

RESULTS FROM MSPB's 2024 SOYBEAN YIELD CONTEST

Results from MSPB's 2023 soybean yield contest for Mississippi are finalized. These results are divided into categories for Delta Irrigated [14 entrants], Delta dryland [8 entrants], non-Delta irrigated [5 entrants], and non-Delta dryland [10 entrants]. Below is a summary of the results and the practices used to achieve those results for each category.

Delta Irrigated.

- Winning yields [1-3 places] averaged 102.25 bu/acre, with a range of 100.37 to 104.37 bu/acre. Yields of the top 10 entrants in this category were >81.5 bu/acre.
- The top three yields were achieved with varieties from MG's 4.3 to 4.9 [winner] that were planted Apr. 24, 16, and 8, respectively.
- The top-yielding entrant used 38-in.-wide twin rows, whereas the second and third place entrants used a row spacing of 30-in. Row spacing was either 38-in.-wide twin rows or 30 in. for 9 of the 10 entrants with the highest yields.
- All three of the top producers planted treated seed.
- Producers with the top three yields applied irrigation water by the furrow method.
- All three of the top producers applied both a foliar fungicide and insecticide.
- Plant populations at harvest were between 101 and 137 thousand/acre for 9 of the 10 top-yielding entrants.

Delta Dryland.

- The top three yields averaged 70.7 bu/acre, with a range of 78.6 to 65.6 bu/acre from first to third place.
- The top three yields were achieved with varieties from MG's 4.2 to 4.8 [winner] that were planted Apr. 18, 19, and 7, respectively.
- Row spacings used by the top three entrants were 38 in. [winner], 38 in. twin rows, and 30 in.
- Entrants with the top two yields used a seed treatment.
- Plant populations at harvest were 106, 111, and 99 thousand/acre for the first through third place entrants.
- Fall tillage was used by entrants with the top two yields, whereas the third place entrant used a no-till system.

Non-Delta Irrigated.

- The top three yields averaged 78.9 bu/acre, with a range of 75.0 to 84.3 bu/acre.
- The top three yields were achieved with the same MG 4.8 variety.
- Planting dates for entrants with the top three yields were May 7, 2, and 23, respectively.
- Row spacings used for the top three yields were 30 [winner], 30, and 15 in.
- All three of the top yields were achieved with treated seed.
- Irrigation water was applied by the pivot method by entrants with the top three yields.
- Entrants with the three highest yields applied a foliar fungicide and insecticide, plus a desiccant prior to harvest.
- Plant populations at harvest for all entrants ranged from 88 [winner] to 125 thousand/acre.
- Fall tillage was used by the three entrants with the highest yields.

Non-Delta Dryland.

- The top three yields were 104.5, 88.4, and 69.1 bu/acre. Yields of the 10 entrants averaged 68.6 bu/acre.
- The top three yields were achieved with varieties from MG's 4.7 [winner], 4.6, and 4.8 that were planted on Apr. 1 and 24 and May 1, respectively.

- Row spacings used by entrants with the top three yields were 15, 38-in. twin rows, and 30 in.
- Entrants with the first and third place yields planted treated seeds.
- Entrants with the first and third place yields applied a foliar fungicide and insecticide, plus a desiccant prior to harvest..
- The entrant with the top yield used a no-till system, whereas entrants with the second and third highest yields used fall tillage.
- Plant populations at harvest for the top three yields were 106, 116, and 107 thousand/acre, respectively.

Overall Results.

- Click the above link to view a detailed summary of the results from the contest.
- Soybeans grown by three of the four top entrants in the above categories followed corn, whereas the fourth top entrant rotated with cotton. Ten of the 12 top-yielding entrants used a rotation system.
- Most of the top entrants in the above four categories planted treated seed.
- Most of the entrants with the top yields applied a foliar fungicide and insecticide.
- Entrants with the top three yields in each category used MG 4 varieties.
- Planting date of most of the top entrants was in April.
- For all top entrants, plant populations at harvest were generally greater than 100 thousand/acre.

TAKEAWAY MESSAGE

These results support the following for Mississippi soybean growers.

- To achieve maximum soybean yields in Mississippi, growers should be planting treated seed of MG 4 varieties at between 120 and 140 thousand seeds/acre in mid-April in rows no more than 30 in. apart.
- Soybean growers should strive for a harvest plant population of at least 100 thousand/acre.
- In Mississippi, it is apparent that Delta irrigators use the furrow method to irrigate soybeans, whereas non-Delta irrigators use center pivots to apply irrigation water. This is likely related to topographical differences between the two regions of the state.
- No mention of whether or not irrigation water-conserving tools such as Pipe Planner, soil moisture sensors, and/or surge valves were used, but the amount of water applied by winning irrigators indicates that some or all of these tools were used.
- It is likely that the highest soybean yields will be achieved when soybeans are grown in rotation with either corn or cotton. However, individual producers should be aware of pest problems that may be exacerbated when soybeans follow either crop.
- These results provide a good indication of the practices that should be used to grow high-yielding soybeans in Mississippi. However, individual producers should determine if all inputs that these entrants used will in fact be profitable in their environment.

