

Southeast Research Farm Summary

RFR-A15101

Southeast Iowa Agricultural Research Association
Association Established 1983; Research Farm Established 1987

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Research and Demonstration Farms Coordinator Mark Honeyman
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Farm and Weather Summary

Myron Rees, farm superintendent

Farm Comments

Developments. Miscanthus was planted for a new long-term biomass project. Input, evaluation, and yield will be monitored. Production will be used as an energy source for the University of Iowa. The plots will encompass over six acres. Milkweed and other pollinators habitat was established near the headquarters.

Field days and tours. Four field day events were held in 2015 and were well attended. Over 700 people visited the farm.

New projects. Small plot lime, A. Mallarino; Fungicide standability trial and corn seed treatments study, A. Robertson; Nitrogen application timing, J. Sawyer; Soybean seed treatments, M. Rees and R. Sandeen.

Crop Season Comments

Corn planting began April 30 and finished June 1. June was wetter than normal from July through September. Summer temperatures were moderate with 13 days above 90°F, but none above 100°F. Soybean planting began mid-May and ended June 3.

Harvest began September 22 and ended October 26. Weather was perfect with no rain delays. Corn yield was surprising in spite of the Northern corn leaf blight across the farm. Corn following corn showed a 10 to 20 bushel yield drag. The total farm average was 190 bushels/acre. Soybean yields were variable with total farm average of 55 bushels/acre.

Weather Comments

Winter 2014-15. Moisture was surplus going into 2015.

Spring 2015. March and early April were dryer than normal. Fieldwork went well.

Summer 2015. Ten inches of rain fell in June with normal rains through September. Temperatures were moderate with only 13 days above 90°F degrees and none above 100°F.

Fall 2015. It was dry the last half of September and all of October. Temperatures fell to a killing frost October 17, but cover crops continued growing into December. November rains soaked fields going into winter.

Table 1. Southeast Research and Demonstration Farm, Crawfordsville, monthly rainfall and average temperatures for 2015.

Month	Rainfall (in.)		Temperature (°F)		Days 90° or above
	2015	Deviation from normal	2015	Deviation from normal	
March	0.25	-1.78	40.0	-1.6	
April	2.50	-1.00	55.0	1.9	0
May	4.55	-0.25	64.4	0.7	0
June	10.00	4.80	72.2	-1.1	1
July	5.55	1.94	74.7	-2.1	5
August	4.45	0.21	71.9	-3.2	1
September	3.10	-0.07	71.0	3.6	6
October	1.95	-0.68	55.8	-0.4	0
Totals	32.35	3.17			13

Research Farm Projects

<u>Project</u>	<u>Project Leader</u>
Automated weather station	E. Taylor
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 by N by K study	A. Mallarino
Corn breeding trials	J. Edwards
Corn date of planting	M. Licht
Corn performance testing	J. Rouse
Corn seed treatment	A. Robertson
Cover crop studies	E. Juchems
Fall cover crop demonstration	S. Carlson
Fungicide standability trial	A. Robertson
Herbicide resistance demonstration	V. Schmitt
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
Long-term nitrogen study	J. Sawyer
Milkweed demonstration	R. Hellmich
Miscanthus trial	E. Heaton/N. Boersma
Native prairie grass demonstration	M. Rees
Nira soil tillage study	G. Brenneman
Nitrogen application timing	J. Sawyer
Nut tree demonstration	Iowa Nut Growers Association
Orchard demonstration	P. O'Malley
Organic corn variety trial	K. Delate
Organic fertilizer in popcorn	K. Delate
P and K placement within tillage systems	A. Mallarino
Pioneer seed treatment plots	M. Rees/R. Sandeen
Pollinator habitat	R. Hellmich
Rye cover crop study in corn and soybean	J. Sawyer
SCN breeding nursery	G. Gebhart
Small plot lime study	A. Mallarino
Sorghum biomass yield trial	M. Salas
Soybean date of planting	M. Licht
Soybean insecticide by fungicide study	D. Mueller/S. Wiggs
Soybean performance testing	J. Rouse
Subsurface drainage study	M. Helmers/G. Brenneman
Switchgrass biomass production trial	G. Brenneman
Wetland demonstration for nitrate removal	G. Brenneman
Windbreak demonstration	M. Rees