

CATHERINE SIMPSON

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Catherine.Simpson@ttu.edu

EDUCATION:

Ph.D. in Horticulture

Texas A&M University, College Station, TX

December 2013

M.S. in Plant and Soil Science

Texas A&M University-Kingsville, Kingsville, TX

August 2005

B.S. in Environmental Soil Science

Texas A&M University-Kingsville, Kingsville, TX

December 2003

Summa Cum Laude

RESEARCH INTERESTS:

Plant-water-soil relationships; Whole systems research (soil, water, plant, nutrient interrelationships and their effects on production); Urban horticulture; Vertical farming; Controlled environment systems; Abiotic stress physiology; Post-harvest physiology; Cropping, and nutrient management strategies; Nutrient partitioning and its role in pest/pathogen resistance and disease resistance or management; Water quality and drought effects on physiology and production.

RESEARCH EXPERIENCE:

2023 – Present *Associate Professor*, Texas Tech University, Lubbock, TX

2019 – 2023 *Assistant Professor*, Texas Tech University, Lubbock, TX

2015 – 2019 *Assistant Professor*, Texas A&M University – Kingsville, Citrus Center, Weslaco, TX

2014 - 2015 *Research Scientist*, Texas A&M University – Kingsville, Citrus Center, Weslaco, TX

2011 – 2013 *Teaching/ Graduate Research Assistant*, Texas A&M University, College Station, TX.

2007 – 2008 *Quality and Research Coordinator*, EnviroTech Services Inc., Greeley, CO.

2006 – 2007 *Graduate Research Assistant*, Colorado State University, Fort Collins, CO.

2005 – 2006 *Graduate Research Assistant*, Texas A&M University, College Station, TX

2004 – 2005 *Graduate Teaching & Research Assistant*, Texas A&M University- Kingsville, Kingsville, TX.

2003 – 2004 *Undergraduate Research Aide*, Kika de la Garza Plant Materials Center, Kingsville, TX

2002 – 2002 *Undergraduate Research Aide*, Texas A&M University-Kingsville, Kingsville, TX

TEACHING EXPERIENCE:

2023 – Present *Associate Professor*, Texas Tech University, Lubbock, TX

2019 – Present *Assistant Professor*, Texas Tech University, Lubbock, TX

2015 – 2019 *Assistant Professor*, Texas A&M University – Kingsville, Citrus Center, Weslaco, TX

2014 – 2014 *Instructor of Horticulture*, Texas A&M University, College Station, TX

2008 – 2011 *Instructor of Plant and Soil Science*, Texas A&M University- Kingsville, Kingsville, TX.

2004 – 2005 *Graduate Teaching & Research Assistant*, Texas A&M University- Kingsville, Kingsville, TX.

2002 – 2002 *Student Program Coordinator*, Texas A&M University-Kingsville, Kingsville, TX

Texas Tech Courses Taught –

- Arboriculture – PSS 4313

- Management of Horticultural Enterprises – PSS 4314
- Greenhouse Crop Production – PSS 4411
- Adv. Management of Horticultural Enterprises – PSS 5317
- Adv. Greenhouse Crop Production – PSS 5415
- Adv. Arboriculture – PSS 5316

TAMU-Kingsville Courses Taught –

- Advanced Plant Propagation – PLSS 6390
- Scientific Writing – PLSS 6390
- Advanced Crop Physiology – PLSS 6390
- Crop Physiology – PLSS 3381
- Agriculture and Human Sciences as Professions – AGRI 1201 (3 semesters)
- Soil Morphology – PLSS 3320
- Landscape Design – PLSS 3319
- Soil and Water Conservation and Management – PLSS 3321
- Ornamental Plant Materials – PLSS 3331
- Plant Propagation – PLSS 3332
- Principles of Soil Science – PLSS 3410
- Principles of Soil Science Laboratory - PLSS 3410 (4 semesters)
- Senior Seminar – AGRI 4171 (6 semesters)
- Plant and Soil Water Relations – PLSS 4327 (2 semesters)
- Soil Fertility and Plant Nutrition – PLSS 4329

TAMU Courses- 2011-2014

- Plant Propagation – HORT 326 (*Instructor*)
- Crop Physiology – MEPS 313 (*TA*)
- Enology – HORT 421 (*TA*)
- Special Event Design and Production – HORT 454 (*TA*)
- Retail Floristry – HORT 451(*TA*)
- Floral Art – HORT 453 (*TA*)
- Vegetable Crop Production – HORT 325 (*TA*)

THESIS:

Ph.D. Dissertation: Simpson, C.R. 2013. Physiological Effects of Saline Water on Two Economically Important Horticultural Crops in South Texas. Department of Horticultural Sciences, Texas A&M University, College Station, TX. (Supervisors – Dr. Astrid Volder, Dr. Shad D. Nelson)

- My doctoral research assessed physiological impacts of salinity in grafted and ungrafted citrus and watermelons. I compared rootstocks of each species and evaluated their ability to impart salinity tolerance to the scion, increasing yield potential in areas prone to low quality water or soil salinity. Results from these studies showed that certain rootstocks (C22- citrus, Strong Tosa-watermelon) can increase salinity tolerance in moderately saline conditions.

M.S. Thesis: Simpson, C.R. 2005. Volatilization Loss of Vapam and K-pam in Different Soil Types and Varying Organic Matter Levels. Department of Agronomy and Resource Sciences, Texas A&M University- Kingsville, Kingsville, TX. (Supervisor - Dr. Shad D. Nelson)

- My master's research focused on soil fate and transport of metam sodium and metam potassium in different soils with varying organic matter contents. This study provided evidence that soil

porosity and composition can deeply influence fumigant movement and persistence in the soil profile.

PUBLICATIONS: (*committee, **advisor, ^ corresponding author)

Refereed Journals [38]–

1. Farzana, K. *, Coldren, C., **Simpson, C.**, Young, J., and Cleveland, T. 2023. Evaluating the Sensitivity of Hydrological Response to Changes in Vegetation Classification: A Case Study of St. Charles Bay, Texas, USA. (*Submitted to Int. J. of Hydrology Science and Technology*)
2. Trevino, J.**, Monsur, M., Lindquist, C.S., Fischer, L., and **Simpson, C.R.**^ 2023. Impacts of the COVID-19 pandemic and nature interactions on faculty mental health. (*Submitted to Hort Science*)
3. Thomas, A.**, Muntazar, M., Lindquist, C.S., Montague, T., **Simpson, C.**^2023. Evaluation of military service member preferences of landscape design elements in gardens. (*Submitted to Int. J. of Environmental Research and Public Health*)
4. Triplett, E.*, Longing, S., **Simpson, C.**, Emendack, Y., Hayes, C., Monclova, C., and Laza, H. 2023. Identified Volatile Organic Compounds as Biomolecular Markers of Innate Sorghum Aphid Resistance in Sorghum under Stress-free Conditions. (*Submitted to Plants*)
5. Kathi, S.**, Singh, S., Laza, H., Thompson, L., Li, W., and **Simpson, C.R.**^ 2024. Ascorbic Acid Foliar Spray Increases Vitamin C Content in Arugula Leafy Greens. (*Submitted to Scientia Horticulturae*)
6. Regmi, A., Rueda-Kunz, D., Liu, H., Trevino, J., Kathi, S., and **Simpson, C.** 2024. Comparing resource use efficiencies in hydroponic and aeroponic production systems. (*In revision - Technology in Horticulture*)
7. Kathi, S.**, Singh, S., Laza, H., Thompson, L., Li, W., and **Simpson, C.R.**^ 2024. Simultaneous Biofortification of Vitamin C and Mineral Nutrients in Arugula Microgreens. *Food Chemistry*, 440; 138180. <https://doi.org/10.1016/j.foodchem.2023.138180>
8. Kathi, S.**, Singh, S., Laza, H., Thompson, L., Li, W., and **Simpson, C.R.**^ 2023. A decade of improving nutritional quality of horticultural crops agronomically (2012–2022): A systematic literature review, *Science of The Total Environment*, 911, 2024, 168665, ISSN 0048-9697, <https://doi.org/10.1016/j.scitotenv.2023.168665>.
9. Venkataramani, S.*, Kafle, A., Singh, S., **Simpson, C.**, Siebecker, M. and Singh, S. 2023. Greenhouse cultivation of cucumber (*Cucumis sativus*) in standard soilless media amended with biochar and compost. *HortScience*, 58(9), 1035-1044. <https://doi.org/10.21273/HORTSCI17257-23>
10. Triplett, E.*, Hayes, C., Emendack, Y., Longing, S., Monclova, C., **Simpson, C.**, and Laza, H. 2023. Leaf structural trait mediating pre-existing physical innate resistance to sugarcane aphids in sorghum under uninfested conditions. *Planta*. 2023 Jul 20;258(2):46. doi: 10.1007/s00425-023-04194-0.
11. Kharel, G., Dhakal, M., Deb, S., Slaughter, L., **Simpson, C.**, and West, C. 2023. Effect of long-term semiarid pasture management on soil hydraulic and thermal properties. *Plants*, 12(7), 1491 <https://doi.org/10.3390/plants12071491>

