

## CURRICULUM VITAE

Name: <b>Shad D. Nelson, Ph.D.</b> <b>C.F. Dick Schendel Family</b> <b>Endowed Professor Soil Science</b>	Position: <b>Dean</b> , Dick and Mary Lewis Kleberg College of Agriculture and Natural Resources	Contact Information: <a href="mailto:Shad.Nelson@tamuk.edu">Shad.Nelson@tamuk.edu</a>
Institution: Texas A&M University- Kingsville	Work Address: Texas A&M Univ.-Kingsville Support Services Bldg Rm117 MSC 156; Kingsville, TX 78363	Office Information: Office Phone: 361-593-3711 Rosie Vela (Assistant to Dean) Mobile: 361-876-6073

## EDUCATION

Institution and Location	Degree	Year	Major Field	Area of Training Specialty
Univ. of Calif., Riverside	Ph.D.	1998	Soil Science	Ag Chemical Fate & Transport
Brigham Young Univ., UT	M.S.	1995	Agronomy	Soil Microbiology & N Cycling
Brigham Young Univ., UT	B.S.	1993	Horticulture Sci.	Plant Abiotic Stress Management

## PROFESSIONAL EXPERIENCE

2022-present	<b>C.F. Dick Schendel Family Endowed Professor in Soil Sciences</b>
2017-present	<b>Dean</b> , Dick & Mary Lewis Kleberg College of Agriculture & Natural Resources, TAMUK
2016-2017	Interim-Dean, D&ML Kleberg College of Ag, Natural Resources & Human Sci., Kingsville, TX
2012-present	Professor, Soil, Plant & Environmental Sci., Texas A&M University-Kingsville, Kingsville, TX
2006-2016	Chair, Dept. of Agriculture, Agribusiness & Environmental Sciences, TAMU-Kingsville
2006-2012	Associate Professor, Texas A&M University-Kingsville, Kingsville, TX (Tenured Aug 2007)
2005-2006	Interim Chair, Dept. of Agronomy & Resource Sci., Texas A&M University-Kingsville
2001-2006	Assistant Professor, Agronomy and Horticultural Sciences, Texas A&M University-Kingsville
2000-2001	Post-Doctoral Research Associate, USDA-ARS Water Management Research Lab, Fresno, CA
1998-2000	Post-Doc Research Assistant, USDA-ARS, Crop Genetic & Environ. Res. Lab, Gainesville, FL
1995-1998	Doctoral Graduate Research & Teaching Assistant, University of California, Riverside, California
1991-1995	Undergrad/Graduate Research & Teaching Assistant, Brigham Young University, Provo, Utah
1991	Internship, Urban Forestry, Salt Lake City Parks & Recreation, Salt Lake City, Utah

## HONORS/AWARDS

- **Paul Smeal Leadership Award**, Southern Region of American Society of Horticulture Science., Feb. 2023.
- **Friend of Conservation** 1<sup>st</sup> place award. Soil and Water Conservation Districts of Texas, Region III. 2018 Texas Conservation Awards Program, May 2018.
- **Distinguished Researcher Award**, TAMUK Javelina Alumni Association, Oct 2017.
- **Texas Commission on Environmental Quality (TCEQ) Environmental Excellence Award: Agriculture** May 2017. TexasAWE Citrus Water Conservation, Texas Project for Ag Water Efficiency (TexasAWE).
- **Friend of Conservation Award**, Kleberg-Kenedy Soil & Water Conservation District, Feb 2017.
- **Blue Legacy Award in Agriculture**, Texas State Water Conservation Advisory Council, March 2015.
- **Senior Research Award**, Dick & Mary Lewis Kleberg College of Ag, Nat. Res. & Human Sci., April 2014.
- **J. Creighton Miller, Jr. Distinguished Educator Award**, South. Region Amer. Soc. of Hort. Sci., Feb 2014.
- **Texas Commission on Environmental Quality (TCEQ) Environmental Excellence Award** May 2011. Agriculture, Water Conservation, Ag Demonstration Initiative Project with Harlingen Irrigation District.
- **Senior Research Award**, Dick & Mary Lewis Kleberg College of Agriculture, April 2009.
- **TCEQ Environmental Excellence Award**, Agriculture, Rio Grande Basin Initiative, April 2008.
- **Presidential Excellence Award in Teaching**, College of Agriculture, TAMUK. April 2004.
- **Certificates of Recognition**, USDA-ARS Water Management Research Lab, Fresno, CA. 2000 & 2001.
- **Outstanding Student Award**, American Society of Agronomy, Ag/Hort Dept., BYU. 1992-93.
- **Eagle Scout Award**, Boy Scouts of America, 1983.

