

Curriculum Vitae

IRISH LORRAINE B. PABUAYON

irish-lorraine.pabuayon@ttu.edu; irishpabuayon@gmail.com
+1-806-500-4491 (cell); ORCID-0000-0003-3964-7058

Education:

Sep 2019 – May 2021 **Doctor of Philosophy in Plant and Soil Science**

Grade Point Average: 4.0/4.0

Texas Tech University, Lubbock, TX, USA

Sep 2016 – May 2018 **Master of Science in Plant and Soil Science**

Grade Point Average: 4.0/4.0

Texas Tech University, Lubbock, TX, USA

Jun 2005 – Apr 2009 **Bachelor of Science in Chemistry**

University of the Philippines

Los Baños, Laguna, Philippines

Professional Experience:

Jun 2024 – present **Research Assistant Professor**

Department of Plant and Soil Science, Texas Tech University, Lubbock, TX, USA

Jul 2022 – Jun 2023 **Assistant Professor of Agronomy**

H. Rouse Caffey Rice Research Station-LSU AgCenter, Rayne, LA, USA

Jun 2021 – Jun 2022 **Postdoctoral Research Associate**

Department of Plant and Soil Science, Texas Tech University, Lubbock, TX, USA

Sep 2016 – May 2021 **Graduate Research Assistant**

Department of Plant and Soil Science, Texas Tech University, Lubbock, TX, USA

Jun 2018 – Aug 2019 **Professional Research Associate – Crop Physiology**

Department of Plant and Soil Science, Texas Tech University, Lubbock, TX, USA

Jun 2011 – Jul 2016 **Crop Researcher**

International Rice Research Institute (IRRI), Los Baños, Laguna, Philippines

Jun 2011 – Jul 2016 **Chemist and Laboratory Manager**

International Rice Research Institute (IRRI), Los Baños, Laguna, Philippines

Jun 2009 – May 2011 **Chemistry Instructor**

University of the Philippines, Los Baños, Laguna, Philippines

Membership in Professional Societies:

2017- present Agronomy Society of America

2017- present Crop Science Society of America

2017- present Soil Science Society of America

Honors and Awards:

2021/2022	Tereshkovich-Pilgrim Plant and Soil Science Outstanding Doctoral Graduate Award Recipient
2021	Gerald O. Mott Meritorious Graduate Student in Crop Science Award Recipient
2021	3rd Place Graduate Student Poster Competition- 2021 Beltwide Cotton Conferences
2020	3rd Place Student Poster Competition – 2020 Great Plains Soil Fertility Conference
2020-2021	Dan & Lee Ruth Krieg Scholarship Endowment Award Recipient
2019-2021	The CH Foundation Graduate Recruitment Fellowship Award Recipient
2017-2021	Grow Texas Scholarship Award Recipient (both for MS and PhD degrees)
2019	West Texas Agricultural Chemistry Institute Scholarship Award Recipient
2017-2021	TTU Graham Endowed AG Scholarship Recipient
2017	1st Place Graduate Student Poster Competition - ASA-CSSA International Meetings
2005-2006	College Scholar and Honor Roll, University of the Philippines- Los Baños

Publications:

Refereed journals

1. **Pabuayon, I. L. B.**, Bicaldo, J. J. B., & Ritchie, G. L. (2024). Within-canopy carbon partitioning to cotton leaves in response to irrigation. *Crop Science*, 65, e21405. <https://doi.org/10.1002/csc2.21405>
2. **Pabuayon, I. L.B.**, Williams, K., & Ritchie, G. (2024). Hail netting changes to spray droplets and patterns in grape canopies. *Viticulture Data Journal*, 5, e133532.
3. Singletary, M. M., Dotray, P. A., Baldwin, G., **Pabuayon, I. L.**, Asher, S., & Hixson, A. C. Axant™ Flex cotton response to topramezone applied early-or mid-postemergence. *Weed Technology*, 1-28.
4. Girsang, S., Castillo, R., Syam, M., Zaini, Z., Sunendar, K., Suyamto, S., Dela Torre, J., **Pabuayon, I L. B.**, Limpiada, R... & Buresh, R. (2024). Site-specific nutrient management for rice using soil properties to adjust phosphorus and potassium supply from compound NPK fertilizer. *Field Crops Research*. (under revision)
5. Bolouri, F., Kocoglu, Y., **Pabuayon, I. L. B.**, Ritchie, G. L., & Sari-Sarraf, H. (2024). CottonSense: A high-throughput field phenotyping system for cotton fruit segmentation and enumeration on edge devices. *Computers and Electronics in Agriculture*, 216, 108531.
6. Girsang, S. S., Stuart, A. M., Raharjo, B., Chivenge, P., Ratmini, N. P. S., Sembiring, H., Pustika, A. B., Yustisia, Y., Suprihatin, A., Barus, J., **Pabuayon, I. L. B.**, & Buresh, R. J. (2024). Rapid determination of site-specific N, P, and K management for rice in a tidal swampland. *Nutrient Cycling in Agroecosystems*. 1-13.
7. **Pabuayon, I. L. B.**, Bordovsky, J. P., Lewis, K. L., & Ritchie, G. (2023). Fruiting patterns impact carbon accumulation dynamics in cotton. *Field Crops Research*, 295, 108892.
8. Girsang, S. S., Stuart, A. M., Parhusip, D., Manurung, E. D., **Pabuayon, I. L. B.**, & Buresh, R. J. (2023). Mid-season adjustment of nitrogen fertilizer for rice with two plant spacings. *Field Crops Research*, 302, 109081.
9. **Pabuayon, I. L. B.**, Singh, S., & Ritchie, G. (2022). Guar Resilience in water-restricted production. *Crop Science*. 1-11. <https://doi.org/10.1002/csc2.20796>
10. Pabuayon, I.M., **Pabuayon, I.L.B.**, Singh, K., Ritchie, G.L., & de los Reyes, B.G. (2022). Applicability of hyperspectral imaging during salinity stress in rice for tracking Na⁺ and K⁺ levels in planta. *PLoS ONE*. 17(7): e0270931. <https://doi.org/10.1371/journal.pone.0270931>
11. Ladha, J.K., Radanielson, A., Rutkoski, J., Buresh, R., Dobermann, A., Angeles, O., **Pabuayon, I. L. B.**, Medellin-Santos, C., Fritsche-Neto, R., Chivenge, P., & Kohli, A. (2021). Steady agronomic and genetic interventions are essential for sustaining productivity in intensive rice cropping. *Proceedings of the National Academy of Sciences of the United States of America*. 118(45).

