

# INSIDE AGRONOMY

ISSUE 21 - JULY 21, 2025

**PURDUE**  
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Agronomy

Anna Paltseva presented at the 4th World Conference of the Society for Urban Ecology in Istanbul, Turkey, where she spoke about the role of soils in blue-green infrastructure and nature-based solutions.

She also gave a virtual guest lecture for the Technical University of Berlin's Institute of Ecology, as part of their Urban Ecosystem Science course. Her talk, titled "Impact, Research Visibility, and Outreach," focused on how researchers can build an intentional digital presence, communicate their science to broader audiences, and align personal branding with professional goals.

*Submitted by Anna Paltseva*



***IF YOU HAVE NOT YET REGISTERED FOR EXPERIENCE ACRE, PLEASE DO SO BY WEDNESDAY, AUGUST 6TH!***

## EXPERIENCE ACRE

WED, AUGUST 13<sup>TH</sup> | 4-6:30 PM

AT THE Beck Agricultural Center

4:00 - 5:45

Networking & Research PROPosal

5:45

Welcome & Remarks

6:00

Food - Catered Meal

6:30

Research PROPosal  
Winners Announced

Research  
PROPosal

A fresh take on the traditional poster session

Do you have research at or related to ACRE?  
Creatively and effectively communicate your research  
using only a single object as your anchor!

➤ Sign up to participate when you register to attend Experience ACRE

**PURDUE**  
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Agronomy Center for  
Research and Education

EVENT DETAILS &  
REGISTRATION:

[purdue.ag/exp-acre](https://purdue.ag/exp-acre)



*In case you  
missed it...*

All issues of Inside Agronomy are available on the Agronomy website. [Click here](#) to view past issues.

Sylvie Brouder was asked to give a keynote address at the 20th International Plant Nutrition Colloquium held in Porto, Portugal from July 22 to 25. The title of her talk was "Plant Nutrition: Maintaining Food Security in a Changing Climate". This meeting, held every three years, brought together 400 experts from around the world to discuss advances and emerging challenges in soil fertility and plant nutrition. She is shown with meeting organizers Marta Vasconcelos (left) and Dirceu Mattos Jr. (right)



# GRADUATE STUDENT HIGHLIGHTS

To recognize the accomplishments resulting from the hard work of our Graduate Students, the Graduate Committee has decided to feature all the recently published papers, peer-reviewed or extension articles, by our graduate students in the Inside Agronomy biweekly newsletter.

*submitted by Cankui Zhang*

1)Gautam, A., Anuo, C.O., Kladvko, E., Vyn, T.J. and Armstrong, S., 2025. Does 46 years of conservation tillage and crop rotations change soil carbon and nitrogen distribution and storage?.*Soil and Tillage Research*,254, p.106702.Doi:<https://doi.org/10.1016/j.still.2025.106702>

Asmita Gautam: graduate student

Long-term no-tillage significantly increased soil carbon and nitrogen storage to 1 m depth compared to tilled systems, while crop rotation had minimal impact. Reduced tillage offered little advantage over intensive tillage, emphasizing the effectiveness of no-till for deep soil C and N retention.

2)Ampong, K., Penn, C.J., Camberato, J., Quinn, D. and Williams, M., 2025. Phosphorus Utilization Efficiency Among Corn Era Hybrids Released over Seventy-Five Years.*Agronomy*,15(6), p.1407.<https://doi.org/10.3390/agronomy15061407>

Kwame Ampong: graduate student.

The study assessed changes in phosphorus utilization efficiency (PUtE) across Pioneer corn hybrids released over 75-year period. While grain yield and PUtE varied among hybrids, no consistent trend was observed with the year of release. Differences in PUtE were primarily associated with yield levels and breeding objectives rather than genetic progress over time.