**TEACHING EXPERIENCE***Courses Taught: Soil & Environmental Sciences*

- Graduate Soils-PLSS 5390: Soil Nutrient Cycling and Management. Spring 2022. SLO goal:  $\geq 80\%$
- *Principles of Soil Science & Lab*-PLSS 3410: *Soil development & management*. Fall 2022. SLO goal:  $\geq 70\%$
- Soil & Water Conservation/Management-PLSS 3321: Methods of reclamation, conservation and management.
- Environmental Sciences & Lab: Undergraduate study of environmental disturbances on soil, plant, and water.
- Research Experimentation/Lab-PLSS 4390: Basics of soil, water, and plant sampling for research analysis.
- Soil Microbiology-Graduate Lab: M.S.-Techniques of enumeration, sampling, microbial analysis.
- Soil Chemistry-PLSS 6326: Advanced study of the chemistry of soils, properties, & processes.
- Art of Scientific Presentations-PLSS 6390: Ph.D. level introduction of enhanced scientific presentations.
- Graduate Seminar-PLSS 6185: Venue for M.S. & Ph.D. students to present research results in seminar setting.

*Courses Taught: Plant & Horticultural Sciences*

- General Plant Science & Lab-PLSS 1407: Fundamentals of growth, development, and cultivation of plants.
- Plant Propagation & Lab--PLSS 4332. Principles and practices of plant propagation techniques.
- Greenhouse Crop Production & Lab -PLSS 4331. Methods of greenhouse maintenance and design.
- Fruit and Vegetable Production & Lab-PLSS 3344: Study of production principles for various crops.
- Landscape Design & Lab -PLSS 3319: Fundamentals of landscape designs of home and urban environs.
- Landscape Maintenance & Construction & Lab -PLSS 4313. Practical practices utilized in urban landscapes.
- Turf Management-PLSS 4390: Fundamentals of turf grass establishment, growth, and management.
- Crop Physiology-PLSS 3381: Function of plant organs, cell growth, and environmental influences.
- Weed Control-PLSS 3334: Growth, economic importance, distribution, and control methods of weeds.
- Internship-PLSS 3995: Real-life application of industry, science, research; writing intensive.
- Senior Seminar-AGRI 4171: Student opportunities for public speaking and professional presentations.

**GRANTS Received – TAMU-Kingsville Funded Grants\***

Vitae: Shad D. Nelson

**>\$20 million total grant funds awarded to Dr. Nelson as P.I./Co-P.I. at TAMUK**

	<u>Total Funds</u>	<u>as P.I.</u>	<u>as Co-P.I.</u>
2002	\$ 620,904	\$620,904	\$
2003	\$ 16,000	\$ 16,000	\$
2004	\$ 313,200	\$313,200	\$
2005	\$ 314,071	\$ 16,000	\$298,071
2006	\$ 313,000	\$313,000	\$
2007	\$ 46,650	\$ 15,750	\$ 30,900
2008	\$ 67,000	\$ 37,000	\$ 30,000
2009	\$ 350,000	\$330,000	\$ 20,000
2010	\$ 347,469	\$ 49,969	\$297,500
2011	\$1,029,500	\$989,500	\$ 40,000
2012	\$1,240,442	\$1,000,000	\$240,442
2013	\$1,546,552	\$1,025,000	\$521,552
2014	\$1,176,500	\$999,500	\$182,000
2015	\$1,016,000	\$640,000	\$376,000
2016	\$1,116,042	\$500,000	\$616,042
2017	\$1,378,227	\$500,000	\$878,227
2018	\$1,086,250	\$500,000	\$586,250
2019	\$1,756,250	\$500,000	\$1,256,250
2020	\$1,275,000		\$1,275,000
2021	\$2,325,417		\$2,325,417
2022	\$2,134,250		\$2,134,250
2023	\$1,000,000		\$1,000,000

## PROFESSIONAL AFFILIATION

Soil Science Society of America (30yrs)	American Society of Horticultural Science (15yrs)
American Society of Agronomy (30yrs)	International Society of Horticultural Science
Crop Science Society of America (15yrs)	Southern Region Amer. Soc. of Hort. Science
Subtropical Agriculture & Environments Society (15+yrs)	Phi Kappa Phi Honor Society

