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UKREC UPDATE

From the Chair



Greetings Alums!

I'm happy to report that major progress on all the College's building projects is occurring both in Lexington and Princeton. By the time I write this newsletter next year, our new instructional facilities should be open and operating in the Martin-Gatton Agricultural Sciences Building. UKREC folks have wonderful new field/farm buildings in use (see article on pg 20) and hope to be in their new main building late this year. Exciting projects are slated to start at Oran Little and North Farm in the near future. This will be a total transformation of the built environment for our College – exciting times! However, due to the construction, we will once again host the annual PSS RoundUp Alumni event off campus this year – at Mirror Twin Brewing – on September 5. We hope to see you there!

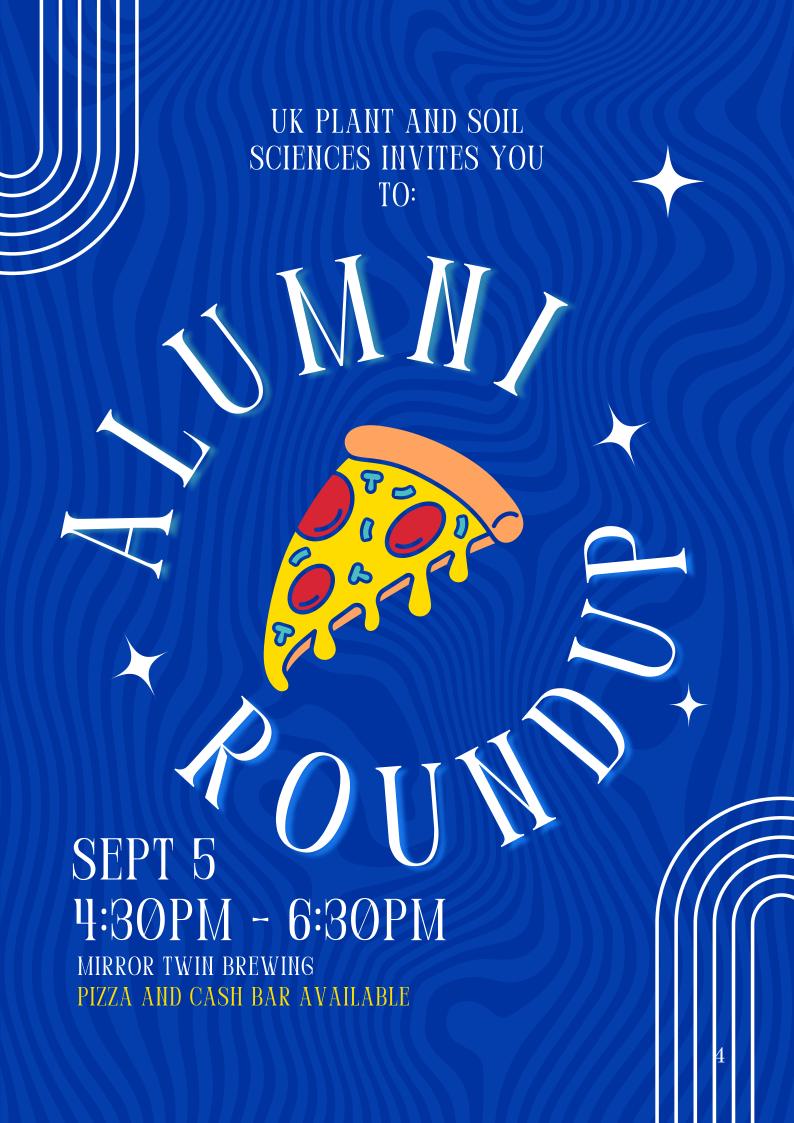


View of new Agricultural Research Building going up adjacent to Plant Science

We welcome **10** new graduate students this fall and **9** new undergraduates in the Agricultural Ecosystem Science (AES) degree program. We have three new faculty members starting this year (pg 6), and we celebrated the retirement of four faculty members last year (Drs. JD Green, Mike Barrett, Elisa D'Angelo, and Jimmy Henning). Our faculty, staff, current students, and alums do great work, discover new things, and make us proud of our unit. Check out the new perennial grain Drs. Brzozowski and Poffenbarger are experimenting with (pg 9) and the achievements of current PhD student Eric Luteyn (pg 11). Please get in touch if you have achievements to share or ideas for next year's newsletter.