Up-to-date information about all of the inputs used for soybean production in both irrigated and dryland environments is presented in White Papers that are posted on this website.

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**GROW IT
SHOW IT
WIN IT**

MISSISSIPPI SOYBEAN YIELD CHALLENGE

RESULTS & PRODUCTION INFORMATION



MSPB

MISSISSIPPI SOYBEAN PROMOTION BOARD

*The Mississippi Soybean Yield
Challenge is funded and
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Soybean Promotion Board (MSPB).*

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2024 RESULTS

MISSISSIPPI SOYBEAN YIELD CHALLENGE

The Mississippi Soybean Promotion Board established the Grow It. Show It. Win It. Mississippi Soybean Yield Challenge in the 2022 growing season to recognize and reward the top soybean growers in the state while sharing production insights with fellow producers. The inaugural challenge saw 12 completed entries, growing to 30 in 2023 and 37 in 2024. This statewide competition gives Mississippi soybean growers the opportunity to showcase their outstanding production practices in various yield divisions. By participating, growers share their production and management strategies, helping to advance soybean farming across the state.



A special thank you to Mississippi State University Extension Agents for serving as Yield Contest Officials. MSPB sincerely appreciates your help in promoting the yield challenge and certifying the yields.

FOR MORE INFORMATION, VISIT [MSSOY.ORG](https://msoy.org)

2024 YEAR IN REVIEW

The 2024 Mississippi soybean crop is valued at \$1.3 billion, ranking third among the state's agricultural commodities, behind poultry and forestry, according to the latest Mississippi State University agricultural values report. Despite an expected record-tying yield of 56 bushels/acre, matching the 2023 crop, the overall crop value is down 22% due to declining commodity prices, even with similar planted acreage.

The National Agricultural Statistics Service (NASS) weekly crop progress report showed that 2024 planting progressed more quickly than in 2023 and the five-year average. However, the earlier planting exposed crops to highly variable rainfall patterns. While some non-irrigated fields received sufficient rainfall for a successful crop, others faced drought conditions during critical growth stages. Below are the 2024 crop planting progress numbers as released by NASS.

Date	2024 Plant %	2023 Plant %	5-Yr Average
4/1	1	1	1
4/8	7	5	5
4/15	16	18	12
4/22	28	31	23
4/29	52	40	35
5/6	67	57	48
5/13	79	69	60
5/20	86	78	71
5/28	92	86	81
6/25	100	98	98

The NASS weekly crop progress report also tracks harvest progress. As of August 1st, Mississippi had harvested 1% of the potential soybean crop. With favorable weather in September, the 2024 harvest pace matched 2023 but was significantly ahead of the five-year average. Additionally, the timely harvest and minimal rainfall during this period resulted in good seed quality across most areas of the state.

Date	2024 Harvest %	2023 Harvest %	5-Yr Average
8/1	1	1	1
8/26	7	3	2
9/3	17	14	7
9/9	32	24	14
9/16	44	38	24
9/23	57	56	35
9/30	66	67	47
10/7	76	79	60
10/15	84	86	73
10/21	90	93	82
10/28	95	96	88
11/18	100	100	100

WHAT WE LEARNED FROM THE 2024 MISSISSIPPI SOYBEAN YIELD CHALLENGE

- To achieve maximum soybean yields in Mississippi, growers should prioritize planting in April. Results show that April planting consistently outperforms May planting across all regions of the state, benefiting both irrigated and non-irrigated soybean acreage.
- Supplemental water, whether from irrigation or rainfall, is essential for achieving top soybean yields. Results indicate that yields from supplemental water are higher for an April planting date compared to a May planting date. To maximize production, growers should prioritize planting in April, understanding that delayed planting in May will generally result in lower yields most years.
- Soybean maturity group selection significantly impacts yield in Mississippi. Growers should prioritize Maturity Group IV for optimal yields, using Group V only as a last option. The highest yields are consistently achieved with Maturity Group IV soybeans planted in April, regardless of supplemental irrigation.
- A complete seed treatment should be used regardless of the planting date.
- A final plant population of 101,000–109,000 plants per acre is sufficient to achieve top soybean yields. Many growers tend to overplant, but research shows that lower populations within this range can still maximize yield potential while optimizing seed costs.