12. **Pabuayon, I. L. B.**, McCallister, D.M., Lewis, K. L., & Ritchie, G. L. (2021). Yield and economic efficiency response of modern cotton cultivars to nitrogen fertilizer. *Agronomy*, 11, 2149. <https://doi.org/10.3390/agronomy11112149>
13. **Pabuayon, I. L. B.**, Lewis, K. L., & Ritchie, G. L. (2021). Hidden Fractions: another look at micronutrient and sodium partitioning in modern cotton cultivars. *Crop Science*, 61:3623-3636.
14. Buresh, R. J., Correa, T. Q., **Pabuayon, I. L. B.**, Laureles, E., Choi, I. R. (2021). Yield of irrigated rice affected by asymptomatic disease in a long-term intensive monocropping experiment. *Field Crops Research*, 265, 108121.
15. **Pabuayon, I. L. B.**, Kelly, B. R., McCallister, D. M., Coldren, C. L., & Ritchie, G. L. (2021). Cotton Boll Distribution: A Review. *Agronomy Journal*, 1-15.
16. **Pabuayon, I. L. B.**, Lewis, K. L., & Ritchie, G. L. (2020). Dry matter and nutrient partitioning changes for the past 30 years of cotton production. *Agronomy Journal*, 112(5), 4373-4385.
17. Russell, K. R., Dotray, P. A., **Pabuayon, I. L. B.**, & Ritchie, G. L. (2020). Dicamba effects on fruiting in sensitive cotton. *Weed Technology*, 1-6.
18. Thompson, C. N., Mills, C., **Pabuayon, I. L. B.**, & Ritchie, G. L. (2020). Time-based remote sensing yield estimates of cotton in water limiting environments. *Agronomy Journal*, e20126.
19. Bechere, E., Auld, D. L., Smith, C. W., Cantrell, R. G., Hequet, E. F., Ritchie, G. L., **Pabuayon, I. L. B.** & Kelly, B. R. (2020). Registration of six upland cotton germplasm lines with improved fiber quality through ethyl methane sulfonate treatments and selection. *Journal of Plant Registrations*, 14(2), 159-164.
20. **Pabuayon, I. L. B.**, Yazhou, S. U. N., Wenxuan, G. U. O., & Ritchie, G. L. (2019). High-Throughput Phenotyping in Cotton: A review. *Journal of Cotton Research*, 2(1), 18-27.
21. **Pabuayon, I. L. B.**, Singh, S., & Ritchie, G. L. (2019). Effects of deficit irrigation on yield and oil content of sesame, safflower, and sunflower. *Agronomy Journal*, 111(6), 3091-3098.
22. **Pabuayon, I. L. B.**, Singh, S., Lewis, K. L., & Ritchie, G. L. (2019). Water extraction and productivity of cotton, sorghum, and sesame under deficit irrigation. *Crop Science*, 59(4), 1692-1700. [featured in ASA-CSA-SSSA Web Story, Certified Crop Adviser, and other media sites in 2020]

Book Chapters

1. **Pabuayon, I. L. B.** & Ritchie, G. L. (2022). Chapter Four: Part 3 - Water in the Plant: Too Much is as Harmful as Too Little. In F. R. Echer and C. A. Rosolem (Eds.). *Fisiologia aplicada ao manejo do algodoeiro*. Instituto Mato-Grossense do Algodão: Cuiabá (MT). 136-159.
2. Herrero, J. & **Pabuayon, I. L. B.** (2021). Chapter Four - The problem with “apparent electrical conductivity” in soil electromagnetic induction studies. In D. L. Sparks (Ed.). *Advances in Agronomy*. 165: 161-173. <https://doi.org/10.1016/bs.agron.2020.08.002>

Technical Publications

1. Levy, R., Webster, C., Dalla Lana, F., **Pabuayon, I. L. B.**, Fritsche-Neto, R... & Wilson, B. (2023). Rice Varieties and Management Tips. PUB. 2270 Louisiana State University Agricultural Center. <https://www.lsuagcenter.com/articles/page1669217585621>
2. **Pabuayon, I. L. B.**, Kongchum, M., Leonards, J. P., Fluit, J. S., Hartman, J. R., & Breaux, M. J. (2023). 2022 Annual Report: Rice Management Strategies for Efficient Utilization of Agronomic Inputs and Natural Resources. Rice Agronomy. Louisiana State University Agricultural Center.

Media and Popular Press:

