

2026

SOYBEAN

VARIETY YIELDS & PRODUCTION PRACTICES

2026 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.

VARIETY SELECTION

Variety selection is not a decision to be made lightly as it is one of the most important decisions facing a producer going into the season. Variety selection can radically change the yield potential and possibly provide resistance to abiotic and biotic stressors. This decision can be daunting, but through the LSU AgCenter, producers do have information at their disposal to improve this decision-making process.

Fortunately, growers in Louisiana have two types of multi-environment data to use when selecting varieties. The official variety trials (OVT) are replicated small-plot trials. For the 2025 OVT, 68 varieties were entered by nine seed companies and one university soybean breeding program. The varieties consisted of several different herbicide technologies, and the maturity groups ranged from 4.0 to 5.7. The trial was replicated at seven research stations across the state in different soil types, including sandy loam, silt loam, silty clay loam and sharkey clay.

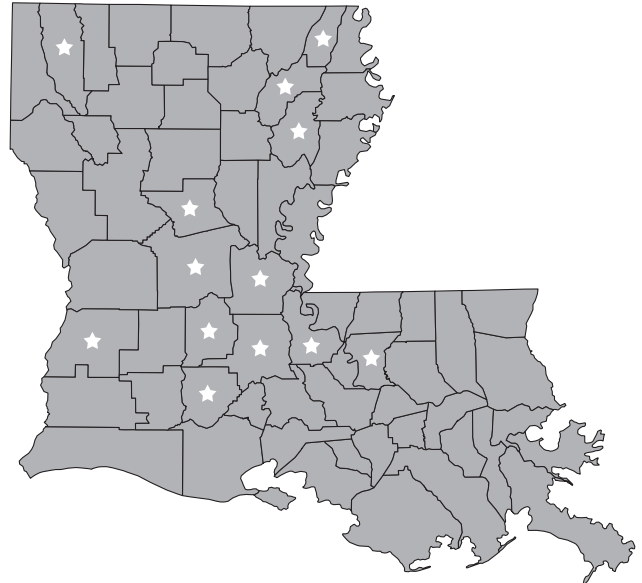
In addition to the OVT, the LSU AgCenter collaborates with soybean producers to evaluate soybean varieties directly on farms. For these core-block demonstration plots, LSU AgCenter parish agents cooperate with producers to plant, maintain and harvest strip trials submitted by seed companies. These demonstrations provide valuable yield data from local growing conditions and agronomic practices. The core-block program is designed to evaluate a select number of soybean varieties in large plots located across the state. In some cases, observations from these large plots can result in identification of varieties that are resistant to a number of soilborne maladies. Six seed companies submitted varieties for the 2025 core-block demonstrations. A total of 25 demonstrations were planted across 13 parishes. The demonstrations were divided by maturity group (MG). A demonstration consisted of varieties with a MG of 4.0 to 4.4; 4.5 to 4.9; or 5.0 to 5.6. The numbers of varieties submitted for each MG were five (MG 4.0 to 4.4), 11 (MG 4.5 to 4.9) and five (MG 5.0 to 5.5).

The OVT and the core-block demonstrations allow producers to select from the large number of varieties in the OVT and from varieties tested in environments similar to their farms. We would advise growers to make all variety decisions based on multi-environment and multi-year (when

possible) data to identify stable varieties that perform well over a range of environments.

For best use of this guide, we recommend evaluating variety yield results based on performance and stability. Performance refers to identifying the varieties that are high yielding in environments that best represent your local farm. Stability refers to the performance of a variety across multiple environments. It is important for growers to consider both factors when making variety decisions.

2025 SOYBEAN CORE BLOCK PARISHES



Acadia, Avoyelles, Beauregard, Bossier, East Baton Rouge, Evangeline, Franklin, Grant, Pointe Coupee, Rapides, Richland, St. Landry, West Carroll

OTHER VARIETAL CHARACTERISTICS

Variety yield potential is an important trait in selecting a variety, but other varietal characteristics should also be considered. How these criteria rank in importance to the grower may vary from one grower to the next and may vary from one field to the next. Several of these criteria for variety selection are discussed below.

Herbicide Tolerance and Weed Management Programs

Six different herbicide tolerances are available in soybean in 2026. They are Roundup Ready, Enlist, Liberty Link, and STS/BOLT. Both Xtend and XtendFlex soybean

varieties will be available for purchase, but no dicamba formulation is currently registered for use; therefore, dicamba cannot be legally applied. Roundup Ready is tolerant to glyphosate; Enlist is tolerant to glyphosate, glufosinate and 2,4-D choline; Liberty Link is tolerant to glufosinate; STS/BOLT is tolerant to glyphosate and higher rates of Classic and other ALS-herbicides; Xtend is tolerant to glyphosate, Engenia, Tavium and XtendiMax; and XtendFlex is tolerant to glyphosate, glufosinate, Engenia, Tavium and XtendiMax. At the time of this publication, Engenia, Tavium and XtendiMax are not registered for use in Xtend or XtendFlex soybean. If multiple herbicide technologies are utilized by a producer, they should be careful in their planning because there is no cross tolerance among the varieties. 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. For Enlist varieties, the company website should be consulted prior to mixing herbicides to ensure whether the desired herbicide combination is legal. Applications of Enlist One or Enlist Duo require specific spray nozzles; therefore, check the company website to ensure spray nozzles are legal. Research has shown that maintaining soybean weed-free for the first five weeks after emergence can maximize yield and the best program to accomplish this is use of residual herbicides preemergence and postemergence.

Disease Resistance

Soybean varieties differ in susceptibility to diseases and nematodes. Aerial blight is an important foliar disease south of Alexandria and is becoming more of an issue in northern parishes. Cercospora leaf blight is a major disease throughout the state. Frogeye leaf spot is becoming more of an issue in recent years; however, there are still plenty of resistant varieties to choose from. These, and other foliar diseases, may cause significant yield losses and harvest delays. Soil-borne diseases may also be a problem in any given year. Sudden death syndrome (SDS) has been confirmed in Louisiana, but it is not widespread and is rarely seen. A soil-borne disease with similar foliar symptoms as SDS known as taproot decline (TRD) has been confirmed by pathologists. Data from a specialized TRD variety trial is available annually in this publication. Charcoal rot can also be problematic in some fields during periods of drought or other environmental stressors. Phytophthora root rot is an isolated issue and is more prevalent in clay or poorly drained soils. Root-knot nematode is prevalent in sandy soils and is 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 and nematodes. Specialized variety trials may be conducted in certain areas

to target specific diseases, such as the taproot decline variety screening at Macon Ridge Research Station. In addition, the OVT varieties are evaluated with and without a fungicide application at the Dean Lee and Doyle Chambers Research Stations.

Insects

Soybeans are vulnerable to a range of insect pests including stink bugs (such as redbanded stink bug, brown stink bug, green stink bug, and southern green stink bug), threecornered alfalfa hopper, beetles, Lepidopteran defoliators (such as soybean looper, velvetbean caterpillar, and green cloverworm) and pod feeders (like corn earworm/soybean podworm) from plant emergence until harvest. While soybean plants can withstand some level of insect injury, high insect pest populations can lead to severe yield reductions or even total crop loss. To reduce yield loss, fields should be scouted no less than once per week using a sweep net, and appropriate control measures (e.g., insecticides) should be applied in a timely manner when action thresholds are met. Soybean varieties may vary in their ability to tolerate insect pests. Less tolerant varieties should be scouted more frequently.

Scouting is particularly important for detecting the redbanded stink bug, the most damaging soybean pest in Louisiana. This insect pest feeds exclusively on legumes; thus, earlier maturing varieties are more vulnerable to redbanded stink bug damage. Generally, MG IV soybeans will have more damage than MG V at pod initiation, as seed set begins earlier and lasts longer. This results in longer exposure to stink bugs over time, resulting in greater opportunities for stink bug injury. Planting soybean as early as possible can help mitigate late-season damage. As early-planted soybeans mature and are harvested, later planted soybeans act as a sponge and absorb all the surrounding stink bugs searching for a new host. As a rule, scouting for redbanded stink bugs 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 (nymphs and adults) per 100 sweeps.

For several years, we have screened high-yielding, commercially available soybean varieties for their susceptibility to stink bugs to provide information to agents, consultants, and growers. Currently, no varieties offer immunity from stink bugs, but many commercial varieties yield very well under various growing conditions despite being 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 near Winnsboro have made it possible to identify 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. When choosing varieties to be utilized in irrigated systems, excluders (those varieties that can tolerate high chloride levels) should be chosen. However, yield potential of both excluders and includers (those varieties that cannot tolerate high chloride levels) will be reduced in soils with high chloride levels.

Maturity

There is a certain amount of overlap in maturity between groups within the state. Environmental conditions, especially drought and pest pressure, can cause variation in maturity. Most varieties within a group mature in the following range when planted at recommended times:

- Very early maturity (MG 3.0-4.5): Aug. 10-Aug. 19
- Early maturity (MG 4.5-4.9): Aug. 20-Sept. 10
- Medium maturity (MG 5+): Sept. 11-Oct. 1

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 soils and new ground. It is important for all varieties to set pods a reasonable distance above the soil surface to aid in harvestability.

Poor Drainage

In Louisiana, soybean seed is often planted in 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 can be affected. A lodged field is more susceptible to disease and can reduce harvest efficiency.

Plant Height

Plant height varies according to growing conditions, planting date, soil type and variety. 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, seed quality issues can often be observed for most varieties. 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 Micronutrients

Availability of most plant nutrients is typically greatest in soils with a pH of 5.8 to 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. Soil testing should be conducted on a regular basis, and agricultural lime should be used to correct low pH soils to proper levels.

In extreme cases, manganese toxicity is expressed as a stunted plant with crinkled leaves. In milder cases, manganese toxicity may result in reduced yields even when visible symptoms are not present. Aluminum toxicity typically affects the roots, resulting in short, thick roots, 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. Although our soils typically have enough molybdenum for optimal growth, molybdenum is less available to plants as the soil becomes more acidic. At soil pH below 6.2, molybdenum should be applied as seed treatment at planting. However, if a commercial inoculum is needed and is applied as a seed treatment, molybdenum should not be applied as a seed treatment. The molybdenum salt will reduce the viability of the inoculum and will result in poor nodulation.

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 and form nodules on soybean roots that capture nitrogen from the atmosphere and fix it into 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 throughout the plant 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 of a pound of phosphate (P_2O_5) 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 reduced yields.

Phosphorus fertilization rates should be based on soil test results. A phosphorus fertilization should be performed when phosphorus levels in the soil are below the critical level of 35 ppm. Soil pH affects the availability of phosphorus, which is most available to soybeans when the soil pH is between 6.0 and 7.0.

Interpretation of Mehlich-3 Soil Test for Phosphorus (P) for All Soil Types and Textures.

Level	Concentration (ppm)	Recommendation (lbs P_2O_5 /acre)
Very low	<10	100
Low	11-20	80
Medium	21-35	60
Optimum	36-60	0
Above optimum	>60	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, and plants with adequate amounts of potassium are better able to resist diseases and abiotic stresses (e.g., drought) than potassium-deficient plants. About four times as much potash (K_2O) is required by soybeans as phosphate (P_2O_5), and about twice as much potash (K_2O) is removed in the seed as phosphate (P_2O_5). Soybeans remove about 1.4 pounds of potash (K_2O) per bushel in the harvested portion of the plant.

Potassium deficiency symptoms are 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. Potassium fertilization should be performed when potassium levels in the soil are below the critical level of 150 ppm.

Interpretation of Mehlich-3 Soil Test for Potassium (K) for All Soil Types and Textures.

Level	Concentration (ppm)	Recommendation (lbs K_2O /ac)
Very low	<50	120
Low	51-100	100
Medium	101-150	60
Optimum	151-250	0
Above optimum	>250	0

Additional Considerations About Soil Testing

All the fertilizer recommendations developed specifically for the state of Louisiana are based on results obtained using the Mehlich-3 methodology as nutrient extractant. An extractant is a chemical solution that is added to a soil sample in the Soil Testing Lab to estimate the amount of plant-available nutrients. When sending soil samples outside Louisiana, it is important to make sure that the chosen lab uses Mehlich-3 as the extractant. Different regions of the United States utilize different extractants, and these methods can produce significantly different soil test results. Using a different extractant can lead to recommendations that are not appropriate for Louisiana soils.