## JOURNAL PUBLICATIONS: (Peer Reviewed)

*Vitae: Shad D. Nelson*

### 60 total peer-reviewed journal publication with Dr. Nelson as Author/Co-author

1. Kommineni, V., A. Bandari., G. Schuster, and S.D. Nelson. 2024. Response of cotton cultivars to foliar potassium application in the south Texas dryland. *Agriculture*. 14(10):2422  
<http://doi.org/10.3390/agronomy14102422>.
2. De Leon, D., S.D. Nelson, M. Setamou, E. Zamora, A. Zaragoza, M.C. Donato-Molina, and J. Cabrera. 2024. Enhanced nutrition programs to rehabilitate freeze-stressed citrus trees in subtropical regions. *HortScience*. 59:1763-1771. DOI: <http://doi.org/10.21273/HORTSCI18233-24>.
3. Meagher, M.L., A.O. Anoruo, B.L. Turner, P.W. Holland, S.D. Nelson, and M.C. Donato-Molina. 2024. Patch growth of seashore paspalum (*Paspalum vaginatum*) treated with inorganic fertilizer and organic biostimulant. *Open J. Environ. Biol.* 9(1):010-014. DOI: <https://dx.doi.org/10.17352/ojeb.00041>.
4. Morgan, E.I., E. Zamora, S.D. Nelson, M.C. Donato-Molina, and A. Anoruo. 2024. Effects of deficit irrigation in pepper plants (*Capsium annuum*) grown under greenhouse conditions. *World J. Agri. & Soil Sci.* 9(2):1-7. DOI: 10.33552/WJASS.2024.09.000705.
5. Anoruo, A.O., B.L. Turner, M.R. Garcia, S.D. Nelson and M.C. Donato-Molina. 2024. Morphological and anatomical development of *Solanum lycopersicum* seedlings grown with non-conventional water. *International J. Agric. Res. and Environ. Sci.* 5(1):1-4. DOI: 10.51626/ijares.2024.05.00039.
6. Rishitha, L., B. Turner, S. Nelson, and A. Anoruo. 2023. Studies on production of Anaheim pepper in greenhouse media supplemented with organic and inorganic nutrient sources, and water conservation. *J. Hortic. Sci.* 18(2):357-362.
7. Camacho, A.M., H.L. Perotto-Baldivieso, J.A. Ortega-S., E.P. Tanner, A.L. Montemayor, W.A. Gless, T.J. Yamashita, A.M. Foley, R. DeYoung, and S.D. Nelson. 2023. The broad scale impact of climate change on planning aerial wildlife surveys with drone-based thermal cameras. *Nature Portfolio: Scientific Reports*. 13:4455. <https://doi.org/10.1038/s41598-023-31150-5>
8. Simpson, C.R., M. Setamou, and S.D. Nelson. 2023. Evaluation of citrus grove floor management strategies for water use efficiency and conservation. *Scientia Horticulturae*. Vol. 309 Article 111680.  
<https://doi.org/10.1016/j.scienta.2022.111680>
9. Simpson, C.R., J. Gonzales III, J. Enciso, S.D. Nelson, and M. Setamou. 2020. Root distribution and seasonal fluctuations under different grove floor management systems in citrus. *Scientia Horticulturae*. 272 Article 109364. Pp.1-10.
10. Neelipally, R.T.K., A. Anorou, and S.D. Nelson. 2020. Effect of Co-inoculation of Bradyrhizobium and Trichoderma on Growth, Development, and Yield of *Arachis hypogaea* L. (Peanut). *Agronomy*. Vol. 10(9),1415. <https://doi.org/10.3390/agronomy10091415>
11. Semida, W.M., H.R. Hussein, M. Setamou, C.R. Simpson, T.A. Abd El-Mageed, M.M. Rady, and **S.D. Nelson**. 2019. Biochar implications for sustainable agriculture and environment: A review. *South African Journal of Botany* (SAJB). 127:333-347.
12. Simpson, C.R., J.C. Melgar, S.D. Nelson, and M. Setamou. 2019. Growth and yield responses under different grove floor management strategies for water conservation in young grapefruit trees. *Scientia Horticulturae*. Vol. 256 Article 108567. <https://doi.org/10.1016/j.scienta.2019.108567>
13. Fuentes, C., J. Enciso, S.D. Nelson, J. Anciso, M. Setamou, and S. Elsayed-Farag, 2018. Yield production and water use efficiency under furrow and drip irrigation systems for watermelon in south Texas. *Subtropical Ag & Environ Journal*. 69:1-7.
14. Ruppert, D.E., D. Wester, and S.D. Nelson. 2017. Residual compost carryover on soil health and biology in a citrus-supporting Ustoll. *Subtropical Ag & Environ Journal*. 68:18-29.

