
Rishi Prasad, Ph.D.

Associate Professor / Extension Specialist (Nutrient Management)

Departments of: Animal Sciences / Crop, Soil and Environmental Sciences

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Education and Training

- **Ph.D.**, Soil and Water Science; Minor - Agronomy University of Florida 2014
- **M.S.**, Agronomy, West Virginia University 2010
- **B.S.**, Agricultural Sciences G.B. Pant University of Agricultural Technology, India 2007

Research and Professional Experience

- 2023 – Present **Graduate Program Officer.** Department of Crop, Soil, and Environmental Sciences, Auburn University, AL.
- 2023 – Present **Associate Professor / Extension Specialist (Nutrient Management)**
Depts.: Animal Sciences / Crop, Soil and Environmental Sciences, Auburn Univ., AL
- 2017 – 2023 **Assistant Professor / Animal Systems Environmental Specialist,**
Dept. of Crop, Soil and Environmental Sciences & Dept. of Animal Sciences, Auburn University, AL
- 2016 – 2017 **Research Associate,** USDA-ARS/Penn State University, University Park, PA
- 2015 – 2016 **Crop Nutrition & Systems Modeling Scientist,** FarmLogs, Ann Arbor, MI
- 2014 – 2015 **Postdoctoral Research Associate,** Department of Agriculture & Biological Engineering, University of Florida, Gainesville, FL
- 2010 – 2014 **Graduate Research Assistant,** Soil and Water Science Department, University of Florida, Gainesville, FL
- 2007 – 2010 **Graduate Research Assistant,** Division of Plant and Soil Science, West Virginia University, Morgantown, WV

Awards and Honors

2025

- **Dean's Grantmanship Awards, (Top 5% of Total Extramural awards)**
College of Agriculture, Auburn University.

2024

- **Outstanding Publication with High Economic Impact.** College of Agriculture, Auburn University (coauthor).

Publication: Chakraborty, D., R. Prasad, D. Watts, and H.A. Torbert. 2023. Effectiveness of flue gas desulfurization gypsum in reducing phosphorus solubility in poultry litter when applied as an in-house amendment. Waste Manage. 171 (1):1-9.

2023

- **Dean's Grantmanship Awards,** College of Agriculture, Auburn University.
- **South Carolina Association County Agricultural Agents Communication Award for SARE Book** (coauthor)

2022

- **Academic Editor.** *PLOS ONE-current*
- **Associate Editor.** Journal of Agricultural & Environmental Letters- *current*
- **Leader** of the Beneficial Reuse By-Products in Agriculture Community-American Society of Agronomy.
- **Auburn Author Award.** *Contributing author* to the Alabama Forage Handbook. Auburn University, Auburn, AL.

2021

- **Vice-Leader** of the Beneficial Reuse By-Products in Agriculture community-American Society of Agronomy.
- **Achievement Award.** In Recognition of Excellence in Extension Educational Program. National Association of County Agricultural Agents.
- **Outstanding Educational Materials Award.** *Contributing Author* to Alabama Extension Commercial Horticulture Webinar Series. American Society of Horticultural Science, Extension Division.
- **Achievement Award.** Alabama Association of County Agricultural Agents.
- **Dean's Grantsmanship Awards.** College of Agriculture, Auburn, University.
- **Outstanding Publication with High Scientific Impact Award** for an article published in Agrosystems, Geosciences & Environment. College of Agriculture, Auburn University, Auburn, AL.

2020

- **The Inspiring Young Scientist Award.** Environmental Quality Section, American Society of Agronomy.
- **Professional Excellence Award. National Finalist** in Applied Research Poster. New tools to identify phosphorus hotspots and predict phosphorus loss risk from manure-impacted soils. National Association of County Agricultural Agents.
- **Regional Winner in Applied Research Poster.** New tools to identify phosphorus hotspots and predict phosphorus loss risk from manure-impacted soils. National Association of County Agricultural Agents.
- **Visionary Leadership Award.** Epsilon Sigma Phi, Alpha Pi Chapter.
- **Dean's Grantsmanship Award.** College of Agriculture, Auburn University,
- **State Winner in Applied Research Poster.** New tools to identify phosphorus hotspots and predict phosphorus loss risk from manure-impacted soils. National Association of County Agricultural Agents.
- **Second Place in Applied Research Poster.** Does fertilizing soybean with poultry litter enrich the grain with mineral nutrients? Alabama Association of County Agricultural Agents and Specialists.
- **First place in Applied Research Poster.** New tools to identify hotspots and predict phosphorus loss risk from manure impacted soil Alabama Association of County Agricultural Agents and Specialists.
- **Second Place in Applied Research Poster.** Application time and rate of poultry litter and urea on corn grain yield in Alabama. Alabama Association of County Agricultural Agents and Specialists.

2019

- **National Winner- Best Bound Book.** *Contributing author* to the Alabama Beef Handbook. The National Association of County Agricultural Agents.
 - **State Finalist-Best Bound Book.** *Contributing author* to the Alabama Beef Handbook. The Alabama Association of County Agricultural Agents and specialists.
- 2013
- **Best Oral Presentation Award.** 14th Annual Soil and Water Science Research Forum. University of Florida, Gainesville, FL.
- 2012
- **William Robertson Fellowship.** Department of Soil and Water Science. University of Florida, Gainesville, FL.
 - **Best Poster Award.** 13th Annual Soil and Water Science Research Forum. University of Florida, Gainesville, FL
- 2011
- **Best Poster Award (Fourth Place).** Soil Fertility & Plant Nutrition (S04/S08 Division). ASA-CSSA-SSSA International Annual meeting, San Antonio, TX.
- 2009
- **Best Poster Award (Second Place).** Soil Fertility & Plant Nutrition S04/S08 Division. ASA-CSSA-SSS International Annual Meeting, Pittsburgh. PA.
- 2003
- **National Talent Scholarship.** Indian Council of Agricultural Research (ICAR). Government of India.

Awards Received by Graduate Students Under the Supervision of Dr. Prasad

- 2024 **National**
- **Shruthi Koneti. Third Place in the Graduate Student Poster Presentation Competition** (ASA Community: Animal Agriculture and the Environment) at the ASA-CSSA-SSSA International Annual Meeting (Nov 10 -13, 2024).
 - **Shruthi Koneti. Third Place in the Graduate Student Oral Presentation Competition** (ASA Community: Nutrients and Environmental Quality) at the ASA-CSSA-SSSA International Annual Meeting (Nov 10 -13, 2024).
 - **Maryam Sayad. Second Place in the Graduate Student Poster Presentation Competition** (ASA Community Biochar: Agronomic & Environmental Uses) at ASA, CSSA, SSA International Annual Meeting (Nov 10 -13, 2024).
 - **Maryam Sayad. Second Place in the Graduate Student Poster Presentation.** (ASA Community: Animal Agriculture and the Environment) at the ASA-CSSA-SSSA International Annual Meeting (Nov 10 -13, 2024).
 - **Rajveer Singh. 2024 ASA-CSSA-SSSA Encompass Scholar.**
 - **Vaibhav Balasaheb Shelar. Third place in Graduate Student Poster Presentation** (Model Application in Field Research Community) at the ASA-CSSA-SSSA. International Annual Meeting (Nov 10 -13, 2024).
 - **Temitope Popoola. Verma Graduate Student Leadership Fellow 2024.**

State/Local

- **Shruthi Koneti. First Place in the Student Poster Presentation Competition** at the Alabama Water Resources Conference (September 4 – 6, 2024).
- **Shruthi Koneti. Second Place in the Graduate Student Poster Presentation Competition** at the graduate student poster showcase competition, College of Agriculture, Auburn University (October 24, 2024).
- **Maryam Sayad. Finalist, three-minute Thesis competition**, Auburn University

2023

National

- **Anjan Bhatta: Soil Water Management Community Graduate Student travel Award.** 2023.
- **Rajveer Singh: 3rd Place. Oral Competition.** Animal Agriculture and the Environment community. Environmental Quality Section. ASA-CSA-SSSA Annual meeting. 2023. Saint Louis, Missouri.
- **Sabina Poudel: 1st Place. Poster Competition.** Animal Agriculture and the Environment community. Environmental Quality Section. ASA-CSA-SSSA Annual meeting. 2023. Saint Louis, Missouri.
- **Shruthi Koneti: 2nd place. Poster Competition.** Animal Agriculture and the Environment community. Environmental Quality Section. ASA-CSA-SSSA Annual meeting. 2023. Saint Louis, Missouri.
- **Navdeep Singh Sidhu. 2nd Place. Poster Competition.** S4 & S8 division. Nutrient Management and Soil and Plant Analysis. ASA-CSA-SSSA Annual meeting. 2023, Saint Louis, Missouri.
- **Gagandeep Kaur. 3rd Place. Poster Competition.** Nutrient Management. ASA-CSA-SSSA Annual meeting. 2023, Saint Louis, Missouri.

State/Local

- **Gagandeep Kaur: Auburn University's Outstanding Master's students for 2022-2023.**
- **Gagandeep Kaur: Auburn University's Master's Thesis award for 2022-2023.**
- **Chhabi. Raj. 1st place in MS Students' Competition.** Poultry Litter's Impact on Water Quality Under One Acre-Inch Rainfall. Annual Graduate Poster Showcase. October 26, 2023, College of Agriculture, Auburn University, Alabama.

2022

National

- **Rajveer Singh: 3rd Place in Oral Presentation.** Influence of cleanout frequency of broiler litter on corn production and soil properties. Animal Agriculture and Environment Community. ASA-CSSA-SSSA International Annual Meeting. Baltimore, MD. Nov 6-9, 2022.

- **Navdeep Singh: 3rd Place in Poster Presentation.** Evaluating the Effect of Phosphorus Stratification on Corn and Soybean Yield. Nutrients in Environmental Quality. ASA-CSSA-SSSA International Annual Meeting. Baltimore, MD. Nov 6-9, 2022.
- **Arpita Sharma: 1st Place in Poster Presentation.** Simulating Nitrogen Dynamics of Row Crops of Alabama using DSSAT. Nutrient Management Professionals Community. ASA-CSSA-SSSA International Annual Meeting. Baltimore, MD. Nov 6-9, 2022.
- **Chhabi Raj: 1st Place in Poster Presentation.** Nutrients, Sediments, and Water Losses from One-inch Rainfall Simulation in Conventionally Tilled Soils Receiving Two Manure Types and Four Application Rates. Animal Agriculture and Environment Community. ASA-CSSA-SSSA International Annual Meeting. Baltimore, MD. Nov 6-9, 2022.

State/Local

- **Anna Powell. 3rd Place in Graduate Student Oral Competition.** Effects of flue gas desulfurization gypsum bedding on nutrient release and water quality. Alabama Water Resources Conference. Sept 7-9, Orange Beach, Alabama.
- **Arpita Sharma. 1st Place in PhD Poster Competition.** Runoff Nutrient Losses from Row Crop Fields of Alabama. 2022 College of Agriculture (COA) Graduate Student Research Poster Showcase. Oct 20, 2022.
- **Chhabi Raj. 1st Place in MS Poster competition.** Nutrient and water losses from one-inch rainfall simulation in conventionally tilled soils receiving two manure types and four application rates. 2022 College of Agriculture (COA) Graduate Student Research Poster Showcase. Oct 20, 2022.
- **Arpita Sharma. 1st Place in PhD Poster Competition.** Runoff Nutrient Losses from Row Crop Fields of Alabama. 2022 College of Agriculture (COA) Graduate Student Research Poster Showcase. Oct 20, 2022.

2021

National

- **Anna Powell. 2nd Place in Graduate Student Poster Competition.** Effects of gypsum-amended poultry litter on nutrient release and crop yield. ASA-CSSA-SSSA International Annual Meeting. Salt Lake City, UT.
- **Gagandeep Kaur. 3rd Prize in Graduate Student Poster Competition.** Evaluating the changes in phosphorus pools with soil depth in five Alabama soil regions. ASA-CSSA-SSSA International Annual Meeting. Salt Lake City, UT.

State/Local

- **Arpita Sharma. 1st Place in Graduate Student Poster Competition.** Understanding nutrient balances of commercial row crop fields in Alabama. College of Agriculture Graduate Student Research Poster Showcase. Auburn University, Auburn, AL.

- **Anna Powell. 1st Place in Graduate Student Poster Competition.** Effects of gypsum-amended poultry litter on nutrient release and runoff. College of Agriculture Research Poster Showcase. Auburn University, Auburn, AL.
- **Poulomi Dey. Outstanding Master's Student Award.** Auburn University, Auburn, AL.

2020

National

- **Rajveer Singh. 3rd Place in Graduate Student Poster Competition.** Poultry litter application rate and time impact on corn grain yield and environmental nitrogen loss. Animal Agriculture and the Environmental Quality Division. ASA-CSSA-SSSA International Annual Meeting. Virtual meeting.
- **Poulomi Dey. 3rd Place in Graduate Student Poster Competition.** Phosphorus characterization in PL of various ages by sequential fractionation procedure. ASA-CSSA-SSSA International Annual Meeting. Virtual meeting.

State/Local

- **Rajveer Singh. Outstanding Master's Student Award.** Auburn University, Auburn, AL.
- **Rajveer Singh. Master's Thesis Award.** Auburn University, Auburn, AL.
- **Rajveer Singh. 1st Place in Virtual Graduate Student Research Poster Showcase.** Effect of poultry litter fertilization on soybean yield and seed nutrient composition. College of Agriculture Research Poster Showcase. Auburn University, Auburn, AL.

2019

National

- **Rajveer Singh. 3rd Place in Oral Presentation.** Nutrient Management Professional. Corn yield and environmental nitrogen loss under poultry litter and urea application systems. ASA-CSSA-SSSA International Annual Meeting, San Antonio, Texas.
- **Poulomi Dey. 3rd Place in Graduate Student Poster Presentation.** Characterization of phosphorus (P) in poultry litter and determination of P extraction efficiency of extractants. Nutrients and Environmental Quality Section. ASA-CSSA-SSSA International Annual Meeting, San Antonio, Texas.
- **Rajveer Singh. 3rd Place out of 150 Entries in Photo Contest.** 2019 ASA-CSA-SSSA Annual Photo contest.

State/Local

- **Poulomi Dey. 1st Place in Poster Presentation.** College of Agriculture Graduate Student Research Poster Showcase. Auburn University, Auburn, AL.

List of Graduate Students whose Work is Complete (N=21)

Student name	Degree	Year awarded	Department	Role	Current Position
1. Rajveer Singh	Ph.D.	2024	CSES	Major Professor	Pursuing Postdoc (Arkansas State U)
2. Corey Kichler	Ph.D.	2024	CSES	Major Professor	USDA-ARS (Auburn)
3. Sabina Poudel	M.S.	Summer 2024	CSES	Major Professor	Pursuing Ph.D. (Kansas State U)
4. Chhabi Raj	M.S.	Summer 2024	CSES	Major Professor	Pursuing Ph.D. (U. Hawaii)
5. Gurparshad Singh Brar	M.S.	Summer 2024	BSEN	Committee member	Pursuing Ph.D. (Auburn)
6. Vishawjot Singh Sandhu	M.S.	Summer 2024	BSEN	Committee member	Pursuing Ph.D. (U. Massachusetts)
7. Austin L. Lindquist	M.S.	Summer 2024	HORT	Committee member	Pursuing Ph.D. (U. Arkansas)
8. Kritika Malhotra	PhD	Summer 2023	BSEN	Committee member	Pursuing Postdoc California State
9. Navdeep Singh	M.S.	Summer 2023	CSES	Major Professor	Pursuing Ph.D. (UW-Madison)
10. Gagandeep Kaur	M.S.	Spring, 2022	CSES	Major Professor	Pursuing Ph.D. (UW-Madison)
11. Matthew J. Duchrow	M.Ag.	Fall, 2021	CSES	Major Professor	Farm manager, Everglades
12. Blake Clark	M.Ag.	Spring, 2021	CSES	Major Professor	NRCS, AL
13. Poulomi Dey	M.S.	Fall, 2020	CSES	Major Professor	Pursuing Ph.D. (Virginia Tech)
14. Brooke Walls	M.Ag.	Fall, 2020	CSES	Major Professor	Environmental Scientist, Delaware
15. Hayley Crowell	M.S.	Fall, 2020	CSES	Committee member	Industry
16. Rajveer Singh	M.S.	Summer, 2020	CSES	Major Professor	Pursuing Ph.D. (Auburn)
17. Anjan Bhatta	M.S.	Summer, 2020	CSES	Major Professor	Pursuing Ph.D. (Auburn)

18. Ashley Hopper	M.Ag.	Spring, 2020	CSES	Major Professor	Private farm manager, Missouri
19. Jordon Oldag	M.S.	Fall, 2019	CSES	Committee member	Industry
20. Laljeet S. Sangha	M.S.	Summer, 2019	BSEN	Committee member	Pursuing Ph.D. (Virginia Tech)
21. Kyrie Adkins	M.Ag.	Summer, 2019	CSES	Committee member	Industry

Graduate Students whose Work is in Progress (N=10)

Student name	Degree	Department	Role	Expected Graduation
1. Anjan Bhatta	Ph.D.	CSES	Major Professor	2025
2. Arpita Sharma	Ph.D.	CSES	Major Professor	2025
3. Gibi Thomas	M.S.	CSES	Major Professor	2027
4. Carson Archie	M.S.	CSES	Major Professor	2026
5. Felix Satognon	Ph.D.	CSES	Major Professor	2025
6. Anna Powel	M.S.	CSES	Major Professor	2025
7. Vaibhav Shelar	M.S.	CSES	Major Professor	2025
8. Shruthi Koneti	M.S.	CSES	Major Professor	2025
9. Temitope Popoola	Ph.D.	CSES	Major Professor	2026
10. Maryam Saeed	M.S.	CSES	Major Professor	2025

Post-doctoral fellows (N=6)

Name	Year	Current position
1. Anh Nguyen	2022-current	
2. Soura Gupta	2024-current	
3. Prasenjit Roy	2023-current	
4. Rafique Ahasan Chawdhery	2024	Tuskegee University
5. Marco Ebbing	2024	Seara Food Company, Brazil
6. Hanxiao Feng	2022-2023	China (University)

Research Impact

The impact of research by Prasad and his research group is demonstrated by articles published in high-impact factor journals. Prasad's scholarly work has been cited 858 times (source: Google Scholar; retrieved 03-30-2025). A summary of journal names, the number of articles published in each journal, and the impact factor of the journals are listed below. The number in parentheses following the journal name indicates the number of articles published in that journal.

