

2015

Soybean

Variety Yields and Production Practices



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The soybean production guidelines were prepared by LSU AgCenter researchers and specialists from its Louisiana Agricultural Experiment Station and Louisiana Cooperative Extension Service.

Grain yield is probably the single most important trait to consider when selecting a soybean variety. Other variety characteristics indirectly affect yield, as well. Table 1 shows current year and two-year averages, when available, for varieties involved in LSU AgCenter testing. Performance of superior varieties is indicated by bold type and footnotes in Table 1. Varieties are listed alphabetically.

Soybean varieties in Maturity Groups IV-V are suggested for Louisiana because they consistently outperform other maturity groups in quality and yield per acre. The early indeterminate varieties have been grown successfully in certain parts of Louisiana. But poor seed quality and excess shattering can be problems with them 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

LibertyLink® soybeans will continue to increase in acres planted. There is LSU AgCenter information on variety performance. Liberty (glufosinate) is a broad spectrum herbicide that can be applied only to LibertyLink® soybean varieties. Do not apply Liberty herbicide to any variety not labeled as LibertyLink®, which includes Roundup Ready varieties. Applications of Ignite to non-LibertyLink® soybeans will cause significant injury to and/or death of non-LibertyLink® soybeans. LibertyLink® soybeans may help reduce resistance issues associated with currently available herbicides. The decision to plant these should be based on their adaptability to Louisiana's climate and disease situation.

Disease Resistance

Varieties of soybeans differ in susceptibility to diseases and nematodes. Aerial blight is an important disease south of Alexandria but it can spread into other parishes during wet seasons. The disease *Cercospora* (spp.) has become a major disease problem throughout the state. These late-season diseases cause yield loss and harvest delays. Regarding other diseases, Phy-

tophthora root rot is more prevalent in clay or poorly drained soils, and root-knot nematodes are more prevalent in sandy soils. Cyst nematodes may occur on all soils. When these diseases occur, results can be devastating, so variety selection is very important.

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 Branch 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 dates of maturity of varieties if planted at the optimum times. Where large acreages are involved, varieties of differing maturity ranges should be selected to stagger the harvest and avoid loss from shattering and poor quality.

Lower Pod Height

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

Poor Drainage

Most 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 highly fertile soil. Tall varieties tend to lodge more severely than short ones. When lodging oc-

curs, seed quality and yield are affected. A lodged field is more susceptible to diseases and it 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 closer row spacing adopted. On highly fertile soil, too much growth sometimes is a problem, and a shorter variety is the better choice.

Seed Quality

Poor seed quality is more often found in early maturing varieties. This is especially true for indeterminate varieties that do not mature uniformly. In wet harvest seasons when temperatures and humidity remain high, however, most varieties will have the problem. Poor seed quality occurs when fields are not harvested when ready or when they are under heavy pressure from some diseases. 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 usually is best in soils with a pH of 5.8-7. When the soil pH drops below 5.2 on sandy loam and silt loam soils or below 5 on clay soils, manganese toxicity may occur. When the soil pH drops below 5, aluminum toxicity also may 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 nutrient needed by soybeans in small quantities. There is enough molybdenum in Louisiana soils 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

Nitrogen is needed in large quantities by soybeans. 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 bacteria *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 *Rhizobium japonicum* 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. Phosphorus is concentrated in the seed and strongly affects seed formation. Soybeans remove about 0.8 pounds of phosphate per bushel in the harvested portion of the crop.

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

Phosphorus fertilization rates should be based on soil test results. Remember soil pH affects the availability of phosphorus. It is most available to soybeans at when the soil pH is between 6 and 7.

Potassium

Potassium is essential in the growth and development of soybeans. Potassium 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 fight diseases than potassium-deficient plants. About four times as much potash is required by soybeans as phosphate. About twice as much potash is removed in the seed as phosphate. Soybeans remove about 1.4 pounds of potash in the harvested portion of the plant.

Potassium deficiency symptoms are fairly easy to diagnose when they are severe enough to be noticed visually. Potassium deficiency symptoms usually occur on the lower leaves. The deficiency symptoms usually will occur during bloom or pod fill. The margins (edges) of the leaves are necrotic (dead and brown). Severe potassium deficiencies greatly can reduce yields.

Potassium fertilizer rates should be based on soil test results.

Planting Dates

Because weather conditions are different from year to year, seeding dates can be affected by environmental conditions. Early or late planting can cause reductions 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.

Soybeans can be planted in Louisiana as early as March 15 and as late as July 4 if weather conditions are favorable. If planting is delayed beyond June 15, soybeans become more of a risk. Yields of soybeans have been shown to decline approximately 1/2 bushel per day for each day planting is delayed past June 15.

Early Planting

Soybeans should not be planted until soil temperatures reach 60 degrees Fahrenheit. Because emergence may also be affected by cool soil temperatures after planting, early planting decisions also should 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 IVs and Group Vs planted in mid- to late March. In these cases, daily average soil temperatures generally were at or above 60 degrees Fahrenheit 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 fungicide seed treatment when planting early and when 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. Soybeans planted later than this should use a variety geared toward a tall, spreading plant that will give maximum branching and node formation to allow as much room for vegetative and pod development as possible. When blooming starts, most vegetative growth ceases in determinate varieties. When planting late, seeding rates should be increased to compensate for reduced vegetative growth.