15. Sétamou, M.; C.R. Simpson; O. J. Alabi; S.D. Nelson; S. Telagamsetty; J.L. Jifon. 2016. Quality matters: Influences of citrus flush physiochemical characteristics on population dynamics of the Asian citrus psyllid (Hemiptera: Liviidae). *PLOS ONE*. (DOI:10.1371/journal.pone.0168997). pg 18.
16. Kusakabe, A, B.A. Contreras-Barragan, C.R. Simpson, J. Enciso, S.D. Nelson, and J.C. Melgar. 2016. Application of partial rootzone drying to improve irrigation water use efficiency in grapefruit trees. *Ag Water Manag.* 178:66-75.
17. Contreras-Barragan, B.A., A. Kusakabe, J.C. Melgar and S.D. Nelson. 2016. Understanding partial rootzone drying in citrus. *Acta Horticulturae*. 1135:123-130. <http://dx.doi.org/10.17660/ActaHortic.2016.1135.15>
18. Simpson, C.R., S.D. Nelson, J.C. Melgar, S. King, J. Jifon, G. Schuster, and A. Volder. 2015. Effects of salinity on physiological parameters of grafted and ungrafted citrus trees. *Scientia Horticulturae*. 197:483-489.
19. Simpson, C.R., S. King, S.D. Nelson, J. Jifon, G. Schuster, and A. Volder. 2015. Salinity evaluation for watermelon (*Citrullus lanatus*) grafted with different rootstocks. *Subtrop. Ag & Environ.* 66:1-6.
20. Enciso, J., S.D. Nelson, H. Perea, V. Uddameri, N. Kannan, and A. Gregory. 2014. Impact of residue management and subsurface drainage on non-point source pollution in the Arroyo Colorado. *Sustainability of Water Qual. and Ecol.* 3-4:25-32. (published May 2015).
21. Melgoza, F.J., A. Kusakabe, S.D. Nelson, and J.C. Melgar. 2014. Exogenous applications of abscisic acid to increase freeze tolerance in Citrus trees. *International J. of Fruit Sci.* 14:376-387.
22. Simpson, C.R., S.D. Nelson, J.C. Melgar, S. King, J. Jifon, G. Schuster, and A. Volder. 2014. Growth response of grafted and non-grafted citrus trees to saline irrigation. *Scientia Horticulturae*. 169:199-205.
23. Williams, C.F., J.E. Watson, and S.D. Nelson. 2014. Comparison of equilibrium and non-equilibrium distribution coefficients for the human drug carbamazepine in soil. In X. Cao, I. Cousins, J. de Boer, and K. Kummerer (Eds.) *Environmental Chemistry. Chemosphere*. 95:166-173.
24. Nelson, S.D., J.M. Enciso, H. Perea, M. Setamou, L. Beniken, M. Young, and C. Williams. 2013. Alternative flood irrigation strategies that improve water conservation in citrus. *Subtrop. Plant Sci.* 65:15-23. (Manuscript submitted to Journal in Dec 2013, but release for print until Dec 2014).
25. Perea, H., J. Enciso, J. Jifon, S. Nelson, and C. Fernandez. 2013. Performance of tensiometer and granular matrix soil moisture sensors in irrigated light, medium, and heavy textured soil. *Subtrop. Plant Sci.* 65:1-7.
