

# Soybean Update

University of Arkansas Division of Agriculture

## 2011 Soybean Performance Results for Full-Season and Double-Crop Conventional and LibertyLink Production Systems in Arkansas (Two-Year Averages)

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With the increase in glyphosate-resistant weeds, many soybean producers have gone back to growing conventional or LibertyLink soybean varieties. Hundreds of soybean varieties are commercially available to growers in Arkansas. Varietal performance, including yield, varies according to location, environmental adaptability to soils, maturity, lodging, height, disease and nematode resistance, and herbicide and chloride sensitivity. The information listed in this publication is largely derived from the University of Arkansas System Division of Agriculture soybean variety test and screening programs and is provided as an aid in variety selection. **All varieties listed in this publication have been tested in the University of Arkansas System Division of Agriculture Soybean Performance Trials for at least two years.**

Proper variety selection involves knowledge of yield history, maturity, disease reaction and many other factors. Many important characteristics are listed in this update for varieties which, based primarily on yield potential, are considered

adapted to Arkansas conditions.

The location, soil description and cultural information for each of the soybean performance trials conducted in 2011 are found in **Table 1**.

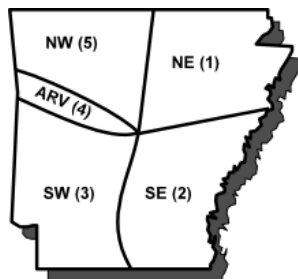
Since variety performance varies from year to year, **two-year yield averages** are better predictors of performance than data from a single year. Superior performance across several locations suggests that a variety has wide adaptability; thus two-year and multi-location yields are also useful in variety selection. Producers are encouraged to closely evaluate variety trial results from locations that best typify their farming conditions.

**SOYVA**, a University of Arkansas System Division of Agriculture computerized variety selection program, can assist in making field-specific variety selection decisions. **SOYVA** sorts through hundreds of adapted soybean varieties in Maturity Groups (MG) III – V and makes variety recommendations based on responses to specific conditions described by the user. Soybean producers are encouraged to use this publication and **SOYVA** when

selecting varieties. Contact your county extension agent for details concerning **SOYVA**. Additional information is available at the University of Arkansas System Division of Agriculture Cooperative Extension Service website (<http://www.aragriculture.org/soybean.htm>): click on the **Computer Programs** link.

### ADAPTED SOYBEAN VARIETIES

Generally, varieties within MG III – V are the best adapted for planting in Arkansas; however, there are situations where a given MG is inappropriate. Planting recommended varieties of more than one MG is recommended as a way to reduce the risk of adverse weather conditions prior to and during the harvest season in Arkansas. The following designations apply to varieties within the various MG's: III – very early maturity; IV – mid-season maturity and VI – late maturity.



**Figure 1. Area of Adaptation for Soybean Maturity Groups for All Production Systems**

- Northeast Arkansas (1):** Groups III, IV, or V
- Southeast Arkansas (2):** Groups III, IV, or V
- Southwest Arkansas (3):** Groups III, IV, or V
- Arkansas River Valley (4):** Groups III, IV, or V
- Northwest Arkansas (5):** Groups IV or V

### ABOUT THIS PUBLICATION

**Table 1** consists of cultural information that pertains to the 2011 University of Arkansas Soybean Performance Trials (<http://www.arkansasvarietytesting.com>). **Tables 2, 3, 6 and 7** contain varietal information for both 2010 and 2011. **Tables 4, 5, 8 and 9** contain the many varietal characteristics of those varieties designated as being adapted to the Arkansas soybean production environment and are grouped by MG. These adapted varieties are included in **SOYVA** and field specific variety recommendations can be obtained by utilizing this program.