Journal	Impact factor	Year
Water Research (1)	11.24	2019
Environmental Challenges (1)	8.91	2021
Science of The Total Environment (1)	7.96	2021
Waste Management (1)	7.14	2019
Journal of Environmental Management (2)	6.79	2022, 2021
Agricultural Water Management (1)	5.9	2025
Geoderma (1)	5.6	2025
Precision Agriculture (1)	5.38	2016
Field Crop Research (1)	5.22	2016
Agronomy (1)	3.94	2021
PLOS ONE (4)	3.24	2015, 2016, 2018, 2019
Journal of Soil and Water Conservation (1)	3.18	2020
Soil Science Society of America Journal (1)	2.8	2025
Agronomy Journal (4)	2.24	2021, 2023, 2024, 2025
Journal of Applied Poultry Research (1)	1.19	2022
Open Data Journal for Agricultural Research (1)	0.99	2018
Agricultural Research (1)	0.99	2014
Agrosystems, Geosciences, & Environment (3)	*NA	2021, 2023, 2025

Peer-Reviewed Journal Articles (N=37) (* indicate graduate students of Dr. Prasad)

- 2025 Sandhu, V., J. Lamba, P. Kaur, K. Malhotra, T.R. Way, K.S. Balkcom, **R. Prasad**. 2025. Effect of cover crops on phosphorus and trace metal leaching in agricultural soils. *Agricultural Water Management* 309, 109343.
- 2025 Bhatta, A., Chakraborty, D., **R. Prasad**, D.B. Watts, H. A.Torbert. 2025. Phosphorus loss in surface runoff from soils with different soil test phosphorus ratings. *Agrosystems, Geosciences & Environment*. (*Accepted*).
- 2025 *Singh, R., **R Prasad**. 2025. Fertilizer nitrogen rate effects on broiler litter–fertilized corn: Grain yield and nutrient composition. *Agronomy Journal* 117 (1), e21718.
- 2025 Chakraborty, D., **R. Prasad**, H. Feng, D.B. Watts, H.A. Torbert. 2025. Distribution of phosphorus forms in soil amended with poultry litter of different ages and application rates: Agronomic and environmental perspectives. *Soil Science Society of America Journal* 89 (1), e20781

- 2025 Malhotra, K., J. Lamba, T.R. Way, C. Williams, K.G. Karthikeyan, **R. Prasad**. 2025. Investigating the effect of animal manure on colloidal-facilitated phosphorus transport. *Geoderma* 455, 117203.
- 2024 Worosz, M.R. H. Stewart, M.K. Robinette, B. Ortiz, **R. Prasad**, A. Gambel. 2024. The Challenges of co-developing climate-smart strategies, practices, and technologies among research and extension teams. *The Journal of Extension* 62 (4), 23
- 2024 Reiter, W.S., A.V. Gamble, H. Crowell, K.S. Balkcom, Y. Feng, L. Dillard, K. Mullenix, **R. Prasad**. 2024. Cover crop grazing length impacts on soil health and crop productivity in US Coastal Plain soils. *Agronomy Journal* 116 (6), 2885-2900
- 2024 Poudel, S*, D. Chakraborty, **R. Prasad**. 2024. Evaluation of the efficacy of amendment types and rates in reducing ammonia emissions from broiler litter. *Poultry Science* <https://doi.org/10.1016/j.psj.2024.104467>
- 2024 Raj, C*, D. Chakraborty, D. B. Watts, T. Horvath, Q. M. Ketterings, D. Bliersch, A. A. Tomasek, B. C. Cordoba, **R. Prasad**. 2024. Impact of broiler litter and swine liquid manure on nutrient loss in runoff from three consecutive one acre-inch rainfall events. *Heliyon*. <https://doi.org/10.1016/j.heliyon.2024.e40062>
- 2024 Malhotra, K., J. Lamba, T. R. Way, C. Williams, K.G. Karthikeyan, S. Budhathoki, **R. Prasad**, P. Srivastava, J. Zheng. 2024. Preferential flow of phosphorus and nitrogen under steady-state saturated conditions. *Vadose Zone Journal* 23 (3), e20331.
- 2024 Jatana, B.S., **R. Prasad**, A. Tomasek, T. Horvath, Q.M. Ketterings. 2024. Impact of Manure Type and Rate on Soil Loss and Nutrient Mobilization in Runoff and Infiltrate. *Water, Air, & Soil Pollution* 235 (6), 403.
- 2023 Feng, H., **R. Prasad**, D. Chakraborty. 2023. Effects of broiler litter age and application rate on nutrient mineralization under laboratory conditions. *Agrosystems, Geosciences & Environment* 6 (4), e20445.
- 2023 Kalvakaalva, R., M. Smith, E. Ayipio, C. Blanchard, S. A. Prior, G. B. Runion, D. Wells, D. Bliersch, S. Adhikari, **R. Prasad**, T. R. Hanson, N. Wall, B. T. Higgins. 2023. Mass-Balance Process Model of a Decoupled Aquaponics System. *Journal of the ASABE* 66(4): 955-967 (doi: 10.13031/ja.15468).
- 2023 Kalvakaalva, R., M. Smith, S.A. Prior, G.B. Runion, E. Ayipio, C. Blanchard, D. Wells, D.Bliersch, S. Adhikari, **R. Prasad**, T. R. Hanson, B. T Higgins. 2023. Life cycle assessment of a decoupled biofloc aquaponics facility across seasons. *Journal of Cleaner Production* 429, 139356.
- 2023 *Kichler, C., T. Kornecki, D. Watts, A.Torbert, **R. Prasad**. Cover crop termination methods and custom residue manager effects on collard production. *Agronomy* 2023, 13(10), 2595
- 2023 Chakraborty, D., **R. Prasad**, D.B. Watts, H. A.Torbert. 2023. Effectiveness of flue gas desulfurization gypsum in reducing phosphorus solubility in poultry litter when applied as an in-house amendment. *Waste Management*. 171(1):1-9
- 2023 *Singh, R., **R. Prasad**, K. Balkcom, J. Lamba, D. B. Watts. 2023. Broiler litter application rate and time impacts on corn ear mineral composition. *Agronomy Journal* 115(2):932–944.
- 2023 *Sharma, A., **R. Prasad**. A. Nguyen, A. Bhatta, A. Gamble, M. Worosz. 2023. Potential Nitrogen Mineralization Variability in Commercial Row Crop Fields. *Journal of the NACAA* 16(2).

- 2022 Chakraborty, D., **R. Prasad**, D. B. Watts, H. A. Torbert. 2022. Exploring alternate methods for predicting sorption-desorption parameters for environmental phosphorus loss assessment in poultry litter impacted soils. *Journal of Environmental Management* 317: 115454.
- 2022 Gulizia, J.P., M.S. Rueda, F.K. Ovi, S.M. Bonilla, **R. Prasad**, M.E. Jackson, O. Gutierrez, W.J. Pacheco. 2022. Evaluate the effect of a commercial heat stable phytase on broiler performance, tibia ash, and mineral excretion from 1 to 49 days of age assessed using nutrient reduced diets. *Journal of Applied Poultry Research* 100276.
- 2021 Chakraborty, D., **R. Prasad**. 2021. Stratification of soil phosphorus forms from long-term repeated poultry litter applications and its environmental implication. *Environmental Challenges* 5, 100374.
- 2021 Higgins B.T., K. Chaump, Q. Wang, **R. Prasad**, P. Day. 2021. Moisture content and aeration control mineral nutrient solubility in poultry litter. *Journal of Environmental Management* 300:113787.
- 2021 Chakraborty, D., **R. Prasad**, A. Bhatta, H.A. Torbert. 2021. Understanding the environmental impact of phosphorus in acidic soils receiving repeated poultry litter applications. *Science of The Total Environment* 779:146267
- 2021 *Bhatta, A., **R. Prasad**, D. Chakraborty, J.N. Shaw, J. Lamba, E. Brantley, H.A. Torbert. 2021. Mehlich 3 as a generic soil test extractant for environmental phosphorus risk assessment across Alabama soil regions. *Agrosystems, Geosciences & Environment* 4(3).
- 2021 *Singh, R., **R. Prasad**, B. Guertal, K. Balkcom, J. Lamba. 2021. Effects of broiler litter application rate and time on corn yield and environmental nitrogen loss. *Agronomy Journal*. DOI: 10.1002/agj2.20944.
- 2021 *Singh R., **R. Prasad**, D.P. Delaney, D. B. Watts. 2021. Does soybean yield and seed nutrient content change due to broiler litter application? *Agronomy* 11(8):1523.
- 2020 Sangha, L., J. Lamba, H. Kumar, P. Srivastava, M. Dougherty, **R. Prasad**. 2020. An innovative approach to rainwater harvesting for irrigation based on El Niño Southern Oscillation forecasts. *Journal of Soil and Water Conservation* 75 (6) 1-14.
- 2019 Wang, Q., **R. Prasad**, B. T. Higgins. 2019. Aerobic bacterial pretreatment to overcome algal growth inhibition on high-strength anaerobic digestates. *Water Research* 162: 420-426.
- 2019 Gunn K.M., M.A. Holly, T.L. Veith, A.R. Buda, **R. Prasad**, C.A. Rotz, et al. 2019. Projected heat stress challenges and abatement opportunities for U.S. milk production. *PLoS ONE* 14(3): e0214665
- 2019 Chaump K, M. Preisser, S.R. Shanmugam, **R. Prasad**, S. Adhikari, B. T. Higgins. 2019. Leaching and anaerobic digestion of poultry litter for biogas production and nutrient transformation. *Waste Management* 84:413-422.
- 2018 **Prasad R.**, S.K. Gunn, C.A. Rotz, H. Karsten, G. Roth, A. Buda, A.N.M.K Stoner. 2018. Projected climate and agronomic implications for corn production in the Northeastern United States. *PLoS ONE* 13(6):e0198623.
- 2018 Raymundo, R., S. Asseng, **R. Prasad**, U. Kleinwechter, B. Condori, W. Bowen, J. Wolf, J. E Olesen, Q. Dong, L. Zotarelli, M. Gastelo, A. Alva, M. Travasso, V. Arora. 2018. Global field experiments for potato simulations. *Open Data Journal for Agricultural Research* 4:35-44.

- 2016 **Prasad, R.**, G. Hochmuth. 2016. Environmental nitrogen losses from commercial crop production system in the Suwannee river basin of Florida. PLoS ONE 11(12): e0167558
- 2016 Jin, Z. N., **R. Prasad**, J. Shriver, Q. Zhuang. 2016. Crop model and satellite imagery based recommendation tool for variable rate N fertilizer application for the US corn system. Precision Agriculture 18(5): 779-800.
- 2016 Raymundo, R., S. Asseng, **R. Prasad**, et al. 2016. Performance of SUBSTOR-potato model across contrasting growing conditions. Field Crop Research 202: 57-76.
- 2015 **Prasad, R.**, G. Hochmuth, K.J. Boote. 2015. Estimation of nitrogen pools in irrigated potato production on sandy soil using model SUBSTOR. PLoS ONE. 10(1): e0117891.
- 2014 Chintala, R., G. Djira, M. Devkota, **R. Prasad**, S. Kumar. 2014. Modeling the effect of temperature and precipitation on crop residue potential for the North Central Region of the United States. Agricultural Research 3: 148–154.

Book Chapters

- 2024 Chakraborty, D., **R. Prasad**. 2024. Phosphorus Management for Agriculture and the Environment. In H. Rouached, and S. Satbhai (Eds.) Plant Phosphorus Nutrition, 1-17. CRC press.

Patents and Inventions

- I. Shriver, J., **R. Prasad**, M. Asher, and T. Blackmer. 2017. U.S. Patent 9,652,840. System and method for remote nitrogen monitoring and prescription.

Peer-Reviewed Extension Articles (* indicate Graduate students of Dr. Prasad) (N=25)

- 2025 *Koneti, S., D. Chakraborty, and **R. Prasad**. 2025. Mitigation Strategies for Ammonia & Greenhouse Gas Emissions from Manure. ANR-3141. Alabama Cooperative Extension System.
- 2024 Chakraborty, D., and **R. Prasad**. 2024. Phosphorus Basics: Understanding the types of Phosphorus Species Present in Water that can Disrupt the Health of Freshwater Systems. ANR-3057. Alabama Cooperative Extension System.
- 2024 Ray, P., D. Chakraborty, and **R. Prasad**. 2024. Per- & Polyfluoroalkyl Substances in the Environment: Sources, Health Effects & Remediation Options. ANR-3090. Alabama Cooperative Extension System.
- 2023 *Singh, R., and **R. Prasad**. 2023. Corn nutrient removal: Nitrogen rates & broiler litter application. ANR-3043. Alabama Cooperative Extension System.
- 2023 Kesheimer, K., E. McGriff.....**R. Prasad**. 2023. Agronomic Crops Team Impact Report, 2022. ANR-3008. Alabama Cooperative Extension System.
- 2023 *Singh, R., and **R. Prasad**. 2023. Comparison of nitrogen use efficiency indices for corn fertilized with commercial urea & poultry litter. ANR-2976. Alabama Cooperative Extension System.
- 2023 Chakraborty, D. and **R. Prasad**. 2023. Phosphorus Management: Best Management Practices for Minimizing Phosphorus Loss from Agricultural Soils. ANR-3010. Alabama Cooperative Extension System.

- 2022 **Prasad, R.**, and D. Chakraborty. 2022. Phosphorus Basics: Testing soil phosphorus for agronomic and environmental purposes. ANR-2866. Apr 2022. Alabama Cooperative Extension System.
- 2021 **Prasad, R.** 2021. Nutrient Management in High Tunnel Systems. ANR-2725. Oct 2021. Alabama Cooperative Extension Systems.
- 2021 Chakraborty, D., and **R. Prasad**. 2021. Phosphorus Stratification: Agronomic & Environmental Consequences. ANR-2830. Oct 2021. Alabama Cooperative Extension Systems.
- 2021 Chakraborty, D., and **R. Prasad**. 2021. Phosphorus Management: Indices to Measure Environmental Phosphorus Loss Risk from Soils. ANR-2740. March 2021. Alabama Cooperative Extension Systems.
- 2021 Chakraborty, D., and **R. Prasad**. 2021. Phosphorus Management: Use of Soil Phosphorus Storage Capacity. ANR-2739. March 2021. Alabama Cooperative Extension Systems.
- 2021 Sangha, L., J. Lamba, H. Kumar, P. Srivastava, **R. Prasad**, B. Ortiz, M. Dougherty. 2021. ENSO forecasts to plan water withdrawals for irrigation. [ANR-2832](#). Sep 2021. Alabama Cooperative Extension System.
- 2020 **Prasad, R.**, and K. Stanford. 2020. Applying soil amendments of organic origin to agricultural land. ANR-2634. Feb 2020. Alabama Cooperative Extension Systems.
- 2020 Chakraborty, D., **R. Prasad**, and E. Brantley. 2020. Phosphorus Basics: Understanding Pathways of Soil Phosphorus Loss. ANR-2662. May 2020. Alabama Cooperative Extension Systems.
- 2019 Chakraborty, D., and **R. Prasad**. 2019. Phosphorus basics: deficiency symptoms, sufficiency ranges, and common symptoms. [ANR-2588](#). Sept 2019. Alabama Cooperative Extension System.
- 2019 **Prasad, R.**, and D. Chakraborty. 2019. Phosphorus basics: understanding phosphorus forms and their cycling in the soil. [ANR-2535](#). Apr 2019. Alabama Cooperative Extension System.
- 2019 **Prasad, R.**, and K. Stanford. 2019. Nutrient content and composition of poultry litter. [ANR-2522](#). Jan 2019. Alabama Cooperative Extension System.
- 2019 *Singh, R., and **R. Prasad**. 2019. Using a nitrogen budget in farm management. [ANR 2594](#). Oct, 2019. Alabama Cooperative Extension System.
- 2018 **Prasad, R.**, and K. Stanford. 2018. Factors affecting the nutrient content and composition of poultry litter. Crop, Soil, and Environmental Sciences Timely Information Nutrient Management Series Dec 2018. Alabama Cooperative Extension System.
- 2018 **Prasad, R.**, and K. Stanford. 2018. Evaluating the phosphorus status of soil and the 590 phosphorus application criterion. Crop, Soil, and Environmental Sciences Timely Information Nutrient Management Series Dec 2018. Alabama Cooperative Extension System.
- 2015 **Prasad, R.**, and G. Hochmuth. 2015. Understanding nitrogen release from anaerobically digested beef cattle manure. [SL 424](#). The University of Florida/IFAS Extension.

- 2015 Prasad, R., and G. Hochmuth. 2015. Understanding nitrogen transformations and cycling for sweet corn production in sandy soils. [SL430](#). University of Florida/IFAS Extension.
- 2014 **Prasad, R.**, G. Hochmuth, and A.C. Wilkie. 2014. Anaerobic digesters for manure management for livestock operations. [SL402](#). University of Florida/IFAS Extension.
- 2013 **Prasad, R.**, and G. Hochmuth. 2013. How to calculate a partial nitrogen mass budget for potato. SL401. University of Florida/IFAS Extension.

