

2017

Soybean

Variety Yields and Production Practices



2017 Soybean Variety Yields and Production Practices

Soybean production guidelines are prepared by LSU AgCenter cooperating personnel from Louisiana Agricultural Experiment Station researchers and by Louisiana Cooperative Extension Service specialists.

Grain yield is one of the most important traits to consider. Other variety characteristics can indirectly affect yield. The data in Table 1 provide current year variety trial yield results and two-year averages when available. Performance of superior varieties is indicated by bold type and footnotes in Table 1. Varieties are listed alphabetically.

Soybean varieties in Maturity Group IV-V are suggested for Louisiana because they consistently outperform other maturity groups in quality and yield. The early indeterminate varieties have been grown successfully in certain parts of Louisiana. Poor seed quality and excess shattering, however, can be a problem if weather conditions before harvest are warm and wet.

For best use of this guide, refer to Tables 1A-1C for variety yield results, and pick the location fitting your situation. If your farm does not fit any location, choose varieties that perform well at multiple locations.

Other Varietal Characteristics

Yield per acre is an important trait in selecting a variety, but other varietal characteristics should be considered. One or more of the following may be important, depending on the individual farm situation.

Herbicide Tolerance and Weed Management Programs

Liberty Link soybeans are tolerant of the herbicide glufosinate (Liberty), which is a nonselective, broad spectrum herbicide. The LSU AgCenter has information on Liberty Link variety performance. Do NOT apply Liberty herbicide to any variety not labeled as Liberty Link, which includes, but not limited to, Roundup Ready and/or STS and/or BOLT varieties. Applications of Liberty (glufosinate) to non-Liberty Link soybeans will cause significant injury to and/or death of non-Liberty Link soybeans. Regardless of the herbicide tolerant technology utilized, application of a residual herbicide prior to soybean emergence followed by a postemergence application of a residual herbicide that is tank-mixed with a nonselective herbicide is the best strategy to manage herbicide-resistant weeds. Furthermore, research has shown that maintaining soybean weed-free for the first five weeks after emergence can maximize soybean yields.

Disease Resistance

Varieties of soybeans differ in susceptibility to diseases and nematodes. Aerial blight is an important foliar disease south of Alexandria, but can occur in other parishes during wet seasons. The disease, *Cercospora* leaf blight, has become a major disease problem throughout the state. Frogeye leaf spot has been an annual occurrence for the past several years. These, and other foliar diseases, may cause significant yield losses and harvest delays. Soilborne diseases also may be a problem in a given year. Sudden death syndrome (SDS) has been confirmed in Louisiana and is considered a rare occurrence. A soilborne disease with similar foliar symptoms as SDS known as taproot decline has recently been confirmed by pathologists and is likely the most prevalent issue in the state. *Phytophthora* root rot is an isolated issue and is more prevalent in clay or poorly drained soils. Root-knot nematodes are prevalent in sandy soils and can be an annual problem in certain areas. When these and other diseases occur in official variety trials, ratings are conducted to identify potential sources of resistance, making variety selection the most economical way for producers to manage diseases.

Insects

Soybeans are damaged by a diverse insect pest complex of stink bugs, three-cornered alfalfa hopper, beetles and several Lepidopteran defoliators (soybean looper, velvetbean caterpillar, green cloverworm and corn earworm) from plant emergence until harvest. Soybeans can compensate for considerable insect injury; however, high pest populations can cause severe yield reductions or total crop loss. To reduce yield loss, scout fields weekly using a shake sheet or sweep net. If numbers reach action thresholds, apply insecticides. Soybean varieties do differ in susceptibility to insects, and those that are more susceptible will need to be scouted more often.

Scouting fields is especially important for locating the most damaging soybean pest in Louisiana, the redbanded stink bug. This pest feeds only on legumes; thus, earlier maturing varieties have the most potential for stink bug damage. In general, MGIV soybeans will have more damage than MGIV as pod initiation, and seed set starts earlier and lasts longer. This results in longer exposure to stink bugs over time, resulting in greater opportunities for stink bug injury. As a rule, scouting for redbanded stink bug should begin at R2 and occur every five days, if possible. Failure to detect early populations can result in missed opportunities for control. As a reminder, the action threshold for the redbanded stink bug is 16 insects per 100 sweeps.

For the several years, we have screened high-yielding, commercially available soybean varieties for susceptibility to stink bugs to provide agents, consultants and growers information on what to expect from stink bug pressure. No varieties are currently available that provide immunity from stink bugs. Many commercial varieties, however, provide excellent yields under varied growing conditions that are highly susceptible to stink bugs.

Salt-Chloride Tolerance

Soybeans under continuous irrigation may be subjected to high levels of salts or chlorides from well or surface water. Observations from several years at the Macon Ridge Research Station at Winnsboro have made it possible to pinpoint varieties that have resistance or sensitivity to the problem. The problem shows up as leaf scorching and usually occurs shortly after irrigation water is applied.

Maturity

There is a certain amount of overlap in maturity between groups within the state. Environmental conditions, especially drought, can cause variation in maturity. In the southern region of Louisiana, varieties may mature five to 10 days later than in the northern region. Most varieties within a group mature in the following range when planted at recommended times:

- Very early maturity: Aug. 10 – Aug. 19
- Early maturity: Aug. 20 – Sept. 10
- Early medium maturity: Sept. 11 – Oct. 1

Table 2 indicates the approximate date of maturity of varieties if planted at the optimum time. Where large acreages are involved, varieties of differing maturity should be selected to stagger the harvest and avoid losses from shattering and poor quality.