Early Planting

Soybeans should not be planted until soil temperature reaches 60 degrees Fahrenheit. Because emergence may also be affected by cool soil temperatures after planting, early planting decisions should also consider the forecast up to seven days after planting. Adequate soil temperatures are often observed in April but can vary by location and year. Maturity Group IV and indeterminate Group V varieties perform best in April plantings. Research in north Louisiana has shown 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 varieties (especially determinate types) may be sensitive to planting before early May. Narrow row spacing may be beneficial when planting early because of 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 V 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	Population in 1,000s
36-40	8-9	6-8	78-104
30-32	6-7	4-5	78-104
20-24	5-6	4-5	104-130
7-10	4-5	3	104-130
Broadcast	5-6/sq.ft.	3/sq.ft.	150
Late planting	6-7/sq.ft.	4/sq.ft.	200

Planting Dates

Because weather conditions are different from year to year, planting dates can be affected by environmental conditions. Early or late planting can cause a 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 half a 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 (not typically recommended in Louisiana): March 25-April 30

Row Spacing

Varieties respond differently to row spacing. An important consideration is that the canopy closes as quickly as possible to avoid late-season weed problems and to maximize the amount of light captured. Research has shown that narrow row spacing (30 inches or fewer) may outyield wide row spacing in some environments.

Depth of Seeding

Plant only deep enough to get the seed in moist soil. On sandy or silt loam soils, plant 1 inch deep if moisture is available. On clay soils, plant 1 to 2 inches deep, depending on moisture conditions.

Table 1A. Maturity Group 4.0-4.4 Soybean OVT Yield Data.

Variety	Central Station	Dean Lee	Iberia	Macon Ridge	Northeast ¹	Northeast ¹	Red River	Rice Station	2025 Average ²	2-Year Average
Bayer AG40XF5	58.7	46.6	20.9	61.6	31.8	45.2	66.5	39.1	46.3	38.4
Bayer AG42XF4	65.1	40.9	30.5	67.6	33.3	49.4	41.4	42.8	46.4	39.1
Bayer AG43XF5	68.8	50.8	30.7	73.0	43.4	54.2	69.8	42.4	54.1	47.6
Dyna-Gro Seed S43XF85S	72.5	44.9	26.8	75.3	35.2	53.1	63.9	40.3	51.5	43.6
Pioneer P41Z16E	64.7	55.1	27.7	73.2	37.2	50.2	59.4	40.7	51.0	-
Pioneer P43Z44SE	75.2	51.4	28.1	76.0	32.4	52.5	76.7	43.0	54.4	45.6
Pioneer P44Z67BE	75.0	51.6	27.1	76.6	46.5	57.8	57.7	47.0	54.9	-
University of Missouri S21-20276	64.5	-	22.1	-	33.2	46.9	77.6	40.3	47.4	-
University of Missouri S21-22067	75.6	-	33.8	-	35.7	52.2	75.7	36.8	51.6	-
Winfield United Armor 44-F46S	62.8	45.7	30.4	76.0	38.5	54.9	56.4	43.7	51.0	-
Location Average	68.0	48.3	27.5	72.8	36.8	51.6	63.2	41.5	-	-
Soil Type	Cancienne silt loam	Coushatta silt loam	Baldwin silty clay	Gigger-Gilbert complex	sharkey clay	silt loam	Caplis very fine sandy loam	Crowley silt loam	-	-
LSD P=0.05	7.4	7.7	5.3	8.1	8.5	3.8	11.3	NS	-	-
Standard Deviation	5.1	5.2	3.6	5.5	5.9	2.6	7.6	4.1	-	-
CV	7.5	10.7	13.1	7.6	16.0	5.0	12.0	10.0	-	-

The 2025 OVT Trial was planted at these LSU AgCenter research stations: Central Station, Baton Rouge; Dean Lee, Alexandria; Iberia, Jeanerette; Macon Ridge, Winnsboro; Northeast, St. Joseph; Red River, Bossier City; and Rice Station, Crowley.

All yields are expressed in bushels per acre and adjusted to 13% moisture.

Bold - Highest yielding (P=0.05) at this location in 2025.

NS - Not significant.

¹Northeast locations had two different soil types (silt loam and sharkey clay).

²Variety average from seven research stations and eight locations.

Table 1B. MG 4.0-4.4 Agronomic Data.

Variety	Dean Lee Maturity ¹	Iberia Maturity ²	Red River Maturity ²	Rice Station Maturity ²	Dean Lee Height ³	Iberia Height ³	Red River Height ³	Rice Station Height ³	Dean Lee Lodging ⁴	Red River Lodging ⁴	Macon Ridge Lodging ⁵	Dean Lee Shattering ⁶
Bayer AG40XF5	120	137	123	107	29	38	33	28	2	1	6	2
Bayer AG42XF4	119	134	119	108	31	41	39	30	1	1	1	2
Bayer AG43XF5	120	139	126	110	29	38	38	27	1	2	2	1
Dyna-Gro Seed S43XF85S	120	140	123	111	34	38	37	30	1	1	4	1
Pioneer P41Z16E	112	138	126	109	31	37	32	26	2	2	2	1
Pioneer P43Z44SE	119	140	127	109	28	35	33	24	1	1	0	1
Pioneer P44Z67BE	119	143	126	110	33	37	37	28	2	2	1	1
University of Missouri S21-20276	-	142	129	108	-	31	36	27	-	2	-	-
University of Missouri S21-22067	-	139	127	110	-	44	42	31	-	3	-	-
Winfield United Armor 44-F46S	120	139	124	109	31	36	37	28	1	2	2	1

¹R7 Date (One pod with the mature color; Prior to desiccation; Days after planting).

²Maturity (R8 - 95% brown pods; Days after planting).

³Plant height at R8 in inches.

⁴Lodging (1-5): 1=almost all plants erect; 5=all plants down.

⁵Lodging (0-9): 0=almost all plants erect; 9=all plants down.

⁶Shattering (1-5): 1=no shattering; 5=all seeds on the ground.

Table 1C: MG 4.0-4.4 - Abiotic/Biotic Stress Tolerance (With and Without Fungicide).

Variety	Dean Lee Green Stem ¹	Central Station FE Fungicide ^{2dt} AA	Central Station FE Untreated ²	Dean Lee FE Fungicide ²	Dean Lee FE Untreated ²	Macon Ridge FE ^{2dt} AL	Dean Lee AB Fungicide ³	Dean Lee AB Untreated ³	Central Station TS Fungicide ⁴	Central Station TS Untreated ⁴	Dean Lee TS Fungicide ⁴	Dean Lee TS Untreated ⁴	Dean Lee CLB Fungicide ⁵	Dean Lee CLB Untreated ⁵	Macon Ridge CLB ⁵	Macon Ridge TRD ⁶	Macon Ridge PSS ⁷	Macon Ridge Seed Quality ⁸	Northeast Flood ⁹	Dean Lee Yield Fungicide ¹⁰	Dean Lee Yield Untreated ¹¹	Central Station Yield Fungicide ¹²	Central Station Yield Untreated ¹³
Bayer AG40XF5	2.3	-	5.1	0.8	3.5	2.5	0.0	1.5	-	3.4	0.5	2.5	4.6	4.5	1.9	4.4	3.0	3.8	4.2	46.3	36.7	58.7	47.0
Pioneer P43Z44SE	3.1	1.2	5.0	0.5	3.3	3.1	0.0	2.0	1.8	2.5	0.8	2.8	6.9	5.5	2.0	4.1	1.8	3.3	4.3	55.3	38.5	75.2	66.6
Bayer AG43XF5	3.1	1.0	3.3	0.8	3.1	1.0	0.0	1.5	1.0	2.8	0.3	2.0	5.0	4.3	3.8	3.8	1.5	2.5	3.3	50.5	42.4	68.8	67.7
Bayer AG42XF4	2.9	1.2	3.8	0.3	2.8	2.5	0.0	0.5	0.8	2.3	0.3	2.5	6.7	5.0	1.8	0.9	0.3	2.0	4.0	40.9	33.8	61.6	62.7
Pioneer P41Z16E	3.3	1.0	4.0	0.8	3.5	1.6	0.0	1.3	1.0	3.2	0.5	2.5	5.1	4.8	3.0	2.9	2.0	3.0	3.5	55.1	34.8	64.7	62.2
Dyna-Gro Seed S43XF85S	4.5	0.9	3.0	0.5	2.3	1.6	0.0	1.5	1.7	2.3	0.3	1.8	5.0	5.0	2.8	1.8	1.3	2.8	3.8	44.9	41.8	72.5	62.5
Pioneer P44Z67BE	3.4	1.5	3.3	0.8	2.9	1.0	0.0	1.5	1.0	2.0	0.3	2.5	6.8	4.3	3.0	4.0	2.0	3.3	3.5	51.3	48.0	76.8	69.2
Winfield United Armor 44-F46S	3.8	1.5	3.0	0.3	3.3	1.5	0.0	1.3	1.5	2.5	0.3	2.8	5.5	5.0	3.3	2.3	1.8	2.0	4.0	45.4	44.6	62.8	64.2
University of Missouri S21-22067	-	1.0	6.3	-	-	-	-	-	1.0	2.5	-	-	-	-	-	-	-	-	4.0	-	-	75.1	59.9
University of Missouri S21-20276	-	0.9	4.5	-	-	-	-	-	1.3	3.8	-	-	-	-	-	-	-	-	3.8	-	64.5	58.9	
Location Average	3.3	6.13	4.0	0.6	3.1	0.44	0.0	1.4	1.2	2.6	0.4	2.4	5.7	4.8	2.7	3.3	1.7	2.8	3.8	48.6	40.1	67.9	62.1
LSD P=0.05	NS	NS	0.9	NS	NS	1.19 - 1.53	NS	NS	NS	0.9	NS	NS	NS	NS	NS	NS	NS	0.7	NS	6.4	NS	8.0	7.0
Standard Deviation	0.9	1.65	0.6	0.5	0.7	0.14	0.0	0.8	0.7	0.6	0.7	0.8	1.3	1.2	1.1	2.4	1.8	0.5	0.8	4.3	6.4	5.5	4.8
CV	27.4	26.88	15.2	94.0	24.1	31.17	0.0	57.8	53.9	22.0	172.1	31.3	22.8	24.6	39.7	72.2	107.9	18.0	20.2	8.8	15.9	8.1	7.7

NS - Not significant.

¹Green stem (0-5 scale): 0=no plants with symptoms; 3=36%-65% plants with symptoms; 5=91%-100% plants with symptoms.²Frogeye Leaf Spot (FE) (0-9 scale): 0=no damage; 9=all plants are dead.³Aerial Blight (AB) (0-9 scale): 0=no disease; 9=completely defoliated.⁴Target Spot (TS) (0-9 scale): 0=no disease; 9=completely defoliated.⁵Cercospora Leaf Blight (CLB) (0-9 scale): 0=no disease; 5=20-40% foliar symptoms/20% defoliation; 9=completely defoliated.⁶Tap Root Decline (TRD) (# of plants with symptoms per row with a 20-ft row and 8 seed/ft).⁷Purple Seed Stain (PSS) (0%-100% scale): 0%=no PSS; 100%=complete seed coverage of PSS.⁸Seed quality (1-5 scale): 1=excellent quality; 5=poor quality.⁹Flood resistant specialized OVT plots conducted at the Northeast Research Station. (1-5 scale): 1=healthy plants; 5=all plants are dead.¹⁰Yield (bu/A) for four-row OVT plots at the Dean Lee Research Station with a fungicide application (Revylak 5.5 oz/A with a non ionic surfactant at 0.25% applied at the R3-R4 growth stage).¹¹Yield (bu/A) for two-row OVT plots at the Dean Lee Research Station without a fungicide application.¹²Yield (bu/A) for four-row OVT plots at the Central Station with a fungicide application (Revylak 5.5 oz/A with a non ionic surfactant at 0.25% applied at the R3-R4 growth stage).¹³Yield (bu/A) for two-row OVT plots at the Central Station without a fungicide application.¹⁴Means are reported in de-transformed data units.¹⁵Mean descriptions are reported in transformed data units and are not de-transformed.

AA = Performed arcsine square root percent transformation, arcsin(SQRT(x/100)), on Summary Reports.

AL = Performed log transformation, LOG(x+1), on Summary Reports.

Table 1D. Conventional Soybean OVT Yield Data (MG 4.0-4.9) for Dean Lee and Macon Ridge Research Stations.