Peer Reviewed Extension Books (N=3)

- 2022 Silva, L.S., S.L. Dillard, M.K. Mullenix, M. Wallau, C.Vasco, J.J. Tucker, K. Keishmer, D. Russell, K. Kelley, M. Runge, A. Gamble, **R. Prasad**, M. Elmore, M. Burns, K. Stanford, V. Niyigena, C. Wickens, W. Sawadgo, and C. Heaton. 2022. Concepts and research-based guidelines for forage-livestock systems in the Southeast region. Southern Region SARE. 127p
- 2021 Dillard, S.L., A. Rabinowitz, A.V. Gamble, D. Russell, J. Sawyer, K. Kesheimer, W.K. Kelley, M.K. Mullenix, S.L. Dillard, L.S. Silva, M. Runge, **R. Prasad**, and S. Rodning. 2021. Alabama Forage Guide.
- 2018 Mullenix, M.K., S.P. Rodning, L.A. Kriese-Anderson, S.L. Dillard, M. Elmore, W.K. Kelley, B. Goodrich, M. Runge, **R. Prasad**, K. Stanford. 2018. Alabama Beef Handbook-ANR1323. 132 p.

Published Abstracts (indicate Graduate students of Dr. Prasad) (N=174)*

1. Ray, P., Chakraborty, D., & **Prasad, R.** (2024) Evaluating the Effects of Biochar and Inorganic Amendments on the Availability of Phosphorus and Heavy Metals in Broiler Litter Treated Soils (Abstract). Poster. ASA, CSSA, SSSA International Annual Meeting, November 10-13, 2024, San Antonio, TX.
2. Ray, P., Chakraborty, D., & **Prasad, R.** (2024) Effect of Treating Poultry Litter with Biochar and Inorganic Amendments on the Potential Release of Phosphorus and Heavy Metals in Soil: Relevance to Water Quality (Abstract). Oral Presentation. Alabama Water Resources Conference, September 4 – 6, 2024, Orange Beach, AL.
3. Ray, P., Chakraborty, D., & **Prasad, R.** (2024) Effect of Treating Poultry Litter with Biochar and Inorganic Amendments on the Potential Release of Phosphorus and Heavy Metals in Soil (Abstract). Future of Farming Symposium, Auburn, AL.
4. *Koneti, S., **R. Prasad**, D. Chakraborty, D. Watts, A. Torbert. 2024. Does Covering Broiler Litter in Open Field Minimize Nutrient Losses and Reduce Environmental Concerns? Alabama Water Resources Conference. (Abstract). Poster. September 4 – 6, 2024, Orange beach, Alabama.
5. *Koneti, S., **R. Prasad**, D. Chakraborty, D. Watts, A. Torbert 2024. Is Covering Broiler Litter an Effective Strategy to Reduce Greenhouse Gas and Ammonia Emissions? Graduate student poster showcase. October 24, 2024, College of Agriculture, Auburn University, Alabama.

6. *Koneti, S., **R. Prasad**, D. Chakraborty, D. Watts, A. Torbert 2024. Evaluating Ammonia and Greenhouse Gas Emission from Broiler Litter Stockpiles during Storage. (Abstract). Oral presentation. ASA, CSSA, SSSA International Annual Meeting. November 10-13, 2024, San Antonio, Texas.
7. *Koneti, S., **R. Prasad**, D. Chakraborty, D. Watts, A. Torbert. 2024. Effect of Storage Method and Duration on Nutrient Dynamics in Broiler Litter. (Abstract). Poster. ASA, CSSA, SSSA International Annual Meeting. November 10-13, 2024, San Antonio, Texas.
8. Velasco, J., L. R. Teixeira, B. V. Ortiz, G. Hoogenboom, A. Sharma, **R. Prasad**, A. Nguyen, A. Gamble. 2024. Using simulation modeling to evaluate the corn response to deficit irrigation strategies in South Alabama. (Abstract). Poster. International Conference of Precision Agriculture. July 21-24, 2024. Manhattan, Kansas. 3rd place in Graduate Student Poster Competition.
9. *Maryam S., D. Chakraborty, **R. Prasad**, D. Watts, A. Gamble, A. Torbert. 2024. Efficacy of Biochar to Reduce Greenhouse Gas Emissions in Cotton Systems Fertilized with Poultry Litter or Urea. (Abstract). Poster. Alabama Water Resources Conference. September 4 – 6, 2024, Orange beach, Alabama.
10. *Maryam S., D. Chakraborty, **R. Prasad**, D. Watts, A. Gamble, A. Torbert. 2024. Potential of Biochar for Mitigating Greenhouse Gas Emissions in Cotton Production System. (Abstract). Poster. ASA, CSSA, SSSA International Annual Meeting. November 10-13, 2024, San Antonio, Texas.
11. *Poudel, S., **R. Prasad**, and D. Chakraborty. Effects of Poultry Litter Amendments in Reducing Ammonia Emissions. (Abstract). Poster. ASA Southern Branch Annual Conference, 2024. Feb 3 - 5. Atlanta, GA.
12. *Poudel, S., D. Chakraborty, D. Watts, A. Torbert, **R. Prasad**. Effects of Poultry Litter Amendments in Reducing Greenhouse Gas Emissions. (Abstract). Oral Presentation. ASA Southern Branch Annual Conference, 2024. Feb 3 - 5. Atlanta, GA.
13. *Poudel, S., D. Chakraborty, D. Watts, A. Torbert, **R. Prasad**. Effects of Broiler Litter Amendments in Reducing Greenhouse Gas Emissions. (Abstract). Poster. ASA CSA, SSA, International annual meeting. November 10-13, 2024, San Antonio, Texas.
14. *Bhatta, A., D. Chakraborty, **R. Prasad**, D. B. Watts, H. A. Torbert and P. J. A. Kleinman. Comparison of Additive, Multiplicative and Component based Phosphorus Index using Edge-of-Field Monitoring Data. ASA Southern Branch Meeting.(Abstract). Oral Presentation. February 3 - 5, Atlanta, GA.
15. *Bhatta, A., D. Chakraborty, **R. Prasad**, A. T. Nguyen, D. B. Watts, H. A. Torbert and P. J. A. Kleinman. Evaluation of Alabama Phosphorus Index Using Edge-of-Field Monitoring Data. (Abstract). Oral Presentation. ASA CSSA SSSA Annual Meeting. November 9-13. 2024.
16. *Bhatta, A., D. Chakraborty, **R. Prasad**, A. T. Nguyen, D. B. Watts, H. A. Torbert and P. J. A. Kleinman. Runoff Losses of Phosphorus from Different Cropping Systems in Alabama Row Crop Farms. (Abstract). Oral Presentation. Alabama Water Resource Conference. September 4 - 6, Orange Beach, Alabama.

17. *Singh, R., **R. Prasad**, S. Brown, and A.V. Gamble. 2024. Optimal Nitrogen Fertilization in Broiler-Litter-Fertilized Cotton is Influenced by Yield Potential.(Abstract). Oral Presentation. ASA, CSSA, SSSA International Annual Meeting. November 10–13, San Antonio, TX.
18. *Singh, R., and **R. Prasad**. 2024. How Does Extreme Rainfall Influence Runoff from Crop and Pasture Lands in Alabama? Auburn University College of Agriculture Graduate Research Poster Showcase. October 24.
19. *Singh, R., and **R. Prasad**. 2024. Effects of Broiler Litter Total Cleanout Frequency on Corn Production and Soil Nutrient Status. (Abstract). Oral Presentation. ASA Southern Branch Meeting. February 3–5, Atlanta, GA
20. *Singh, R., and **R. Prasad**. 2024. How Do Extreme Rainfall Events Influence Surface Runoff from Alabama Cropping Systems? (Abstract). Poster. Future of Farming Symposium. September 13, Auburn University, AL.
21. *Singh, R., and **R. Prasad**. 2024. How Do Extreme Rainfall Events Influence Surface Runoff from Alabama Cropping Systems? (Abstract). Poster. Alabama Water Resources Conference and Symposium. September 4–6, Orange Beach, AL.
22. *Shelar, V. B., **Prasad, R.**, Sharma, A., Nguyen, A. T., & Ortiz, B. (2024) Leveraging Soil Moisture Sensors and Machine Learning to Predict Potential Runoff from Agricultural Lands (Abstract). Poster. 2024. Alabama Water Resources Conference & Symposium, September 4–6, Orange Beach, AL.
23. *Shelar, V. B., **Prasad, R.**, Sharma, A., & Nguyen, A. T. (2024) Understanding the Nitrogen Losses in Winter Wheat Using DSSAT-CERES-Wheat Model on Commercial Row Crop Farm (Abstract). Poster. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.
24. *Popoola, T.O., Chakraborty, D., Ray, P., **Prasad, R.** (2024). Phosphorus Sorption-Desorption Pattern in Treated Versus Untreated Biochar. (Abstract). Oral Presentation. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.
25. *Popoola, T.O., Chakraborty, D., Ray, P., **Prasad, R.** (2024). Optimizing Biochar as a Sustainable Solution for Phosphorous Management and Water Quality Improvement in Agricultural Systems. (Abstract). Poster. Auburn University College of Agriculture Research Symposium. Auburn, AL. October 24, 2024.
26. *Popoola, T.O., Chakraborty, D., Ray, P., **Prasad, R.** (2024). Enhancing Water Quality Through Biochar: Evaluating Phosphorus Retention and Release Dynamics of Biochar. Alabama Water Resources Conference.(Abstract). Poster. September 4-6, 2024, Orange Beach, AL.
27. *Raj, C., **R. Prasad**, D. Chakraborty, D. Watts, Horvath T., B. Chaves-Cordoba. 2024. Manure Type and One-Inch Rainfall in a Till System? (Abstract). Poster Presentation. ASA Southern Branch Meeting. February 3–5, Atlanta, GA.
28. *Sharma, A., **Prasad, R.**, Nguyen, A. T., Ortiz, B. V., Shelar, V. B., Gamble, A. V., Worosz, M. R., & Duzy, L. (2024) Quantifying Nitrogen Losses from Commercial Row Crop Systems of Alabama Using Nitrogen Budget Approach. (Abstract). Oral Presentation. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.

29. *Sharma, A., **Prasad, R.**, Nguyen, A. T., Ortiz, B. V., Teixeira Nunes, L. R., Hoogenboom, G., & Gamble, A. V. (2024) Simulating Growth Yield and Nitrogen Dynamics in Commercial Corn Production of Alabama. (Abstract). Poster Presentation. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.
30. *Sharma, A., **Prasad, R.**, Nguyen, A. T., Ortiz, B. V., Gamble, A. V., Worosz, M. R., & Duzy, L. (2024) Understanding fate and flow of nitrogen in commercial row crop systems of Alabama. (Abstract). Oral Presentation. Alabama Water Resource Conference, September 4–6, 2024, Orange Beach, Alabama.
31. Nguyen, A. T., **Prasad, R.**, Sharma, A., & Shelar, V. B. (2024) Calibrate and Validate the Apex Model for Simulating Winter Wheat and Runoff from Agricultural Fields: A Case Study in Alabama. (Abstract). Oral Presentation. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.
32. Nguyen, A. T., **Prasad, R.**, & Sharma, A. (2024). Evaluating Apex Model Performance for Simulating Winter Wheat Growth and Runoff in Commercial Agricultural Fields in North Alabama.(Abstract). Poster Presentation. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.
33. Nguyen, A.T., **R. Prasad**, A. Sharma, A. Bhatta, B. Ortiz, A. Gamble, M. Worosz, L. Duzy. (2024). Calibrating the APEX Model for Assessing Environmental Impacts of Agricultural Practices: A Case Study in Alabama. (Abstract). Oral Presentation. 2024 Alabama Water Resources Conference & Symposium, Orange Beach, AL.
34. Nguyen A., A. Sharma, **R. Prasad**. (2024). Assess the feasibility of remote sensing vegetation index for in-season N status evaluation with nitrogen measurement from the commercial field. (Abstract). Poster Presentation. Proceeding of 16th International Conference of Precision Agriculture. July 21-24, 2024 Manhattan, Kansas.
35. Nguyen A.T., **R. Prasad** , A. Sharma, B. Ortiz, L. Nunes, A. Gamble, M. Worosz, L. Duzy. (2024) Runoff depth and nutrient losses from agricultural fields in Alabama: 3-year Edge of field monitoring under natural rainfall. (Abstract). Poster Presentation. Southern Regional Branch American Society of Agronomy Meeting. Feb 3 – 5, 2024. Atlanta, Georgia.
36. Ebbing, M., **R. Prasad**, & D. Chakraborty. (2024) Effects of Broiler Litter Grinding and Pelleting on Physical Quality, Nutrient Density, and Its Water Solubility. (Abstract). Poster Presentation.ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.
37. Chakraborty, D., **R. Prasad**, D.B. Watts, and H.A. Torbert. 2024. How do phosphorus (P) forms and crop P availability vary with time in poultry litter-amended soils? (Abstract). Oral presentation. ASA-CSSA-SSSA International meeting, November 10–13, San Antonio, TX.
38. Chakraborty, D., and **R. Prasad**. 2024. Changes in soil phosphorus forms when amended with poultry litter with different litter ages and application rates. (Abstract). Poster presentation. Southern ASA Annual Meeting, Atlanta, GA.
39. Chawdhery M. R. A., D. Chakraborty, **R. Prasad**. 2024. Effects of Phosphorus (P) Fertilizer Placement on Corn Yield in P Stratified Soils of Alabama. (Abstract). Poster presentation. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.

40. Brar, G.S., J. Lamba, K. Malhotra, T.R. Way, **R. Prasad**, S. Adhikari, H.A. Torbert. 2024. Investigating the Impact of Biochar Application Method on Contaminant Leaching in Agricultural Soils Fertilized with Poultry Litter. (Abstract). Poster presentation. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.
41. *Sidhu, N.S., **R. Prasad**, D. Chakraborty. 2024. Phosphorus Stratification: Does It Impact Grain Nutrient Content and Water Quality? (Abstract). Poster presentation. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.
42. *Satognon, F., D.B. Watts, A. Adesemoye, K. Mullenix, H.A. Torbert, **R. Prasad**. 2024. Impacts of Plant Growth-Promoting Rhizobacteria and Poultry Litter on the Early Growth of Tall Fescue and Ryegrass Under Greenhouse Conditions. (Abstract). Poster presentation. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.
43. *Kichler, C.M., D.B. Watts, H.A. Torbert, T.S. Kornecki, **R. Prasad**. 2024. How Cover Crop Residue Management Impacts Soil Moisture and Cotton Seed Emergence. (Abstract). Oral presentation. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.
44. *Kichler, C.M., D.B. Watts, H.A. Torbert, T.S. Kornecki, **R. Prasad**. 2024. Influence of Cover Crop Residue Management and Nutrient Types on Cotton Growth and Yield. (Abstract). Poster presentation. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.
45. *Satognon, F., D.B. Watts, A. Adesemoye, K. Mullenix, H.A. Torbert, **R. Prasad**. 2024. Influences of Timely Application of PGPR Inoculant on Tall Fescue Hayfield Performance Fertilized with Poultry Litter. (Abstract). Poster presentation. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.
46. *Singh, A., **R. Prasad**, D.P. Russell, A. Maity. 2024. Weed Proliferation in Crop Fields: The Unseen Impact of Poultry Litter Application in Alabama. (Abstract). Oral presentation. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.
47. Ortiz, B.V., M.R. Worosz, A.V. Gamble, M.D. de Val, B.P. Lena, L. Duzy, **R. Prasad**. 2024. Exploring the Effectiveness of Serious Games in Promoting Knowledge Exchange and Strengthening Farmer-Extension Personnel Interaction to Favor Adoption of Conservation Practices. (Abstract). Oral presentation. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.
48. *Satognon, F., D.B. Watts, A. Adesemoye, K. Mullenix, H.A. Torbert, **R. Prasad**. 2024. Impacts of Plant Growth Promoting Rhizobacteria and Poultry Litter on Forage Hay Yield, Quality and Shoot Nutrient Content Under Field Conditions. (Abstract). Oral presentation. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.
49. *Satognon, F., D.B. Watts, A. Adesemoye, K. Mullenix, H.A. Torbert, **R. Prasad**. 2024. Can PGPR and Poultry Increase the Early Growth of Forage Grasses? A Case of Tall Fescue and Ryegrass Grown Under Greenhouse Conditions. (Abstract). Poster presentation. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.
50. **Prasad, R.**, C. Raj, D. Chakraborty, T. Horvath, Q.M. Ketterings, D.B. Watts, & A. Tomasek. 2024. Impact of Manure Source and Application Rate on Nutrient Losses from a

Series of Three One-Acre Inch-Simulated Rainfall Events. (Abstract). Oral Presentation. ASA, CSSA, SSSA International Annual Meeting, November 10–13, San Antonio, TX.