Seeding Rate

Too dense a plant population reduces yields, encourages diseases and lodging and increases 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 per Row Foot	Plants per 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 per square foot	3 per square foot	75-90	150
Late Planting	6-7	4 per square foot	80-100	200

Dates of Seeding

Because weather conditions are different from year to year, seeding dates can be affected by environmental conditions. Early or late planting can cause reductions 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 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 narrow-row spacing (30 inches or less) has outyielded wider 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 Group III and Early Group IV Soybean Varieties From 6 Louisiana Locations

Variety	Dean Lee	Northeast	Rice Station	Macon Ridge	Red River	Central Station	2014 Average	2013/2014 Average
43-R43	48	56	56	68	52	48	55	
44-R08	47	59	50	76	56	57	57	56
AG 4135 RR2Y/SR	43	63	48	68	48	57	54	
AX4430	48	50	54	77	51	38	53	
CZ 3841 LL	36	54	44	70	52	53	51	
CZ 4181 RY	55	59	64	75	51	50	59	
Dyan-Gro 39RY43	41	58	54	72	55	61	57	56
Dyna-Gro S40RY73	45	51	55	72	60	33	53	52
Dyna-Gro S43RY95	45	61	72	78	61	55	62	
P 4211 RY	48	58	48	76	56	46	55	53
P 4440 RY	44	53	49	77	56	46	54	
R2C 4493	51	52	63	71	57	36	55	
Average	46	56	55	73	55	48		

Other Group III and Early Group IV Soybean Varieties Included in Louisiana Tests

AX 4410	37	51	42	62	48	51	49	
CZ 3539 LL	32	47	32	53	41	30	39	
Average	34	49	37	58	45	40		

Table 1B. Highest Yielding Late Group IV Soybean Varieties From Seven Louisiana Locations

Variety	Dean Lee	Northeast	Rice Station	Macon Ridge	Red River	Central Station	Iberia	2014 Average	2013/2014 Average
46-R65	46	65	62	70	69	52	38	57	
46X04	54	56	62	70	71	42	34	56	
47-R13	47	66	78	64	71	57	48	62	60
47X12	45	65	78	63	64	53	46	59	60
48-R66	49	61	73	68	69	49	39	58	59
48X02	46	67	63	72	81	49	43	60	59
48X34	50	50	67	70	77	34	35	55	
49-R56	46	63	58	70	69	36	38	54	56
49X54	46	61	71	66	74	45	36	57	56
5N451R2	44	65	63	71	83	46	41	59	
5N452R2	42	67	63	76	68	43	41	57	58
5N478R2	52	65	69	65	61	51	33	57	
5N479R2	46	64	68	69	66	57	46	59	55
AG 4531	45	57	63	70	64	51	37	55	
AG 4533	49	66	64	73	69	46	30	57	56
AG 4534	46	57	48	73	68	45	32	53	
AG 4632	50	64	58	72	65	58	45	59	52
AG 4835	44	64	70	68	72	52	43	59	57
AG 4934	48	55	67	74	69	51	39	58	
AX4450	49	55	58	69	70	42	29	53	59

Table 1B. Highest Yielding Late Group IV Soybean Varieties From Seven Louisiana Locations (continued)

Variety	Dean Lee	Northeast	Rice Station	Macon Ridge	Red River	Central Station	Iberia	2014 Average	2013/2014 Average
AX4460	45	65	63	74	77	41	45	59	
AX4470	42	54	66	71	84	42	41	57	
AX4471	48	65	62	69	82	46	41	59	
AX4480	51	54	59	63	68	40	30	52	
AX4490	50	49	61	67	84	37	35	55	
C4544R2	48	66	64	66	70	52	39	58	
C4780R2	50	64	72	70	71	57	46	62	
CZ 4748 LL	50	65	57	64	65	44	33	54	
CZ 4959 RY	48	62	66	67	67	39	43	56	
DG 4670 RR2	47	64	63	71	77	44	40	58	
DG 4685 RR2	48	53	57	72	81	43	36	56	57
DG 4755 RR2	43	67	65	73	69	48	36	57	
DG 4765 RR2/STS	47	61	71	68	67	47	44	58	57
DG 4767 LL/STS	49	56	63	62	65	50	44	56	57
DG 4775 RR2	50	61	65	72	67	37	41	56	
DG 4825 RR2/STS	50	52	71	74	73	52	47	60	
DG 4880 RR	46	59	70	67	61	33	43	54	
DG 4925 RR2	47	60	63	62	74	43	37	55	54
DG 4930 RR2	47	49	67	64	75	39	40	54	53
DG 4940 RR	49	56	59	64	64	43	47	55	
DG 4967 LL	49	65	61	58	76	51	54	59	55
DG 4970 RR	43	62	54	66	73	39	41	54	
DG 4981 LL/STS	42	58	71	62	69	49	44	56	53
DG 4985 RR2	42	62	73	63	71	42	38	56	52
DG 4990 LL	46	65	69	64	67	38	49	57	
Dyna-Gro 31RY45	51	68	59	72	83	48	40	60	55
Dyna-Gro S46RY85	46	62	62	70	69	47	34	56	58
Dyna-Gro S47RY13	50	65	62	71	74	48	37	58	
Dyna-Gro S48RS53	45	61	68	68	70	57	45	59	57
Dyna-Gro S49RY25	49	62	67	69	69	48	42	58	59
Go Soy 4713	51	55	63	55	58	45	43	53	
Go Soy 4914	45	58	69	65	60	53	44	56	
HALO 4.97 LL/STS	42	50	69	63	65	50	49	55	
HALO 4:76 LL	50	57	61	73	54	50	34	54	53
HALO 4:94 LL	43	69	65	61	74	46	50	58	
HALO 4:95 LL	47	69	58	68	62	50	39	56	56
HALO X448 LL	40	62	55	60	72	40	33	52	57
HBK LL4650	50	61	55	62	77	44	35	55	
HBK LL4653	46	62	57	73	71	44	35	56	53
HBK LL4850	48	60	61	62	60	45	44	54	54
HBK LL4950	48	62	68	60	66	50	52	58	54
HBK LL4953	49	65	75	60	69	51	57	61	56
MPG 4714NRR	55	55	61	72	70	46	39	57	51

