.4 *	42.2	2.0
USG	RR2	USG 75J90R	55.4 *	41.0	1.4
REV	RR	REV 56R63	52	41.1	2.0
		<b>Mean</b>	55	41.3	1.9
		<b>Locations</b>	9	9	9
		CV (%)	11	.	.
		SEM	2	.	.
		LSD (0.1)	4.6	.	.
		DF LSD (0.1)	24	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 18. TWO YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2015-2016)**

**Maturity:** 5.5 - 5.9

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
USG	RR2	USG 75B75R	53.4 **	36.2	1.4
Pioneer	RR2	P56T29R2	51.4 *	33.6	1.4
Progeny	RR2	P 5752 RY	51.2 *	35.2	1.4
RPM	RR	DB5710RR	51.1 *	39.0	2.0
Southern States	RR2	SS 5615N R2	50.5 *	37.8	1.3
Dyna-Gro	RR2	S57RY26	49.7 *	35.6	1.4
REV	RR	REV 57R21	47.4 *	41.6	1.8
REV	RR	REV 56R63	46.9	37.4	1.7
(Public)	RR2	+R10-197RY	46.4	37.8	1.4
USG	RR2	USG 75J90R	45.9	37.0	1.2
		<b>Mean</b>	49.4	37.1	1.5
		<b>Locations</b>	5	5	5
		CV (%)	11.7	.	.
		SEM	2.6	.	.
		LSD (0.1)	6	.	.
		DF LSD (0.1)	36	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale. +Experimental**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 19. ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2016)**

**Maturity:** 5.5 - 5.9

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Asgrow	Xtend	AG59X7	54.1**	35.8	1.2
RPM	RR	DB5710RR	54*	40.5	2.3
USG	RR2	USG 75B75R	53.2*	37.3	1.5
Dyna-Gro	RR2	S57RY26	51.8*	37.0	1.5
NK	RR2	S56-M8	51.7*	36.3	1.2
NK	RR2	S58-Z4	51.6*	39.0	1.3
Pioneer	RR2	P56T29R2	51.1*	34.0	1.5
Progeny	RR2	P 5752 RY	50.7*	36.8	1.5
Southern States	RR2	SS 5615N R2	50.3*	37.3	1.4
Stine	RR2	55RI02	49.3*	36.0	1.4
USG	Xtend	USG 7576XT	49.1*	34.8	1.2
REV	RR	REV 57R21	48.9*	43.0	2.0
Southern States	Xtend/STS	SS 5917NS X	47.0	42.8	1.3
T.A. Seeds	RR2	TS5659R2	46.2	38.3	1.9
(Public)	RR	+R07-6614RR	45.8	38.0	1.5
REV	RR	REV 56R63	44.4	39.0	1.8
(Public)	RR2	+R10-197RY	42.7	39.8	1.5
USG	RR2	USG 75J90R	42.4	38.8	1.3
(Public)	RR2	+V12-0045R2	42.0	35.8	1.6
		<b>Mean</b>	48.8	37.9	1.5
		<b>Locations</b>	4	4	4
		CV (%)	6.0		
		SEM	2.9	.	.
		LSD (0.1)	6.8	.	.
		DF LSD (0.1)	54.0	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale. +Experimental**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 20.** ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - LOCATION SUMMARY (2016)**Maturity:** 5.5 - 5.9**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<i>Beaufort Yield (bu/a)</i>	<i>Pasquotank Yield (bu/a)</i>	<i>Sampson Yield (bu/a)</i>	<i>Rowan Yield (bu/a)</i>	<b>Statewide Average Yield (bu/a)</b>
Asgrow	Xtend	AG59X7	55.8	46 *	71.1 **	42.7	<b>54.1**</b>
RPM	RR	DB5710RR	60.5 *	47.6 *	63.3	36.1	<b>54*</b>
USG	RR2	USG 75B75R	61.1 *	45.5 *	58.1	44.4	<b>53.2*</b>
Dyna-Gro	RR2	S57RY26	60.5 *	43.7 *	55.6	42.7	<b>51.8*</b>
NK	RR2	S56-M8	54.1	48 *	62	42.7	<b>51.7*</b>
NK	RR2	S58-Z4	47.4	50.1 **	70 *	45.5 *	<b>51.6*</b>
Pioneer	RR2	P56T29R2	52.7	48.7 *	61.6	42.2	<b>51.1*</b>
Progeny	RR2	P 5752 RY	61 *	45.2 *	45.9	51.6 **	<b>50.7*</b>
Southern States	RR2	SS 5615N R2	62.4 **	44.1 *	47.1	40	<b>50.3*</b>
Stine	RR2	55RI02	59 *	43.1 *	48.2	44.4	<b>49.3*</b>
USG	Xtend	USG 7576XT	50	39.3	67.2 *	42.5	<b>49.1*</b>
REV	RR	REV 57R21	54.6	45.5 *	55.2	35.2	<b>48.9*</b>
Southern States	Xtend	SS 5917NS X	50.6	39.5	60.9	33.4	<b>47.0</b>
T.A. Seeds	RR2	TS5659R2	47.9	44.7 *	56.2	35.3	<b>46.2</b>
(Public)	RR	+R07-6614RR	48.2	41.8	54.4	43	<b>45.8</b>
REV	RR	REV 56R63	41.3	46.4 *	57.1	39.6	<b>44.4</b>
(Public)	RR2	+R10-197RY	43.6	41.9 *	47.5	48.5 *	<b>42.7</b>
USG	RR2	USG 75J90R	41.5	44.3 *	49.9	42.3	<b>42.4</b>
(Public)	RR2	+V12-0045R2	47.2	37.8	48.8	30.8	<b>42.0</b>
		<b>Mean</b>	52.6	44.4	56.8	41.2	
		CV (%)	11.4	17.8	13.8	29.1	
		SEM	2.7	3.5	3.5	5.9	
		LSD (0.1)	6.4	8.2	7.3	6.3	
		DF LSD (0.1)	74	74	74	55	

+Experimental.

\*\*Highest yielder. \*Not significantly different from highest yielder.

CV - coefficient of variation within environment.

SEM - standard error of variety mean within environment.

LSD - measured differences between varieties across reps within environment.

**TABLE 21. THREE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE (2014-2016)**

**Maturity:** 5.5 - 5.9

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
USG	RR2	USG 75J90R	51.9 **	34.4	1.4
REV	RR	REV 56R63	49.9 *	34.9	2.0
REV	RR	REV 57R21	47.9	37.0	1.9
RPM	RR	DB5710RR	47.4	36.6	1.9
		<b>Mean</b>	49.3	35.7	1.8
		<b>Locations</b>	11	11	11
		CV (%)	7.7	.	.
		SEM	1.1	.	.
		LSD (0.1)	2.7	.	.
		DF LSD (0.1)	30	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 22. TWO YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE (2015-2016)**

**Maturity:** 5.5 - 5.9

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Progeny	RR2	P 5752 RY	52.1 **	33.0	1.6
Southern States	RR2	SS 5615N R2	51.8 *	33.0	1.6
Pioneer	RR2	P56T29R2	50.2 *	32.1	1.3
USG	RR2	USG 75B75R	50 *	33.6	1.6
REV	RR	REV 56R63	49.5 *	33.5	2.3
USG	RR2	USG 75J90R	49.3 *	33.0	1.6
(Public)	RR2	+R10-197RY	48.7 *	33.1	1.7
Dyna-Gro	RR2	S57RY26	47.9	32.1	1.6
REV	RR	REV 57R21	47.4	36.3	2.1
RPM	RR	DB5710RR	47	35.7	2.2
		<b>Mean</b>	49.4	33.6	1.8
		<b>Locations</b>	7	7	7
		CV (%)	8.3	.	.
		SEM	1.6	.	.
		LSD (0.1)	3.7	.	.
		DF LSD (0.1)	54	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale. +Experimental**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 23. ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2016)**

