



#### PROVIDING TIMELY & RELEVANT INFORMATION TO FIELD CROP PRODUCERS & AGRONOMISTS

# 16,785

field crop producers and agronomists were reached through educational programs.

#### 1,854 one-to-one consultations were provided.

**1,623** producers and agronomists improved their knowledge by participating in MSU Extension programs.



#### AREAS

The following priority areas were identified by regional advisory groups composed of producers, agribusiness representatives, Michigan Farm Bureau and commodity groups:

- Cropping systems agronomy
- Nutrient management and soil health
- Farm profitability
- Pesticide resistance and integrated pest management
- Government regulation and policy

For additional information regarding field crop educational programs, research projects and materials, visit www.canr.msu.edu/field\_crops

# IMPACTS

Michigan State University (MSU) Extension has a long history of providing research-based knowledge to address the needs of field crop producers and agronomists across Michigan. Eighteen faculty specialists and 12 county-based educators are currently assigned to MSU Extension field crops education in Michigan. Faculty specialists are experts in their fields of study, conducting research and sharing recommendations based on their findings with growers. Field educators work side-by-side with producers, agribusinesses and agencies, delivering educational programming on either a regional or statewide basis. Exit surveys conducted at educational programs revealed the following combined impacts:



acres were projected to be impacted by the new information learned.



was the total projected financial impact in 2023.

Following the series has really increased my yield by over 40% for soybeans and corn. I have learned how to identify some of the crop disease and seek advice.

• Virtual Breakfast Series participant



## **VIRTUAL BREAKFAST SERIES**



PowerPoint slide showing the specialists and educators who gave Virtual Breakfast presentations in 2022.

MSU Extension field crops educators have planned, promoted, conducted and evaluated the Field Crops Virtual Breakfast Series since its inception in 2018. The Virtual Breakfast Series provides timely crop and pest management information to field crop producers and agronomists for 26 weeks during the growing season when important decisions are made. Participants hear weekly crop and pest updates as well as detailed weather updates and forecasts, earn pesticide recertification credits and have ample opportunity to ask questions.

Producers and agronomists accessed the sessions through various channels, such as participating in live sessions via Zoom, listening to podcast recordings, viewing YouTube video recordings and through a Facebook livestream. In 2023, 4,729 producers and agronomists participated in the live sessions for an average of 182 participants each week. Furthermore, 7,888 individuals viewed the YouTube recordings and another 2,171 listened to podcasts. The live sessions reached producers and agronomists in 15 states and 11 countries in addition to those from 60 Michigan counties.

The financial and educational impacts of the program were evaluated through a follow-up evaluation distributed six weeks after the last weekly session of the season. The 688 recipients of the survey had a 47.2% response rate and represented 4,522,267 acres. Recipients indicated that they planned to make changes producing a projected additional cost savings or income of \$2,816,810 in 2024.

The YEN project showed us more of what our ground is capable of with proper management. From now on, we are going to be doing tissue sampling and more soil testing to push our yields from what you learned.

# WHEAT ON-FARM WORK

Since 2021, MSU Extension wheat educators have been working with the Michigan Wheat Program and the Grain Farmers of Ontario on a project called the Great Lakes Yield Enhancement Network (YEN), modeled off the Yield Enhancement Network started in the United Kingdom. This program aims to help farmers determine what percentage of their maximum yield potential they are achieving in their wheat crops. This helps farmers make decisions on what practices are working and what practices may not be creating a benefit. 2023 was the third year of this project and saw 156 fields participating, up from 43 in its pilot year of 2021. The program is geared up for 202 fields in 2024 spread across 10 states and two countries.



YEN participants on a tour of YEN farms and research plots across the Thumb area in 2023.

## **FIELD CROPS WEBINAR SERIES**

The Field Crops Webinar Series is an annual event that consists of eight weekly sessions conducted in February and March. Each session features one or more specialists who give interactive presentations around managing risk and improving productivity on farms. The audience is typically farmers and agriculture advisers.