Table 1B. Highest Yielding Late Group IV Soybean Varieties From Seven Louisiana Locations (continued)

Variety	Dean Lee	Northeast	Rice Station	Macon Ridge	Red River	Central Station	Iberia	2014 Average	2013/2014 Average
MPV 483C	50	61	59	74	71	52	43	58	
P 4560 LL	48	65	59	68	76	46	37	57	54
P 4613 RYS	41	65	58	71	72	53	37	57	55
P 4620 LLS	42	56	64	57	70	50	50	55	56
P 4747 RY	46	66	62	69	70	44	42	57	
P 4788 RY	51	61	61	69	67	43	46	57	57
P 4819 LL	50	57	61	63	59	44	48	54	
P 4848 RYS	49	52	67	69	68	48	36	56	54
P 4850 RYS	46	68	67	66	60	55	46	58	
P 4900 RY	47	61	62	75	64	35	45	56	57
P 4928 LL	50	64	59	56	77	45	56	58	57
P 4930 LL	45	66	65	64	79	53	52	61	55
R05-3239	49	67	61	67	46	49	45	55	58
R08-2797	42	46	64	62	56	40	37	49	
R09-4571	50	57	56	66	64	36	37	52	
R2C 4541	48	67	65	66	69	48	42	58	
REV 46R64	50	63	59	74	61	50	40	57	
REV 47R34	47	67	60	67	75	60	45	60	57
REV 47R53	50	68	62	68	78	52	39	59	60
REV 48R22	49	61	68	70	60	42	32	55	
REV 48R44	44	69	63	73	71	50	45	59	53
REV 49A14	53	62	60	74	68	54	50	60	58
REV 49A55	42	62	63	70	73	53	41	58	
REV 49A75	49	65	70	73	74	44	46	60	
REV 49R94	38	68	69	72	76	53	43	60	
REV 52A94	45	64	61	72	76	53	49	60	59
S11-20365	50	68	59	71	61	48	43	57	
S45-V8	43	61	51	69	66	42	26	51	
S46-L2	44	60	60	69	66	40	32	53	
S47-K5	50	70	59	75	80	45	39	60	
X54490NR2	47	55	73	68	72	46	41	57	
Average	47	61	64	68	70	47	41		
Other Late Group IV Soybean Varieties included in Louisiana Tests									
DG 4867 LL	44	60	55	67	66	37	35	52	59
HALO X449 LL/STS	43	54	68	67	73	48	46	57	
HBK RY 4620	41	54	63	65	63	43	33	51	59
HBK RY4721	46	61	61	59	67	38	40	53	53
P 4510 RYS	42	55	67	62	58	41	32	51	
S09-6262	45	45	62	64	70	44	41	53	
Average	43	55	62	64	66	42	38		

Table 1C. Highest Yielding Group V Soybean Varieties From 6 Louisiana Locations								
Variety	Dean Lee	Northeast	Rice Station	Macon Ridge	Red River	Central Station	2–14 Average	2013/2014 Average
51-R50	42	65	69	67	67	27	56	
53-R16	59	60	67	78	63	47	62	59
53X82	51	58	73	79	68	43	62	
55-R22	50	64	78	67	61	32	59	59
5N522R2	46	69	80	83	70	45	65	
5N540R2	50	62	72	81	71	40	63	
5N550R2	54	68	81	82	66	42	65	
AG 5332	55	60	77	81	64	41	63	64
AG 5335	59	56	68	77	66	44	62	
AG 5533	50	63	87	88	63	50	67	63
AG 5535	55	67	76	83	59	45	64	
AG 5634	51	66	72	77	65	44	63	60
AX4500	57	59	72	70	50	34	57	
AX4520	55	62	69	80	59	47	62	
AX4550	58	69	82	81	65	43	66	
C5460R2	49	57	72	82	53	36	58	
CZ 5150 LL	47	66	76	67	67	41	61	
CZ 5242 LL	42	62	80	66	68	46	61	
DG 5230 RR2	54	70	75	82	46	45	62	
DG 5267 LL	44	68	80	70	70	43	63	
DG 5367 LL	48	49	81	77	56	31	57	
DG 5461 LL	43	63	73	69	62	34	57	56
DG 5480 RR2	50	64	65	80	67	42	61	59
DG 5565 RR2	45	68	81	69	56	34	59	55
DG 5575 RR2	53	65	67	84	66	32	61	61
DG 5625 R2	55	64	76	65	66	43	62	60
Dyna-Gro 32RY55	50	68	80	71	73	38	63	60
Dyna-Gro 39RY57	50	60	78	66	60	42	59	59
Dyna-Gro S52RY75	49	67	73	83	65	47	64	
Dyna-Gro S54RY43	51	59	74	78	63	39	61	59
Dyna-Gro S56RY84	52	60	82	85	74	46	66	
Go Soy 5214	46	59	79	69	59	46	60	
HALO 5:01 LL	43	62	76	64	71	42	60	58
HALO 5:25 LL	47	67	69	63	64	33	57	
HALO 5:26 LL	49	66	65	65	58	38	57	54
HALO 5:45 LL	54	69	68	70	48	24	56	55
HALO X451 LL	47	64	72	73	77	38	62	
HALO X452 LL	46	61	75	71	75	43	62	
HBK RY5421	52	61	77	73	57	48	61	59
Leland	50	58	73	82	57	50	62	59
MPG 5214NRR	43	57	77	80	63	45	61	59