Lower Pod Height

Pod height is especially important in rough, poorly drained or new ground. It is important for all varieties to set pods a reasonable distance above the soil surface to aid in harvestability.

Poor Drainage

Many soybeans in Louisiana are planted on heavy clay soils with poor internal drainage. Research has determined that certain varieties are superior to others under these conditions. Consult results from the St. Joseph Sharkey clay test to select varieties for tolerance to poor drainage. Planting on raised beds is desirable where drainage is less than optimal.

Lodging Resistance

Soybean varieties are more likely to lodge if a population of more than six plants per foot of row is present and if grown on a highly fertile soil. Tall varieties tend to lodge more severely than short ones. When lodging occurs, seed quality and yield are affected. A lodged field is more susceptible to disease and reduces harvest efficiency.

Plant Height

Plant height varies according to growing conditions, planting date, soil type and variety. Table 2 indicates relative plant height among varieties tested in 2011. If canopy closure has been a problem, a taller variety should be selected or a closer row spacing should be adopted. On highly fertile soil, too much growth is sometimes a problem, and a shorter variety is the better choice.

Seed Quality

Poor seed quality is more often found in early maturing varieties. Poor quality is especially true for indeterminate varieties that do not mature uniformly. However, in wet harvest seasons when temperatures and humidity remain high, most varieties will have the problem. Poor seed quality occurs when fields are not harvested when ready or under heavy disease pressure. When poor conditions occur between physiological maturity (maximum dry matter accumulation) and harvest, chances increase for a decline in seed quality.

Cultural Practices

Lime and Molybdenum

Availability of most plant nutrients is usually best in soils with a pH of 5.8-7.0. When the soil pH drops below 5.2 on sandy loam and silt loam soils, and below 5.0 on clay soils, manganese toxicity may occur. When the soil pH drops below 5.0, aluminum toxicity may also occur.

In extreme cases, manganese toxicity is expressed as a stunted plant with crinkled leaves. In milder cases, manganese toxicity may not show, but yield decreases will occur. Aluminum toxicity affects the roots. Roots on plants with aluminum toxicity are shorter and thicker than normal, resulting in a condition known as club root. Manganese and aluminum toxicities can be controlled by keeping the soil pH above the critical levels.

Molybdenum is a critical component of the nitrogenase complex that fixes atmospheric nitrogen into a usable form for the soybean plant. Molybdenum is a nutrient needed by soybeans in small quantities. Our soils have enough molybdenum for optimum growth, but molybdenum is less available to plants as the soil becomes more acidic. At a pH higher than 6.2, additional molybdenum is not needed as seed treatments or fertilizer. When the soil pH is below 5.5, both lime and molybdenum are needed. The lime (enough to raise the soil pH to 5.5 or higher) is needed to eliminate the possibility of manganese and aluminum toxicities. When the soil pH is between 5.5 and 6.2, molybdenum should be used.

Nitrogen

Soybeans need large quantities of nitrogen. Soybeans remove about 4 pounds of nitrogen in each harvested bushel. Fortunately, soybeans are legumes and can obtain most of their nitrogen from

the atmosphere. They accomplish this with the aid of the bacterium, *Rhizobium japonicum*. These bacteria use soybean roots as a livable environment. They form nodules on soybean roots that capture nitrogen from the atmosphere and fix it in a usable form. Seed should be inoculated with *Rhizobium japonicum* bacteria in soils with no recent history of soybeans or when conditions have reduced bacteria survival.

Phosphorous

Phosphorous is critical in the early stages of soybean growth. It stimulates root growth, is essential in the storage and transfer of energy and is an important component of several biochemicals that control plant growth and development. Phosphorous is concentrated in the seed and strongly affects seed formation. Soybeans remove about 0.8 pound of phosphate (P₂O₅) per bushel in the harvested portion of the crop.

Phosphorous deficiencies are not easily observed. Usually no striking visual symptoms indicate phosphorous deficiency in soybeans. The most common characteristics of phosphorous-deficient soybean plants are stunted growth and lower yields.

Phosphorous fertilization rates should be based on soil test results. Remember, soil pH affects the availability of phosphorous, which is most available to soybeans when the soil pH is between 6.0 and 7.0.

Potassium

Potassium is essential in the growth and development of soybeans and is indirectly related to many plant cell functions. Some 60 enzymes require the presence of potassium. Plants with adequate amounts of potassium are better able to resist diseases than potassium-deficient plants. About four times as much potash (K₂O) is required by soybeans as phosphate (P₂O₅). About twice as much potash (K₂O) is removed in the seed as phosphate (P₂O₅). Soybeans remove about 1.4 pounds of potash (K₂O) per bushel in the harvested portion of the plant.

Potassium deficiency symptoms are fairly easy to diagnose when they are severe enough to be seen visually and will usually occur on the lower leaves during pod fill as margins (edges) of the leaves appear necrotic (dead and brown). Severe potassium deficiencies can greatly reduce yields. Potassium fertilizer rates should be based on soil test results.

Early Planting

Soybeans should not be planted until soil temperature reaches 60 F. Because emergence also may be affected by cool soil temperatures after planting, early planting decisions should also consider the forecast. Adequate soil temperatures occur in April but it can vary by location and year. Maturity Group IV and indeterminate Group V varieties do best in April plantings. Research in north Louisiana has instances of high yields for Group IV and V planted in mid- to late March. In these cases, daily average soil temperatures were generally at or above 60 F at planting. A few (especially determinate types) may be sensitive to

planting before early May. Narrow row spacing may be beneficial when planting early due to the potential of reduced plant height. Always use a base fungicide seed treatment when planting early and conditions are less than favorable.

