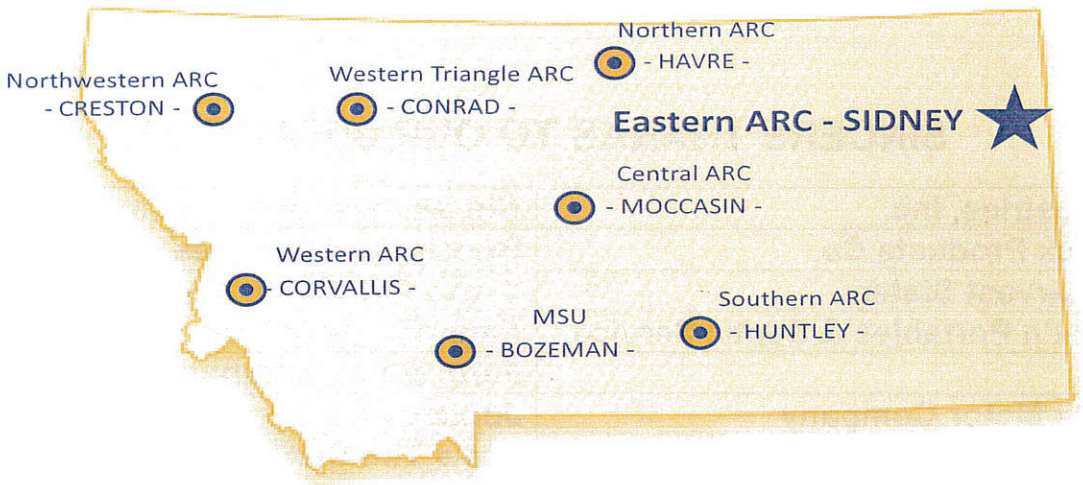
Eastern Agricultural Research Center



Field Day

July 24, 2014

MSU celebrates 100 years of EXTENSION

MONTANA STATE UNIVERSITY
MONTANA AGRICULTURAL EXPERIMENT STATION
Eastern Ag Research Center

MONTANA STATE UNIVERSITY
EXTENSION

WELCOME

Welcome to the 34th Annual Field Day at your MSU Eastern Agricultural Research Center (EARC). The day will begin with a welcome and field tour of the MSU-EARC valley research site with a sponsored luncheon to follow.

We appreciate your attendance and participation in the EARC Field Day activities and welcome your questions and comments during and after the tour. The MSU Eastern Agricultural Research Center extends thanks to its staff members, the guest speakers, and everyone who contributed and participated in the Field Day activities.

SINCERE THANKS TO OUR SPONSORS:

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A special thanks to Tim Fine, Richland County Extension Agent, for his cooperative efforts in planning the Field Day activities. Thanks also NDSU Williston Research Extension Center for providing the trailers and to The Depot for their assistance in procuring the food for the luncheon.

The MSU Montana Agricultural Experiment Station and Research Centers will provide accommodations for any known disability that may interfere with a person's participation in any service, program or activity. If you require reasonable accommodations to participate in this event, we request 48 hours notice of the requested accommodations directly to Hans Schneider at (406) 433-2208 or johannes.schneider@montana.edu.

MSU-EARC/EXTENSION
34TH Annual Field Day
Schedule of Events

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8:30 am	**Refreshments and Registration for Pesticide Application Credits**
9:00 am	**Welcome** – Dr. Hans Schneider, MSU/MAES EARC Superintendent
	Dr. Glenn Duff, Interim Dean & Director, MSU College of Agriculture/AES
	Dr. Barry Jacobsen, MSU Interim Dept. Head of Research Centers
	Dr. Jeff Bader, MSU Extension Director, *DRC and Extension*
9:15 am	**Tour begins**
Stop #1	Roshan Acharya MS, MSU Graduate Student - *MSU Spring Wheat Stay-Green Characteristic Study. Spring wheat (stay-green study) planted May 9.*
Stop #2	Dr. Jamie Sherman, MSU Associate Research Professor - *MSU Spring Wheat breeding program. Spring wheat planted May 8.*
	Dr. Joyce Eckhoff, MSU/MAES EARC Agronomist - *Orange Wheat Blossom Midge, Barley Varieties & Durum Varieties. Barley planted May 5. Durum planted May 13.*
Stop #3	Duane Peters, Sidney Sugars, Inc. Agronomist - *Sugarbeet Varieties. Sugarbeet planted April 25.*
	Dr. Bart Stevens, USDA-ARS Agronomist - *Sugarbeet phosphorus study. Sugarbeet planted April 25.*
Stop #4	Dr. Mary Burrows, MSU Plant Pathologist - *Wheat, Barley, and Pea (pulse crop) Diseases. Barley planted April 26. Peas planted May 12.*
Stop #5	Dr. Jerry Bergman, NDSU-WREC Director - *Safflower Varieties & Management. Safflower planted May 22.*
	Sherry Turner MS, MSU/MAES EARC Research Associate - *Integrated Control of Ascochyta Blight of Chick Pea. Chick Peas planted May 22.*
Stop #6	Dr. TheCan Caesar, USDA-ARS Soil Microbiologist - *USDA-ARS Soil Microbiology Research*
Stop #7	Dr. Hans Schneider, MSU/MAES EARC Plant Pathologist - *Integrated Control of Beet Cyst Nematodes. Sugarbeet planted May 9.*
	Dr. Hans Schneider, MSU/MAES EARC Plant Pathologist - *Integrated Control of Rhizoctonia Solani. Sugarbeet planted May 22.*
	Sponsored Luncheon – *Sponsored by area businesses*