1. Breeding, Crop Management Needed to Increase Rice Production. 2021.
<https://caes.ucdavis.edu/news/breeding-crop-management-needed-increase-rice-production>
2. Researchers evaluate improvements in cotton cultivar nutrition uptake and partition. 2020.
<https://www.lubbockonline.com/story/news/2020/11/13/researchers-evaluate-improvements-cotton-cultivar-nutrition-uptake-and-partition/6283451002/>
3. Pabuayon, I. L. B. Changes in Resource Partitioning After 30 Years of Cotton Production. 2020.
<https://www.planthealthexchange.org/cotton/Pages/GROW-COT-12-20-283.aspx>
4. Improvements in Texas Cotton Nutrition. 2020.
https://issuu.com/onegrower/docs/cotton_farming_december_2020
5. Researchers evaluate improvements in Texas cotton nutrition. 2020.
<https://www.cottonfarming.com/cover-story/texas-tech-researchers-evaluate-improvements-in-cotton-nutrition/>
6. In Depth: PSS researchers search for innovative ways to improve cotton. 2020.
<https://www.depts.ttu.edu/agriculturalsciences/news/posts/2020/11/pss-researchers-seek-innovative-ways-to-improve-cotton.php>
7. Pabuayon, I. L. B. Sesame Crop Yields Stable in Drought Conditions. 2019. American Society of Agronomy. <https://scitechdaily.com/sesame-crop-yields-stable-in-drought-conditions/>
8. Sesame ideal crop for drought regions in the US. 2019.
<https://www.greenprophet.com/2019/09/sesame-ideal-crop-for-drought-regions-in-the-us/>

External Grants:

Funded

1. Co-PI. 2024-2028. Implementing cover crops and compost additions to improve soil microbiomes and mitigate stress in semi-arid cotton production systems. *USDA-NIFA*. **Approved funds: \$294,000**
2. Lead PI. 2024. Impact of plant population and other management inputs on cotton seed size and seed size distribution. *Bayer Crop Science*. **Approved funds: \$30,240**
3. Lead PI. 2024. University Field Trial Agreement (Seed Size AXTP, B3XF). *BASF Corporation*. **Approved funds: \$3,600**
4. Co-PI. 2025. Maximizing Cotton Productivity through Light Capture and Resource Allocation at Reduced Seeding Rates. *Texas State Support Committee*. **Approved funds: \$35,000**
5. Co-PI. 2025. Evaluation of Cotton Plant Spacing and Age Uniformity in the Texas High Plains. *Texas State Support Committee*. **Approved funds: \$30,000**
6. PI. 2024. Big Cotton Project - Recalibrating the cotton development curve for diverse environments in the Texas Panhandle Plains. *Ogallala Aquifer Project*. **Approved funds: \$29,783**
7. Co-PI. 2024. Evaluating tools to monitor water use and water conservation in drought-prone urban landscapes. *TTU Davis College*. **Approved funds: \$50,000**
8. Co-PI. 2023-2024. Redefining Predictors for Cotton Emergence under Field Conditions. *Project Revolution (TTU-BASF)*. **Approved Funds: \$50,000**
9. Lead PI. 2023. Evaluation of Urease Inhibitors on Broadcast Urea in Flooded Rice Production. *Koch Agronomic Services*. **Approved Funds: \$8,400**
10. Lead PI. 2023. Rice Management Strategies for Efficient Utilization of Agronomic Inputs and Natural Resources. *Louisiana Rice Research Board*. **Approved Funds: \$137,412**
11. Lead PI. 2022. Rice Management Strategies for Efficient Utilization of Agronomic Inputs and Natural Resources. *Louisiana Rice Research Board*. **Approved Funds: \$157,412**
12. Co-PI. 2022. Redefining Predictors for Cotton Emergence under Field Conditions. *Project Revolution (TTU-BASF)*. **Approved funds: \$50,000**

13. Co-PI. 2022-2023. Plant Phenotype and Partitioning to Maximize Cotton Productivity under Water-Deficit Stress. *Texas State Support Committee*. **Approved funds: \$30,000**
14. Co-PI. 2022. Enhancing the Marketability of U.S. Cotton Through Length Uniformity Improvement. *Texas State Support Committee*. **Approved funds: \$150,000**
15. Co-PI. 2022. Nutrient Accumulation and Requirements of Modern Cotton Cultivars in the Southern High Plains and Rolling Plains of Texas. Texas State Support Committee. Project 18-124TX. **Approved funds: \$36,000**