12. Kathi, S.** , Singh, S., Laza, H., Thompson, L., Li, W., and **Simpson, C.R.**^ 2023. Vitamin C Biofortification of Broccoli Microgreens and Resulting Effects on Nutrient Composition. *Frontiers in Plant Science*, 14: 1145992. <https://doi.org/10.3389/fpls.2023.1145992>
13. Regmi, A.**, Singh, S., Moustaid-Moussa, N., Coldren, C., and **Simpson, C.R.** 2023. Biochar influences phytochemical concentrations of *Viola cornuta* flowers. *Sustainability*, 15 (5): 3882. <https://doi.org/10.3390/su15053882>
14. Plocek, G.** , Kathi, S., and **Simpson, C.R.**^ 2023. The Effects of Eustress Induced by Low Concentrations of Salinity on Broccoli (*Brassica oleracea*) and Purslane (*Portulaca oleracea*) Microgreens. *Technology in Horticulture*, 3:4. <https://doi.org/10.48130/TIH-2023-0004>
15. **Simpson, C.**^, Setamou, M., & Nelson, S. D. 2023. Evaluation of citrus grove floor management strategies for water use efficiency and conservation. *Scientia Horticulturae*, 309, 111680. <https://doi.org/10.1016/J.SCIENTA.2022.111680>
16. Kathi, S.** , Singh, S., Laza, H., Thompson, L., Li, W., and **Simpson, C.R.**^ 2022. Increasing Vitamin C through agronomic biofortification of arugula microgreens. *Scientific Reports*. 2022, 12:13093 <https://doi.org/10.1038/s41598-022-17030-4>
17. Trevino, J.** , Monsur, M., Lindquist, C.S., and **Simpson, C.R.**^ . College student nature interactions and their impacts on mental health during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*. 2022, 19(9), 5030, <https://doi.org/10.3390/ijerph19095030>
18. Regmi, A. **, Singh, S, Moustaid-Moussa, N, Coldren, C, Simpson, C.^ The Negative Effects of High Rates of Biochar on Violas Can Be Counteracted with Fertilizer. *Plants*. 2022; 11(4):491. <https://doi.org/10.3390/plants11040491>
19. Reed, D.* , Montague, T., **Simpson, C.R.**, Singh, S. 2021. Influence of media, plant growth regulators, and cultivar on rooting of Lavandula x intermedia cuttings. *The Journal of Environmental Horticulture*. 1 December 2021; 39 (4): 150–159. doi: <https://doi.org/10.24266/0738-2898-39.4.150>
20. Mohawesh, O., Albalasmeh, A., Deb, S., Singh, S., **Simpson, C.**, AlKafaween, N., and Mahadeen, A. 2022. Effect of Colored Shading Nets on the Growth and Water Use Efficiency of Sweet Pepper (*Capsicum annum* L.) Grown Under Semiarid Conditions. *HortTechnology*. 32 (1); <https://doi.org/10.21273/HORTTECH04895-21>
21. Mohawesh, O., Albalasmeh, A., Gharaibeh, M., Deb, S., **Simpson, C.**, Singh, S., and El Hanandeh, A. 2021. Potential use of biochar as an amendment to improve soil fertility and plant growth under arid conditions. *Journal of Soil Science and Plant Nutrition*. <https://doi.org/10.1007/s42729-021-00580-3>
22. Kathi, S.** , Umphres-Lopez, A., **Simpson, C.R.**, and Schuster, G. 2021. Superabsorbent polymers improve water retention, reduce nitrate leaching, and result in improved tomato growth and development. *HortScience*. 56 (12). <https://doi.org/10.21273/HORTSCI16089-21>
23. **Simpson, C.R.**^, Gonzales III, J.** , Enciso, J., Nelson, S.D., and Setamou, M. 2020. Root distribution and seasonal fluctuations under different grove floor management systems in citrus. *Scientia Horticulturae*, 272 Article 109364. <https://doi.org/10.1016/j.scienta.2020.109364>

24. Garza, B.N.***, Ancona, V., Enciso, J., Perotto, H., and **Simpson, C.R.**^ 2020. Quantifying citrus tree health using true color UAV images. *Remote Sensing* 12, 170; doi:10.3390/rs12010170
25. Rodriguez, J.***, Enciso, J., Anoruo, A., and **Simpson, C.R.**^ 2019. Physiological effects of exogenously applied reflectants and anti-transpirants on leaf temperature and fruit sunburn in citrus. *Plants* 8, 549 doi:10.3390/plants8120549
26. Semida, W., Rady, M., Abdelmageed, T., Abdelaziz, S., Taha, R., and **Simpson, C.** 2019. The combined application of residual sulfur biochar and effective microorganisms (EMs) improves soil properties, plant growth and productivity of *Capsicum annuum* under salt stress. *Scientia Horticulturae* 261 (2020) 108930
27. Semida, W., **Simpson, C.** Hussein, H., Setamou, Rady, M., Nelson, S., and Abdelmageed, T., 2019. Biochar implications for sustainable agriculture and environment: A review. *South African Journal of Botany* 127, p.333-347
28. **Simpson, C.R.**^, Melgar, J.C., Nelson, S.D., and Setamou, M. 2019. Growth and yield responses under different grove floor management strategies for water conservation in young grapefruit trees. *Scientia Horticulturae*, 256 108567. <https://doi.org/10.1016/j.scienta.2019.108567>
29. Barickman, T.C., **Simpson, C.R.**, and Sams, C.E. 2019. Waterlogging causes early developmental modification in the physiological performance, carotenoids, chlorophylls, proline, and soluble sugars of cucumber plants. *Plants* 8, 160 p 1-15.
30. **Simpson, C.R.**^, Franco, J., King, S., and Volder, A. 2018. Intercropping halophytes to mitigate salinity in watermelons. *Sustainability* 10 (3), 681 p 1-17. doi:[10.3390/su10030681](https://doi.org/10.3390/su10030681)
31. Setamou, M., Alabi, O., **Simpson, C.**, Jifon, J. 2017. Contrasting amino acid profiles among permissive and non-permissive hosts of *Candidatus Liberibacter asiaticus*, putative causal agent of Huanglongbing. Published online Dec 13, 2017 <https://doi.org/10.1371/journal.pone.0187921>
32. Setamou, M. **Simpson C.R.**, Alabi, O.J., Nelson, S.D., Telagamsetty, S., and Jifon, J. 2016. Quality Matters: Influences of citrus flush physiochemical characteristics on population dynamics of the Asian citrus psyllid (Hemiptera:Liviidae). Published online Dec 28, 2016 <http://dx.doi.org/10.1371/journal.pone.0168997>
33. Kusakabe, A., Contreras-Barragán, B.A., **Simpson, C.R.**, J. Enciso, Nelson, S.D., and Melgar, J.C. 2016. Partial rootzone drying reduces water use and maintains fruit yield and quality in citrus. *Agricultural Water Management* 178: 66-75 <http://dx.doi.org/10.1371/journal.pone.0168997>
34. **Simpson, C.R.**^, Nelson, S.D., Melgar, J.C., King, S., Jifon, J., Schuster, G. and Volder, A. 2015. Effects of salinity on physiological parameters of grafted and ungrafted citrus. *Scientia Horticulturae* 197C: 483-489
35. **Simpson, C.R.**^, Nelson, S.D., King, S., Jifon, J., Schuster, G., and Volder, A. 2015. Grafted watermelon rootstock salinity evaluation. *Subtropical Agriculture and Environments* 66:1-6
36. **Simpson, C.R.**^, Volder, A., Nelson, S.D., Melgar, J.C., King, S., Jifon, J., and Schuster, G. 2013. Growth response of grafted and non-grafted citrus trees to saline irrigation. *Scientia Horticulturae* 169: 199-205.

37. **Simpson, C.R.**[^], S.D. Nelson and H.A. Ajwa. 2011. Impact of soil texture and organic matter content on MITC volatilization from soil columns. *Journal of Agricultural Science & Technology A* 1:194-198.
38. **Simpson, C.R.**[^], Nelson, and S.D., Ajwa, H.A. 2010. Surface Water Seal Application to Minimize Volatilization Loss of Methyl Isothiocyanate from Soil Columns. *Pest Management Science* 66:6 686-692.

