PR-848

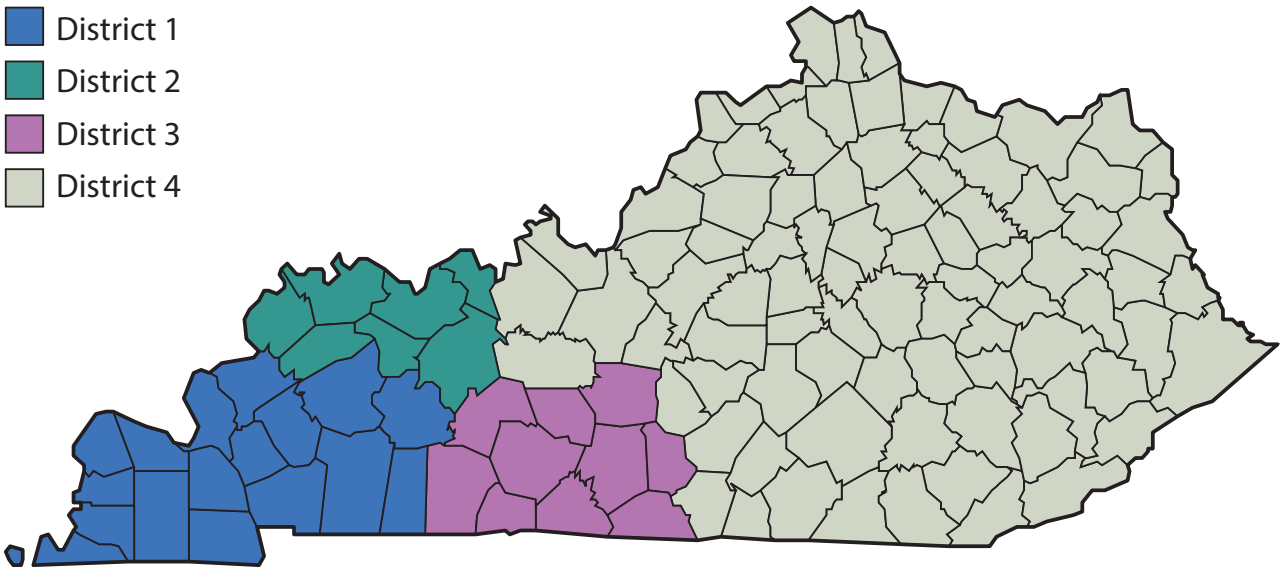
Agricultural Experiment Station

2023 Soybean Production Contest

Summary of Management Practices

Carrie Knott, Plant and Soil Sciences, and Clint Hardy, Daniel Carpenter, Troy Muse, Danny Adams, Katie Hughes, Jessica James, Bronson Bass, Lance Lockhart, Tim Lax, Andy Mills, Miranda Rudolph, Darrell Simpson, Jay Stone, Jeana Tapp, and John David Tucker, Cooperative Extension Service

Figure 1. The counties for each of the four districts of the Soybean Production Contest.



District 1: Ballard, Caldwell, Calloway, Carlisle, Christian, Crittenden, Fulton, Graves, Hickman, Hopkins, Livingston, Lyon, Marshall, McCracken, Muhlenberg, Todd, Trigg
District 2: Daviess, Hancock, Henderson, McLean, Ohio, Union, Webster
District 3: Allen, Barren, Butler, Edmonson, Hart, Logan, Metcalfe, Monroe, Simpson, Warren
District 4: Rest of the state

In Kentucky, farmers grow soybeans in two common soybean production systems: full season and double crop. Farmers plant full season soybeans in the spring and harvest in fall, so they have harvested one crop in one calendar year. Farmers plant double-crop soybeans after wheat harvest in June. These soybeans are harvested later that fall, making them the second crop harvested in the same calendar year. Both systems are important to the overall production of soybean in Kentucky. To document the agronomic practices utilized by producers, an annual soybean production contest was initiated in Kentucky in 1980.

In 2023, 12 yield awards were possible. Four statewide yield awards recognized the top two full-season entries for soybean produced in irrigated and non-irrigated environments: First Place Irrigated, Second Place Irrigated, First Place Non-Irrigated, and Second Place Non-Irrigated. Four statewide yield awards recognized the same categories for double-crop entries and four awards recognized the highest yielding entry for the four districts (Figure 1).

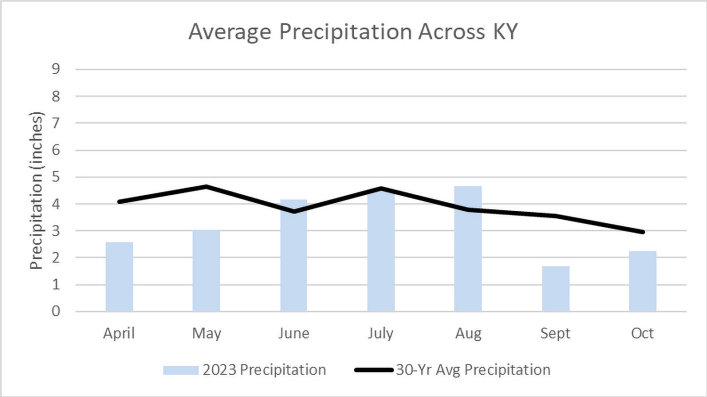
Soybean quality is also measured for all production contest entries each year. Four awards recognize the top two entries for oil and protein concentration: First Place Oil Concentration, Second Place Oil Concentration, First Place Protein Concentration, Second Place Protein Concentration. Protein and oil concentration of soybean are two important qualities that are considered worldwide by soybean purchasers. Therefore, documenting management practices that improve oil and protein concentration in Kentucky may result in increased value of Kentucky soybean.

