

# Southeast Research Farm Summary

**RFR-A16103**

## Southeast Iowa Agricultural Research Association

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Research Farm Superintendent ..... Myron Rees

Ag Specialist ..... Lance Miller (resigned July 2016)  
 Ag Specialist ..... Cody Schneider

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

difficult harvest conditions and the cancellation of two studies.

### Farm Comments

*Developments.* Windbreak renovation started with mowing the shrub rows and replacing part of them with new hazelnut, ninebark, redbud, and lilac bushes. The remaining nine poplar trees at the farmstead also were removed. Cody Schneider joined our team in September as ag specialist, following Lance Miller's resignation in July. Lance started in 2013.

*Field days and tours.* Four field day events and two training days were held in 2016. Meaghan Anderson and Rebecca Vittetoe started a biweekly women's group called "Agronomy in the Field." Nearly 800 people visited the farm during 2016.

*New projects.* Spring and fall pollinator habitat, R. Hellmich; STRIPS, M. Helmers; FACTS, S. Archontoulis; Organic corn breeding trials, J. Edwards.

### Crop Season Comments

Corn planting began April 20, and soybean began May 17. Planting was finished May 23. The June 22 windstorm severely lodged corn on the north half mile of the farm. This led to

Harvest began September 20 and ended November 9. Harvest was delayed two weeks following a combine fire October 14. Despite lodged corn, yields were good at 190 bushels/acre. Soybean averaged 55 bushels/acre.

### Weather Comments

*Winter 2015-16.* The moisture was surplus going into 2016.

*Spring 2016.* Normal planting conditions occurred with three good planting windows in April and May.

*Summer 2016.* June was warm and dry with 11 days above 90°F and 2 in. below normal rainfall. July and August were 7.25 in. above normal. Temperatures were fairly normal. There were 20 days above 90°F for the year.

*Fall 2016.* It was dry during harvest continuing into early 2017. Temperatures fell low enough for a killing frost on November 20. Cover crops looked tremendous going into winter.

**Table 1. Southeast Research and Demonstration Farm, Crawfordsville, monthly rainfall and average temperatures for 2016.**

Month	Rainfall (in.)		Temperature (°F)		Days 90° or above
	2016	Deviation from normal	2016	Deviation from normal	
March	3.13	1.10	45.9	4.3	0
April	2.43	-1.07	52.8	-0.3	0
May	3.60	-1.20	62.2	-1.5	0
June	2.05	-3.15	75.2	1.9	11
July	7.05	3.44	74.2	-2.6	4
August	8.05	3.81	74.9	-0.2	3
September	1.80	-1.37	70.6	3.2	2
October	<u>1.70</u>	<u>-0.93</u>	59.5	3.3	<u>0</u>
Totals	29.81	0.63			20

### 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
FACTS crop modeling	S. Archontoulis
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 breeding trial	J. Edwards
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
STRIPS	M. Helmers
Subsurface drainage study	M. Helmers/G. Brenneman
Switchgrass biomass production trial	G. Brenneman
Wetland demonstration for nitrate removal	G. Brenneman
Windbreak demonstration	M. Rees