

# Southeast Research Farm Summary

RFR-A1494

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103 Curtiss Hall, ISU

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## Farm and Weather Summary

Myron Rees, farm superintendent

### Farm Comments

*Developments.* Land improvement was a focus in 2014. Large rain events the past several years had damaged erosion control structures. The 6,000 feet of waterways were reshaped and reseeded in June. A small terrace was repaired and the wetland dredged. In September, Jesse Randall assessed the windbreak and started selective and wholesale pruning. This will be an ongoing project.

*Field days and tours.* Two field day events were held in 2014 and were well attended. Over 500 people visited the farm.

*New projects.* Soybean planting population study, M. Rees; Date of planting in corn and soybeans, M. Licht; Fungicide evaluations, A. Robertson.

### Crop Season Comments

Corn planting began May 5 and finished May 22. June was especially wet, then timely rain July through September built a great crop. Temperatures were modest with only three days above 90°F.

Soybean planting began mid-May and ended May 30. There were no disease problems in 2014.

Harvest began September 24 and ended November 10. The corn dried well in the field. Corn yields were tremendous with plots ranging 100-250 bushels/acre. Corn-on-corn showed no yield drag, ranging 160-250 bushels/acre. Total farm average was 191 bushels/acre. Soybean yields were good, averaging 57 bushels/acre.

### Weather Comments

*Winter 2013–14.* The moisture was surplus going into 2014.

*Spring 2014.* Spring was cool and wet. Field work was delayed.

*Summer 2014.* More than 11 in. of rain fell in June with timely rains through September. Temperatures were fairly cool with only three days above 90°F.

*Fall 2014.* Nearly 10 in. of rain fell in September and October. Winter arrived November 14 with 10°F temps. There was a soaking rain late in November but freeze up quickly returned and did not leave.

**Table 1. Southeast Research and Demonstration Farm, Crawfordsville, monthly rainfall and average temperatures for 2014.**

<b>Month</b>	<b>Rainfall (in.)</b>		<b>Temperature (°F)</b>		<b>Days 90° or above</b>
	<b>2014</b>	<b>Deviation from normal</b>	<b>2014</b>	<b>Deviation from normal</b>	
March	0.30	-1.79	41.6	-8.0	
April	4.20	0.66	53.8	-1.9	0
May	1.80	-3.01	63.7	0.5	0
June	11.10	6.16	73.3	-0.1	0
July	2.10	-1.43	76.8	-6.4	0
August	2.85	-1.39	75.1	-1.3	2
September	4.90	1.73	67.4	-3.3	1
October	<u>4.55</u>	<u>1.89</u>	55.4	-1.6	<u>0</u>
Totals	31.80	2.82			3

## Research Farm Projects

<u>Project</u>	<u>Project Leader</u>
Bayer experimental seed treatment study	D. Mueller/S. Wiggs
Carbon sequestration study	M. Al-Kaisi
Cardinal corn fungicide study	A. Robertson
Continuous corn insecticide evaluations	P. Weber
Continuous corn sulfur × N × K study	A. Mallarino
Corn breeding trials	J. Edwards
Corn date of planting	M. Licht
Corn performance testing	J. Rouse
Cover crop studies	E. Juchems
Dry micronutrient fertilizer study	A. Mallarino
Fall cover crop demonstration	S. Carlson
Foliar applied micronutrient study	A. Mallarino
Iowa Soybean Association seed treatment study	D. Mueller/S. Wiggs
K residue study in corn	A. Mallarino
K residue study in soybeans	A. Mallarino
Kalona soil tillage study	G. Brenneman/J. Fawcett/J. Jensen
Limited nitrogen study	M. Rees
Long term nitrogen study	J. Sawyer
Marrone corn fungicide study	A. Robertson
Native prairie grass demonstration	M. Rees
Nira soil tillage study	G. Brenneman/J. Fawcett/J. Jensen
Nitrogen emissions in continuous corn	M. Castellano
Nut tree demonstration	Iowa Nut Growers Association
Orchard demonstration	P. O'Malley
Organic barley variety trial	K. Delate
Organic fertilizer in popcorn	K. Delate
P and K placement within tillage systems	A. Mallarino
Rye cover crop study in corn and soybean	J. Sawyer
SB date of planting	M. Licht
SCN breeding nursery	G. Gebhart
Sorghum biomass yield trial	M. Salas
Soybean insecticide by fungicide study	D. Mueller/S. Wiggs
Soybean performance testing	J. Rouse
Soybean planting population study	M. Rees
Subsurface drainage study	M. Helmers/G. Brenneman
Switchgrass biomass production trial	G. Brenneman
Waterway repair demonstration	M. Rees
Wetland demonstration for nitrate removal	G. Brenneman
Windbreak demonstration	M. Rees