Determination of Yield Entries

Any farmer who produced ten (10) acres or more of soybean in Kentucky was eligible to enter the contest. Each contest field was at least ten (10) continuous acres, with a minimum of three (3) harvested acres.

Field measurement and yield determination were determined by supervisor(s) that are approved by each county's yield-contest committee (typically the Agricultural and Natural Resources county Extension agent). There were no restrictions on management practices.

A producer could enter more than one yield entry per category if the entries were from different fields. A producer could only win one award per category (Full Season Irrigated, Full Season Non-Irrigated, Double Crop Irrigated, Double Crop Non-Irrigated, Oil Concentration, Protein Concentration).



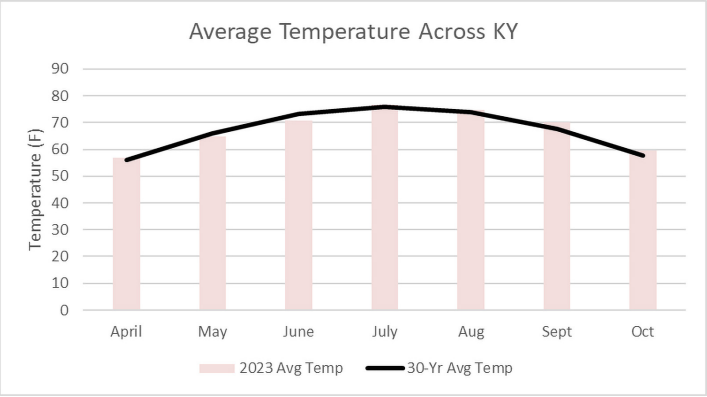


Figure 2. Average precipitation and temperature in 2023 and the 30-year average across Kentucky.

Determination of Quality Entries

All entries were required to submit samples for the Quality Contest. Contestants placed a one-pound seed sample from the harvested area into a plastic bag. Samples were then sent to an independent laboratory to determine oil and protein concentration.

Overall Observations

Growing Conditions

Average temperatures from April to October across the entire state and for all four districts were similar to the 30-year average (Figures 2 and 3). The total precipitation, across all months, was about 0.6 inches less than the 30-year average. However, when examined by month April, May, September, and October all had below-average precipitation: -1.5, -1.6, -1.9, and -0.7 inches, respectively, while August had almost 0.9 inches more than the 30-year average (Figure 2).

For District 1, precipitation was about 0.5 inches more than the 30-year average when averaged across the growing season. However, each month deviated from the 30-year average (Figure 3). April to June and September had less than the 30-year average precipitation: -2.1, -1.4, -1.3, and -1.6 inches, respectively. July, August, and October had more than the 30-year average precipitation: 3.8, 5.3, and 0.7 inches, respectively.

For District 2, precipitation during the growing season was about 0.5 inches less than the 30-year average. Although June and August had about 0.4 and 4.3 inches more precipitation than the 30-year average, respectively, April, May, July, and September had below average precipitation: about -2.0, -1.9, -1.5, -3.0, respectively.

For District 3, total precipitation during the growing season was about 1.0 inch less than the 30-year average. All months during the growing season except August had less precipitation than expected: -2.5 inches in April, -0.7 inches in May, -0.4 inches in June, -2.1 inches in July, +1.4 inches in August, -1.8 inches in September, and -0.9 inches in October (Figure 3).

For District 4, total precipitation was about 0.8 inches less than the 30-year average. All months received less than expected precipitation except June: -1.3 inches in April, -1.7 inches in May, +0.8 inches in June, -0.5 inches in July, -0.2 in August, -1.8 inches in September, and -1.0 inches in October.

Production Contest Entries

In 2023, a total of 31 entries were submitted from 13 Kentucky counties (Table 1, Figure 4). Twenty-two entries were full-season soybean, of which two entries were irrigated (Table 2). There were nine double-crop entries, four of which were irrigated (Table 3).

In 2023, the average yield of all full-season entries (Table 1) was 86.58 bushels per acre with two entries yielding more than 100 bushels per acre (Table 2). More than two-thirds of the entries were planted before May 1, and the average seeding rate was about 130,000 seeds per acre.

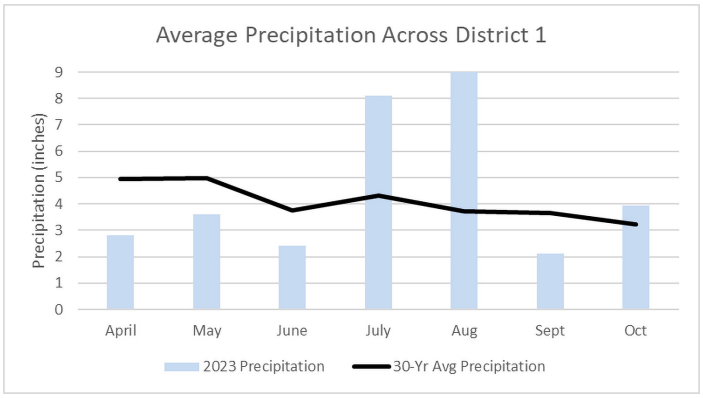
For the double-crop entries, the average yield was 69.68 bushels per acre with an average seeding rate of about 157,000 seeds per acre (Table 3).

