Spring 2024

From the Field Newsletter

MICHIGAN STATE

Extension



Central Michigan Field Crops

This is the first addition of the new Field Crops newsletter for the Central MI Region; From the Field. With Paul Gross's retirement and a need to reach the entire region, I decided that was the logical thing to do. I plan to have this electronic newsletter quarterly to give you the events for that season.

Spring is here and so is the return of staring at the weather forecast. If you have never attended Field Crops Virtual Breakfast, I would recommend checking it out. The first half of the Thursday, 7 a.m. webinar is an agronomic update that pertains to the current field conditions. The second part of the webinar is a meteorology update and it is the most accurate weather prediction I will see that week. There is also one RUP and one CCA credit with each webinar; just the frosting on top of a great cake! If you are interested in attending the program, there is an advertisement later in this newsletter under the RUP Credit opportunities.

I have also added a partner event section and a dedicated RUP/CCA credit section.

I have included a list of research trials for the 2024 season including the list of MI Soybean Committee On-Farm research list as a separate attachment on this email.

If you have any feedback, please complete this survey: <u>https://tinyurl.com/bddsnrsz</u>

Please contact me for more information!

- Teralytic Soil Probes
- <u>Enhanced Soil Carbon</u>
 <u>Farming Soil sampling</u>
- Deer Damage On-Farm
 plots
- 3-year potassium fertilizer trial

Enjoy this quarterly newsletter!

In this newsletter you can expect:

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RUP Credit Opportunities page 3

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Featured Resources

Wild Wheat

Growing wheat in a wild spring

The weather so far this spring has not been exactly normal. Find out what this means for wheat spring management. *Click here to continue reading.*



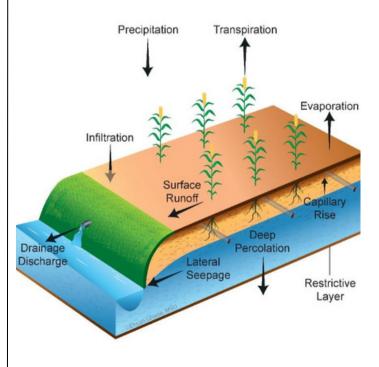


Enviroweather Support from Project GREEEN helps Enviroweather deliver needed information to Michigan growers For more than two decades, Enviroweather has provided real-time weather information to help make farming decisions — dealing with pests, plant development and natural

resources management. *Click here to continue reading.*

Drainage Water management is important for reducing phosphorus loss

Soil health alone will not achieve our water quality goal. Nutrient management is a good start, but it's best when combined with water management to achieve our water quality goal. *Click here to continue reading.*



Upcoming Events



Scouting School

New this year, MSU Extension holds a field crops scouting school

This scouting school is designed for interns and entry level scouts to learn the basics of identification, walking patterns and scouting tools. *Click here to continue reading.*

RUP/CCA Credit Opportunities

• D2L Course



 Field Crops Virtual Breakfast



Termination Field Day

Cover Crop Termination Field Day to be hosted at the MSU Agronomy Farm

Join Christy Sprague and Karen Renner April 24 for the latest recommendations on effective cover crop termination. *Click here to continue reading.*

Partner Events



Food-Grade Grains Field Day

HIGHLIGHTING THE STEPS FROM FIELD TO MUG, SPOON & JUG!

Join us for a collaborative conversation and field tour about food-grade grains in the Upper Midwest.

We'll discuss agronomy, variety selection, processing, and end markets.

- Wednesday, June 19th, 2024
- 9:00 AM 1:30 PM, lunch included
- No fee, but registration required
- Kellogg Biological Station, 9693 N 40th St., Hickory Corners, Michigan, 49060

Please register by June 12, 2024 at https://events.anr.msu.edu/foodgradegrains24/ Questions? Email Brook Wilke at <u>wilkebro@msu.edu</u>



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Thank you for reading!

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Michigan Soybean On-Farm Research Projects for 2024

The projects we plan to conduct in on-farm replicated strip trials are listed below. All trials will be replicated at least four times and must be oriented perpendicular to existing tile lines. Detailed protocols for each of the projects are available and should be obtained from Eric Anderson (269) 359-0565, Teresa Crook (989) 652-3552 or Mark Seamon, (989) 245-3100 before conducting the trial.

1) Broadcast Potassium Fertilizer: This project will determine the yield and income benefits of applying a maintenance/crop removal rate of 0-0-60 in the spring on fields having soil test K levels in or below the maintenance range. The treatments are:

- 1. A maintenance application of 0-0-60 as determined by proven yield goals. The fertilizer should be applied in the spring at least two weeks prior to planting, if possible.
- 2. An unfertilized control

2) Spring Tillage: This project will determine the yield and income benefits of performing one-pass tillage operations compared to no-tillage. Cooperators choose the tillage implement to evaluate. The same planting equipment must be used for all treatments and be equipped and operated to perform in high-residue conditions. The treatments are:

- 1. A single pass of the tillage tool of your choice (vertical tillage tool, high-speed disk, soil finisher, strip tillage, etc.) performed in the spring prior to planting
- 2. An untilled control

3) Planting Date X Maturity Group: This project will measure the effect of planting date and maturity group have soybean yield and income. The treatments are:

- 1. Planting date- In/near the third week of April as weather and soil conditions allow vs 2-4 weeks later
- 2. Maturity group- Two varieties that are nearly one full MG different with all other traits being as similar as possible. These could be the longest and the shortest maturity groups you plan to plant in 2024.