**Users of this publication are encouraged to review the “Key Code” page for further explanation regarding varietal ratings to disease, herbicide sensitivity and other agronomic considerations.**

<b>Table 1. Location, Soil Description and Cultural Information of the Arkansas Performance Trials – 2011</b>								
Location	Soil Description	Planting Date	Row Width	Harvest Date by MG				Previous Crop
				Early IV	Late IV	Early V	Late V	
Keiser – Irrigated	Sharky Silty Clay	5/31	38 inches	10/15	10/21	10/23	10/23	Corn
Keiser – Non-Irrigated	Sharky Silty Clay	6/1	38 inches	10/6	10/14	10/21	10/21	Corn
Keiser – DC Irrigated	Sharky Silty Clay	6/23	Four 7.5-inch rows on two 38-inch beds	11/7	11/7	11/8	11/8	Corn
Marianna – Irrigated	Calloway Silt Loam	5/27	30 inches	10/11	10/20	10/21	10/21	Soybean
Stuttgart – Irrigated	Crowley Silt Loam	5/17	31 inches	10/11	10/11	10/17	10/17	Rice
Rohwer – Irrigated	Sharky Clay	5/24	19 inches	10/5	10/5	10/12	10/12	Soybean
Kibler – Irrigated	Roxanna Silt Loam	6/2	36 inches	•	•	11/1	11/1	Soybean

**The KEY CODE for all the following tables is found on the back page. Refer to the KEY CODE for a description of the abbreviated varietal characteristics.**

**HOW TO MAKE YIELD COMPARISONS USING THE FOLLOWING TABLES:** The LSD (0.05), Least Significant Difference, represents the minimum yield difference required between two varieties within the same location before concluding that their yields are truly different (while assuming a 5% risk that the yield differences are due to random chance.) Use only the LSD value listed below each column (location-maturity group) to compare variety yield averages among varieties within that column.

**Note: “Shading” beside a variety mean indicated that there are no statistical difference between that varietal mean and the highest yielding varietal mean “\*” at the test location utilizing the appropriate LSD (0.05) value.**

**Table 2. Yields (bu/A) of Maturity Group IV Conventional Soybean Cultivars at All Locations, 2011.**

Variety	Keiser Irrg	2yr Avg	3yr Avg	Keiser Non Irrg	2yr Avg	3yr Avg	Keiser DC Irrg	2yr Avg	3yr Avg	Marianna Irrg	2yr Avg	3yr Avg	Stuttgart Irrg	2yr Avg	3yr Avg	Rohwer Irrg	2yr Avg	3yr Avg	Kibler Irrg	2yr Avg	3yr Avg	Silt Loam Avg <sup>2</sup>	Clay Avg <sup>3</sup>	All Location Avg <sup>4</sup>
.....bu/A.....																								
<b>Maturity Group IV (RM 4.0 to 4.9)</b>																								
HBK C4926	80.2*	76.4	75.6	•	•	•	61.2	62.7	65.7	40.3	38.4	48.4	56.9	56.2	62.9	51.7*	52.2	57.6	•	•	•	48.6	64.4	58.1
HBK C4929	64.4	71.6	74.4	•	•	•	59.1	67.6	71.0	38.2	39.4	47.6	56.4	57.0	62.4	46.3	49.9	55.1	•	•	•	47.3	56.6	52.9
Progeny 4910	67.1	71.8	73.7	•	•	•	60.6	63.1	64.9	48.2	48.0	52.9	52.7	54.5	58.7	49.2	50.2	51.2	•	•	•	50.4	59.0	55.6
R05-3239	74.4	71.7	•	•	•	•	56.2	63.6	•	43.8	45.5	•	62.2	58.9	•	49.8	52.3	•	•	•	•	53	60.1	57.3
UA 4910	72.7	71.4	72.1	•	•	•	63.3*	66.4	63.2	42.6	41.4	54.4	58.6	58.7	61.9	48.2	47.9	48.7	•	•	•	50.6	61.4	57.1
V03-4660	73.0	68.9	70.6	•	•	•	52.4	56.8	60.1	51.9*	47.9	54.4	65.1*	60.3	57.1	49.7	51.5	53.9	•	•	•	58.5	58.4	58.4
GRAND MEAN	73.8	•	•	•	•	•	61.2	•	•	47.1	•	•	60.5	•	•	50.1	•	•	•	•	•	53.8	61.7	58.5
LSD (5%)	7.8	•	•	•	•	•	6.5	•	•	6.4	•	•	5.7	•	•	5.3	•	•	•	•	•	6.1	6.5	6.3
C.V.	6.4	•	•	•	•	•	6.4	•	•	8.2	•	•	5.7	•	•	6.4	•	•	•	•	•	7	6.4	6.6