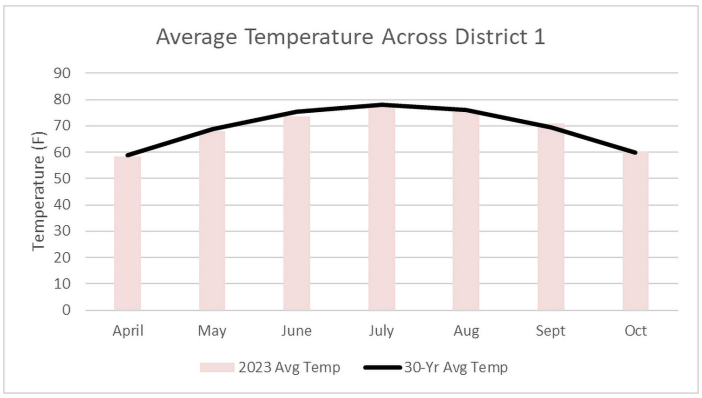
All the district winners were full-season soybean (Table 6). Two entries were planted in late April, and two were planted in late May. The average yield was 87.66 bushels per acre with an average seeding rate of about 127,500 seeds per acre (Table 6).

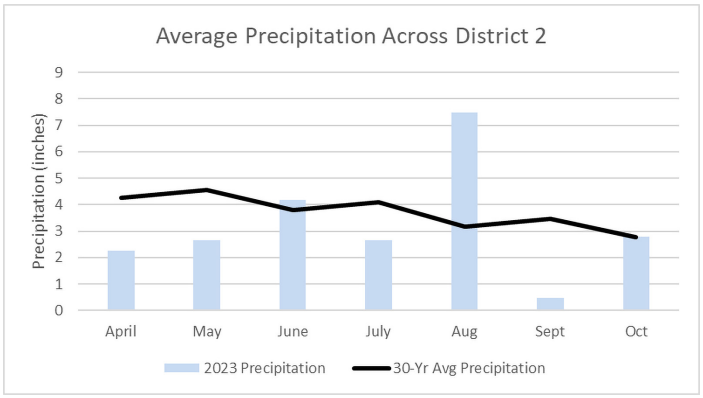
Quality Entries

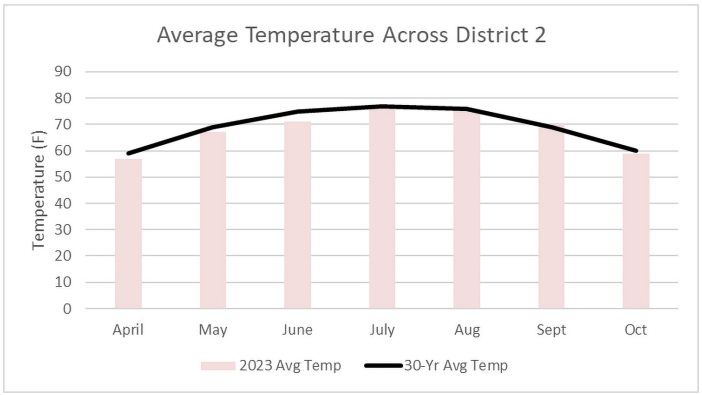
All winning entries of the quality contest were full-season soybean. Three were planted in mid-April. The winning oil entry had a concentration of 20.55% while the second-place winner had 20.39% oil concentration.

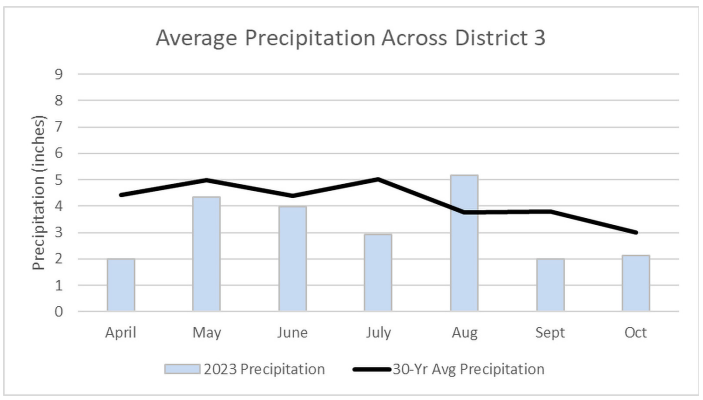
The winning entry for percent protein concentration had 35.60% protein concentration (Table 7). The second-place winner had a protein concentration of 34.83%.