51. *Sharma, A., **R. Prasad**, A.T. Nguyen, B. Ortiz, A. Gamble, M.R. Worosz, L. Duzy. 2023. Understanding Nitrogen Dynamics from Agricultural Watershed in Alabama. Poster Presentation. Alabama Water Conference, USA. Sept 6-7, 2023.
52. *Sharma, A., **R. Prasad**, A.T. Nguyen A.T., A. Bhatta. B.Ortiz, A Gamble, M.R. Worosz, L. Duzy. 2023. Simulating the effect of winter cover crops on nitrogen dynamics in Alabama using the DSSAT crop model. Poster Presentation. Auburn Research: Student Symposium 2023 March 28th.
53. Nguyen A.T., **R. Prasad**, A. Sharma, B. Ortiz., L. Nunes, A. Gamble, M.R. Worosz, L. Duzy 2023. Effect of rainfall characteristics on runoff and nutrient load: Preliminary results from edge-of-field agriculture water quality monitoring in Alabama. Oral Presentation. American Society of Agronomy Meeting. St. Louis, Missouri. October 29-November 1st, 2023.
54. *Bhatta, A., **R. Prasad**, D. Chakraborty. 2023. Phosphorus Loss at Field Scale: Insights for Enhancing the Alabama Phosphorus Index. Alabama Water Resource Conference. September 6-8, 2023, Orange Beach, Alabama.
55. De Val, Marina D. B. V. Ortiz, F. Morlin, **R. Prasad**, A. Nguyen, A. Sharma, A. Gamble. 2023. Evaluating the Impact of Irrigation Strategies on Peanut Yield Using Simulation Modelling. Oral Presentation. American Peanut Research and Education Society Meeting. Savannah, Georgia. July 10-13, 2023.
56. Nunes, L.R.T, B. V. Ortiz, **R. Prasad**, A. Sharma, A. Gamble. 2023. Evaluating the Impact of Deficit Irrigation Strategies on Maize growing in Alabama using the DSSAT CERES-Maize Model. Poster Presentation. American Society of Agronomy Meeting. St. Louis, Missouri. October 29-November 1st, 2023.
57. Nunes, L.R.T, B. V. Ortiz, **R. Prasad**, A. Sharma, A. Gamble. 2023. Evaluating Irrigation Strategies with the DSSAT CERES-Maize Model: A Study on Water Conservation and Crop Yield for Corn Farmers in Alabama. Oral Presentation. Alabama Water Resources Conference. Orange Beach, September 6-8, 2023.
58. De Val, Marina D., B. V. Ortiz, F. Morlin, B. Patias Lena, R. Prasad, A. Nguyen, A. Sharma, A. Gamble, A Johnson. 2023. Impact of Soil Water Deficit Levels on Peanut Yield: Evaluating Irrigation Management Strategies. Oral Presentation. Alabama Water Resources Conference. Orange Beach, September 6-8, 2023.
59. *Poudel, S., **R. Prasad**, and D. Chakraborty. 2023. Evaluation of Amendments to Reduce Ammonia Emissions from Poultry Litter. Graduate Student Poster Showcase, College of Agriculture, Auburn University. October 26, 2023.
60. *Poudel, S., D. Chakraborty, H. Feng, D.B. Watts, & **R. Prasad**. 2023. Evaluation of Amendments to Reduce Ammonia Emissions from Poultry Litter. ASA, CSSA, SSSA International Annual Meeting, St. Louis, MO.
61. *Bhatta, A., **R. Prasad**, D. Chakraborty, D. Watts, H. A. Torbert. 2023. Spatial and Seasonal Variation in Phosphorus Losses at Field-Scale: Relation to Alabama Phosphorus Index. ASA, CSSA, SSSA International Annual Meeting, St. Louis, MO.

62. *Bhatta, A., **R. Prasad**, D. Chakraborty. Phosphorus Loss at Field Scale: Insights for Enhancing the Alabama Phosphorus Index. Alabama Water Resource Conference. September 6-8, 2023, Orange Beach, Alabama.
63. *Bhatta, A., **R. Prasad**, D. Chakraborty, D. Watts, H. A. Torbert. Sensitivity Analysis of Alabama Phosphorus Index. Graduate Student Poster Showcase, College of Agriculture, Auburn University. October 26, 2023.
64. *Raj, C., D. Chakraborty, **R. Prasad**, D. Watts, T. Horvath, B. Chaves-Cordoba 2023. Manure, One Acre Inch of Rainfall, and Conventional Tillage: Influencing Water Quality. ASA, CSSA, and SSSA. October 29-31, 2023, St. Louis, MO.
65. *Raj, C., D. Chakraborty, **R. Prasad**, D. Watts, T. Horvath, B. Chaves-Cordoba 2023. Poultry Litter's Impact on Water Quality Under One Acre-Inch Rainfall. Annual Graduate Poster Showcase. October 26, 2023, College of Agriculture, Auburn University, Alabama.
66. *Raj, C., **R. Prasad**, D. Chakraborty, D. Watts, T. Horvath, B. Chaves-Cordoba 2023. Improving Water Quality through Manure Management. Three-minute thesis. October 25, 2023, Auburn University, Alabama.
67. *Raj, C., D. Chakraborty, **R. Prasad**, D. Watts, T. Horvath, B. Chaves-Cordoba 2023. Does manure type and their application rate affect sediment and nutrient losses in a Conventional Tillage System? Alabama Water Resource Conference. September 6-8, 2023, Orange Beach, Alabama.
68. *Raj, C., **R. Prasad**, D. Chakraborty, D. Watts, T. Horvath, B. Chaves-Cordoba 2023. How Two Manure Types and Four Application Rates Affect Nutrients, Sediments, and Water Loss in Conventionally Tilled Soils? Auburn University Student Research Symposium. March 2023, Auburn, Alabama.
69. *Koneti, S., **R. Prasad**, D. Chakraborty. 2023. Analyzing Ammonia and Greenhouse Gas Emissions in Poultry Manure Stockpiled Under Open and Covered Conditions. Graduate student poster showcase. October 26, 2023, College of Agriculture, Auburn University, Alabama.
70. *Koneti, S., **R. Prasad**, D. Chakraborty. 2023. Assessing Ammonia and Greenhouse Gas Emissions in Poultry Manure Stockpiled Under Open and Covered Conditions. ASA, CSSA, SSSA International Annual Meeting. October 29 – November 1, 2023, Saint Louis, Missouri.
71. *Singh, R., and **R. Prasad**. 2023. How Does Cleanout Frequency of Broiler Litter Influence Corn Production and Soil Properties? ASA, CSSA, SSSA International Annual Meeting. October 29–November 1, St. Louis, MO.
72. *Singh, R., and R. Prasad. 2023. Supplemental Nitrogen for Broiler-Litter–Fertilized Cotton. Auburn University College of Agriculture Graduate Research Poster Showcase. October 26.
73. *Sidhu, N. S., D. Chakraborty, & **R. Prasad**. 2023. Understanding the Effect of Phosphorus Fertilizer Placement on Soybean Yield Under a No-till System in Phosphorus Stratified Soils of Alabama. ASA, CSSA, SSSA International Annual Meeting, St. Louis, MO. October 29 – November 1, 2023.

74. *Sidhu, N. S., D. Chakraborty, & **R. Prasad**. 2023. Surface and Subsurface Phosphorus Fertilizer Placements Effect on Corn Yield in Alabama Soil Regions. ASA, CSSA, SSSA International Annual Meeting, St. Louis, MO. October 29 – November 1, 2023.
75. *Kaur, G., **R. Prasad**, & D. Chakraborty. 2023. Which Phosphorus Fraction Is Dominant in Each of the Five Alabama Soil Regions? [Abstract]. ASA, CSSA, SSSA International Annual Meeting, St. Louis, MO. October 29 – November 1, 2023.
76. Lindquist, A., **R. Prasad**, G. Fain, and P. Bartley. 2023. Plant Growth Evaluation of Novel Poultry-Litter Derived Fertilizer. Oral presentation. Alabama Water Resource Conference. September 6-8, 2023, Orange Beach, Alabama.
77. Lindquist, A., **R. Prasad**, G. Fain, and P. Bartley. 2023. Plant Growth Evaluation of Novel Poultry-Litter Derived Fertilizer. Poster Presentation. Alabama Water Resource Conference. September 6-8, 2023, Orange Beach, Alabama.
78. Chakraborty, D., **R. Prasad**, D.B. Watts, and H.A. Torbert. 2023. Effectiveness of flue gas desulfurization gypsum used as a litter amendment to reduce environmental phosphorus loss risk. ASA-CSSA-SSSA International meeting, St Louis, MO. October 29 – November 1, 2023.
79. Chakraborty, D., **R. Prasad**, D.B. Watts, and H.A. Torbert. 2023. Potential of flue gas desulfurization gypsum used as a litter amendment in broiler house to mitigate phosphorus loading during runoff events. Alabama Water Resources Conference. September 6-8, 2023, Orange Beach, AL.
80. *Kichler, C. M., **R. Prasad**, A. Torbert, D.B. Watts, & T.S. Kornecki. (2023). Soil Moisture and Cotton Emergence Response to Cover Crop Residue Management Methods. ASA, CSSA, SSSA International Annual Meeting, St. Louis, MO. ASA-CSSA-SSSA International meeting, St Louis, MO. October 29 – November 1, 2023.
81. *Satognon, F., D.B. Watts, A. Adesemoye, M.K. Mullenix, H.A. Torbert, & **R. Prasad**, R. (2023). Can PGPR Microbial Inoculants Improve Hay Production of a Pasture Fertilized with Poultry Litter? ASA, CSSA, SSSA International Annual Meeting, St. Louis, MO. October 29 – November 1, 2023.
82. Stewart, H., M.R. Worosz, M. Robinette, B. Ortiz, A. Gamble, L. Duzy, and R. Prasad. 2022. Co-Developing climate-smart strategies for Alabama row crop producers and agricultural stakeholders. Poster Presentation. Southern Rural Sociological Association (SRSA) section of the annual meetings of the Southern Association of Agricultural Scientists, New Orleans, LA. 13-14 Feb 2022.
83. Robinette, M.R., M.R. Worosz, H. Stewart, B. Ortiz, A. Gamble, L. Duzy and **R. Prasad**. 2022. “Climate -Smart” information exchanges in the future of farming. Poster Presentation. Southern Rural Sociological Association (SRSA) section of the annual meetings of the Southern Association of Agricultural Scientists, New Orleans, LA. 13-14 Feb 2022.
84. Stewart, H., M.R. Worosz, M. Robinette, B. Ortiz, A. Gamble, L. Duzy and **R. Prasad**. 2022. Climate-Based convergence strategies to facilitate sustainable learning among row crop producers and agricultural stakeholders. Poster Presentation. “Mediterranean Agriculture, Food and Environment,” the annual meetings of the Association of International Agricultural and Extension Education, Thessaloniki, Greece. 04-07 Apr 2022.

85. *Singh, R. and **R. Prasad**. 2021. Field and laboratory evaluation of nitrogen release from poultry litter. Poster Presentation. 2021 Virtual ASA Southern Regional Branch. Jan 30-Feb 1, 2021.
86. *Singh, R., **R. Prasad**, D.B. Watts, and H.A. Torbert. 2021. Identification of optimum side dress nitrogen rate for dryland corn using poultry litter as starter fertilizer. Poster Presentation. 2021 ASA, CSSA, SSSA International Annual Meeting. Salt Lake City, UT. Nov 7-10, 2021.
87. **Prasad, R.**, and D. Chakraborty. 2021. Stratification of phosphorus forms and its environmental implication in soils impacted with poultry litter. Poster Presentation. ASA-CSSA-SSSA International Annual Meeting. Salt Lake City, UT. Nov 7-10, 2021.
88. Chakraborty, D. and **R. Prasad**. 2021. Phosphorus retention and release from soils receiving repeated poultry litter applications. Poster Presentation. ASA-CSSA-SSSA International Annual Meeting. Salt Lake City, UT. Nov 7-10, 2021.
89. Chakraborty, D. and **R. Prasad**. 2021. Extraction efficiency of inorganic and organic extractants to solubilize phosphorus from poultry litter. Poster Presentation. ASA-CSSA-SSSA International Annual Meeting. Salt Lake City, UT. Nov 7-10, 2021.
90. Chakraborty, D., and **R. Prasad**. 2021. Phosphorus stratification and environmental implication for soils with repeated poultry litter application. Poster Presentation. 32nd Annual Alabama Water Resources Conference, Orange Beach, AL. Sep 8-10, 2021.
91. *Kaur, G., D. Chakraborty, **R. Prasad**. 2021. Understanding the distribution of phosphorus pools in five Alabama soil regions. Poster presentation. 32nd Annual Alabama Water Resources Conference, Orange Beach, AL. Sep 8-10, 2021.
92. *Kaur, G., D. Chakraborty, **R. Prasad**. 2021. Characterization of phosphorus pools in Alabama soil regions. Poster Presentation. Auburn University-College of Agriculture Graduate Student Research Poster Showcase. Auburn, AL. Oct 28, 2021.
93. *Kaur, G., D. Chakraborty, **R. Prasad**. 2021. Evaluating the changes in phosphorus pools with soil depth in five Alabama soil regions. Poster Presentation. ASA-CSSA-SSSA International Annual Meeting. Virtual Meeting. Nov7-10, 2021.
94. *Powell, A., **R. Prasad**, D. Watts, D. Chakraborty, A. Torbert. 2021. Effects of gypsum-amended poultry litter on nutrient release and water quality. Poster Presentation. Alabama Water Resources Conference. Perdido Beach, AL. Sep 8-10, 2021.
95. *Powell, A., **R. Prasad**, D. Watts, D. Chakraborty, A. Torbert. 2021. Effects of gypsum-amended poultry litter on nutrient release and runoff. Poster Presentation. Auburn University College of Agriculture Research Showcase. Auburn, AL. Oct 28, 2021. (*Awarded best poster*).
96. *Powell, A., **R. Prasad**, D. Watts, D. Chakraborty, A. Torbert. 2021. Effects of gypsum-amended poultry litter on nutrient release and water quality. Poster Presentation. ASA-CSSA-SSSA International Annual Meeting. Salt Lake City, UT. Nov 7-10, 2021. (*Awarded best poster*)

97. *Powell, A., **R. Prasad**, D. Watts, D. Chakraborty, A. Torbert. 2021. effects of gypsum-amended poultry litter on nutrient release and crop yield. Poster Presentation. ASA-CSSA-SSSA International Annual Meeting. Salt Lake City, UT. Nov 7-10, 2021.
98. *Bhatta, A., R. Prasad, D. Chakraborty, D. Watts, and A. Torbert. Phosphorus loss in runoff from soils with different soil test phosphorus ratings. Poster Presentation. Alabama Water Resource Conference, Orange Beach, AL. Sep 8-10, 2021.
99. *Bhatta, A., **R. Prasad**, D. Chakraborty, D. Watts, and A. Torbert. Determination of phosphorus loss in runoff from soils with different soil test phosphorus ratings. Oral Presentation. ASA, CSSA, SSSA International Annual Meeting. Salt Lake City, ID. Nov 7-10, 2021.
100. *Sidhu, N.S., **R. Prasad**, D. Chakraborty. 2021. Understanding the variation in phosphorus pools with time in Alabama soil regions. Poster Presentation. ASA-CSSA-SSSA International Annual Meeting. Salt Lake City, ID. Nov 7-10, 2021.
101. *Sharma, A., **R. Prasad**, A.T. Nguyen, A. Bhatta, B. Ortiz, A. Gamble, M. Worosz, L. Duzy. 2021. Understanding nutrient balances of commercial row crop fields in Alabama. Poster Presentation. University- College of Agriculture Graduate Student Research Poster Showcase. Auburn, AL. Oct 28, 2021. (*Awarded Best Poster*).
102. Worosz, M.R., H. Stewart, M. Robinette, B. Ortiz, A. Gambel, L. Duzy, and **R. Prasad**. 2021. Future of Farming: Building a Transdisciplinary Team. Invited presentation during the Engagement Workshop Series, Advancing Scholarship and Practice of Stakeholder Engagement in Working Landscapes, Auburn, AL. 10-11 Jun 2021.
103. Worosz, M.R., B. Ortiz, A. Gamble, L. Duzy, and **R. Prasad**. 2021. Future Farmer. Poster Presentation. Faculty Research Symposium, Auburn University, Auburn, AL. Jan 29, 2021.
104. *Bhatta, A., D. Chakraborty and **R. Prasad**. 2020. Using Phosphorus Saturation Ratio as a Tool for Environmental Risk Assessment for Major Alabama Soils. Poster Presentation. College of Agriculture Poster Showcase, Auburn University, AL. Oct 29, 2020.
105. *Bhatta, A., **R. Prasad**, and D. Chakraborty. 2020. Estimating Soil Phosphorus Storage Capacity of Major Soil Areas of Alabama: Implications for Environmental Loss Risk Assessment. Proceedings of the 2020 Virtual Student Symposium. Auburn University Virtual Student Research Symposium, Auburn, AL. Apr 2020.
106. *Dey, P., D. Chakraborty, **R. Prasad**. 2020. Comparisons of phosphorus release characteristics from poultry litter using selective acidic and basic extractants. Poster Presentation. Auburn University Virtual Student Research Symposium, Auburn, AL. Apr 2020.
107. *Singh, R., **R. Prasad**, K. S. Balkcom, E. A. Guertal and J. Lamba. 2020. Estimating nitrogen loss to the environment using nitrogen budget in response to poultry litter application. Poster Presentation. AU Virtual Student Research Symposium Auburn, AL. Apr 2020.
108. *Singh, R., and **R. Prasad**. 2020. Does fertilizing soybean with poultry litter enrich the grain with mineral nutrients? Poster Presentation. AU Virtual Student Research Symposium Auburn, AL. Apr 2020.