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DELTA IRRIGATED DIVISION



DIVISION AVERAGES:

Harvest Population: 117,685
Irrigation Inches: 10.7
Rainfall Inches: 12.7
Total Water: 23.3
Bushel/Inch of Water: 3.7
Moisture: 11.8
Yield: 85.5060

1

THOMAS NEBLETT

yield: 104.3678

County: Coahoma
Soil Type: Alligator Clay
Previous Crop: Corn
Tillage: Conventional
Planting Date: 4/24/2024
Row Width: 38" Twin
Planting Population: 133,000
Variety: Agrigold 4910XF
Maturity Group: 4.9
Seed Treatments: Agrishield Plus
Tillage Operations: Fall - mowed corn stalks + Vertical till (2 times) + Bedded and rolled
Irrigation System: Furrow
Irrigation Inches: 7.2
Rainfall Inches: 18.0
Total Water: 25.2

Fertilizer: Broadcast - Delstar Bio K-S @ 2 qts/acre
Herbicide: Fall - Dual 24 oz/acre + Valor 2 oz/acre; V8 - Engenia 12.8 oz/acre + Roundup 32 oz/acre; R2 - Reveal 5.7 oz/acre + Trevi TRZ 10 oz/acre + Liberty 32 oz/acre
Insecticide, Fungicides, Desiccants: R2 - Reveal 5.7 oz/acre + Trevi TRZ 10 oz/acre
Harvest Date: 9/26/2024
Harvest Population: 133,142
Moisture: 12.3

2

TERRY SCHMIDT

yield: 101.9969

County: Coahoma
Soil Type: Forestdale Silty Clay
Previous Crop: Corn
Tillage: Conventional
Planting Date: 4/16/2024
Row Width: 30"
Planting Population: 110,000
Variety: Beck 4337XF
Maturity Group: 4.3
Seed Treatments: Escalate with Nemasect SDS+
Tillage Operations: Fall - 2X Speed Disk + Orthman Bedder + Smooth Roller + Irrigation Furrow Plow
Irrigation System: Furrow
Irrigation Inches: 6.0
Rainfall Inches: 16.8
Total Water: 22.8

Fertilizer: Potassium 230 lbs/A + TSP Phosphate 175 lbs/A
Herbicide: Burndown - Flumioxazin 51 WDG 2 oz/A + Paraquat 3SL 32 oz/A + Stalwart C 21 ox/A + 80/20 Surfactant 4 oz/A; V2 Stage - GCS Metola Plus 8EC 16 oz/A + Clethodim 2EC 16 oz/A + Glufosinate 280SL 32 oz/A + Crop Oil 13 oz/A; R1 - GCS Metola Plus 8EC 12 oz/A + Glufosinate 280SL 24 oz/A
Insecticide, Fungicides, Desiccants: R3 - Miravis Top 13.7 oz/A + Bifenthrin 4.2 oz/A + Dimilin 2 oz/A + Smart B Mo 16 oz + Delstar Bio K S 64 oz/A + Xion Silicongel .5 oz/A
Harvest Date: 8/29/2024
Harvest Population: 69,000
Moisture: 13.5

3

PRESTON ARRINGTON

yield: 100.3734

County: Sunflower
Soil Type: Forestdale Silty Loam
Previous Crop: Corn
Tillage: Strip, Minimum, Ridge-Till
Planting Date: 4/8/2024
Row Width: 30"
Planting Population: 112,000
Variety: Pioneer 47A64X
Maturity Group: 4.7
Seed Treatments: LumiTreo + Lumiderm; Soyworx by BW Fusion 3 gallons/A in furrow
Tillage Operations: Fall - Cover crop applied in Standing corn; Orthman 1 tripr. Orthman bedder for irrigation furrows
Irrigation System: Furrow
Irrigation Inches: 9.3
Rainfall Inches: 23.2
Total Water: 32.5

Fertilizer: Applied Poultry litter 1.5 tons/A + Potassium Acetate 2 qts/A + 16% Molibdinum 4 oz/A + 10% Boron 2 qts/A
Herbicide: V3 - PowerMaxx 22 oz/A + Engenia 12.8 oz/A + Dual 24 oz/A; V11-R2 - banded y-drop PowerMaxx 18 oz/A + Prefix 20 oz/A
Insecticide, Fungicides, Desiccants: R3 - Miravis Top 13.7 oz/A + Bifen 4.5 oz/A; Dessicant - Gramoxone 16 oz/A
Harvest Date: 8/30/2024
Harvest Population: 101,000
Moisture: 13.7