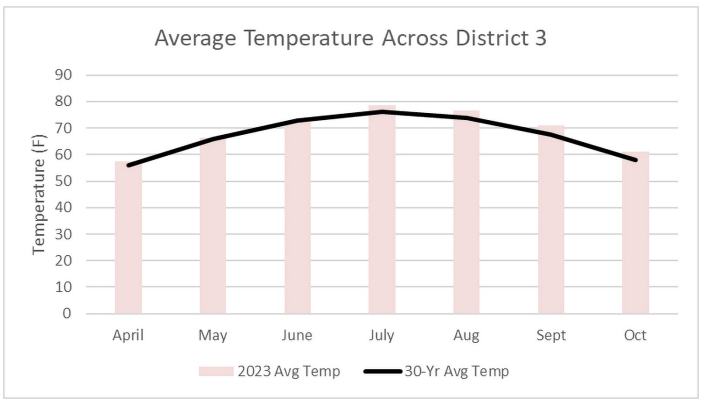


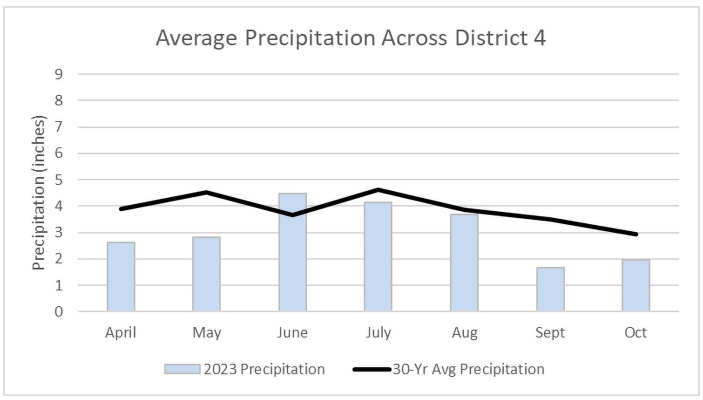












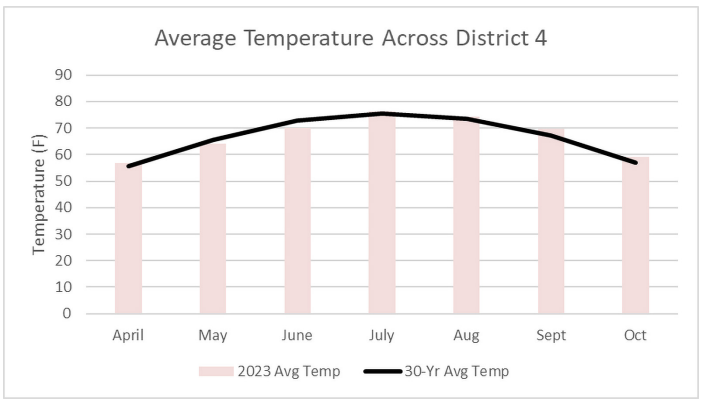


Figure 3. Average precipitation and temperature in 2023 and the 30-year average by district across Kentucky.

County	Number of Entries	County	Number of Entries
Calloway	2	Hopkins	1
Daviess	9	McLean	1
Graves	1	Meade	1
Hardin	6	Muhlenberg	1
Henderson	2	Union	2
Hickman	1	Warren	1
		Wayne	3

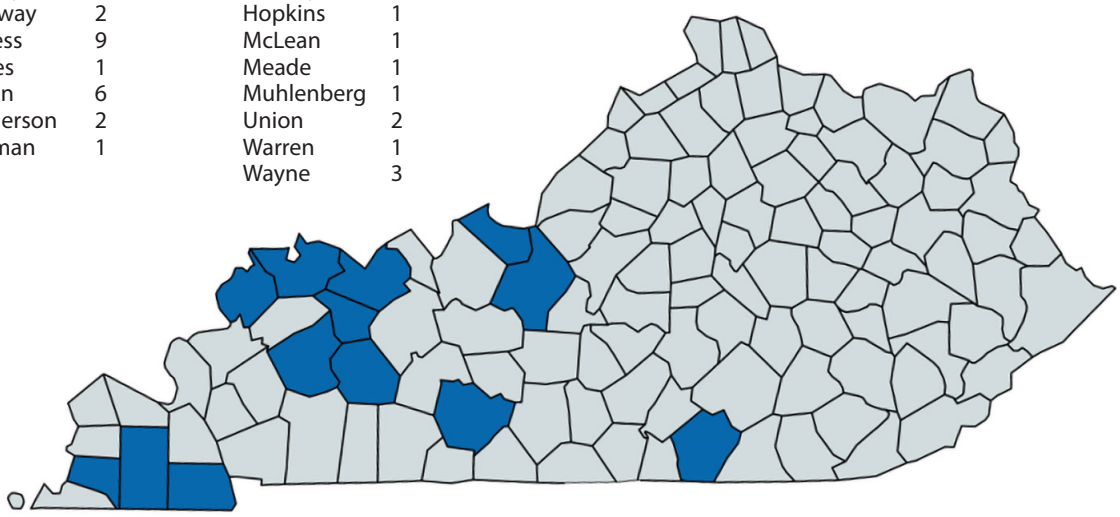


Figure 4. The number of entries, by county, that were submitted to the 2023 Soybean Production Contest.

Acknowledgements

The yield and quality contests are jointly sponsored by the University of Kentucky Cooperative Extension Service and the Kentucky Soybean Association with support from the Kentucky Soybean Promotion Board.

Weather data were obtained from the University of Kentucky Ag Weather Center (http://weather.uky.edu/ky/data.php#KY_Climate_Data). Weather stations included for District 1 are Mayfield, Paducah, Princeton; District 2 is Henderson; District 3 are Bowling Green and Glasgow; and District 4 are Bardstown, Berea, Buckhorn Lake, Campbellsville, Covington, Cumberland Gap, Dixon Dam, Grayson, Hardinsburg, Jackson, Lexington, London, Louisville, Nolin Lake, Quicksand, Somerset, Spindletop, Williamstown.