Variety	MG	Dean Lee Fungicide Yield	Macon Ridge Yield
University of Missouri S21-22067	4.0	58.1	61.2
University of Missouri S21-20276	4.2	61.6	56.8
University of Missouri S21-11102	4.5	59.0	65.4
University of Missouri S21-11211	4.7	55.2	60.5
University of Missouri S21-15672	4.8	52.1	56.1
University of Missouri S21-20065	4.9	61.6	60.3
University of Missouri S21-7836	4.9	60.7	56.9
Bayer AG40XF5	4.0	49.9	-
Bayer AG43XF5	4.3	65.2	-
Bayer AG48XF5	4.8	67.3	-
Pioneer P41Z16E	4.1	62.0	-
Pioneer P45Z75E	4.5	67.0	-
Progeny 4604XFS	4.6	70.7	-
Dyna-Gro Seed S43XF85S	4.3	60.2	-
Dyna-Gro Seed S49XF43S	4.9	66.2	-
Location Average		61.3	59.6
Soil Type		Coushatta silt loam	Gigger-Gilbert complex
LSD P=0.05		9.2	NS
Standard Deviation		6.4	4.9
CV		10.5	8.2

The 2025 Conventional OVT Trial was planted at these LSU AgCenter research stations: Dean Lee, Alexandria; Macon Ridge, Winnsboro. All yields are expressed in bushels per acre and adjusted to 13% moisture.

Bold- Highest yielding (P=0.05) at this location in 2025.

NS - Not significant.

Table 1E. Conventional Soybean OVT (MG 4.0-4.9) for Dean Lee and Macon Ridge Research Stations. Agronomic Data.

Variety	MG	Dean Lee Maturity ¹	Dean Lee Height ²	Dean Lee Lodging ³	Macon Ridge Lodging ⁴	Dean Lee Shattering ⁵
University of Missouri S21-22067	4.0	122	40	2	3	1
University of Missouri S21-20276	4.2	122	33	1	1	1
University of Missouri S21-11102	4.5	124	35	2	1	1
University of Missouri S21-11211	4.7	117	35	2	1	1
University of Missouri S21-15672	4.8	125	31	2	1	2
University of Missouri S21-20065	4.9	122	33	1	0	1
University of Missouri S21-7836	4.9	127	42	3	0	1
Bayer AG40XF5	4.0	103	32	1	-	1
Bayer AG43XF5	4.3	125	33	1	-	1
Bayer AG48XF5	4.8	123	39	2	-	1
Pioneer P41Z16E	4.1	103	32	1	-	1
Pioneer P45Z75E	4.5	107	36	2	-	1
Progeny 4604XFS	4.6	122	34	2	-	1
Dyna-Gro Seed S43XF85S	4.3	122	35	2	-	1
Dyna-Gro Seed S49XF43S	4.9	134	30	2	-	1

¹R7 Date (One pod with the mature color; Prior to desiccation; Days after planting).

²Plant height at R8 in inches.

³Lodging (1-5): 1=almost all plants erect; 5=all plants down.

⁴Lodging (0-9): 0=almost all plants erect; 9=all plants down.

⁵Shattering (1-5): 1=no shattering; 5=all seeds on the ground.

Table 1F. Conventional Soybean OVT (MG 4.0-4.9) for Dean Lee and Macon Ridge Research Stations. Abiotic/Biotic Stress Tolerance (With and Without Fungicide).

Variety	MG	Dean Lee Green Stem ¹	Dean Lee FE Fungicide ²	Dean Lee FE Untreated ²	Macon Ridge FE ²	Dean Lee AB Fungicide ³	Dean Lee AB Untreated ³	Dean Lee TS Fungicide ⁴	Dean Lee TS Untreated ⁴	Macon Ridge CLB ⁵	Macon Ridge TRD ⁶	Macon Ridge PSS ⁷	Macon Ridge Seed Quality ⁸	Dean Lee Yield Fungicide ⁹	Dean Lee Yield Untreated ¹⁰
University of Missouri S21-22067	4.0	4.0	1.0	4.0	3.3	0.0	0.5	1.3	4.0	2.5	2.5	1.2	2.0	58.1	33.4
University of Missouri S21-20276	4.2	2.9	2.3	4.5	4.5	0.0	2.0	1.5	3.3	4.0	2.3	3.5	1.8	61.6	36.4
University of Missouri S21-11102	4.5	2.6	1.3	2.8	6.0	0.0	1.0	0.8	2.5	2.3	6.3	7.3	2.5	59.0	40.4
University of Missouri S21-11211	4.7	2.6	1.3	3.0	1.0	0.0	1.4	0.3	2.4	4.3	1.0	3.5	2.3	55.2	40.3
University of Missouri S21-15672	4.8	1.3	2.5	4.4	1.0	0.0	1.6	2.3	3.4	3.8	1.5	0.3	1.3	52.1	44.4
University of Missouri S21-20065	4.9	1.6	3.3	3.6	2.0	0.0	1.3	1.5	2.6	1.3	3.3	1.8	2.0	61.6	49.8
University of Missouri S21-7836	4.9	4.3	2.0	3.0	1.0	0.0	1.3	2.0	2.5	4.0	4.0	0.0	1.0	60.7	45.1
Bayer AG40XF5	4.0	2.1	1.7	4.0	-	0.0	1.8	1.2	3.3	-	-	-	-	49.9	29.8
Bayer AG43XF5	4.3	2.3	1.0	3.5	-	0.0	0.3	0.5	2.8	-	-	-	-	65.2	42.0
Bayer AG48XF5	4.8	2.0	1.0	3.0	-	0.0	1.0	1.5	3.3	-	-	-	-	67.3	46.6
Pioneer P41Z16E	4.1	2.6	2.3	3.4	-	0.0	1.5	1.8	3.3	-	-	-	-	62.0	35.2
Pioneer P45Z75E	4.5	2.0	2.3	3.4	-	0.0	1.5	2.0	3.1	-	-	-	-	67.0	47.8
Progeny 4604XFS	4.6	2.4	2.2	3.5	-	0.0	1.1	1.2	3.5	-	-	-	-	70.7	42.3
Dyna-Gro Seed S43XF85S	4.3	2.1	1.0	2.8	-	0.0	0.3	1.0	2.5	-	-	-	-	60.2	40.6
Dyna-Gro Seed S49XF43S	4.9	2.9	1.0	2.8	-	0.0	1.3	0.8	2.3	-	-	-	-	66.2	42.9
Location Average		2.5	1.7	3.4	2.7	0.0	1.2	1.3	3.0	3.1	3.0	2.6	1.8	61.3	41.2
LSD P=0.05		1.0	1.2	0.7	1.4	NS	0.8	NS	0.8	1.6	2.8	2.3	0.6	9.2	4.7
Standard Deviation		0.7	0.8	0.5	0.9	0.0	0.6	0.9	0.6	1.1	1.9	1.6	0.4	6.4	3.3
CV		26.5	48.6	14.3	35.1	0.0	48.8	67.5	19.4	33.8	62.5	61.3	22.5	10.5	8.0

NS - Not significant.

¹Green stem (0-5 scale); 0=no plants with symptoms; 3=36%-65% plants with symptoms; 5=91%-100% plants with symptoms.

²Frogeye Leaf Spot (FE) (0-9 scale); 0=no damage; 9=all plants are dead.

³Aerial Blight (AB) (0-9 scale); 0=no disease; 9=completely defoliated.

⁴Target Spot (TS) (0-9 scale); 0=no disease; 9=completely defoliated.

⁵Cercospora Leaf Blight (CLB) (0-9 scale); 0=no disease; 5=20-40% foliar symptoms/20% defoliation; 9=completely defoliated.

⁶Tap Root Decline (TRD) (# of plants with symptoms per row with a 20-ft row and 8 seed/ft).

⁷Purple Seed Stain (PSS) (0%-100% scale); 0=no PSS; 100%=complete seed coverage of PSS.

⁸Seed quality (1-5 scale); 1=excellent quality; 5=poor quality.

⁹Yield (bu/A) for four-row OVT plots at the Dean Lee Research Station with a fungicide application (Revylak 5.5 oz/A with a non ionic surfactant at 0.25% applied at the R3-R4 growth stage).

¹⁰Yield (bu/A) for two-row OVT plots at the Dean Lee Research Station without a fungicide application.

Table 2A. Maturity Group 4.5-4.7 Soybean OVT Yield Data.

Variety	Central Station	Dean Lee	Iberia	Macon Ridge	Northeast ¹	Northeast ¹	Red River	Rice Station	2025 Average ²	2-Year Average	3-Year Average
Delta Grow Seed Company DG 47E20	60.8	55.3	25.6	70.2	29.0	52.6	77.3	45.4	52.0	-	-
DONMARIO SEEDS DM47F44S	66.7	51.6	30.2	69.9	32.6	60.2	61.9	40.6	51.7	44.4	
Dyna-Gro Seed S46XF26S	74.1	56.4	33.4	70.4	41.2	58.3	65.0	52.6	56.4	-	-
Dyna-Gro Seed S47XF96	69.1	55.0	24.6	63.6	30.7	49.5	41.5	38.7	46.6	-	-
Pioneer P45Z75E	67.3	60.4	34.0	70.4	44.5	61.0	83.8	52.0	59.2	49.8	-
Pioneer P47Z15BE	72.7	65.3	34.2	70.2	43.0	57.0	78.8	45.1	58.3	-	-
Progeny 4604XFS	72.7	58.4	34.2	72.2	30.3	55.9	63.6	43.8	53.9	46.0	45.7
Progeny 4623XF	73.7	57.5	25.7	68.8	32.0	52.3	72.2	47.7	53.7	47.8	-
Progeny 4724XFS	72.7	59.6	27.0	69.3	31.2	48.2	70.0	45.1	52.9	-	-
Progeny 4734XFS	73.0	58.5	32.9	70.3	46.5	58.2	64.3	46.3	56.2	-	-
Syngenta NK46-D2E3	72.6	57.8	24.7	65.2	40.9	53.2	75.1	46.8	54.5	-	-
Syngenta NK47-UXFS	74.5	60.6	26.6	70.6	47.5	65.1	68.8	46.3	57.5	-	-
University of Missouri S21-11102	61.8	-	25.8	-	29.3	56.3	74.2	36.2	47.2	-	-
University of Missouri S21-11211	60.2	-	24.1	-	34.3	51.3	72.1	40.1	47.0	-	-
Winfield United Armor 45-F65S	66.2	54.5	14.5	68.8	26.4	56.5	50.6	45.2	47.8	42.8	-
Winfield United Armor 45-F86S	63.8	56.3	29.2	70.1	40.9	56.2	62.8	44.4	52.9	-	-
Winfield United Armor 46-F15S	69.5	50.6	30.6	67.4	31.0	56.1	71.1	48.5	53.1	47.6	-
Winfield United Armor 46-F96	66.8	51.8	25.0	70.1	38.9	54.4	65.1	42.9	51.9	45.1	43.4
Winfield United Armor 48-F25S	68.1	54.1	27.2	66.4	22.3	53.8	66.3	47.6	50.7	-	-
Location Average	69.0	56.8	27.6	69.1	35.6	55.4	67.9	45.1	-	-	-
Soil Type	Cancienne silt loam	Coushatta silt loam	Baldwin silty clay	Gigger-Gilbert complex	Sharkey clay	silt loam	Caplis very fine sandy loam	Crowley silt loam	-	-	-
LSD P=0.05	6.7	6.4	8.2	NS	9.3	6.8	12.7	4.3	-	-	-
Standard Deviation	4.7	4.5	5.8	4.5	6.5	4.8	8.9	3.0	-	-	-
CV	6.8	7.8	20.8	6.5	18.3	8.6	13.1	6.8	-	-	-

The 2025 OVT Trial was planted at these LSU AgCenter research stations: Central Station, Baton Rouge; Dean Lee, Alexandria; Iberia, Jeanerette; Macon Ridge, Winnsboro; Northeast, St. Joseph; Red River, Bossier City; and Rice Station, Crowley.

All yields are expressed in bushels per acre and adjusted to 13% moisture.

NS - Not significant.

Bold- Highest yielding (P=0.05) at this location in 2025.

¹Northeast locations had two different soil types (silt loam and sharkey clay).

²Variety average from seven research stations and eight locations.

Table 2B. MG 4.5-4.7 Agronomic Data.

Table 2B. MG 4.5-4.7. Agronomic Data.

