INSIDE AGRONOMY

ISSUE 16 - MAY 5, 2025



Agronomy

Congratulations to the Agronomy Outstanding Undergraduate Students who were recognized at the College of Ag spring awards on April 21st.

Outstanding Senior: Kathryn Lightfoot

Outstanding Junior: Jason Emsweller

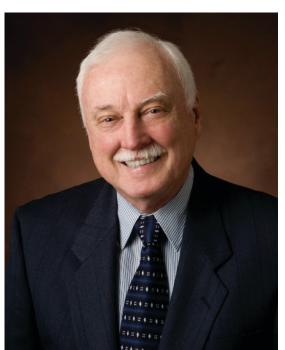
Outstanding Sophomore: Ahren Berlanger

Outstanding Freshman: Justin Bedel



PURDUE AGRONOMY PROFESSOR EMERITUS HONORED WITH LIFETIME ACHIEVEMENT AWARD 2024

Submitted by JoAnn Vorst



The late <u>James J. Vorst</u>, University of Nebraska–Lincoln alumni, received the Department of Agronomy and Horticulture 2024 Alumni Lifetime Achievement Award.

This award is the highest honor bestowed upon graduates of the Department of Agronomy and Horticulture who have made significant contributions to their community, state and nation through professional service, public service and/or civic engagement. The award was founded in 2016 to recognize alumni who have enhanced the reputation of the department and the university by distinguishing themselves in their careers. Honorees are selected by the Agronomy and Horticulture Alumni Advisory Council (AHAAC).

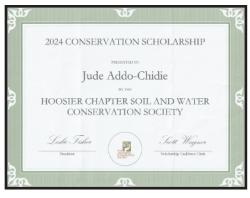
See the full article at the link below.

https://agronomy.unl.edu/our-people/alumni/alumni-lifetime-achievement-award-2024

Congratulations to Dr. Armstrong's Ph.D.

student, Jude Addo-Chidie, who was awarded the Conservation Scholarship by the Soil and Water Conservation Service and completed their SWCD watershed leadership training.





Congratulations to Amare Seyoum Hailessilase who has been awarded the 2025 Dr. Dagnatchew Yirgou Endowment Travel Award from the College of Agriculture.

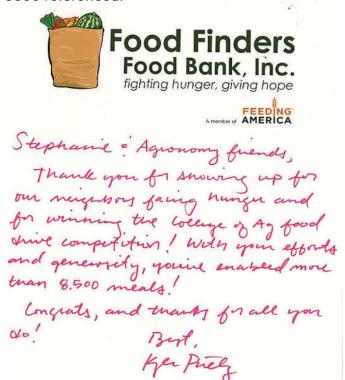


THANK YOU FOR YOUR SUPPORT OF FOOD FINDERS!

Through all of your generous online and in-person donations, including the pie a la mode sales, the Department of Agronomy was able to donate a total of \$3585.60 (10,757 meals) to support Food Finders Food Bank! Agronomy donations surpassed all other departments by over \$2000!

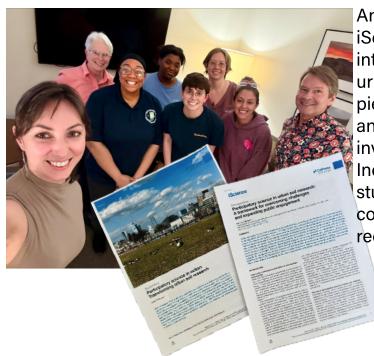
Thank you all for doing your part to fight hunger and give hope to people in the community!

Below is a thank you from Food Finders. The total meals supported was estimated at that point, but was well over the 8500 referenced.





Dr. Eileen Kadivko represented Agronomy at the Food Finders annual Blue Jean Ball. Unfortunately, the traveling fork trophy was not able to be presented at the ball, but will soon be back in Agronomy for another year!



Anna Paltseva, invited by the editor of iScience, published a <u>perspective article</u> introducing a framework for participatory urban soil research, followed by a companion piece sharing the <u>backstory</u> of her fieldwork and research approach. She was also recently invited to visit Dr. Gabriel Filippelli's lab at Indiana University, where she spoke with students about environmental contaminants, community science, and insights from her recent TEDx talk at NCState.

Click the links above to view the article and backstory.

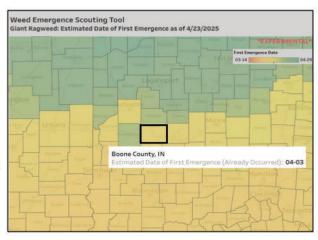
The Agronomy Club made Spring Fest 2025 unforgettable! They transformed a gravity wagon into "Harvest Hoops" in honor of Agronomy alum Robbie Armstrong (1998-2023).

They even added a mini hoop for all ages to enjoy! Free popcorn, corn Jeopardy, and soil painting were a hit all day long!