DELTA IRRIGATED DIVISION

Grower	County	Variety	Soil Type	Plant Date	Row Spacing	Harvest Population	Yield
Thomas Neblett	Coahoma	Agrigold 4910XF	Alligator Clay	4/24/24	38" Twin	133,142	104.3678
Terry Schmidt	Coahoma	Becks 4337XF	Forestdale Silty Clay	4/16/24	30"	69,000	101.9969
Preston Arrington	Sunflower	Pioneer 47A64X	Forestdale Silty Loam	4/8/24	30"	101,000	100.3734
David Carr	Coahoma	Northrup King S49-F5X	Alligator Clay	4/16/24	30"	123,833	98.8179
Brian Andrus	Sunflower	Pioneer 47A64X	Alligator Clay	4/5/24	38" Twin	111,000	89.6112
Adron Belk	Sunflower	Asgrow 46X0	Forestdale Silt Loam	4/28/24	30"	104,000	88.8095
Lawanda Irby Morris	Bolivar	Pioneer 44A21X	Pearson silt loam	4/16/24	38" Twin	122,000	87.3199
Blake Perry	Tunica	Becks 4885XF	Sharkey Clay	4/25/24	30"	105,833	82.7636
Rocco Glynn Morris	Bolivar	Asgrow 48X9	Dowling Sharkey Clay	4/18/24	38" Twin	122,000	82.2641
Ray Crawford	Quitman	Asgrow 48x9	Sharkey Clay	4/24/24	38"	137,166	81.5438
Gerald White	Quitman	Gateway 453RXS	Alligator Silty Clay	4/22/24	38"	114,333	78.9192
Taylor Watson	Tunica	Becks 4887XF	Sharkey Clay	4/17/24	30"	89,333	77.8791
Brian Fyfe	Coahoma	NK 42T5X	Dundee Silty Clay Loam	5/12/24	40" Twin	103,375	73.6587
Adam Baird	Tunica	Pioneer 46A86X	Sharkey Clay	4/23/24	7.5"	211,575	62.7592

DIVISION FINDINGS:

- **Yield:** 1st-3rd averaged 102.2 bu/acre, ranging from 100.3 – 104.4 bu/acre. This division averaged 85.5 bu/acre across 14 entries.
- **Crop Information:** Winners planted a maturity group IV (4.3-4.9) and all achieved a planting date in April (4/8-4/24). Final harvest population for the winners was 101,000 plants/acre. The division harvest population averaged 117,700 plants/acre.
- **Row Spacing:** 1st place planted in 38" twin rows while 2nd & 3rd place planted in 30" row spacing.
- **Water:** The winners applied irrigation water by the furrow method with an average 7.5" applied plus 19.3" of rainfall for a total of 26.8" of water. The ratio of bushels/inch of water was 3.8. The overall division average was 3.7" bushel/inch of water across 14 entries.
- **Treatments/Applications:** Seed treatments, foliar fungicides, and insecticides were utilized for the winners.
- **Tillage:** Conventional tillage was used for the 1st and 2nd place and 3rd place used a fall cover crop system with minimum tillage in the spring.

DIVISION AVERAGES:

Harvest Population: 117,685
Irrigation Inches: 10.7
Rainfall Inches: 12.7
Total Water: 23.3
Bushel/Inch of Water: 3.7
Moisture: 11.8
Yield: 85.5060



DELTA NON-IRRIGATED DIVISION



DIVISION AVERAGES:

Harvest Population: 133,750

Rainfall Inches: 12.9

Bushel/Inch of Water: 5.0

Moisture: 11.7

Yield: 58.9771

1

THOMAS NEBLETT

yield: 78.6458

County: Bolivar
Soil Type: Dundee Silty Clay Loam
Previous Crop: Cotton
Tillage: Conventional
Planting Date: 4/18/2024
Row Width: 38"
Planting Population: 110,000
Variety: Revere 4826XSF
Maturity Group: 4.8
Seed Treatments: Radium Premium
Tillage Operations: Fall - Subsoiled +
Bedded; Spring - Beds Rolled
Rainfall Inches: 11.5
Bu/Inch of Water: 6.8

Fertilizer: Delstar Bio K - 2 qts/A
Herbicide: Fall - Roundup 24 oz/A +
Select 12 oz/A + Valor 2 oz/A + Crop
Oil 10 oz/A; R1 - Flexstart 32 oz/A +
Liberty 32 + Zidua 3.2 oz/A
Insecticide, Fungicides, Desiccants:
Trevor Trz 12 oz/acre
Harvest Date: 9/20/2024
Harvest Population: 106,000
Moisture: 11.1

