March 28, 2020

The Digital Ag Download

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

2020 Pre-Plant Update

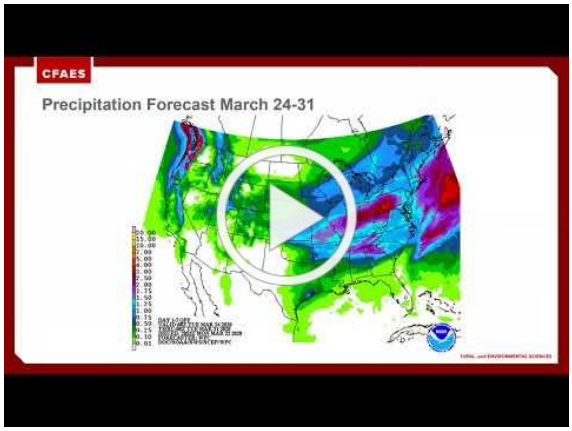
Many of you are gearing up for the 2020 planting season! In this newsletter, find weather and climate outlook information, resources for precision seeding, planter pre-season notes, highlighted eFields studies, and more. Be sure to share this newsletter with anyone who may be interested; we hope you enjoy! – The Ohio State Digital Ag Team

Digital Agriculture at OSU

Weather and Climate Outlook

View this video to listen to Dr. Aaron Wilson, OSUE Climatologist, review the 2019 weather for the growing season and provide the 2020 weather outlook.

See more details in the online eFields Report under "2019 Growing Season Weather" on page 14 here: **https://digitalag.osu.edu/efields**.



Find weekly updates by visiting https://climate.osu.edu.

climate.osu.edu

Digital Ag Precision Seeding Resources

Precision Seeding

Looking for a place to get started? Visit the Digital Ag Precision Seeding Resource page for quick start guides, relevant publications, presentations, articles and other useful links. Featured below is just a sample of the resources available.

Precision Seeding Technology Presentation

Looking for an overview on precision seeding technology? View this presentation with information on topics such as fertilizer placement at planting, downforce and seeding depth, dual hybrid planting, and on-farm research considerations.

Read more
digitalag.osu.edu

Conversion Formulas for Seed Meter Parameters

Find formulas on the go using this easy-access sheet to find seeding rate, meter speed, seed spacing, and more. Click below to access this resource or find it on the Precision Seeding page.

Read more
digitalag.osu.edu

Yield Impacts of Large Central Fill Planters and Tractors

As machinery has gotten bigger, so has the concern for compaction. View this presentation for information about pinch row compaction and to learn about the impact of tracks and wing downforce.

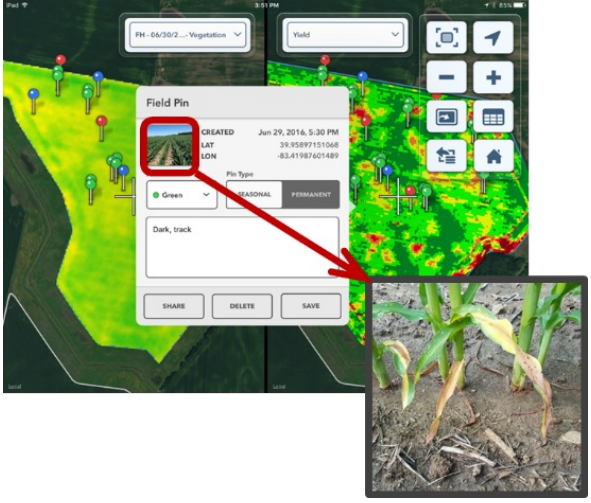
Read more
digitalag.osu.edu

Planter Pre-Season Notes

Planting season is quickly approaching, and many of you are preparing your planters for optimal performance. With today's seed costs and tight margins, getting seed placed right is critical and can have a major impact on your yields.

Visit the 2019 Planter Pre-Season Notes article below for information and tips about preparing for this planting season. This article includes the following:

- Planter Goals
- Planter Checklist
- Technology Checklist
- Post-Emergence Scouting
- Helpful APPs



Click the button below to find out more.

Pre-Season Notes

Planter Downforce Technology

Planter Downforce Technology for Uniform Seeding Depth

Read more
bookstore.ksre.ksu.edu

"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."

Looking for more information on planter downforce technology? Check out this featured Planter Downforce Fact Sheet by clicking above or visiting this link: Planter Downforce Technology.

eFields Trials

Check out the links below to find seeding rate protocols for both corn and soybeans or visit **eFields Study Protocols**

Corn Seeding Rate Protocols

Read more
digitalag.osu.edu

Soybean Seeding Rate Protocols

Read more
digitalag.osu.edu

Featured Studies

View the result of studies below and others in the 2019 eFields Report by clicking below.

2019 eFields Report

High Speed Planting

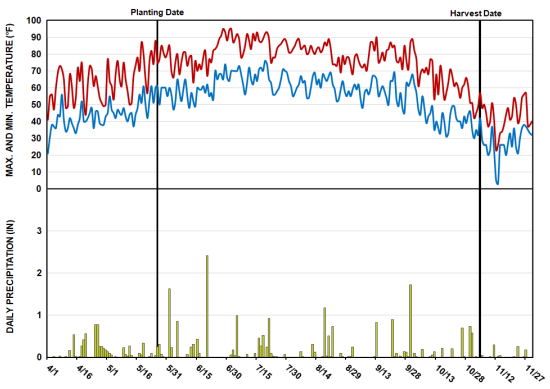
This study evaluates four speeds of planting in central Ohio and their effects on yield and emergence. The results suggested that there is a potential to put more money in the individual rows on a planter than putting more rows on the planter and achieve the same results. Find more information by visiting page 40 of the 2019 eFields Report.

Pinch Row Compaction

A study done on pinch row compaction was done to evaluate if utilizing tracks on the planter would reduce compaction or yield in corn. Although the results showed no statistical difference, it was clear during harvest operations that there were visual differences in ear size and plant height between treatments. Read more about the study by visiting page 66 of the 2019 eFields Report.

Seeding Rate Trials

These trials were conducted to understand the impact of varying corn seeding rate within Ohio considering in-field variability and cultural practices implemented. Information from these trials is being used to improve management recommendations for growers throughout Ohio and to help understand how variable-rate seeding may impact field by field profitability. To learn more about these trials, visit page 92 of the 2019 eFields Report.



Planter 2x2x2 vs. 2x2

Ohio farmers have been looking for better ways to apply nutrients that increases the efficiency of crop uptake.This study was done to evaluate the yield impacts of nitrogen placement on both sides of the furrow. There was no significant difference in yield results this year. Find more information on page 72 of the 2019 eFields Report.

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eFields

connecting science to fields

Did you miss the 2019 eFields Report Webinar but still want to learn more?

Visit **go.osu.edu/eFieldsWebinar** to view the full webinar and hear from Digital Ag team members as they highlight results and learnings from on-farm studies. Thank you to all the collaborating farmers and industry partners that make this work possible!

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