**Table 3. Yields (bu/A) of Maturity Group Early V Roundup Ready™ Soybean Cultivars at All Locations, 2011**

Variety	Keiser Irrg	2yr Avg	3yr Avg	Keiser Non Irrg	2yr Avg	3yr Avg	Keiser DC Irrg	2yr Avg	3yr Avg	Marianna Irrg	2yr Avg	3yr Avg	Stuttgart Irrg	2yr Avg	3yr Avg	Rohwer Irrg	2yr Avg	3yr Avg	Kibler Irrg	2yr Avg	3yr Avg	Silt Loam Avg <sup>2</sup>	Clay Avg <sup>3</sup>	All Location Avg <sup>4</sup>
.....bu/A.....																								
<b>Maturity Group V Early (RM 5.0 to 5.5)</b>																								
DB03-8416	75.4	73.6	•	52.9	53.1	•	49.9	57.9	•	46.5	42.5	•	58.4	57.7	•	52.0	55.5	•	47.5	42.6	•	50.8	57.6	54.6
DB04-10836	65.3	69.8	69.3	57.8	52.7	58.0	54.3	60.7	60.9	49.7	45.8	51	61.3	60.5	64.6	53.2	52.4	56.9	49.1*	44.3	55.5	53.4	57.7	55.8
DB06-3442	71.1	72.1	•	57.7	52.7	•	58	62.3	•	54.9	47.5	•	58.6	61.6	•	50.9	54.4	•	44.9	41.6	•	52.8	59.4	56.6
GLENN	79.8	76.5	75.2	54.2	42.9	55	62.6	66.6	69.1	56.9*	50	57.6	66.9*	63.4	64.8	56.2*	53	57.6	48.9	43.4	53.1	57.6	63.2	60.8
HBK C5025	69.9	72.7	73.0	51.7	44.8	53.3	57.5	61.9	62.1	46.1	44.4	52.4	55.9	56.7	58.8	46.6	49.7	58.6	45.0	36.5	49.8	49.0	56.4	53.2
HBK C5528	71.4	71.2	70.9	52.6	53.0	56.8	52.5	57.8	59.8	47.8	45.8	52	55.9	56.1	59.9	50.9	52.6	58.2	45.0	39.6	51.1	49.5	56.8	53.7
Hutcheson	80.2*	74.9	73.1	64.8*	55.4	59.2	55.7	58.7	59.2	53.0	51.5	57.2	49.7	55.9	60.1	50.1	50.1	53.3	46.8	45.5	54.1	49.8	62.7	57.2
Morsoy 5209	69.5	69.9	71.8	52.1	44.1	53	54.9	61.3	63.4	49.7	46.4	55.4	65.6	58.9	61.5	52.2	54.8	61.0	44.3	39.5	50.3	53.2	57.2	55.5
Ozark	72.2	71.5	72.7	55.6	51.5	57.9	62.7*	65.7	65.1	51.6	48.1	56.9	62.3	62.7	64.2	45.9	51.6	58.0	47.0	44.4	54.2	53.6	59.1	56.8
GRAND MEAN	74.3	•	•	56.2	•	•	57.3	•	•	48.8	•	•	63.3	•	•	50.4	•	•	47.1	•	•	53.0	59.6	56.8
LSD (5%)	5.8	•	•	7.1	•	•	7.9	•	•	6.8	•	•	4.6	•	•	7.7	•	•	5.4	•	•	5.6	7.2	6.5
C.V.	4.8	•	•	7.7	•	•	8.4	•	•	8.5	•	•	4.4	•	•	9.3	•	•	7	•	•	6.6	7.6	7.2
<b>Maturity Group V Late (RM 5.6 to 5.9)</b>																								
Osage	74.7	73.3	73.4	62.3	55.5	59.9	56.7	63.3	61.9	51.9	37.2	49.9	66.7	64.1	68.5	57.4*	58.3	61.2	54.2	46.5	56.7	57.6	62.8	60.5
Progeny 5770	86.2*	81.9	82.1	57.3	46.4	56.8	62.6*	65.6	66.3	59.2*	47.9	55.2	63.4	63.0	64.9	51.4	53.4	58.5	60.7*	54.6	62.0	61.1	64.4	63.0
R04-357	77.7	77.7	77.6	58.8	49.9	57.4	59.1	65.4	65.4	54.5	50.3	52.6	68.1	68.6	69.9	47.5	54.0	56.2	53.6	49.8	59.9	58.7	60.8	59.9
R04-572	73.7	71.2	•	65.8*	57.3	•	61.5	64.1	•	49.1	37.5	•	63.5	57.1	•	47.1	48.0	•	52.3	44.4	•	55.0	62.0	59.0
R05-235	82.3	78.1	•	59.7	50.7	•	61.6	63.7	•	53.9	45.4	•	63.0	64.4	•	53.4	57.8	•	49.8	47.3	•	55.5	64.3	60.5
R06-4433	81.1	75.3	•	61.9	57	•	52.5	57.6	•	47.7	35.7	•	67.7	64.7	•	54.4	58.9	•	54.5	50.7	•	56.6	62.5	60.0
GRAND MEAN	72.2	•	•	59.1	•	•	58.1	•	•	50.6	•	•	64.1	•	•	50.6	•	•	50.4	•	•	55.0	60.0	57.9
LSD (5%)	8.7	•	•	9.7	•	•	9.4	•	•	4.6	•	•	5.4	•	•	6.2	•	•	6.8	•	•	5.6	8.5	7.3
C.V.	7.1	•	•	9.6	•	•	9.4	•	•	5.2	•	•	5.0	•	•	7.3	•	•	6.2	•	•	5.5	8.4	7.1