109. *Singh, R., **R. Prasad**, D.P. Delaney, and D.B. Watts. 2020. Effect of poultry litter fertilization on soybean yield and seed nutrient composition. Poster Presentation. Auburn University College of Agriculture Virtual Graduate Student Research Poster Showcase. Auburn, AL. Oct 29, 2020.
110. Malhotra, K., J. Lamba, T. Way, S. Budhathoki, P. Srivastava, **R. Prasad**. 2020. Phosphorus leaching through undisturbed soil cores: influence of preferential flow paths. Poster Presentation. ASA-CSSA-SSSA International Annual Meeting. Virtual Meeting. Nov 9-13, 2020.
111. *Dey, P., **R. Prasad**, and D. Chakraborty. 2020. Understanding phosphorus and nutrients release characteristics of poultry litter using acidic and basic extractants. Oral Presentation. ASA-CSSA-SSSA International Annual Meeting. Virtual Meeting. Nov 9-13, 2020.
112. Torbert, H.A., D. B. Watts and **R. Prasad**. 2020. Can FGD Gypsum be used as a poultry litter treatment to reduced ammonia concentrations in a broiler house? Poster Presentation. ASA-CSSA-SSSA International Annual Meeting. Virtual Meeting. Nov 9-13, 2020.
113. *Dey, P., **R. Prasad**, and D. Chakraborty. 2020. Phosphorus (P) characterization in poultry litter of various ages by sequential P fractionation. ASA-CSSA-SSSA International Annual Meeting. Virtual Meeting. Nov 9-13, 2020.
114. *Singh, R., **R. Prasad**, K. S. Balkcom, E. A. Guertal and J. Lamba. 2020. Mineral composition of corn ear as affected by poultry litter fertilization. Oral Presentation. ASA-CSSA-SSSA International Annual Meeting. Virtual Meeting. Nov 9-13, 2020.
115. *Kaur, G., D. Chakraborty, and **R. Prasad**. 2020. Understanding the distribution of phosphorus (P) in various p-pools for environmental p loss risk assessment. Poster Presentation. ASA-CSSA-SSSA International Annual Meeting. Virtual Meeting. Nov 9-13, 2020.
116. Chakraborty, D. and **R. Prasad**. 2020. Evaluating phosphorus sorption capacity of poultry litter impacted soils. Poster Presentation. ASA-CSSA-SSSA International Annual Meeting. Virtual Meeting. Nov 9-13, 2020.
117. Chakraborty, D. and **R. Prasad**. 2020. Phosphorus availability and loss from poultry litter impacted Alabama soils. ASA-CSSA-SSSA International Annual Meeting. Poster Presentation. Virtual Meeting. Nov 9-13, 2020.
118. Crowell, H., A. V. Gamble, Y. Feng, and **R. Prasad**. 2020. Impacts of winter grazing on soil health in southeastern cropping systems. Oral Presentation. ASA-CSSA-SSSA International Annual Meeting. Virtual Meeting. Nov 9-13, 2020.
119. *Singh, R., **R. Prasad**, K. S. Balkcom, E. A. Guertal and J. Lamba. 2020. Poultry litter application rate and time impacts on corn grain yield and environmental nitrogen loss. Poster Presentation. ASA-CSSA-SSSA International Annual Meeting. Virtual Meeting. Nov 9-13, 2020.
120. *Bhatta, A., **R. Prasad**, D. Chakraborty. 2020. Comparison of extraction efficacy of common extractants for environmental phosphorus loss risk assessment for five major Alabama soils. Oral Presentation. ASA-CSSA-SSSA International Annual Meeting. Virtual Meeting. Nov 9-13, 2020.

121. Crowell, H., A. V. Gamble, Y. Feng, **R. Prasad** and K. Balkcom. 2020. How does length of winter grazing impact soil health in southeastern cropping systems? Oral Presentation. ASA-CSSA-SSSA International Annual Meeting. Virtual meeting. Nov 9-13, 2020.
122. **Prasad, R.**, D. Chakraborty, and A. Bhatta. 2019. Understanding the phosphorus loss risk from P-hotspots in Alabama soil. Oral Presentation. ASA, CSSA, and SSSA Annual Meetings. San Antonio, TX. Nov 10-13, 2019.
123. *Singh, R., **R. Prasad**, K. Balkcom, E. A. Guertal, J. Lamba, and B. V. Ortiz. 2019. Corn yield and nitrogen loss differences between urea and poultry litter systems. Oral Presentation. ASA, CSSA, and SSSA Annual Meetings. San Antonio, TX. Nov 10-13, 2019. (*Awarded best oral presentation*)
124. *Dey, P., D. Chakraborty, **R. Prasad**, A. Gamble, Y. Feng, and B. Higgins. 2019. Characterization of phosphorus (P) in poultry litter and determination of p extraction efficiency of extractants. Oral Presentation. ASA, CSSA, and SSSA Annual Meetings. San Antonio, TX. Nov 10-13, 2019.
125. *Bhatta, A., D. Chakraborty, and **R. Prasad**. 2019. Efficacy of commonly used extractants for evaluating p retention capacity for Alabama Soils. Poster Presentation. ASA, CSSA, and SSSA Annual Meetings. San Antonio, TX. Nov 10-13, 2019.
126. *Bhatta, A., **R. Prasad**, D. Chakraborty, J.N. Shaw, E. Brantley, and J. Lamba. 2019. Phosphorus characterization of Alabama soils under different management practices for environmental risk assessment. Poster Presentation. ASA, CSSA, and SSSA Annual Meetings. San Antonio, TX. Nov 10-13, 2019.
127. *Singh, R., and **R. Prasad**. 2019. Effect of poultry litter on soybean yield and grain nutrient composition. Poster Presentation. ASA, CSSA, and SSSA Annual Meetings. San Antonio, TX. Nov 10-13, 2019.
128. *Dey, P., **R. Prasad**, D. Chakraborty, B. Higgins, A. Gamble, and Y. Feng. 2019. Phosphorus (P) characterization in poultry litter of various ages and compositions. Poster Presentation. ASA, CSSA, and SSSA Annual Meetings. San Antonio, TX. Nov 10-13, 2019. (*Awarded best poster presentation*)
129. Chakraborty, D. and **R. Prasad**. 2019. Phosphorus release characteristics of poultry litter impacted soils of Lake Wedowee watershed. Poster Presentation. ASA, CSSA, and SSSA Annual Meetings. San Antonio, TX. Nov 10-13, 2019.
130. Chakraborty, D., **R. Prasad**, and J.B. Clarke. 2019. Changes in soil phosphorus fractions due to cover crop rotation with row crops. Poster Presentation. ASA, CSSA, and SSSA Annual Meetings. San Antonio, TX. Nov 10-13, 2019.
131. *Dey, P., and **R. Prasad**, A.V. Gamble, Y. Feng, and B. Higgins. 2019. Reusing phosphorus from poultry litter; extraction methods. 3MT (3-minute thesis) Oral Presentation. Auburn University, Auburn, AL. Oct 24, 2019.
132. *Singh, R., and **R. Prasad**. 2019. Corn yield and environmental nitrogen loss under poultry litter and urea application systems. College of Agriculture Graduate Student Poster Showcase. Auburn, AL. Oct 23, 2019.

133. *Dey, P., and **R. Prasad**. 2019. Determination of phosphorus (P) extraction efficiency of chemical extractants in poultry litter; Quantification of total versus reactive P fractions. College of Agriculture Graduate Poster Showcase, Auburn University. Auburn, AL. Oct 23, 2019. (*Awarded best poster presentation*)
134. Sangha, L., J. Lamba, H. Kumar, P. Srivastava, M. Dougherty, and **R. Prasad**. Modeling the effect of climate variability on the ecologically sustainable water withdrawals from streams for cropland irrigation. Poster Presentation. Auburn Research Faculty Symposium, Auburn University, Auburn, AL. Oct 4, 2019.
135. *Bhatta, A., **R. Prasad**, D. Chakraborty, J.N. Shaw, E. Brantley, and J. Lamba. 2019. Phosphorus characterization of Alabama soils under different management practices for environmental phosphorus loss risk assessment. Poster Presentation. Water Resources Conference and Symposium. Orange Beach, AL. Sep 4-6, 2019.
136. *Dey, P., **R. Prasad**, and D. Chakraborty. 2019. Phosphorus release characteristics of poultry litter and its implications for water quality. Poster Presentation. Water Resources Conference and Symposium. Orange Beach, AL. Sep 4-6, 2019.
137. *Singh, R., and **R. Prasad**. 2019. Observed and simulated environmental nitrogen losses from poultry litter and urea under dryland corn using partial nitrogen mass balance. Poster Presentation. Water Resources Conference and Symposium. Orange Beach, AL. Sep 4-6, 2019.
138. Chakraborty, D., and **R. Prasad**. 2019. Understanding the phosphorus retention capacity and phosphorus forms in poultry litter impacted soils of Lake Wedowee watershed in Alabama. Poster Presentation. Water Resources Conference and Symposium. Orange Beach, AL. Sep 4-6, 2019.
139. **Prasad, R.** 2019. The Beckoning Phosphorus: The status of phosphorus in Alabama soils. Alabama water resources conference and symposium. Oral Presentation. Orange Beach, AL. Sep 4-6, 2019.
140. Sangha, L., J. Lamba, H. Kumar, P. Srivastava, M. Dougherty, and **R. Prasad**. Influence of climate variability on ecologically sustainable water withdrawals from streams for irrigation. Oral Presentation. Alabama Water Resource Conference, Orange Beach AL. Sep 4-6, 2019.
141. Sangha, L., J. Lamba, H. Kumar, P. Srivastava, M. Dougherty, and **R. Prasad**. 2019. An innovative approach to rainwater harvesting for irrigation based on ENSO forecasts. Oral Presentation. ASABE Annual International Meeting, Boston, MA. Jul 7-10, 2019.
142. Sangha, L., J. Lamba, H. Kumar, P. Srivastava, M. Dougherty, and **R. Prasad**. 2019. Use of ENSO to withdraw water sustainably from the streams. Poster Presentation. ASABE Annual International Meeting, Boston, MA. Jul 7-10, 2019.
143. Higgins, B.T., K. Chaump, **R. Prasad**. 2019. Biological phosphorus mineralization in poultry litter as a first step toward sustainable nutrient recycling. Oral Presentation. ASABE Annual International Meeting. Boston, MA. Jul 7-10.
144. *Singh, R., **R. Prasad**, K. Balkcom, B. Guertal, J. Lamba, and B. Ortiz. 2019. Application rate and time impact of poultry litter and urea on corn grain yield in Alabama. Poster Presentation. Auburn Research Student Symposium. Auburn, AL. Apr 9, 2019.

145. *Dey, P., **R. Prasad**, D. Chakraborty, B. Higgins, Audrey V. Gamble, and Y. Feng. 2019. Characterization of phosphorus (P) in poultry litter and determination of P extraction efficiency of extractants. Poster Presentation. Auburn University Student Poster Symposium. Auburn, AL. Apr 9, 2019.
146. *Bhatta, A., **R. Prasad**, D. Chakraborty, J. N. Shaw, E. Brantley and J. Lamba. 2019. Phosphorus characterization of Alabama soils under different management practices for environmental risk assessment. Poster Presentation. Graduate Student Symposium, Auburn University, Auburn, AL. Apr 9, 2019.
147. Sangha, L., J. Lamba, H. Kumar, P. Srivastava, M. Dougherty, and **R. Prasad**. 2019. Development of an ENSO based approach to rainwater harvesting for irrigation. Poster Presentation. Auburn Research Student Symposium. Auburn, AL. Apr 9, 2019.
148. *Singh, R., **R. Prasad**, K. Balkcom, E. A. Guertal, J. Lamba, and B. V. Ortiz. 2019. Corn yield, plant N uptake, and environmental N loss differences under urea and poultry litter application at different rates and timing in Alabama soils. Poster Presentation. Southern Branch American Society of Agronomy Annual Meeting. Birmingham, AL. Feb 3-5, 2019.
149. *Dey, P., **R. Prasad**, D. Chakraborty, B. Higgins, A. Gamble, and Y. Feng. 2019. Characterization of Phosphorus (p) in poultry litter and determination of P extraction efficiency of extractants. Poster Presentation. Southern Branch American Society of Agronomy Annual Meeting. Birmingham, AL. Feb 3-5, 2019.
150. *Bhatta, A., **R. Prasad**, D. Chakraborty, J.N. Shaw, E. Brantley, and J. Lamba. 2019. Phosphorus characterization of Alabama soils under different management practices for environmental risk assessment. Poster Presentation. Southern Branch American Society of Agronomy Annual Meeting. Birmingham, AL. Feb 3-5, 2019.
151. Chakraborty, D., and **R. Prasad**. 2019. Quantitative approach to identify phosphorus hotspots and predict phosphorus loss risk in poultry litter impacted soils of Lake Wedowee watershed in Alabama. Poster Presentation. Southern Branch American Society of Agronomy Annual Meeting. Birmingham, AL. Feb 3-5, 2019.
152. **Prasad, R.** 2018. Chemical characterization of poultry litter and development of phosphorus extraction methods. Poster Presentation. AAES faculty summit & mixer. Auburn, AL. Dec 10, 2018.
153. **Prasad, R.**, R. Singh, B. V. Ortiz, K. S. Balkcom, and J. Lamba. 2018. Evaluation of nitrogen losses and grain yield from a corn system receiving two nitrogen sources, rates, and application time. Poster Presentation. ASA-CSA Annual Meeting. Baltimore, MD. Nov. 4-7, 2018.
154. Sangha, L., H. Kumar, J. Lamba, P. Srivastava, M. Dougherty, **R. Prasad** and B. Otiz. 2018. An innovative approach to rainwater harvesting for irrigation based on ENSO forecasts. Poster Presentation. College of Agriculture Graduate Student Research Poster Showcase, Auburn, AL. Oct 25, 2018.
155. *Singh, R., **R. Prasad**, K. Balkcom, B. Guertal, J. Lamba, and B. Ortiz. 2018. Corn yield differences under urea and poultry litter application at different rates and timing in Alabama soils. Poster Presentation. 2018 Graduate Student Poster Showcase, College of Agriculture. Auburn University, Auburn, AL. Oct 25, 2018.

156. *Bhatta, A., **R. Prasad** and D. Chakraborty. 2018. Understanding soil phosphorus storage capacity of Alabama soil under contrasting management practices. Poster Presentation. 2018 Graduate Student Poster Showcase, College of Agriculture. Auburn University Auburn, AL. Oct 25, 2018.
157. *Dey, P., **R. Prasad**, and B. Higgins. 2018. Chemical characterization of poultry litter and development of phosphorus extraction methods. Poster Presentation. 2018 Graduate Student Poster Showcase, College of Agriculture. Auburn University Auburn, AL. Oct 25, 2018.
158. **Prasad, R.**, P. Dey, K. Chaump and B. Higgins. 2018. Chemical characterization of poultry litter and development of phosphorus extraction methods. Poster Presentation. Auburn Research Faculty Symposium. Auburn, AL. Oct 23, 2018.
159. **Prasad, R.** 2018. Determination of environmental phosphorus loss risks for Alabama Soils. Alabama Water Resources Conferences. Oral Presentation. Orange Beach, AL. Sep 6, 2018.
160. **Prasad, R.**, S. Gunn, C. A. Rotz, G. W. Roth, H. D. Karsten, & A. Stoner. 2017. Ensemble climate and crop model predictions of maize yield in the northeast U.S. to the end of the 21st century for two contrasting greenhouse gas emission pathways. Oral Presentation. ASA, CSSA, and SSSA Annual Meetings. Tampa, FL. Oct 22-25, 2017.
161. **Prasad, R.**, S. Gunn, C. A. Rotz, G. W. Roth, H. D. Karsten, & A. Stoner. 2017. Projected climate and their agronomic implications for silage corn production in the Northeastern U.S. Oral Presentation. ASABE Annual International Meeting. Spokane, WA. Jul 15-19, 2017.
162. Raymundo R., S. Asseng, **R. Prasad**, U. Kleinwechter, B. Condori, W. Bowen, J. Wolf, J. Olesen, Q. Dong, L. Zotarelli, M. Gastelo, A. Alva, M. Travasso, V. Arora, W. Graham, & C. Porter. 2015. Performance of SUSTOR-potato model across contrasting environments. Poster Presentation. Fifth Annual AgMIP Global workshop. Gainesville, FL. Feb 25-28, 2015.
163. **Prasad, R.**, G. Hochmuth, D. Cammarano and S. Asseng. 2014. Role of nitrogen budget in evaluating nitrogen leaching from potato production in sandy soil: A model-based approach to improve nitrogen management in Suwannee River Basin. Poster Presentation. Fourth University of Florida Water Institute Symposium. Gainesville, FL. Feb 11-12, 2014.
164. Raymundo R., S. Asseng, **R. Prasad**, U. Kleinwechter, B. Condori, W. Bowen, J. Wolf, J. Olesen, Q. Dong, L. Zotarelli, M. Gastelo, A. Alva, M. Travasso, V. Arora, W. Graham, and C. Porter. Performance of SUBSTOR-potato model across contrasting environments. Poster Presentation. Graduate Student Research Day. Gainesville, FL. Oct 28, 2014.
165. **Prasad, R.**, G. Hochmuth and C. Martinez. 2013. Employing nitrogen budgets for assessment of nitrogen loss from agricultural systems: A Florida case study on N management in sandy soils. Oral Presentation. ASA, CSSA, and SSSA Annual Meetings. Tampa, FL. Nov 3-6, 2013.
166. **Prasad, R.**, G. Hochmuth, R.S. Mylavarapu and M.C. Giurcanu. 2013. In-situ nitrogen mineralization of anaerobically digested beef cattle manure in sandy soil. Poster Presentation. ASA, CSSA, and SSSA Annual Meetings. Tampa, FL. Nov 3-6, 2013.