Contact

Dr. Carrie Knott
P.O. Box 469
348 University Drive
Princeton, KY 42445
carrie.knott@uky.edu

Table 1. Entry, category, grower/farm, county, cultivar information, seed yield and oil and protein concentration for each entry submitted to the 2023 Soybean Production Contest.

Entry	Category	Grower/Farm	County	Company	Brand/Variety	Yield, bu/A	Oil, %	Protein, %
1.	Full Season Irrigated	O'Bryan Grain Farms	Daviess	Pioneer	P32T26E	100.80	19.98	33.14
2.	Full Season Non-Irrigated	Greenwell Acres	Union	Channel	3322RXF	100.41	18.59	34.83
3.	Full Season Non-Irrigated	O'Bryan Grain Farms	Daviess	Pioneer	P35T15E	97.18	18.42	33.61
4.	Full Season Non-Irrigated	Adams Family Farms	Hardin	Pioneer	P48A14E	95.68	17.17	34.07
5.	Full Season Non-Irrigated	Cole Hamilton Farms	Daviess	NK	NK40-P5E3	95.11	18.45	35.60
6.	Full Season Non-Irrigated	Paschall Ag Operations	Calloway	Asgrow	AG48XF3	93.16	19.51	32.67
7.	Full Season Non-Irrigated	C and T Farms LLC	Daviess	Pioneer	P37A18E	92.30	20.39	33.44
8.	Full Season Non-Irrigated	Jones Farms	Henderson	Pioneer	P37A18E	92.24	19.91	34.16
9.	Full Season Non-Irrigated	Ken-Maur Farms	Daviess	AgriGold	G3030XF	90.36	17.56	33.85
10.	Full Season Non-Irrigated	Valley View Ag LLC	Calloway	Pioneer	P48A14E	88.35	19.51	33.51
11.	Double Crop Non-Irrigated	Goetz Bros Farms	Daviess	Asgrow	AG40XF1	88.29	19.18	34.05
12.	Full Season Non-Irrigated	Rogers Farm	Hardin	AgriGold	G3577E3	87.77	20.55	33.76
13.	Full Season Non-Irrigated	Wells Bros Farms	Union	Asgrow	AG33XF3	87.75	19.49	34.08
14.	Full Season Irrigated	Mark Thomas	Hardin	AgriGold	G3957E3	87.69	20.11	32.67
15.	Full Season Non-Irrigated	Larry Thomas	Hardin	AgriGold	G4094XF	87.64	20.19	33.43
16.	Full Season Non-Irrigated	Hester Farms	Henderson	Beck	3555XF	87.38	19.42	33.98
17.	Full Season Non-Irrigated	FL Sipes Farms	Meade	Dynagro	38XF22S	79.20	19.71	33.31
18.	Full Season Non-Irrigated	Cole Hamilton Farms	Daviess	NK	NK44-Q5E3S	78.80	19.17	34.74
19.	Full Season Non-Irrigated	Brian Lynn	Hopkins	Dynagro	DG48XF61S	77.08	19.01	33.50
20.	Full Season Non-Irrigated	David Denney	Wayne	Pioneer	P46A09E	75.84	19.22	34.71
21.	Double Crop Irrigated	Dixon Farms	Graves	Asgrow	AG48X9	75.37	17.81	34.08
22.	Double Crop Non-Irrigated	Jonathan Miller	McLean	Stewart	4053XF	75.09	19.08	34.37
23.	Full Season Non-Irrigated	Andrew Bullock	Muhlenberg	Asgrow	AG35XF1	74.58	19.20	34.53
24.	Double Crop Irrigated	Dixon Farms	Hickman	Asgrow	AG46X0	74.49	18.27	34.00
25.	Double Crop Non-Irrigated	Goetz Bros Farms	Daviess	Asgrow	AG40XF1	69.21	17.68	33.62
26.	Full Season Non-Irrigated	David Denney	Wayne	Pioneer	P46A09E	68.68	18.23	34.20
27.	Double Crop Non-Irrigated	Mark Thomas	Hardin	AgriGold	G3724XF	67.02	18.45	34.50
28.	Full Season Non-Irrigated	Western Kentucky University	Warren	Xitavo	XO4522E	66.70	19.38	33.49
29.	Double Crop Irrigated	Ken-Maur Farms	Daviess	AgriGold	G4615XF	64.16	18.48	33.55
30.	Double Crop Irrigated	Drew Langley	Hardin	Beck	4119	62.92	15.91	33.14
31.	Double Crop Non-Irrigated	James Sexton	Wayne	Dynagro	45XF02	50.60	18.24	34.50

Overall Contest Average	**81.67**	**18.91**	**33.91**
Full-Season Average	**86.58**	**19.23**	**33.88**
Double-Crop Average	**69.68**	**18.12**	**33.98**

Table 2. A summary of all production practices for the 22 full season soybean production contest entries.