**Maturity:** 5.5 - 5.9

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
NK	RR2	S58-Z4	56.6**	35.4	1.4
T.A. Seeds	RR2	TS5659R2	54.2*	35.2	2.4
NK	RR2	S56-M8	54.2*	35.8	1.1
Southern States	RR2	SS 5615N R2	53.7*	33.8	1.9
Asgrow	Xtend	AG59X7	53.6*	32.2	1.3
USG	Xtend	USG 7576XT	52.8	31.6	1.4
Progeny	RR2	P 5752 RY	52.6	32.4	1.8
Stine	RR2	55RI02	51.8	33.2	1.5
Pioneer	RR2	P56T29R2	51.4	32.4	1.4
(Public)	RR2	+R10-197RY	51.3	34.0	2.0
USG	RR2	USG 75J90R	50.8	34.4	1.9
REV	RR	REV 57R21	50.7	38.0	2.6
USG	RR2	USG 75B75R	50.5	34.8	1.8
RPM	RR	DB5710RR	50.5	37.0	2.6
REV	RR	REV 56R63	50.1	34.3	2.6
(Public)	RR2	+V12-0045R2	50.1	34.0	1.6
Dyna-Gro	RR2	S57RY26	49.2	32.8	1.8
(Public)	RR	+R07-6614RR	47.5	35.2	2.3
Southern States	Xtend/STS	SS 5917NS X	46.9	37.4	2.1
		<b>Mean</b>	51.5	34.4	1.9
		<b>Locations</b>	5	5	5
		CV (%)	3.1		
		SEM	1.6	.	.
		LSD (0.1)	3.7	.	.
		DF LSD (0.1)	72.0	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale. +Experimental**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 24. ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - LOCATION SUMMARY (2016)****Maturity:** 5.5 - 5.9**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Pasquotank Yield (bu/a)</b>	<b>Beaufort Yield (bu/a)</b>	<b>Edgecombe Yield (bu/a)</b>	<b>Sampson Yield (bu/a)</b>	<b>Rowan Yield (bu/a)</b>	<b>Statewide Average Yield (bu/a)</b>
NK	RR2	S58-Z4	48.1 **	56.1	56.3 **	54.2 **	73.4 *	<b>56.6**</b>
NK	RR2	S56-M8	44.2 *	58 *	52.6 *	48.8 *	70.8 *	<b>54.2*</b>
T.A. Seeds	RR2	TS5659R2	39.9	59.3 *	53.2 *	53.3 *	64.2	<b>54.2*</b>
Southern States	RR2	SS 5615N R2	36.1	59.9 *	54.1 *	53.4 *	63.4	<b>53.7*</b>
Asgrow	Xtend	AG59X7	41.1	58.8 *	47.9	51.6 *	69.1 *	<b>53.6*</b>
USG	Xtend	USG 7576XT	40.2	58.7 *	52.3 *	44.2	75.7 **	<b>52.8</b>
Progeny	RR2	P 5752 RY	42.5 *	61.3 **	44.6	49.8 *	59.4	<b>52.6</b>
Stine	RR2	55RI02	35.3	56.4 *	50.5 *	53.6 *	61.3	<b>51.8</b>
Pioneer	RR2	P56T29R2	36.3	59.8 *	43.3	50.6 *	64.2	<b>51.4</b>
(Public)	RR2	+R10-197RY	32.4	58.9 *	43.6	50.7 *	72.9 *	<b>51.3</b>
USG	RR2	USG 75J90R	32.2	56.8 *	47.7	54.1 *	60.2	<b>50.8</b>
REV	RR	REV 57R21	40.7	54.6	44.5	51 *	59.9	<b>50.7</b>
RPM	RR	DB5710RR	39.5	57.2 *	42.6	49.1 *	60.8	<b>50.5</b>
USG	RR2	USG 75B75R	33	58.9 *	40.6	51.1 *	67.9 *	<b>50.5</b>
REV	RR	REV 56R63	36	56.5 *	44.1	47.8	67.4 *	<b>50.1</b>
(Public)	RR2	+V12-0045R2	33.7	59.1 *	41.3	50.5 *	62.3	<b>50.1</b>
Dyna-Gro	RR2	S57RY26	37.8	52.4	46.3	48.3	61.2	<b>49.2</b>
(Public)	RR	+R07-6614RR	36.4	48	42.4	48.1	66.4	<b>47.5</b>
Southern States	Xtend/STS	SS 5917NS X	30.4	52.9	40.2	45.9	68.2 *	<b>46.9</b>
		<b>Mean</b>	37.7	57	46.7	50.3	65.7	
		CV (%)	17.1	9.6	14.2	11.6	12.6	
		SEM	2.9	2.4	3.4	2.4	4.1	
		LSD (0.1)	6.8	5.1	6.7	5.8	8.8	
		DF LSD (0.1)	74	74	55	60	55	

**+Experimental.****\*\*Highest yielder. \*Not significantly different from highest yielder.**

CV - coefficient of variation within environment.

SEM - standard error of hybrid mean within environment.

LSD - measured differences between hybrids across reps within environment.

**TABLE 25. THREE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE (2014-2016)**

**Maturity:** 6.0 - 6.9

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Progeny	RR2	P 6710 RY	58.9 **	40.4	1.1
NK	RR	S67-R6	58.5 *	39.3	1.2
USG	RR2	USG 76S73R	58.2 *	37.1	1.1
Dyna-Gro	RR2	S67RY25	56.2 *	36.7	1.1
Dyna-Gro	RR2	S65RY73	53.5	38.6	1.3
		<b>Mean</b>	57.1	38.4	1.2
		<b>Locations</b>	11	11	11
		CV (%)	8.9	.	.
		SEM	1.5	.	.
		LSD (0.1)	3.6	.	.
		DF LSD (0.1)	40	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale.

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 26. TWO YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2015-2016)**

**Maturity:** 6.0 - 6.9

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
NK	RR	S67-R6	53.6 **	35.8	1.2
Progeny	RR2	P 6710 RY	51.4 *	38.2	1.1
USG	RR2	USG 76S73R	49.6 *	33.5	1.1
Dyna-Gro	RR2	S65RY73	49.1 *	36.8	1.3
Dyna-Gro	RR2	S67RY25	48.9 *	36.0	1.0
Credenz	RR	CZ 6060 RY	48.1	35.2	1.5
Pioneer	RR2	P67T25R2	47.1	39.7	1.5
		<b>Mean</b>	49.7	36.5	1.2
		<b>Locations</b>	6	6	6
		CV (%)	10.9	.	.
		SEM	2.2	.	.
		LSD (0.1)	5.2	.	.
		DF LSD (0.1)	30	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 27. ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2016)**

**Maturity:** 6.0 - 6.9

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
NK	RR	S67-R6	52.3**	37.8	1.3
USG	Xtend	USG 7686XT	49.4*	36.3	1.5
Asgrow	Xtend	AG69X6	49.2*	37.8	1.2
Progeny	RR2	P 6710 RY	49*	41.0	1.1
Dyna-Gro	RR2	S65RY73	48.5*	39.5	1.3
Dyna-Gro	RR2	S67RY25	47.8*	39.5	1.1
Credenz	RR	CZ 6060 RY	46.5	37.8	1.6
RPM	RR	DB6017R	45.5	34.3	1.6
Pioneer	RR2	P67T25R2	45.3	43.5	1.5
NK	RR2	S69-G9	45.2	39.0	1.3
USG	RR2	USG 76S73R	44.7	35.8	1.1
Southern States	Xtend	+SS 6917 X	44.1	36.5	1.7
USG	Xtend	USG 7607 XT	42.2	34.8	1.4
Dyna-Gro	Xtend	S69XT57	40.6	37.0	1.5
T.A. Seeds	RR2	TS6569R2	37.7	36.0	1.4
		<b>Mean</b>	45.8	37.8	1.4
		<b>Locations</b>	4	4	4
		CV (%)	5.1		
		SEM	2.3	.	.
		LSD (0.1)	5.5	.	.
		DF LSD (0.1)	42.0	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale. +Experimental**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 28.** ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - LOCATION SUMMARY (2016)**Maturity:** 6.0 - 6.9**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Beaufort Yield (bu/a)</b>	<b>Pasquotank Yield (bu/a)</b>	<b>Sampson Yield (bu/a)</b>	<b>Rowan Yield (bu/a)</b>	<b>Statewide Average Yield (bu/a)</b>
NK	RR	S67-R6	53 **	46 *	57.4 *	43.5	<b>52.3**</b>
USG	Xtend	USG 7686XT	45.8	38.4	64.4 **	53.4 *	<b>49.4*</b>
Asgrow	Xtend	AG69X6	44.4	43	59.9 *	54.8 *	<b>49.2*</b>
Progeny	RR2	P 6710 RY	42.6	47.3 *	57.5 *	56.2 **	<b>49*</b>
Dyna-Gro	RR2	S65RY73	43.4	45.4 *	58.7 *	50.2 *	<b>48.5*</b>
Dyna-Gro	RR2	S67RY25	44.8	36.7	62.7 *	49.6 *	<b>47.8*</b>
Credenz	RR	CZ 6060 RY	43.9	52.6 **	44.6	36.8	<b>46.5</b>
RPM	RR	DB6017R	45	40.4	49.8	40.5	<b>45.5</b>
Pioneer	RR2	P67T25R2	46.3	31.7	51.5	48.8	<b>45.3</b>
NK	RR2	S69-G9	43	36.3	55.7	45.5	<b>45.2</b>
USG	RR2	USG 76S73R	43.5	38.9	48.7	45	<b>44.7</b>
Southern States	Xtend	+SS 6917 X	39.4	37.4	51.7	55.5 *	<b>44.1</b>
USG	Xtend	USG 7607 XT	41.2	28.9	54.7	43.6	<b>42.2</b>
Dyna-Gro	Xtend	S69XT57	36.1	38.5	46.9	43.1	<b>40.6</b>
T.A. Seeds	RR2	TS6569R2	38.3	26.4	44.2	37.7	<b>37.7</b>
		<b>Mean</b>	43.4	39.2	53.9	46.9	
		CV (%)	12.1	19.2	15.9	21	
		SEM	2.4	3.4	3.9	5	
		LSD (0.1)	5.3	8	8.3	7.1	
		DF LSD (0.1)	58	56	58	43	

+Experimental.

\*\*Highest yielder. \*Not significantly different from highest yielder.

CV - coefficient of variation within environment.

SEM - standard error of variety mean within environment.

LSD - measured differences between varieties across reps within environment.

**TABLE 29. THREE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE (2014-2016)**

**Maturity:** 6.0 - 6.9

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
USG	RR2	USG 76S73R	56.8 **	32.6	1.1
Progeny	RR2	P 6710 RY	53.1 *	35.0	1.3
NK	RR	S67-R6	53 *	34.4	1.3
Dyna-Gro	RR2	S67RY25	50.9	32.1	1.0
Dyna-Gro	RR2	S65RY73	44.5	32.3	1.4
		<b>Mean</b>	51.7	33.3	1.2
		<b>Locations</b>	9	9	9
		CV (%)	13.1	.	.
		SEM	2.3	.	.
		LSD (0.1)	5.2	.	.
		DF LSD (0.1)	32	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 30. TWO YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2015-2016)**

**Maturity:** 6.0 - 6.9

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
NK	RR	S67-R6	56.2 **	34.2	1.5
USG	RR2	USG 76S73R	54.2 *	31.6	1.2
Credenz	RR	CZ 6060 RY	52.9 *	30.6	1.7
Progeny	RR2	P 6710 RY	52.7 *	35.4	1.6
Pioneer	RR2	P67T25R2	49.4	36.2	1.6
Dyna-Gro	RR2	S67RY25	48.9	31.6	1.1
Dyna-Gro	RR2	S65RY73	44.9	31.4	1.7
		<b>Mean</b>	51.3	33.0	1.5
		<b>Locations</b>	5	5	5
		CV (%)	11.2	.	.
		SEM	2.6	.	.
		LSD (0.1)	5.9	.	.
		DF LSD (0.1)	24	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale.