Variety	Dean Lee Maturity ¹	Iberia Maturity ²	Red River Maturity ²	Rice Station Maturity ²	Dean Lee Height ³	Iberia Height ³	Red River Height ³	Rice Station Height ³	Dean Lee Lodging ⁴	Red River Lodging ⁴	Dean Lee Shattering ⁵
Delta Grow Seed Company DG 47E20	124	141	136	109	40	44	46	32	1	2	1
DONMARIO SEEDS DM47F44S	124	145	133	111	40	44	44	33	1	2	1
Dyna-Gro Seed S46XF26S	124	130	130	109	34	47	43	35	2	3	1
Dyna-Gro Seed S47XF96	119	131	128	108	37	46	39	33	2	3	1
Pioneer P45Z75E	121	132	123	108	35	40	41	28	2	2	1
Pioneer P47Z15BE	121	140	130	109	37	40	41	28	1	2	1
Progeny 4604XFS	125	137	132	110	37	46	44	32	1	2	1
Progeny 4623XF	122	143	129	109	35	38	36	28	1	1	1
Progeny 4724XFS	120	140	130	109	36	42	41	31	2	2	1
Progeny 4734XFS	124	140	124	110	36	40	39	31	2	3	1
Syngenta NK46-D2E3	122	141	133	110	36	39	39	29	2	3	1
Syngenta NK47-U1XFS	131	149	137	111	31	36	34	28	1	1	1
University of Missouri S21-11102	-	140	133	112	-	42	43	32	-	3	-
University of Missouri S21-11211	-	126	132	110	-	41	41	31	-	3	-
Winfield United Armor 45-F65S	120	144	121	108	28	35	33	26	1	1	1
Winfield United Armor 45-F86S	126	138	128	110	35	42	41	29	1	2	1
Winfield United Armor 46-F15S	122	136	133	110	36	44	44	34	2	3	1
Winfield United Armor 46-F96	123	135	125	109	34	42	39	29	1	1	1
Winfield United Armor 48-F25S	126	139	128	110	36	42	42	31	1	2	1

¹R7 Date (One pod with the mature color; Prior to desiccation; Days after planting).

²Maturity (R8 - 95% brown pods; Days after planting).

³Plant height at R8 in inches.

⁴Lodging (1-5): 1=almost all plants erect; 5=all plants down.

⁵Shattering (1-5): 1=no shattering; 5=all seeds on the ground.

Table 2C: MG 4.5-4.7 Abiotic/Biotic Stress Tolerance (With and Without Fungicide).

Variety	Dean Lee Green Stem ¹	Central Station FE Fungicide ²	Central Station FE Untreated ^{2dt} AL	Dean Lee FE Fungicide ^{2dt} AS	Dean Lee FE Untreated ²	Macon Ridge FE ²	Dean Lee AB Fungicide ³	Dean Lee AB Untreated ³	Central Station TS Fungicide ⁴	Central Station TS Untreated ⁴	Dean Lee TS Fungicide ^{4dt} AA	Dean Lee TS Untreated ⁴	Dean Lee CLB Fungicide ⁵	Dean Lee CLB Untreated ^{5dt} AS	Macon Ridge CLB ⁵	Macon Ridge TRD ^{6dt} AS	Macon Ridge PSS ⁷	Macon Ridge Seed Quality ⁸	Northeast Flood ⁹	Dean Lee Yield Fungicide ¹⁰	Dean Lee Yield Untreated ¹¹	Central Station Yield Fungicide ¹²	Central Station Yield Untreated ¹³
Delta Grow Seed Company DG 47E20	3.4	1.5	4.6	0.9	3.8	6.5	0.0	1.1	1.3	2.5	0.3	2.6	3.5	4.7	1.0	4.1	1.0	1.8	3.8	55.3	46.6	60.6	63.4
DONMARIO SEEDS DM47F44S	3.3	1.8	2.4	0.0	2.9	1.0	0.0	1.0	1.3	2.0	0.0	2.4	4.3	3.9	2.5	4.7	1.3	1.5	3.5	51.7	41.2	63.2	70.0
Dyna-Gro Seed S46XF26S	3.4	1.3	3.2	0.0	3.0	1.8	0.0	1.0	1.3	2.5	0.0	2.5	4.8	3.7	1.5	2.7	0.5	1.8	2.8	56.3	35.4	70.5	72.8
Dyna-Gro Seed S47XF96	2.0	1.6	3.2	0.2	3.3	1.0	0.0	1.3	1.3	2.3	0.6	2.5	6.8	6.2	1.8	4.3	1.3	2.0	3.5	55.0	33.2	69.1	71.1
Pioneer P45Z75E	3.1	1.5	2.9	0.7	3.0	1.0	0.0	1.5	1.0	2.0	0.1	2.8	5.5	5.2	1.3	2.4	0.8	3.3	4.0	60.4	41.0	67.3	72.4
Pioneer P47Z15BE	2.8	0.8	2.5	0.4	2.5	1.0	0.0	1.3	1.3	2.3	0.1	2.0	5.0	4.7	1.5	2.3	0.5	2.3	3.8	64.2	41.4	72.7	70.8
Progeny 4604XFS	3.8	1.5	3.5	0.7	3.0	3.3	0.0	2.0	1.0	2.0	0.4	3.0	4.5	4.7	2.3	4.3	0.3	1.3	4.5	58.4	40.2	66.3	70.7
Progeny 4623XF	3.0	1.5	3.4	0.7	3.5	5.8	0.0	1.5	1.3	2.3	0.6	2.5	4.5	3.5	1.8	1.6	2.5	2.0	4.0	57.5	34.6	73.7	65.6
Progeny 4724XFS	3.3	1.3	3.2	0.4	3.0	1.0	0.0	1.0	1.3	2.3	0.0	2.3	6.4	4.9	1.8	3.2	1.6	1.3	3.8	59.6	34.6	72.7	62.8
Progeny 4734XFS	3.6	1.1	2.7	0.7	3.3	1.0	0.0	1.8	1.5	2.3	0.3	3.0	4.3	3.5	1.5	3.6	2.0	2.3	4.3	58.5	33.9	73.0	73.2
Syngenta NK46-D2E3	4.2	1.4	3.0	0.0	3.3	1.0	0.0	1.8	1.3	2.0	0.1	2.5	5.0	3.5	2.5	4.3	8.5	2.8	3.5	57.8	371	72.6	73.0
Syngenta NK47-U1XFS	4.0	1.0	2.7	0.4	2.8	1.3	0.0	1.3	1.3	2.0	0.3	2.0	3.5	4.0	3.0	6.9	1.3	1.8	3.3	60.5	47.6	74.5	75.1
University of Missouri S21-11102	-	1.0	2.9	-	-	-	-	-	1.3	2.0	-	-	-	-	-	-	-	-	3.0	-	-	62.0	61.4
University of Missouri S21-11211	-	1.6	3.4	-	-	-	-	-	1.3	2.3	-	-	-	-	-	-	-	-	3.5	-	-	60.4	58.1
Winfield United Armor 45-F65S	3.6	1.5	4.5	0.9	3.3	3.8	0.0	0.3	1.3	3.3	0.3	2.3	7.0	4.9	2.5	5.2	6.8	2.3	3.8	54.5	28.7	66.2	63.8

Table 2C: MG 4.5-4.7 Abiotic/Biotic Stress Tolerance (With and Without Fungicide). (cont.)

Variety	Dean Lee Green Stem ¹	Central Station FE Fungicide ²	Central Station FE Untreated ^{2dt} AL	Dean Lee FE Fungicide ^{2dt} AS	Dean Lee FE Untreated ²	Macon Ridge FE ²	Dean Lee AB Fungicide ³	Dean Lee AB Untreated ³	Central Station TS Fungicide ⁴	Central Station TS Untreated ⁴	Dean Lee TS Fungicide ^{4dt} AA	Dean Lee TS Untreated ⁴	Dean Lee CLB Fungicide ⁵	Dean Lee CLB Untreated ^{5dt} AS	Macon Ridge CLB ⁵	Macon Ridge TRD ^{6dt} AS	Macon Ridge PSS ⁷	Macon Ridge Seed Quality ⁸	Northeast Flood ⁹	Dean Lee Yield Fungicide ¹⁰	Dean Lee Yield Untreated ¹¹	Central Station Yield Fungicide ¹²	Central Station Yield Untreated ¹³
Winfield United Armor 45-F86S	3.5	1.3	2.9	0.4	2.5	1.0	0.0	0.9	1.3	2.0	0.5	2.0	4.5	3.5	2.3	2.3	1.0	2.0	3.3	56.3	39.5	66.6	61.3
Winfield United Armor 46-F15S	3.4	1.3	2.7	0.7	2.5	2.0	0.0	1.5	1.3	2.0	0.1	2.3	5.5	3.7	1.0	4.1	0.0	2.0	3.5	50.5	40.0	69.5	66.6
Winfield United Armor 46-F96	4.2	1.5	3.7	0.4	3.0	2.0	0.0	1.0	1.3	2.5	0.4	2.5	5.3	5.2	2.0	3.0	2.0	2.0	3.8	51.7	31.2	66.8	67.9
Winfield United Armor 48-F25S	1.7	1.3	2.7	0.2	2.5	3.8	0.0	0.8	1.3	2.0	0.1	2.3	4.8	4.2	2.0	2.2	1.3	1.3	4.0	54.0	42.8	68.1	66.6
Grand Mean	3.3	1.3	0.61 ^t	0.97 ^t	3.0	2.2	0.0	1.2	1.2	2.2	2.305 ^t	2.4	5.0	2.20 ^t	1.9	2.00 ^t	1.9	2.0	3.7	56.6	38.4	68.5	67.8
LSD P=0.05	1.1	NS	1.00-1.27	NS	0.7	0.7	NS	0.8	NS	NS	NS	NS	1.0	1.25-1.42	1.1	NS	2.5	0.7	NS	6.4	6.1	8.2	7.1
Standard Deviation	0.8	0.6	0.08 ^t	0.27 ^t	0.5	0.5	0.0	0.6	0.6	0.7	3.139 ^t	0.6	0.7	0.20 ^t	0.7	0.59 ^t	1.8	0.5	0.8	4.5	4.3	5.8	5.0
CV	24.2	45.2	12.79 ^t	28.2 ^t	16.7	22.3	0.0	48.8	47.0	31.4	136.21 ^t	25.1	13.7	9.31 ^t	39.4	29.26 ^t	92.2	23.8	20.7	7.9	11.1	8.4	7.4

NS - Not significant.

¹Green stem (0-5 scale); 0=no plants with symptoms; 3=36%-65% plants with symptoms; 5=91%-100% plants with symptoms.²Frogeye Leaf Spot (FE) (0-9 scale); 0=no damage; 9=all plants are dead.³Aerial Blight (AB) (0-9 scale); 0=no disease; 9=completely defoliated.⁴Target Spot (TS) (0-9 scale); 0=no disease; 9=completely defoliated.⁵Cercospora Leaf Blight (CLB) (0-9 scale); 0=no disease; 5=20-40% foliar symptoms/20% defoliation; 9=completely defoliated.⁶Tap Root Decline (TRD) (# of plants with symptoms per row with a 20-ft row and 8 seed/ft).⁷Purple Seed Stain (PSS) (0%-100% scale); 0%=no PSS; 100%=complete seed coverage of PSS.⁸Seed quality (1-5 scale); 1=excellent quality; 5=poor quality.⁹Flood resistant specialized OVT plots conducted at the Northeast Research Station. (1-5 scale); 1=healthy plants; 5=all plants are dead.¹⁰Yield (bu/A) for four-row OVT plots at the Dean Lee Research Station with a fungicide application (Revylak 5.5 oz/A with a non ionic surfactant at 0.25% applied at the R3-R4 growth stage).¹¹Yield (bu/A) for two-row OVT plots at the Dean Lee Research Station without a fungicide application.¹²Yield (bu/A) for four-row OVT plots at the Central Station with a fungicide application (Revylak 5.5 oz/A with a non ionic surfactant at 0.25% applied at the R3-R4 growth stage).¹³Yield (bu/A) for two-row OVT plots at the Central Station without a fungicide application.¹⁴Means are reported in de-transformed data units.¹⁵Mean descriptions are reported in transformed data units and are not de-transformed.

AA = Performed arcsine square root percent transformation, arcsin(SQRT(x/100)), on Summary Reports.

AL = Performed log transformation, LOG(x+1), on Summary Reports.

AS = Performed square root transformation, SQRT(x+0.5), on Summary Reports.

Table 3A. Maturity Group 4.8-4.9 Soybean OVT Yield Data.