Pending

1. Lead PI. 2025. Integrating Carbon Partitioning and Metabolomics for Improved Irrigation Management in Corn. *Texas Corn Producers Board*. **Requested Funds: \$36,450**
2. Lead PI. 2025-2027. Expanding Cottonsense Capabilities to Tackle Tissue Damage Detection and Plant Morphology Analysis for Improved Cotton Management. *USDA-NIFA*. **Requested Funds: \$300,000**
3. Co-Lead PI. 2025-2027 Biological Infrastructure for Cereal Breeding and Genetic Discovery Towards Climate and Environmental Resilience: Zea mays as Model System for the Texas High Plains. *Texas University Fund*. **Requested Fund: \$556,765**

Presentations at National and International Scientific Meetings:

1. **Pabuayon, I. L. B.**, Bicaldo, J.B., Alemar, Z., Best, B., & Ritchie, G.L. (2024). Adaptive carbon use in cotton leaves under deficit irrigation. ASA-CSSA-SSSA Annual International Meetings. November 9-13, 2024. San Antonio, TX. (*oral presentation*)
2. **Pabuayon, I. L. B.**, Lewis, K. L., & Ritchie, G. L. (2024). Nutrient Partitioning Changes for the Past 30 Years of Cotton Production. 2024 Great Plains Soil Fertility Conference. March 4-5, 2024. Lubbock, TX. (*oral presentation*)
3. **Pabuayon, I. L. B.** & Ritchie, G. L. (2024). Carbon Partitioning Response to Irrigation at the Leaf Level. 2024 Beltwide Cotton Conferences. January 5-7, 2024. Fort Worth, TX. (*oral presentation*)
4. **Pabuayon, I. L. B.** & Ritchie, G. L. (2022). Leeway and Limitations in Cotton Resource Partitioning. ASA-CSSA-SSSA Annual International Meetings. Nov. 6-9, 2022. Baltimore, MD. (*oral presentation*)
5. **Pabuayon, I. L. B.** & Ritchie, G. L. (2022). Cotton Boll Accumulation: Follow the Carbon. ASA-CSSA-SSSA Annual International Meetings. Nov. 6-9, 2022. Baltimore, MD. (*oral presentation*)
6. **Pabuayon, I. L. B.** & Ritchie, G. L. (2022). Cotton Resource Partitioning: Leeway and Limitations. 2022 Beltwide Cotton Conferences. January 4-6, 2022. San Antonio, TX. (*poster presentation*)
7. Ritchie, G. L. & **Pabuayon, I. L. B.** (2022). Seeing, Knowing, Doing: Changing Paradigms in Crop Phenotyping. 2022 Beltwide Cotton Conferences. January 4-6, 2022. San Antonio, TX. (*poster presentation*)
8. **Pabuayon, I. L. B.**, McCallister, D.M., Lewis, K. L., & Ritchie, G. L. (2021). Weather sensitivity of cotton in the Southern High Plains. ASA-CSSA-SSSA Annual International Meetings. Nov. 7-10, 2021. Salt Lake City, UT. (*oral presentation*)
9. **Pabuayon, I. L. B.**, Ritchie, G. L., & Lewis, K. R. (2021). Essential micronutrient and sodium partitioning changes in modern cotton cultivars. 2021 Virtual Beltwide Cotton Conferences. January 5-7, 2021. (*poster presentation*)
10. **Pabuayon, I. L. B.**, K. L. Lewis, & G. L. Ritchie. (2020). Re-evaluation of essential micronutrient and sodium uptake in high productivity cotton cultivars. 2020 Virtual Annual ASA-CSSA-SSSA International Meetings. November 9-13, 2020. (*poster presentation*)
11. **Pabuayon, I. L. B.**, K. L. Lewis, & G. L. Ritchie. (2020). Changes in resource partitioning after 30 years of cotton production. 68th Virtual Annual West Texas Agricultural Chemicals Institute Conference. September 9, 2020. (*oral presentation*)
12. **Pabuayon, I. L. B.**, Ritchie, G. L., & Lewis, K. R. (2020). Nutrient partitioning changes in the past 30 years of cotton production. 2020 Great Plains Soil Fertility Conference. March 10-11, 2020. Denver CO. (*poster presentation*)