Refereed Conference Papers –

39. Jones, J., Borch, T., Young, R., Davis, J., and **Simpson, C.** 2007. Photolysis of testosterone, progesterone and 17 β -estradiol by UVA light. AWRA 2007 Summer Specialty Conference, June 25-27, 2007, Vail, Colorado. (*Published conference paper*)

Non- refereed/ Extension Publications –

1. **Simpson, C.** (contributor). Citrus Center Highlights FY 2018-2019.
2. **Simpson, C.**, Setamou, M., and Nelson, S.D., Raised Beds and Groundcovers Impacts on Citrus. Texas A&M University – Kingsville Citrus Center Fact Sheet# TAMUK CC PHYS-2 and 2b.
3. **Simpson, C.** (editor/author). Citrus Center Highlights FY 2017-2018.
<https://citrusphysiologylab.wixsite.com/simpson/citrus-center-highlights-magazine>
4. Solorzano, J., and **Simpson, C.** 2018. Developing Microcontroller Based Environmental Monitors. TheAgMag, Issue 24: 10-11. https://issuu.com/theagmag/docs/issue_24
5. **Simpson, C.** (editor/author). Citrus Center Highlights FY 2016-2017.
<https://citrusphysiologylab.wixsite.com/simpson/citrus-center-highlights-magazine>
6. **Simpson, C.**, Telagamsetty, S. 2016. Sunburn in Citrus. TheAgMag, Issue 15 (Jan/Feb edition): 6-7.
https://issuu.com/theagmag/docs/issue_15
7. **Simpson, C.**, Nelson, S.D., and Setamou, M. 2016. Novel Planting Design: Raised bed with plastic mesh groundcover to improve citrus tree growth. TheAgMag, Issue 14 (Nov/Dec edition): 48-49.
https://issuu.com/theagmag/docs/issue_14_pgs_1-72-2
8. **Simpson, C.**, Nelson, S.D., and Setamou, M. 2016. Novel Planting Design: Raised bed with plastic mesh as groundcover to improve tree growth. Texas A&M University – Kingsville Citrus Center Fact Sheet# TAMUK CC PHYS-1.

Manuscripts in Preparation –

1. York, S.***, Siebecker, M., Williams, C., and **Simpson, C.R.**[^] 2023. Influence of Selenium and Salt Stress on Plant Growth and Physiology in Hydroponically Produced Indian Mustard.
2. Poudyal, S., Regmi, A.**, and **Simpson, C.** 202X. Effect of salt stress and biochar amendments on phytochemical properties of leafy greens. (In preparation to submit to Agricultural and Food Chemistry)
3. Poudyal, S., Kathi, S.**, and **Simpson, C.** 202X. Comparing the efficacy of four different bioreactor substrates for removal of nitrate and phosphorus and as a plant growth substrate. (In preparation to submit to Agricultural Water Management)

4. Poudyal, S. and **Simpson, C.** 202X. Biochar amendments promote growth and physiology of leafy greens grown under salinity stress. (In preparation to submit to PLOS ONE)
5. Poudyal, S. and **Simpson, C.** 202X. Evaluating the accuracy of a handheld spectrophotometer to determine leaf chlorophyll and carotenoid content of collard greens. (In preparation to submit to HortScience)
6. Thomas III, G.J.***, Setamou, M., Enciso, J., and **Simpson, C.R.** 202X. Impact of soil type and management strategies on citrus root development. (In preparation to send to HortScience)
7. Rodriguez, J.***, Enciso, J., Anoruo, A., and **Simpson, C.R.** 202X. The physiological impacts of sunburn on grapefruit in Texas. (In preparation to send to Scientia Horticulturae)
8. **Simpson, C.R.**, and Solorzano, J. 202X. Developing a low-cost solution for microenvironment monitoring. (In preparation to send to Computers and Electronics in Agriculture)

Book Chapters [3] –

1. Kathi, S.** and **Simpson, C.** 2023. Enhancing nutritional value: The potential and challenges of vitamin C biofortification in plants. (*Book Chapter Submitted to Springer Nature*)
2. Simpson, C.R., Perry, G., Cooper, Caitlyn, Coman, Ioana, and Coldren, C. 2023. Chapter: Urban Vegetation: Anthropogenic Influences, Public Perceptions, and Wildlife Implications. In A. Kuden (Ed) Urban Horticulture – Sustainable Gardening in Cities, Intech Open Access Publisher.
<https://doi.org/10.5772/intechopen.1001155>
3. Nelson, S.D., **C.R. Simpson**, H.A. Ajwa, and C.F. Williams. 2012. Chapter 24: Evaluating surface seals in soil columns to mitigate methyl isothiocyanate volatilization. In M.L. Larramendy and S. Soloneski (Eds.) Integrated Pest Management and Pest Control-Current and Future Tactics. Intech-Open Access Publisher. p. 567-580. <http://www.intechopen.com/articles/show/title/evaluating-surface-seals-in-soil-columns-to-mitigate-methyl-isothiocyanate-volatilization> (Book Chapter, Invited, ISBN: 978-953-51-00508.)

Published Abstracts/Professional Presentations [134] –

1. Simpson, C. and Williams, C. MASTERS: Mentoring Agricultural Students through Training Experiential Learning and Research Skills for the Future Agricultural Workforce. Annual American Society of Horticultural Sciences Conference. Orlando, FL. July 31- August 4, 2023.
2. Thomas, A. Lindquist, C.S. Monsur, M., Montague, T., and Simpson, C. Adapting Horticultural Therapy: The Benefits of an At-home Bonsai Kit for Military Service Members. Annual American Society of Horticultural Sciences Conference. Orlando, FL. July 31- August 4, 2023.
3. Thomas, A. Lindquist, C.S. Monsur, M., Montague, T., and Simpson, C. Horticultural Therapy as a Tool to Support the Sustainable-Self in Military Service Member Reintegration. Annual American Society of Horticultural Sciences Conference. Orlando, FL. July 31- August 4, 2023. (*Scholars Ignite -1st Place winner*)
4. Kathi, S., Singh, S., Li, W., Thompson, L., Laza, H., and Simpson, C. Biofortification of Vitamin C and Micronutrients in Arugula Microgreens. Annual American Society of Horticultural Sciences Conference. Orlando, FL. July 31- August 4, 2023.
5. Regmi, A., Slaughter, L., Moustaid-Moussa, N., and Simpson, C. Interaction Effects of Salinity and Mycorrhizal Inoculation on Two Basil Cultivars. Annual American Society of Horticultural Sciences Conference. Orlando, FL. July 31- August 4, 2023.
6. Regmi, A., Slaughter, L., Moustaid-Moussa, N., and Simpson, C. Interaction Effects of Salinity and Mycorrhizal Inoculation on Two Basil Cultivars. Annual American Society of Horticultural Sciences Conference. Orlando, FL. July 31- August 4, 2023. (Scholars Ignite Competition)