Table 1C. Highest Yielding Group V Soybean Varieties From 6 Louisiana Locations (continued)

Variety	Dean Lee	Northeast	Rice Station	Macon Ridge	Red River	Central Station	2-14 Average	2013/2014 Average
OSAGE	51	61	75	72	54	32	58	57
P 5160 LL	45	67	69	67	56	39	57	56
P 5213 RY	48	63	72	73	59	31	58	59
P 5220 LLS	47	57	76	66	66	48	60	
P 5333 RY	48	59	42	79	62	36	54	55
P 5460 LL	48	62	71	67	69	39	59	58
P 5555 RY	52	64	77	80	54	37	61	61
P 5610 RY	49	56	77	70	63	37	59	57
P 5960 LL	52	70	77	68	58	29	59	56
R05-374	42	59	74	75	59	48	59	
R09-430	52	68	57	80	49	28	55	
R2C 5482	51	57	69	78	56	47	60	
R2C 5673	55	68	85	86	65	44	67	
REV 51R53	50	52	75	77	71	34	60	62
REV 55R53	50	58	77	85	37	35	57	57
REV 56A54	52	64	86	78	56	43	63	
REV 56R63	55	70	82	80	65	47	67	63
REV 57R21	49	63	79	75	63	43	62	60
S11-20124	44	60	79	81	67	52	64	
S52-Y2	52	58	79	74	63	38	61	
S55-Q3	55	64	85	82	62	44	65	
UA 5213C	46	61	74	73	54	45	59	56
UA 5612	54	66	77	82	55	39	62	60
Average	50	63	75	75	62	40		
Other Group V Soybean Varieties Included in Louisiana Tests								
50-R44	44	60	70	68	59	34	56	
DG 5475 RR2	48	58	68	77	63	38	59	57
HBK RY5221	44	56	67	72	54	19	52	52
MPG 5314NRR	43	57	68	74	43	36	53	
OZARK	43	62	67	68	58	32	55	56
R04-1250 RR	46	60	71	67	54	30	55	53
R04-1268 RR	44	59	62	65	60	38	55	52
R10-130RY	45	60	70	74	63	36	58	
REV 52R74	41	61	69	74	57	27	55	55
REV 54R84	51	61	70	77	66	37	60	58
S51-C5	49	59	63	69	47	33	53	
Average	45	59	68	71	56	33		
Data from these LSU AgCenter research stations: Dean Lee, Alexandria; Macon Ridge, Winnsboro; Northeast, St. Joseph; Red River, Bossier City; Rice, Crowley; Iberia, Jeanerette; and Central, Baton Rouge. All yields expressed in bushels per acre. Bold indicates highest yielding (P=.10) at this location in 2014.								

Table 2. Agronomic Data 2014: Dean Lee Research Station

Group III and Early Group IV Varieties	Maturity	Plant Height (inches)	Lodging*	Salt Injury**	Disease BRR 7/31/2014***
44-R08	123	29.9	1.5	1	2.8
AG 4135 RR2Y/SR	122	32.6	1	1	3.3
AX 4410	123	28.1	1.5	1	2.5
AX4430	126	33.3	2.5	1	2.5
CZ 3539 LL	119	23.8	1.5	1	1.8
CZ 3841 LL	120	31.55	2	1	3.3
CZ 4181 RY	120	36.3	1.5	1	2
Dyan-Gro 39RY43	128	29.1	1	1	3
Dyna-Gro S40RY73	127	27	1	1	2.3
Dyna-Gro S43RY95	121	34.9	3	1	2
P 4211 RY	123	28.2	1.5	1	2.8
P 4440 RY	125	36.05	2.5	1	3.3
R2C 4493	124	27.8	2	1	2.8

*Lodging from 1 to 5, with 5 = prostrate.

**Salt Injury rating: 1 = No Notable injury; 2 = Notable foliar injury on less than 50% plants; 3 = Notable foliar injury on less than 50% plants with stand loss; 4 = Notable foliar injury on more than 50% plants with stand loss and 5 = Substantial stand loss (>75% of total plants).

No salt damage occurred during this year. Only two total irrigation events occurred during the entire growing season. These events typically were followed by precipitation events.