2

COLLINS FYFE

yield: 67.8991

County: Tunica
Soil Type: Sharkey Clay
Previous Crop: Soybeans
Tillage: Conventional
Planting Date: 4/19/2024
Row Width: 38" Twin
Planting Population: 140,000
Variety: NK42-T5XF
Maturity Group: 4.2
Seed Treatments: Dyna Start 3P +
Dyna Shield Conquest
Tillage Operations: Fall - Disk +
Paratill + Hipper Chopper
Rainfall Inches: 14.5
Bu/Inch of Water: 4.8

Fertilizer: 200 lbs/A of 0-46-60
Herbicide: Planting - Gramoxone 1
pt/A + Intimidator 36 oz/A; V1 -
Roundup 32 oz/A + Medal 16 oz/A +
Engenia 12.8 oz/A
Insecticide, Fungicides, Desiccants:
R7 desiccant - Gramoxone 12 oz/A
Harvest Date: 8/29/2024
Harvest Population: 111,333
Moisture: 11.0

3

WYATT CLARK

yield: 65.6476

County: Tunica
Soil Type: Dundee Silt Loam
Previous Crop: Soybeans
Tillage: No-Till
Planting Date: 4/7/2024
Row Width: 30"
Planting Population: 120,000
Variety: Asgrow AG48X9
Maturity Group: 4.8
Seed Treatments: None
Tillage Operations: No-Till
Rainfall Inches: 18.1
Bu/Inch of Water: 3.6

Fertilizer: None
Herbicide: Pre-Emergence -
Gramoxone @ 1 Qt/A + Ringside @ 1
pt/A + Residual @ 28 oz/A +
Valcheck 80/20 @ 1/4%v/v; R4 -
DiCash @ 16 oz/A + Roundup @ 32
oz/A + Python @ 1 oz/per 6 A
Insecticide, Fungicides, Desiccants:
None
Harvest Date: 9/22/2024
Harvest Population: 99,333
Moisture: 14.4

DELTA NON-IRRIGATED DIVISION

Grower	County	Variety	Soil Type	Plant Date	Row Spacing	Harvest Population	Yield
Thomas Neblett	Bolivar	Revere 4826XSF	Dundee Silty Clay Loam	4/18/24	38"	106,000	78.6458
Collins Fyfe	Tunica	Northrup King NK42-T5XF	Sharkey clay	4/19/24	38" Twin	111,333	67.8991
Wyatt Clark	Tunica	Asgrow AG48X9	Dundee Silt Loam	4/7/24	30"	99,333	65.6476
Brian Andrus	Sunflower	Revere 4299XS	Aligator Clay	4/6/24	38" Twin	101,000	63.0653
Ray Crawford	Quitman	Asgrow 48X9	Dundee Silt Loam	4/17/24	38"	132,000	53.7036
Adam Baird	Tunica	Pioneer 46A86X	Sharkey Clay	4/23/24	7.5"	211,575	53.1752
Gerald White	Quitman	Armor 48D25	Collins Silt Clay	5/1/24	38"	98,833	50.6106
Lawanda Irby Morris	Bolivar	Agrigold 4094XF	Dowling Sharkey Clay	5/1/24	38" Twin	118,000	39.0698

DIVISION FINDINGS:

- **Yield:** 1st-3rd averaged 70.7 bu/acre, ranging from 65.6 - 78.6 bu/acre. This division averaged 58.9 bu/acre across 8 entries.
- **Crop Information:** Winners planted a maturity group IV (4.2-4.8) and all achieved a planting date in April (4/7-4/19). Final harvest population for the winners was 105,500 plants/acre. The division harvest population averaged 133,700 plants/acre.
- **Row Spacing:** 1st place planted in 38" twin rows while 2nd & 3rd place planted in 30" row spacing.
- **Water:** The winners received 14.7" of rainfall during the growing season for a conversion of 5.1 bushels/inch of water. The overall division average was 5.0 bushel/inch of water across 8 entries.
- **Treatments/Applications:** Seed treatments were used for 1st and 2nd place and no seed treatment for 3rd place. No insecticides were used and only 1st place used a fungicide.
- **Tillage:** Conventional tillage was used for 1st and 2nd place and no-till operation was used for 3rd place.