7. Trevino, J., Fischer, L., Thompson, L., Baliga, V., and Simpson, C. Signage for Success: Evaluating Community Garden Signage. Annual American Society of Horticultural Sciences Conference. Orlando, FL. July 31- August 4, 2023.
8. Sehrish, A., Vyavhare, S. Parajulee, M. Coldren, C, Haydee, L, and Simpson, C. The effects of neonicotinoid seed treatments on cotton seedling's physiology and growth. Annual American Society of Horticultural Sciences Conference. Orlando, FL. July 31- August 4, 2023.
9. Plocek, G. and Simpson, C. Analysis of *Trichoderma* Sp. and *Bacillus amyloliquefaciens* as Biofertilizers for Black Summer Pac Choi (*Brassica rapa* var. Chinensis) Produced in Deep-Water and NFT Hydroponic Systems. Annual American Society of Horticultural Sciences Conference. Orlando, FL. July 31- August 4, 2023.
10. Plocek, G. and Simpson, C. Evaluating *Trichoderma* sp. and *Bacillus amyloliquefaciens* as biofertilizers for Black Summer Pac Choi (*Brassica rapa* var. Chinensis) produced in Deep-Water and NFT Hydroponic Systems. Texas Tech Undergraduate Research Conference. Lubbock, TX. April 11-14, 2023.
11. Simpson, C.R.* and Monsur, M. The Effectiveness of Interactive Virtual Tours (IVTs) for Distance Learning in Environmental/Agricultural Education. Annual Southern Region ASHS meeting, Oklahoma City, OK. February 3-5, 2023.
12. Kathi, S., Singh, S., Li, W., Thompson, L., Laza, H., and Simpson, C. Vitamin C Biofortification in Arugula Leafy greens Through Foliar Application of Ascorbic Acid. Annual Southern Region ASHS meeting, Oklahoma City, OK. February 3-5, 2023. (3rd place Ph.D. Oral Presentation Paper Award)
13. Kathi, S., Singh, S., Li, W., Thompson, L., Laza, H., and Simpson, C. Vitamin C Biofortified Arugula and Broccoli Microgreens. Annual Southern Region ASHS meeting, Oklahoma City, OK. February 3-5, 2023.
14. Newberry, K., Baliga, V., Wallace, R. and Simpson, C. Analysis of Spray Frequencies within an Aeroponic Crop Production System. TNLA Lone Star Hort Forum. College Station, TX. January 9-10, 2023. (2nd place winner)
15. Plocek, G. and Simpson, C. The Impacts of *Trichoderma* sp. and *Bacillus amyloliquefaciens* on Black Summer Pac Choi (*Brassica rapa* var. Chinensis) produced in Deep-Water and NFT Hydroponic Systems. TNLA Lone Star Hort Forum. College Station, TX. January 9-10, 2023. (1st place B.S. winner)
16. Thomas, A. Lindquist, C.S. Monsur, M., Montague, T., and Simpson, C. At-home Bonsai Kit: Providing Horticultural Therapy to Military Members in Isolation. TNLA Lone Star Hort Forum. College Station, TX. January 9-10, 2023. (1st place Ph.D. winner)
17. Kathi, S., Singh, S., Li, W., Thompson, L., Laza, H., and Simpson, C. Foliar Spray of Ascorbic Acid Improves Vitamin C in Arugula Leafy Greens. TNLA Lone Star Hort Forum. College Station, TX. January 9-10, 2023. (2nd place Ph.D. winner)
18. Plocek, G. and Simpson, C. The Effects of Eustress Induced by Municipal Water Salinity on Broccoli (*Brassica oleracea*) and Purslane (*Portulaca oleracea*) Microgreens. Texas Tech TrUE Symposium. Lubbock, TX. October 20-21, 2022.
19. Stamm, E., Coldren, C., Williams, C., and Simpson, C. Impacts of Carbamazepine Rates on Lettuce (*Lactuca sativa* var. capitata) Growth in Hydroponics Systems. American Society of Horticultural Sciences annual meeting. Chicago, IL. July 30-Aug 3, 2022 (Oral presentation)
20. Stamm, E., Coldren, C., Williams, C., and Simpson, C. Impacts of Carbamazepine Rates on Lettuce (*Lactuca sativa* var. capitata) Growth in Hydroponics Systems. American Society of Horticultural Sciences annual meeting. Chicago, IL. July 30-Aug 3, 2022 (Poster presentation)
21. Kathi, S., Singh, S., Li, W., Thompson, L., Laza, H., and Simpson, C. Supergreens. American Society of Horticultural Sciences annual meeting. Chicago, IL. July 30-Aug 3, 2022 (Scholars Ignite presentation)
22. Kathi, S., Singh, S., Li, W., Thompson, L., Laza, H., and Simpson, C. Foliar application of ascorbic acid in hydroponically grown arugula leafy greens. American Society of Horticultural Sciences annual meeting. Chicago, IL. July 30-Aug 3, 2022 (Poster presentation)
23. Kathi, S., Singh, S., Li, W., Thompson, L., Laza, H., and Simpson, C. Super-greens. American Society of Horticultural Sciences annual meeting. Chicago, IL. July 30-Aug 3, 2022 (Oral presentation)

24. Cognasi, S., Siebecker, M., Williams, C., and Simpson, C. The influence of selenium on salt stress in hydroponically produced Indian mustard (*Brassica juncea* cv. Red Giant). American Society of Horticultural Sciences annual meeting. Chicago, IL. July 30-Aug 3, 2022 (Oral presentation)
25. Newberry, K., Baliga, V. and Simpson, C. Comparing lettuce production in aeroponic and hydroponic production systems. American Society of Horticultural Sciences annual meeting. Chicago, IL. July 30-Aug 3, 2022 (Poster presentation)
26. Newberry, K., Baliga, V. and Simpson, C. The effects of aeroponic production on lettuce growth and root development. American Society of Horticultural Sciences annual meeting. Chicago, IL. July 30-Aug 3, 2022 (Oral presentation)
27. Thomas, A. Lindquist, C.S. Monsur, M. and Simpson, C. At-home horticultural therapy kits for military service members' mental health rehabilitation. American Society of Horticultural Sciences annual meeting. Chicago, IL. July 30-Aug 3, 2022 (*Scholars Ignite First Place Winner*)
28. Thomas, A. Lindquist, C.S. Monsur, M. and Simpson, C. Military branch does not affect military service member landscape element preferences or emotional perceptions. American Society of Horticultural Sciences annual meeting. Chicago, IL. July 30-Aug 3, 2022 (Poster presentation)
29. Thomas, A. Lindquist, C.S. Monsur, M. and Simpson, C. Cultivate to recuperate: Why military service members join plant-based jobs, fields of study, and programs. American Society of Horticultural Sciences annual meeting. Chicago, IL. July 30-Aug 3, 2022 (Oral presentation)
30. Sehrish, A. Simpson, C. Vyavhare, S. Parajulee, M. Coldren, C and Haydee, L. Effect of water stress on physiology and different neonicotinoid compound concentrations in treated cotton seeds. American Society of Horticultural Sciences annual meeting. Chicago, IL. July 30-Aug 3, 2022 (Oral presentation)
31. Plocek, G. and Simpson C. The Effects of Salinity on Broccoli (*Brassica oleraceae*) and Purslane (*Portulaca oleracea*) Microgreens. Texas Tech University Undergraduate Research Conference. Lubbock, TX. March 28-April 1, 2022
32. Newberry, K., Baliga, V. and Simpson, C. The comparison of aeroponic and hydroponic crop production. Texas Tech Graduate School Poster Competition. Lubbock, TX. March 3, 2022. (*2nd place winner*)
33. Plocek, G. and Simpson C. The Effects of Salinity on Broccoli (*Brassica oleraceae*) and Purslane (*Portulaca oleracea*) Microgreens. Southern Region American Horticultural Sciences annual meeting. New Orleans, LA. February 10-13, 2022.
34. Stamm, E., Coldren, C., Williams, C., and Simpson, C. Impacts of Carbamazepine Rates on Lettuce (*Lactuca sativa* var. capitata) Growth in Hydroponics Systems. Southern Region American Society of Horticultural Sciences annual meeting. New Orleans, LA. February 10-13, 2022.
35. Thomas, A. Lindquist, C.S. Monsur, M. and Simpson, C. Veteran emotional perceptions and preferences of landscape design elements. Southern Region American Society of Horticultural Sciences annual meeting. New Orleans, LA. February 10-13, 2022.
36. Newberry, K., Baliga, V. and Simpson, C. Aeroponic production of lettuce promotes biomass and root growth in comparison to hydroponic production methods. Southern Region ASHS Annual Meeting. New Orleans, LA. February 11-13, 2022.
37. Cognasi, S., Siebecker, M., Williams, C., and Simpson, C. Effects of Se on growth and physiochemical properties in hydroponically produced Indian Mustard. Southern Region ASHS, New Orleans, LA. February 11-13, 2022.
38. Thomas, A. Lindquist, C.S. Monsur, M. and Simpson, C. Evaluating Landscape Design Elements for Veteran-based Therapeutic Horticulture. Lone Star Horticultural Forum. College Station, TX. January 10-12, 2022.
39. Newberry, K., Baliga, V. and Simpson, C. Comparing hydroponic and aeroponic lettuce production. TNLA Lone Star Hort Forum. College Station, TX. January 9-11, 2022. (*2nd place M.S. oral competition winner*)
40. Stamm, E., Williams, C. Coldren, C. and Simpson, C. Impacts of Carbamazepine Rates on Lettuce (*Lactuca sativa* var. capitata) Growth in Hydroponics Systems. Lone Star Horticultural Forum. College Station, TX. January 10-12, 2022. (*3rd place M.S. oral competition winner*)