Table 4. Nematode, Disease, and Chloride Sensitivity Ratings for MG IV and V Conventional Soybean Cultivars, 2011<sup>5</sup>

Variety	Root Knot Nematode <sup>6</sup>	Soybean Cyst Nematode <sup>7</sup>				Reniform Nematode	Frogeye	Stem Canker	SDS <sup>8</sup>	Aerial Blight <sup>8</sup>	Chloride <sup>9</sup>	
		2	3	5	14						2010	2011
<b>Maturity Group IV (RM 4.0 to 4.9)</b>												
HBK C4926	7	3	7	5	7	–	0	5 <sup>s</sup>	–	4	Includer	Includer
HBK C4929	7	3	7	7	5	7	1	3 <sup>s</sup>	•	•	Mixed	Mixed
Progeny 4910	7	5	5	7	7	–	3	–	•	•	Mixed	Mixed
R05-3239	•	5	5	•	5	•	•	1	•	•	Includer	Includer
UA 4910	7	5	5	7	7	7	4	–	–	•	Mixed	Mixed
V03-4660	•	•	•	•	•	•	•	•	•	•	Excluder	Excluder
<b>Maturity Group V Early (RM 5.0 to 5.5)</b>												
DB03-8416	7	7	•	7	5	–	0	1	•	•	Includer	Includer
DB04-10836	7	5	•	5	7	–	0	1 <sup>s</sup>	•	•	Includer	Includer
DB06-3442	7	7	•	5	7	–	0	5	•	•	Excluder	Excluder
GLENN	7	5	7	7	5	7	2	–	–	8	Includer	Includer
HBK C5025	7	5	7	7	5	–	1	1 <sup>s</sup>	–	7	Includer	Includer
HBK C5528	5	7	7	7	5	–	1	–	–	•	Includer	Includer
Hutcheson	7	5	7	7	5	–	2	–	–	•	Mixed	Mixed
Morsoy 5209	7	7	7	5	5	7	1	–	–	•	Excluder	Excluder
Ozark	7	5	7	3	3	–	1	–	–	5	Includer	Mixed
<b>Maturity Group V Late (RM 5.6 to 5.9)</b>												
Osage	7	5	7	7	7	7	2	–	•	•	Excluder	Excluder
Progeny 5770	7	7	5	5	5	–	1	–	•	•	Includer	Includer
R04-357	7	5	–	7	7	–	3	7	•	•	Mixed	Mixed
R04-572	7	5	–	7	7	–	2	1	•	•	Includer	Includer
R05-235	5	7	–	7	7	–	1	9	•	•	Excluder	Excluder
R06-4433	7	7	•	7	7	–	3	5	•	•	Excluder	Excluder