Late Planting

When planting is delayed until June 15 or later, the amount of vegetative growth that the plant produces becomes more critical. It is important to choose varieties that grow rapidly in a short time. When blooming starts, most vegetative growth ceases in determinate varieties. Maturity Group VI soybeans should be used when planting after June 1. When planting late, seeding rates should be increased to compensate for reduced vegetative growth.

Seeding Rate

Plant populations that are too dense reduce yields, encourage diseases and lodging and increase seed cost. When calibrating planters, use seed-per-foot as your guide rather than pounds of seed per acre. In the following table, the estimated pounds per acre should be used only to calculate how much seed to buy. Because of varietal difference in seed size, as well as seasonal variation within lots of the same variety, planting rates can be misleading if expressed in pounds per acre. The following rates are recommended:

Row Width (Inches)	Seed / Row Foot	Plants / Row Foot	Estimated lbs. per Acre	Population in 1,000s
36-40	8-9	6-8	35	78-104
30-32	6-7	4-5	40	78-104
20-24	5-6	4-5	45	104-130
7-10	4-5	3	70	104-130
Broadcast	5-6/sq.ft.	3/sq.ft.	75-90	150
Late Planting	6-7/sq.ft.	4/sq.ft.	80-100	200

Seeding Dates

Because weather conditions are different from year to year, seeding dates can be affected by environmental conditions. Early or late planting can cause reduction in plant height in many varieties. Generally, late plantings have less chance of success unless irrigation is available or optimal weather and timely rains occur throughout the growing season. A general rule is that 1/2 bushel per day is lost for every day that planting is delayed past the first week of June.

Optimal seeding dates for each maturity group planted in Louisiana are:

- Group III – April 15 – May 10
- Group IV – April 15 – May 10
- Group V – March 25 – May 5
- Group VI – March 25 – April 30

Row Spacing

Varieties respond differently to row spacing. The most important consideration is that the canopy be closed as quickly as possible to avoid late-season weed problems and low yields. Research has shown that narrow row spacing (30 inches or less) may outyield wide row spacing.

Depth of Seeding

Plant only deep enough to get the seed in moist soil. On sandy or silt loam soils, plant only 1 inch deep if moisture is available. On clay soils, plant 1 to 2 inches deep, depending on moisture conditions. Rolling the soil, especially clays, after planting will help obtain a stand by conserving moisture.

Table 1A. Highest Yielding Maturity Group 3.0-4.4 Soybean Varieties From Six Louisiana Locations:

Variety	Central Station	Rice Station	Dean Lee	Macon Ridge	Red River	Northeast	2016 Average	2015/2016 Average	2014/2015 Average
AG 44X6	49	34	50	42	53	76	50		
CZ 3841 LL	45	24	42	28	54	71	44	45	48
CZ 3945 LL	44	24	45	26	46	76	44	42	
CZ 3991RY	45	24	45	30	59	70	45		
CZ 4181 RY	46	34	52	44	54	76	51	51	55
CZ 4222LL	40	32	39	44	66	73	49		
Mycogen 5N406R2	41	20	42	35	59	57	42		
Mycogen 5N414R2	47	34	51	36	57	81	51		
Mycogen 5N424R2	42	26	46	41	63	79	49		
Mycogen 5N433R2	43	24	54	43	54	79	50	52	
P 4211RY	43	23	55	33	58	79	48	50	53
P 4247LL	38	32	52	42	59	76	50		
P41T33R	40	32	50	37	63	76	50		
S39-C4	46	26	38	39	65	73	48	46	
S39-T3	47	21	49	40	59	69	48		
S42-P6	50	32	49	32	57	76	49		
S43RY95	46	32	53	49	57	81	53	54	58
Average	44	28	48	38	58	74			
Other Group 3.0-4.4 Soybean Varieties included in Louisiana tests:									
CZ 4044LL	40	26	45	26	57	68	44		
CZ 4105 LL	42	20	41	35	52	65	43	42	
S42RY77	40	25	47	34	46	72	44		
Average	41	24	45	32	52	69			

Table 1B. Highest Yielding Maturity Group 4.5-4.7 Soybean Varieties From Seven Louisiana Locations:

Variety	Central Station	Rice Station	Dean Lee	Macon Ridge	Red River	Northeast	2016 Average	2015/2016 Average	2014/2015 Average
AG 45X6	56	31	47	42	50	77	51		
AG 46X6	46	40	49	50	51	91	54		
AG 46X7	50	32	53	41	58	81	52		
AG 47X6	47	28	48	40	58	82	50		
Armor 46-D08	47	39	49	55	64	83	56		
Armor 47-D17	50	33	49	46	58	79	52		
Armor 47-R70	52	36	49	46	58	73	52	53	
ARX4706	49	32	47	40	52	82	50		
CZ 4540LL	54	34	46	52	62	77	54	53	
CZ 4590 RY	53	33	54	54	57	77	55	53	
CZ 4656RY	48	39	43	48	54	61	49		
CZ 4748 LL	49	37	55	43	62	66	52	54	56

Table 1B. Highest Yielding Maturity Group 4.5-4.7 Soybean Varieties From Seven Louisiana Locations: (continued)