41. Cognasi, S., Siebecker, M., Williams, C., and Simpson, C. Influence of Se supplementation on Indian mustard grown in a hydroponic system. TNLA Lone Star Hort Forum. College Station, TX. January 9-12, 2022.
42. Sehrish, A. Simpson, C. Vyavhare, S. Parajulee, M. Coldren, C and Haydee, L. Effect of Seed Treatments on Physiology and Nutrition of Cotton Seedlings. Lone Star Horticultural Forum. College Station, TX. January 10-12, 2022. (3rd place Ph.D. oral competition winner)
43. Plocek, G. and Simpson C. The Effects of Salinity on Broccoli (*Brassica oleracea*) and Purslane (*Portulaca oleracea*) Microgreens. TNLA Lone Star Hort Forum. College Station, TX. January 9-12, 2022. (1st place B.S. oral competition winner)
44. Regmi, A., Singh S., Coldren C., Moustaid-Moussa N., and Simpson C. Fertilization can reduce the stress of biochar. TNLA Lone Star Hort Forum, College Station, TX. January 10-12, 2022.
45. Kathi, S., Simpson, C., Umphres, A., Schuster, G. Incorporation of corn-starch-based polymer reduces leaching and improves tomato production, Lone Star Hort Forum, College Station, TX. January 10-12, 2022.
46. Thomas, A. and Simpson, C. Horticultural Therapy. Master Gardeners Intern Class. Lubbock, TX. October 7, 2021. (*Invited speaker*)
47. Trevino, J. and Simpson, C. Nature and stress in a pandemic. Master Gardeners Presentation, Lubbock, TX. October 7, 2021 (*Invited speaker*)
48. Simpson, C. Perotto-Baldivieso, H., and Garza, B. Remote sensing for citrus tree health. International Year of Plant Health Webinar. November 2, 2021. (*Invited speaker*)
49. Poudyal, S. and Simpson, C. Effect of salt stress and biochar amendments on yield and quality of leafy greens. American Society of Horticultural Sciences annual meeting. Denver, CO. August 5-9, 2021
50. Kathi, S.R., Poudyal, S. and Simpson, C. Evaluating the efficacy of different bioreactor systems for removal of nitrate in runoff water. American Society of Horticultural Sciences annual meeting. Denver, CO. August 5-9, 2021.
51. Thomas, A. and Simpson, C. The effect of plant and soil science jobs on military veteran mental and physical well-being. American Society of Horticultural Sciences annual meeting. Denver, CO. August 5-9, 2021.
52. Trevino, J., Monsur, M., Lindquist, C. S., and Simpson, C. Nature interactions are effective in mitigating student stress related to COVID-19. American Society of Horticultural Sciences annual meeting. Denver, CO. August 5-9, 2021. (1st Place M.S. Student Competition Winner)
53. Regmi, A., Moustaid-Moussa, N., Coldren, C., Singh, S., and Simpson, C. Effect of biochar rates on phytochemicals in Viola. American Society of Horticultural Sciences annual meeting. Denver, CO. August 5-9, 2021.
54. Simpson, C., Nelson, S.D., and Setamou, M. Citrus Root distribution and characteristics in different management systems. American Society of Horticultural Sciences annual meeting. Denver, CO. August 5-9, 2021. (*Invited speaker*)
55. Simpson, C. Plant Empowerment: Horticultural Engineering for the Food-Water-Energy Nexus. Department of Environmental Engineering Seminar Series, Texas A&M University-Kingsville. February 12, 2021 (*Invited speaker*)
56. Simpson, C., Gonzalez III, J., Thomas III, J., Ancona, V., Laughlin, D., Nelson, S., and Setamou, M. Rooting for the future: Citrus management practices, roots, and water use efficiency in Texas. University of Florida Department of Horticulture Seminar Series. November 23, 2020. (*Invited speaker*)
57. Simpson, C. Pigment distribution analysis in petunias and violas using the Spectravue Spectrometer. CID Inc. Webinar series. October 8, 2020. (*Invited speaker*)
58. Simpson, C., Gonzalez III, J., Thomas III, J., Nelson, S., and Setamou, M. Impacts of soils and management on citrus roots and productivity. Sustainable Water Use Workshop. September 17, 2020. (*Invited speaker*)
59. Kathi, S., Umphres-Lopez, A., Simpson, C. and Schuster, G. Impacts of different rates of superabsorbent polymer (SAP) on leachate, nitrogen, and growth of tomatoes. American Society of Horticultural Sciences annual meeting, Virtual Conference. August 9-13, 2020.

60. Regmi, A., Simpson, C. Effects of Biochar Rates on Productivity of Viola. American Society of Horticultural Sciences annual meeting, Virtual Conference. August 9-13, 2020.
61. Simpson, C.R., da Graca, J., Ancona, V., Setamou, M., Louzada, E., Kunta, M., Laughlin, D., and Mandadi, K. The state of Texas citrus in the era of HLB. In: Envisioning a US Citrus Industry with Endemic HLB workshop. American Society of Horticultural Sciences annual meeting, Las Vegas, NV. July 21-26, 2019. (*Invited panel speaker*)
62. Barickman, T.C., and Simpson, C.R. Regulation of photosynthesis and stomatal conductance of cucumber under early season waterlogging conditions. American Society of Horticultural Sciences annual meeting, Las Vegas, NV. July 21-26, 2019.
63. Thomas III, G.J., Setamou, M., Ancona, V., Enciso, J., Nelson, S.D., and Simpson, C. Comparing root distribution in groves with different floor management and irrigation practices. American Society of Horticultural Sciences annual meeting, Las Vegas, NV. July 21-26, 2019.
64. Rodriguez, J., Jifon, J., Anorou, A., and Simpson, C.R. The effects of sunburn on grapefruit peel physiochemical properties. American Society of Horticultural Sciences annual meeting, Las Vegas, NV. July 21-26, 2019.
65. Lewis, A., Cisneros-Zevallos, L., Nelson, S.D., Schuster, G., and Simpson, C.R. Infrared thermography applications in stomatal conductance and drought stress. American Society of Horticultural Sciences annual meeting, Las Vegas, NV. July 21-26, 2019.
66. Simpson, C., and Rodriguez, J. Reducing sunburn in Texas citrus. Texas Citrus Mutual Annual Meeting. May 22, 2019 (*Invited speaker*)
67. Laughlin, D., Solorzano, J., Simpson, C., and Ancona, V. Effect of Las titers on tree health, root health, yield, and Phytophthora populations. 6th Annual IOCV and IRCHLB, Riverside, CA. March 10-15, 2019.
68. Barickman, T.C. and Simpson, C. Regulation of photosynthesis, fluorescence, and stomatal conductance of cucumber under early season waterlogging conditions. Southern Region ASHS Annual Conference, Birmingham, AL. February 1-4, 2019.
69. Thomas III, G.J., Setamou, M., Ancona, V., Enciso, J., Nelson, S.D., and Simpson, C. Impact of grove floor management and irrigation practices on citrus root distribution. Southern Region ASHS Annual Conference, Birmingham, AL. February 1-4, 2019.
70. Nelson, S.D. and Simpson, C.R. Water Conservation Strategies in Citrus Production. 2nd Annual Texas Hispanic Farmer and Rancher Conference, McAllen, TX. December 6-7, 2018
71. Simpson, C.R., Gonzales III, J., Setamou, M., and Nelson, S.D. Citrus root production and fruit yield improves with raised bed and groundcovers. American Society of Horticultural Sciences annual meeting, Washington D.C. July 30-August 3, 2018.
72. Garza, B., Ancona, V., Enciso, J., Perotto, H. and Simpson, C.R. Quantifying citrus tree health and disease progression using true color UAS images. American Society of Horticultural Sciences annual meeting, Washington D.C. July 30-August 3, 2018.
73. Gurung, M., Simpson, C.R., and Ancona, V. Field evaluations of *Trichoderma asperellum* as biocontrol agent against *Phytophthora* foot and root rot in citrus. American Society of Horticultural Sciences annual meeting, Washington D.C. July 30-August 3, 2018.
74. Lewis, A., Cisneros-Zevallos, L., Nelson, S.D., Schuster, G., and Simpson, C.R. Infrared thermography pre- and post-harvest applications. American Society of Horticultural Sciences annual meeting, Washington D.C. July 30-August 3, 2018.
75. Simpson, C.R., Telagamsetty, S., Nelson, S.D., and Setamou, M. Raised beds and groundcover in citrus: What have we learned after 6 years? Texas Citrus Mutual Annual Meeting. May 9, 2018. (*Invited speaker*)
76. Lewis, A., Cisneros-Zevallos, L., Nelson, S.D., Schuster, G., and Simpson, C. Infrared thermography applications in stress response. TAMUK Phi Kappa Phi Student Research Forum. April 18, 2018. (*1st Place Doctoral*)
77. Lewis, A., Cisneros-Zevallos, L., Nelson, S.D., Schuster, G., and Simpson, C. Infrared thermography pre- and post-harvest applications. Annual Subtropical Agriculture and Environments Conference, Monte Alto, TX. February 9, 2018.