**CV** - coefficient of variation within environment.

**SEM** - standard error of variety mean within environment.

**LSD** - measured differences between varieties across reps within environment.

**TABLE 31. ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2016)**

**Maturity:** 6.0 - 6.9

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
USG	RR2	USG 76S73R	63.6**	33.7	1.2
Dyna-Gro	RR2	S67RY25	62.4*	34.0	1.1
Asgrow	Xtend	AG69X6	61.8*	37.7	1.9
Credenz	RR	CZ 6060 RY	60.4*	33.0	2.1
Progeny	RR2	P 6710 RY	59.5*	38.7	1.9
NK	RR2	S69-G9	59.4*	35.3	1.8
USG	Xtend	USG 7686XT	59.3	35.0	2.0
NK	RR	S67-R6	58.9	34.0	1.8
USG	Xtend	USG 7607 XT	58.5	33.7	1.1
Dyna-Gro	RR2	S65RY73	55.4	33.0	2.0
RPM	RR	DB6017R	55.2	33.3	1.9
Pioneer	RR2	P67T25R2	54.2	38.0	1.6
Southern States	Xtend	+SS 6917 X	51.9	35.0	1.7
Dyna-Gro	Xtend	S69XT57	49.7	33.7	1.5
T.A. Seeds	RR2	TS6569R2	48.5	35.7	2.0
		<b>Mean</b>	57.3	34.9	1.7
		<b>Locations</b>	3	3	3
		CV (%)	3.1		
		SEM	1.8	.	.
		LSD (0.1)	4.2	.	.
		DF LSD (0.1)	28.0	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale. +Experimental**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 32. ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - LOCATION SUMMARY (2016)****Maturity:** 6.0 - 6.9**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Beaufort Yield (bu/a)</b>	<b>Sampson Yield (bu/a)</b>	<b>Rowan Yield (bu/a)</b>	<b>Statewide Average Yield (bu/a)</b>
USG	RR2	USG 76S73R	57.8 **	53.5 *	81.2 *	<b>63.6**</b>
Dyna-Gro	RR2	S67RY25	56.4 *	53.2 *	77.9 *	<b>62.4*</b>
Asgrow	Xtend	AG69X6	53	56.2 **	82.7 **	<b>61.8*</b>
Credenz	RR	CZ 6060 RY	55.1 *	51.2 *	71.2	<b>60.4*</b>
Progeny	RR2	P 6710 RY	50.4	55.6 *	74.5	<b>59.5*</b>
NK	RR2	S69-G9	53.5 *	50.8 *	72.3	<b>59.4*</b>
USG	Xtend	USG 7686XT	53	52.4 *	67.8	<b>59.3</b>
NK	RR	S67-R6	54.3 *	47.3	74.5	<b>58.9</b>
USG	Xtend	USG 7607 XT	49.6	53.2 *	79.5 *	<b>58.5</b>
Dyna-Gro	RR2	S65RY73	51	43.5	71.3	<b>55.4</b>
RPM	RR	DB6017R	52.1	43.9	58	<b>55.2</b>
Pioneer	RR2	P67T25R2	47.5	47.5	64.3	<b>54.2</b>
Southern States	Xtend	+SS 6917 X	43	47.4	68.5	<b>51.9</b>
Dyna-Gro	Xtend	S69XT57	42.6	41.3	70.1	<b>49.7</b>
T.A. Seeds	RR2	TS6569R2	41.4	41.3	63.3	<b>48.5</b>
		<b>Mean</b>	50.7	49.2	71.8	
		CV (%)	9.9	13.4	16.9	
		SEM	2.3	3.1	6	
		LSD (0.1)	4.4	6.1	5.5	
		DF LSD (0.1)	58	58	43	

+Experimental.

\*\*Highest yielder. \*Not significantly different from highest yielder.

CV - coefficient of variation within environment.

SEM - standard error of variety mean within environment.

LSD - measured differences between varieties across reps within environment.

**TABLE 33. THREE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE (2014-2016)**

**Maturity:** 7.0 - 8.9

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
NK	RR2	S74-M3	60.6 **	37.4	1.2
Asgrow	RR2	AG7535	60.2 *	38.8	1.4
Progeny	RR2	P 7310 RY	59.2 *	37.3	1.2
Dyna-Gro	RR2	S74RY15	52.8	38.6	1.2
NK	RR	S78-G6	49.1	39.6	1.4
		<b>Mean</b>	56.4	38.3	1.3
		<b>Locations</b>	8	8	8
		CV (%)	8	.	.
		SEM	1.6	.	.
		LSD (0.1)	3.8	.	.
		DF LSD (0.1)	28	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 34. TWO YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2015-2016)**

**Maturity:** 7.0 - 8.9

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
NK	RR2	S74-M3	55.6 **	35.8	1.4
Progeny	RR2	P 7310 RY	53.6 *	35.2	1.3
AgSouth Genetics	RR	AGS 738 RR	52.6 *	34.8	1.5
Asgrow	RR2	AG7535	51.5 *	36.4	1.3
Pioneer	RR2	P76T54R2	51.2	36.8	1.1
Dyna-Gro	RR2	S74RY15	48.9	36.6	1.3
USG	RR2/STS	USG 77J25RS	48.2	36.6	1.2
(Public)	RR	Paul	48	35.4	1.5
Southern States	RR	SS 7215NS R2	47.3	37.2	1.3
NK	RR	S78-G6	45.9	38.8	1.4
Dyna-Gro	RR2/STS	S72RS36	45.1	39.0	1.2
(Public)	RR	Cheraw	44.2	36.8	1.3
AgSouth Genetics	RR	AGS 828 RR	42.4	34.6	1.8
		<b>Mean</b>	48.8	36.5	1.4
		<b>Locations</b>	5	5	5
		CV (%)	8.6	.	.
		SEM	1.9	.	.
		LSD (0.1)	4.4	.	.
		DF LSD (0.1)	48	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 35. ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2016)**

**Maturity:** 7.0 - 8.9

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
NK	RR2	S74-M3	56.3**	40.3	1.5
AgSouth Genetics	RR	AGS 738 RR	53.5*	37.7	1.9
Progeny	RR2	P 7310 RY	52.6*	40.3	1.4
Pioneer	RR2	P76T54R2	50.2	40.7	1.2
USG	Xtend	USG 7757XT	47.2	45.0	1.4
Asgrow	Xtend	AG75X6	47.1	41.0	1.3
Asgrow	RR2	AG7535	46.7	40.0	1.4
USG	RR2/STS	USG 77J25RS	46.5	41.0	1.4
Southern States	Xtend	SS 7516N X	46.3	39.7	1.5
Dyna-Gro	RR2	S74RY15	46.0	40.7	1.4
(Public)	RR	Paul	45.3	38.3	1.8
Dyna-Gro	Xtend	S75XT26	44.7	42.0	1.5
Southern States	RR	SS 7215NS R2	44.4	42.0	1.5
Asgrow	Xtend	AG72X7	43.3	36.7	1.2
NK	RR	S78-G6	42.5	44.0	1.4
Dyna-Gro	RR2/STS	S72RS36	42.1	42.3	1.3
(Public)	RR	Cheraw	40.9	39.7	1.4
AgSouth Genetics	RR	AGS 828 RR	38.4	39.0	1.8
		<b>Mean</b>	46.3	40.6	1.5
		<b>Locations</b>	3	3	3
		CV (%)	5.5		
		SEM	2.5	.	.
		LSD (0.1)	6.0	.	.
		DF LSD (0.1)	34.0	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 36. ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - LOCATION SUMMARY (2016)****Maturity:** 7.0 - 8.9**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Beaufort Yield (bu/a)</b>	<b>Pasquotank Yield (bu/a)</b>	<b>Rowan Yield (bu/a)</b>	<b>Statewide Average Yield (bu/a)</b>
NK	RR2	S74-M3	63.5 **	40.3 *	62.5 **	<b>56.3**</b>
AgSouth Genetics	RR	AGS 738 RR	61.4 *	42.1 *	47	<b>53.5*</b>
Progeny	RR2	P 7310 RY	53.9	47.4 **	54.5 *	<b>52.6*</b>
Pioneer	RR2	P76T54R2	48.7	44.5 *	61.9 *	<b>50.2</b>
USG	Xtend	USG 7757XT	50	34	60.9 *	<b>47.2</b>
Asgrow	Xtend	AG75X6	48.7	42.2 *	47	<b>47.1</b>
Asgrow	RR2	AG7535	49.4	36.3	55.1 *	<b>46.7</b>
USG	RR2/STS	USG 77J25RS	49.8	35.4	54.7 *	<b>46.5</b>
Southern States	Xtend	SS 7516N X	49.3	32.9	60.4 *	<b>46.3</b>
Dyna-Gro	RR2	S74RY15	48.3	37.7	51	<b>46.0</b>
(Public)	RR	Paul	45.5	44.6 *	40.9	<b>45.3</b>
Dyna-Gro	Xtend	S75XT26	46.7	34.4	55 *	<b>44.7</b>
Southern States	RR	SS 7215NS R2	45.1	36.8	53 *	<b>44.4</b>
Asgrow	Xtend	AG72X7	43.1	36.1	54 *	<b>43.3</b>
NK	RR	S78-G6	42.5	36.2	50.6	<b>42.5</b>
Dyna-Gro	RR2/STS	S72RS36	43.2	33.5	52.2	<b>42.1</b>
(Public)	RR	Cheraw	44.2	30	48.6	<b>40.9</b>
AgSouth Genetics	RR	AGS 828 RR	39.3	32.4	42.9	<b>38.4</b>
		<b>Mean</b>	48.5	37.6	52.9	
		CV (%)	11.8	18.6	17.3	
		SEM	2.6	3.1	4.6	
		LSD (0.1)	5.5	7.2	9.8	
		DF LSD (0.1)	70	70	52	

**\*\*Highest yielder. \*Not significantly different from highest yielder.****CV - coefficient of variation within environment.****SEM - standard error of variety mean within environment.****LSD - measured differences between varieties across reps within environment.**

**TABLE 37. THREE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE (2014-2016)**

**Maturity:** 7.0 - 8.9

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
NK	RR2	S74-M3	57.6 **	35.2	1.4
Progeny	RR2	P 7310 RY	57.1 *	34.5	1.6
Asgrow	RR2	AG7535	54.3 *	33.5	1.7
NK	RR	S78-G6	50.9	33.7	1.7
Dyna-Gro	RR2	S74RY15	48.1	35.8	1.6
		<b>Mean</b>	53.6	34.5	1.6
		<b>Locations</b>	6	6	6
		CV (%)	2.1	.	.
		SEM	9.4	.	.
		LSD (0.1)	4.9	.	.
		DF LSD (0.1)	20	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 38. TWO YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2015-2016)**