Production Practices		Full Season Irrigated		Full Season Non-Irrigated				
		bushels per acre						
		100	80	100	90	80	70	Participants
		Number of Entries						
		1	1	1	7	5	5	2
Average Yield (bu/A)		100.80	87.69	100.41	93.72	87.78	77.10	67.69
Seed Company	AgriGold		1		1	2		
	Asgrow				1	1	1	
	Beck					1		
	Channel			1				
	Dynagro						2	
	NK				1		1	
	Pioneer	1			4	1	1	1
	Xitavo							1
Seed Treatment	Acceleron			1			1	
	Apron				1			
	CruiserMaxx						1	
	CruiserMaxx APX				1		1	
	Equity VIP						1	
	Escalate					1		
	EverGol					1		
	Gaucho					1		
	LumiGEN						1	1
	Lumisena					1		
	Obvius Plus							1
	Product Not Stated				3	1		
	Saltro		1			2	2	
	SDS+					1		
Seed Inoculant	BreakThrough				1		1	
	Concept AgriTek			1				
	Dyna-Start		1		1		1	
	Dyna-Start 3P+						1	
	Product Not Stated				3	3	1	1
Foliar Insecticide	Endigo				1		1	
	Endigo ZC				1			
	Endigo ZCX					1		
	Grizzly Too				1			
	Hero	1	1		3	3	1	
	Lambda				1			
	Mustang Maxx					1		
	Steed			1				
	Tombstone						1	
Foliar Fungicide	Approach Prima						1	
	Miravis Top	1			4	2	2	
	Priaxor				1			
	Revytek			1	1	2		
	TopGuard					1		
	Trivapro					1		
	Veltyma		1		1			1

continued

Table 2. A summary of all production practices for the 22 full season soybean production contest entries. (continued)

Production Practices		Full Season Irrigated		Full Season Non-Irrigated				
		bushels per acre						
		100	80	100	90	80	70	Participants
		Number of Entries						
		1	1	1	7	5	5	2
Average Yield (bu/A)		100.80	87.69	100.41	93.72	87.78	77.10	67.69
Herbicide	**Pre-Emergence**							
	2,4-D	1	1		2	1	1	
	2,4-D LV6				1			
	Anthem Maxx				1			
	Authority (fall)						1	
	Boundary						1	
	BroadAxe				1		1	
	clethodim							1
	Dicamba			1				
	Dual				1			
	Enlist				1			
	Fire-Zone							1
	glyphosate	1			1			
	Matador-S				1			
	Paraquat				1		1	
	Roundup		1	1	3	3	1	
	Roundup PowerMAX					1		1
	Roundup PowerMAX3				1			
	Salvo				1			
	Sharpen				1	2		
	Tendovo					1		
	Trivence					1		
	Verdict		1	1		1		
	Zidua				1			
	Zidua Pro							1
	Zidua SC				1			
	Post-Emergence							
	Anthem MAXX				3			
	clethodim				1	1		
	Engenia					1		
	Enlist	1	1		3	2	1	
	Enlist One				2		1	1
	ExtendiMax			1				
	Flexstar					1		
	glyphosate	1			1			
	Intensity One					1		
	Liberty				1		2	1
	Prefix	1			1			
	Roundup		1	1	4	3	3	1
	Roundup PowerMAX							1
	Roundup PowerMAX3				1			
	Roundup Ultra MAX						1	
	Tavium					1		
	Warrant						1	
	Zidua			1	1		1	
	Zidua SC				1			
Soil Preparation	No-Till		1		4	4	2	1
	Fall							
	chisel	1			1		1	
	disc				2			
	Spring							
	chisel				1	1		
	disc	1		1	1		2	
	disc (x2)							1
	other					1		
	plow							1
	Turbo-Max						1	
	vertical tillage				1		1	
Seeds per acre	100,000-125,000	1	1	1	4	2		
	126,000-150,000				3	2	4	1
	151,000-175,000					1	1	1

continued

Table 2. A summary of all production practices for the 22 full season soybean production contest entries. (continued)

Production Practices		Full Season Irrigated		Full Season Non-Irrigated				
		bushels per acre						
		100	80	100	90	80	70	Participants
		Number of Entries						
		1	1	1	7	5	5	2
Average Yield (bu/A)		100.80	87.69	100.41	93.72	87.78	77.10	67.69
Planting Date	March 21-31					1		
	April 1-10	1			2			
	April 11-20		1	1	4	3	1	
	April 21-30						2	
	May 11-20						1	1
	May 21-31				1		1	1
	No response					1		
Harvest Date	Sept 1-15			1	1	1		
	Sept 16-30	1			2	1		
	Oct 1-15				2	2	2	
	Oct 16-31		1		1	1	2	2
	Nov 1-15				1		1	
Row Width	6-10 inches						1	1
	11-15 inches	1	1	1	6	5	4	1
Nitrogen applied (lb/acre)	24					1		
	27			1	3			
	30		1		1			
	31					1		
P_2O_5 applied (lb/acre)	50		1					
	60						1	
	65							1
	69			1	2			
	70				1			
	80				1	2		
	100							
	167						1	
K_2O applied (lb/acre)	60		1					
	80						1	
	90			1	3		1	1
	120					2		
	156						1	
	200				1		1	
	240					1		
	250				1			
Manure/Litter Applied	poultry litter					1		
	swine compost lagoon water	1			1			
Other Fertilizer Applied	boron (2 lb)				1			
	Catalyst				1			
	CoRoN (25-0-0)				1		1	
	High Phos				1		1	
	K Rev				1			
	Megafol (3-0-8)				1		1	
	sulfur						1	
	sulfur (20 lb)					1		1
	Weather King				1			
	zinc (7 lb)				1			
Previous Crop	Corn	1	1	1	6	4	3	
	Corn fb Cereal Rye Cover Crop					1		
	Silage Corn							1
	Soybean						1	1
	Squash				1			
Other Inputs	CropKarb @ R5					1		
	CropKarb @ R3					1		

Table 3. A summary of all production practices for the nine double crop soybean production contest entries.