13. **Pabuayon, I. L. B.**, Ritchie, G. L., & Lewis, K. R. (2020). Nutrient partitioning changes in the past 30 years of cotton production. 2020 Southwest Cotton Physiology Meeting. February 4-6, 2020. Ardmore, OK. (*oral presentation*)
14. Ritchie, G. L. & **Pabuayon, I. L. B.** (2020). Middle Children Are Best: Carbon dynamics and boll distribution. 2020 Beltwide Cotton Conferences. January 8-10, 2020. Austin, TX.
15. **Pabuayon, I. L. B.**, Ritchie, G. L., & Lewis, K. R. (2020). Resource Partitioning in Cotton: Three decades later. 2020 Beltwide Cotton Conferences. January 8-10, 2020. Austin, TX. (*poster presentation*)
16. **Pabuayon, I. L. B.** & Ritchie, G. L. (2019). Spatial and temporal distribution of solar radiation and its effect on cotton growth under different rates of irrigation. ASA-CSSA-SSSA International Annual Meetings. November 10-13, 2019. San Antonio, TX. (*poster presentation*)
17. **Pabuayon, I. L. B.**, Ritchie, G. L., & Lewis, K. R. (2019). Re-evaluation of the biomass partitioning and nutrient accumulation of cotton cultivars in Texas Southern High Plains. ASA-CSSA-SSSA International Annual Meetings. November 10-13, 2019. San Antonio, TX. (*oral presentation*)
18. **Pabuayon, I. L. B.**, Lewis, K. R., & Ritchie, G. L. (2019). Leaf and petiole nutrient concentration by node-stem position in cotton. West Texas Agricultural Chemicals Institute Annual Conference. September 9, 2020. Lubbock, TX. (*poster presentation*)
19. **Pabuayon, I. L. B.**, Ritchie, G. L., & Lewis, K. R. (2019). Re-assessment of the nutrient accumulation and requirements of modern cotton cultivar in Southern High Plains. Beltwide Cotton Conferences. January 8-10, 2019. New Orleans, LA. (*poster presentation*)
20. **Pabuayon, I. L. B.**, Singh, S., & Ritchie, G. L. (2018). Comparison of the water use dynamics of cotton grown with sorghum under deficit irrigation. Beltwide Cotton Conferences. January 8-10, 2019. New Orleans, LA. (*poster presentation*)
21. Luth, K., Ritchie, G. L., **Pabuayon, I. L. B.**, Lewis, K. R., & Macha, N. (2018). Cotton and sorghum intercropping. Beltwide Cotton Conferences. January 8-10, 2019. New Orleans, LA.
22. **Pabuayon, I. L. B.**, Singh, S., & Ritchie, G. L. (2018). Productivity of cotton and alternative oilseed crops subjected to water-limiting conditions in West Texas. ASA and CSSA International Annual Meetings. November 4-7, 2018. Baltimore, MD. (*poster presentation*)
23. **Pabuayon, I. L. B.**, Singh, S., & Ritchie, G. L. (2018). Soil water and water use dynamics of alternative crops with deficit irrigation. Southern Regional Branch of ASA 2018 Annual Meetings. February 4-6, 2018. Jacksonville, FL. (*oral presentation*)
24. **Pabuayon, I. L. B.**, Singh, S., & Ritchie, G. L. (2018). Response of alternative oilseed crops to deficit irrigation in West Texas. Southern Regional Branch of ASA 2018 Annual Meetings. Feb. 4-6, 2018. Jacksonville, FL. (*poster presentation*)
25. **Pabuayon, I. L. B.**, Singh, S., & Ritchie, G. L. (2017). Productivity of drought-tolerant alternative crops subjected to water-limiting conditions in West Texas. ASA-CSSA-SSSA International Annual Meetings. October 22-25, 2017. Tampa, FL. (*poster presentation*)

Teaching Experience:

Spring 2025	Instructor of PSS 3322 – Grain, Fiber, and Oilseed Crops <i>Department of Plant and Soil Science, Texas Tech University, Lubbock, TX, USA</i>
Spring 2024	Lecturer – PSS 6001 Field Research Methods <i>Department of Plant and Soil Science, Texas Tech University, Lubbock, TX, USA</i>
Fall 2021	Guest Lecturer – PSS 1321 Agronomic Plant Science <i>Department of Plant and Soil Science, Texas Tech University, Lubbock, TX, USA</i>
Fall 2021	Blackboard Coordinator of PSS 3421 – Fundamental Principles of Genetics <i>Department of Plant and Soil Science, Texas Tech University, Lubbock, TX, USA</i>
Summer 2021	Guest Lecturer – 2021 Texas International Cotton School <i>Fiber and Biopolymer Research Institute, Texas Tech University, Lubbock, TX, USA</i>
Spring 2021	Instructor of PSS 3322 – Grain, Fiber, and Oilseed Crops <i>Department of Plant and Soil Science, Texas Tech University, Lubbock, TX, USA</i>

2017 - 2020	Teaching Assistant PSS 3323 Crop Physiology, PSS 4325 Crop Water Management, PSS 5323 Environmental Crop Physiology, PSS 6323 Plant-Water Relations <i>Department of Plant and Soil Science, Texas Tech University, Lubbock, TX, USA</i>
2009 – 2011	Chemistry Instructor <i>Institute of Chemistry, University of the Philippines, Los Baños, Philippines</i>

Formal Courses Taught:

Spring 2025	<i>PSS 3322 Grain, Fiber, and Oilseed Crops</i> Department of Plant and Soil Science, Texas Tech University
Spring 2024	<i>PSS 6001 Field Research Methods</i> Department of Plant and Soil Science, Texas Tech University
Spring 2021	<i>PSS 3322 Grain, Fiber, and Oilseed Crops</i> Department of Plant and Soil Science, Texas Tech University
2009-2011	Institute of Chemistry, University of the Philippines - Los Baños <i>CHEM 15.1 Fundamentals of Chemistry Laboratory</i> <i>CHEM 16.1 General Chemistry I Laboratory</i> <i>CHEM 17.1 General Chemistry II Laboratory</i> <i>CHEM 40.1 Basic Organic Chemistry</i>

Editorial Board Roles:

2025-2027	Associate Editor - <i>Crop Science</i>
2024-2025	Social Media Editor - <i>Crop Science</i>
2024-2027	Science Communication Editor - <i>Crop Science</i>
2024-2027	Reviewing Editor – <i>Journal of Crop Improvement</i>

Services:

2024-present	Texas FFA CDE Agronomy Contest - Superintendent
2022-present	TTU Regional Science Fair – judge
2024	Field Crops Research – journal reviewer
2023-2024	2nd Annual Davis College Graduate Student Research Poster Competition - judge
2023	LSU AgCenter Rice Research Station Search Committee Member
2023-present	Agronomy Journal – journal reviewer
2020 - 2024	ASA-CSSA-SSSA Conference Graduate Student Oral Competition – judge
2021-present	AoB Plants – journal reviewer
2021-present	All Life – journal reviewer
2021-present	Journal of Natural Fibers – journal reviewer
2019-present	Crop Science - journal reviewer
2020-present	Agricultural Water Management - journal reviewer
2020-present	Agrosystems, Geosciences & Environment - journal reviewer
2020-present	International Journal of Biometeorology - journal reviewer
2020-present	New Zealand Journal of Crop & Horticultural Science - journal reviewer
2018-present	State FFA Agronomy competition – contributor, volunteer

License and Certifications:

Apr 2019 (acquired)	Commercial Pesticide Applicator License
Jun 2017 (acquired)	Radiation Safety Training Certified for CPN AmBe Soil Moisture Probes
Sep 2010 (acquired)	PRC Chemistry Professional License