**Maturity:** 7.0 - 8.9

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
NK	RR2	S74-M3	54.7 **	35.4	1.4
Progeny	RR2	P 7310 RY	54.3 *	34.6	1.6
Pioneer	RR2	P76T54R2	52.3 *	36.3	1.3
Southern States	RR	SS 7215NS R2	50.9 *	35.6	1.7
USG	RR2/STS	USG 77J25RS	50	34.6	1.6
Asgrow	RR2	AG7535	49.7	33.4	1.7
NK	RR	S78-G6	47.8	33.6	1.7
Dyna-Gro	RR2/STS	S72RS36	47.3	34.2	1.6
AgSouth Genetics	RR	AGS 738 RR	47	34.8	1.7
(Public)	RR	Paul	46.5	35.8	1.6
Dyna-Gro	RR2	S74RY15	44.8	35.8	1.8
(Public)	RR	Cheraw	42.6	34.2	1.8
AgSouth Genetics	RR	AGS 828 RR	40.6	34.8	1.9
		<b>Mean</b>	48.4	34.9	1.6
		<b>Locations</b>	5	5	5
		CV (%)	8.5	.	.
		SEM	1.8	.	.
		LSD (0.1)	4.3	.	.
		DF LSD (0.1)	48	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 39. ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - STATEWIDE  
(2016)**

**Maturity:** 7.0 - 8.9

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Progeny	RR2	P 7310 RY	58.8**	36.8	1.8
NK	RR2	S74-M3	58.1*	37.5	1.5
Pioneer	RR2	P76T54R2	54.5	39.3	1.4
Southern States	Xtend	SS 7516N X	52.6	38.5	1.7
USG	Xtend	USG 7757XT	52.4	36.5	1.6
Asgrow	RR2	AG7535	52.2	35.3	1.9
Southern States	RR	SS 7215NS R2	52.1	37.8	1.8
Dyna-Gro	Xtend	S75XT26	51.9	37.0	1.5
USG	RR2/STS	USG 77J25RS	51.1	36.3	1.8
Asgrow	Xtend	AG72X7	50.9	37.3	1.5
Dyna-Gro	RR2/STS	S72RS36	48.7	35.3	1.7
AgSouth Genetics	RR	AGS 738 RR	47.4	36.5	1.9
(Public)	RR	Paul	47.1	37.8	1.7
NK	RR	S78-G6	46.5	35.0	1.8
Dyna-Gro	RR2	S74RY15	46.3	38.3	2.0
Asgrow	Xtend	AG75X6	44.9	35.0	1.7
(Public)	RR	Cheraw	41.5	36.0	2.0
AgSouth Genetics	RR	AGS 828 RR	39.7	35.8	2.2
		<b>Mean</b>	49.8	36.8	1.7
		<b>Locations</b>	4	4	4
		CV (%)	3.1		
		SEM	1.5	.	.
		LSD (0.1)	3.6	.	.
		DF LSD (0.1)	51.0	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale

**CV** - coefficient of variation within environment.

**SEM** - standard error of variety mean within environment.

**LSD** - measured differences between varieties across reps within environment.

**TABLE 40. ONE YEAR AVERAGE GLYPHOSATE TOLERANT PERFORMANCE - LOCATION SUMMARY (2016)****Maturity:** 7.0 - 8.9**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Beaufort Yield (bu/a)</b>	<b>Pasquotank Yield (bu/a)</b>	<b>Rowan Yield (bu/a)</b>	<b>Statewide Average Yield (bu/a)</b>
Progeny	RR2	P 7310 RY	42.8 **	58.4 *	63.1 **	<b>58.8**</b>
NK	RR2	S74-M3	40.5 *	60.1 **	59.8 *	<b>58.1*</b>
Pioneer	RR2	P76T54R2	38.4 *	50.2	57.8	<b>54.5</b>
Southern States	Xtend	SS 7516N X	35.8 *	51.4	55.9	<b>52.6</b>
USG	Xtend	USG 7757XT	33.5	54.7	55.1	<b>52.4</b>
Asgrow	RR2	AG7535	34.9	52.3	55.1	<b>52.2</b>
Southern States	RR	SS 7215NS R2	37.8 *	48.4	56.4	<b>52.1</b>
Dyna-Gro	Xtend	S75XT26	33.6	51.2	54.7	<b>51.9</b>
USG	RR2/STS	USG 77J25RS	34.1	46.9	55.8	<b>51.1</b>
Asgrow	Xtend	AG72X7	35.6 *	45.2	55.4	<b>50.9</b>
Dyna-Gro	RR2/STS	S72RS36	32.6	48.7	51.6	<b>48.7</b>
AgSouth Genetics	RR	AGS 738 RR	34.3	46.7	48.2	<b>47.4</b>
(Public)	RR	Paul	34	43.5	50.8	<b>47.1</b>
NK	RR	S78-G6	31.7	44.2	47.9	<b>46.5</b>
Dyna-Gro	RR2	S74RY15	35	44.6	45.4	<b>46.3</b>
Asgrow	Xtend	AG75X6	30.8	45.3	43.9	<b>44.9</b>
(Public)	RR	Cheraw	30.9	44.1	40.5	<b>41.5</b>
AgSouth Genetics	RR	AGS 828 RR	28.4	42.3	36.9	<b>39.7</b>
		<b>Mean</b>	34.7	48.8	51.9	
		CV (%)	20.5	11.6	9	
		SEM	3.2	2.5	2.1	
		LSD (0.1)	7.3	5.4	4.5	
		DF LSD (0.1)	70	70	70	

\*\*Highest yielder. \*Not significantly different from highest yielder.

**CV - coefficient of variation within environment.****SEM - standard error of variety mean within environment.****LSD - measured differences between varieties across reps within environment.**

**TABLE 41. TWO YEAR AVERAGE LIBERTY LINK PERFORMANCE - STATEWIDE (2015-2016)**

**Maturity:** 4.0 - 4.9

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Stine	LL	49LD02	57.1 **	38.4	1.9
Progeny	LL/STS	P 4814 LS	54.4 *	40.8	2.3
Progeny	LL	P 4930 LL	53.6 *	41.0	1.7
Credenz	LL	CZ 4818 LL	45	40.6	2.1
Credenz	LL	CZ 4540 LL	43	39.2	2.3
Credenz	LL	CZ 4748 LL	39.3	35.6	1.8
		<b>Mean</b>	48.7	39.3	2.0
		<b>Locations</b>	5	5	5
		CV (%)	13.7	.	.
		SEM	3		
		LSD (0.1)	7.2	.	.
		DF LSD (0.1)	20	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 42.** ONE YEAR AVERAGE LIBERTY LINK PERFORMANCE - STATEWIDE (2016)

**Maturity:** 4.0 - 4.9

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Stine	LL	49LD02	58.2**	38.0	2.1
Progeny	LL	P 4930 LL	53.3*	41.8	1.9
Progeny	LL/STS	P 4814 LS	51.5*	41.3	2.5
Stine 48LI32	LL	48LI32	45.8	38.3	2.0
Credenz	LL	CZ 4818 LL	43.1	40.8	2.3
Credenz	LL	CZ 4540 LL	40.1	38.5	2.6
Credenz	LL	CZ 4748 LL	36.5	34.5	2.0
		<b>Mean</b>	46.9	39.0	2.2
		<b>Locations</b>	4	4	4
		CV (%)	5.9		
		SEM	2.8	.	.
		LSD (0.1)	6.8	.	.
		DF LSD (0.1)	18.0	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale.

**CV** - coefficient of variation within environment.

**SEM** - standard error of variety mean within environment.

**LSD** - measured differences between varieties across reps within environment.

**TABLE 43.** ONE YEAR AVERAGE LIBERTY LINK PERFORMANCE - LOCATION SUMMARY (2016)

**Maturity:** 4.0 - 4.9

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Beaufort Yield (bu/a)</b>	<b>Pasquotank Yield (bu/a)</b>	<b>Edgecombe Yield (bu/a)</b>	<b>Sampson Yield (bu/a)</b>	<b>Statewide Average Yield (bu/a)</b>
Stine	LL	49LD02	62.8 **	56.3 **	59.3 **	57.6 **	<b>58.2**</b>
Progeny	LL	P 4930 LL	58.4 *	51	51.5 *	55.5 *	<b>53.3*</b>
Progeny	LL/STS	P 4814 LS	57.1 *	53.6 *	44.4	48.2	<b>51.5*</b>
Stine 48LI32	LL	48LI32	46.9	45.4	37.2	51.6 *	<b>45.8</b>
Credenz	LL	CZ 4818 LL	48.1	48.8	33.8	35	<b>43.1</b>
Credenz	LL	CZ 4540 LL	37.1	36.2	34.3	54.2 *	<b>40.1</b>
Credenz	LL	CZ 4748 LL	39.3	31.9	33.8	45.2	<b>36.5</b>
		<b>Mean</b>	50	46.2	42	49.6	
		CV (%)	16.7	11.8	20.1	15	
		SEM	3.4	2.2	3.8	3	
		LSD (0.1)	8.2	5.3	9.2	7.3	
		DF LSD (0.1)	30	30	24	30	

\*\*Highest yielder. \*Not significantly different from highest yielder.

CV - coefficient of variation within environment.

SEM - standard error of variety mean within environment.

LSD - measured differences between varieties across reps within environment.