**Table 5. Agronomic Characteristics for MG IV and V Conventional Soybean Cultivars, 2011**

Variety	MG	STS	Herbicide Tolerance	Flower Color	Pubescence	Pod Color	Hilum Color	Avg. Days to Maturity <sup>10</sup>	Avg. Lodging Score <sup>11</sup>	Avg. Shatter Score <sup>12</sup>	Avg. Plant Ht.(in) <sup>13</sup>
<b>Maturity Group IV (RM 4.0 to 4.9)</b>											
HBK C4926	4.9	No	Conventional	Purple	Gray	Tan	Imperfect Black	120	2.2	1	43
HBK C4929	4.9	No	Conventional	Purple	Light Tawny	Tan	Black	119	1.5	1	46
Progeny 4910	4.9	No	Conventional	Mixed	Light Tawny	Tan	Black	122	2	1	45
R05-3239	4.9	No	Conventional	Purple	Tawny	Tan	Black	124	1	1	31
UA 4910	4.9	No	Conventional	White	Light Tawny	Tan	Black	118	1.1	1.1	38
V03-4660	4.9	No	Conventional	Purple	Tawny	Tan	Black	125	1.8	1.3	33
<b>Maturity Group V Early (RM 5.0 to 5.5)</b>											
DB03-8416	5.5	No	Conventional	Purple	Grey	Tan	Imperfect Black	128	1.5	1	35
DB04-10836	5.5	No	Conventional	Purple	Tawny	Tan	Black	130	1.7	1.1	37
DB06-3442	5.2	No	Conventional	White	Grey	Tan	Black	126	1.4	1.2	33
GLENN	5.3	No	Conventional	White	Tawny	Tan	Black	125	1.2	1.2	29
HBK C5025	5.0	No	Conventional	White	Gray	Tan	Buff	125	2.4	1	46
HBK C5528	5.5	No	Conventional	Purple	Tawny	Tan	Black	132	1.1	1.1	40
Hutcheson	5.3	No	Conventional	White	Gray	Tan	Buff	125	1.6	1.1	36
Morsoy 5209	5.2	No	Conventional	White	Tawny	Tan	Brown	130	1.2	1	38
<b>Maturity Group V Late (RM 5.6 to 5.9)</b>											
Osage	5.6	No	Conventional	Purple	Gray	Tan	Imp Black	129	1.4	1.1	31
Progeny 5770	5.7	No	Conventional	Purple	Gray	Tan	Buff	134	1.7	1	39
R04-357	5.6	No	Conventional	Purple	Gray	Tan	Imperfect Black	131	1.7	1	36
R04-572	5.6	No	Conventional	Purple	Gray	Tan	Buff / Imp. Black	134	1.1	1	32
R05-235	5.7	No	Conventional	Purple	Gray	Tan	Buff / Grey	131	1.4	1	37
R06-4433	5.6	No	Conventional	White	Gray	Tan	Buff	132	1.6	1	36

**Table 6. Yields (bu/A) of Maturity Group IV LibertyLink Soybean Cultivars at All Locations, 2011.**

Variety	Keiser Irrg	2yr Avg	3yr Avg	Keiser Non Irrg	2yr Avg	3yr Avg	Keiser DC Irrg	2yr Avg	3yr Avg	Marianna Irrg	2yr Avg	3yr Avg	Stuttgart Irrg	2yr Avg	3yr Avg	Rohwer Irrg	2yr Avg	3yr Avg	Kibler Irrg	2yr Avg	3yr Avg	Silt Loam Avg <sup>2</sup>	Clay Avg <sup>3</sup>	All Location Avg <sup>4</sup>
.....bu/A.....																								
<b>Maturity Group IV Early (RM 4.0 to 4.9)</b>																								
HALO 4:65	80.9*	82.3	80.5	•	•	•	61.4	72.6	69.2	52.3*	47.9	51.5	66.5*	64.9	62.3	53.4*	51.4	50.1	•	•	•	59.4	65.2	62.9
HALO 4:94	76.3	75.5	76.1	•	•	•	63.4	66.4	68.4	45.1	43.8	51.9	64.8	59.4	64.6	52.0	51.2	55.0	•	•	•	54.9	63.9	60.3
Progeny 4928 LL	74.5	77.0	•	•	•	•	65.9	71.8	•	42.6	42.6	•	61.7	60.8	•	48.9	52.3	•	•	•	•	52.1	63.1	58.7
USG 74G99L	74.3	75.4	•	•	•	•	66.7*	68.2	•	48.0	44.3	•	63.1	61.9	•	50.0	51.2	•	•	•	•	55.6	63.7	60.4
GRAND MEAN	73.8	•	•	•	•	•	61.2	•	•	47.1	•	•	60.5	•	•	50.1	•	•	•	•	•	53.8	61.7	58.5
LSD (5%)	7.8	•	•	•	•	•	6.5	•	•	6.4	•	•	5.7	•	•	5.3	•	•	•	•	•	6.1	6.5	6.4
C.V.	6.4	•	•	•	•	•	6.4	•	•	8.2	•	•	5.7	•	•	6.4	•	•	•	•	•	7.0	6.4	6.6

**Table 7. Yields (bu/A) of Maturity Group V LibertyLink Soybean Cultivars at All Locations, 2011.**

Variety	Keiser Irrg	2yr Avg	3yr Avg	Keiser Non Irrg	2yr Avg	3yr Avg	Keiser DC Irrg	2yr Avg	3yr Avg	Marianna Irrg	2yr Avg	3yr Avg	Stuttgart Irrg	2yr Avg	3yr Avg	Rohwer Irrg	2yr Avg	3yr Avg	Kibler Irrg	2yr Avg	3yr Avg	Silt Loam Avg	Clay Avg	All Location Avg
.....bu/A.....																								
<b>Maturity Group V Early (RM 5.0 to 5.5)</b>																								
HALO 5:25	75.1	74.0	76.3	59.3	52.7	59.4	58.4	59.2	60.9	51.4	46.7	58.0	73.1	65.5	69.1	58.4	55.9	61.6	48.1	48.0	61.1	57.5	62.8	60.5
Progeny 5160LL	79.1	80.3	•	61.1	51.9	•	57.5	60.3	•	48.8	45.2	•	71.5	65.6	•	54.7	55.5	•	51.8	45.5	•	57.4	63.1	60.7
Progeny 5460LL	72.6	75.2	•	57.1	48.8	•	60.1	66.3	•	46.0	44.1	•	66.1	63.6	•	47.9	47.0	•	43.5	39.0	•	51.9	59.4	56.2
GRAND MEAN	74.3	•	•	56.2	•	•	57.3	•	•	48.8	•	•	63.3	•	•	50.4	•	•	47.1	•	•	53.0	59.6	56.8
LSD (5%)	5.8	•	•	7.1	•	•	7.9	•	•	6.8	•	•	4.6	•	•	7.7	•	•	5.4	•	•	5.6	7.2	6.5
C.V.	4.8	•	•	7.7	•	•	8.4	•	•	8.5	•	•	4.4	•	•	9.3	•	•	7.0	•	•	6.6	7.6	7.2
<b>Maturity Group V Late (RM 5.6 to 5.9)</b>																								
HALO 5:65	61.5	66.1	69.0	52.8	46.7	54.0	54.8	60.3	61.8	52.3	38.5	51.0	61.6	61.5	67.1	49.7	51.3	57.9	46.7	39.3	52.1	53.5	54.7	54.2
Progeny 5960LL	67.6*	69.6	•	56.5*	44.3	•	63.6*	61.3	•	54.2*	42.5	•	62.9*	61.9	•	53.5*	51.5	•	45.1	41.5	•	54.1	60.3	57.6
GRAND MEAN	72.2	•	•	59.1	•	•	58.1	•	•	50.6	•	•	64.1	•	•	50.6	•	•	50.4	•	•	55.0	60.0	57.9
LSD (5%)	8.7	•	•	9.7	•	•	9.4	•	•	4.6	•	•	5.4	•	•	6.2	•	•	6.8	•	•	5.6	8.5	7.3
C.V.	7.1	•	•	9.6	•	•	9.4	•	•	5.2	•	•	5.0	•	•	7.3	•	•	6.2	•	•	5.5	8.4	7.1

**Table 8. Nematode, Disease, and Chloride Sensitivity Ratings for MG IV and V LibertyLink Soybean Cultivars, 2011<sup>5</sup>**

Variety	Root Knot Nematode <sup>6</sup>	Soybean Cyst Nematode <sup>7</sup>				Reniform Nematode	Frogeye	Stem Canker	SDS <sup>8</sup>	Aerial Blight <sup>8</sup>	Chloride <sup>9</sup>	
		2	3	5	14						2010	2011
<b>Maturity Group IV Early (RM 4.0 to 4.9)</b>												
HALO 4:65	7	5	3	5	7	7	1	1~	–	8	Mixed	Includer
HALO 4:94	7	3	7	5	7	7	1	1~	–	8	Includer	Includer
Progeny 4928 LL	7	3	5	7	7	7	1	–	•	•	Includer	Mixed
USG 74G99L	7	5	7	7	5	7	1	–	•	•	Includer	Includer
<b>Maturity Group V Early (RM 5.0 to 5.5)</b>												
HALO 5:25	7	7	7	7	5	7	1	1~	–	8	Includer	Excluder
Progeny 5160LL	7	5	7	3	5	7	1	–	•	•	Includer	Includer
Progeny 5460LL	7	3	7	3	3	7	2	–	•	•	Includer	Includer
<b>Maturity Group V Late (RM 5.6 to 5.9)</b>												
HALO 5:65	5	5	–	5	7	–	0	1	–	–	Excluder	Excluder
Progeny 5960LL	7	7	–	5	7	–	1	1	–	–	Excluder	Excluder