167. **Prasad R.**, G. Hochmuth. 2013. Employing a nitrogen budget and crop model SUBSTOR to track nitrogen losses from potato production in sandy soil. Oral Presentation. 14th Annual Soil and Water Science Research Forum, Gainesville, FL. Sep 6, 2013. (*Awarded best oral presentation*).
168. **Prasad, R.**, G. Hochmuth and C. Martinez. 2012. Where is my Nitrogen: A Florida case study on nitrogen budgeting and assessment for potato cultivation? Poster Presentations. ASA, CSSA, and SSSA Annual Meetings. Cincinnati, OH. Oct.21-24, 2012.
169. **Prasad, R.**, and G. Hochmuth. 2012. Tracking nitrogen using SUBSTOR: A model based approach for improving nitrogen management for potato cultivation in the Suwannee river watershed. Poster Presentation. 13th Annual Soil and Water Science Research Forum. Gainesville, FL. Sep 7, 2012. (*Awarded best poster*).
170. **Prasad, R.**, G. Hochmuth and C. Martinez. 2012. Nitrogen budgeting and cycling for an integrated farm: a step towards improved nitrogen management in the Suwannee river watershed. Poster Presentation. 3rd University of Florida Water Institute Symposium. Gainesville, FL. Feb 15-16, 2012.
171. **Prasad, R.**, and G. Hochmuth. 2011. Nitrogen mass balance in potato production: what it means to the environment. Poster Presentation. 12th Annual Soil and Water Science Research Forum. Gainesville, FL. Sep 9, 2011.
172. **Prasad, R.**, G. Hochmuth and C. Martinez. 2011. Nitrogen partitioning and budget assessment for potato cultivation: environmental implications. Poster Presentation. ASA, CSSA, and SSSA Annual Meetings. San Antonio, TX. Oct.16-19, 2011. (*Awarded best poster*).
173. **Prasad, R.**, and L.M. McDonald. 2009. Calcium/Magnesium ratio and water potential effects on forage quality and pectin content. Poster Presentation. ASA, CSSA and SSSA Annual Meetings. Pittsburgh, PA. Nov1-5, 2009. (*Awarded best poster*).
174. **Prasad, R.**, and L.M. McDonald. 2008. Forage quality and pectin content response to Soil pH, Ca, and water potential. Oral Presentation. ASA, CSSA, and SSSA Annual Meetings. Houston, TX. Oct 5-9, 2008.

Extension presentations (N=139)

1. **Prasad, R.** 2024. Fate of Nutrients at Posey Farms. CIG meeting. Town Creek, AL. March 3, 2024. (number of attendee#5)
2. **Prasad, R.** 2024. Nutrient Stratification and Considerations. 4 R Nutrient Stewardship Field Day. Shorter, AL. Feb 22, 2024. Invited talk. (number of attendee#25).
3. Maryam S., **R. Prasad**. 2024. Effects of Biochar and Broiler litter Application on Greenhouse Gas Emissions and Nutrient Dynamics in Cotton. Wiregrass Field day. Aug 16, 2024. Headland, AL. (number of attendees #25).
4. Sharma, A., **Prasad, R.**, Nguyen, A. T., Ortiz, B. Shellar V.B., V., Gamble, A. V., Worosz, M. R., & Duzy, L. (2024) Understanding nitrogen dynamics using nitrogen mass balance tool. Certified crop advisor training . Alabama Crop Management Association. 09 Dec 2024. Auburn University. (number of attendees #25).

5. **Prasad, R.** 2024. The Future of Farming: Increasing Adoption of Conservation Practices Among Alabama Row Crop Farmers. AU climate symposium. March 19, 2024. Auburn University, Auburn. Invited talk (number of attendees #50).
6. **Prasad, R.** 2024. Effect of biochar application rates on greenhouse gas emissions and nutrient concentration in runoff and leaching in manured cropping systems. AU-ARS update. August 01, 2024. Biosystems Engineering department, Auburn University Auburn (number of attendees #10).
7. **Prasad, R.** 2024. The Status of Phosphorus in Alabama Soils: Challenges and Opportunities. Oct 24, 2024. Alabama Soil and Water Conservation Committee. Montgomery, AL. Invited talk (number of attendees #10).
8. **Prasad, R.** 2024. Certified Crop Advisor Training. Alabama Crop Management Association. 09 Dec 2024. Auburn University. (number of attendees #25).
9. **Prasad, R.** 2024. Nutrient Management Strategies for the 2025 Crop Season. Nutrient Management Meeting. 4th Dec, 2024. Shorter, AL. (number of attendees #15).
10. **Prasad, R.** 2024. Nutrient Management Strategies for the 2025 Crop Season. Nutrient Management Meeting. 5th Dec, 2024. Towncreek, AL. (number of attendees #25).
11. **Prasad, R.** 2024. Nutrient Management Strategies for the 2025 Crop Season. Nutrient Management Meeting. 16th Dec, 2024. Hartford, AL. (number of attendees #30).
12. **Prasad, R., B. Ortiz, A. Gamble, L. Duzy & M. Worsoz.** 2024. The Future of Farming: Increasing the Adoption of Conservation Practices Among Alabama Row Crop Farmers. Soil and Water Conservation Society International Annual Conference. July 21-24, 2024. Myrtle Beach, SC. Invited talk. (Number of attendees #25).
13. **Prasad, R.** 2024. Soil Testing and Nutrient Management. Commercial Horticulture Webinar. Oct 28, 2024. Online (Number of attendees #15).
14. **Prasad, R.** 2024. Caution Using Poultry Litter in Cotton Production. Wiregrass Cotton Expo. Feb 9, 2024. Dothan, AL. Invited talk. (Number of attendees #15).
15. **Prasad, R.,** 2024. Lessons Learnt from Three Alabama Demonstration Farms. Future of Farming Symposium. 13 September. Auburn, AL. (Number of attendees #50).
16. **Prasad, R.** 2024. Poultry Litter Pellets. IFDC delegation visit. 27 Sept 2024. Auburn, AL. (Number of attendees #15).
17. **Prasad, R.** 2024. Nutrient Stratification. Precision Management for Soil Health. Soil Health Institute. June 6, 2024. Cherokee, AL. Invited talk. (Number of attendees #50).
18. **Prasad, R.** 2024. Impact of Manure Source and Application Rate on Nutrient Losses from Three One-Acre Inch-Simulated Rainfall Events. North American Manure Expo. July 18, 2024. Auburn, New York. (Number of attendees #100).
19. **Prasad, R.** 2024. Chicken litter application for corn production. Corn and small grains Production meeting. Feb. 29, 2024. Goshen, AL. Invited talk. (Number of attendees #10).
20. **Prasad, R.** 2024. Using poultry litter in cotton production. Cotton Production meeting. March. 04, 2024. New Brockton, AL. Invited talk. (Number of attendees #20).

21. **Prasad, R.** 2024. Development of Practices to Reduce Nutrient Losses to the Environment from Land Application of Animal Waste & By-products. USDA-ARS update. Oct 1, 2024. Auburn University. (Number of attendees #50).
22. **Prasad, R.** 2024. Deep phosphorus injection research update. 2024 Annual Field Crops Day. 16 Aug 2024. Headland, AL. (Number of attendees #50).
23. **Prasad, R.**, 2023. Seeing the Unseen: Nutrients and their Fate in Alabama Demonstration Farms!! 1-1 Farmer meeting, Samson, AL, June 14, 2023. (Number of attendees: 10).
24. **Prasad, R.**, 2023. Seeing the Unseen: Nutrients and their Fate in Alabama Demonstration Farms!! 1-1 Farmer meeting, Society Hill, AL, May 24, 2023. (Number of attendees: 10).
25. **Prasad, R.**, 2023. Animal Waste and Nutrient Management Program. Alabama Farmer Federation. Montgomery, AL, NOV 14, 2023. (Number of attendees: 15).
26. **Prasad, R.**, 2023. Soil and Nutrient Management. Operation Grow Boot camp. Montgomery, AL, May 25, 2023. (Number of attendees: 30).
27. **Prasad, R.**, 2023. Getting the Most out of Chicken Litter Application: Best Management Strategies. Precision agriculture workshop. Athens, AL, Feb 8, 2023. (Number of attendees: 40).
28. **Prasad, R.**, 2023. Animal Waste and Environmental Nutrient Management Program. University of Cape Code online presentation. Auburn, AL, Feb 9, 2023. (Number of attendees: 10).
29. **Prasad, R.**, 2023. Phosphorus Stratification in Alabama Soils – How is it Affecting Crop Yield? Certified Crop Advisor (CCA) Training. Alabama crop management association. Auburn, AL, December 12, 2023. (Number of attendees: 40).
30. **Prasad, R.**, 2023. The Future of Farming. 45th Central Alabama Crops Tour. Society Hill, AL, August 3, 2023. (Number of attendees: 50).
31. **Prasad, R.**, 2023. Chicken litter: Quality versus Quantity. Nutrient management meeting. Hartford, AL, Dec 11, 2023. (Number of attendees: 45).
32. **Prasad, R.**, 2023. Myths around Soil Test (Mehlich 1 vs Mehlich 3). Nutrient management meeting. Towncreek, AL, Nov 27, 2023. (Number of attendees: 40).
33. **Prasad, R.**, 2023. Myths around Soil Test (Mehlich 1 vs Mehlich 3). Nutrient management meeting. Autaugaville, AL, Dec 7, 2023. (Number of attendees: 20).
34. **Prasad, R.**, 2023. Corn, Cotton, & Soybean Nutrient Mgmt. when using Poultry Litter. 2023 Row Crops Kickoff Meeting. Tanner, AL, March 2, 2023. (Number of attendees: 30).
35. **Prasad, R.**, 2023. Corn, Cotton, & Soybean Nutrient Mgmt. when using Poultry Litter. 2023 Row Crops Kickoff Meeting. Fayette, AL, March 3, 2023. (Number of attendees: 30).
36. **Prasad, R.**, 2023. Chicken Litter Application for Corn Production. 2023 Corn Production Meeting. Goshen, AL, Feb 15, 2023. (Number of attendees: 20).
37. **Prasad, R.**, 2023. Nutrient Management Update. 2023 Corn Production Meeting. Hartford, AL, Feb 15, 2023. (Number of attendees: 20).

38. **Prasad, R.**, 2023. Cotton Fertility with Poultry Litter. 2023. Annual Field Crops Day. Hartford, AL, August 18, 2023. (Number of attendees: 30).
39. **Prasad, R.**, 2023. Where are my nutrients? A tale of nutrient cycling in Alabama farms. Alabama Row Crops Short Course, Auburn, AL, December 14. (Number of attendees: 50).
40. **Prasad, R.**, 2023. Nutrient Management Update. 2023 Row Crop Production Meeting. Hartford, AL. March 7, 2023. (Number of attendees: 20).
41. **Prasad, R.**, 2023. Development of Practices to Reduce Nutrient Losses to the Environment from Land Application of Animal Waste & By-products. An update to USDA-ARS area directors. August 2, 2023. (Number of attendees: 8).
42. **Prasad, R.**, 2023. Poultry Litter/gypsum application on peanuts. Wiregrass Field Day. Wiregrass Research and Extension Center, Dothan, AL. August 18, 2023. (Number of attendees: 35).
43. Singh, R., **Prasad, R.**, 2023. Optimum Side Dress Nitrogen Rate for Broiler-Litter-Fertilized Cotton. Wiregrass Field Day. Wiregrass Research and Extension Center, Dothan, AL. August 18, 2023. (Number of attendees: 35).
44. **Prasad, R.**, 2023. Understanding the nutrient value of chicken litter. 5 April, 2023. Animal Science Team Webinar.
45. **Prasad, R.** 2022. The Beckoning Phosphorus. American Association of Plant Food Control Officials Winter Annual Meeting. Mobile, AL. Feb 15, 2022. (Number of attendees: 50).
46. **Prasad, R.** 2020. A systems approach to manage phosphorus and nutrients of environmental concerns present in poultry waste. Auburn University, College of Agriculture Fall 2020 Virtual Colloquium. Nov 16, 2020.
47. **Prasad, R.** 2020. Nutrient release characteristics of poultry litter: agronomic and environmental implications. Livestock and Poultry Environmental (LPE) Learning Community Educational Webinar Series. Online. June 19, 2020.
48. **Prasad, R.** 2020. Nexus of animal agriculture, soil quality, and environmental impacts. Poster session. Organizer and moderator. Soils and Environmental Quality Division Program. ASA-CSSA-SSSA International Annual Meeting. Virtual Meeting. Nov 9-13, 2020.
49. **Prasad, R.** and S. Kumar. 2020. Nexus of animal agriculture, soil quality, and environmental impacts. Soils and Environmental Quality Division Program. ASA-CSSA-SSSA International Annual Meeting. Virtual Meeting. Nov 9-13, 2020.
50. **Prasad, R.** 2019. Environmental animal waste & nutrient management Program. Plant production systems, soil fertility, and plant-soil-microbial interaction research team meeting. Auburn, Alabama, Oct 31, 2019.
51. **Prasad, R.** 2019. The beckoning phosphorus: challenges and opportunities for Alabama! Animal Science Department Seminar. Auburn, Alabama, Apr 12, 2019.
52. **Prasad, R.** 2022. Benefits of broiler litter in row crops. Jacksonville Crop Production Meeting. Jacksonville, AL. March 3, 2022. (Number of attendees: 15).

53. **Prasad, R.** 2022. Revisiting broiler litter as a fertilizer – Applications for my operation. Annual Alabama Cattlemen’s Association Convention. Mobile, AL. March 4th, 2022. (Number of attendees: 15). Invited presentation.
54. **Prasad, R.** 2022. Nutrient management program at Auburn University- an overview. Nutrient Management Spear Program, Cornell University. Online. March 21st, 2022. (Number of attendees: 12). Invited presentation.
55. **Prasad, R.** 2022. Gypsum poultry Litter use. Agricultural Research Service. FGD Gypsum Research Meeting. Online. March 1, 2022. (Number of attendees: 10).
56. **Prasad, R.** 2022. Use of poultry litter & soil testing. Monthly Beef Management Meeting. Montgomery County Extension Office, Montgomery, AL. Jan 3, 2022. (Number of attendees: 12).
57. **Prasad, R.** 2022. Development of practices to reduce nutrient losses to the environment from land application of animal waste & by-products. Senate Ag Appropriations Subcommittee. Auburn, AL. April 14th, 2022 (Number of attendees: 10).
58. **Prasad, R.** 2022. Development of practices to reduce nutrient losses to the environment from land application of animal waste & by-products. Online, USDA ARS. April 28th, 2022 (Number of attendees: 8).
59. **Prasad, R., A. Gamble, B. Ortiz:** 2021. The Future of Farming: Increasing adoption of conservation practices among Alabama row crop farmers. Agronomy team meeting, Auburn, Al, Sept 28, 2021. (Number of attendees:25).
60. **Prasad, R.** 2021. Understanding soil phosphorus test. Commercial horticulture webinar. April 26, 2021. (Number of attendees:10).
61. **Prasad, R.** 2021. Facebook live Q &A Friday season. Commercial horticulture team. July 23, 2021.
62. **Prasad, R.** 2021. Facebook live Q &A Friday season. Commercial horticulture team. March 5, 2021.
63. **Prasad, R.** 2021. Facebook live Q &A Friday season. Commercial horticulture team. September 17, 2021.
64. **Prasad, R., A. Gamble, B. Ortiz:** 2021. The Future of Farming: Increasing adoption of conservation practices among Alabama row crop farmers. Animal science team meeting, Auburn, Al, Oct 10, 2021. (Number of attendees ~25).
65. **Prasad, R.** 2021. Nutrient Management updates. Commercial horticulture team meeting, Auburn, Al, Oct 12, 2021. (Number of attendees ~25).
66. **Prasad, R.** 2021. Soil testing and recommendations. Greenpoint Ag meeting. Auburn, Al, March 5, 2021. (Number of attendees ~7). Invited presentation.
67. **Prasad, R.** 2021. Broiler litter for soybean, corn, and cotton production. Alabama Crop Management Association's Certified Crop Advisers’ Training. Auburn, Al, Dec 6, 2021. (Number of attendees ~35).

68. **Prasad, R. 2021.** Broiler litter for row crop production. Nutrient management meeting. Southeast farmer-focused group. Hartford Alabama. Dec 9, 2021. (Number of attendees ~35).
69. **Prasad, R. 2021.** Broiler Litter for Row crop Production. Nutrient management meeting. Central Alabama farmer-focused group. E.V. Smith research center. Dec 2, 2021. (Number of attendees ~25).
70. Chakraborty, D., and **R. Prasad.** 2021. Phosphorus situation in Wedowee watershed. NRCS meeting. Auburn, AL. April 4, 2021. (Number of attendees: 6).
71. Chakraborty, D., and **R. Prasad.** 2021. Phosphorus situation in Wedowee watershed. Alabama Soil and Water Conservation Committee. Feb 11, 2021. (Number of attendees: 5).
72. **Prasad, R.** 2020. Soil sampling in lake Wedowee for phosphorus loss risk determination-research update. State Soil and Water Conservation Committee Board Meeting. Montgomery, AL. Jan 8, 2020. (Number of attendees: 25).
73. **Prasad, R.** 2020. A decision support tool for phosphorus application in corn and soybean fields that have a “high” soil test phosphorus rating. Project Reports. Commodity organization meeting. Montgomery, AL. 4-5 Feb 2020. (Number of attendees: 30).
74. **Prasad, R.** 2020. Alabama Nutrient Management Program. Auxin Herbicide Training: Agronomic Update 2020. Atmore, AL. Feb 18, 2020. (Number of attendees: 30).
75. **Prasad, R.** 2020. Amount and timing of nitrogen, phosphorus, and potassium release from poultry litter in soybean and corn production system. Row Crop Production Meeting Corn, Cotton & Soybeans. Shorter, AL. 25 Feb, 2020. (Number of attendees: 20).
76. **Prasad, R.** 2020. RCPP soil quality project working with producers to give sound nutrient mgt advice on farm in high poultry concentration counties. Presentation to NRCS chief Matthew Lohr visit to Auburn, AL. March 10, 2020. (Number of attendees:15). Invited presentation.
77. **Prasad, R.** 2020. Nutrient management update. Row crop production meeting. Hartford, AL. Mar 12, 2020. (Number of attendees:30).
78. **Prasad, R.** 2020. Q&A Friday. A Facebook live event by the commercial horticulture team. April 3, 2020. (Number of attendees:15).
79. **Prasad, R.** 2020. Phosphorus management in Alabama soils. Precision agriculture Facebook live presentation. May 5, 2020. (Number of attendees:15).
80. **Prasad, R.** 2020. Poultry litter as a nutrient source. Commercial horticulture webinar series. May 18, 2020. (Number of attendee:20).
81. **Prasad, R.** 2020. The Future of Farming: increasing adoption of conservation practices among Alabama row crop farmers. Project goals and objectives. NRCS and SWCC project update. Auburn, AL. June 4, 2020. (Number of attendees:10).
82. **Prasad, R.** 2020. The Future of Farming: increasing adoption of conservation practices among Alabama row crop farmers. Lazenby Farms. Auburn, AL. July 21, 2020. (Number of attendees: 8).