**TABLE 44. TWO YEAR AVERAGE LIBERTY LINK PERFORMANCE - STATEWIDE (2015-2016)**

**Maturity:** 4.0 - 4.9

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Stine	LL	49LD02	51.1 **	32.6	1.1
Progeny	LL	P 4930 LL	49.5 *	35.0	1.0
Progeny	LL/STS	P 4814 LS	49.1 *	36.2	1.2
Credenz	LL	CZ 4818 LL	38.7	35.2	1.2
Credenz	LL	CZ 4540 LL	38.1	34.0	1.2
Credenz	LL	CZ 4748 LL	37.1	33.2	1.1
		<b>Mean</b>	43.9	34.4	1.1
		<b>Locations</b>	5	5	5
		CV (%)	8.4	.	.
		SEM	1.6	.	.
		LSD (0.1)	3.9	.	.
		DF LSD (0.1)	20	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 45. ONE YEAR AVERAGE LIBERTY LINK PERFORMANCE - STATEWIDE  
(2016)**

**Maturity:** 4.0 - 4.9

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Stine	LL	49LD02	55.4**	35.3	1.1
Progeny	LL	P 4930 LL	54*	37.8	1.0
Progeny	LL/STS	P 4814 LS	50.8	38.5	1.2
Stine	LL	48LI32	47.0	36.3	1.2
Credenz	LL	CZ 4818 LL	43.7	38.0	1.2
Credenz	LL	CZ 4540 LL	41.9	37.3	1.2
Credenz	LL	CZ 4748 LL	40.1	35.3	1.2
		<b>Mean</b>	47.6	36.9	1.1
		<b>Locations</b>	4	4	4
		CV (%)	3.3		
		SEM	1.6	.	.
		LSD (0.1)	3.7	.	.
		DF LSD (0.1)	18.0	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 46.** ONE YEAR AVERAGE LIBERTY LINK PERFORMANCE - LOCATION SUMMARY (2016)**Maturity:** 4.0 - 4.9**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<i>Pasquotank</i> <b>Yield</b> (bu/a)	<i>Edgecombe</i> <b>Yield</b> (bu/a)	<i>Sampson</i> <b>Yield</b> (bu/a)	<i>Rowan</i> <b>Yield</b> (bu/a)	<b>Statewide Average Yield (bu/a)</b>
Stine	LL	49LD02	49.3 **	46.2 *	52.6 *	70 **	<b>55.4**</b>
Progeny	LL	P 4930 LL	46 *	48.2 *	53.8 **	68.5 *	<b>54*</b>
Progeny	LL/STS	P 4814 LS	43.8	55.3 **	47.3	58.9	<b>50.8</b>
Stine	LL	48LI32	40.8	46.9 *	44	55	<b>47.0</b>
Credenz	LL	CZ 4818 LL	39.1	41.9	36.7	53.3	<b>43.7</b>
Credenz	LL	CZ 4540 LL	33.4	40.6	43.9	51	<b>41.9</b>
Credenz	LL	CZ 4748 LL	32	45.1	36.3	52.1	<b>40.1</b>
		<b>Mean</b>	40.6	46.3	44.9	58.4	
		CV (%)	10.4	16.1	13.9	12.6	
		SEM	1.7	3.7	2.5	3.3	
		LSD (0.1)	4.1	9.1	6.1	8	
		DF LSD (0.1)	30	18	30	24	

\*\*Highest yielder. \*Not significantly different from highest yielder.

CV - coefficient of variation within environment.

SEM - standard error of variety mean within environment.

LSD - measured differences between varieties across reps within environment.

**TABLE 47. TWO YEAR AVERAGE LIBERTY LINK PERFORMANCE - STATEWIDE (2015-2016)**

**Maturity:** 5.0 - 5.9

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Southern Harvest	LL	SH 5915LL	49.3 **	35.2	1.9
Southern States	LL/STS	LL 5914NS	49 *	37.6	1.7
Dyna-Gro	LL/STS	S59LS45	48 *	38.2	2.1
		<b>Mean</b>	48.8	37.0	1.9
		<b>Locations</b>	5	5	5
		CV (%)	5.3	.	.
		SEM	1.1		
		LSD (0.1)	2.9	.	.
		DF LSD (0.1)	8	.	.

*\*\*Highest yielder. \*Not significantly different from highest yielder.*

*#Harvest lodging rated on a 1 (good) to 5 (bad) scale.*

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 48.** ONE YEAR AVERAGE LIBERTY LINK PERFORMANCE - STATEWIDE (2016)**Maturity:** 5.0 - 5.9**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Southern Harvest	LL	SH 5915LL	52.2**	35.0	2.1
Southern States	LL/STS	LL 5914NS	51.5*	36.8	1.6
Dyna-Gro	LL/STS	S59LS45	51.2*	39.5	2.3
Stine	LL	54LE23	49.7*	36.8	2.4
Credenz	LL	CZ 5147 LL	48.8*	27.5	1.1
Southern Harvest	LL	SH 5215LL	45.2*	37.5	1.7
Stine	LL	51LI32	44.4	36.3	1.8
Dyna-Gro	LL/STS	S55LS75	44.3	37.3	1.8
Progeny	LL/STS	P 5414 LLS	44.2	37.8	1.7
AgSouth Genetics	LL	AGS 537 LL	44.0	37.3	1.5
Stine	LL	52LI20	43.7	33.0	1.5
Southern Harvest	LL	SH 5515LL	43.7	37.5	2.1
Credenz	LL/STS	CZ 5225 LL	38.6	29.0	1.2
Credenz	LL/STS	CZ 5515 LL	38.1	44.0	2.1
Credenz	LL	CZ 5445 LL	37.3	29.5	1.1
	<b>Mean</b>		45.1	35.6	1.7
	<b>Locations</b>		4	4	4
	CV (%)		7.0		
	SEM		3.2	.	.
	LSD (0.1)		7.4	.	.
	DF LSD (0.1)		42.0	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale.

**CV** - coefficient of variation within environment.**SEM** - standard error of variety mean within environment.**LSD** - measured differences between varieties across reps within environment.

**TABLE 49.** ONE YEAR AVERAGE LIBERTY LINK PERFORMANCE - LOCATION SUMMARY (2016)**Maturity:** 5.0 - 5.9**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Beaufort Yield (bu/a)</b>	<b>Pasquotank Yield (bu/a)</b>	<b>Sampson Yield (bu/a)</b>	<b>Rowan Yield (bu/a)</b>	<b>Statewide Average Yield (bu/a)</b>
Southern Harvest	LL	SH 5915LL	59.7 *	52.6 **	49.5	31.7	<b>52.2**</b>
Southern States	LL/STS	LL 5914NS	62.2 **	45.5	47.9	35.2	<b>51.5*</b>
Dyna-Gro	LL/STS	S59LS45	60.5 *	48.2 *	50.4	27.6	<b>51.2*</b>
Stine	LL	54LE23	51.7	49 *	54	43.8	<b>49.7*</b>
Credenz	LL	CZ 5147 LL	48.9	46.3 *	59.8 *	43.2	<b>48.8*</b>
Southern Harvest	LL	SH 5215LL	49.3	38.8	47.8	47.8 *	<b>45.2*</b>
Stine	LL	51LI32	44.9	43.9	45.1	51.4 *	<b>44.4</b>
Dyna-Gro	LL/STS	S55LS75	41.9	41.5	62.2 **	38.1	<b>44.3</b>
Progeny	LL/STS	P 5414 LLS	42.3	49.3 *	48.7	40	<b>44.2</b>
AgSouth Genetics	LL	AGS 537 LL	45.9	43.8	43.7	46	<b>44.0</b>
Southern Harvest	LL	SH 5515LL	45.4	38.6	45.1	55.4 **	<b>43.7</b>
Stine	LL	52LI20	44.8	49.1 *	40.9	39.8	<b>43.7</b>
Credenz	LL/STS	CZ 5225 LL	37.6	35.4	47.3	44.2	<b>38.6</b>
Credenz	LL/STS	CZ 5515 LL	36.2	41.2	50.8	24	<b>38.1</b>
Credenz	LL	CZ 5445 LL	37.4	36.5	46.3	31	<b>37.3</b>
		<b>Mean</b>	47.2	44	49.3	39.9	
		CV (%)	11.5	16.4	17.1	25.6	
		SEM	2.4	3.2	3.7	5.3	
		LSD (0.1)	4.7	7	8	9.1	
		DF LSD (0.1)	57	58	58	43	

\*\*Highest yielder. \*Not significantly different from highest yielder.

**CV** - coefficient of variation within environment.**SEM** - standard error of variety mean within environment.**LSD** - measured differences between varieties across reps within environment.

**TABLE 50. TWO YEAR AVERAGE LIBERTY LINK PERFORMANCE - STATEWIDE (2015-2016)**

**Maturity:** 5.0 - 5.9

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Dyna-Gro	LL/STS	S59LS45	43.9 **	33.8	1.7
Southern Harvest	LL	SH 5915LL	42.9 *	31.4	1.7
Southern States	LL/STS	LL 5914NS	42.5 *	33.0	1.6
		<b>Mean</b>	43.1	32.7	1.7
		<b>Locations</b>	5	5	5
		CV (%)	6	.	.
		SEM	1.2		
		LSD (0.1)	3	.	.
		DF LSD (0.1)	8	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 51. ONE YEAR AVERAGE LIBERTY LINK PERFORMANCE - STATEWIDE (2016)****Maturity:** 5.0 - 5.9**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Stine	LL	54LE23	51**	37.0	1.2
AgSouth Genetics	LL	AGS 537 LL	49.7*	34.3	1.0
Credenz	LL	CZ 5147 LL	48.2*	29.8	1.3
Progeny	LL/STS	P 5414 LLS	47.5*	35.5	1.7
Credenz	LL/STS	CZ 5225 LL	47.4*	30.0	1.6
Dyna-Gro	LL/STS	S55LS75	47.2*	35.3	1.7
Southern Harvest	LL	SH 5215LL	46.6*	33.8	1.0
Credenz	LL	CZ 5445 LL	45.6	29.0	1.7
Dyna-Gro	LL/STS	S59LS45	45.6	34.5	1.9
Southern Harvest	LL	SH 5915LL	45.4	32.0	1.8
Southern Harvest	LL	SH 5515LL	44.2	34.3	1.2
Stine	LL	51LI32	44.0	35.5	1.2
Southern States	LL/STS	LL 5914NS	43.8	34.3	1.8
Stine	LL	52LI20	41.2	33.0	1.1
Credenz	LL/STS	CZ 5515 LL	39.3	37.0	1.6
		<b>Mean</b>	45.8	33.7	1.4
		<b>Locations</b>	4	4	4
		CV (%)	4.3		
		SEM	2.0	.	.
		LSD (0.1)	4.7	.	.
		DF LSD (0.1)	42.0	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale.