3)Bandura, C.J., Laboski, C.A., Camberato, J.J., Carter, P.R., Clark, J.D., Ferguson, R.B., Fernández, F.G., Franzen, D.W., Kitchen, N.R., Nafziger, E.D. and Ransom, C.J., 2025. Is an economically optimal corn nitrogen rate also environmentally optimal?*Soil Science Society of America Journal*,89(4), p.e70105.<https://doi.org/10.1002/saj2.70105>

Christopher Bandura: graduate student.

4)Mumbi, R.C., Williams, M.R., King, K.W., Penn, C.J. and Camberato, J.J., 2025. Drought to inundation: Precipitation extremes exacerbate phosphorus loss in artificially drained watersheds.*Agricultural Water Management*,316, p.109606.<https://doi.org/10.1016/j.agwat.2025.109606>

Rose Mumbi: graduate student.

5)Bertolino, K.M., Duarte, G.R., Martins, F.A., Camberato, J.J., Medeiros, F.C. and Botelho, F., 2025. Weed dynamics in cover crop/Silage maize succession under potassium fertilization.*Weed Control Journal*,24.<http://dx.doi.org/10.7824/wcj>.

Karina Bertolino: visiting scholar.

6)Mumbi, R.C., Williams, M.R., Ford, W.I., Camberato, J.J. and Penn, C.J., 2025. Identifying dissolved reactive phosphorus sources in agricultural runoff and leachate using phosphate oxygen isotopes.*Journal of Contaminant Hydrology*,269, p.104501.<https://doi.org/10.1016/j.jconhyd.2025.104501>

Rose Mumbi: graduate student.

7)Cavadini, J.S. and Kladvko, E.J., 2025. Oilseed radish/cereal cover crop bicultures and soil phosphorus distribution.*Journal of Soil and Water Conservation*,80(1), pp.76-90.DOI:10.1080/00224561.2024.2429960

Jason Cavadini: graduate student.

8)Omonode, R.A. and Kladvko, E.J., 2025. Subsurface drainage intensity effects on soil physical characteristics, plant biomass production, and carbon balance.*Soil Science Society of America Journal*,89(4), p.e70106.<https://doi.org/10.1002/saj2.70106>

Rex Omonode: graduate student.

9)Cavadini, J., and E. Kladvko. 2025. Can radish cover crops be used to manage soil phosphorus?Purdue Extension Publ. AY-359-W.

Jason Cavadini: graduate student.

We're excited to feature Alex Wassgren's research in this month's College Grad Spotlight! Congratulations, Alex!

*Submitted by Sophia Qu*

Click the link to view the full article. <https://ag.purdue.edu/news/department/arge/2025/08/graduate-spotlight-wassgren.html>



# 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](mailto:dianewang@purdue.edu)



# SAVE THE DATES

## COLLEGE OF AGRICULTURE NETWORKING GATHERINGS

INVITE A COLLEAGUE OR FRIEND! NON-PURDUE GUESTS WELCOME

LEARN MORE AT: [purdue.ag/coag-networking](http://purdue.ag/coag-networking)



**AUGUST 13, 2025**  
3:00-6:30pm

**Experience ACRE**  
Celebrating Agricultural Field Research  
► *Agronomy Center for Research & Education*



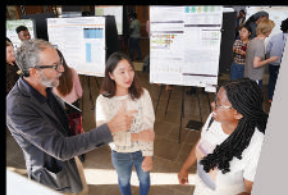
**SEPTEMBER 5, 2025**  
3:00-6:30pm

**CoAg Graduate Student Welcoming  
Poster Networking Gathering**  
► *Marriott Hall*



**OCTOBER 3, 2025**  
3:00-6:30pm

**Global One Health**  
► *Marriott Hall*



**NOVEMBER 7, 2025**  
3:00-6:30pm

**Joint Poster Networking Gathering  
Colleges of Agriculture & Engineering**  
► *Marriott Hall*



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

**Fermentation Frenzy**  
► *Marriott Hall*



**MARCH 6, 2026**  
3:00-6:30pm

**Timely Topic To Be Determined**  
- *Suggestions Most Welcome!*  
► *Marriott Hall*

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