Variety	Central Station ER4	Dean Lee	Iberia	Macon Ridge	Northeast ¹	Northeast ¹	Red River	Rice Station	2025 Average ²	2-Year Average	3-Year Average
Bayer AG48XF5	69.2	55.0	28.1	64.8	47.3	56.4	62.6	49.2	54.1	-	-
Bayer AG48XF6	67.8	64.2	27.5	67.4	44.3	61.5	76.9	49.1	57.3	-	-
Bayer AG49XF4	68.6	63.3	17.2	67.5	44.7	56.6	48.7	44.1	51.3	45.8	-
Bayer AG49XF6	66.0	60.3	31.8	60.9	46.3	55.4	81.0	47.9	56.2	-	-
Bayer AG50XF5	76.6	62.4	30.7	64.8	47.1	50.2	69.6	55.3	57.1	-	-
Delta Grow Seed Company DG 48XF80	68.8	50.8	20.2	67.1	47.6	53.9	75.8	44.3	53.5	45.5	-
Delta Grow Seed Company DG 48XF70STS	75.4	60.4	25.8	65.1	43.6	54.8	72.0	48.6	55.7	48.1	-
Delta Grow Seed Company DG 49E30	70.6	66.4	18.0	57.4	41.0	48.7	61.7	46.0	51.2	-	-
Delta Grow Seed Company DG 49XF70	74.1	55.2	26.4	67.4	46.6	61.0	70.7	47.4	56.1	-	-
DONMARIO SEEDS DM48F53	69.6	52.1	30.1	61.6	45.0	51.1	49.0	44.5	50.4	44.0	43.9
Dyna-Gro Seed S48XF35	75.4	54.8	14.5	67.2	46.4	57.5	57.6	46.8	52.5	48.1	-
Dyna-Gro Seed S49XF43S	71.1	56.2	25.1	67.2	49.6	57.3	56.6	43.5	53.3	46.1	45.4
Integra XF4875S	65.4	64.0	18.3	61.4	51.3	53.7	58.1	46.1	52.3	46.2	-
Integra XF4914S	69.6	59.8	20.6	66.4	46.4	60.4	50.1	44.4	52.2	46.1	-
Pioneer P48Z73E	79.5	64.5	21.6	72.7	51.1	52.0	71.9	46.3	57.5	-	-
Pioneer P49Z02E	65.3	55.6	31.9	64.6	47.8	56.8	56.7	46.4	53.1	-	-
Progeny 4824XF	75.0	59.1	29.0	67.7	48.9	62.3	71.0	45.9	57.4	-	-
Progeny 4842XFS	72.7	56.1	23.5	63.5	42.6	54.2	59.5	47.2	52.4	-	-
Progeny 4848XF	72.1	51.7	23.3	56.2	38.9	47.0	47.4	45.3	47.7	43.1	-

Table 3A. Maturity Group 4.8-4.9 Soybean OVT Yield Data. (cont.)

Variety	Central Station ER4	Dean Lee	Iberia	Macon Ridge	Northeast ¹	Northeast ¹	Red River	Rice Station	2025 Average ²	2-Year Average	3-Year Average
Progeny 4947XFS	67.3	60.0	29.3	61.8	48.0	54.0	66.1	48.9	54.4	47.3	-
Progeny 4999E3S	75.2	57.2	21.6	61.5	40.6	54.7	55.2	50.4	52.0	46.1	-
Syngenta NK49-N7XF	64.7	58.1	19.9	63.7	39.3	53.9	55.1	47.0	50.2	44.6	-
Syngenta NK49-U9E3S	71.8	55.9	30.3	64.4	43.2	60.2	54.2	42.7	52.8	-	-
University of Missouri S21-15672	60.3	-	20.0	-	38.9	44.5	74.4	37.8	46.0	-	-
University of Missouri S21-20065	65.2	-	16.2	-	42.1	52.4	65.6	40.3	47.0	-	-
University of Missouri S21-7836	64.8	-	20.5	-	44.8	48.8	68.3	44.4	48.6	-	-
Winfield United Armor 47-F66S	75.1	62.8	16.1	63.0	49.5	59.0	76.0	46.8	56.0	-	-
Winfield United Armor 48-F55S	70.7	65.4	23.6	68.1	49.8	51.7	67.8	48.8	55.7	48.4	-
Location Average	70.4	59.0	23.6	64.8	45.6	54.7	64.4	46.2	-	-	-
Soil Type	Cancienne silt loam	Coushatta silt loam	Baldwin silty clay	Gigger-Gilbert complex	sharkey clay	silt loam	Caplis very fine sandy loam	Crowley silt loam	-	-	-
LSD P=0.05	8.8	7.1	7.5	4.5	5.8	6.0	14.1	4.5	-	-	-
Standard Deviation	5.3	5.0	5.3	3.2	4.1	4.3	9.9	3.2	-	-	-
CV	7.6	8.5	22.4	4.9	9.0	7.8	15.4	7.0	-	-	-

The 2025 OVT Trial was planted at these LSU AgCenter research stations: Central Station, Baton Rouge; Dean Lee, Alexandria; Iberia, Jeanerette; Macon Ridge, Winnsboro; Northeast, St. Joseph; Red River, Bossier City; and Rice Station, Crowley.

All yields are expressed in bushels per acre and adjusted to 13% moisture.

Bold- Highest yielding (P=0.05) at this location in 2025.

¹Northeast locations had two different soil types (silt loam and sharkey clay).

²Variety average from seven research stations and eight locations.

ER4 = Excluded replicate 4.

Table 3B. MG 4.8-4.9 Agronomic Data.

Variety	Dean Lee Maturity ¹	Iberia Maturity ²	Red River Maturity ²	Rice Station Maturity ²	Dean Lee Height ³	Iberia Height ³	Red River Height ³	Rice Station Height ³	Dean Lee Lodging ⁴	Red River Lodging ⁴	Dean Lee Shattering ⁵
Bayer AG48XF5	129	138	134	110	33.0	45.8	37.3	32.3	1.1	2.3	1.0
Bayer AG48XF6	133	144	136	113	37.0	44.3	36.0	31.8	1.4	3.9	1.0
Bayer AG49XF4	119	138	130	109	34.3	40.0	34.8	29.3	1.1	2.0	1.0
Bayer AG49XF6	131	143	134	112	34.5	43.8	36.5	31.0	1.1	1.7	1.0
Bayer AG50XF5	130	140	132	111	34.9	41.8	33.8	29.8	1.0	1.4	1.0
Delta Grow Seed Company DG 48X80	130	144	132	111	35.0	39.0	31.0	27.3	1.0	1.7	1.0
Delta Grow Seed Company DG 48XF70STS	133	142	132	113	38.8	42.3	34.3	31.5	1.0	1.9	1.0
Delta Grow Seed Company DG 49E30	128	142	125	109	35.1	44.8	34.3	30.8	1.0	2.0	1.0
Delta Grow Seed Company DG 49XF70	131	144	132	111	33.0	36.3	29.0	26.8	1.0	1.3	1.0
DONMARIO SEEDS DM48F53	123	139	127	110	31.0	37.0	29.5	26.3	1.0	1.4	1.0
Dyna-Gro Seed S48XF35	130	139	132	110	35.0	41.0	34.8	29.0	1.0	2.7	1.0
Dyna-Gro Seed S49XF43S	131	142	133	112	32.3	38.5	34.8	27.8	1.0	1.9	1.0
Integra XF4875S	131	142	134	112	33.9	42.0	36.5	32.0	1.5	1.3	1.0
Integra XF4914S	131	143	130	110	35.5	35.5	30.8	28.3	1.0	1.3	1.0
Pioneer P48Z73E	129	142	131	109	35.1	37.0	31.5	27.0	1.0	2.7	1.0
Pioneer P49Z02E	129	143	135	110	32.0	41.5	37.3	27.8	1.0	1.7	1.0
Progeny 4824XF	129	135	130	112	34.8	45.0	36.0	31.8	1.3	2.3	1.0
Progeny 4842XFS	122	139	128	109	35.3	44.5	39.3	31.0	1.6	3.3	1.0
Progeny 4848XF	130	138	133	110	37.2	39.8	34.5	27.5	1.0	2.3	1.0
Progeny 4947XFS	131	141	132	113	36.3	43.5	34.3	31.5	1.6	2.0	1.0
Progeny 4999E3S	128	142	131	109	35.0	44.8	37.0	32.0	1.0	1.0	1.0
Syngenta NK49-N7XF	117	141	131	109	33.5	37.0	31.3	27.3	1.0	1.9	1.0
Syngenta NK49-U9E3S	130	142	134	109	32.5	37.0	33.0	26.0	1.0	3.3	1.1
University of Missouri S21-15672	-	127	137	109	-	34.0	24.8	28.8	-	1.9	-
University of Missouri S21-20065	-	142	132	113	-	34.3	27.5	30.5	-	2.0	-
University of Missouri S21-7836	-	141	135	113	-	42.8	39.8	30.8	-	2.4	-
Winfield United Armor 47-F66S	131	143	131	112	34.0	39.3	31.3	27.8	1.0	3.3	1.0
Winfield United Armor 48-F55S	130	142	132	112	35.3	41.3	37.8	31.3	1.8	2.7	1.0

¹R7 Date (One pod with the mature color; Prior to desiccation; Days after planting).

²Maturity (R8 - 95% brown pods; Days after planting).

³Plant height at R8 in inches.

⁴Lodging (1-5): 1=almost all plants erect; 5=all plants down.

⁵Shattering (1-5): 1=no shattering; 5=all seeds on the ground.

Table 3C: MG 4.8-4.9 Abiotic/Biotic Stress Tolerance (With and Without Fungicide).

Variety	Dean Lee Green Stem ¹	Central Station FE Fungicide ^{2dt} AL	Central Station FE Untreated ^{2dt} AL	Dean Lee FE Fungicide ^{2dt} AS	Dean Lee FE Untreated ²	Macon Ridge FE ²	Dean Lee AB Fungicide ³	Dean Lee AB Untreated ^{3dt} AS	Central Station TS Fungicide ^{4dt} AL	Central Station TS Untreated ^{4dt} AS	Dean Lee TS Fungicide ⁴	Dean Lee TS Untreated ⁴	Dean Lee CLB Fungicide ⁵	Dean Lee CLB Untreated ⁵	Macon Ridge CLB ^{5dt} AL	Macon Ridge TRD ^{6dt} AS	Macon Ridge PSS ^{7dt} AS	Macon Ridge Seed Quality ^{8dt} AS	Northeast Flood ⁹	Dean Lee Yield Fungicide ¹⁰	Dean Lee Yield Untreated ¹¹	Central Station Yield Fungicide ¹²	Central Station Yield Untreated ¹³
Bayer AG48XF5	2.5	1.7	3.2	0.4	2.8	1.0	0.0	0.7	1.4	1.2	1.0	2.1	4.3	3.5	1.4	2.7	0.7	2.2	3.8	55.0	51.0	71.3	73.8
Bayer AG48XF6	3.9	1.4	2.7	0.4	3.1	1.0	0.0	0.9	1.6	1.7	0.3	2.5	3.0	4.0	1.2	2.8	1.9	1.5	3.5	64.2	45.3	68.9	75.4
Bayer AG49XF4	2.1	2.1	2.5	0.7	3.0	1.0	0.0	1.7	1.9	1.7	0.3	1.8	3.5	3.8	1.9	3.0	0.6	1.2	3.3	63.3	39.6	68.8	73.6
Bayer AG49XF6	2.8	1.0	2.5	0.2	2.8	1.0	0.0	0.9	1.7	1.5	0.3	2.0	2.0	3.8	1.0	1.9	0.0	1.0	4.8	60.3	44.7	64.0	70.8
Bayer AG50XF5	4.0	1.2	3.2	0.4	2.4	3.5	0.0	1.2	2.1	1.5	0.3	2.0	3.3	3.8	1.2	2.5	1.1	1.0	3.0	62.4	44.4	77.0	80.3
Delta Grow Seed Company DG 48X80	3.8	1.7	2.5	0.4	2.1	1.0	0.0	1.1	1.2	1.7	0.3	2.0	3.0	4.0	2.1	4.3	1.1	1.7	3.8	50.8	43.7	70.6	77.4
Delta Grow Seed Company DG 48XF70STS	3.6	1.6	2.2	0.4	3.0	4.3	0.0	0.5	1.7	1.5	0.5	2.3	2.8	3.5	1.0	2.4	0.0	1.0	3.3	60.4	47.7	75.6	71.2
Delta Grow Seed Company DG 49E30	3.3	2.2	3.0	0.0	2.8	6.3	0.0	1.1	1.0	1.5	0.5	2.5	4.0	4.3	1.4	2.0	1.1	2.0	2.8	66.4	43.4	70.6	64.2
Delta Grow Seed Company DG 49XF70	3.6	1.3	2.5	0.7	2.5	1.0	0.0	1.2	1.6	1.7	0.8	2.3	3.0	3.8	3.5	4.8	1.1	1.7	3.3	55.2	45.2	73.0	74.1
DONMARIO SEEDS DM48F53	2.3	1.7	2.9	0.0	3.0	1.0	0.0	1.2	1.9	1.2	0.3	3.0	4.3	3.5	3.7	4.6	0.8	1.2	4.3	52.1	46.6	70.2	70.1
Dyna-Gro Seed S48XF35	2.9	1.4	2.0	0.4	3.0	3.5	0.0	1.1	1.2	1.5	0.3	1.8	3.3	3.5	1.9	2.6	0.7	1.5	3.3	54.8	42.4	75.8	72.5
Dyna-Gro Seed S49XF43S	3.7	1.6	2.5	0.4	2.6	1.0	0.0	0.8	1.4	1.5	0.5	2.0	3.3	3.5	2.0	2.4	1.4	1.5	3.8	56.2	43.3	71.8	76.1
Integra XF4875S	3.7	1.7	2.2	0.2	3.0	1.0	0.0	1.4	1.0	1.5	0.4	2.8	3.0	4.0	1.6	1.1	0.8	1.7	3.5	64.0	41.5	65.7	72.5
Integra XF49I4S	3.1	1.2	2.7	0.2	2.5	1.3	0.0	0.6	1.6	1.5	0.0	2.8	2.3	4.0	2.0	3.9	1.1	1.0	3.8	59.8	46.8	71.8	71.6
Pioneer P48Z73E	4.2	1.2	2.7	0.4	2.6	1.0	0.0	1.2	1.4	1.9	0.6	2.8	4.0	3.5	2.5	2.4	3.5	2.0	2.8	64.5	46.9	78.5	75.9
Pioneer P49Z02E	3.6	1.2	2.7	0.4	2.8	4.0	0.0	1.1	1.4	1.2	0.3	2.0	4.0	4.0	1.2	1.7	1.1	3.0	3.3	55.6	43.5	65.8	73.1
Progeny 4824XF	3.9	1.4	2.7	1.2	2.5	2.5	0.0	1.1	1.9	1.7	0.9	2.3	3.5	3.5	1.8	2.7	1.4	1.2	4.3	59.1	42.6	74.8	71.9
Progeny 4842XFS	2.0	1.6	2.5	0.2	2.9	3.3	0.0	0.4	1.7	1.7	0.3	2.0	4.0	4.3	1.4	2.5	1.1	1.5	3.0	56.1	43.5	69.4	67.3
Progeny 4848XF	3.2	1.4	3.0	0.6	3.3	6.8	0.0	1.0	1.4	1.7	0.5	2.3	4.3	4.0	1.6	3.6	0.7	2.0	3.0	51.7	44.8	72.6	67.8
Progeny 4947XFS	2.9	1.2	2.5	0.2	3.0	1.0	0.0	1.5	2.0	1.7	0.0	2.3	2.5	3.5	1.2	1.7	0.2	1.2	3.5	60.0	46.2	69.4	62.3
Progeny 4999E3S	4.0	1.2	3.1	0.7	3.0	5.5	0.0	2.4	1.9	2.5	0.3	2.3	4.0	4.0	1.6	2.1	2.4	1.7	3.3	57.2	42.9	75.5	78.5
Syngenta NK49-N7XF	2.3	1.4	2.7	0.2	2.8	1.0	0.0	1.5	1.2	1.2	0.0	2.3	5.3	4.5	2.8	4.9	0.4	2.0	4.0	58.1	44.4	64.0	67.3