Production Practices		Double Crop Irrigated		Double Crop Non-Irrigated		
		bushels per acre		bushels per acre		
		70	Participants	80	70	Participants
		Number of Entries		Number of Entries		
		2	2	1	1	3
Average Yield (bu/A)		74.93	63.54	88.29	75.09	62.28
Seed Company	AgriGold		1			1
	Asgrow	2		1		1
	Beck		1			
	Dynagro					1
	Stewart				1	
Seed Treatment	Acceleron	2				
	Product Not Stated		2	1		
	Saltro					1
Seed Inoculant	Environoc		1			
	Product Not Stated					1
Foliar Insecticide	Baythroid	2				
	Crossover Pro				1	
	Hero		1	1		2
	Lambda T-2		1			
	Reveal				1	
Foliar Fungicide	Crossover Pro				1	
	Miravis Top			1		1
	Priaxor		1		1	
	Revytek	2				
	Tilt		1			
	Veltyma		1			
Herbicide	**Pre-Emergence**					
	2,4-D		1	1		2
	Liberty			1		1
	Roundup		1	1		2
	Valor	2				
	Verdict					1
	Post-Emergence					
	EverpreX				1	
	Cavalry II				1	
	Liberty		1		1	1
	Roundup	2	2			2
	Roundup PowerMAX				1	
	Zidua SC		1			
Soil Preparation	No-Till	2	2			2
Seeds per acre	100,000-125,000					1
	126,000-150,000	2		1		1
	151,000-175,000		2			1
	176,000-200,000				1	
Planting Date	May 1-10			1		
	June 1-10					1
	June11-20	1			1	1
	June 21-30	1	2			1
Harvest Date	Oct 1-15			1		
	Oct 16-31	2	1		1	1
	Nov 1-15		1			2
Row Width	11-15 inch		2	1	1	3
	16-20 inch	2				
P_2O_5 applied (lb/acre)	100					1
K_2O applied (lb/acre)	100					1
Other Fertilizer Applied	3-18-18 (3.5 gal)			1		1
Previous Crop	Barley					1
	Timothy hay					1
	Wheat	2	2		1	1
	Wheat hay			1		

Table 4. Production practices utilized to produce the state yield contest winning entries for irrigated and non-irrigated full season soybean in Kentucky in 2023.

Production Practices	Full Season Irrigated		Full Season Non-Irrigated	
	State Champion	Second Place	Champion	Second Place
Grower/Farm	O'Bryan Grain Farms	Mark Thomas	Greenwell Acres	O'Bryan Grain Farms
County	Daviess	Hardin	Union	Daviess
Company	Pioneer	AgriGold	Channel	Pioneer
Brand/Variety	P32T26E	G3957E3	3322RXF	P35T15E
Yield (bu/A)	100.80	87.69	100.41	97.18
Soil Preparation		No-Till		
Fall	chisel		disc	chisel
Spring	disc		disc	disc
Planting Date	4/10/2023	4/18/2023	4/13/2023	4/4/2023
Row Width (in.)	15	15	15	15
Seeds/A	105,000	106,000	120,000	105,000
Harvest Date	9/25/2023	10/25/2023	9/13/2023	9/22/2023
Previous Crop	Corn	Corn	Corn	Corn
Total N (lbs/A)		30	27	
Total P_2O_5 (lbs/A)		50	69	
Total K_2O (lbs/A)		60	90	
Total Manure (lbs/A)	swine compost lagoon water 2 ton			swine compost lagoon water 2 ton
Seed Treatment		Saltro	Acceleron	
Seed Inoculant		Dyna-Start	Concept AgriTek	
Foliar Insecticide	Hero	Hero	Steed	Hero
Foliar Fungicide	Miravis Top	Veltyma	Revytek	Miravis Top
Herbicide -Pre-Emergence	glyphosate	Roundup	Roundup	glyphosate
	2,4-D	Verdict	Verdict	2,4-D
		2,4-D	Dicamba	
Herbicide -Post-Emergence	Enlist	Roundup	Roundup	Enlist
	glyphosate	Enlist	Zidua	glyphosate
	Prefix		ExtendiMax	Prefix

Table 5. Production practices utilized to produce the state yield contest winning entries for irrigated and non-irrigated double crop soybean in Kentucky in 2023.

