

# The Digital Ag Download

An eNewsletter with research updates, digital ag news, and tech insights for your farm.

## **Pre-Plant Update**

Although planting is just around the corner, there is still time to prepare and we have our sights on providing you with as much cutting edge information, technology, and research as possible. In this edition of the Digital Ag Download, we have highlighted resources from our team that you can use to make these decisions a little easier, including information from the 2021 Precision U, eFields, featured articles, recent publications, and more. We hope you find this newsletter helpful and be sure to share it with anyone who may be interested!

- The Ohio State Digital Ag Team

Digital Agriculture at OSU

## **Growing Season Weather Outlook**



Looking for the weather outlook for this growing season? View this video to see Dr. Aaron Wilson review what we can expect during our planting window this spring and how the summer growing season weather patterns will affect crop development and yields.

Click on the image or visit **go.osu.edu/wx-sp21** for more information.

## Ag Tech Tuesdays - eFields Results

The Ohio State Digital Ag Team's Ag Tech Tuesday webinars covered results from several 2020 eFields trials, from corn, soybeans, water quality, tech and more. Previous webinars can be viewed by clicking featured videos below or by visiting our YouTube.





# Improving Profitability in Corn Production

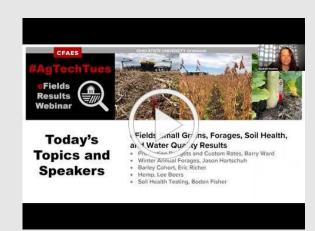
- Weather and Climate Trends, Aaron Wilson
- Making Irrigation Decisions, Amanda Douridas and Will Hamman
- Corn Seeding Rate Results, Chris Zoller
- Variable Rate Seeding with SmartFirmer Data, Elizabeth Hawkins

# February 16 Topics and Speakers OHOSTATE UNIVERSITY EXTRIBUTE Webinar February 16 Topics and Speakers OHOSTATE UNIVERSITY EXTRIBUTE February 16 Violat Monitor Data of On-Farm Research, Alyas Gauci Violat Monitor Data of On-Farm Research, Alyas Gauci Violat Monitor Data of On-Farm Research, Alyas Gauci Violat Weating and Field Demonstrations, Dr. Brocke Beam Register today at go.osu.edu/AgTechTues

Tech to Improve
On-Farm Efficiency

## Pushing Soybean Productivity in Ohio

- Boots on the Ground Statewide Summary, Dr. Laura Lindsey
- Local Boots on the Ground Results, Mary Griffith
- Foliar Fertilizer on Soybeans, James
- Morris
- Soybean Seeding Rate Results, Ken Ford
- Sulfur on Soybeans, John Barker



Small Grains, Forages, Soil Health, and Water Quality Results

- Manure On-the-Go Sensing, Chris Shoup
- Yield Monitor Data, Alysa Gauci
- Virtual Reality and Field Demonstrations, Brooke Beam
- Equipment Technology, Andrew Klopfenstein
- Production Budgets and Custom Rates, Barry Ward
- Winter Annual Forages, Jason Hartschuh
- Barley Cohort, Eric Richer
- Hemp, Lee Beers
- Soil Health Testing, Boden Fisher

## 2021 Precision University: Tackling Spring Operations with Reduced Working Days

Did you miss Precision U? Click below to see university and industry experts share research results and technology available to help you work smarter and more efficiently.

Ohio State Precision Ag YouTube

Be sure to subscribe to our YouTube channel for a variety of extension and educational materials presented by team members!



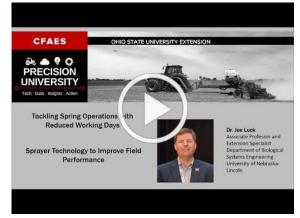
**Gambling with Planting Decisions** 



Improving Fertilizer Efficiency with the Planter Pass



**Pre-season Crop Protection Decisions** 



Sprayer Technology to Improve Field Performance

## **Featured Publications**

#### **Planter Pre-Season Notes**

Spring planting is right around the corner and one wants to ensure the planter is at peak performance. Considering current seed costs and tight margins, getting seed placed right during planting is critical. Not getting it right at planting can impact yield, with university research on corn indicating...

#### **Planter Pre-Season Notes**

### Planter Downforce Technology for Uniform Seeding Depth

Proper planting at target depth places seeds in the available moisture zone and provides good seed-to-soil contact for even germination and emergence. Given appropriate planting time and target depth where right moisture exists, seeds placed shallower or deeper than target depths have exhibited faster or delayed emergence, respectively, and at times, inadequate root development...

#### Planter Downforce Technology for Uniform Seeding Depth

# Operational Challenges and Yield Implications of Increasing Corn Planting Speeds

This presentation covers the operational challenges and yield implications of increasing corn planting speeds. This includes results from field investigations and observations regarding seed spacing and emergence.

#### **Increasing Corn Planting Speeds**

More planting related publications can be found under "Precision Seeding" on the <u>Digital</u> **Ag website**.

**Precision Seeding** 

## Featured Articles, Videos, and Podcasts



# The Trends & Learnings from 2020 Research Trials...

Each year, countless hours go into planning, executing and analyzing field trials. Farmers and researchers are usually trying to solve a problem in order to increase yield, efficiency, or profitability and, on the surface, the questions we're...



# Improving fertilizer efficiency with the planter pass

By Dusty Sonnenberg, CCA, Ohio Field Leader: a project of the Ohio Soybean Council and soybean checkoffAn important part of crop production with environmental stewardship is efficient fertilizer application. The 4Rs are a consideration that can...



## **Fine-tuning Fertilizer**

Quantifying soil spatial variability doesn't do a farmer any good unless they are able to respond to that variability. Dr. John Fulton, Professor in the Depa...

#### Read more

www.youtube.com



## **Post-planting scouting**

Planting remains one the most important, if not most important, field operation for row-crop producers. In most cases, there is one pass to "get it right" with the planting operation. Two key goals of the planter are to achieve...

# Read more ocj.com

## 7 Ways Technology Will Disrupt Your Precision Farming Business

From comprehensive ag tech consulting to robotic specialization and support, dealers and industry experts share their vision for how opportunities and objectives will change.

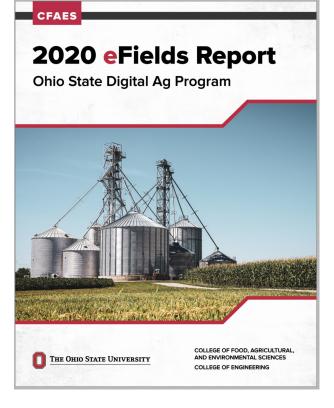
**Precision Farming Dealer** 



connecting science to fields

The 2020 eFields Report was released in early January! Previous editions of the report can be viewed by clicking the button below.

eFields



# Like this Newsletter? Help us share it!

Help grow the popularity of "The Digital Ag Download" by sharing with growers, extension folks, and anyone interested in your neck of the woods! Just tell them to sign up and send them this link to go straight to our signup page:

go.osu.edu/DigitalAgDownload

## **CONTACT US**

digitalag@osu.edu







Department of Food, Agricultural and Biological Engineering Agricultural Engineering Building 590 Woody Hayes Drive, Columbus, OH 43210 Phone: 614-292-6131 Fax: 614-292-9448