DIVISION AVERAGES:

Harvest Population: 133,750

Rainfall Inches: 12.9

Bushel/Inch of Water: 5.0

Moisture: 11.7

Yield: 58.9771



NON-DELTA IRRIGATED DIVISION



DIVISION AVERAGES:

Harvest Population: 108,930
Irrigation Inches: 4.7
Rainfall Inches: 12.4
Total Water: 17.1
Bushel/Inch of Water: 4.9
Moisture: 11.8
Yield: 70.4640

1 LANE GIESBRECHT

yield: 84.3415

County: Noxubee
Soil Type: Brooksville Silty Clay
Previous Crop: Corn
Tillage: Conventional
Planting Date: 5/7/2024
Row Width: 30"
Planting Population: 125,000
Variety: Asgrow 48X9
Maturity Group: 4.8
Seed Treatments: Apron Maxx + Dyna Shield + Imidiclopid + Dyna Start Max 3P
Tillage Operations: Fall - Chisel + Disc + Bed
Irrigation System: Pivot
Irrigation Inches: 6.7
Rainfall Inches: 14.4
Total Water: 21.1
Bu/Inch of Water: 4.0

Fertilizer: Broadcast - Lime 0.5 tons/A + 0-46-0 66 lbs/A + 0-0-60 140 lbs/A + K-Mag 75 lbs/A + Boron 14.3% @ 4lbs/A + Zinc Sulfate 6 lbs/A; Foliar - Radiate 2 oz/A + MAX-IN-K 1 qt/A + 16-0-0-20.85 @ 13 gal/A.
Herbicide: Burndown - Glyphosate 40 oz/A + Dicamba 0.5 pints/A + Clethodim 0.5 pints/A + Valor SX 2oz/A; R! - Gyphosate 32 oz/A + Prefix 1 qt/A
Insecticide, Fungicides, Desiccants: Insecticide + Fungicide R3 Growth Stage - Tundra 4 oz/A + Dimilin 2L 2.0 oz/A + Miravis Top 13.4 oz/A; R5 - Acephate 0.8 lbs/A + Intrepid Edge 0.3 oz/A; Gramoxone 12 oz/A.
Harvest Date: 9/20/2024
Harvest Population: 88,250
Moisture: 11.4

2 PHILLIP WEDEL

yield: 77.4176

County: Noxubee
Soil Type: Brooksville Silty Clay
Previous Crop: Corn
Tillage: Minimum (Fall)
Planting Date: 5/2/2024
Row Width: 30"
Planting Population: 124,000
Variety: Asgrow 48X9
Maturity Group: 4.8
Seed Treatments: Seed Shield (azoxystrobin, fludioxnil, sedaxane, mefenoxam) + Seed Shield {thiamethoxam}
Tillage Operations: Fall - Vertical Tillage Disc +Bed
Irrigation System: Pivot
Irrigation Inches: 6.4

Rainfall Inches: 22.7
Total Water: 29.1
Bu/Inch of Water: 2.7
Fertilizer: None
Herbicide: Pre-Emergence - Valar @ 2 oz/A + PowerMax3 @ 32 oz/A + 2,4-D @ 22 oz/A + Clethodim @ 12 oz/A; V4 - Prefix @ 32 oz/A + PowerMax3 @ 32 oz/A; Hand weeding during the year.
Insecticide, Fungicides, Desiccants: R3: Dimilin 2oz/A + Miravis Top 14 oz/A + Bifenthrin @ 6.6 oz/A, R5 - Intrepid Edge @ 4.1 oz/A; R7 application of Gramoxone 24 oz/A
Harvest Date: 9/24/2024
Harvest Population: 121,000
Moisture: 11.7

3 RODNEY MCGILL

yield: 74.9671

County: Noxubee
Soil Type: Brooksville Silty Clay
Previous Crop: Cotton
Tillage: Minimum Till
Planting Date: 5/23/2024
Row Width: 15"
Planting Population: 120,000
Variety: Asgrow 48X9
Maturity Group: 4.8
Seed Treatments: Seed Inoculant - Dyna Start 3P; Seed Fungicide Apronmaxx; Seed Insecticide Dyna Shield Imidiclopid
Tillage Operations: Fall- Chisel + speed disc
Irrigation System: Pivot
Irrigation Inches: 3.2
Rainfall Inches: 7.2
Total Water: 10.4
Bu/Inch of Water: 7.2

Fertilizer: Poultry Litter 2.0 tons/A; Lokomotive 1 gal/A + Nutrisync Boron 16 oz/A + 32% Nsol @ 10 gal/A
Herbicide: Burndown - Valor Sx 2.0 oz/A + Strut 16 oz/A + Makaze 40 oz/A + Intensity 16 oz/A + MSO 1/2%v/v + Choice 1/2% v/v; Pre-Emergence - Gramoxone 32 oz/A + Intimidator 32 oz/A + Infuse 24 oz/A + Makaze 40 oz/A
Insecticide, Fungicides, Desiccants: R3 application of Intrepid Edge 5 oz/A + Sniper 4 oz/A; Fungicide - R3 application of Miravis Top 13.7 oz/A; Dessicant - R7 Gramoxone 16 oz/A
Harvest Date: 10/8/2024
Harvest Population: 115,000
Moisture: 10.1