Midwestern Regional Climate Center Launches New Experimental Weed Emergence Scouting Tool

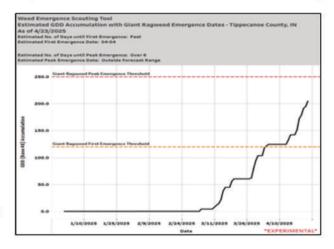
Midwestern farmers have faced a buildup of pesticide resistance in pigweeds (waterhemp and Palmer amaranth), highlighting the importance of scouting to detect weeds early in their growth stages. Otherwise, weed escapes are a common issue as herbicides lose their efficacy when weeds are allowed to grow long enough into their growth cycle. The Midwestern Regional Climate Center (MRCC), supported by the USDA National Institute of Food and Agriculture, Crop Protection and Pest Management Program through the North Central IPM Center (2022-70006-38001), has developed the experimental Weed Emergence Scouting Tool



(W.E.S.T.) to help farmers estimate when agronomic weeds are likely first to emerge and reach peak emergence based on growing degree day (GDD) models. The tool is currently limited to two weeds: waterhemp and giant ragweed. The MRCC hopes to expand its focus to other weeds with future funding.

The current version allows users to:

- Track GDD (base 48°F) accumulations over the current year (January 1 to the current date) for any Midwest County.
- Based on forecast data, determine whether giant ragweed or water hemp is expected to reach its peak emergence within six days and, if so, in how many days.
- Review the current season's emergence dates for giant ragweed or water hemp in specific Midwest counties.



W.E.S.T. uses high-resolution PRISM temperature data to calculate GDDs with a base of 48°F and adds them to the previous day's total. Forecast maximum, minimum, and average temperatures from NOAA are adjusted to the county level and are then used to calculate daily GDD accumulations over the subsequent six-day period. Research from Iowa State University indicates that giant ragweed typically emerges with fewer than 150 GDD, while waterhemp requires more than 350 GDD. To refine these estimates, Purdue Extension Educators collected field data across Indiana in 2023. Findings include:

- Giant ragweed first emerges at about 120 GDD (base 48°F) and reaches peak emergence between 200 and 300 GDD.
- Waterhemp first emerges at about 425 GDD (base 48°F) and peaks between 500 and 600 GDD.

This tool would benefit from your giant ragweed and waterhemp observations to better refine this product. Email mrcc@purdue.edu if you want to provide weed emergence observations to assist in tool validation and refinement.



Issue #2 - May 2, 2025

From South to North: Tracking Indiana's Planting Progress

(Jeferson Pimentel), (Dan Quinn) & (Betsy Bower)

Nationwide, planting is starting to pick up, with USDA-NASS reporting 24% of corn planted across the U.S. as of April 27, just slightly ahead of the 5-year average of 2% (Table 1). States like Texas (74%), Kansas (39%), and Missouri (47%) are leading the way, while much of the Corn Belt, including Iowa (34%) and Illinois (16%), is still in the early stages. The recent rain events have slowed progress in several areas, but as fields dry out, we expect planting activity to ramp up quickly! The USDA-NASS report shows that 10% of Indiana's corn acres had been planted (Figure 1), an 8%-point jump from last week. Although we expect less than one inch of rain this week, recent rainfall and

wet soil conditions have continued to delay fieldwork across much of the eastern and southern portions of the state.

Despite Indiana's slow start, there's reason for optimism. The forecast indicates warmer, drier conditions, and planting progress is expected to ramp up significantly in the coming weeks as fields dry and planters get to work. In previous years, corn planting in Indiana typically spiked in late April and early May, especially when farmers faced a limited weather window. Although the current pace is slow, momentum can shift quickly once field conditions improve for next week.

Let us know if we can help.

Click the link below to view the full publication.

https://ag.purdue.edu/news/department/agry/kernel-news/2025/05/ docs/indiana-corn-update-issue2-may-2.pdf

SAVE THE DATES

COLLEGE OF AGRICULTURE NETWORKING GATHERINGS

LEARN MORE AT: purdue.ag/coag-networking



MARCH 7, 2025 3:00-6:30pm Joint Poster Networking Gathering Colleges of Agriculture & Engineering

► Marriott Hall



JULY 10, 2025 3:00-6:30pm Mandela Washington Entrepreneurial Fellows Poster Networking Gathering

► Lafayette Brewing Company (Upstairs)



SEPTEMBER 5, 2025 3:00-6:30pm CoAg Graduate Student Welcoming Poster Networking Gathering

► Marriott Hall



AUGUST, 2025 DATE & TIME TBD **Experience ACRE**Celebrating agricultural field research

► Agronomy Center for Research & Education



OCTOBER 3, 2025 3:00-6:30pm **Global One Health**

► Marriott Hall



January 30, 2026 3:30-6:30pm **Fermentation Frenzy**

► Marriott Hall

THANK YOU TO OUR SPONSORS:









AGRY 624 PLANT ECOPHYSIOLOGY

AGRY624 is back again!

Come learn about the underlying processes of plant-environment interaction



Days

Tues/Thurs



Time

3:00pm - 4:15pm



Location

MATH 215

QUESTIONS?

contact: Diane Wang dianewang@purdue.edu











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