26. Williams, C.F., J.E. Watson, S.D. Nelson, and C.W. Walker. 2013. Sorption/desorption of lincomycin from three arid region soils. *J. Environ. Qual.* 42:1460-1465.
27. Nelson, S.D., H.A. Ajwa, T. Trout, M. Stromberger, S.R. Yates and S. Sharma. 2013. Water and methyl isothiocyanate distribution in soil after drip fumigation. *J. Environ. Qual.* 42:1555-64.
28. Ajwa, H.A., D.A. Sullivan, M.T. Holdsworth, R.D. Sullivan, and S.D. Nelson. 2013. Reduction of Methyl Isothiocyanate Atmospheric Emissions after Application of Metam Sodium by Shank Injection. *J. Environ. Qual.* 42:1652-1660.
29. Nelson, S.D., M. Young, R. Hanagriff, and S. Klose. Mar. 2012. An evaluation of flood irrigation and compost use in South Texas Rio Red grapefruit production: Are there economic values? *The Journal of American Academy of Business, Cambridge*. 17(2):23-29.
30. Setamou, M., A. Sanchez, J. Patt, S. Nelson, and E. Louzada. 2012. Diurnal patterns in flight activity and effects of light on host finding behavior of the Asian citrus psyllid. *J. Insect Behavior*. 25:264-276.
31. Nelson, S.D., M. Young, J. Enciso, S.L. Klose, and M. Setamou. 2011. Impact of irrigation method on water savings and 'Rio Red' grapefruit pack-out in South Texas. *Subtrop. Plant Sci.* 63:14-22.
32. 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. *J. Agricultural Sci. & Techn. A* 1:194-198.
33. Williams, C.F., and S.D. Nelson. 2011. Comparison for rhodamine-WT and bromide as a tracer for elucidating internal wetland flow dynamics. *Ecological Engineering*. 37:1492-1498.
34. Simpson, C.R., S.D. Nelson, J.E. Stratmann, and H.A. Ajwa. 2010. Surface water seal application to minimize volatilization loss of methyl isothiocyanate from soil columns. *Pest Manag. Sci.* 66:686-692.
35. Uckoo, R.M., G.K. Jayaprakasha, S.D. Nelson, and B.S. Patil. 2010. Rapid simultaneous determination of amines and organic acids in citrus using high-performance liquid chromatography. *Talanta*. 83:948-954.
36. Setamou, M., D. Rodriguez, R.R. Saldana, G. Schwarzlose, D. Palrang and S.D. Nelson. 2010. Efficacy and uptake of soil-applied imidacloprid in the control of Asian citrus psyllid and citrus leafminer, two foliar feeding citrus pests. *J. Economic Entomology*. 103:1711-1719.
37. Reddy, V.P., K. Madhurababu, S.D. Nelson, J.V. da Graca and M. Skaria. 2010. Gene expression studies in sour orange and C-22 rootstocks challenged with the fungus, *Phytophthora nicotianae* and the nematode, *Tylenchulus semipenetrans*. *Pest Technology*. 4 (Special Issue 1): 29-34.