***BRR stands for black root rot (0-9).

Table 2. Agronomic Data 2014: Dean Lee Research Station (continued)

Group IV Late Varieties	Maturity	Plant Height (inches)	Lodging*	Salt Injury**	Disease BRR 8/14/2014***	Disease FE 8/20/2014***
46-R65	121	34.1	1.5	1	3.8	3.3
46X04	123	33.5	1	1	4	5
47-R13	127	37.7	1	1	2.5	3
47X12	126	38	1.5	1	3.3	2.3
48-R66	128	28.6	1.5	1	3.5	4
48X02	126	35.3	1.5	1	2.8	3
48X34	126	34.2	1	1	4.8	6
49-R56	127	28.4	1.5	1	2.5	4
49X54	128	40.1	1.5	1	2.8	3
5N451R2	125	33.6	1	1	4	1
5N452R2	126	28.7	1.5	1	3.3	2
5N478R2	124	39.5	2.5	1	3.3	1.3
5N479R2	126	35.1	1	1	3.8	2.3
AG 4531	124	33.4	1	1	2.8	5.3
AG 4533	124	30.6	1	1	2.3	1.7
AG 4534	123	31.4	1	1	4.3	4
AG 4632	123	36	1	1	4.3	1
AG 4835	125	40.4	1.5	1	3.4	3
AG 4934	123	37.5	1.5	1	2.8	5

Table 2. Agronomic Data 2014: Dean Lee Research Station (continued)

Group IV Late Varieties	Maturity	Plant Height (inches)	Lodging*	Salt Injury**	Disease BRR 8/14/2014***	Disease FE 8/20/2014***
AX4450	122	33	1	1	3	4.7
AX4460	124	37.2	2	1	3.8	2.7
AX4470	124	34.7	1	1	2.5	5
AX4471	124	31.1	2	1	2.3	3.7
AX4480	120	34.4	1	1	3.8	5
AX4490	125	32.9	1	1	3	5.3
C4544RR2	124	32.1	1	1	2.5	1
C4780RR2/STS	126	34.2	1	1	2.5	2.7
CZ 4748 LL	125	35.4	1.5	1	2.5	2.7
CZ 4959 RY	126	30.9	1	1	3	2.7
DG 4670 RR2	125	31.9	1	1	5.8	1.7
DG 4685 RR2	122	32.3	1	1	5.8	4.7
DG 4755 RR2	126	33.8	1	1	2	3.3
DG 4765 RR2/STS	126	36.6	1.5	1	4	3
DG 4767 LL/STS	119	45	3	1	4.8	3.7
DG 4775 RR2	126	36.7	1	1	1	4.7
DG 4825 RR2/STS	127	29.9	2	1	3.8	4.3
DG 4867 LL	122	29.4	1	1	2	5
DG 4880 RR	127	28.8	2	1	2.3	1.3
DG 4925 RR2	126	35.5	1	1	4.3	4
DG 4930 RR2	127	34	1	1	3.3	5.7
DG 4940 RR	122	31.9	2.5	1	4	4
DG 4967 LL	122	43.1	2.5	1	4.3	1
DG 4970 RR	127	34.5	2.5	1	2	1
DG 4981 LL/STS	126	42.9	2.5	1	4.3	2
DG 4985 RR2	128	41	1	1	3.8	3.3
DG 4990 LL	124	39	2	1	4	2
Dyna-Gro 31RY45	123	35.5	2	1	4.8	1.3
Dyna-Gro S46RY85	123	32.5	1	1	4.3	4.3
Dyna-Gro S47RY13	123	33.5	1.5	1	2.5	3.7
Dyna-Gro S48RS53	125	38.3	1	1	4.5	2.3
Dyna-Gro S49RY25	126	37.6	1	1	2.7	2.7
Go Soy 4713	120	41.5	1	1	2.3	3.3
Go Soy 4914	121	45.7	3.5	1	4	1.7
HALO 4.97 LL/STS	123	48	3	1	4	3.7
HALO 4.76 LL	125	33.5	1	1	1.3	1.3
HALO 4.94 LL	121	40.1	1	1	4	1
HALO 4.95 LL	121	30.1	1	1	3.3	1.3
HALO X448 LL	127	36.8	2	1	2.8	4
HALO X449 LL/STS	121	44.9	3	1	3	2.3
HBK LL4650	127	32.9	1	1	1.5	1.7
HBK LL4653	123	31.7	1	1	2.3	2.3
HBK LL4850	125	29.3	1	1	2.8	4.3
HBK LL4950	123	42.1	2	1	4.5	1.3
HBK LL4953	123	39.2	2	1	3.8	1.7
HBK RY4620	123	32.3	2	1	5	4.7

Table 2. Agronomic Data 2014: Dean Lee Research Station (continued)

Group IV Late Varieties	Maturity	Plant Height (inches)	Lodging*	Salt Injury**	Disease BRR 8/14/2014***	Disease FE 8/20/2014***
HBK RY4721	124	41.3	1.5	1	2.5	2
MPG 4714NRR	121	41.5	3	1	1.8	4
MPV 483C	123	36.4	2	1	2.5	3.3
P 4510 RYS	123	34.2	1	1	3.3	5.7
P 4560 LL	127	32.8	1	1	1.8	4
P 4613 RYS	121	34.2	1.5	1	3.3	3.3
P 4620 LLS	119	45.3	3	1	3.8	3
P 4747 RY	124	31.5	1	1	3	3.3
P 4788 RY	120	37.2	1	1	3.8	1.7
P 4819 LL	123	32.8	1.5	1	4	4.7
P 4848 RYS	124	35.2	1	1	3.5	4.7
P 4850 RYS	127	35.5	1	1	3.3	2.7
P 4900 RY	127	27.9	1	1	3.3	4
P 4928 LL	121	40.6	1.5	1	3.3	1
P 4930 LL	122	40.3	2.5	1	3.3	1.3
R05-3239	123	24.4	1	1	0.8	2.3
R08-2797	127	32.9	1	1	2.8	5.7
R09-4571	121	38.8	2.5	1	2.3	4.3
R2C 4541	125	31.6	1	1	1.8	1.3
REV 46R64	124	31	1	1	3.5	3.7
REV 47R34	119	34.7	1.5	1	3.8	1
REV 47R53	119	37.5	2.5	1	1.8	1
REV 48R22	121	33.6	1	1	1.8	2.7
REV 48R44	123	29.3	1	1	4.8	1
REV 49A14	123	37.3	2	1	3	3.3
REV 49A55	126	33.2	1	1	3.5	1.7
REV 49A75	121	37	4	1	1.8	2.7
REV 49R94	124	31.5	2	1	3	1
REV 52A94	118	29.4	2	1	4.3	1.3
S09-6262	125	37.5	2.5	1	2.8	5.3
S11-20365	122	32.1	2	1	0.8	1
S45-V8	125	33.8	1.5	1	1.8	3.3
S46-L2	125	34	1.5	1	3.8	4.7
S47-K5	125	26	1	1	2.5	1
X54490NR2	127	39.5	1	1	4.3	3