NON-DELTA IRRIGATED DIVISION

Grower	County	Variety	Soil Type	Plant Date	Row Spacing	Harvest Population	Yield
Lane Giesbrecht	Noxubee	Asgrow 48X9	Brooksville Silty Clay	5/7/24	30"	88,250	84.3415
Phillip Wedel	Noxubee	Asgrow 48X9	Brooksville Silty Clay	5/2/24	30"	121,000	77.4176
Rodney McGill	Noxubee	Asgrow 48X9	Brooksville Silty Clay	5/23/24	15"	115,000	74.9671
Galan Schrock	Noxubee	Pioneer 53A67X	Vaiden Silty Clas	4/5/24	30"	125,000	71.4693
Howard Martin	Monroe	Asgrow 52X9	Houston Clay	4/25/24	30"	95,400	44.1246

DIVISION FINDINGS:

- **Yield:** 1st-3rd averaged 78.9 bu/acre, ranging from 74.9 - 84.3 bu/acre. This division averaged 70.5 bu/acre across 5 entries.
- **Crop Information:** Winners planted a maturity group IV (4.8) and all planted between May 2nd – 23rd. Final harvest population for the winners was 108,100 plants/acre. The division harvest population averaged 108,900 plants/acre.
- **Row Spacing:** 1st and 2nd place were planted in 30" row spacing, while 3rd place was planted in 30" row spacing.
- **Water:** The winners applied irrigation water by the pivot method and averaged 5.4" applied plus 14.8" of rainfall for a total of 20.2" of water. The ratio of bushels/inch of water was 4.6. The overall division average was 4.9 bushel/inch of water across 5 entries.
- **Treatments/Applications:** Seed treatments, foliar fungicides, and insecticides were utilized for the top winners.
- **Tillage:** Conventional tillage was used for 1st place with 2nd and 3rd place utilizing a minimum tillage system with all tillage done in the fall.

DIVISION AVERAGES:

Harvest Population: 108,930

Irrigation Inches: 4.7

Rainfall Inches: 12.4

Total Water: 17.1

Bushel/Inch of Water: 4.9

Moisture: 11.8

Yield: 70.4640



NON-DELTA NON-IRRIGATED DIVISION



DIVISION AVERAGES:

Harvest Population: 104,887

Rainfall Inches: 12.6

Bushel/Inch of Water: 6.2

Moisture: 12.3

Yield: 68.4915

1 CHRIS TAYLOR

yield: 104.5429

County: Tate
Soil Type: Falaya Silt Loam
Previous Crop: Corn
Tillage: No-Till
Planting Date: 4/1/2024
Row Width: 15"
Planting Population: 120,000
Variety: Pioneer 47A64X
Maturity Group: 4.7
Seed Treatments: Preside Ultra + Lum i Gen + Lum i Treo + Seed Coat
Tillage Operations: No-Till
Rainfall Inches: 18.4
Bu/Inch of Water: 5.5

Fertilizer: Broadcast - Lime - 0.5 tons/A + 0-46-0 176 lbs/A + 0-0-60 260 lbs/A + 22-0-0-12 100 lbs/A; Foliar - Perc Plus 32 oz/A + Microvite 32 oz/A + Boron 10 oz/A = Calcium Plus 32 oz/A + Crop Kerb 1 gallon/A
Herbicide: Burndown - Roundup 48 oz/A + Dicamba 16 oz/A + Valor 2 oz/A; Pre Plant - Intimidator 32 oz/A; V3 - Anthem Max 2.5 oz/A + Engenia 12.8 oz/A + Roundup 32 oz/A; V5 - Roundup 28 oz/A
Insecticide, Fungicides, Desiccants: R3 - Bifethrin 4.2 oz/A + Dimilin 3 oz/A + Revytek 8 oz/A; R 4.5 - Intrepid Edge 5 oz/A; Desiccants - Gramoxone 12 oz/A + DeFol 5 48 oz/A
Harvest Date: 9/11/2024
Harvest Population: 105,786
Moisture: 11.7

2 MICHAEL MASSEY

yield: 88.3687

County: Tate
Soil Type: Collins Silt Loam
Previous Crop: Corn
Tillage: No-Till
Planting Date: 4/24/2024
Row Width: 38" Twin
Planting Population: 140,000
Variety: Innvictis A4690XF
Maturity Group: 4.6
Seed Treatments: None
Tillage Operations: Vertical Till
Rainfall Inches: 10.3
Bu/Inch of Water: 8.6

Fertilizer: 5-23-60 @ 200 lbs/A
Herbicide: Burndown - Roundup 32 oz/A; Layby - Roundup 32 oz/A + Engenia 12.8 oz/A + Anthem Max 3 oz/A + Mav RX 4 oz/A
Insecticide, Fungicides, Desiccants: None
Harvest Date: 9/10/2024
Harvest Population: 116,166
Moisture: 12.6

