

Southeast Research Farm Summary 2013

RFR-A1388

Southeast Iowa Agricultural Research Association

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Research and Demonstration Farms Manager Tim Goode
103 Curtiss Hall, ISU

Research and Demonstration Farms Coordinator Mark Honeyman
103 Curtiss Hall, ISU

Farm and Weather Summary

Myron Rees, farm superintendent

Farm Comments

Developments. Lance Miller, ag specialist, joined our team in 2013 and has been developing the Farmer Assisted Research and Management (FARM) program. FARM is an outreach program that works with area producers to put strip trials on their farms. Lance will continue to expand FARM and create a larger presence for ISU in our community.

Field Days and Tours. Two field day events were held in 2013 and were well attended. Nearly 700 people visited the farm.

New Projects. Fall cover crop demonstration, S. Carlson; Cover crop studies, E. Juchems; Soybean variety demonstration, M. Rees; Organic fertilizer in popcorn, K. Delate; Switchgrass biomass trial, G. Brenneman; Glyphosate resistance in soybean study and Cover crop tolerance to herbicide, J. Fawcett.

Crop Season Comments

Corn planting began April 30 and continued through May 17. Two large rain events occurred in May that caused severe erosion. Emergence problems led to replanting approximately 15 acres. Dry conditions returned in the summer with virtually no rain from the end of July through mid September. Temperatures were modest with 90-degree

weather for one week in July and the last week of August.

Soybean planting began May 22 and ended June 13. There were no disease problems in 2013. Yields were down from 2012 averaging about 50 bushels/acre.

Harvest began September 19 and ended October 29. Corn moisture was extremely variable. Yields were down from 2012, ranging 60-200 bushels/acre.

Weather Comments

Winter 2012–13. The moisture was adequate going into 2013. Tile lines had flow late in 2012.

Spring 2013. Spring was cool and wet. Field work continued between rains. There was over 20 in. of rainfall April through June.

Summer 2013. Dry weather came again late in July with little rain until the middle of September. Fortunately, temperatures were pleasant during the dry period. There were no days of 100 degrees and only 19 days above 90 degrees during the season.

Fall 2013. The weather was comfortable through the fall. There was approximately 6 in. of rain after the growing season. Tile lines were running prior to freeze up. Soybean yields were near expectations and corn yields were slightly below expectations.

Table 1. Southeast Research and Demonstration Farm, Crawfordsville, monthly rainfall and average temperatures for 2013.

Month	Rainfall (in.)		Temperature (°F)		Days 90° or above
	2013	Deviation from normal	2013	Deviation from normal	
March	2.35	0.19	29.9	-9.8	0
April	7.39	3.38	47.2	-4.4	0
May	10.25	5.32	61.6	-0.9	0
June	4.05	-0.65	70.8	-0.8	2
July	1.14	-2.45	72.7	-2.6	6
August	0.07	-4.22	72.9	-0.5	6
September	1.09	-2.02	67.3	2.2	5
October	<u>2.66</u>	<u>0.08</u>	51.9	-1.1	<u>0</u>
Totals	29.00	-0.37			19

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 hybrid by N by K study	A. Mallarino
Continuous corn insecticide evaluations	P. Weber
Corn breeding trials	J. Edwards
Corn performance testing	J. Rouse
Cover crop studies	E. Juchems
Cover crop tolerance to herbicide	J. Fawcett
Dry micronutrient fertilizer study	A. Mallarino
Fall cover crop demonstration	S. Carlson
Foliar applied micronutrient study	A. Mallarino
Glyphosate resistant herbicide response	J. Fawcett
Home garden orchard demonstration	P. O'Malley
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
Late applied nitrogen study	J. Sawyer/D. Barker
Long term nitrogen study	J. Sawyer
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
Organic soybean variety trial	K. Delate
Organic fertilizer in popcorn	K. Delate
P and K placement within tillage systems	A. Mallarino
Rye cover crop study	J. Sawyer
SCN breeding nursery	G. Gebhart
Sorghum biomass yield trial	M. Salas
Soybean high yield study	M. Rees/J. Hedges
Soybean insecticide by fungicide study	D. Mueller/S. Wiggs
Soybean performance testing	J. Rouse
Soybean replant study	J. Fawcett
Soybean SDS planting date study	D. Mueller/S. Wiggs
Soybean variety demonstration	M. Rees
Subsurface drainage study	M. Helmers/G. Brenneman
Switchgrass biomass production trial	G. Brenneman
Wetland demonstration for nitrate removal	G. Brenneman
Windbreak demonstration	M. Rees