78. Rodriguez, J. Telagamsetty, S., Simpson, C. Sunburn in Citrus: Assessing physiological impacts and mitigation treatments. Annual Subtropical Agriculture and Environments Conference, Monte Alto, TX. February 9, 2018.
79. Simpson, C., Nelson, S.D., and Setamou, M. Alternative management strategies for citrus in the Lower Rio Grande Valley. Research Presentations at the Instituto de Recursos Naturales y Agrobiologia de Sevilla (IRNAS), Sevilla, Spain. November 22, 2017 (*Invited speaker*)
80. Lewis, A., Simpson, C., and Nelson, S.D. Infrared Thermography for Stomatal Response to Abiotic Stress, Applications in Citrus. Research Presentations at the Instituto de Recursos Naturales y Agrobiologia de Sevilla (IRNAS), Sevilla, Spain. November 22, 2017
81. Rodriguez, J., Telagamsetty, S. and Simpson, C.R. Evaluating the Effects of Anti-transpirants and Calcium Sprays on Sunburn in Grapefruit. Research Presentations at the Instituto de Recursos Naturales y Agrobiologia de Sevilla (IRNAS), Sevilla, Spain. November 22, 2017
82. Rodriguez, J., Telagamsetty, S., and Simpson, C.R. Effectiveness of anti-transpirant and calcium applications on grapefruit sunburn. Annual Texas A&M University System Pathways Student Research Symposium, Tarleton State University, Stephenville, TX. November 2-3, 2017.
83. Simpson, C., Gonzales III, J., Ruppert, D., Setamou, M. and Nelson, S. Citrus root distribution and turnover as a result of different management practices. 2017 ASHS Annual Conference, Waikoloa, Hawaii. September 19-22, 2017. (*Invited presentation*)
84. Telagamsetty, S., Setamou, M., Nelson, S., and Simpson, C.R. Improved irrigation and management practices for water conservation and plant growth in citrus. 2017 ASHS Annual Conference, Waikoloa, Hawaii. September 19-22, 2017.
85. Nelson, S., Simpson, C., Setamou, M., Gonzales III, J., and Telagamsetty, S. Adoption of a new orchard planting design as an integrated on-farm management approach to improve citrus production in south Texas. 2017 ASHS Annual Conference, Waikoloa, Hawaii. September 19-22, 2017.
86. Telagamsetty, S., Rodriguez, J., and Simpson, C. Effect of calcium and anti-transpirant sprays on grapefruit sunburn. 2017 ASHS Annual Conference, Waikoloa, Hawaii. September 19-22, 2017.
87. Rodriguez, J., Telagamsetty, S., and Simpson, C.R. Effectiveness of anti-transpirant and calcium applications on grapefruit sunburn. Texas A&M University – Kingsville Javelina Research Symposium, Kingsville, TX. September 25, 2017.
88. Flores-Lopez, C., Nelson, S., and Simpson, C. The effect of mustard meal on seed germination and weed suppression. Texas A&M University – Kingsville Javelina Research Symposium, Kingsville, TX. September 25, 2017.
89. Gurung, M., Gurung, F., Simpson, C., Hernandez, J.L., and Ancona, V. Evaluation of the antagonistic activity of native *Trichoderma* isolates from Texas citrus orchards against *Phytophthora nicotianae*. APS Annual Meeting, San Antonio, TX. August 5-9, 2017
90. Simpson, C.R., Telagamsetty, S., Gonzales, J., Nelson, S.D., Melgar, J.C. and Setamou, M. Partnerships to improve sustainable citrus production in the Lower Rio Grande Valley. Southern Region ASHS Annual Conference, Mobile, AL. February 3-5, 2017.
91. Elsayed-Farag, S., Enciso, J., Cholula, U., and Simpson, C. Using leaf turgor pressure as an indicator to monitor water stress under deficit irrigation strategies in Citrus trees. 71st Annual Subtropical Agriculture and Environments Society, Weslaco, TX. February 3, 2017.
92. Gonzales III, Julian, Nelson, Shad D., Ruppert, D., and Simpson, C. Evaluating Roots in South Texas Citrus. 54th Annual Soil Survey & Land Resource Workshop, College Station, TX. February 2-3, 2017.
93. Gonzales III, Julian, Telagamsetty, S., Nelson, S.D., Setamou, M., and Simpson, C.R. Evaluating Root Distribution on Different Management Techniques in Citrus. Annual Texas A&M University System Pathways Student Research Symposium, Prairie View, TX. November 3-4, 2016. (*2nd place graduate poster*)
94. Gonzales III, Julian, Telagamsetty, S., Nelson, S.D., Setamou, M., and Simpson, C.R. Evaluating Root Distribution on Different Management Techniques in Citrus. 4th Annual TAMUS AGEF Conference, Prairie View, TX. November 3, 2016. (*2nd Place PechKucha Presentation*)

95. Simpson, C.R. Water Balance of Plants. Master Gardener's Training Class. San Juan, TX. Sept. 13, 2016. *(Invited)*
96. Gonzales III, Julian, Telagamsetty, S., Nelson, S.D., Setamou, M., and Simpson C. R.. Impact of Nutrient Applications on Plant Physiology and Asian Citrus Psyllid Populations. ASHS Annual Conference, Atlanta, GA. Aug 7-12, 2016.
97. Simpson, C.R., Setamou, M. Citrus in the Lower Rio Grande Valley: Major Pests and Diseases. Weslaco Rotary, June 30, 2016. *(Invited)*
98. S.D. Nelson, M. Setamou, C. Simpson, D. Ruppert, J. Melgoza, M. Esparza, D. Garza and S. Telagamsetty. Using Compost to Enhance Citrus Tree Health to Combat Drought Stress and Greening Disease. BioCycle West Coast 2016 Conference. April 4-7, 2016. San Diego, CA. *(Invited presentation)*.
99. Kusakabe, A., Simpson, C.R., Nelson, S.D., Melgar, J.C., and Setamou, M. The effects of water management strategies on citrus growth and yield. Southern Region ASHS Annual Conference, San Antonio, TX. Feb 5-7, 2016.
100. Gonzales, J., Nelson, S.D., Setamou, M., and Simpson, C.R. Impact of nutrient applications on plant physiology and Asian citrus psyllid populations. 70th Annual Subtropical Agriculture and Environments Society. Weslaco, TX. Feb 5, 2016.
101. Telagamsetty, S., Simpson, C.R., Nelson, S.D., and Setamou, M. Assessment and influence of citrus flush shoot nutrient quality on Asian citrus psyllid population densities. 70th Annual Subtropical Agriculture and Environments Society. Weslaco, TX. Feb 5, 2016.
102. Simpson, C.R., Nelson, S.D., Kusakabe, A., Contreras, B., Chaudhary, S., Melgar, J.C., and Setamou, M. Partnerships in water conservation: On-farm demonstrations of water saving strategies. Water Workshop and Forum – Santa Cruz Irrigation District #15, Weslaco, TX. Dec. 9, 2015. *(Invited)*.
103. S.D. Nelson, C.R. Simpson, and A.M. Young. On-Farm Orchard Management Strategies the Improve Water Sustainability & Economic Profitability for South Texas. South Texas Regional Meeting, Kingsville, TX Oct 1, 2015. *(Invited)*.
104. Simpson, C.R., Nelson, S.D., Kusakabe, A., Contreras, B., Chaudhary, S., Melgar, J.C., and Setamou, M. On-farm demonstrations of novel planting strategies: Working with growers to optimize soil environment, reduce water loss, and manage pests and diseases. ASHS Annual Conference, New Orleans, LA. Aug 4-7, 2015. *(Invited)*.
105. S.D. Nelson, M. Young, C.R. Simpson, J.C. Melgar, M. Setamou. Improving Orchards Irrigation Management Practices at the On-Farm Level: A 10 Year Case Study of Collaboration between Scientists and Citrus Producers. ASHS Annual Conference, New Orleans, LA. Aug 4-7, 2015. *(Invited)*.
106. Olivares, A., Simpson, C.R., Kusakabe, A. Setamou, M., Nelson, S.D., and Ancona, V. The effects of citrus planting design on soil properties and Phytophthora nicotinae propagule counts in flood irrigated soil. ASHS Annual Conference, New Orleans, LA. Aug 4-7, 2015.
107. Telagamsetty, S., Nelson, S.D., Simpson, C.R. and Setamou, M. Impact of young citrus shoot flush nutrients and phloem sap composition on Asian citrus psyllid populations. ASHS Annual Conference, New Orleans, LA. Aug 4-7, 2015. *(Third place winner in graduate competition)*
108. Telagamsetty, S., Simpson, C.R., Nelson, S.D., and Setamou, M. Assessment of citrus flush shoot nutrient and phloem sap composition and their effects on Asian citrus psyllid population densities. 69th Annual Subtropical Agriculture and Environments Society. Weslaco, TX. Feb 5, 2015.
109. Ball, J., Simpson, C.R., Nelson, S.D., and Setamou, M. Nutrient application to citrus and its interaction with Asian citrus psyllid populations. 69th Annual Subtropical Agriculture and Environments Society. Weslaco, TX. Feb 5, 2015.
110. Simpson, C.R., Nelson, S.D., Schuster, G., Melgar, J.C., Jifon, J., King, S., and Volder, A. Grafting Reduces Salinity Tolerance in Citrus. Oral Presentation. 29th International Horticultural Congress, Brisbane, Australia. August 17-22, 2014.
111. Simpson, C.R., Franco, J., Nelson, S.D., King, S., and Volder, A. Using Halophytes to Mitigate Salinity in Watermelons. Oral Presentation. 29th International Horticultural Congress, Brisbane, Australia. August 17-22, 2014.