Table 3C: MG 4.8-4.9 Abiotic/Biotic Stress Tolerance (With and Without Fungicide). (cont.)

Variety	Dean Lee Green Stem ¹	Central Station FE Fungicide ^{2dt} AL	Central Station FE Untreated ^{2dt} AL	Dean Lee FE Fungicide ^{2dt} AS	Dean Lee FE Untreated ²	Macon Ridge FE ²	Dean Lee AB Fungicide ³	Dean Lee AB Untreated ^{3dt} AS	Central Station TS Fungicide ^{4dt} AL	Central Station TS Untreated ^{4dt} AS	Dean Lee TS Fungicide ⁴	Dean Lee TS Untreated ⁴	Dean Lee CLB Fungicide ⁵	Dean Lee CLB Untreated ⁵	Macon Ridge CLB ^{5dt} AL	Macon Ridge TRD ^{6dt} AS	Macon Ridge PSS ^{7dt} AS	Macon Ridge Seed Quality ^{8dt} AS	Northeast Flood ⁹	Dean Lee Yield Fungicide ¹⁰	Dean Lee Yield Untreated ¹¹	Central Station Yield Fungicide ¹²	Central Station Yield Untreated ¹³
Syngenta NK49-U9E3S	4.3	1.7	3.0	0.6	3.8	1.0	0.0	0.8	2.0	1.5	0.8	2.5	4.3	4.5	3.2	1.3	5.5	3.2	3.8	55.9	46.1	70.2	74.4
University of Missouri S21-15672	-	1.4	3.2	-	-	-	-	-	1.6	1.7	-	-	-	-	-	-	-	-	2.8	-	-	60.2	68.8
University of Missouri S21-20065	-	1.7	2.7	-	-	-	-	-	1.0	1.5	-	-	-	-	-	-	-	-	2.5	-	-	67.2	74.3
University of Missouri S21-7836	-	1.7	2.7	-	-	-	-	-	1.6	1.2	-	-	-	-	-	-	-	-	3.0	-	-	68.0	68.8
Winfield United Armor 47-F66S	3.3	1.6	2.0	0.2	2.6	1.0	0.0	0.5	1.9	2.2	0.5	2.0	3.3	3.5	3.2	5.6	1.8	1.2	3.3	62.8	43.5	74.3	73.4
Winfield United Armor 48-F55S	3.4	1.0	3.0	0.2	2.4	1.0	0.0	0.4	1.2	1.5	0.3	2.4	2.8	3.8	1.7	2.4	0.0	1.2	3.0	65.4	47.0	70.7	73.3
Grand Mean	3.3	0.40 ^t	0.56 ^t	0.94 ^t	2.8	2.2	0.0	1.237 ^t	0.41 ^t	1.43 ^t	0.4	2.3	3.5	3.8	0.45 ^t	1.81 ^t	1.25 ^t	1.45 ^t	3.4	59.0	44.7	70.7	72.2
LSD P=0.05	0.9	0.79-0.91	0.78-0.87	0.81-0.88	0.8	0.6	-	1.262-1.479	0.81-0.91	0.84-0.91	0.8	0.9	0.7	0.9	0.79-1.32	2.73-3.35	1.21-2.37	0.52-0.72	0.9	71	8.3	7.0	8.7
Standard Deviation	0.6	0.10 ^t	0.07 ^t	0.28 ^t	0.6	0.5	0.0	0.366 ^t	0.11 ^t	0.20 ^t	0.5	0.7	0.5	0.6	0.10 ^t	0.58 ^t	0.39 ^t	0.14 ^t	0.6	5.0	5.9	5.0	6.2
CV	19.2	25.91 ^t	12.67 ^t	29.54 ^t	20.6	20.4	0.0	29.56 ^t	25.95 ^t	14.24 ^t	140.6	29.0	15.2	16.5	22.56 ^t	31.77 ^t	30.92 ^t	9.65 ^t	18.4	8.5	13.2	7.0	8.6

¹Green stem (0-5 scale); 0=no plants with symptoms; 3=36%-65% plants with symptoms; 5=91%-100% plants with symptoms.²Frogeye Leaf Spot (FE) (0-9 scale); 0=no damage; 9=all plants are dead.³Aerial Blight (AB) (0-9 scale); 0=no disease; 9=completely defoliated.⁴Target Spot (TS) (0-9 scale); 0=no disease; 9=completely defoliated.⁵Cercospora Leaf Blight (CLB) (0-9 scale); 0=no disease; 5=20-40% foliar symptoms/20% defoliation; 9=completely defoliated.⁶Top Root Decline (TRD) (# of plants with symptoms per row with a 20-ft row and 8 seed/ft).⁷Purple Seed Stain (PSS) (0%-100% scale); 0%=no PSS; 100%=complete seed coverage of PSS.⁸Seed quality (1-5 scale); 1=excellent quality; 5=poor quality.⁹Flood resistant specialized OVT plots conducted at the Northeast Research Station. (1-5 scale); 1=healthy plants; 5=all plants are dead.¹⁰Yield (bu/A) for four-row OVT plots at the Dean Lee Research Station with a fungicide application (Revylak 5.5 oz/A with a non ionic surfactant at 0.25% applied at the R3-R4 growth stage).¹¹Yield (bu/A) for two-row OVT plots at the Dean Lee Research Station without a fungicide application.¹²Yield (bu/A) for four-row OVT plots at the Central Station with a fungicide application (Revylak 5.5 oz/A with a non ionic surfactant at 0.25% applied at the R3-R4 growth stage).¹³Yield (bu/A) for two-row OVT plots at the Central Station without a fungicide application.¹⁴Means are reported in de-transformed data units.¹⁵Mean descriptions are reported in transformed data units and are not de-transformed.

AL = Performed log transformation, LOG(x+1), on Summary Reports.

AS = Performed square root transformation, SQRT(x+0.5), on Summary Reports.

Table 4A. Maturity Group 5.0-5.3 Soybean OVT Yield Data.

Variety	Central Station	Dean Lee	Iberia	Macon Ridge	Northeast ¹	Northeast ¹	Red River	Rice Station	2025 Average ²	2-Year Average	3-Year Average
Pioneer P50Z95E	72.1	61.1	14.8	72.8	51.2	57.9	51.9	46.6	53.5	-	-
Pioneer P51Z31SE	72.1	68.7	31.0	62.2	44.3	60.6	68.0	43.9	56.3	-	-
Progeny 5056XFS	67.3	50.7	17.5	67.1	45.8	56.7	58.6	46.0	51.2	43.8	42.8
Syngenta NK52-M2XFS	74.8	62.8	14.1	72.6	49.6	62.6	76.3	48.1	57.6	-	-
Location Average	71.5	61.2	21.6	68.7	48.0	59.2	62.4	46.0	-	-	-
Soil Type	Cancienne silt loam	Coushatta silt loam	Baldwin silty clay	Gigger-Gilbert complex	sharkey clay	silt loam	Caplis very fine sandy loam	Crowley silt loam	-	-	-
LSD P=0.05	NS	NS	6.7	5.1	3.2	NS	10.2	NS	-	-	-
Standard Deviation	3.9	4.8	3.4	3.2	2.0	4.1	5.6	3.5	-	-	-
CV	5.4	7.9	15.8	4.6	4.1	6.9	9.0	7.7	-	-	-

The 2025 OVT Trial was planted at these LSU AgCenter research stations: Central Station, Baton Rouge; Dean Lee, Alexandria; Iberia, Jeanerette; Macon Ridge, Winnsboro; Northeast, St. Joseph; Red River, Bossier City; and Rice Station, Crowley.

All yields are expressed in bushels per acre and adjusted to 13% moisture.

NS - Not significant.

Bold- Highest yielding (P=0.05) at this location in 2025.

¹Northeast locations had two different soil types (silt loam and sharkey clay).

²Variety average from seven research stations and eight locations.

Table 4B. MG 5.0-5.3 Agronomic Data.

Variety	Dean Lee Maturity ¹	Iberia Maturity ²	Red River Maturity ²	Rice Station Maturity ²	Dean Lee Height ³	Iberia Height ³	Red River Height ³	Rice Station Height ³	Dean Lee Lodging ⁴	Red River Lodging ⁴	Dean Lee Shattering ⁵
Pioneer P50Z95E	130	145	131	110	32	39	36	28	1	2	1
Pioneer P51Z31SE	130	144	134	110	22	25	24	18	1	1	1
Progeny 5056XFS	131	145	132	110	33	44	38	29	2	1	1
Syngenta NK52-M2XFS	131	146	130	110	31	38	35	28	1	2	1

¹R7 Date (One pod with the mature color; Prior to desiccation; Days after planting).

²Maturity (R8 - 95% brown pods; Days after planting).

³Plant height at R8 in inches.

⁴Lodging (1-5): 1=almost all plants erect; 5=all plants down.

⁵Shattering (1-5): 1=no shattering; 5=all seeds on the ground.

Table 4C: MG 5.0-5.3 Abiotic/Biotic Stress Tolerance (With and Without Fungicide).