3 PHILLIP WEDEL

yield: 69.1091

County: Noxubee
Soil Type: Okolona silty clay
Previous Crop: Corn
Tillage: Minimum Tillage
Planting Date: 5/1/2024
Row Width: 30"
Planting Population: 124,000
Variety: Asgrow 48X9
Maturity Group: 4.8
Seed Treatments: Seed Shield (azoxystrobin, fludioxinil, sedaxane, mefenozam); Seed Shield (thiamethozam)
Tillage Operations: Fall - Vertical Tillage + Bedded
Rainfall Inches: 19.0
Bu/Inch of Water: 3.6

Fertilizer: None
Herbicide: Pre-Emergence - Valor @ 2 oz/A + PowerMax3 @ 32 oz/A + 2,4-D @ 22 oz/A + Clethodin @ 12 oz/A; V4 - Prefix @ 32 oz/A + PowerMax3 @ 32 oz/A; Hand weeding as needed
Insecticide, Fungicides, Desiccants: Insecticide R3 - Dimilin 2 oz/A + Bifenthrin 6.6 oz/A; R5 - Intrepid Edge @ 4 oz/A; Fungicide R3 - Miravis Top 14.0 oz/A; Dessicant - Gramaxone 16 oz/A
Harvest Date: 9/11/2024
Harvest Population: 107,000
Moisture: 12.8

NON-DELTA NON-IRRIGATED DIVISION

Grower	County	Variety	Soil Type	Plant Date	Row Spacing	Harvest Population	Yield
Chris Taylor	Tate	Pioneer 47A64X	Falaya Silt Loam	4/1/24	15"	105,786	104.5429
Michael Massey	Tate	Innvictis A4690XF	Collins Silt Loam	4/24/24	38" Twin	116,166	88.3687
Phillip Wedel	Noxubee	Asgrow 48X9	Okolona Silty Clay	5/1/24	30"	107,000	69.1091
John Mahony	Tate	Asgrow 48X9	Falaya Silt Loam	6/7/24	38" Twin	102,356	66.6285
Marshall Litwiller	Monroe	Pioneer 53A67	Houston Clay	4/6/24	30"	97,800	62.7937
Seth Koehn	Noxubee	Asgrow 48X9	Brooksville silty clay	4/5/24	30"	100,833	62.3319
Sheldon Litwiller	Monroe	Asgrow 48X9	Houston Clay	5/1/24	20"	103,600	62.3829
Brandon Litwiller	Monroe	Pioneer 53A67	Houston Clay	4/6/24	30"	81,600	60.6779
Matthew Poe	Pontotoc	Asgrow 46XF3	Iuka Loam	4/25/24	15"	125,333	54.7367
Trey Litwiller	Monroe	Pioneer 53A67	Leeper Silty Clay	5/2/24	30"	108,400	54.3428

DIVISION FINDINGS:

- **Yield:** 1st-3rd averaged 87.3 bu/acre, ranging from 69.1 - 104.5 bu/acre. This division averaged 68.5 bu/acre across 10 entries.
- **Crop Information:** Winners planted a maturity group IV (4.6-4.8). 1st place planted April 1, 2nd place planted April 24th, and 3rd place planted May 1st. Final harvest population for the winners was 109,600 plants/acre. The division harvest population averaged 104,900 plants/acre.
- **Row Spacing:** 1st and 2nd place was planted in 30" row spacing, while 3rd place was planted in 15" row spacing
- **Water:** The winners received 15.9" of rainfall during the growing season for a conversion of 5.9 bushels/inch of water. The overall division average was 6.2 bushel/inch of water across 10 entries.
- **Treatments/Applications:** Seed treatments were used for 1st and 3rd place and no seed treatment for 2nd place. Insecticides and fungicides were used for the 1st and 3rd place and no insecticides and fungicides were used for 2nd place.
- **Tillage:** No-tillage was used for 1st and 2nd place with 3rd place utilizing a minimum tillage system with all tillage done in the fall.

DIVISION AVERAGES:

Harvest Population: 104,887

Rainfall Inches: 12.6

Bushel/Inch of Water: 6.2

Moisture: 12.3

Yield: 68.4915



THANK YOU

We want to commend all entrants and congratulate the winners of the 2024 Grow It. Show It. Win It. Mississippi Soybean Yield Challenge! We appreciate the participation of all producers in the contest and their willingness to share production methods and management practices with the Mississippi soybean industry. Stay tuned for updates and information on the 2025 Mississippi Soybean Yield Challenge by visiting the MSPB website.

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