I hope you enjoy this edition of the PSS Alumni Newsletter. Sincerely,

Rebecca 2 Mically



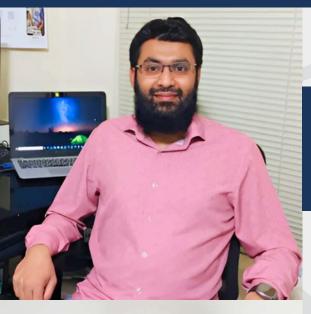


FACULTY UPDATES

Dr. Chris
Shepard was
granted tenure
and promoted
to Associate
Professor this
Spring!

FACULTY UPDATES

We welcome the following who will be joining the Plant and Soil Sciences faculty on campus this academic year!



Dr. Siddique Aboobucker Assistant Professor Plant Reproductive Biology



Dr. Ricardo Ribeiro Assistant Professor Extension Soil Science



Dr. Marcelo Zimmer Assistant Professor Extension Weed Science







Tall fescue's fungal endophyte symbiosis helps the grass tolerate stress from heat, drought, and herbivory. It is not known if planting mixes of tall fescue with differing fungal endophytes provides a benefit to producers in biomass and agroecosystem services such as insect abundance, greenhouse gas emissions, and soil nutrients carbon cycling. The Symbiotic Diversity (or SymDiv) project consists of 80 total plots of varying endophyte diversity: endophyte free fescue, monocultures containing one of four different endophytes, two-way, three-way, and four-way combinations of these endophytes. In the spring and fall, plant biomass samples are collected sorted by species to quantify aboveground biomass and plant species diversity. Prior to 2023, plots were managed as a having operation, and in 2023, cattle grazing was introduced to ascertain interactions between endophyte diversity on grazing tolerance and weed pressure.



INTERMEDIATE WHEATGRASS OFFERS NEW OPTION FOR KENTUCKY GROWERS

By Jordan Strickland

A relatively unassuming plot of intermediate wheatgrass is turning heads at the University of Kentucky Martin-Gatton College of Agriculture, Food and Environment's North Farm. Known by its trademarked grain name Kernza™, the perennial cousin of wheat is the centerpiece of a three-year project aimed at preventing Kentucky's hillsides from eroding while providing growers with a new crop to sell. Plant geneticist Lauren Brzozowski, an assistant professor in the Department of Plant and Soil Science (PSS), is spearheading the trials. This work is supported by a \$400,000 U.S. Department of Agriculture Southern Sustainable Agriculture Research and Education (SSARE) grant, enough to cover three field seasons, lab analyses and student help. Maker's Mark™ provided additional support for this project.



While Brzozowski tracks genetics, PSS associate professor Hanna Poffenbarger tackles the management questions growers will ask first. Her team compares seeding rates, nitrogen programs and planting methods, measuring everything from stand density to grain weight. "We need experiments like this so we can give growers solid recommendations," Poffenbarger said. "Keeping roots in the ground year-round — deeper roots, bigger root systems and less disturbance — is good for soil organic matter and soil structure, and it helps reduce erosion."

Preliminary observations look promising. The intermediate wheatgrass stifles weeds by its second year, and the grass can be mowed for hay before the grain heads ripen in midsummer. Poffenbarger called the dual use a perk for mixed crop-livestock farms, saying that "a producer could take an early forage cut, let the stand regrow and still run a combine in July."

Read more at news.ca.uky.edu/

GRADUATE TEACHING ASSISTANT, ERIC LUTEYN, HONORED WITH OUTSTANDING TEACHING AWARD



By Jenny Wells-Hosley

Eric Luteyn, a doctoral candidate and graduate assistant in the <u>Martin-Gatton College of Agriculture, Food and Environment</u> is one of nine winners to receive the University of Kentucky's 2025 Outstanding Teaching Awards.