Variety	Dean Lee Green Stem ¹	Central Station FE Fungicide ²	Central Station FE Untreated ²	Dean Lee FE Fungicide ²	Dean Lee FE Untreated ²	Dean Lee FE Fungicide ²	Dean Lee FE Untreated ²	Macon Ridge FE ^{2dt} AL	Dean Lee AB Fungicide ³	Dean Lee AB Untreated ³	Central Station TS Fungicide ⁴	Central Station TS Untreated ^{4dt} AS	Dean Lee TS Fungicide ⁴	Dean Lee TS Untreated ⁴	Dean Lee CLB Fungicide ⁵	Dean Lee CLB Untreated ⁵	Macon Ridge CLB ⁵	Macon Ridge TRD ⁶	Macon Ridge PSS ⁷	Macon Ridge Seed Quality ⁸	Northeast Flood ⁹	Dean Lee Yield Fungicide ¹⁰	Dean Lee Yield Untreated ¹¹	Central Station Yield Fungicide ^{12dt} AA	Central Station Yield Untreated ¹³
Pioneer P50Z95E	4.6	1.0	2.5	3.0	3.0	3.0	3.0	1.9	1.9	2.0	0.8	1.7	2.0	1.9	4.0	4.0	2.5	0.5	2.5	2.0	3.5	61.1	46.5	72.1	74.5
Pioneer P51Z31SE	3.1	1.5	2.5	3.3	3.3	3.3	3.3	1.0	3.0	2.5	0.8	2.2	2.5	3.0	3.3	3.3	1.8	0.8	0.0	1.0	3.5	68.7	42.9	72.2	75.9
Progeny 5056XFS	3.9	1.0	2.3	3.1	3.1	3.1	3.1	1.9	2.5	2.0	0.5	1.7	2.0	2.5	3.5	3.5	3.3	0.5	1.3	2.0	4.8	50.7	44.7	67.4	82.3
Syngenta NK52-M2XFS	3.3	1.6	2.5	3.3	3.3	3.3	3.3	1.0	1.5	1.8	0.8	2.0	1.8	1.5	3.8	3.8	3.3	0.3	2.5	1.8	4.5	62.8	47.4	74.8	77.9
Location Average	3.6	1.3	2.4	3.2	3.2	3.2	3.2	0.38 ^t	2.2	2.1	0.7	1.54 ^t	2.1	2.2	3.6	3.6	2.7	0.5	1.6	1.7	4.1	61.2	45.4	57.840 ^t	77.68
LSD P=0.05	0.8	NS	NS	NS	NS	NS	NS	0.83 - 0.86	NS	NS	NS	NS	NS	NS	NS	NS	0.9	NS	1.7	0.4	NS	NS	NS	NS	NS
Standard Deviation	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.09 ^t	0.7	1.0	0.6	0.29 ^t	1.0	0.7	0.8	0.8	0.5	0.6	1.1	0.3	0.9	4.8	6.2	2.422 ^t	3.58
CV	13.7	46.1	19.6	11.9	11.9	11.9	11.9	24.68 ^t	31.5	49.0	84.9	18.74 ^t	49.0	31.5	21.1	21.1	19.9	115.5	67.7	14.8	21.0	7.9	13.6	4.19 ^t	4.60

NS - Not significant.

¹Green stem (0-5 scale): 0=no plants with symptoms; 3=36%-65% plants with symptoms; 5=91%-100% plants with symptoms.

²Frogeye Leaf Spot (FE) (0-9 scale): 0=no damage; 9=all plants are dead.

³Aerial Blight (AB) (0-9 scale): 0=no disease; 9=completely defoliated.

⁴Target Spot (TS) (0-9 scale): 0=no disease; 9=completely defoliated.

⁵Cercospora Leaf Blight (CLB) (0-9 scale): 0=no disease; 5=20-40% foliar symptoms/20% defoliation; 9=completely defoliated.

⁶Top Root Decline (TRD) (# of plants with symptoms per row with a 20-ft row and 8 seed/ft).

⁷Purple Seed Stain (PSS) (0%-100% scale): 0%=no PSS; 100%=complete seed coverage of PSS.

⁸Seed quality (1-5 scale): 1=excellent quality; 5=poor quality.

⁹Flood resistant specialized OVT plots conducted at the Northeast Research Station. (1-5 scale): 1=healthy plants; 5=all plants are dead.

¹⁰Yield (bu/A) for four-row OVT plots at the Dean Lee Research Station with a fungicide application (Revylok 5.5 oz/A with a non ionic surfactant at 0.25% applied at the R3-R4 growth stage).

¹¹Yield (bu/A) for two-row OVT plots at the Dean Lee Research Station without a fungicide application.

¹²Yield (bu/A) for four-row OVT plots at the Central Station with a fungicide application (Revylok 5.5 oz/A with a non ionic surfactant at 0.25% applied at the R3-R4 growth stage).

¹³Yield (bu/A) for two-row OVT plots at the Central Station without a fungicide application.

¹⁴Means are reported in de-transformed data units.

¹⁵Mean descriptions are reported in transformed data units and are not de-transformed.

AA = Performed arcsine square root percent transformation, arcsin(SQRT(x/100)), on Summary Reports.

AL = Performed log transformation, LOG(x+1), on Summary Reports.

AS = Performed square root transformation, SQRT(x+0.5), on Summary Reports.

Table 5A. Maturity Group 5.4-5.7 Soybean OVT Yield Data.

Variety	Central Station	Dean Lee	Iberia	Macon Ridge	Northeast ¹	Northeast ¹	Red River	Rice Station	2025 Average ²	2-Year Average	3-Year Average
Bayer AG54XF5	70.9	62.1	16.2	60.3	44.5	52.5	60.2	45.3	51.5	43.7	-
Bayer AG54XF6	75.7	65.2	13.6	70.5	46.8	59.5	72.6	46.3	56.3		-
Bayer AG55XF5	69.4	66.2	25.0	66.6	46.6	56.9	67.1	44.8	55.3	45.7	-
Delta Grow Seed Company DG 55XF23	51.7	62.5	19.1	44.9	35.5	42.8	83.9	42.9	47.9	39.6	39.3
Dyna-Gro Seed S55XF95	72.4	66.2	14.8	73.1	45.7	55.7	59.0	44.1	53.9	45.6	-
Pioneer P56Z22E	60.3	69.0	20.6	57.6	44.2	49.4	84.8	41.0	53.4	-	-
Progeny 5751XFS	59.4	61.0	16.7	44.1	35.7	40.6	75.7	44.5	47.2	41.5	40.8
Location Average	66.4	64.8	18.1	60.5	42.4	51.1	71.9	44.0	-	-	-
Soil Type	Cancienne silt loam	Coushatta silt loam	Baldwin silty clay	Gigger-Gilbert complex	sharkey clay	silt loam	Caplis very fine sandy loam	Crowley silt loam	-	-	-
LSD P=0.05	6.6	NS	6.6	5.9	3.2	3.8	13.5	NS	-	-	-
Standard Deviation	4.4	6.0	4.3	3.9	2.1	2.6	8.9	2.8	-	-	-
CV	6.6	9.2	23.9	6.4	5.0	5.0	12.4	6.4	-	-	-

The 2025 OVT Trial was planted at these LSU AgCenter research stations: Central Station, Baton Rouge; Dean Lee, Alexandria; Iberia, Jeanerette; Macon Ridge, Winnsboro; Northeast, St. Joseph; Red River, Bossier City; and Rice Station, Crowley.

All yields are expressed in bushels per acre and adjusted to 13% moisture.

NS - Not significant.

Bold - Highest yielding (P=0.05) at this location in 2025.

¹Northeast locations had two different soil types (silt loam and sharkey clay).

²Variety average from seven research stations and eight locations.

Table 5B. MG 5.4-5.7 Agronomic Data.

Variety	Dean Lee Maturity ¹	Iberia Maturity ²	Red River Maturity ²	Rice Station Maturity ²	Dean Lee Height ³	Iberia Height ³	Red River Height ³	Rice Station Height ³	Dean Lee Lodging ⁴	Red River Lodging ⁴	Dean Lee Shattering ⁵
Bayer AG54XF5	130	141	143	109	23	28	23	29	1	1	1
Bayer AG54XF6	130	143	146	110	24	27	25	25	1	1	1
Bayer AG55XF5	130	141	144	110	24	30	28	26	1	1	1
Delta Grow Seed Company DG 55XF23	147	147	145	115	20	24	27	22	1	1	1
Dyna-Gro Seed S55XF95	130	144	146	110	25	26	27	24	1	1	1
Pioneer P56Z22E	135	143	144	110	23	26	25	24	1	1	1
Progeny 5751XFS	149	146	145	115	21	21	26	22	1	1	1

¹R7 Date (One pod with the mature color; Prior to desiccation; Days after planting).

²Maturity (R8 - 95% brown pods; Days after planting).

³Plant height at R8 in inches.

⁴Lodging (1-5): 1=almost all plants erect; 5=all plants down.

⁵Shattering (1-5): 1=no shattering; 5=all seeds on the ground.

Table 5C: MG 5.4-5.7 Abiotic/Biotic Stress Tolerance (With and Without Fungicide).

Variety	Dean Lee Green Stem ¹	Central Station FE Fungicide ²	Central Station FE Untreated ²	Dean Lee FE Fungicide ²	Dean Lee FE Untreated ²	Macon Ridge FE ²	Dean Lee AB Fungicide ³	Dean Lee AB Untreated ³	Central Station TS Fungicide ⁴ ER3	Central Station TS Untreated ⁴	Dean Lee TS Fungicide ⁴	Dean Lee TS Untreated ⁴	Dean Lee CLB Fungicide ⁵	Dean Lee CLB Untreated ⁵	Macon Ridge CLB ⁵	Macon Ridge TRD ⁶	Macon Ridge PSS ^{7dt} AL	Macon Ridge Seed Quality ⁸	Northeast Flood ⁹	Dean Lee Yield Fungicide ¹⁰	Dean Lee Yield Untreated ¹¹	Central Station Yield Fungicide ¹²	Central Station Yield Untreated ¹³
Bayer AG54XF5	2.5	1.8	2.8	0.8	2.8	4.0	0.0	1.5	0.7	1.5	0.3	2.8	4.0	3.5	3.8	2.3	0.0	1.0	2.5	62.1	46.6	70.9	71.8
Bayer AG54XF6	3.9	1.5	3.0	1.0	2.6	1.0	0.0	1.6	0.7	1.3	0.5	2.5	3.0	3.8	2.5	1.0	0.0	1.0	2.3	65.2	50.7	75.7	82.9
Bayer AG55XF5	4.3	1.0	3.5	0.0	3.5	1.0	0.0	1.5	0.3	1.5	0.3	3.3	3.0	3.5	3.8	1.3	0.2	1.0	2.8	66.2	57.2	69.4	81.2
Delta Grow Seed Company DG 55XF23	3.3	1.8	3.3	1.1	3.3	5.0	0.0	1.3	0.0	2.0	0.3	2.5	2.5	3.3	2.0	1.0	0.0	1.0	3.5	62.5	43.9	51.7	53.9
Dyna-Gro Seed S55XF95	4.3	1.3	2.5	1.0	2.8	1.0	0.0	1.8	0.7	1.5	0.5	2.0	3.3	3.8	4.0	5.5	0.2	1.0	2.5	66.2	49.8	72.4	74.4
Pioneer P56Z22E	4.0	1.8	2.8	0.5	2.9	1.0	0.0	1.4	0.3	1.8	0.3	2.5	2.3	3.0	1.0	1.5	0.2	2.3	3.0	69.0	63.6	55.9	69.3
Progeny 575tXFS	3.1	1.3	2.8	0.8	3.5	4.3	0.0	1.8	0.7	1.3	0.9	3.0	2.3	3.0	3.3	3.3	0.0	1.0	4.3	61.0	54.9	58.2	50.5
Location Average	3.6	1.5	2.9	0.7	3.0	2.5	0.0	1.5	0.5	1.5	0.4	2.6	2.9	3.4	2.9	2.3	0.03 ⁱ	1.2	3.0	64.8	51.7	65.3	69.1
LSD P=0.05	0.7	NS	NS	0.6	NS	0.3	NS	NS	NS	NS	NS	NS	0.7	NS	0.6	2.5	NS	0.3	1.1	NS	9.2	7.3	5.4
Standard Deviation	0.5	0.5	0.8	0.4	0.7	0.2	0.0	0.9	0.6	0.6	0.5	0.6	0.5	0.6	0.4	1.7	0.10 ⁱ	0.2	0.7	6.0	6.1	4.9	3.6
CV	13.3	33.6	25.8	51.1	23.8	7.7	0.0	60.5	119.8	40.2	126.7	22.0	16.9	18.4	14.4	73.5	322.03 ⁱ	16.0	24.0	9.2	11.9	7.5	5.2

NS - Not significant.

¹Green stem (0-5 scale): 0=no plants with symptoms; 3=36%-65% plants with symptoms; 5=91%-100% plants with symptoms.²Frogeye Leaf Spot (FE) (0-9 scale): 0=no damage; 9=all plants are dead.³Aerial Blight (AB) (0-9 scale): 0=no disease; 9=completely defoliated.⁴Target Spot (TS) (0-9 scale): 0=no disease; 9=completely defoliated.⁵Cercospora Leaf Blight (CLB) (0-9 scale): 0=no disease; 5=20%-40% foliar symptoms/20% defoliation; 9=completely defoliated.⁶Tap Root Decline (TRD) (# of plants with symptoms per row with a 20-ft row and 8 seed/ft).⁷Purple Seed Stain (PSS) (0%-100% scale): 0%=no PSS; 100%=complete seed coverage of PSS.⁸Seed quality (1-5 scale): 1=excellent quality; 5=poor quality.⁹Flood resistant specialized OVT plots conducted at the Northeast Research Station. (1-5 scale): 1=healthy plants; 5=all plants are dead.¹⁰Yield (bu/A) for four-row OVT plots at the Dean Lee Research Station with a fungicide application (Revolok 5.5 oz/A with a non ionic surfactant at 0.25% applied at the R3-R4 growth stage).¹¹Yield (bu/A) for two-row OVT plots at the Dean Lee Research Station without a fungicide application.¹²Yield (bu/A) for four-row OVT plots at the Central Station with a fungicide application (Revolok 5.5 oz/A with a non ionic surfactant at 0.25% applied at the R3-R4 growth stage).¹³Yield (bu/A) for two-row OVT plots at the Central Station without a fungicide application.ⁱMeans are reported in de-transformed data units.[†]Mean descriptions are reported in transformed data units and are not de-transformed.