83. **Prasad, R.** 2020. Q&A Friday. A Facebook live event by the commercial horticulture team. July 31, 2020. (Number of attendees:15)
84. **Prasad, R.** 2020. The Future of Farming: Increasing adoption of conservation practices among Alabama row crop farmers. Posey Farms. Town creek, AL. Aug 6, 2020. (Number of attendees:8).
85. **Prasad, R.** 2020. The Future of Farming: increasing adoption of conservation practices among Alabama row crop farmers. JC Farms. Samson, AL. Aug 11, 2020. (Number of attendees:8).
86. **Prasad, R.** 2020. The Future of Farming: increasing adoption of conservation practices among Alabama row crop farmers. Project goals and objectives. Extension agents and crop consultants virtual meeting. September 9, 2020. (Number of attendees:15).
87. **Prasad, R.** 2020. The Future of Farming: Increasing adoption of conservation practices among Alabama row crop farmers. Project goals and objectives. Southeast Alabama Farmers Focus Group Meeting. Hartford, AL. September 24, 2020. (Number of attendees:15).
88. **Prasad, R.** 2020. The Future of Farming: increasing adoption of conservation practices among Alabama row crop farmers; 2020 project updates. Agronomy crops meeting. Auburn, AL. September 30, 2020. (Number of attendees:15).
89. **Prasad, R.** 2020. The Future of Farming: increasing adoption of conservation practices among Alabama row crop farmers; 2020 Project updates. Animal science meeting. Auburn, AL. Oct 7 and 8, 2020. (Number of attendees:20).
90. **Prasad, R.** 2020. The Future of Farming: increasing adoption of conservation practices among Alabama row crop farmers. Project goals and objectives. North Alabama Farmers Focus Group Meeting. Town creek, AL. Dec 7, 2020 (Number of attendees:10).
91. **Prasad, R.** 2020. The Future of Farming: increasing adoption of conservation practices among Alabama row crop farmers. Project goals and objectives. Central Alabama Farmers Focus Group Meeting. Shorter, AL. Dec 9, 2020. (Number of attendees:15).
92. *Singh, R. and **R. Prasad.** 2020. Poultry litter application rate and timing impact on corn grain yield and environmental nitrogen loss. Certified Crop Advisor Training. Alabama Crop Management Association winter virtual meeting. December 14-16. (Number of attendees:50).
93. **Prasad, R.** 2020. Phosphorus status of Alabama soils. Certified crop advisor training. Alabama Crop Management Association winter virtual meeting. December 14. (Number of attendees:50)
94. **Prasad, R.,** 2019. The benefits and challenges of using poultry litter. Randolph County Soil and Water Conservation District Producer's meeting. Wedowee, AL, April 30, 2019. (Number of attendees: 21). Invited presentation.
95. **Prasad, R.** 2019. Phosphorus status of Alabama soils: preliminary findings. Alabama Poultry Producers. Alabama Farmer Federation Commodity Organization Meeting. Montgomery, AL, Feb 6, 2019. (Number of attendee:30). Invited presentation.

96. Dey, P.*, and **R. Prasad**. 2019. Nutrient release characteristics of poultry litter. 2019 Alabama Certified Crop Adviser Training. Auburn, AL, Dec 9, 2019 (Number of attendees: 40).
97. Singh, R.*, and **R. Prasad**. 2019. Comparison of corn yield and nitrogen losses between poultry litter and urea. Alabama Certified Crop Adviser Training. Auburn, AL, Dec-9, 2019 (Number of attendees:40).
98. **Prasad, R.** 2019. The status of phosphorus in Alabama farmlands. Alabama Certified Crop Adviser Training. Auburn, AL, Dec 9, 2019 (Number of attendees:40).
99. **Prasad, R.** 2019. Using poultry litter in pastures and hayfields. Animal Science and Forage Webinar Series Nov 13, 2019 (Number of attendees:10).
100. Dey, P.*, and **R. Prasad**. 2019. Phosphorous characterization of poultry litter. Inter-Agency Waste Management Team meeting, Auburn, AL, Oct 29, 2019. (Number of attendees:13).
101. **Prasad, R.** 2019. Phosphorus in Soils. Monthly Breakfast Beef Management Meeting. Montgomery, AL, August 2, 2019. (Number of attendees:12).
102. **Prasad, R.** 2019. Nutrient management for a sustainable agricultural production system. Visiting Delegation from Northwest A&F University. Auburn, AL, May15, 2019. (Number of attendees:10).
103. Stanford, K., and **R. Prasad**. 2019. Cow Pie Counting. AU/Clemson Animal Science and Forages Extension Team Meeting. Talladega, AL, April 23-25, 2019. (Number of attendees:20).
104. **Prasad, R.** and A. Gamble. 2019. Soil Health Demo and understanding the spatial distribution of nutrients in pasture systems. AU/Clemson Animal Science and Forages Extension Team Meeting. Talladega, AL, April 23-25, 2019. (Number of attendees:20)
105. **Prasad, R.** 2019. Benefits and limitations of poultry litter. 2019 Alabama Grazing Academy. Chilton, AL, April 17, 2019. (Number of attendees:20).
106. **Prasad, R.** 2019. Poultry litter as a pasture fertilizer: benefits and challenges. Lawrence County Cattlemen Spring Educational Meeting. Moulton, AL, March 14, 2019. (Number of attendees:30). *Invited presentation.*
107. **Prasad, R.** 2019. Effect of poultry litter on corn and soybean yields. Cotton, Corn and Soybean Meeting. E.V. Smith Research and Extension Center, Shorter, AL, Feb 22, 2019. (Number of attendees:25).
108. **Prasad, R.** 2019. The value of using poultry litter for pasture fertilizer. North AL Agriplex, Cullman, AL, Feb 12, 2019. (Number of attendees:15).
109. **Prasad, R.** 2019. Nutrient Management in Bermudagrass Hay Fields, Special Emphasis on Managing Potassium Needs. Bermudagrass Hay Growers Summit. North AL Agriplex, Cullman, AL, Feb 12, 2019. (Number of attendees:20). *Invited presentation.*
110. **Prasad, R.** 2019. Amount and timing of nitrogen release from poultry litter in a soybean production system. Alabama Soybean Producers. Alabama Farmer Federation Commodity Organization Meeting. Montgomery, AL, Feb 5, 2019. (Number of attendees:30)

111. **Prasad, R.** 2019. Comparisons of yield, nutrient uptake, and nitrogen losses in a corn system receiving two contrasting sources, rates, and timing of nitrogen application. Alabama Wheat and Feed Grain Producers. Alabama Farmer Federation Commodity Organization Meeting. Montgomery, AL, Feb 5, 2019. (Number of attendees:30)
112. **Prasad, R.** 2018. Phosphorus loss risk assessments for farms. Certified Crop Adviser Training. Auburn, AL. Dec 12, 2018. (Number of attendees: 20)
113. **Prasad, R.** 2018. Environmental nutrient management for efficient production systems. Agronomy Crops Team Meeting. Auburn, AL. Oct 24, 2018. (Number of attendees: 20)
114. **Prasad, R.** 2018. Is your soil a source or sink of phosphorus? Interagency Waste Management Meeting. National Soil Dynamics Lab. Auburn, AL. Sept 11, 2018. (Number of attendees: 15)
115. **Prasad, R.** 2018. Know your farm's phosphorus levels. Alabama Farm & Land Expo, Montgomery AL. Aug 4, 2018. (Number of attendees: 10)
116. **Prasad, R.** 2018. Chicken litter and its responsible use. Wiregrass Poultry & Egg Association Meeting. Elba, AL. Nov 13, 2018. (Number of attendee:20). Invited presentation.
117. **Prasad, R.** 2018. Chicken litter and its responsible use. Central Alabama Poultry & Egg Association Meeting. Luverne, AL. Oct 9, 2018. (Number of attendees: 30). Invited presentation.
118. **Prasad, R.** 2018. Future corn production in a changing climate. Osher Lifelong Learning Institute at Auburn University. Auburn, AL. April 2, 2018. (Number of attendees: 10). Invited presentation.
119. **Prasad, R.** 2018. Is your soil a source or sink of phosphorus? Alabama Poultry Producers, Commodity Organizational Meeting Montgomery AL, Feb 7, 2018. (Number of attendees: 60). Invited presentation.
120. **Prasad, R.** 2018. Is your soil a source or sink of phosphorus? Alabama Pork Producers, Commodity Organizational Meeting Montgomery AL, Feb 6 2018. (Number of attendees: 20). Invited presentation.
121. **Prasad, R.** 2018. Changes in NRCS 590 standard and its implication on manure applications for row crop production. Alabama Crop Management Association Annual Meeting. Orange Beach, AL. June 23, 2018 (Number of attendees:35)
122. **Prasad, R.** 2018. Changes in NRCS 590 standard and its implication on manure applications for row crop production. Irrigation Field Day, Wiregrass, AL. Jun 22, 2018. (Number of attendees:20)
123. **Prasad, R.** 2018. Evaluation of phosphorus storage capacity for Alabama Soils. Randolph County Soil & Water Conservation Committee. Wedowee, AL. May 23, 2018. (Number of attendees: 10)
124. **Prasad, R.** 2018. Phosphorus issue and the utilization of poultry litter as a fertilizer for cattle farmers. Montgomery County Extension Beef Meeting. Montgomery AL. April 6, 2018. (Number of attendees: 10)

125. **Prasad, R.** 2018. Nutrient Management: phosphorus. Sand Mountain Pasture and Weeds Conference. Sand Mountain Research and Extension Center. Feb 22. (Number of attendees: 50)
126. **Prasad, R.** 2018. Phosphorus Index. Interagency Waste Management Meeting. National Soil Dynamics Lab. Auburn, AL. Feb 20, 2018. (Number of attendees: 15)
127. **Prasad, R.** 2018. 4R's in Animal Waste and Nutrient Management. Animal Science and Forages Team Webinar. Sept 12, 2018. (Number of attendees: 15)
128. **Prasad, R.** 2017. Extension Programs – Animal Environmental Systems. Certified Crop Advisor Training. Auburn, AL. Dec 11, 2017. (Number of attendees: 40)
129. **Prasad, R.** 2017. Developing on Farm Nutrient Budgets. Certified Crop Advisor Training. Dec 13, 2017. Auburn, AL. (Number of attendees: 40).
130. **Prasad, R.** 2022. Use of poultry litter on pasture and hay fields. Southern SARE Forage Training for Agents and Producers. Columbiana, AL. April 11, 2022. (Number of attendees: 25).
131. **Prasad, R.** 2021. Using Broiler Litter for Forage Production. Alabama Forages Handbook training for Regional Extension Agents. Oct 6, 2021. (Number of attendees: 20).
132. **Prasad, R.,** and K. Stanford. 2020. Environmental Stewardship. In-Service Training for Tuskegee Agents and Interns. ACA building. Montgomery, AL. Nov. 2, 2020. (Number of attendees:15).
133. **Prasad, R.** 2019. Update on Alabama Animal Waste and Nutrient Management Program. Agronomy Crops Meeting. Auburn, AL, Oct 22, 2019. (Number of attendees: 20).
134. **Prasad, R.,** and K. Stanford. 2019. Environmental Stewardship. Beef Systems Short Course In-Service Agents Training. Montgomery, AL. Aug 8, 2019. (Number of attendees:15).
135. **Prasad, R.** 2018. Changes in NRCS 590 standard and its implication on manure applications for row crop production. Extension agents In-service Training. Auburn, AL. May 14, 2018. (Number of attendees:15).
136. **Prasad, R.** 2016. Opportunities for reducing environmental nitrogen loading rates from crop and production systems in 21st century. Research Colloquium. May 13, 2016. Department of Crop and Soil Science, Oregon State University, Oregon, USA.
137. **Prasad, R.** 2016. How good is your nitrogen management? Period. Extension presentation. May 12, 2016. Hermiston Agricultural Research and Extension Center, Oregon, USA.
138. **Prasad, R.** 2015. An investigation on nitrogen losses from crop production in Florida sandy soils using a crop simulation model: opportunities and challenges in crop production system in 21st century. Research Colloquium. Mar 12, 2015. Ball State University, Indiana, USA.
139. **Prasad, R.** 2015. Environmental nitrogen loading rates from typical crop production system in Suwannee River Basin: opportunities and challenges. Water, Wetlands and Watersheds Seminar, Feb 25, 2015, Gainesville, Florida, USA.

Invited International Presentations

USAID Farmer to Farmer program, India, 2018

Dr. Prasad was invited by Florida A&M University (FAMU) to participate as Nutrient Management Expert for the USAID Farmer-to-Farmer project in India. (April 14-27, 2018). The project had the following tasks/objectives:

- Complete a GAP analysis for current nutrient management practices.
- Make recommendations for location-specific improvements.
- Help beneficiaries understand their targeted area's recommended and improved nutrient management strategies.
- Conduct hands-on demonstrations of fundamental techniques in nutrient management.
- Demonstrate soil sampling practices to improve farmers' knowledge of soil nutrient requirements.

Oral presentations delivered by Prasad during the USAID Farmer to Farmer program (3 total presentations, 378 total participants)

1. **Prasad, R.** 2018. Integrated Soil Nutrient Management in a Changing Climate – Soil Health. Oral Presentation. Shree Vivekanand Research and Training Institute, Mandvi, Gujrat, India. April 14-27. Number of attendees: 126.
2. **Prasad, R.** 2018. Integrated Soil Nutrient Management in a Changing Climate – Soil Salinity. Oral Presentation. Shree Vivekanand Research and Training Institute, Mandvi, Gujrat, India. April 14-27. Number of attendees: 126
3. **Prasad, R.** 2018. Integrated Soil Nutrient Management in a Changing Climate – Plant Nutrition. Oral Presentation. Shree Vivekanand Research and Training Institute, Mandvi, Gujrat, India. April 14-27. Number of attendees: 126

White Papers written by Prasad during the USAID Farmer to Farmer program: 5 total

1. **Prasad, R.** 2018. Plant nutrients and their deficiency symptoms. White paper. Shree Vivekanand Research and Training Institute, Mandvi, India.
2. **Prasad, R.** 2018. Common fertilizers and their nutrient contents. White paper. Shree Vivekanand Research and Training Institute, Mandvi, India.
3. **Prasad, R.** 2018. Decision tree for soil nutrient management for Mandvi region, Gujarat. White paper. Shree Vivekanand Research and Training Institute, Mandvi, India.
4. **Prasad, R.** 2018. Method for calculating gypsum requirement for saline soils. White paper. Shree Vivekanand Research and Training Institute, Mandvi, India.
5. **Prasad, R.** 2018. A step-by-step method for sampling soils for soil testing. White paper. Shree Vivekanand Research and Training Institute, Mandvi, India.

Grants and Contracts

<u>Role</u>	<u>Grant dollars</u>
PI-external	\$ 6,973,593

*Co-I external	\$ 4,444,693
PI-internal	\$ 89,500
*Co-I-internal	\$ 214,508
Total	\$11,722,294

Extramural Grants

2024	<u>Chakraborty, D., R. Prasad</u> , and S. Adhikari. Is cover crop a threat to water quality in Alabama? Challenges and opportunities. USGS Water Resources Act Program. Grant total \$35,000 . September 1, 2024 – August 31, 2025. (Role: Co-PI).
2024	<u>Prasad, R.</u> Nutrient Runoff Data Collection Through Rainfall Simulations Across US. USDA-NRCS. Grant total \$1,300,000 . Oct 2024-Sept 2025. (Role: PI).
2024	<u>Maity, A., R. Prasad</u> , A. Price, R. Gosh. Understanding and mitigating weed pressure in southeastern cotton fields receiving poultry litter application and cover cropping. USDA-NIFA-Crosscutting Program. Grant total \$299,893 . Jan 2025-March 2028. (Role: Co-PI).
2024	<u>Adhikari, S., R. Prasad</u> , et al. Use of biochar in agricultural systems. USDA-ARS. Grant total \$1,504,342 . June 2024-June 2025. (Role: Co-PI).
2024	<u>Prasad, R.</u> and D. Watts. Improving Our Understanding of the Impact of Management on Greenhouse. USDA-ARS. Grant total \$212,000 . Aug 2024- Aug 2028. (Role: PI).
2024	<u>Prasad, R.</u> , and D. Chakraborty. Development of practices to reduce nutrient losses to the environment from land application of animal waste and by-products. USDA-ARS. Grant total \$1,074,530 . July 2024-June 2029. (Role: PI).
2023	Singh, R. and <u>R. Prasad</u> . Auburn University Graduate Student Grants. Water Resources Competitive Grants Program. Grant total \$7,500 . September 1, 2023 – August 31, 2024. (Role: PI).
2023	<u>Prasad, R.</u> Effect of litter stockpiling time period on the nutrient content of litter. Alabama Wheat and Feed grain. Grant total \$ 16800 . March 1, 2023 – Feb 28, 2024. (Role: PI).
2023	<u>Prasad, R.</u> and D. Chakraborty. Does phosphorus stratification penalize crop yield. Alabama Soybean Producer. Grant total \$ 15,200 . March 1, 2023 – Feb 28, 2024. (Role: PI).
2023	<u>Prasad, R.</u> and D. Chakraborty. Does phosphorus penalize crop yield? Alabama Wheat and Feed grain. Grant total \$ 16652 . March 1, 2023 – Feb 28, 2024. (Role: PI).
2023	<u>Prasad, R.</u> Amount and timing of nitrogen release from poultry litter in corn systems. Alabama Wheat and Feed grain. Award amount: \$ 13800 . March 1, 2023 – Feb 28, 2024. (Role: PI).