CV - coefficient of variation within environment.

SEM - standard error of variety mean within environment.

LSD - measured differences between varieties across reps within environment.

**TABLE 52.** ONE YEAR AVERAGE LIBERTY LINK PERFORMANCE - LOCATION SUMMARY (2016)**Maturity:** 5.0 - 5.9**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Pasquotank Yield (bu/a)</b>	<b>Edgecombe Yield (bu/a)</b>	<b>Sampson Yield (bu/a)</b>	<b>Rowan Yield (bu/a)</b>	<b>Statewide Average Yield (bu/a)</b>
Stine	LL	54LE23	43.7 *	50.4 *	46.8 *	65.4 **	<b>51**</b>
AgSouth Genetics	LL	AGS 537 LL	46.2 *	47.6 *	44.5 *	62.1 *	<b>49.7*</b>
Credenz	LL	CZ 5147 LL	48.4 *	38.7	46.7 *	55.7	<b>48.2*</b>
Progeny	LL/STS	P 5414 LLS	39.7	52.8 **	44.4 *	57.4	<b>47.5*</b>
Credenz	LL/STS	CZ 5225 LL	39.8	46.2 *	46.5 *	58.2	<b>47.4*</b>
Dyna-Gro	LL/STS	S55LS75	42.1	43.5	46.6 *	56.1	<b>47.2*</b>
Southern Harvest	LL	SH 5215LL	41.8	45.1 *	44.2 *	56	<b>46.6*</b>
Credenz	LL	CZ 5445 LL	37.8	36.3	47 **	59.2	<b>45.6</b>
Dyna-Gro	LL/STS	S59LS45	45 *	43.2	44.4 *	48.8	<b>45.6</b>
Southern Harvest	LL	SH 5915LL	49.6 **	34.7	42.8 *	50.2	<b>45.4</b>
Southern Harvest	LL	SH 5515LL	36.9	43.6	44.2 *	53	<b>44.2</b>
Stine	LL	51LI32	38.5	45.5 *	38.3	57.1	<b>44.0</b>
Southern States	LL/STS	LL 5914NS	45.3 *	32.3	41.9 *	51.5	<b>43.8</b>
Stine	LL	52LI20	35.3	36.9	37.7	55.8	<b>41.2</b>
Credenz	LL/STS	CZ 5515 LL	34.1	36	37.6	49.6	<b>39.3</b>
		<b>Mean</b>	41.6	42.2	43.6	55.7	
		CV (%)	15.2	18.2	14	11.4	
		SEM	2.8	3.8	2.7	3.1	
		LSD (0.1)	6.7	8.8	5.8	6.1	
		DF LSD (0.1)	58	43	58	43	

\*\*Highest yielder. \*Not significantly different from highest yielder.

CV - coefficient of variation within environment.

SEM - standard error of variety mean within environment.

LSD - measured differences between varieties across reps within environment.

**TABLE 53. TWO YEAR AVERAGE LIBERTY LINK PERFORMANCE - STATEWIDE (2015-2016)**

**Maturity:** 6.0 - 8.0

**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Southern Harvest	LL	SH 6515LL	52.1 **	35.8	1.1
USG	LL/STS	USG 76G45LS	52 *	38.5	1.4
Dyna-Gro	LL/STS	S64LS95	51.4 *	36.0	1.4
Southern Harvest	LL	SH 6815LL	50 *	35.5	1.7
Credenz	LL	CZ 6109 LL	48.9 *	33.0	1.4
Credenz	LL/STS	CZ 7007 LL	47.9 *	39.5	2.7
Southern States	LL/STS	LL 6314S	47.3	42.0	1.6
Southern Harvest	LL	SH 6215LL	46.2	44.3	1.6
Credenz	LL/STS	CZ 6316 LL	45.2	34.5	1.6
Southern Harvest	LL	SH 7116LL	44.8	33.0	1.8
Credenz	LL	CZ 7132 LL	44.1	45.3	2.8
		<b>Mean</b>	48.2	37.9	1.7
		<b>Locations</b>	4	4	4
		CV (%)	7.9	.	.
		SEM	1.9	.	.
		LSD (0.1)	4.6	.	.
		DF LSD (0.1)	30	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 54. ONE YEAR AVERAGE LIBERTY LINK PERFORMANCE - STATEWIDE (2016)****Maturity:** 6.0 - 8.0**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Southern Harvest	LL	SH 6515LL	47.8**	32.3	1.1
Southern Harvest	LL	SH 6815LL	47.6*	34.0	1.4
USG	LL/STS	USG 76G45LS	47.6*	36.3	1.2
Dyna-Gro	LL/STS	S64LS95	47.3*	35.0	1.2
Credenz	LL	CZ 6109 LL	46*	30.7	1.3
Progeny	LL	P 6315 LL	45.3*	33.3	1.3
Credenz	LL/STS	CZ 7007 LL	45.1*	37.7	2.7
Southern States	LL	LL 6516	45*	41.3	1.4
Southern States	LL/STS	LL 6314S	42.9*	39.0	1.5
Southern Harvest	LL	SH 7116LL	42.1	30.3	1.7
Southern Harvest	LL	SH 6215LL	42.0	42.7	1.7
Credenz	LL/STS	CZ 6316 LL	41.9	34.0	1.5
Credenz	LL	CZ 7132 LL	38.2	41.7	2.7
		<b>Mean</b>	44.5	36.0	1.6
		<b>Locations</b>	3	3	3
		CV (%)	5.1		
		SEM	2.3	.	.
		LSD (0.1)	5.5	.	.
		DF LSD (0.1)	24.0	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale.

**CV - coefficient of variation within environment.****SEM - standard error of variety mean within environment.****LSD - measured differences between varieties across reps within environment.**

**TABLE 55. ONE YEAR AVERAGE LIBERTY LINK PERFORMANCE - LOCATION SUMMARY (2016)****Maturity:** 6.0 - 8.0**Planting:** Early

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<i>Beaufort Yield (bu/a)</i>	<i>Pasquotank Yield (bu/a)</i>	<i>Sampson Yield (bu/a)</i>	<b>Statewide Average Yield (bu/a)</b>
Southern Harvest	LL	SH 6515LL	47.1 *	43.2 *	52.8 *	<b>47.8**</b>
Southern Harvest	LL	SH 6815LL	46.3 *	40.7	57.5 **	<b>47.6*</b>
USG	LL/STS	USG 76G45LS	46.5 *	47.7 **	45.6	<b>47.6*</b>
Dyna-Gro	LL/STS	S64LS95	47.2 *	44.7 *	47.5	<b>47.3*</b>
Credenz	LL	CZ 6109 LL	42	46.4 *	50.5 *	<b>46*</b>
Progeny	LL	P 6315 LL	44.8 *	40.5	50.1 *	<b>45.3*</b>
Credenz	LL/STS	CZ 7007 LL	49.2 **	34.6	48.1	<b>45.1*</b>
Southern States	LL	LL 6516	42.8	44.5 *	46.8	<b>45*</b>
Southern States	LL/STS	LL 6314S	41.7	35	54 *	<b>42.9*</b>
Southern Harvest	LL	SH 7116LL	35.5	41.8 *	53.4 *	<b>42.1</b>
Southern Harvest	LL	SH 6215LL	39.8	39	47.5	<b>42.0</b>
Credenz	LL/STS	CZ 6316 LL	42.5	36.4	45.4	<b>41.9</b>
Credenz	LL	CZ 7132 LL	35.8	32.5	48.6	<b>38.2</b>
		<b>Mean</b>	43.2	40.5	49.8	
		CV (%)	12.1	15.5	15.9	
		SEM	2.3	2.8	3.5	
		LSD (0.1)	5.2	6.6	8	
		DF LSD (0.1)	50	50	50	

\*\*Highest yielder. \*Not significantly different from highest yielder.

**CV - coefficient of variation within environment.****SEM - standard error of variety mean within environment.****LSD - measured differences between varieties across reps within environment.**

**TABLE 56. TWO YEAR AVERAGE LIBERTY LINK PERFORMANCE - STATEWIDE (2015-2016)**

**Maturity:** 6.0 - 8.9

**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Southern Harvest	LL	SH 6815LL	45.1 **	33.2	1.9
USG	LL/STS	USG 76G45LS	44.8 *	32.5	1.4
Southern States	LL/STS	LL 6314S	44.6 *	37.0	1.6
Southern Harvest	LL	SH 6515LL	44.5 *	32.2	1.5
Dyna-Gro	LL/STS	S64LS95	42.1 *	32.7	1.5
Credenz	LL/STS	CZ 6316 LL	40.4	31.5	1.8
Credenz	LL/STS	CZ 7007 LL	39.5	35.3	2.1
Credenz	LL	CZ 6109 LL	39.3	31.7	1.4
Southern Harvest	LL	SH 7116LL	39.2	32.2	1.7
Credenz	LL	CZ 7132 LL	39.2	36.8	1.9
Southern Harvest	LL	SH 6215LL	38.8	37.2	1.6
		<b>Mean</b>	41.6	33.8	1.7
		<b>Locations</b>	6	6	6
		CV (%)	10	.	.
		SEM	1.7	.	.
		LSD (0.1)	4	.	.
		DF LSD (0.1)	50	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 57. ONE YEAR AVERAGE LIBERTY LINK PERFORMANCE - STATEWIDE (2016)****Maturity:** 6.0 - 8.9**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
Southern States	LL	LL 6516	48.1**	37.0	1.6
USG	LL/STS	USG 76G45LS	46.8*	33.6	1.5
Southern Harvest	LL	SH 6815LL	46.4*	33.0	2.0
Southern Harvest	LL	SH 6515LL	46.1*	33.0	1.6
Dyna-Gro	LL/STS	S64LS95	45.7*	33.4	1.6
Progeny	LL	P 6315 LL	44.7*	34.6	1.9
Southern States	LL/STS	LL 6314S	43.3	37.8	1.7
Credenz	LL/STS	CZ 6316 LL	42.6	32.4	1.9
Credenz	LL	CZ 6109 LL	41.7	32.4	1.5
Credenz	LL/STS	CZ 7007 LL	39.3	36.6	2.2
Southern Harvest	LL	SH 7116LL	38.9	32.6	1.8
Credenz	LL	CZ 7132 LL	38.8	38.6	2.1
Southern Harvest	LL	SH 6215LL	36.6	38.8	1.7
		<b>Mean</b>	43.0	34.9	1.8
		<b>Locations</b>	5	5	5
		CV (%)	4.2		
		SEM	1.8	.	.
		LSD (0.1)	4.3	.	.
		DF LSD (0.1)	48.0	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale.