4) Planting Rates: This project will compare the effects of four planting rates on soybean yields and income. This trial will be easier to implement if the planting equipment is equipped with hydraulic or electric drives on the seed metering system. The four planting rates for this project are:

- 1. 70,000 seeds per acre
- 2. 100,000 seeds per acre
- 3. 130,000 seeds per acre
- 4. 160,000 seeds per acre

5) In-furrow Starter Fertilizer: This project offers cooperators an opportunity to evaluate the yield and income benefits of their in-furrow starter fertilizer program when planting soybeans. (Sure Crop in-furrow starter is available for the first 4 cooperators.) The treatments are:

- 1. In-furrow starter fertilizer (product and rate chosen by cooperator)
- 2. Untreated control (no In-furrow starter fertilizer)

6) In-furrow Radiate® and Accomplish Max[™]**:** This project will evaluate the yield and income benefits of two products included in a verified, high-yield production system. Both products will be provided by Loveland. The treatments are:

- 1. An in-furrow application of 4 oz/ac of Radiate (plant growth regulator) + 32 oz/ac of Accomplish Max (biostimulant)
- 2. Untreated control (no Radiate or Accomplish Max)



7) Saltro® vs ILeVO® Seed Treatment: This project will compare the performance of Saltro from Syngenta to ILeVO from BASF. Choose sites that have a history of moderate to severe SDS and have SCN present. Both Saltro and ILeVO will be provided to the first 6 cooperators. All seed used in the trial must be the same variety and seed lot. The treatments are:

- 1. A base seed treatment (multiple fungicides and an insecticide) with Saltro
- 2. A base seed treatment (multiple fungicides and an insecticide) with ILeVO
- 3. Optional: A base seed treatment (multiple fungicides and an insecticide) without Saltro or ILeVO

8) Soybean Seed Inoculation: This project will evaluate the yield and income from applying rhizobia inoculant to soybean seed. All seed used in the trial must be the same variety and seed lot. The treatments are:

- 1. Seed treated with a base seed treatment with a rhizobia inoculant selected by the cooperator
- 2. Seed treated with the same base seed treatment used in treatment 1 without the rhizobia inoculant

9) Pre-emerge Herbicide: This trial will evaluate the effect of a pre-emergence (PRE) herbicide application on soybean yield and income. This trial is especially beneficial to producers that have not applied a PRE herbicide in the past and producers considering dropping the PRE herbicide application from their weed control program in 2024 (not recommended). The treatments are:

- 1. A pre-emergence (PRE) herbicide application followed by a post-emergence (POST) herbicide application (herbicides are selected and provided by the cooperator)
- 2. A POST herbicide application using the same herbicide(s), adjuvant(s), application date and application rates applied in treatment 1 (no PRE herbicide application)

10) ArchiTech (plant growth regulator and foliar fertilizer): This project will evaluate the yield and income benefits of including ArchiTech in the cooperator's normal post-emergence herbicide application. The ArchiTech will be provided. The treatments are:

- 1. A post-emergence herbicide tank-mixed with ArchiTech at 32 oz/ac
- 2. The same post-emergence herbicide applied in treatment 1 without ArchiTech

11) Delaro® Complete for White Mold: This project will evaluate the effect of a single foliar application of a relatively new fungicide from Bayer Crop Science on soybean yield and income when applied to fields having a history of white mold. The fungicide will be provided to the first 4 cooperators. The treatments are:

- 1. A single foliar application of Delaro Complete fungicide at 8 oz/ac at R1
- 2. Untreated control

12) Delaro® Complete for High Yield: This project will evaluate the effect of a single foliar application of a relatively new fungicide from Bayer Crop Science on soybean yield and income when applied in high-yield environments. The fungicide will be provided to the first 10 cooperators. The treatments are:

- 1. A single foliar application of Delaro Complete fungicide at 8 oz/ac at R3
- 2. Untreated control

13) White Mold Fungicide Application Timing: Three fungicide application timings will be compared to an untreated control to identify the optimum fungicide application timing and to help validate the new Sporecaster phone app. This trial must be conducted in a field that has had severe and relatively uniform white mold within the past 5 to 7 years. The fungicide (Propulse from Bayer) will be provided. The treatments are:

- 1. Foliar fungicide application at R1 (one open flower on 50% of the plants)
- 2. Foliar fungicide application 7 days after the R1 application
- 3. Foliar fungicide application 14 days after the R1 application
- 4. Untreated control