Variety	Central Station	Rice Station	Dean Lee	Macon Ridge	Red River	Northeast	2016 Average	2015/2016 Average	2014/2015 Average
DG4587LL	48	38	48	52	62	74	54	55	
DG4670GENRR2Y	49	30	54	49	60	82	54	54	55
DG4790GENRR2Y	47	32	53	46	61	81	53	54	
Go Soy 4714GTS	49	27	45	50	61	77	52	49	
GS45R216	46	28	47	48	61	84	53		
GS47R216	52	36	59	51	60	78	56		
Mycogen 5N452R2	51	31	47	49	63	80	53	53	55
P 4516RXS	52	34	50	46	58	82	54		
P 4588RY	52	23	40	41	59	63	46		
P 4613RY	48	30	49	47	60	74	51	52	55
P 4620RXS	47	37	52	44	12	84	46		
P 4757RY	50	33	51	49	62	78	54	54	
P 4788RY	55	34	50	45	50	78	52	52	54
P 4799RXS	48	36	47	52	15	79	46		
P47T36R	49	29	54	54	50	85	54		
P47T89R	48	34	60	58	59	86	57		
R2C4775	50	36	48	49	53	73	52		
Rev 45A46	50	38	51	54	51	85	55		
REV 47R34	46	39	49	50	61	80	54	55	57
REV 48A26	47	32	54	49	60	83	54		
S12-3782	47	24	46	45	60	65	48		
S12-3791	52	28	50	42	66	72	52		
S45W9	52	31	49	41	57	83	52		
S45XS66	46	32	49	42	53	84	51		
S47-K5	47	24	50	41	61	77	50		
S47RY13	50	34	51	47	57	78	53	51	52
Average	49	33	50	47	56	78			

Table 1C. Highest Yielding Maturity Group 4.8-4.9 Soybean Varieties From Six Louisiana Locations:

Variety	Central Station	Rice Station	Dean Lee	Macon Ridge	Red River	Northeast	2016 Average	2015/2016 Average	2014/2015 Average
AG 48X7	50	41	56	51	53	63	52		
AG 49X6	47	38	50	40	53	63	49		
Armor 48-D24	41	31	54	55	49	82	52		
Armor 48-D80	47	41	59	43	50	62	50		
Armor 49-D90	43	41	52	50	50	77	52		
ARX4906	49	34	51	54	58	59	51		
CZ 4818 LL	48	34	44	49	48	66	48	49	
CZ 4898RY	47	38	46	61	51	62	51		
CZ 4959 RY	50	37	52	37	54	76	51	49	51
DG4825GENRR2Y	42	35	49	40	52	80	50	51	56
DG4880GLY	42	40	51	55	45	75	51	52	54
DG4995GLY	48	30	51	58	55	71	52	52	
DGX4845RR2	44	33	52	61	49	88	55		
Go Soy 4913LL	44	35	47	46	58	72	51		
Go Soy 4915R2	47	38	56	42	48	59	48		
Go Soy 49G16	46	37	55	57	60	71	54		
Go Soy IREANE	41	32	42	72	56	80	54		

Table 1C. Highest Yielding Maturity Group 4.8-4.9 Soybean Varieties From Six Louisiana Locations: (continued)

Variety	Central Station	Rice Station	Dean Lee	Macon Ridge	Red River	Northeast	2016 Average	2015/2016 Average	2014/2015 Average
GS48R216	48	37	48	52	56	83	54		
GS4915R2	47	38	56	42	48	59	48	51	
HBK LL4953	48	33	50	51	59	69	52	53	58
Mycogen 5N480R2	49	37	57	46	12	66	45		
Mycogen 5N490R2	51	24	50	48	58	82	52	51	
P 4816RX	53	28	52	50	51	83	53		
P 4900RY	47	29	52	49	53	77	51	51	54
P 4930LL	51	34	44	49	62	70	52	52	56
P 4944RX	49	34	53	43	41	58	47		
Rev 48A26	42	33	56	52	51	81	53		
Rev 48A76	46	38	54	49	59	82	55		
Rev 48L63	45	32	51	29	54	73	47		
REV 49A75	44	33	54	52	50	74	51	51	56
REV 49R94	48	30	49	50	52	84	52	54	58
RX4825	51	32	46	57	52	85	54		
S12-2418	48	26	49	46	57	79	51		
S48RS53	47	36	51	44	52	68	50	53	57
S48XT56	45	26	50	49	48	82	50		
S49LL34	41	34	49	51	63	68	51	53	
Average	47	34	51	50	52	74			
Other Group 4.8-4.9 Soybean Varieties included in Louisiana Tests:									
Armor 49-D66	37	35	50	39	46	52	43		
DG4967LL	46	37	46	48	54	63	49	51	56
DG4970GLY	46	32	49	45	47	70	48	49	52
P 4814LLS	43	28	42	42	44	66	44	48	
Rev 49L49	39	35	52	48	55	76	51		
RX4926	44	35	52	43	47	57	46		
S49XT07	44	33	52	41	43	52	44		
Average	43	33	49	44	48	62			

Table 1C. Highest Yielding Maturity Group 5.0-5.3 Soybean Varieties From Six Louisiana Locations:

Variety	Central Station	Rice Station	Dean Lee	Macon Ridge	Red River	Northeast	2016 Average	2015/2016 Average	2014/2015 Average
Armor 53-D04	41	30	53	47	60	81	52		
CZ 5147LL	41	34	50	53	57	72	51	51	
CZ 5150LL	49	37	47	38	63	68	50	52	58
CZ 5225 LL	48	45	49	44	61	70	53	54	
CZ 5375RY	43	42	52	52	62	76	55		
DG5067LL	58	42	46	45	47	63	50	52	
DG5170GENRR2Y	46	39	52	47	52	78	52	52	
DG5230GENRR2Y	52	44	48	47	55	70	53	54	58
Go Soy 5214GTS	45	35	51	53	51	70	51		
Go Soy Leland	48	36	44	53	61	73	53	54	

Table 1C. Highest Yielding Maturity Group 5.0-5.3 Soybean Varieties From Six Louisiana Locations: (continued)