*Lodging from 1 to 5, with 5 = prostrate.

**Salt Injury rating: 1 = No notable injury; 2 = Notable foliar injury on less than 50% plants; 3 = Notable foliar injury on less than 50% plants with stand loss; 4 = Notable foliar injury on more than 50% plants with stand loss and 5 = Substantial stand loss (>75% of total plants).

No salt damage occurred during this year. Only two total irrigation events occurred during the entire growing season. These events typically were followed by precipitation events.

***BRR stands for black root rot (0-9), FE for frog eye spot(1-9).

Table 2. Agronomic Data 2014: Dean Lee Research Station (continued)

Group V Varieties	Maturity	Plant Height (inches)	Lodging*	Salt Injury**	Disease BRR 8/14/2014***	Disease FE 8/20/2014***
50-R44	128	43.3	1.5	1	3	2.6
51-R50	131	30.8	2	1	2	1
53-R16	128	30.3	1	1	2.3	1.6
53X82	129	28.8	1	1	3	4
55-R22	128	30.3	1	1	2.3	1
5N522R2	123	28.6	1.5	1	2.8	1.7
5N540R2	129	28	1	1	2.3	3.5
5N550R2	131	31	1	1	2.5	1
AG 5332	131	32.2	2	1	2.5	3.3
AG 5335	130	39.3	1	1	2.5	4
AG 5533	126	21.9	1	1	2.3	1.3
AG 5535	128	27.9	1	1	2.5	1.3
AG 5634	127	30.2	1	1	1.5	3.9
AX4500	129	43.6	1.5	1	1.8	3.3
AX4520	124	25.5	1	1	2	1.6
AX4550	131	30	1	1	1.8	1
C5460RR2	130	25.9	1	1	3	4
CZ 5150 LL	126	40.2	2	1	1.3	2.9
CZ 5242 LL	127	35.9	4	1	1.5	1.5
DG 5230 RR2	123	27.8	1	1	2.3	1.3
DG 5267 LL	127	43.7	3	1	1	1.3
DG 5367 LL	124	33.9	1.5	1	2	4.8
DG 5461 LL	128	42.7	2	1	3	3.3
DG 5475 RR2	129	27.3	1	1	2.5	3.6
DG 5480 RR2	128	31.1	1.5	1	1.5	1.6
DG 5565 RR2	130	28.5	1	1	2.3	1
DG 5575 RR2	131	28	1.5	1	1.8	1.6
DG 5625 R2	131	28.2	1	1	2	1
Dyna-Gro 32RY55	129	30	1	1	2.3	1
Dyna-Gro 39RY57	130	28.9	1	1	3.3	1.3
Dyna-Gro S52RY75	124	39.2	1.5	1	3	1.7
Dyna-Gro S54RY43	130	27.5	1	1	1.6	3.6
Dyna-Gro S56RY84	131	33.8	1.5	1	2	1.3
Go Soy 5214	125	46.2	3	1	2	1.3
HALO 5:01 LL	126	47.1	3	1	2	1.3
HALO 5:25 LL	130	23.7	1	1	1.5	3.8
HALO 5:26 LL	124	25.8	1	1	1	2.4
HALO 5:45 LL	130	25.9	1	1	0.5	1.3
HALO X451 LL	124	42.1	2	1	3.3	1.3
HALO X452 LL	127	46.9	3	1	2	1.7
HBK RY5221	129	38.7	1.5	1	3.3	1

Table 2. Agronomic Data 2014: Dean Lee Research Station (continued)