38. Uckoo, R.M., J.M. Enciso, I.W. Wesselmann, K. Jones and S.D. Nelson. 2009. Impact of compost application on citrus production under drip and microjet spray irrigation systems. In: Tennant P, Benkeblia N (Eds) *Citrus II. Tree and Forestry Science and Biotechnology*. 3 (Special Issue 1): 59-65.
39. Wiedenfeld, B., J. Enciso, J. Jifon, S. Nelson, and J. Sauls. 2009. Fertilization programs for 'Rio Red' grapefruit (*Citrus paradisi* Macf.) in South Texas. *Intern. J. Fruit Sci.* 9(3):201-210.
40. Enciso, J., B. Wiedenfeld, J. Jifon, and S. Nelson. 2009. Onion yield and quality response to two irrigation scheduling strategies. *Scientia Horticulturae*. 120:301-305.
41. Nelson, S.D., R.M. Uckoo, H. Esquivel, J.M. Enciso, and K. Jones. 2008. Effect of compost in 'Rio Red' grapefruit production in a heavy textured soil. In: Hao X-Y (Ed) *Compost I. Dynamic Soil, Dynamic Plant*. 2 (Special Issue 1): 67-71.
42. Uckoo, R.M., S.D. Nelson, K.J. Shantidas, and J.M. Enciso. 2005. Irrigation and fertilizer efficiency in South Texas grapefruit production. *Subtropical Plant Science*. 57:23-28.
43. Enciso, J.M., J.W. Sauls, R.P. Wiedenfeld, and S.D. Nelson. 2005. Irrigation of citrus in Texas-A Review. *Subtropical Plant Science*. 57:16-22.
44. Nelson, S.D., D.W. Dickson, H.A. Ajwa, and D.A. Sullivan. 2004. Efficacy of metam sodium under drip and surface spray application in Florida tomato production. *Journal of the Rio Grande Valley Horticultural Society*.
45. Ben-Hur, M., J. Letey, W.J. Farmer, C.F. Williams, and S.D. Nelson. 2003. Soluble and solid organic-matter effects on atrazine adsorption in cultivated soils. *Soil Sci. Soc. Am. J.* 67:1140-1146.
46. Ajwa, H. A., T. Trout, J. Mueller, S. D. Nelson, R. Soppe, and D. Shatley. 2002. Application of alternative fumigants through drip irrigation systems. *Phytopathology*. 92:1349-1355.
47. Nelson, S. D., S. J. Locascio, L. H. Allen, Jr., D. W. Dickson, and D. J. Mitchell. 2002. Soil flooding and fumigant alternatives to methyl bromide in tomato and eggplant production. *HortSci*. 37:1057-1060.
48. Nelson, S. D., C. Riegel, L. H. Allen, Jr., J. Gan, D. J. Mitchell, D. W. Dickson, and S. J. Locascio. 2001. The volatilization of 1,3-dichloropropene in Florida plasticulture and its effects on fall squash production. *J. Amer. Soc. Hort. Sci.* 126:496-502.
49. Riegel, C., S. D. Nelson, D. W. Dickson, L. H. Allen, Jr., and L. G. Peterson. 2001. Efficacy of 1,3-dichloropropene in soil amended with compost and unamended soils. *Suppl. J. Nematol.* 33:289-293.
50. Nelson, S. D., L. H. Allen, Jr., J. Gan, C. Riegel, D. W. Dickson, S. J. Locascio, and D. J. Mitchell. 2000. Can virtually impermeable films reduce the amount of fumigant required for pest-pathogen management in high value crops? *Soil Crop Sci. Soc. Florida Proc.* 59:85-89.
51. Nelson, S.D., W.J. Farmer, J. Letey, and C.F. Williams. 2000. Stability and mobility of napropamide complexed with dissolved organic matter in soil columns. *J. Environ. Qual.* 29:1856-1862.
52. Nelson, S.D., J. Letey, W.J. Farmer, C.F. Williams, and M. Ben-Hur. 2000. Herbicide application method effects on napropamide complexation with dissolved organic matter. *J. Environ. Qual.* 29:987-994.
53. Williams, C. F., M. Agassi, J. Letey, W. J. Farmer, S. D. Nelson, and M. Ben-Hur. 2000. Mediated transport of napropamide by dissolved organic matter through soil columns. *Soil Sci. Soc. Am. J.* 64:590-594.
54. Williams, C. F., J. Letey, W. J. Farmer, S. D. Nelson, and M. Ben-Hur. 1999. Efficiency of hexane extraction of napropamide from Aldrich humic acid and soil solutions. *J. Environ. Qual.* 28:1751-1757.
55. Williams, C. F., W. J. Farmer, J. Letey, and S. D. Nelson. 1999. Design and characterization of a new dialysis chamber for investigating dissolved organic matter-napropamide complexes. *J. Environ. Qual.* 28:1757-1760.
56. Williams, C. F., W. J. Farmer, J. Letey, and S. D. Nelson. 1999. Molecular weight of dissolved organic matter-napropamide complex as affected by napropamide-soil application methods. *J. Environ. Qual.* 28:1429-1435.
57. Nelson, S.D., J. Letey, W.J. Farmer, C.F. Williams, and M. Ben-Hur. 1998. Facilitated transport of napropamide by dissolved organic matter in sewage sludge amended soil. *J. Environ. Qual.* 27: 1994-2000.
58. Nelson, S.D. and R.E. Terry. 1996. The effects of soil physical properties and irrigation method on denitrification. *Soil Sci.* 161: 242-249.