Variety	Central Station	Rice Station	Dean Lee	Macon Ridge	Red River	Northeast	2016 Average	2015/2016 Average	2014/2015 Average
Mycogen 5N523R2	53	28	55	36	50	76	50		
R09-430	54	35	54	41	62	75	53	52	53
REV 51A56	47	28	50	30	47	76	46	50	
S11-17025	46	34	42	50	56	85	52	54	
S11-20124	47	48	53	56	64	74	57		
S12-4718	50	41	53	54	52	79	55		
S52RY77	43	38	42	45	60	65	49	52	60
Schillinger 5220. RC	40	30	53	38	52	72	47	46	
UA 5213C	45	33	52	55	58	67	52	51	54
Average	47	37	50	47	56	73			
Other Group 5.0-5.3 Soybean Varieties included in Louisiana Tests:									
AG 53X6	44	32	48	39	57	73	49		
CZ 5242LL	48	39	47	48	48	63	49	51	57
Go Soy 5115LL	48	35	46	34	54	65	47	51	
P 5226RYS	45	30	49	43	56	68	49	50	
P 5016RXS	45	35	48	33	53	72	48		
P 5289RY	44	30	39	32	35	53	39		
S52LL66	39	32	47	46	44	60	45		
UA 5014C	47	30	46	40	48	73	47		
Average	45	33	46	39	49	66			

Table 1C. Highest Yielding Maturity Group 5.4-6.9 Soybean Varieties From Six Louisiana Locations:

Variety	Central Station	Rice Station	Dean Lee	Macon Ridge	Red River	Northeast	2016 Average	2015/2016 Average	2014/2015 Average
AG 55X7	44	30	42	36	58	81	49		
Armor 55-R68	50	47	53	50	54	80	56		
CZ 5445 LL	42	47	46	41	63	68	51	51	
DG5580GENRR2Y	43	43	54	52	65	77	56		
DG5625GENRR2Y	43	47	57	43	55	76	54	55	
Osage	52	40	45	41	65	75	53	51	58
P 5417RX	43	31	46	34	53	76	47		
P54T94R	31	39	51	57	67	78	54		
P 5555RY	43	43	53	47	58	78	54	54	
P 5623LL	51	52	46	51	51	71	54		
P 5752RY	42	38	51	50	59	78	53	55	
R10-197RY	41	41	50	41	60	76	51	53	
REV 52A95	39	39	50	48	65	66	51	52	
REV 56R63	40	51	51	49	60	71	54	56	58
REV 57R21	36	41	50	40	57	72	49	51	
S55Q3	32	45	50	53	66	73	53		
S56RY84	41	43	49	47	58	76	53	54	60
S57RY26	40	35	48	47	55	78	50	52	
Schillinger 557.RC	53	37	47	46	59	70	52		

Table 1C. Highest Yielding Maturity Group 5.4-6.9 Soybean Varieties From Six Louisiana Locations: (continued)

Variety	Central Station	Rice Station	Dean Lee	Macon Ridge	Red River	Northeast	2016 Average	2015/2016 Average	2014/2015 Average
UA 5414RR	49	43	45	40	60	63	50	48	54
UA 5612	44	39	47	46	58	73	51	53	58
Average	43	41	49	46	59	74			
Other Group 5.4-6.9 Soybean Varieties included in Louisiana Tests:									
AG 54X6	41	35	43	36	40	67	44		
AG 59X7	45	41	40	42	52	69	48		
ARX5506	34	33	47	37	46	49	41		
CZ 5515 LL	38	26	29	26	28	52	33	41	
DG5461LL	41	38	45	42	54	67	48	50	55
Go Soy 5515LL	41	41	46	46	59	69	50	52	
P 5414LLS	41	42	48	39	58	68	50		
P 5631RX	44	38	47	39	51	57	46		
P 5768RX	45	32	31	37	42	58	41		
R07-6614RR	41	39	49	48	53	62	49		
R10-230	41	42	47	42	58	70	50		
UA 5814HP	41	40	38	40	49	59	45	48	
Average	41	37	42	39	49	62			

Data from these LSU AgCenter research stations: Dean Lee, Alexandria; Macon Ridge, Winnsboro; Northeast, St. Joseph; Red River, Bossier; Rice Research, Crowley; and Central Research, Baton Rouge.

All yields expressed in bushels per acre.

Bold- Highest yielding (P=.10) at this location in 2016

Table 2. Agronomic Data 2016: Dean Lee Research Station

Group 3.0-4.4	Maturity	Plant Ht (in)	Lodging*	MRRS*	NERS*
AG 44X6	123	34.3	3	8	4
CZ 3841LL	118	29.9	5	6	2
CZ 3945LL	123	28.6	1	8	3
CZ 3991RY	117	31.1	1	6	1
CZ 4044LL	117	30.1	1	7	1
CZ 4105LL	117	29.9	1	7	5
CZ 4181RY	124	39.8	3	8	3
CZ 4222LL	110	28.5	1	8	4
Mycogen 5N406R2	110	32.8	2	7	2
Mycogen 5N414R2	122	39.5	3	7	1
Mycogen 5N424R2	119	26	1	6	2
Mycogen 5N433R2	130	38.5	3	7	1
P 4211RY	121	33.5	1	6	1
P 4247LL	123	37.5	1	6	2
P41T33R	121	33.9	1	8	2
S39-C4	112	30.4	1	8	2
S39-T3	124	34.6	1	4	2
S42-P6	126	34.5	1	6	1
S42RY77	120	33.6	2	7	2

Table 2. Agronomic Data 2016: Dean Lee Research Station

Group 3.0-4.4	Maturity	Plant Ht (in)	Lodging*	MRRS*	NERS*
S43RY95	130	42.3	5	7	1

*Lodging from 1-9, with 1= Straight

*MRRS Greenstem (0-9)