These awards identify and recognize individuals who demonstrate special dedication to student achievement and who are successful in their teaching. Recipients were selected via nomination and reviewed by a selection committee based in the UK Provost's Office for Faculty Advancement and the Center for the Enhancement of Learning and Teaching (CELT).

"I am deeply honored to receive the University of Kentucky's 2025 Outstanding Teaching Award," Luteyn said. "Teaching plant science has been one of the most fulfilling aspects of my academic journey, and this recognition affirms that the approaches I've developed help students engage with the subject in meaningful and lasting ways. I'm truly grateful for this award and inspired to continue fostering inclusive and engaging learning environments."

Luteyn, a U.S. Army veteran, has brought the same level of discipline, compassion and leadership from his military service to the classroom. After sustaining a brain injury during his time in the Army, Luteyn made the decision to pursue advanced degrees in plant breeding and agronomy. While aspects of doctoral study have presented unique challenges, his persistence and passion for teaching have set him apart.



Paul Jasa (left) presented with award from nominator Dr. Chad Lee (right).

The 2024 Shirley Philips No-Till award was presented to Paul Jasa from the University of Nebraska in recognition of his contributions in the field of no-till agriculture.

AWARDS



Drs. J. Henning, J. Gerrish, C. Dougherty, C. Teutsch, R. Smith - left to right

AWARDS

The Distinguished Alumni Award was presented to Jim Gerrish, longtime forage consultant and writer. Jim received his MS degree from our Department with Dr. Chuck Dougherty as serving as his advisor.

Early Career Award recipient, Dr. Katherine Rod, was honored by the Graduate Student Association for her significant achievements as an early career alumni! Dr. Rod was advised by Dr. Carrie Knott for her PhD and Dr. Carl Bradley for her MS degree.

AWARDS





SPRING 2025 GRADUATION HIGHLIGHTS





INTEGRATED PLANT AND SOIL SCIENCES S Y M P 0 S I U M 2 0 2 5









Oral Presentation Winners: (Pictured clockwise)

1st - Magdalena Ricciardi 2nd - Leticia Pacheco Inoue 3rd - Jack Eaker

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Poster Presentation Winners: (Pictured clockwise)

1st - Hallie Sandeen 2nd - Paul Cöckson 3rd - Yuyan Liu







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Gerald O. Mott Award -Kiera Searcy Adv. Haramoto





Tekrony Seed Bio Travel Award -Vijyesh Sharma Adv. Kawashima

GRADUATE STUDENT AWARDS

Peaslee Phillips Award -Paul Cöckson Adv. Pearce





Johnston Carringer Award -Vijyesh Sharma Adv. Kawashima

CONGRATULATIONS TO THE 2025 COHORT GRADUATING WITH A BS IN AGRICULTURAL ECOSYSTEM SCIENCES!



Students in the AES 490 capstone class teamed up with producer Gary Brown of Harrodsburg, KY and his agronomist Jeremiah Windell from Advanced Agrilytics for a project aimed at helping assess what it would take to transition Mr. Brown's nearly 1000-acre soybean and corn row crop operation to all hay production. The students presented their findings to Mr. Brown, Mr. Windell, and a selection of faculty and students on May 2nd. Pictured (from L to R) are Dr. Dave McNear, Matthew Hahn, Sydney Knickel, Rebecca Hamilton, Luke Daugherty, Everett Marret, Jeremiah Windell, and Garv Brown



UKREC

At Princeton

CELEBRATING 100™ YEAR ANNIVERSARY

Main building progress to date

Over the past year, we have made significant progress toward recovery and rebuilding. It has been amazing!

We have completed the farm shop, field research building, residence hall, chemical storage, and one of two cattle handling facilities. We have three buildings in construction at present: Grain and Forage Center for Excellence (main building), a feed barn, and a new greenhouse/headhouse facility.

UKREC celebrates it's 100th anniversary this year. Please watch for a 100th anniversary celebration to happen sometime this fall.



New, functioning field lab and various farm buildings



PLANT AND SOIL SCIENCES

Interested in staying connected? Follow us at @ukplantandsoilscience on Instagram and Facebook!

SEPTEMBER 2025 ISSUE NO.06