#### BOOK CHAPTERS: (Invited, Peer Reviewed)

Vitae: Shad D. Nelson

59. 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. (Book Chapter, Invited, ISBN: 978-953-51-00508.)  
<http://www.intechopen.com/articles/show/title/evaluating-surface-seals-in-soil-columns-to-mitigate-methyl-isothiocyanate-volatilization> )



60. Letey, J., C. F. Williams, W. J. Farmer, S. D. Nelson, M. Agassi, and M. Ben-Hur. 2000. The role of dissolved organic matter in pesticide transport through soil. *In* L. J. Ross (Ed.) *Agrochemical Movement: Perspective and Scale*. American Chemical Society. p. 347-360.

### POPULAR PRESS ARTICLES

61. **Nelson, S.D.**, R.L. Stanko, and M.C. Donato-Molina. Jan. 2021. START NOW to reap the benefits later. Futurm Sci-Comm publishing. Pg 1-6.

### AGRICULTURAL EXTENSION PUBLICATIONS:

*Vitae: Shad D. Nelson*

1. M. Young, S. Nelson, S. Klose, and J. Enciso. December 2013. Increased water use efficiency and profitability in citrus production possible in the Lower Rio Grande Valley. FARM Assistance Focus Series 2013-5. Texas AgriLife Extension Service, Dept of Agricultural Economics, Texas A&M University System. pp. 1-3.
2. M. Young, S. Nelson, S. Klose, and J. Enciso. December 2013. Water savings and higher profit margins possible in cotton and other field crops in the Lower Rio Grande Valley. FARM Assistance Focus Series 2013-4. Texas AgriLife Extension Service, Dept of Agricultural Economics, Texas A&M University System. pp. 1-3.
3. M. Young, S. Nelson, S. Klose, J. Enciso. And T. McLemore. May 2013. Furrow vs. surge irrigation in sugar cane under restricted water availability in the Lower Rio Grande Valley. FARM Assistance Focus Series 2013-1. Texas AgriLife Extension Service, Dept of Agricultural Economics, Texas A&M University System. pp. 1-4.
4. S. Nelson, M. Young, S. Klose, and J. Enciso. Feb. 2013. Narrow-border flood for citrus: Saving water while improving yields and net cash farm income. On-Farm AWEsome FACTS on agricultural water conservation and efficiency, Texas Project for Ag Water Efficiency, TexasAWE.org. Report #OF-02-13.
5. Young, M., S. Nelson, S. Klose, and J. Enciso. Sept 2010. An evaluation of flood irrigation and compost use in South Texas Rio Red grapefruit production. Texas AgriLife Extension. FARM Assist. Focus 2010-5. pp. 1-3.
6. Young, M., S. Nelson, S. Klose, and J. Enciso. Aug 2010. Assessing irrigation methods based on grapefruit pack-out in the Lower Rio Grande Valley. Texas AgriLife Extension. FARM Assistance Focus 2010-4. pp. 1-3.
7. Young, M., S.L. Klose, G. Kasse, S. Nelson, and J. Enciso. July 2009. New orchard establishment: Flood and 1-line drip irrigation illustration for Rio Red grapefruit in the Lower Rio Grande Valley. Texas AgriLife Extension. FARM Assistance Focus 2009-6. pp. 1-4.
8. Young, M., S.L. Klose, G. Kasse, S. Nelson, J. Enciso, and M. Jupe. July 2008. 2-line drip and micro-jet spray irrigation illustration for Rio Red grapefruit in the Lower Rio Grande Valley. Texas AgriLife Extension. FARM Assistance Focus 2008-6. pp. 1-3.
9. Young, M., S.L. Klose, G. Kasse, S. Nelson, J. Enciso, and M. Jupe. July 2008. 1-line drip and micro-jet spray irrigation illustration for Rio Red grapefruit in the Lower Rio Grande Valley. Texas AgriLife Extension. FARM Assistance Focus 2008-5. pp. 1-3.
10. Enciso, J., J.W. Sauls, R.P. Wiedenfeld, and S.D. Nelson. May 2008. Impacts of irrigation on citrus in the Lower Rio Grande Valley. Texas AgriLIFE Extension Fact Sheet B-6205. pp 14.
11. Enciso, J., J.W. Sauls, R.P. Wiedenfeld, and S.D. Nelson. 2008. Los impactos del riego de Citricos. Texas AgriLIFE Extension Service Fact Sheet B-6205S. pp 16.
12. Young, M., S.L. Klose, G. Kasse, S. Nelson, J. Enciso, and M. Jupe. October 2007. Narrow border flood and 2-line drip irrigation illustration for Valencia, Navel and Marrs oranges in the Lower Rio Grande Valley. Texas Cooperative Extension. FARM Assistance Focus 2007-6. pp. 1-3.
13. Young, M., S.L. Klose, G. Kasse, S. Nelson, J. Enciso, and M. Jupe. August 2007. Narrow border flood and micro-jet spray irrigation illustration for Rio Red grapefruit in the Lower Rio Grande Valley. Texas Cooperative Extension. FARM Assistance Focus 2007-5. pp. 1-3.