*NERS Greenstem (0-9)

Group 4.5-4.7	Maturity	Plant Ht (in)	Lodging*	MRRS*	NERS*
AG 45X6	130	39.5	1	3	5
AG 46X6	138	40.3	2	4	1
AG 46X7	132	40.1	2	6	2
AG 47X6	130	32.7	1	5	1
Armor 46-D08	141	32.5	2	3	3
Armor 47-D17	134	36.3	1	4	1
Armor 47-R70	130	38.8	2	6	0
ARX4706	134	42.4	3	4	2
CZ 4540LL	134	38.7	3	5	1
CZ 4590RY	134	39	1	5	0
CZ 4656RY	132	36.4	2	7	2
CZ 4748LL	135	39	4	4	1
DG4587 LL	130	40.4	1	4	0
DG4670GENRR2Y	132	40.9	2	8	2
DG4790GENRR2Y	134	33.6	1	4	2
Go Soy 4714GTS	133	43.7	2	5	3
GS45R216	131	40.7	4	6	5
GS47R216	133	35.7	2	5	1
Mycogen 5N452R2	126	40.4	2	3	2
P 4516RXS	134	36	1	3	2
P 4588RY	125	44.9	1	3	1
P 4613RY	128	34.9	1	3	2
P 4620RXS	142	43	3	0	1
P 4757RY	137	24.6	1	4	3
P 4788RY	131	44.2	1	3	1
P 4799RXS	130	30.6	1	5	0
P47T36R	130	34	1	4	2
P47T89R	132	38.3	2	4	2
R2C4775	134	39.5	3	6	1
Rev 45A46	129	39.6	1	7	1
REV 47R34	129	36.7	1	6	1
REV 48A26	131	33.3	1	2	3
S12-3782	127	34.6	2	7	1
S12-3791	133	43	2	4	2
S45W9	131	42.1	4	4	3
S45XS66	132	33.5	1	7	1
S47-K5	128	37.8	3	4	1

Group 4.5-4.7	Maturity	Plant Ht (in)	Lodging*	MRRS*	NERS*
S47RY13	130	32.4	2	3	4
*Lodging from 1-9, with 1= Straight					
*MRRS Greenstem (0-9)					
*NERS Greenstem (0-9)					

Group 4.8-4.9	Maturity	Plant Ht (in)	Lodging*	MRRS*	NERS*
AG 48X7	134	46.9	4	4	1
AG 49X6	138	42.7	5	5	3
Armor 48-D24	141	27.3	1	8	0
Armor 48-D80	132	46.1	1	4	0
Armor 49-D66	134	39.2	1	7	2
Armor 49-D90	135	43.4	1	5	3
ARX4906	138	35.3	1	2	3
CZ 4818LL	132	32.8	1	8	4
CZ 4898RY	133	42.1	1	2	0
CZ 4959RY	141	40.9	1	3	2
DG4825GENRR2Y	138	34.9	1	3	0
DG4880GLY	142	43.3	3	2	2
DG4967LL	133	44.8	6	4	1
DG4970GLY	138	43.6	3	4	1
DG4995GLY	134	37.9	1	5	0
DGX4845RR2	139	32.4	1	0	0
Go Soy 4913LL	131	43.9	2	1	0
Go Soy 4915R2	139	42.1	1	6	1
Go Soy 49G16	133	30.3	2	4	4
Go Soy IREANE	142	21	3	5	1
GS48R216	135	30.2	1	4	3
HBKLL4953	131	44.1	1	2	0
Mycogen 5N480R2	136	34.1	1	7	0
Mycogen 5N490R2	134	33.1	2	3	2
P 4814LLS	132	43.3	7	1	2
P 4816RX	133	33.9	1	2	1
P 4900RY	136	32.9	1	5	1
P 4930LL	134	41.1	2	1	1
P 4944RX	131	36.7	1	7	1
Rev 48A26	135	33.5	2	6	0
Rev 48A76	132	35.1	2	4	0
Rev 48L63	134	43.7	2	5	1
REV 49A75	134	42	3	3	1
Rev 49L49	139	44.1	2	1	2
REV 49R94	136	37.3	3	3	0
RX4825	136	32.5	1	8	1
RX4926	135	39.6	2	5	1
S12-2418	134	37.5	1	6	3

Group 4.8-4.9	Maturity	Plant Ht (in)	Lodging*	MRRS*	NERS*
S48RS53	135	39.5	1	2	0
S48XT56	134	33.3	1	3	1
S49LL34	131	43.9	2	5	4
S49XT07	134	37.5	2	4	2

*Lodging from 1-9, with 1= Straight

*MRRS Greenstem (0-9)

*NERS Greenstem (0-9)

Group 5.0-5.3	Maturity	Plant Ht (in)	Lodging*	MRRS*	NERS*
AG 53X6	130	49	3	0	0
Armor 53-D04	141	25.3	1	3	1
CZ 5147LL	140	47.7	2	3	0
CZ 5150LL	134	21.1	1	6	0
CZ 5225LL	135	26.4	1	3	0
CZ 5242LL	144	25.7	1	1	2
CZ 5375RY	133	45.4	3	3	1
DG5067LL	132	23.9	1	5	1
DG5170GENRR2Y	131	45.2	3	4	0
DG5230GENRR2Y	136	22.7	1	3	1
Go Soy 5115LL	137	43.2	2	4	1
Go Soy 5214GTS	138	35.8	4	1	1
Go Soy LELAND	140	24.1	1	2	1
Mycogen 5N523R2	142	46.9	6	5	1
P 5016RXS	135	36.8	1	4	0
P 5226RYS	144	47.7	2	4	1
P 5289RY	137	52.4	8	6	0
R09-430	131	23.9	1	3	2
REV 51A56	136	37.9	3	4	1
S11-17025	130	25.7	1	6	1
S11-20124	141	29.7	3	5	1
S12-4718	133	25.3	1	7	0
S52LL66	139	46.3	6	2	0
S52RY77	136	26.3	1	5	0
Schillinger 5220.RC	138	38.8	1	5	0
UA 5014C	135	22.9	1	5	0
UA 5213C	138	25	1	1	0

*Lodging from 1-9, with 1= Straight

*MRRS Greenstem (0-9)

*NERS Greenstem (0-9)

Group 5.4-6.9	Maturity	Plant Ht (in)	Lodging*	MRRS*	NERS*
AG 54X6	146	45.8	2	2	1
AG 55X7	147	27.3	1	1	0
AG 59X7	131	31.6	1	4	1
Armor 55-R68	136	46.8	2	2	0
ARX5506	142	24.3	1	1	0

Group 5.4-6.9	Maturity	Plant Ht (in)	Lodging*	MRRS*	NERS*
CZ 5445LL	138	24.6	1	2	1
CZ 5515LL	146	25.5	1	2	1
DG5461LL	141	47.8	3	1	2
DG5580GENRR2Y	142	26.2	1	4	0
DG5625GENRR2Y	141	57	8	3	1
Go Soy 5515LL	135	32.6	1	1	1
OSAGE	140	25.4	1	2	0
P 5414LLS	146	30.4	1	2	0
P 5417RX	135	30.1	1	4	1
P54T94R	145	25.7	1	5	3
P 5555RY	136	29.2	1	1	0
P 5623LL	141	26.6	1	5	1
P 5631RX	138	48.1	3	3	1
P 5752RY	138	26.6	1	1	1
P 5768RX	136	20.9	1	4	0
R07-6614RR	139	29.5	1	3	0
R10-197RY	141	28.5	1	6	0
R10-230	134	26.6	1	3	2
REV 52A95	147	29.3	1	2	1
REV 56R63	139	31.6	2	1	1
REV 57R21	145	39.6	2	5	1
S55Q3	143	33.1	1	4	3
S56RY84	140	28.7	1	1	0
S57RY26	132	30.4	1	4	0
Schillinger 557.RC	146	24.6	1	3	1
UA 5414RR	145	26.4	1	4	1
UA 5612	140	24.2	1	1	0
UA 5814HP	141	29	1	4	2

*Lodging from 1-9, with 1= Straight

*MRRS Greenstem (0-9)

*NERS Greenstem (0-9)

**Table 1A: Summary of soybean demonstrations at 27 locations identified by parish.
Yield expressed in bushels per acre (13% Moisture)**

GP IV Varieties:	Location by Parish											
	Glyphosate Resistant	Avoyelles	Concordia	Franklin	Madison - 1	Madison - 2	Morehouse	Ouachita	St. Landry	St. Martin	W. Baton Rouge	W. Carroll - 1
Armor 47D17 XTend	43		42			64	72	55	29	57	35	62
Armor 47R70	46	77	58	66	61	53	67	56	24	55	34	55
Asgrow 46X6 XTend	40	85	72			59	75	63	14	57	33	69
Asgrow 47X6 Xtend	35	78	49			62	69	54	28	59	23	62
Credenz 4656RY	38	67	36	61	50	40	53	42	23	57	39	15
Credenz 4898RY	30	70	30	60	50	32	34	42	15	42	17	19
Delta Grow 4670	42		63	67	62	67	55	57	30	51	36	53
Delta Grow 4790	46		59	66	58	59	68	58	30	48	42	60

Table 1A: Summary of soybean demonstrations at 27 locations identified by parish. (continued)
Yield expressed in bushels per acre (13% Moisture)

GP IV Varieties:	Location by Parish											
Dyna-Gro S43RY95	46		55	67	58	59	72	57	24	54	43	62
Dyna-Gro S47RY13	41		74	70	60	56	57	57	22	59	36	55
Mycogen 5N433R2	43		57	67	63	65	71	57	26	43	38	54
Mycogen 5N452R2	37		52	64	56	59	65	54	22	50	40	55
Pioneer 47T36R	43		75	64	57	65	74	53	18	41	33	71
Progeny 4788RY	36	74	58	66	58	54	55	53	23	53	36	45
REV 48A26	45	77	60	67	61	66	66	60	21	54	17	62
REV 48A76	42	78	64	67	60	63	61	56	25	61	32	47
Syngenta NK S45-W9	39		81	69	63	69	71	52	21	31	67	76
Syngenta NK S47-K5	40		85	68	61	69	65	53	23	53	42	72

Table 1B: Summary of soybean demonstrations at 27 locations identified by parish.
Yield expressed in bushels per acre (13% Moisture)

GP V Varieties:	Location by Parish						
Glyphosate Resistant	Avoyelles	Beauregard 1	Beauregard 2	Catahoula	Rapides	St. Landry	St. Martin
Armor 55D15 XTend	26	45	57	54	47	27	21
Armor 55R68	30	43	56	61	72	50	34
Asgrow 54X6 XTend	25	36	51	57	46	39	24
Credenz 5375RY	31	35	56	62	68	49	30
Delta Grow 5170	29	43	52	64	57	44	25
Delta Grow 5230	29	41	56	63	52	49	24
Dyna-Gro S57RY26	31	42	58	65	54	44	26
Progeny 5226RYS	28	43	57	57	54	43	26
Progeny 5752RY	26	42	60	67	54	46	28
REV 51A56	28	39	50	60	51	52	17
Syngenta NK S55-Q3	29	45	61	54	59	42	35
Syngenta NK S56-M8	31	46	59	51	46	30	32

Table 1C: Summary of soybean demonstrations at 27 locations identified by parish.
Yield expressed in bushels per acre (13% Moisture)

Group IV Liberty Link Soybeans	Location by Parish			
Glyphosate Resistant	Dean Lee Research	Grant Parish	Red River Research Irrigated	Red River Research Non-Irrigated
Armor 47-L10	63		34	43
Credenz 4818LL	53	59	45	31
Credenz CZ4540LL	63		43	40
Credenz CZ4748LL	63	69	35	42
Delta Grow 4587LL	62		41	40
Delta Grow 4781LL	60	61	39	39
Dyna-Gro S49LL34	61	71	54	37
Hornbeck LL4953	64	74	54	40
Pioneer 45T39L	63		19	27
Pioneer 48T67L	56		38	31
Pioneer 49T31L	59		42	28
Progeny 4814LLS	49	59	39	36
Progeny 4930LL	62	72	56	42

Table 1D: Summary of soybean demonstrations at 27 locations identified by parish.

Yield expressed in bushels per acre (13% Moisture)

Group V Liberty Link Soybeans	Location by Parish			
	Dean Lee Research	Grant Parish	Red River Research Irrigated	Red River Research Non-Irrigated
Armor 53-L55	54	56	51	36
Credenz CZ5147LL	72	65	57	37
Credenz CZ5150LL	65	76	43	40
Credenz CZ5225LL	62	64	55	40
Dyna-Gro S52LL66	63	68	44	40
Pioneer 53T62L	62		56	34

Seed Companies and Varieties

University of Arkansas	University of Missouri	Progeny Ag Products	Mycogen Seeds	Stratton Seed	Bayer CropScience	Dyna-Gro Seed
OSAGE	S11-17025	P 4211RY	Mycogen 5N406R2	Go Soy 4714GTS	CZ 3841 LL	S42RY77
R07-66147RR	S11-20124	P 4247LL	Mycogen 5N414R2	Go Soy 4913LL	CZ 3945 LL	S43RY95
R09-430	S12-2418	P 4516RXS	Mycogen 5N424R2	Go Soy 49G16	CZ 3991 RY	S45XS66
R10-197RY	S12-3782	P 4588RY	Mycogen 5N433R2	Go Soy 5115LL	CZ 4044 LL	S47RY13
R10-230	S12-3791	P 4613RYS	Mycogen 5N452R2	Go Soy 5214GTS	CZ 4105 LL	S48RS53
UA 5014C	S12-4718	P 4620RXS	Mycogen 5N480R2	Go Soy 5515LL	CZ 4181 RY	S48XT56
UA 5213C		P 4757RY	Mycogen 5N490R2	Go Soy Ireane	CZ 4222 LL	S49LL34
UA 5414RR		P 4788RY	Mycogen 5N523R2	Go Soy Leland	CZ 4540 LL	S49XT07
UA 5612		P 4799RXS		GS45R216	CZ 4590 RY	S52LL66
UA 5814HP		P 4814LLS		GS47R216	CZ 4656 RY	S52RY77
		P 4816RX		GS48R216	CZ 4748 LL	S56RY84
		P 4900RY		GS4915R2	CZ 4818 LL	S57RY26
		P 4930LL		Schillinger 5220.RC	CZ 4898 RY	
		P 4944RX		Schillinger 557.RC	CZ 4959 RY	
		P 5016RXS			CZ 5147 LL	
		P 5226RYS			CZ 5150 LL	
		P 5289RYS			CZ 5225 LL	
		P 5414LLS			CZ 5242 LL	
		P 5417RX			CZ 5375 RY	
		P 5555RY			CZ 5445 LL	
		P 5623LL			CZ 5515 LL	
		P 5631RX			HBK LL4953	
		P 5752RY				
		P 5768RX				

Seed Companies and Varieties

Syngenta	Terral Seed	Asgrow-Monsanto	Armor Seed	Delta Grow Seed	Dupont Pioneer	Croplan
S39-C4	REV 45A46	AG 44X6	Armor 46-D08	DG4587 LL	P41T33R	R2C4775
S39-T3	REV 47R34	AG 45X6	Armor 47-D17	DG4670GENRR2Y	P47T36R	RX4825
S42-P6	REV 48A26	AG 46X6	Armor 47-R70	DG4790GENRR2Y	P47T89R	RX4926
S45W9	REV 48A26	AG 46X7	Armor 48-D24	DG4825GENRR2Y	P54T94R	
S47-K5	REV 48A76	AG 47X6	Armor 48-D80	DG4880GLY		
S55Q3	REV 48L63	AG 48X7	Armor 49-D66	DG4967LL		
	REV 49A75	AG 49X6	Armor 49-D90	DG4970GLY		
	REV 49L49	AG 53X6	Armor 53-D04	DG4995GLY		
	REV 49R94	AG 54X6	Armor 55-R68	DG5067LL		
	REV 51A56	AG 55X7	Armor ARX4706	DG5170GENRR2Y		
	REV 52A94	AG 59X7	Armor ARX4906	DG5230GENRR2Y		
	REV 56R63		Armor ARX5506	DG5461LL		
	REV 57R21			DG5580GENRR2Y		
				DG5625GENRR2Y		
				DGX4845RR2		

For more information on Louisiana soybeans, visit:

www.lsuagcenter.com/en/crops_livestock/crops/soybeans/

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