**CV - coefficient of variation within environment.****SEM - standard error of variety mean within environment.****LSD - measured differences between varieties across reps within environment.**

**TABLE 58. ONE YEAR AVERAGE LIBERTY LINK PERFORMANCE - LOCATION SUMMARY (2016)****Maturity:** 6.0 - 8.0**Planting:** Late

<b>Brand</b>	<b>Trait</b>	<b>Variety</b>	<i>Pasquotank</i> <b>Yield</b> (bu/a)	<i>Beaufort</i> <b>Yield</b> (bu/a)	<i>Edgecombe</i> <b>Yield</b> (bu/a)	<i>Sampson</i> <b>Yield</b> (bu/a)	<i>Rowan</i> <b>Yield</b> (bu/a)	<b>Statewide Average Yield</b> (bu/a)
Southern States	LL	LL 6516	38.5 *	44.5 *	33.6	60.7 **	69.2 **	<b>48.1**</b>
USG	LL/STS	USG 76G45LS	39.7 **	46.7 *	35.4 *	55.6 *	48.6	<b>46.8*</b>
Southern Harvest	LL	SH 6815LL	35.9 *	46 *	42.3 *	54.7 *	47.1	<b>46.4*</b>
Southern Harvest	LL	SH 6515LL	37.2 *	44.1 *	44 **	48.3	60.3 *	<b>46.1*</b>
Dyna-Gro	LL/STS	S64LS95	39 *	47.1 *	36.9 *	50.5	48.6	<b>45.7*</b>
Progeny	LL	P 6315 LL	35.4 *	48.8 **	31.9	49.1	63.4 *	<b>44.7*</b>
Southern States	LL/STS	LL 6314S	31.1	40.2	36.9 *	52.8 *	63.1 *	<b>43.3</b>
Credenz	LL/STS	CZ 6316 LL	32.3	43.4 *	30.3	52.8 *	55	<b>42.6</b>
Credenz	LL	CZ 6109 LL	34.7 *	40.3	28	51.9	49	<b>41.7</b>
Credenz	LL/STS	CZ 7007 LL	29.4	35.4	40.8 *	44.2	44.9	<b>39.3</b>
Southern Harvest	LL	SH 7116LL	29.9	42.1 *	30.5	41.9	51.1	<b>38.9</b>
Credenz	LL	CZ 7132 LL	29.8	33.7	37.3 *	45.5	45.6	<b>38.8</b>
Southern Harvest	LL	SH 6215LL	24.7	39.3	28.8	43.3	50.7	<b>36.6</b>
		<b>Mean</b>	33.7	42.4	35.1	50.1	53.6	
		CV (%)	18.8	18.3	21.2	14.9	23.1	
		SEM	2.8	3.5	3.7	3.3	6.2	
		LSD (0.1)	6.6	7.8	8.8	8	11.4	
		DF LSD (0.1)	50	50	36	50	37	

\*\*Highest yielder. \*Not significantly different from highest yielder.

CV - coefficient of variation within environment.

SEM - standard error of variety mean within environment.

LSD - measured differences between varieties across reps within environment.

**TABLE 59. ONE YEAR AVERAGE CONVENTIONAL PERFORMANCE - STATEWIDE  
(2016)**

**Maturity:** 4.0 - 5.4

**Planting:** Early

<b>Brand</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
(Public)	+S11-17025	54.1**	31.5	1.9
(Public)	+S11-20124	51*	38.0	3.9
USG	Ellis	49.4*	33.5	1.5
(Public)	+S12-4718	49.4*	31.5	1.8
(Public)	+R09-430	49.1	32.0	2.0
(Public)	+V11-0730	47.5	30.0	1.8
(Public)	+JTN-5110	47.5	34.0	1.7
(Public)	UA 5213C	46.9	38.0	2.6
(Public)	+V09-0610	46.0	36.0	1.5
(Public)	+S12-2418	43.5	38.0	1.8
(Public)	UA 5014C	43.5	31.5	1.2
	<b>Mean</b>	48.3	34.0	2.0
	<b>Locations</b>	2	2	2
	CV (%)	4.1		
	SEM	2.0	.	.
	LSD (0.1)	4.9	.	.
	DF LSD (0.1)	11.0	.	.

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale. +Experimental**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 60. ONE YEAR AVERAGE CONVENTIONAL PERFORMANCE - LOCATION SUMMARY (2016)**

**Maturity:** 4.0 - 5.4

**Planting:** Early

<b>Brand</b>	<b>Variety</b>	<b>Sampson Yield (bu/a)</b>	<b>Rowan Yield (bu/a)</b>	<b>Statewide Average Yield (bu/a)</b>
(Public)	+S11-17025	55.7 **	48.7 *	<b>54.1**</b>
(Public)	+S11-20124	52.3 *	46.5 *	<b>51*</b>
(Public)	+S12-4718	47.5	56.8 **	<b>49.4*</b>
USG	Ellis	50.6 *	45.7 *	<b>49.4*</b>
(Public)	+R09-430	49.4 *	48.8 *	<b>49.1</b>
(Public)	+JTN-5110	48.1	45.8 *	<b>47.5</b>
(Public)	+V11-0730	46.8	50.7 *	<b>47.5</b>
(Public)	UA 5213C	46.7	48.1 *	<b>46.9</b>
(Public)	+V09-0610	45.6	47.9 *	<b>46.0</b>
(Public)	+S12-2418	44.1	42	<b>43.5</b>
(Public)	UA 5014C	42.8	46.6 *	<b>43.5</b>
	<b>Mean</b>	48.5	48.1	
	CV (%)	14.2	24.7	
	SEM	3	5.9	
	LSD (0.1)	7.4	14.2	
	DF LSD (0.1)	45	33	

**+Experimental.**

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 61. TWO YEAR AVERAGE CONVENTIONAL PERFORMANCE - STATEWIDE  
(2015-2016)**

**Maturity:** 4.0 - 5.4

**Planting:** Late

<b>Brand</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
(Public)	+JTN-5110	49.7 **	30.5	1.6
(Public)	UA 5213C	47.8 *	30.0	1.7
(Public)	+R09-430	46.3 *	29.0	1.6
USG	Ellis	45.8 *	30.8	1.2
(Public)	+V09-0610	44.2 *	31.2	1.6
	<b>Mean</b>	46.3	30.4	1.5
	<b>Locations</b>	5	5	5
	CV (%)	12.6	.	.
	SEM	2.6		
	LSD (0.1)	6.2	.	.
	DF LSD (0.1)	20	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale. +Experimental

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 62. ONE YEAR AVERAGE CONVENTIONAL PERFORMANCE - STATEWIDE (2016)****Maturity:** 4.0 - 5.4**Planting:** Late

<b>Brand</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
(Public)	+JTN-5110	54.6**	32.7	1.7
(Public)	+S12-4718	52.4*	31.3	1.6
(Public)	+S11-20124	52*	31.5	2.4
(Public)	+S11-17025	50.3*	31.0	1.6
USG	Ellis	50.3*	32.3	1.3
(Public)	UA 5213C	50*	30.3	1.9
(Public)	+R09-430	49.2*	29.5	1.8
(Public)	+V11-0730	48.4	31.0	1.4
(Public)	UA 5014C	47.3	29.5	1.5
(Public)	+S12-2418	46.5	33.0	1.6
(Public)	+V09-0610	43.4	32.5	1.7
	<b>Mean</b>	49.0	31.4	1.7
	<b>Locations</b>	4	4	4
	CV (%)	4.8		
	SEM	2.4	.	.
	LSD (0.1)	5.6	.	.
	DF LSD (0.1)	33.0	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale. +Experimental

**CV - coefficient of variation within environment.****SEM - standard error of variety mean within environment.****LSD - measured differences between varieties across reps within environment.**

**TABLE 63. ONE YEAR AVERAGE CONVENTIONAL PERFORMANCE - LOCATION SUMMARY (2016)****Maturity:** 4.0 - 5.4**Planting:** Late

<b>Brand</b>	<b>Variety</b>	<b>Pasquotank Yield (bu/a)</b>	<b>Beaufort Yield (bu/a)</b>	<b>Sampson Yield (bu/a)</b>	<b>Rowan Yield (bu/a)</b>	<b>Statewide Average Yield (bu/a)</b>
(Public)	+JTN-5110	48.3 **	49.8	59 **	57.2 *	<b>54.6**</b>
(Public)	+S12-4718	46.6 *	53.4	53.4 *	48.8	<b>52.4*</b>
(Public)	+S11-20124	45.5 *	53.1	55.1 *	47.1	<b>52*</b>
USG	Ellis	38	54.5 *	54.4 *	61.3 *	<b>50.3*</b>
(Public)	+S11-17025	42.4	48.4	56.2 *	50.6 *	<b>50.3*</b>
(Public)	UA 5213C	39.6	61.2 **	49	51.2 *	<b>50*</b>
(Public)	+R09-430	40.3	48.4	58.5 *	45.7	<b>49.2*</b>
(Public)	+V11-0730	41.2	49	43.4	62.4 **	<b>48.4</b>
(Public)	UA 5014C	37.2	47	55.8 *	49.4	<b>47.3</b>
(Public)	+S12-2418	33.9	53.9 *	49.7	55.6 *	<b>46.5</b>
(Public)	+V09-0610	32.6	48	49.6	43.8	<b>43.4</b>
	<b>Mean</b>	39.8	50.5	53	52.6	
	CV (%)	13.9	16.7	15.4	19.2	
	SEM	2.5	3.8	3.6	5	
	LSD (0.1)	5.8	7.5	8.4	12.1	
	DF LSD (0.1)	46	46	45	33	

+Experimental.

\*\*Highest yielder. \*Not significantly different from highest yielder.

CV - coefficient of variation within environment.

SEM - standard error of variety mean within environment.

LSD - measured differences between varieties across reps within environment.

**TABLE 64. TWO YEAR AVERAGE CONVENTIONAL PERFORMANCE - STATEWIDE  
(2015-2016)**

**Maturity:** 5.5 - 8.0

**Planting:** Early

<b>Brand</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
(Public)	N7003CN	54.8 *	36.0	2.3
USG	USG 76S73R	53 *	33.7	1.0
(Public)	Santee	52.1 *	38.3	1.8
(Public)	Musen	49.7 *	37.0	1.7
(Public)	N8001	49.1	37.3	1.4
(Public)	NC-Roy	47.8	35.3	1.8
(Public)	NC-Raleigh	45.8	36.0	2.2
	<b>Mean</b>	50.2	36.0	1.7
	<b>Locations</b>	3	3.0	3.0
	CV (%)	7.4		
	SEM	2.1		
	LSD (0.1)	5.3		
	DF LSD (0.1)	14		

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 65. ONE YEAR AVERAGE CONVENTIONAL PERFORMANCE - STATEWIDE (2016)****Maturity:** 5.5 - 8.0**Planting:** Early

<b>Brand</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
(Public)	N7003CN	52.6**	33.0	2.4
(Public)	Motte	51.1*	38.0	2.2
(Public)	Santee	49.7*	36.5	1.9
(Public)	Musen	45.7*	35.0	1.9
(Public)	UA 5612	45.2*	33.5	1.8
(Public)	N8001	44.8	36.0	1.4
(Public)	NC-Roy	44.8	33.5	2.2
(Public)	+R10-230	44.6	33.5	1.6
(Public)	UA 5814HP	44.0	36.0	2.4
(Public)	NC-Raleigh	41.3	33.0	1.9
(Public)	+V10-0262	38.8	30.0	1.2
(Public)	Osage	35.0	27.0	1.4
	<b>Mean</b>	45.2	33.6	1.8
	<b>Locations</b>	2	2	2
	CV (%)	6.7		
	SEM	3.0	.	.
	LSD (0.1)	7.5	.	.
	DF LSD (0.1)	13.0	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale. +Experimental

**CV - coefficient of variation within environment.****SEM - standard error of variety mean within environment.****LSD - measured differences between varieties across reps within environment.**

**TABLE 66. ONE YEAR AVERAGE CONVENTIONAL PERFORMANCE - LOCATION**

SUMMARY (2016)

**Maturity:** 5.5 - 8.0**Planting:** Early

<b>Brand</b>	<b>Variety</b>	<b>Beaufort Yield (bu/a)</b>	<b>Pasquotank Yield (bu/a)</b>	<b>Statewide Average Yield (bu/a)</b>
(Public)	N7003CN	53.4 *	52.4 **	<b>52.6**</b>
(Public)	Motte	56.5 **	42.7	<b>51.1*</b>
(Public)	Santee	55.4 *	40.7	<b>49.7*</b>
(Public)	Musen	49.8	39.5	<b>45.7*</b>
(Public)	UA 5612	46.8	43.7	<b>45.2*</b>
(Public)	N8001	47.3	41.5	<b>44.8</b>
(Public)	NC-Roy	45.3	45.1 *	<b>44.8</b>
(Public)	+R10-230	44.8	45.5 *	<b>44.6</b>
(Public)	UA 5814HP	43.7	45.9 *	<b>44.0</b>
(Public)	NC-Raleigh	42.9	39.8	<b>41.3</b>
(Public)	+V10-0262	36.5	44.3	<b>38.8</b>
(Public)	Osage	34.6	36.9	<b>35.0</b>
	<b>Mean</b>	46.9	43.6	
	CV (%)	11	15.9	
	SEM	2.3	3.1	
	LSD (0.1)	4.1	7.4	
	DF LSD (0.1)	54	54	

**+Experimental.****\*\*Highest yielder. \*Not significantly different from highest yielder.****CV - coefficient of variation within environment.****SEM - standard error of variety mean within environment.****LSD - measured differences between varieties across reps within environment.**

**TABLE 67. THREE YEAR AVERAGE CONVENTIONAL PERFORMANCE - STATEWIDE (2014-2016)**

**Maturity:** 5.5 - 8.0

**Planting:** Late

<b>Brand</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
(Public)	N7003CN	60.8 *	37.2	2.2
(Public)	N8001	57.2 *	39.0	1.7
(Public)	NC-Roy	54.9	36.8	2.2
(Public)	NC-Raleigh	53.1	38.2	2.3
	<b>Mean</b>	56.5	37.8	2.1
	<b>Locations</b>	5	5	5
	CV (%)	6.5		
	SEM	1.6		
	LSD (0.1)	4		
	DF LSD (0.1)	12		

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 68. TWO YEAR AVERAGE CONVENTIONAL PERFORMANCE - STATEWIDE  
(2015-2016)**

**Maturity:** 5.5 - 8.0

**Planting:** Late

<b>Brand</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
(Public)	NC-Roy	51 *	33.2	2.2
(Public)	NC-Raleigh	48 *	32.2	2.1
(Public)	N8001	46.7 *	34.5	1.9
USG	USG 76S73R	46.7 *	32.0	1.3
(Public)	N7003CN	46.2 *	33.2	1.9
(Public)	Santee	42.5	34.7	2.2
(Public)	Musen	41.2	33.5	2.0
	<b>Mean</b>	46.3	33.1	1.9
	<b>Locations</b>	6	6	6
	CV (%)	10.8		
	SEM	2		
	LSD (0.1)	4.9		
	DF LSD (0.1)	35		

**\*\*Highest yielder. \*Not significantly different from highest yielder.**

**#Harvest lodging rated on a 1 (good) to 5 (bad) scale.**

**CV - coefficient of variation within environment.**

**SEM - standard error of variety mean within environment.**

**LSD - measured differences between varieties across reps within environment.**

**TABLE 69. ONE YEAR AVERAGE CONVENTIONAL PERFORMANCE - STATEWIDE (2016)****Maturity:** 5.5 - 8.0**Planting:** Late

<b>Brand</b>	<b>Variety</b>	<b>Yield (bu/a)</b>	<b>Plant Height (in)</b>	<b>Harvest Lodging #</b>
(Public)	NC-Roy	52.6**	35.2	2.3
(Public)	UA 5612	50.4*	32.4	2.3
(Public)	NC-Raleigh	48.7*	33.0	2.3
(Public)	+R10-230	48.2*	32.2	2.1
(Public)	N8001	47.7*	35.8	2.1
(Public)	Osage	47.2	31.6	1.4
(Public)	N7003CN	46.7	34.2	2.1
(Public)	UA 5814HP	45.8	31.2	2.3
(Public)	Santee	44.0	36.4	2.4
(Public)	+V10-0262	43.9	31.0	1.4
(Public)	Motte	43.1	36.8	2.4
(Public)	Musen	42.6	34.2	2.2
	<b>Mean</b>	47.1	33.6	2.0
	<b>Locations</b>	5	5	5
	CV (%)	4.4		
	SEM	2.1	.	.
	LSD (0.1)	4.9	.	.
	DF LSD (0.1)	52.0	.	.

\*\*Highest yielder. \*Not significantly different from highest yielder.

#Harvest lodging rated on a 1 (good) to 5 (bad) scale. +Experimental

CV - coefficient of variation within environment.

SEM - standard error of variety mean within environment.

LSD - measured differences between varieties across reps within environment.

**TABLE 70. ONE YEAR AVERAGE CONVENTIONAL PERFORMANCE - LOCATION SUMMARY (2016)****Maturity:** 5.5 - 8.0**Planting:** Late

<b>Brand</b>	<b>Variety</b>	<b>Pasquotank Yield (bu/a)</b>	<b>Beaufort Yield (bu/a)</b>	<b>Edgecombe Yield (bu/a)</b>	<b>Sampson Yield (bu/a)</b>	<b>Rowan Yield (bu/a)</b>	<b>Statewide Average Yield (bu/a)</b>
(Public)	NC-Roy	40.8 *	62.8 **	38.7 *	58.7 *	61.9	<b>52.6**</b>
(Public)	UA 5612	45.5 **	53.8	35.3	59.5 *	53.2	<b>50.4*</b>
(Public)	NC-Raleigh	40.3 *	50.4	36.3	56.5 *	60.1	<b>48.7*</b>
(Public)	+R10-230	42.2 *	53	30.4	54.9	55.7	<b>48.2*</b>
(Public)	N8001	39.8 *	49	37.5	49.7	64.2	<b>47.7*</b>
(Public)	Osage	37.8	46.6	32.9	58.1 *	61	<b>47.2</b>
(Public)	N7003CN	42.9 *	49.1	43.1 *	42.7	56.6	<b>46.7</b>
(Public)	UA 5814HP	38.7	48.8	33.9	48.7	58.8	<b>45.8</b>
(Public)	Santee	39	46.3	33.7	41	59.6	<b>44.0</b>
(Public)	+V10-0262	36.9	44.3	35.8	48.2	55.7	<b>43.9</b>
(Public)	Motte	40.6 *	39.8	32.8	48.1	51.8	<b>43.1</b>
(Public)	Musen	37.5	45.1	40.4 *	38.3	54.1	<b>42.6</b>
	<b>Mean</b>	40.1	48.9	36.5	51.3	58.8	
	CV (%)	14.4	14	23.2	14.1	12.2	
	SEM	2.6	3.1	4.3	3.3	3.6	
	LSD (0.1)	6.1	7.1	8.6	7.1	8.4	
	DF LSD (0.1)	54	54	40	54	40	

+Experimental.

\*\*Highest yielder. \*Not significantly different from highest yielder.

**CV - coefficient of variation within environment.****SEM - standard error of variety mean within environment.****LSD - measured differences between varieties across reps within environment.**