112. Simpson, C.R., Volder, A., Nelson, S.D., Schuster, G., Melgar, J.C., Jifon, J., and King, S. Physiological Effects of Salinity on Grafted and Ungrafted Trees. Oral Presentation. ASA-CSSA-SSSA Annual Conference, Tampa, FL. November 3-6, 2013.
113. Simpson, C.R., Franco, J., King, S., and Volder, A. Using Halophytes to Mitigate Salinity in Watermelons. Poster Presentation. ASA-CSSA-SSSA Annual Conference, Tampa, FL. November 3-6, 2013. (*3rd place Ph.D. poster competition*)
114. Simpson, C.R., Volder, A., Nelson, S.D., Schuster, G., Melgar, J.C., Jifon, J., and King, S. Grafting Reduces Salinity Tolerance of Citrus Rootstocks. Poster Presentation. Texas A&M University MEPS Symposium. May 15-16, 2013
115. Simpson, C.R., Volder, A., Nelson, S.D., Schuster, G., Melgar, J.C., Jifon, J., and King, S. Grafting Reduces Salinity Tolerance of Citrus Rootstocks. Poster Presentation. Texas A&M University Student Research Week. March 26-28, 2013.
116. Simpson, C.R., Volder, A., Nelson, S.D., Schuster, G., Melgar, J.C., Jifon, J., and King, S. Water Quality Effects on Grafted and Non-Grafted Citrus. Oral Presentation. American Society for Horticultural Sciences Annual Meetings. July 30 – August 4, 2012.
117. Simpson, C.R., Volder, A., Nelson, S.D., Schuster, G., Melgar, J.C., Jifon, J., and King, S. The Effects of Grafting on Citrus Salinity Tolerance. Oral Presentation. Texas A&M University Student Research Week. March 20-23, 2012.
118. Simpson, C.R., Volder, A., Nelson, S.D., Schuster, G., Melgar, J.C., Jifon, J., and King, S. Does Grafting Effect Salinity Tolerance? Texas A&M University-Kingsville Citrus Center Seminar Series. February 20, 2012. *Invited Speaker.*
119. Gomez, M., Simpson, C., Nelson, S., Volder, A., King, S., Melgar, J., Jifon, J., and Schuster, G. Salinity Impacts on Growth and Physiology of Grafted and Non-Grafted Citrus Trees. 2nd Annual Texas Irrigation Expo, McAllen, TX. Dec 8-9, 2011. (*2nd place graduate winner*)
120. Simpson, C.R., Volder, A., Nelson, S.D., Schuster, G., Melgar, J.C., Jifon, J., and King, S. The Effects of Salinity on Citrus Rootstocks in South Texas. Texas A&M University Horticulture Graduate Council Poster Competition. College Station, TX. November 30, 2011.
121. Simpson, C., Gomez, M., Nelson, S., Volder, A., King, S., Melgar, J., Jifon, J., and Schuster, G. Salinity Impacts on Growth and Physiology of Grafted and Non-Grafted Citrus Trees. 9th Annual Texas A&M System Pathways to the Doctorate Symposium, College Station, TX. Nov. 11, 2011.
122. Simpson, C.R., Volder, A., Nelson, S.D., Schuster, G., Melgar, J.C., Jifon, J., and King, S. Assessing the Impact of Salinity on Citrus Rootstocks in the Lower Rio Grande Valley. Oral Presentation. . The ASA-CSSA-SSSA International Annual Meetings San Antonio, TX. October 16-19, 2011.
123. Simpson, C.R., Nelson, S.D., Cornell, S., Schuster, G. and Setamou, M. Evaluation of Salinity on Citrus and Watermelon Rootstock Seed Germination. Oral Presentation. Southern Region of American Society of Horticultural Science meetings. February 5-8, 2011 *2nd place Oral PhD competition.*
124. Simpson, C.R., Nelson, S.D., Ajwa, H.A. Impact of Soil Texture and Organic Matter Content on MITC Volatilization from Soil Columns. 19th Annual World Congress of Soil Science, August 1-6, 2010, Australia.
125. C.R. Simpson, D.T. Gardiner and S.D. Nelson. Incorporating College Students into a South Texas Public Landscape Horticulture Project. American Public Gardens Association Annual Conference, Atlanta, GA. June 1-5, 2010.
126. Simpson, C.R., Gardiner, D., Nelson, S.D. Incorporating Horticulture into a South Texas Community. Annual Texas A&M University System Pathways Student Research Symposium., Laredo, TX. November 13-14, 2009.
127. Borch, T., Young, R.B., Jones, J.M., Davis, J.G., Simpson, C.R. Degradation of Steroid Hormones in the Environment. The ASA-CSSA-SSSA International Annual Meetings, New Orleans, LA. November 4-8, 2007.
128. Jones, J.M., Borch, T., Hansen, N.C., Davis, J.G., and Simpson, C.R. Photodegradation of Manure-Borne Steroid Hormones. The ASA-CSSA-SSSA International Annual Meetings, Indianapolis, IN. November

- 12-16, 2006. (Won 2nd place in the American Society of Agronomy Undergraduate Research Symposium Contest).
129. Simpson, C.R., Borch, T., Davis, J.G., Jones, J.M. Fate of Testosterone in Manures from Various Livestock. The AWRA Summer Specialty Conference on *Emerging Contaminants of Concern in the Environment: Issues, Investigations and Solutions*. Vail Cascade Resort & Spa, Vail, CO. June 25-27, 2007.
 130. Jones, J.M., Borch, T., Davis, J.G., Young, R.B., Simpson, C.R. Photolysis of Testosterone: Kinetics and Degradation Products. The AWRA Summer Specialty Conference on *Emerging Contaminants of Concern in the Environment: Issues, Investigations and Solutions*. Vail Cascade Resort & Spa, Vail, CO. June 25-27, 2007.
 131. Simpson, C. R. and S.D. Nelson. Vapam and K-Pam Fate and Movement Under Varying Soil Properties. 69th Annual ASA-CSSA-SSSA meetings. Salt Lake City, UT. Nov. 6-10, 2005.
 132. Simpson, C.R. and S.D. Nelson. Soil Fumigant Fate and Movement in Soil Organic Matter Systems. 2005 Agriculture Program Conference. Student Research Poster Competition. Texas A&M University System, College Station, TX. Jan. 11-12, 2005.
 133. Nelson, S.D., J.E. Stratmann, H.A. Ajwa and C.R. Simpson. Minimizing Soil Fumigant Off-Gassing by Using a Soil Surface Water Seal. 68th Annual ASA-SSSA-CSSA meetings. Seattle, WA, Oct 31-Nov. 4, 2004.
 134. Simpson, C.R. and S.D. Nelson. Volatilization Loss of Vapam and K-Pam in Different Soil Types and Varying Organic Matter Levels. 2nd Annual Texas A&M University System Pathways Student Research Symposium. Corpus Christi, TX. Oct. 15-16, 2004.

GRANTS:

In-Kind Gifts: [\$84,150]

- \$16,000 gifts from companies for research program on plant stress and horticulture (2022)
- \$21,000 gifts from companies for research program on nutrition and abiotic stress (2019)
- \$14,500 gifts from companies for research program on nutrition and abiotic stress (2018)
- \$10,000 gifts from companies for research program abiotic stress (2017)
- \$6,000 gifts from companies for research program on nutrition (2016)
- \$10,000 gifts from companies for research program on nutrition (2015)
- ~\$6,650 donations and supplies– Texas A&M University-Kingsville Urban Xeriscape (2009)

Grants Awarded: [\$4,038,769 since 2015, \$712,523 awarded directly as PI/co-PI where there was a funds split] *no specified funds split

2023

- *4 pending*
- \$50,000 from TTU Catalyst program (PI – Carlos Carpio, Co-PIs – C. Simpson, S. Singh, L. Thompson)
- \$50,000 from TTU Catalyst program (PI – Muntazar Monsur, Co-PIs – C. Simpson, D. Phillips, C. Cook, M. Amin, S. Badruddoza, A. Shaw, C. Meyers, S. Collins, K. Jagadish)

2021

- \$500,000* from AFRI REEU (PI – N. Moustaid-Moussa, Co-PIs – C. Simpson, J. Canas-Carrell, O. Park, K. Albracht-Schulte, H. Moussa, P. Hughes, W. Oldewage-Theron, M. Evola)
- \$750,000* from USDA HEC (PI- C. Meyers, Co-PIs – C. Simpson, M. Monsur, S. Collins, F. Churchill, S. Gragg, G. Hock, E. Irlbeck, L. Kennedy, D. Lawver, J. Loizzo, L. Randolph, T. Rogers-Randolph, R. Telg.)