2023 **Prasad, R.** Choosing the right side-dress nitrogen rate when using chicken litter for cotton production. Alabama Cotton Commission. Grant total **\$12,113**. March 1, 2023 – Feb 28, 2024. (Role: PI).

2023 **Prasad, R.** Effect of litter stockpiling time period on the nutrient content of litter. Alabama Cotton Commission. Award amount: **\$16632**. March 1, 2023 – Feb 28, 2024. (Role: PI).

2022 **Prasad, R.**, and D. Watts. Research support agreement - National Soil Dynamics Lab. USDA-ARS. Grant total **\$191,272.29**. Apr 2022-Jan-2023. (Role: PI).

2021 **Prasad, R.**, Q. Ketterings, and A.A. Tomasek. Nutrient runoff data collection through rainfall simulations across the US. NRCS-USDA. Grant total **\$300,000**. Sep-2021-Dec 2022. (Role: PI).

2021 **Prasad, R.**, and D. Chakraborty. Does phosphorus stratification penalize crop yield? Alabama soybean producers. Grant total **\$17,000**. Mar 2021-Feb 2023 (Role: PI).

2021 **Prasad, R.**, S. Brown, and A. Gamble. Choosing the right side-dress nitrogen rate when using chicken litter for cotton production. Alabama Cotton Commission. Grant total **\$16,000**. Mar 2021-Feb 2023 (Role: PI).

2021 **Prasad, R.**, and D. Chakraborty. Does phosphorus stratification penalize crop yield? Alabama Wheat & Feed Grain Producers. Grant total **\$30,275**. Mar 2021-Feb 2023 (Role: PI).

2021 **Prasad, R.**, D.E. McGriff. Choosing the right side-dress nitrogen rate when using chicken litter for dryland corn production. Alabama Wheat & Feed Grain Producers. Grant total **\$15,000**. Mar 2021-Feb 2022 (Role: PI).

2021 **Dillard, S.L.**, D. Russell, J. Sawyer, L. Severino, M. Mullenix, **R. Prasad**, S. Rodning. Master your business: an online certificate course for forage & livestock farmers. USDA. Grant total **49,779**. Apr 2021- Sep 2022 (Role: Co-I).

2021 **Dillard, S.L.**, D. Russell, K. Kesheimer, L. Silva, M.K. Mullenix, **R. Prasad**, and S. Rodning. Development of a forage establishment and management curriculum for Alabama producers and Extension agents. Southern Region Sustainable Agriculture Professional Development Grant. Grant total **\$77,469**. Jul 2021-Jun 2023 (Role: content developer and presenter).

2020 **Higgins, B.**, A. Wilson, and **R. Prasad**. Development of a bacterial-algal-zooplankton process for conversion of agricultural waste into aquaculture feed. NIFA-USDA. Grant total **\$434,659**. May 2020-May 2024 (Role: Co-I).

2020 **Higgins, B.**, D. Bourassa, **R. Prasad**, and D. Wells. Assessing nutrient cycling and food safety of poultry processing wastewater for irrigation in controlled-environment agriculture. NIFA-USDA. Grant total **\$499,573**. May 2021-May 2024 (Role: Co-I)

2020 **Lamba, J.**, **R. Prasad**, and J. Simunek. An Innovative Approach to Characterize Colloidal-Facilitated Heavy Metal Transport from

Land Applied Animal Waste. NIFA-USDA. Grant total **\$500,000**.
May 2020-Apr 2023 (Role: Co-I)

2020 **Prasad, R.** B. Ortiz, A. Gamble, and M. Worosz. The Future of Farming: Increasing Adoption of Conservation Practices among Alabama Row Crop Farmers. CIG-NRCS-USDA. Grant total **\$3,000,000**. May 2020-Dec 2026 (Role: PI)

2020 **Dillard, S.L.**, K. Mullenix, M. Runge, K. Kelley, A. Gamble, **R. Prasad**, D. Russell, K. Kesheimer, and K. Stanford. Development of an online Forage Basics course for livestock and forage producers. SERME-NIFA. Grant total **\$49,608**. Apr-2020-Mar 2022 (Role: content developer)

2020 **Sanz-Saez, A.**, **R. Prasad**, and A. Gamble. Has nutrient removal rates of cotton changed over the years? Alabama Cotton Commission. Grant total **\$12,932**. Mar 2020-Feb 2023. (Role: Co-I).

2019 **Prasad, R.** Educate farmers on reducing nutrient inputs to their cash crops. USDA-NRCS. Grant total **\$26,917**. Jul 2019-Dec 2022. (Role: PI).

2019 **Prasad, R.** Soil sampling in Lake Wedowee for P loss risk determination. Alabama Soil and Water Conservation Committee. Grant total **\$127,202**. Jul 2018- Oct 2020 (Role: PI).

2019 **Prasad, R.**, and T. Sandlin. Amount & timing of nitrogen release from poultry litter in cotton systems. Alabama Cotton Commission. Grant total **\$28,000**. Mar 2019-Feb 2023 (Role: PI).

2018 **Ortiz, B.**, A. Gamble, D. Delaney, K. Balkcom, **R. Prasad**, T. Sandlin, X. Li. Corn & Wheat Short Course. Alabama Wheat & Feed Grain Producers. Grant total **\$38,000**. Mar 2016-Feb 2023 (Role: Co-I).

2018 **Majumdar, A.**, E. Vinson, E. Coven, E. Sikora, J. Kemble, K. Burkett, and, **R. Prasad**. Expansion of the Alabama beginning farmer program using a farm community cluster model integrated with new educational tools and partnerships. BFR- NIFA-USDA. Grant total \$ **599,926**. Sept 2018-Nov 2021 (Role: content developer and presenter)

2018 **Dillard, S.L.**, **R. Prasad**, C. Holland, K. Mullenix, B. Goodrich, and A. Gamble. Development of Alabama Grazing School For Management of Production Risks Associated With Pasture-Based Livestock Systems. Southern Extension Risk Management Education-NIFA-USDA. Grant total **\$4,919** Mar 2018-Jan 2019 (Role: Co-I).

2018 **Mullenix, K.**, **R. Prasad**, M. Elmore, L. Dillard, S. Rodning, M. Runge, LK. Anderson, and B. Goodrich. Development of Beef Cattle Quick Reference Tools. Southern Extension Risk Management Education –NIFA-USDA. Grant total **\$46,963.43**. Apr 2018-Sep 2019 (Role: Chapter author).

2018 **Prasad, R.** Assuring minimal phosphorus (P) loss risks from cover crop practices in Alabama through P loss risk assessment, soil

- testing, and producer education. Alabama Soil and water conservation committee. Grant total **\$175,000**. Apr 2018-Apr 2022 (Role: PI).
- 2018 **Prasad, R.**, B. Ortiz, D. McGriff, K. Balkcom. Compare nitrogen loss in a corn system receiving two contrasting sources, rates & timing of application. Alabama Wheat & Feed Grain Producers. Grant total **\$7,000**. Mar 2018-Feb 2021 (Role: PI).
- 2018 **Prasad, R.**, and W. Birdsong. Amount & timing of nitrogen release from poultry litter. Alabama Soybean Producers. Grant total **\$3,400**. Mar 2018-Feb 2020 (Role: PI).
- 2018 **Prasad, R.**, and D. Chakraborty. A decision support tool for phosphorus application in corn fields with a “high” soil test phosphorus rating. Alabama Wheat and Feed Grain Producers. Grant total **\$96,000**. Mar 2018-Feb 2023 (Role: PI).
- 2018 **Prasad, R.** Amount and timing of nitrogen release from poultry litter in corn systems. Alabama Wheat and Feed Grain Producers. Grant total **\$64,300**. Mar 2018-Feb 2023 (Role: PI).
- 2018 **Prasad, R.**, and D. Chakraborty. A decision support tool for phosphorus application in soybean fields with a “high” soil test phosphorus rating. Alabama Soybean Producers. Grant total **\$57,000**. Mar 2018-May 2023 (Role: PI).
- 2018 **Prasad, R.**, and D. Chakraborty. A decision support tool for phosphorus application in cotton fields with a “high” soil test phosphorus rating. Alabama Cotton Commission. Grant total **\$84,000**. Mar 2018-Feb 2023 (Role: PI).
- 2018 **Guertal, E.**, A. Gamble, **R. Prasad**. Evaluation of a rapid test to evaluate nitrogen mineralization in tropical & subtropical soils. International Fertilizer Development Center. Grant total **\$49,979**. Aug 2018-Sep 2021 (Role: Co-I).
- 2018 **Gamble, A.**, M. Mullenix, **R. Prasad**, S. Dillard, Y. Feng. Guidance For grazing winter cover, animal performance, soil health & cash crop production. NRCS-USDA. Grant total **\$231,651**. Sept 2018-Oct 2022 (Role: Co-I)
- 2017 **Mullenix, M.K.**, K. Kelly, B. Goodrich, M. Elmore, L. Kriese-Anderson, S.L. Dillard, and **R. Prasad**. 2017. Beef Cattle Pocket Guide Update. Alabama Cattleman’s Association. Grant total **\$10,000**. Apr 2018- Sep 2019 (Role: Chapter author).

Internal Competitive Grants

- 2021 **Mullenix, K.**, L. Dillard, L. Silva, J. Sawyer, **R. Prasad**. Improving further processing of forage and feed samples for determining nutritive value in livestock systems research. AAES Grant total **\$16,421.16** for 2021 (Role: Co-I)
- 2021 **Higgins, B.**, D. Bourassa, **R. Prasad**, and D. Wells. 2021. Support for collaborative research on crop irrigation with poultry processing

	wastewater. Auburn University Food Safety Institute. Grant total \$14,310 for 2021 (Role: Co-I).
2020	<u>Gamble, A.</u> , B. Guertal, R. Prasad , S. Brown. Enhancing Nitrogen Use Efficiency in Alabama Cotton Production Systems. AAES-PAR. Grant total \$47,670 for 2020-2022 (Role: Co-I).
2020	<u>Dillard L.</u> , K. Mullenix, R. Prasad , D. Russell, R. Muntiferling, J. Yeager, C. Parker, S. Scott, J. Elmore. Purchase of a Forage Harvester for use at Multiple Research and Extension Stations in Alabama. AAES- ARES, Equipment Funding Program. Grant total \$91,107 for 2020-2021 (Role: Co-I).
2019	Prasad, R. , Gamble, A., and B. Guertal. Purchase of automated flow injection analysis systems to support multidisciplinary research in soil, water, manure, and plant systems. AAES- Equipment Grant Program. Grant total \$22, 958.60 for 2019 (Role: PI).
2019	Lamba, J., R. Prasad , and P. Srivastava. Colloidal-Facilitated Heavy Metal Transport from Land-Applied Animal Waste. Intramural Grant Program, Auburn University. Grant total \$40,000 . Mar 2019-Apr 2021 (Role: Co-I)
2019	Prasad R. Travel award to visit Kansas Agricultural Watershed Field Lab, Kansas State University. AAES- Travel grant, Auburn University. Grant total \$500 for 2019 (Role: PI).
2018	Prasad, R. , B.T. Higgins, A. Gamble, Y. Feng. A systems approach to extract and recover phosphorus from poultry litter. Intramural Grants Program, Office of President, Auburn University. Grant total \$40,000 . May 2018-Apr 2020 (Role PI).
2018	Prasad, R. , J. Lamba, A. Gamble, E. Brantley, K. Stanford, K.M. Mullinex, and L. Dillard. Development of an environmental phosphorus loss risk assessment tool for manure application in Alabama agricultural lands. Alabama Agricultural Experiment Station Production Agriculture Research Funding Program. Grant total \$49,000 . Oct 2018-Apr 2020 (Role PI).
2018	<u>Lamba J.</u> , P. Srivastava, R. Prasad , and B. Ortiz. Effect of Irrigation Practices on Nitrogen and Phosphorus Losses from Agricultural Landscapes. AAES Enabling Grant, College of Agriculture, Auburn University. Grant total \$5,000 . Apr 2018-May 2020 (Role: Co-I).

Service

- Serving as Graduate Program Office, Department of Crop, Soil and Environmental Sciences (since 2022).
- Served as Judge at Auburn University Research Student Symposium (2019, 2025).
- Patent and Invention Disclosure Committee (2020-2023)
- Search committee member for CSES interim department head (2022).
- Search committee member for Broiler Breeder and Hatchery Management Assistant professor and Extension specialist position. Poultry Science Department (2021).

- Reviewer for Alabama Cooperative Extension System ANR publications (2018-2022).
- Search committee member for the Soil Test Lab Manager position of the Soil, Forage and Water Testing Lab (2020).
- Judge at the College of Agriculture Graduate Student Poster Showcase, Auburn University (2017, 2018, 2019).
- Novus International Research award committee (2018, 2019, 2020).
- Participated in Center of Excellence meeting with Tuskegee and International Fertilizer Development Center (2018).
- Served on a committee evaluating Industry collaborations with Zero Gravity LLC (2018).
- Social committee – Animal Science Department (2017 - 2022).
- Awards committee – Animal Science Department (2018- 2022).
- Crop, Soil, and Environmental Sciences departmental representative graduation ceremony (Fall 2017).
- Environmental science program and scholarships committee- Crop, Soil and Environmental Sciences Department (2017, 2018, 2019, 2020, 2021).
- 2022 Chair, Beneficial Reuse By-Products in Agriculture. Agronomy Society of America, Environmental Quality Section.
- Invited to serve in the Environmental Quality Research Award Committee, Agronomy Society of America: 2021-2022.
- Invited to serve in the Agronomic Education and Extension Award Committee, Agronomy Society of America: 202-2022.
- Session Moderator: Nutrients and Environmental Quality General Oral I, ASA, CSSA, and SSSA Annual Meeting, Salt Lake City, UT, Nov 8, 2021.
- 2021 Vice-Chair, By-Product Gypsum Community. Agronomy Society of America, Environmental Quality Section.
- Invited judge for best research paper award in SSSA- Soil and Water Management Conservation division. 2020-2021.
- Vice-chair for Sustainable Agriculture. Professional Improvement Council. 2019. Alabama Association of County Agricultural Agents and Specialists (AACAAS).
- Invited judge for the SASES Research Symposium Contest at ASA-CSA Annual meeting Baltimore, MD, Nov 5, 2018.
- Invited judge for the Soil Fertility, Plant Nutrition, and Soil/Plant Analysis MS and Ph.D. Poster Contest at ASA-CSA Annual meeting Baltimore, MD, Nov 5, 2018.
- Invited Judge for the SASES Speech Contest at ASA-CSA Annual meeting Baltimore, MD, Nov 5, 2018.
- Session moderator for “ Management Impacts on Soil Properties and Soil C and N Dynamics Oral II Session.” November 12, 2019, ASA, CSSA and SSSA Annual Meeting in San Antonio, TX.
- Session moderator for “Soil Fertility and Plant Nutrition General Oral III.” November 13, 2019, ASA, CSSA and SSSA Annual Meeting in San Antonio, TX.
- Session moderator for “Nutrient Management and Soil and Plant Analysis General Oral I”. November 11, 2019, ASA, CSSA, and SSSA Annual Meeting in San Antonio, TX.
- Lead writer for Agronomy and the Environment section for A522 committee, general public communications committee for American Society of Agronomy. Feb 1, 2019.

Grant Reviewer

- NIFA- AFRI- Soil Health program. (2022)
- BARD - The US-Israel Agricultural Research & Development Fund grant reviewer (2020, 20201).
- Foundation for Food and Agriculture Research (FFAR). New Innovator in Food and Agriculture Research Award (2019).
- Southern Sustainable Agriculture Research and Education (SARE) Grant Program (2019, 2020)
- Foundation for Food and Agriculture Research (FFAR). 2018 New Innovator Award. (2018).
- Foundation for Food and Agriculture Research (FFAR). Protein Challenge (2018).

Manuscript Reviewer

Journal	Year
Water, Air, & Soil Pollution (1)	2017
Agronomy Journal (2)	2018
PLOSONE (4)	2018
Environmental Monitoring and Assessment (1)	2018
Agronomy Journal (1)	2019
Environmental Development (1)	2019
Agricultural & Environmental Letters (1)	2019
Industrial Crops and Products (1)	2019
PLOS ONE (3)	2019
Soil & Tillage Research (1)	2019
Industrial Crops and Products (1)	2020
Agrosystems, Geosciences & Environment (1)	2020
Science of Total Environment (1)	2020
Environmental Letters (1)	2020
American Society of Agriculture and Biological Engineers (1)	2020
Agrosystems, Geosciences & Environment (2)	2020
Environmental Letters (1)	2021
The Journal of Agricultural Science (1)	2021
Journal of Cotton (1)	2022
Agronomy Journal (1)	2022
Alabama Cooperative Extension System (2)	2022

Society Membership

- American Society of Agronomy (2008 – present)
- Crop Science Society of America (2008 – present)
- Soil Science Society of America (2008 – present)
- Alabama Association of County Agents and Specialists (2018-present)
- Alabama Crop Management Association (2018-present)
- Epsilon Sigma Phi Extension Professional Honor Society (2019-present)