Production Practices	Double Crop Irrigated		Double Crop Non-Irrigated	
	Champion	Second Place	Champion	Second Place
Grower/Farm	Dixon Farms	Ken-Maur Farms	Goetz Bros Farms	Jonathan Miller
County	Graves	Daviess	Daviess	McLean
Company	Asgrow	AgriGold	Asgrow	Stewart
Brand/Variety	AG48X9	G4615XF	AG40XF1	4053XF
Yield (bu/A)	75.37	64.16	88.29	75.09
Soil Preparation	No-Till	No-Till		
Fall				
Spring			chisel disc	chisel
Planting Date	6/25/2023	6/24/2023	5/5/2023	6/16/2023
Row Width (in.)	20	15	15	15
Seeds/A	175,000	160,000	135,000	180,000
Harvest Date	10/26/2023	10/24/2023	10/5/2023	10/18/2023
Previous Crop	Wheat	Wheat	Wheat hay	Wheat
Total N (lbs/A)				
Total P_2O_5 (lbs/A)				
Total K_2O (lbs/A)				
Total Manure (lbs/A)				
Other Fertilizer			3-18-18 (3.5 gal)	
Seed Treatment	Acceleron	Product Not Stated	Product Not Stated	
Seed Inoculant		Environoc		
Foliar Insecticide	Baythroid	Lambda T-2	Hero	Crossover Pro
				Reveal
Foliar Fungicide	Revytek	Priaxor	Miravis Top	Crossover Pro
		Tilt		Priaxor
Herbicide -Pre-Emergence	Valor		Roundup	
			2,4-D	
			Liberty	
Herbicide -Post-Emergence	Roundup	Liberty		Liberty
		Roundup		Cavalry II
		Zidua SC		EverpreX
				Roundup PowerMAX

Table 6. Production practices utilized to produce the district yield contest winning entries in Kentucky in 2023.

Production Practices	District			
	1	2	3	4
Grower/Farm	Paschall Ag Operations	Cole Hamilton Farms	Western Kentucky University	Adams Family Farms
County	Calloway	Daviess	Warren	Hardin
Company	Asgrow	NK	Xitavo	Pioneer
Brand/Variety	AG48XF3	NK40-P5E3	XO4522E	P48A14E
Yield (bu/A)	93.16	95.11	66.70	95.68
Soil Preparation	No-Till		No-Till	No-Till
Fall				
Spring		vertical tillage		
Planting Date	4/20/2023	4/15/2023	5/25/2023	5/30/2023
Row Width (in.)	30	15	15	15
Seeds/A	120,000	130,000	140,000	120,000
Harvest Date	10/4/2023	10/18/2023	10/18/2023	11/15/2023
Previous Crop	Squash	Corn	Silage Corn	Corn
Total N (lbs/A)	30			27
Total P_2O_5 (lbs/A)	80		65	70
Total K_2O (lbs/A)	200	250		90
Other Fertilizer	boron (2 lb)	CoRoN (25-0-0)	sulfur (20 lb)	
	zinc (7 lb)	Megafol (3-0-8)		
		High Phos		
Seed Treatment	Product Not Stated	CruiserMaxx APX	Obvius Plus	Apron
Seed Inoculant	Product Not Stated	BreakThrough		Dyna-Start
Foliar Insecticide	Grizzly Too	Endigo		Endigo ZC
Foliar Fungicide	Revytek	Miravis Top	Veltyma	Miravis Top
Herbicide -Pre-Emergence	Dual	BroadAxe	Roundup PowerMAX	Roundup PowerMAX3
	Roundup	2,4-D	Zidua Pro	Sharpen
		Roundup	Fire-Zone	Salvo
			clethodim	Matador-S
Herbicide -Post-Emergence	Anthem MAXX	Roundup	Roundup PowerMAX	Roundup PowerMAX3
	Roundup	Enlist	Liberty	Enlist One
		Anthem MAXX		Anthem MAXX

Table 7. Production practices utilized to produce the state quality contest winning entries in Kentucky in 2023.

Production Practices	Oil		Protein	
	First Place	Second Place	First Place	Second Place
Grower/Farm	Rogers Farm	C and T Farms LLC	Cole Hamilton Farms	Greenwell Acres
County	Hardin	Daviess	Daviess	Union
Company	AgriGold	Pioneer	NK	Channel
Brand/Variety	G3577E3	P37A18E	NK40-P5E3	3322RXF
Oil (%)	20.55	20.39	18.45	18.59
Protein (%)	33.76	33.44	35.60	34.83
Yield (bu/A)	87.77	92.30	95.11	100.41
Division	Full Season	Full Season	Full Season	Full Season
Soil Preparation	No-Till			
Fall				disc
Spring		disc	vertical tillage	disc
Planting Date	Not stated	4/12/2023	4/15/2023	4/13/2023
Row Width (in.)	15	15	15	15
Seeds/A	120,000	140,000	130,000	120,000
Irrigated	Non-Irrigated	Non-Irrigated	Non-Irrigated	Non-Irrigated
Harvest Date	10/9/2023	10/2/2023	10/18/2023	9/13/2023
Previous Crop	Corn	Corn	Corn	Corn
Total N (lbs/A)	31	27		27
Total P_2O_5 (lbs/A)	80	69		69
Total K_2O (lbs/A)	120	90	250	90
Other Fertilizer		Catalyst	CoRoN (25-0-0)	
		K Rev	Megafol (3-0-8)	
		Weather King	High Phos	
Seed Treatment	Saltro		CruiserMaxx APX	Acceleron
Seed Inoculant	Product Not Stated		BreakThrough	Concept AgriTek
Foliar Insecticide	Hero	Hero	Endigo	Steed
Foliar Fungicide	TopGuard	Miravis Top	Miravis Top	Revytek
Herbicide -Pre-Emergence	Roundup	Zidua SC	BroadAxe	Roundup
	Trivence	Paraquat	2,4-D	Verdict
	2,4-D	2,4-D LV6	Roundup	Dicamba
	Sharpen			
Herbicide -Post-Emergence	Roundup	Roundup	Roundup	Roundup
	Enlist	Enlist One	Enlist	Zidua
		Zidua SC	Anthem MAXX	ExtendiMax
		clethodim		

9-2024