AL = Performed log transformation, LOG(x+1), on Summary Reports.

ER3 = Excluded replicate 3.

Table 6A. Summary of 2025 On-Farm MG 4.0-4.3 Soybean Core-Block Demonstrations at Five Locations.

Variety	Acadia	Bossier 1	East Baton Rouge	Franklin 1	Rapides
Bayer AG40XF5	42.9	21.9	57.9	49.3	57.0
Bayer AG43XF5	45.9	41.6	60.9	51.4	55.5
Delta Grow Seed Company DG 43XF65STS	50.4	29.8	65.7	52.4	59.2
Pioneer P42A84E	49.6	28.2	77.0	56.4	61.8
Pioneer P43Z44SE	49.3	29.1	82.8	38.2	72.1
Location Average	47.6	30.1	68.9	49.5	61.1
Soil Type	Crowley silt loam	Caplis very fine sandy loam	Cancienne silt loam	Gigger-Gilbert complex	Coushatta silt loam
Planting Date	6/6/25	5/16/25	5/20/25	5/14/25	4/29/25

All yields are expressed in bushels per acre and adjusted to 13% moisture.

Table 6B. Summary of 2025 On-Farm MG4.5-4.9 Soybean Core-Block Demonstrations at 13 Locations.

Variety	Acadia	Avoyelles	Beauregard	Bossier 1	Bossier 2	East Baton Rouge	Franklin 1	Franklin 2	Grant	Rapides	Richland	St. Landry	West Carroll
Bayer AG48XF5	55.4	27.8	81.1	63.2	29.9	75.8	56.0	82.1	90.2	62.1	69.4	44.3	51.8
Bayer AG49XF4	52.5	18.5	73.1	51.6	31.7	67.5	58.1	68.5	82.5	57.9	75.8	58.9	51.6
Delta Grow Seed Company DG 48XF70STS	52.3	24.7	73.6	37.9	36.3	62.3	53.2	83.2	82.2	53.9	65.9	49.3	49.1
Erwin-Keith, Inc./ Progeny Ag Progeny 4623XF	54.7	17.0	70.1	40.3	32.6	82.3	53.0	72.6	93.7	58.3	73.5	40.1	52.5
Erwin-Keith, Inc./ Progeny Ag Progeny 4947XFS	52.8	18.5	67.2	45.8	41.0	45.7	56.9	75.6	80.9	55.6	67.5	57.8	49.4
Gateway Seed 457XFS	52.4	23.5	67.5	45.3	35.3	57.8	57.6	79.0	97.5	60.5	71.2	41.7	50.4
Gateway Seed 487XFS	50.0	23.3	64.0	33.3	38.9	43.4	50.5	78.2	85.6	54.5	74.0	48.9	50.0
Pioneer P45Z75E	54.5	17.2	81.0	36.4	30.7	82.5	53.2	80.9	84.3	60.9	78.1	44.0	54.7
Pioneer P49Z02E	51.7	21.1	-	32.3	34.7	75.9	49.1	84.7	85.3	55.4	71.7	55.4	53.2
Syngenta - NK NK47-U1XFS	-	22.0	87.4	34.3	-	84.2	49.5	91.6	-	51.6	76.1	38.1	59.9
Syngenta - NK NK49-N7XF	-	18.5	74.6	32.6	-	73.9	51.4	58.5	-	51.5	68.7	43.6	55.1
Location Average	52.9	21.1	74.0	41.2	34.6	68.3	53.5	77.7	86.9	56.6	72.0	47.5	52.5
Soil Type	Crowley silt loam	Coushatta silt loam	sandy loam	Caplis very fine sandy loam	Caplis very fine sandy loam	Cancienne silt loam	Gigger-Gilbert complex	Gilbert-Gigger-Egypt	Coushatta silty clay loam/silt loam	Coushatta silt loam	mixed clay	clay loam	Forestdale
Planting Date	6/6/25	5/15/25	4/16/25	5/16/25	5/16/25	5/20/25	5/14/25	4/11/25	4/15/25	4/29/25	4/30/25	5/16/25	4/30/25

All yields are expressed in bushels per acre and adjusted to 13% moisture.

Table 6C. Summary of 2025 On-Farm MG 5.0-5.6 Soybean Core-Block Demonstrations at Eight Locations.

Variety	Acadia	Avoyelles	Bossier 1	East Baton Rouge	Evangeline	Franklin 1	Pointe Coupee	Rapides
Bayer AG50XF5	47.8	31.4	46.0	75.0	63.4	47.8	45.3	57.2
Bayer AG54XF5	48.7	35.1	51.0	67.4	60.4	48.1	38.2	70.0
Delta Grow Seed Company DG 55XF23	43.2	23.6	52.5	62.7	26.8	42.0	28.1	48.4
Pioneer P51Z31SE	49.0	36.9	52.0	75.0	53.7	47.3	-	57.9
Pioneer P56Z22E	44.2	31.9	49.7	72.9	48.0	45.4	-	57.9
Location Average	46.6	31.8	50.2	70.6	50.4	46.1	37.2	58.3
Soil Type	Crowley silt loam	Coushatta silt loam	Caplis very fine sandy loam	Cancienne silt loam	silt loam	Gigger-Gilbert complex	sharkey clay	Coushatta silt loam
Planting Date	6/6/25	5/15/25	5/16/25	5/20/25	4/23/25	5/14/25	5/23/25	4/29/25

All yields are expressed in bushels per acre and adjusted to 13% moisture.

Table 7. Summary of 2025 Conventional Soybean On-Farm Demonstration.

Variety	MG	Bossier	Franklin 1	Franklin 2
Bayer AG43XF5	4.3	30.3	55.9	68.6
University of Arkansas R18C-13665	4.6	28.5	54.0	66.8
University of Arkansas R19C-1012	4.4	30.0	59.4	51.7
Location Average		29.6	56.4	62.4
Soil Type		Caplis very fine sandy loam	Gigger-Gilbert complex	Gigger-Gilbert complex
Planting Date		5/6/25	5/14/25	5/14/25

All yields are expressed in bushels per acre and adjusted to 13% moisture.

Table 8. Soybean Variety Performance in a Root-Knot Nematode Infested Field at the Red River Research Station.

Variety	Root-Knot Nematode Density in Soil (#/500 cm ³ of soil) ¹	Root Gall Index Rating (0 - 5 scale) ¹	Nematode Egg Production (#/plant) ¹	Yield (bu/A) ²
PROGENY 4724XFS	4,400	1.6	18,944	22.4 c
AG46XF3 (Root-knot nematode susceptible variety)	4,240	1.5	11,084	23.8 bc
NK50-W4E3S	8,400	1.8	16,840	33.2 abc
NK52-M2XFS	8,240	2.3	18,704	35.1 ab
AG52XF5	11,440	2.2	23,268	36.1 ab
AG54XF5	9,600	1.7	9,168	31.7 abc
AG55XF5	15,040	1.5	11,584	44.0 a
PROGENY 5751XFS	16,960	2.2	78,240	39.1 a
<i>P</i> -value	0.292	0.589	0.086	0.024

¹Assessed at harvest.

²Yields with the same letter are not significantly different (*P*=0.05).

Table 9. Soybean Variety Performance in a Reniform Nematode Infested Field at the Northeast Research Station.

Variety	Reniform Nematode Density in Soil (#/500 cm ³ of soil) ^{1,2}	Yield (bu/A) ²
PROGENY 4724XFS	6,920 bc	66.4 bc
AG46XF3	7,640 bc	85.2 a
NK50-W4E3S	14,640 a	86.2 a
NK52-M2XFS	11,000 ab	92.5 a
AG52XF5	10,280 ab	79.6 ab
AG54XF5	2,640 cd	92.5 a
AG55XF5	1,680 d	84.9 a
PROGENY 5751XFS	4,920 cd	63.0 c
P-value	<0.001	0.004

¹Assessed at harvest.

²Nematode densities and yields with the same letter are not significantly different (P=0.05).

Table 10. Greenhouse Screening of 2025 Soybean Core-Block Varieties for Resistance to Aerial Blight.

Variety	Disease severity estimate	Statistical group	Comments
AG48XF5	20	a	Susceptible
NK47-U1XFS	20.5	a	Susceptible
AG50XF5	21.5	a	Susceptible
AG49XF4	22.5	a	Susceptible
P43Z44SE	23	a	Susceptible
DP3589	24	a	Check
NK49-N7XF	26	a	Susceptible
Progeny 4623XF	27	a	Susceptible
P56Z22E	34	a	Susceptible
AG40XF5	34	a	Susceptible
457XFS	34.5	a	Susceptible
P51Z31SE	35.5	a	Susceptible
P42A84E	36.5	a	Susceptible
AG54XF5	39.5	a	Susceptible
AG43XF5	41.5	a	Susceptible
DG 55XF23	42.5	a	Susceptible
487XFS	43	a	Susceptible
P49Z02E	46.5	a	Susceptible
P45Z75E	48	a	Susceptible
DG 43XF65STS	49.5	a	Susceptible
DG 48XF70STS	52.5	a	Susceptible
Progeny 4947XFS	52.5	a	Susceptible

2025 core block varieties were screened for resistance to aerial blight in two greenhouse trials. Trials did not differ statistically and have been combined here for easy interpretation.

Disease severity estimates were calculated by using a disease rating scale every 2-3 days (starting approximately 1 week after artificial inoculation) and combined over the entire trial period (25 days after inoculation). Disease ratings were conducted using a 0-9 rating scale where 0 was no symptoms and 9 was severe infection on all nodes.

Variety DP3589 (in bold) was not part of the 2025 core block and was included as a resistant check.

The varieties did not differ from each other (varieties followed by the same letter were not statistically different) and are conservatively labeled as susceptible to aerial blight.

Note: It is currently unknown whether resistance/susceptibility in greenhouse studies translates well into the field.

AUTHORS

David Moseley

Assistant Professor
Dean Lee Research Station

Boyd Padgett

Professor
Dean Lee Research Station

Trey Price

Associate Professor
Macon Ridge Research Station

Manoch Kongchum

Associate Professor
H. Rouse Caffey Rice Research Station

Stephen Ippolito

Assistant Professor
Dean Lee Research Station

Leandro Vieira

Assistant Professor
School of Plant, Environmental and
Soil Sciences

James Villegas

Assistant Professor
Dean Lee Research Station

Dawson Kerns

Assistant Professor
Macon Ridge Research Station

Tristan Watson

Assistant Professor
Department of Plant Pathology and
Crop Physiology

Sara Thomas-Sharma

Associate Professor
Plant Pathology and Crop Physiology

Christopher Roider

Research Associate
Central Region Station

Greg Williams

Research Associate
Iberia Research Station

Russell Anderson

Research Associate
Red River Research Station

Bill Waltman

Research Associate
Red River Research Station

James Leonards

Research Associate
H. Rouse Caffey Rice Research Station

Jacob Fluitt

Research Associate
H. Rouse Caffey Rice Research Station

Tashia Monaghan

Research Associate
Dean Lee Research Station

Katarzyna Fic

Research Associate
Dean Lee Research Station

Myra Purvis

Research Associate
Macon Ridge Research Station

Dustin Ezell

Research Associate
Macon Ridge Research Station

Brady McKay

Research Associate
Macon Ridge Research Station

Warren Ratcliff

Research Associate
Northeast Research Station

Bruce Garner

Parish Agent – West Carroll

Mark Carriere

Parish Agent – Pointe Coupee

Vince Deshotel

Parish Agent – St. Landry

Justin Dufour

Parish Agent – Avoyelles

Carol Pinnell-Alison

Parish Agent – Franklin

Nate Jennings

Parish Agent – Richland

Mike Laveregne

Parish Agent – Beauregard

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



Visit our website:
www.LSUAgCenter.com

P2269 (1,806) 1/26 REV.

The LSU AgCenter and LSU provide equal opportunities in programs and employment.