2014 WEATHER SUMMARY

MSU EASTERN AGRICULTURAL RESEARCH CENTER

	Precipitation – Inches			Temperature	
Month	Irrigated	Dryland	Avg.	2014	Avg.
January	0.07	0.07	0.41	18.8	13.0
February	0.04	0.04	0.35	35.1	20.0
March	0.38	0.38	0.54	27.8	30.3
April	1.39	1.02	1.15	42.6	44.6
May	3.55	3.71	2.19	58.0	56.1
June	1.11	1.28	2.76	62.2	64.5
July 1-15	0.15	0.11	2.09	67.3	70.1
TOTAL	**6.69**	**6.61**	**9.49**		

EASTERN AGRICULTURAL RESEARCH CENTER STAFF

Hans Schneider	Supt./Plant Pathologist
Joyce Eckhoff	Research Agronomist
Ron Brown	Farm Mechanic/Mgr.
Ghazal Ebadzadsahrai	Postdoctoral Research Associate
Becky Garza	Research Assistant
Cherie' Gatzke	Administrative Assistant
Thomas Gross	Research Assistant
Calla Kowatch-Carlson	Research Assistant
Sherry Turner	Research Associate

SEASONAL ASSISTANTS:

Miriam Backhaus	Charles Flynn
Johanna Lepel	Red Lovec
Chuck Lowman	Stanley McMurray
Abbey Ries	

MSU EXTENSION-RICHLAND COUNTY STAFF

Tim Fine	Agriculture Agent
Patti Fjelstad	Administrative Assistant
Josie Evenson	4-H County Agent
Ludmila Keller	FCS Agent

"Whoever makes two ears of corn or two blades of grass to grow where only one grew before deserves better of mankind and does more essential service to his country than the whole race of politicians put together."
Jonathan Swift

FY14 MONTANA WHEAT & BARLEY GRANTS

GRANT TITLE	PRINCIPAL INVESTIGATOR	MSU	CARC	EARC	NARC	NWARC	SARC	WARC	WTARC
Identifying and developing improved barley varieties for Montana	Tom Blake	X	X	X	X	X	X		X
Winter wheat breeding and genetics - early line selection	Phil Bruckner			X	X	X			
Winter wheat breeding and genetics - advanced line selection	Phil Bruckner	X	X	X	X	X	X	X	X
Plant disease management and education in Montana	Mary Burrows		X		X				
Early generation durum selection and germplasm improvement	Joyce Eckhoff			X					
A field survey for occurance of herbicide-resistant kochia in Northern Montana	Prashant Jha						X		
Light-activated sensor controlled sprayer technology	Prashant Jha						X		
Strategic investment in SARC for small grains research in South Central Montana	Ken Kephart						X		
Soil sampling equipment for field scale-small plot on & off-station research at NARC	Peggy Lamb				X				
Weather data collection for producers in North Central Montana	Peggy Lamb				X				
Adding ESN to urea as nitrogen source for irrigated spring wheat production	Kent McVay						X		
Assessing agronomic practices to advance cereal production in Montana	Kent McVay	X	X	X	X	X	X		X
Trapping click beetles with pheromone traps (Coleoptera: Elateridae)	Gadi V.P. Reddy								X
Purchase of diesel pick-up	Gadi V.P. Reddy								X
Orange wheat blossom midge management	Bob Stougaard					X			
Evaluation of materials/practices contributing to economic production in Montana	Bob Stougaard					X			
Spring wheat breeding and genetics - early line selection	Luther Talbert	X			X	X			
Spring wheat breeding and genetics - advanced line selection	Luther Talbert	X	X	X	X	X	X	X	X
Sensor-based nitrogen fertilization Algorithm for winter wheat varieties	Olga Walsh		X		X		X	X	X
Expanded implementation of wheat stem sawfly IPM	David Weaver				X				X

FY14 FERTILIZER TAX AWARDS

GRANT TITLE	PRINCIPAL INVESTIGATOR	MSU	CARC	EARC	NARC	NWARC	SARC	WARC	WTARC
Tillage and crop rotation effect on nitrogen use efficiency and crop yield	Chegnci Chen		X						
Nitrogen management of Roundup Ready sugar beets	Joyce Eckhoff			X					
Effect of fertilizer nitrogen weed control and crop-weed competition in Montana cereal production	Prashant Jha						X		
Comparison of Urea to ESN as nitrogen source for irrigated corn production in Montana	Ken Kephart						X		
Effects of alternative nitrogen sources applied in variable blends and timings on yield and quality of short seasoned dryland corn grown for grain production in a low rainfall	Peggy Lamb				X				
Comparison of foliar applied nitrogen fertilizers in spring wheat	Olga Walsh							X	X
Evaluation of sensor-based technologies & nitrogen sources for improved recommendations for dryland & irrigated spring wheat production in Montana	Olga Walsh							X	X
Effect of nitrogen sources, rates & application time on spring wheat yield & grain protein	Olga Walsh								X
A comparison of nitrogen sources for spring wheat production	Olga Walsh							X	X
Winter wheat, in a continuous crop system, yield and protein response to time of winter application of urea and ESN nitrogen fertilizer	Dave Wichman		X						

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