The 2023 season was well-attended, with 199 people registered to attend the series live all eight weeks. The post webinar survey was completed 911 times, which allowed them to get pesticide applicator recertification credits and complete an impact questionnaire. Eighty-four percent of survey respondents reported that they learned something and 256 indicated they plan to make changes as a result of attending this program. The intended changes will impact 296,461 acres and generate a projected increase in financial savings or revenue of \$3,384,309 in 2024.

Good presentation. New learnings for me even though I've been in the game for 40 years!

• Field Crops Webinar Series participant

## SOYBEAN ON-FARM RESEARCH **& EDUCATION PROGRAM**

In 2023, MSU Extension and the Michigan Soybean Committee collaborated on seven educational programs reaching 490 producers and agronomists. Six of these were regional on-farm research updates where the 2022 research results were presented and input for the 2023 research projects was collected. The seventh program was the annual Soybean Harvest Equipment Field Day conducted near Yale, Michigan, on Oct. 3. Follow-up evaluations were mailed to program participants at the end of the 2023 harvest season to measure and document the actual educational and financial impacts of the programs. A summary of the results from all seven educational events follows:

5	1

producers earned additional income by implementing new information they learned in 2023. .....

# **\$14.11**

per acre in additional earnings was generated on 22,441 acres. .....

is the reported actual total financial **\$316,721** impact of the programs in 2023. .....

MSU Extension and the Michigan Soybean Committee cooperated to plan, conduct and summarize 52 on-farm trials in 2023. Twelve projects, based on input from more than 400 producers and agronomists, were evaluated in the trials. The research results were summarized in a 32-page research report that was mailed to more than 8,000 soybean producers and distributed at six inperson programs.

I enjoy going to these meetings because I learn what works and doesn't work, and I do not have to do all these tests myself.

> Michigan Soybean On-Farm Research Update participant



Participants at the 2023 Soybean Harvest Equipment Field Day in Sanilac County.

#### **IMPROVING IRRIGATION EFFICIENCY & WATER USE** REPORTING

In 2023, staff from the MSU Biosystems and Agricultural Engineering Department and MSU Extension developed and delivered 41 presentations focused on improving irrigation system uniformity and irrigation scheduling. These presentations were given at field days hosted by MSU Extension, commodity groups, other state agencies and irrigation equipment suppliers. More than 2,728 farmers, agricultural professionals and policymakers participated.

MSU Extension and Purdue Extension have collaborated with the corn and soybean checkoff organizations in Michigan and Indiana to conduct a high-profile, multistate educational program since 2014. The goal of the program is to provide information to help producers mitigate the challenges and maximize the opportunities associated with irrigated corn and soybean production. One hundred and twenty-one producers and agronomists participated in the 2023 conference. The results of a 10-month follow-up evaluation (n=13) of the 2023 conference follow:

\$7.62

per acre of additional income was generated on 15.292 acres.

**\$116,623** is the reported actual financial impact.



#### **INTEGRATED CROP & PEST UPDATE FOR AGRIBUSINESS**

In 2023, MSU Extension held its 25th annual Integrated Crop and Pest Update for Agribusiness. This meeting has been well-attended over the years, with 346 attendees in 2023. This program offers an in-person and online option (n=146, n=200, respectively). Attendees were from 43 Michigan counties as well as from six other states and one other country.

A survey taken after the event showed that 93% of respondents indicated they increased their knowledge and 42% indicated they would implement changes in 2024. They estimated changes would be implemented on 346,562 acres. A follow-up survey of people who attended in 2022 reported that they implemented changes on 212,524 acres during the 2023 season because of information from this meeting.



Participants watch a presentation at the 2023 Integrated Crop and Pest Update for Agribusiness.

Very well organized, great topics.

• Integrated Crop and Pest Update for Agribusiness participant



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