2020

- \$272,999 from NIFA NLGCA (PI- *C.R. Simpson*) (2020/23)

2018

- \$12,034 Agriculture Sciences Inc. (PI- *C.R. Simpson*) (2018)
- \$114,251* Texas Citrus Producers Board (PI- J. daGraca, Co-PI's – *C.R. Simpson*, V. Ancona, E. Louzada, M. Setamou) (2018)
- \$342,778* HLB MAC. (PI- V. Ancona, Co-PI – *C.R. Simpson*) (2018/20)

2017

- \$199,990 Texas Water Development Board. (PI-*C. R. Simpson*) (2017/21)
- \$18,000* NIFA funds release request for awarded grant (PI -Nelson, *C. R. Simpson*, et al.) (2017)
- \$114,251* Texas Citrus Producers Board (PI- J. daGraca, Co-PI's – *C.R. Simpson*, V. Ancona, E. Louzada, M. Setamou) (2017)
- \$23,874* Texas Citrus Producers Board (PI- V. Ancona, Co-PI – *C. Simpson*) (2017))

2016

- \$150,000 Texas Water Development Board. Collaborative Water Conservation Grant. K. Wagner, R. Lacewell (Texas A&M AgriLife), et. al. and S.D. Nelson, *C.R. Simpson* (\$40,000* TAMUK institutional award) (2016/18)
- \$42,687* Texas Citrus Producers Board (PI- V. Ancona, Co-PI – *C.R. Simpson*) (2016)
- \$114,251* Texas Citrus Producers Board (PI- J. daGraca, Co-PI's – *C.R. Simpson*, V. Ancona, E. Louzada, M. Setamou) (2016)
- \$1,000,000 USDA-NIFA HSI Standard Proposal. USDA Education and Research Experience in Unmanned Aircraft Vehicles for Precision Agriculture. J. Fox (PD) TAMU-CC; TAMUK-S.D. Nelson (PD), G. Schuster, R. Stanko, *C. Simpson*; R. Gilkerson (PD)-UTRGV; J. Halcomb (PD)-DMC; J. Landivar-Texas A&M AgriLife. (\$220,000* TAMUK institutional award) (2016/20).

2015

- \$53,784* Texas Citrus Producers Board (PI's – J. daGraca, E. Louzada, M. Setamou, V. Ancona, *C.R. Simpson*) (2015/16)
- \$200,000 Texas Water Development Board (PI's- *C.R. Simpson*, S. D. Nelson, M. Setamou) (2015/19)
- \$15,000 TAMUK University Research Award (PI -*C. Simpson*, Co-PIs – M. Setamou, S.Nelson)

2012 and before

- \$71,300* TDA Specialty Crop Block Program (*Co-PI*, PI- A. Volder; Co-PI's: *C.R. Simpson*, J. Franco and S. King) (2012/13)
- \$290,000* USDA/NIFA-HSI grants (*Co-PI*, PI- R. Rhoades; Co-PI's Nelson, S.; McCuistion, K.; Williams, R.; Kulvesky, B.; Hernandez, F.; Lukefahr, S., *C.R. Simpson*,) (2010/13)
- \$5,000 Texas Water Resources Institute (*Graduate PI-C.R. Simpson*, Co-PI: S. Nelson) (2009/10)

Grants Pending:

- \$5,000,000 requested from NSF-ERC (\$2,500,000 TTU) (OSU -Lead, TTU PI – G. McKenna, TTU Co-PIs/Senior Personnel -*C. Simpson*, H. Laza, S. Singh)
- \$228,910 requested from the CH Foundation. (PI – *C. Simpson*, Co-PI – V. Baliga, S. Singh, H. Laza)

- \$262,500 requested from USDA NNF (PI – C. Simpson, Co-PIs – N. Moustaid-Moussa, L. Thompson, and O. Park)

AWARDS AND HONORS:

ASHS Leadership Class III	2023
Davis College Advising Award	2022
Outstanding Faculty Mentor, TrUE program	2022
Innovation Hub Faculty Ambassador	2022
Obesity Research Institute Faculty	2021
STEP Program Fellow	2021
Junior Research Award- TAMUK	2019
Margaret Plum Graduate Scholarship	2012
Belsterling Scholarship	2011
Appreciation Award from the City of Kingsville	2011
Mott Award	2011
Outstanding Ph.D. Student	2011
Steidinger Scholarship	2010
<i>Faculty Teaching Excellence Award</i>	2010
Quality Enhancement Plan Award	2009

GRADUATE STUDENT COMMITTEES:

* TAMUK Students

<u>Student</u>	<u>(Expected) Graduation Date</u>	<u>Role</u>
*Sri Telagamsetty	Spring 2016	Chair
*Benjamin Perea	Spring 2016	Committee member
*Julian Gonzales III	Spring 2018	Chair
*Meena Gurung	Summer 2018	Co-Chair
*Julissa Rodriguez	Fall 2018	Chair
*Blanca Garza	Spring 2019	Chair
*Venkata Bhargavi Kunduru	Spring 2019	Committee member
*George Thomas III	Summer 2019	Chair
*Amanda Lewis (Ph.D.)	(NA)	Committee member
*Liliana Cantu (Ph.D.)	(na, part-time)	Committee member
*Cynthia Puente	Summer 2020	Co-Chair
Alicia Thomas (Ph.D.)	Fall 2023	Chair
Jonah Trevino (Ph.D.)	M.S. Fall 2021/ (PhD - 2025)	Chair
Abishkar Regmi (Ph.D.)	M.S. -Fall 2021/ (PhD -2025)	Chair
Shivani Kathi (Ph.D.)	Fall 2023	Chair
Derek Reed	Summer 2021	Committee member
Kolbie Tyler	Fall 2021	Committee member
Sujatha Venkataramani	(NA)	Committee member
Kaniz Farzana (Ph.D.)	Fall 2023	Co-Chair
Savannah Cognasi	Fall 2022	Chair
Emily Stamm	Summer 2023	Chair
Kamron Newberry	Spring 2023	Chair
Aqeela Sehrish (Ph.D.)	(Spring 2024)	Chair
Dario Kunz-Rueda (Ph.D.)	(Fall 2025)	Chair

Cody Vavra (Ph.D.)	Fall 2023	Committee member
Arjun Kafle (Ph.D.)	(2024)	Committee member
Ethan Triplett (Ph.D.)	Fall 2023	Committee member
Jennifer Faigenblat	(2025)	Co-Chair
Courtney Turner	(2025)	Chair

Non-Thesis Distance Student	Start Date/Graduated	Role
Grant Gerald	Graduated Fall 2022	Chair/Advisor
Jessica Murphy	Graduated Fall 2022	Chair/Advisor
Daniel Ramirez	2021	Chair/Advisor
Michael Gonzales	Graduated Spring 2023	Chair/Advisor
Daniel Czahor	2022	Chair/Advisor
Makayla Kidner	2023	Chair/Advisor
Aleah Pickartz	2023	Chair/Advisor
Wendy Steward	Graduated Spring 2023	Committee member
Raven Johnson	Graduated Fall 2021	Committee member
Abigail Parker	2021	Committee member
Chase Victorson	2021	Committee member
Sorrell Kropf	Graduating Spring 2023	Committee member
Makenzie Salyer	Graduated Fall 2022	Committee member
Chagal Marciano	Graduated Fall 2022	Committee member

PROFESSIONAL AFFILIATIONS:

Soil Science Society of America	International Society for Horticultural Sciences
Alpha Chi Honor Society	American Society for Agronomy
Crop Science Society of America	American Society for Horticultural Sciences

PROFESSIONAL AND UNIVERSITY SERVICE:

- *Editorial Board:* Scientific Reports
- *Associate Editor:* Technology in Horticulture
- *Guest Editor:* Sustainability Special Issue: Research in Soil Science and Greenhouse Production under Controlled Environment Systems
- *Review Editor:* Frontiers in Sustainability
- Texas Nursery and Landscape Association (TNLA) education committee
- TNLA Lone Star Hort Forum organizer and section chair.
- *Faculty search committees:* Small farms lecturer (2023)
- *ASHS professional involvement:* Ornamentals Publication Award Committee (2020-2023); Secretary: Graduate student activities committee (2019-2023); Controlled Environment professional interest group (2019-21), Chair elect; Former chair: Citrus professional interest group (2017/18); Former chair: Ecological physiology professional interest group, former secretary (2018/19, 2017/18)
- *SR ASHS professional involvement:* Section Chair for the J.B. Edmond Undergraduate Student Paper Competition (2022/23), Chair Elect for the Education Section (2023/24)
- *TTU committees:* CASNR Institutional Effectiveness Committee (2021); PSS Scholarship Committee (2020); Strategic plan committee co-chair (2021)

- *Board of Directors:* Earth Day Lubbock (2020)
- *Committee member:* California Citrus Producers Board -Production Committee (2015- 2019)
- *Reviewer:* Annals of Botany, HortScience, Journal of Subtropical Agriculture, Journal of Environmental Quality, Journal of the American Society of Horticultural Sciences, The Journal of Horticultural Science and Biotechnology, etc.
- Co-organizer of TAMUK Citrus Center graduate student journal and writing group (2014-2018)
- *TAMUK Committees:* Faculty Evaluation Committee (2019), Service-learning committee (2018), Writing intensive course committee (2017- present) serving as Chair (2018/2019), Student recruitment (2008-2011), Department name change (2010-2011), Departmental library chair (2009-2011)
- *TAMUK Departmental Student Recruiting:* 2008-2011, 2015- current
- *Ag Olympics Team Faculty:* 2009, 2010
- *Board member:* Keep Kingsville Beautiful (2009-2011), Kingsville's Next Generation (2010-2011)
- FFA Floriculture Contest Consulting Coordinator (2010)
- Horticulture Graduate Council (President, 2012/13)