Group V Varieties	Maturity	Plant Height (inches)	Lodging*	Salt Injury**	Disease BRR 8/14/2014***	Disease FE 8/20/2014***
HBK RY5421	129	28.6	1	1	1.5	1
Leland	125	26.3	1.5	1	0.5	2.6
MPG 5214NRR	126	35	4	1	2.5	4
MPG 5314NRR	122	41.8	3	1	2.8	4
OSAGE	127	23.3	1	1	1.3	4
OZARK	125	21.9	1	1	1	2.6
P 5160 LL	130	19.8	1	1	0.3	2.6
P 5213 RY	128	42.9	1	1	1.5	3.3
P 5220 LLS	129	57.1	3	1	2.8	2.3
P 5333 RY	126	26.5	1	1	3	3
P 5460 LL	127	42.1	2	1	2.5	1.6
P 5555 RY	130	27	1	1	3.3	1
P 5610 RY	129	27.4	1	1	2.5	1.3
P 5960 LL	130	28.9	1	1	0.8	1
R04-1250 RR	129	25.9	1	1	2	1.4
R04-1268 RR	128	22.7	1	1	1.5	4
R05-374	125	26.2	1.5	1	2.8	4
R09-430	125	22.2	1	1	2.8	1.3
R10-130RY	125	19.7	1	1	2.5	1.3
R2C 5482	129	27.1	1	1	1.8	4
R2C 5673	130	30.7	1	1	1.8	1.6
REV 51R53	129	33.3	1	1	2.8	3.8
REV 52R74	128	34.6	1.5	1	0.5	2
REV 54R84	129	21.8	1.5	1	2	3.3
REV 55R53	129	24.7	1	1	2.8	4
REV 56A54	130	36.1	2.5	1	3.5	2.6
REV 56R63	128	33.6	2	1	3	1.3
REV 57R21	129	40.3	2.5	1	2.8	1
S11-20124	124	31.1	2.5	1	1.3	2.5
S51-C5	125	23.6	1	1	1.3	2.3
S52-Y2	128	35.5	1.5	1	1.3	4.3
S55-Q3	126	34.4	1.5	1	1.8	1
UA 5213C	128	17.8	1	1	2.8	4
UA 5612	130	26.9	1.5	1	1.8	2.4

*Lodging from 1 to 5, with 5 = prostrate.

***Salt Injury rating: 1 = No notable injury; 2 = Notable foliar injury on less than 50% plants; 3 = Notable foliar injury on less than 50% plants with stand loss; 4 = Notable foliar injury on more than 50% plants with stand loss and 5 = Substantial stand loss (>75% of total plants).

No salt damage occurred during this year. Only two total irrigation events occurred during the entire growing season. These events typically were followed by precipitation events.

***BRR stands for black root rot (0-9), FE for frog eye spot(1-9).

**Table 3A. Summary of Soybean Demonstrations at 22 Locations Identified by Parishes.
Yields Expressed in Bushels per Acre (13% Moisture).**

Group IV Varieties	Locations by Parishes										
	Avoyelles	East Carroll	Franklin	Madison - 1	Madison - 2	Morehouse	St. Landry	St. Martin	Vermilion	West Carroll - 1	West Carroll - 2
Armor 48R66	57	77	55	73	63	58	84	51		54	65
Armor 49R56	55	74	75	77	84	59	84	57		64	74
Asgrow 4632	64	79	70	79	87	58	80	61	41	66	78
Asgrow 4934	56	78	75	73	64	52	76	55	54	51	73
Croplan R2C 4493	53	74	60	73	76	61	76		46	50	47
Delta Grow 4765	61		53	70	84	50	57	48		50	67
Delta Grow 4825	53		72	76	67	51	86	33	56	17	67
Dyna-Gro S47RY13	55	80	71	76	76	63	82	32	41	48	64
Dyna-Gro S48RS53	57		55	74	82	62	56	46	44	35	64
Hornbeck RY4620	49		54	68	55	63	70	37	52	38	74
Hornbeck RY4721	48		57	63	62	63	70	26		45	41
LG C4544R2	58		69	77	81	51	75			66	
LG C4780R2	61		58	76	80	50	71	48		50	69
Mycogen 5N479R2	58	73	58	76	82	53	49	52		36	55
Progeny 4788RY	56	75	65	75	83	49	79	48	53	65	68
Progeny 4900RY	56		71	74	79	50	85	50		68	70
REV 47R53	57	78	56	75	78	57	77	55	48	35	62
REV 49R94	59		69	76	76	59	82	57	49	49	64
Syngenta NK S45-V8	47		71	66	64	63	72	47	39	40	61
Syngenta NK S46-L2	53	81	65	73	66	64	78	49	47	40	62

Table 3B. Other Group III & Group IV Varieties.

	Lafourche	Iberia	St. James	West Carroll
Asgrow 3931	57	67	65	
Asgrow 3934	47	59	63	
Asgrow 4232		70	78	
Asgrow 4533	66	67	78	
Croplan R2C3814		59	73	
Croplan R2C4412	52	63		
Croplan R2C4493		69	79	
Croplan R2C4541	63	69		
Croplan R2C4873S				67
Dyna-Gro 31RY45	65	62		
Dyna-Gro 39RY43	57	73	71	
Dyna-Gro S40RY13		64		
Dyna-Gro S40RY25		64		
Dyna-Gro S40RY73	45	64	80	
Dyna-Gro S44RS93			75	
Mycogen 5N393R2	52		61	
Mycogen 5N404R2	54	59	62	
Mycogen 5N413R2	60	52	63	
Mycogen 5N431R2	53	70	83	
Mycogen 5N451R2	64			
Progeny 4211RY	62	63	67	
Progeny 4510RYS			51	
Progeny 4570RYS	63			
REV 38R10	55		65	
RJS 4006		61		
Syngenta S41-J6		63	91	
Syngenta S42-W9		69	74	
Syngenta S45-V8		84	79	
XBP 39010		67		