**Table 9. Agronomic Characteristics for MG IV and V LibertyLink Soybean Cultivars, 2011**

Variety	MG	STS	Herbicide Tolerance	Flower Color	Pubescence	Pod Color	Hilum Color	Avg. Days to Maturity <sup>10</sup>	Avg. Lodging Score <sup>11</sup>	Avg. Shatter Score <sup>12</sup>	Avg. Plant Ht. (in) <sup>13</sup>
<b>Maturity Group IV Early (RM 4.0 to 4.9)</b>											
HALO 4:65	4.6	No	LL	Purple	Light Tawny	Brown	Black	115	1.5	1.2	37
HALO 4:94	4.9	No	LL	Purple	Gray	Tan	Imp Black	121	1	1	38
Progeny 4928 LL	4.9	No	LL	Purple	Gray	Tan	Buff	121	1.2	1	42
USG 74G99L	4.9	No	LL	Purple	Gray	Tan	Imp. Black	122	1.2	1	40
<b>Maturity Group V Early (RM 5.0 to 5.5)</b>											
HALO 5:25	5.2	No	LL	White	Tawny	Brown	Black	125	1	1	30
Progeny 5160LL	5.1	No	LL	White	Tawny	Brown	Black	125	1	1	32
Progeny 5460LL	5.4	No	LL	Purple	Light Tawny	Tan	Brown	123	1.3	1.3	41
<b>Maturity Group V Late (RM 5.6 to 5.9)</b>											
HALO 5:65	5.6	No	LL	White	Gray	Brown	Buff	130	1.2	1	35
Progeny 5960LL	5.9	No	LL	White	Gray	Brown	Buff	130	1.4	1.1	35

## Key Codes for All Tables

- “ - ” **No disease data available**  
“ . ” **Information not available**  
“ \$ ” **Information provided by Mississippi State University**

1. Many of the test yields this year are lower than expected due to extended periods of hot and dry weather.  
Keiser Irrigated = Northeast Research and Extension Center  
Keiser Non-Irrigated = Northeast Research and Extension Center  
Keiser Double-Crop = Northeast Research and Extension Center  
Marianna Irrigated = Lon Mann Cotton Research Station  
Stuttgart Irrigated = Rice Research and Extension Center – Stuttgart Division  
Rohwer Irrigated = Southeast Research and Extension Center – Rohwer Division  
Kibler Irrigated = Vegetable Research Station
2. Average yield of Marianna Irrigated, Stuttgart Irrigated and Kibler Irrigated.
3. Average yield of Keiser Irrigated, Keiser Non-Irrigated, Keiser Double-Crop and Rohwer Irrigated locations.
4. Average yields from All Locations.
5. Soybean disease and nematode ratings were conducted by Drs. Kirkpatrick and Monfort with support from the Arkansas Soybean Promotion Board. Disease ratings are characterized by the following scale:

**0-1 = Resistant   2-3 = Moderately Resistant   4-5 = Moderately Susceptible**  
**6-7 = Susceptible   8-9 = Very Susceptible**

Additional soybean disease data can be accessed at the following website:

<http://comp.uark.edu/~avrtest/index.php?sb&content>

6. Root-knot nematode ratings refer to the Southern Root-Knot Nematode, *Meloidogyne incognita* (see <http://comp.uark.edu/~avrtest/index.php?sb&content> for additional information on experimental methods.)
7. Ratings for soybean cyst nematode were evaluated at the Southwest Research and Extension Center, Hope. Only races 2, 3, 5 and 14 are currently being evaluated.
8. Ratings for SDS and Aerial Blight are from 2009 data.
9. Chloride Sensitivity – Excluder varieties accumulate chloride and restrict it to the roots. Includer varieties accumulate chloride throughout the plants. Varieties with a Mixed population have both Includer and Excluder plants. Don't assume that high soluble salts constitute a chloride ion problem. Chloride levels should be determined by irrigation water tests and/or plant tissue analysis.
10. Days to maturity represent the average number of days (of all locations) from planting until 80% of the soybeans in the plot were thought to be mature.
11. Soybean lodging is an average of all locations and is reported using the following criteria: **1** = all plants erect, **2** = all plants slightly leaning or a few plants down, **3** = all plants moderately leaning or 25-50% of the plants are down, **4** = all plants considerably leaning or 50-80% of the plants are down, **5** = all plants down.
12. Soybean shattering is an average of all locations and is reported by using the following criteria: **1** = no shattering, **2** = 1-3% shattered, **3** = 4-8% shattered, **4** = 9-19% shattered, **5** = 20% or more shattered.
13. Soybean plant height reported in inches and is an average of all locations.

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