### PROCEEDING PUBLICATIONS: (Peer Reviewed)

1. Fuentes, C., J. Enciso, S. Nelson, J. Anciso and M. Setamou. 2014. Comparing water use efficiency in South Texas furrow and drip irrigated watermelon. Irrigation Show and Education Conference. Phoenix, AZ. Nov. 17-21.
2. Nelson, S.D., M. Setamou, D.E. Garza, J. Raygoza, and M. Esparza. 2014. Nutritional Metalosate® supplements with calcium that reduce pest pressure in citrus production. Albion Minerals Annual Conference. Park City, UT. Jan. 13-16.
3. Nelson, S.D., M. Setamou, D.J.E. Garza, M. Esparza, and J. Raygoza. 2013. Nutritional supplements that fortuitously reduce pest pressure for sustainable citrus production and quality. Eds. M.B. Chetti, et al.

- Proceedings Souvenir of the Fifth International Symposium on Human Health Effects of Fruits and Vegetables. FAV HEALTH 2012. Dharwad, Karnataka, India. Jan. 7-11, 2013. Pp. 29-34.
4. Trevino, J., G. Schuster, S.D. Nelson, A.P. Ochoa, and J. Munyaneza. 2011. Effects of potato planting dates on psyllid populations and zebra chip incidence in Texas. Pp: 127-130. *In*: (Eds: F. Workneh, A. Rashed, and C.M. Rush) Proceedings of the 11<sup>th</sup> Annual 2011 Zebra Chip Reporting Session. San Antonio, TX. Nov. 6-9, 2011.
  5. Ochoa, A., G. Schuster, B. Bextine, S. Nelson, and J. Munyaneza. 2011. Using biotyping to establish temporal and spatial relationships between potato psyllid populations colonizing potatoes in Texas. Pp: 92-96. *In*: (Eds: F. Workneh, A. Rashed, and C.M. Rush) Proceedings of the 11<sup>th</sup> Annual 2011 Zebra Chip Reporting Session. San Antonio, TX. Nov. 6-9, 2011.
  6. Nelson, S.D., L. Rock, M. Sétamou, and J. Lloyd-Reilly. 2011. Flowering native plants able to withstand elevated abiotic salt stress. *In* (Eds. J.A. Pascual and F. Perez-Alfocea) Proceeding of the 5th International Symposium on Seed, Transplant and Stand Establishment of Horticultural Crops. *Acta Horticult.* 898:103-111.
  7. Simpson, C.R., S.D. Nelson and H.A. Ajwa. 2010. Impact of soil texture and organic matter content on MITC volatilization from soil columns. Proceeding of the 19<sup>th</sup> World Congress of Soil Science. Aug. 1-6, 2010. Brisbane, Australia.
  8. Uckoo, R.M., S.D. Nelson, G.K. Jayaprakash, and B.S. Patil. 2009. Impact of low water use systems on bioactive flavonoids of grapefruit. Proceedings of the 2<sup>nd</sup> International Symposium on Human Health Effects of Fruits and Vegetables. *Acta Horticulturae*. 841:607-610.
  9. Mudunuru, U., S.D. Lukefahr, S.D. Nelson, and D.O. Flores. 2008. Performance of growing rabbits fed *Lablab purpureus* with molasses mini-blocks and restricted commercial pellets. 9<sup>th</sup> World Rabbit Congress. Verona, Italy. June 10-13. *Nutrition and Digestive Physiology*. 753-758.
  10. Enciso J. Morales, J., B. Wiedenfeld., S. Nelson, and X. Peries. 2007. Irrigating Onions under Subsurface Drip Irrigation under Different Stress Levels. In Proceedings of the Annual International Irrigation Show December 9-11, 2007. San Diego, CA. Irrigation Association Meeting. Pp. 338-352.
  11. Nelson, S. D., and H. A. Ajwa. 2001. Physico-chemical properties of chloropicrin with various surfactants. *In* 2001 Proceeding so the Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reduction. Methyl Bromide Alternatives Outreach. San Diego, CA. Nov. 5-9, 2001. 95:1-4.
  12. Ben-Hur, M., J. Letey, W. J. Farmer, C. F. