Crop Production and Irrigation Research Field Day

August 16, 2019
8:00 a.m. to 1:00 p.m.

N. Centreville Rd., 0.5 mile south of Featherstone Rd., Sturgis, MI
(GPS 41.846584, -85.430041)

From the North: Turn right at 65416 N. Centreville Rd., Sturgis, MI
From the South: Turn left at 65570 N. Centreville Rd., Sturgis, MI
Drivers will be marked with MSU Extension banners
GPS Coordinates: 41.846584, -85.430041

Thanks to the Michigan Soybean Promotion Committee for sponsoring the Field Research and Meeting

The Soybean Checkoff

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Crop Production and Irrigation Research Field Day
Friday, August 16th, 8:00 a.m. to 1:00 p.m.

Water has played an especially key role in crop production this year. A cool, wet spring delayed planting—and in many cases prevented planting—at historic levels. Late-planted crops were slow to develop in some places as cool and cloudy conditions and waterlogged soils limited plant growth and root development. Hot and dry periods typical of mid-summer in Michigan arrived in early July, and plants with limited root systems have had difficulty finding water deeper in the soil profile. Irrigation can address some of these challenges while crop management can address others. Knowing how to “finish the crop” will be critical in this unusually late and challenging season.

The cost for the field day is free, but registration is required for space and meal planning.

Register online by August 8th to ensure meal using the QR code or visiting the MSU Extension website.

Contact Eric Anderson (eander32@msu.edu or 269-467-5511) for more information or for requests for accessibility accommodations.

Field Day Schedule

8:00 am  Registration & Light Breakfast

- **Tools for Soil Moisture Monitoring and Irrigation Scheduling** – Lyndon Kelley, Purdue and MSU Extension irrigation educator, will discuss how he uses the soil moisture sensors at the field day site to schedule irrigation. Steve Miller, MSU Extension irrigation specialist, will discuss traditional and cutting-edge technology for soil moisture monitoring and irrigation scheduling. Younsuk Dong, a post-doc researcher in Ag and Biosystems Engineering at MSU, will demonstrate the mobile-enabled soil moisture sensor equipment he is developing that farmers can use to remotely monitor their fields at a fraction of the cost of other sensors on the market. Michael Scobie, an irrigation research engineer from the University of Southern Queensland, Australia, has been building smart tools to help manage water and energy. Michael will showcase some mobile phone apps that are being used by farmers in Australia to help them manage their irrigation.

- **Corn Leaf Wetness Monitoring and Tar Spot** – Bruce MacKellar, MSU Extension field crop and IPM educator, will discuss MSU’s work with tar spot in corn, a disease that has significantly impacted fields in at least 27 counties in Michigan in the past two years. He will demonstrate leaf wetness sensor equipment being used in studies this year to determine the impact of timing and duration of corn leaf wetness under irrigation on the potential development of this disease.

- **Irrigation Uniformity Check: Taco Bell or Eye in the Sky?** – Lyndon Kelley will explain why ensuring irrigation system uniformity is critical and how it is traditionally measured. Eric Anderson, MSU Extension field crop educator, will show results of a demonstration project using an unmanned aerial vehicle (UAV, a.k.a. drone) to detect differences in sprinkler nozzle output.

- **Soybean Nodulation and Crop Development Research in 2019** – Dr. Manni Singh, MSU Extension cropping systems agronomist, will discuss recent and ongoing research with corn and soybean production. Of particular interest this year, he will address the question of whether a late-planted crop will be able to make it to maturity this fall and what can be done if things don’t go as planned. Eric Anderson will describe two on-farm research projects being conducted this year—the MSPC-funded study with soybean inoculation pre- and post-plant and the impact on nodulation and yield, and a statewide project funded by MDARD’s Fertilizer Grant gathering corn stalk nitrate and soil health data in commercial corn to further our understanding of impacts of various production practices.

- **Soybean Production in a Late-Planted Season** – Mike Staton, MSU Extension soybean educator, will discuss several delayed planting resources produced or updated by MSU this year. He will specifically address late-season soybean development and what can be done in the event of an early frost.

The meeting will conclude by 1:00pm with a free lunch. Several presenters will be available following the meeting for one-on-one consultation. Two MDARD pesticide recertification (RUP) credits and 3.5 Certified Crop Advisor CEU’s have been applied for.

Lunch catered by Yoder’s Country Market