Table 3C. Group V Varieties

	Avoyelles	Beauregard	Concordia	Evangeline	Jefferson Davis	Pointe Coupee	St. Landry	St. Martin
Armor 51R50	41	59	72	56	52	57	68	29
Armor 55R22	41	55	75	55	56	65	74	47
Asgrow 5332	33	57	76	56	56	66	81	
Asgrow 5634	38	52	71	52	61	52	73	43
Croplan R2C 5482	36	49	71	55	51	58	65	36
Delta Grow 5575	38	59	75	60	45	68	79	35
Delta Grow 5625	44	60	77	65	46	68	71	45
Dyna Gro 32RY55	41	52	76	48	51	65	74	43
Dyna Gro S56RY84	44	59	74	56	52	48	75	41
Hornbeck RY5221	34	45	73	48	59	60	79	36
Hornbeck RY5421	44	49	76	51	58	56	80	44
LG C5460R2	34	51	70	54	46	54	71	33
Mycogen 5N550R2	47	62	74	61	50	63	79	
Progeny P5555RY	40	56	75	56	48	75	82	42
REV 56R63	42	55	73	53	53	65	78	47
REV 57R21	35	51	76	57	46	64	72	
Syngenta NK S52-Y2	36	60	74	56	49	72	77	56



Seed Companies and Varieties

University of Arkansas	University of Missouri	Progeny Ag Products	Mycogen Seeds	LG Seed	Stratton Seed	Bayer CropScience	US Agriseeds
OSAGE	S09-6262	P 4211 RY	5N451R2	C4544RR2	Go Soy 4713	CZ 3539 LL	HALO 4:97 LL/STS
OZARK	S11-20124	P 4440 RY	5N452R2	C4780RR2/STS	Go Soy 4914	CZ 3841 LL	HALO 4:76 LL
R04-1250RR	S11-20365	P 4510 RYS	5N478R2	C5460RR2	Go Soy 5214	CZ 4181 RY	HALO 4:94 LL
R04-1268RR		P 4560 LL	5N479R2		Leland	CZ 4748 LL	HALO 4:95 LL
R05-3239		P 4613 RYS	5N522R2		MPG 4714NRR	CZ 4959 RY	HALO X448 LL
R05-374		P 4620 LLS	5N540R2		MPG 5214NRR	CZ 5150 LL	HALO X449 LL/STS
R08-2797		P 4747 RY	5N550R2		MPG 5314NRR	CZ 5242 LL	HALO 5:01 LL
R09-430		P 4788 RY	X54490NR2		MPV 483C	HBK LL4650	HALO 5:25 LL
R09-4571		P 4819 LL				HBK LL4653	HALO 5:26 LL
R10-130RY		P 4848 RYS				HBK LL4850	HALO 5:45 LL
UA 5213C		P 4850 RYS				HBK LL4950	HALO X451 LL
UA 5612		P 4900 RY				HBK LL4953	HALO X452 LL
		P 4928 LL				HBK RY4620	
		P 4930 LL				HBK RY4721	
		P 5160 LL				HBK RY5221	
		P 5213 RY				HBK RY5421	
		P 5220 LLS					
		P 5333 RY					
		P 5460 LL					
		P 5555 RY					
		P 5610 RY					
		P 5960 LL					

Seed Companies and Varieties

Dyna-Gro Seed	Syngenta	Terral Seed	Cache River Valley Seed	Asgrow-Monsanto	Armor Seed	Delta Grow Seed	Croplan Genetics
Dyan-Gro 39RY43	S45-V8	REV 46R64	46X04	AG 4531	43-R43	DG 4670 RR2	R2C 5482
Dyna-Gro 31RY45	S46-L2	REV 47R34	47X12	AG 4533	AX 4410	DG 4685 RR2	R2C 5673
Dyna-Gro 32RY55	S47-K5	REV 47R53	48X02	AG 4534	AX4430	DG 4755 RR2	R2C 4541
Dyna-Gro 39RY57	S51-C5	REV 48R22	48X34	AG 4632	47-R13	DG 4765 RR2/STS	R2C 4493
Dyna-Gro S40RY73	S52-Y2	REV 48R44	49X54	AG 4835	48-R66	DG 4767 LL/STS	
Dyna-Gro S43RY95	S55-Q3	REV 49A14	53X82	AG 4934	46-R65	DG 4775 RR2	
Dyna-Gro S46RY85		REV 49A55		AG 4135 RR2Y/SR	49-R56	DG 4825 RR2/STS	
Dyna-Gro S47RY13		REV 49A75		AG 5332	AX4450	DG 4867 LL	
Dyna-Gro S48RS53		REV 49R94		AG 5335	AX4460	DG 4880 RR	
Dyna-Gro S49RY25		REV 51R53		AG 5533	AX4470	DG 4925 RR2	
Dyna-Gro S52RY75		REV 52A94		AG 5535	AX4471	DG 4930 RR2	
Dyna-Gro S54RY43		REV 52R74		AG 5634	AX4480	DG 4940 RR	
Dyna-Gro S56RY84		REV 54R84			AX4490	DG 4967 LL	
		REV 55R53			55-R22	DG 4970 RR	
		REV 56A54			50-R44	DG 4981 LL/STS	
		REV 56R63			51-R50	DG 4985 RR2	
		REV 57R21			53-R16	DG 4990 LL	
					AX4500	DG 5230 RR2	
					AX4520	DG 5267 LL	
					AX4550	DG 5367 LL	
					44-R08	DG 5461 LL	
						DG 5475 RR2	
						DG 5480 RR2	
						DG 5565 RR2	
						DG 5575 RR2	
						DG 5625 R2	

For more information on Louisiana soybeans, visit:
www.lsuagcenter.com/en/crops_livestock/crops/soybeans/

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Pub. 2269

12/14 Rev.

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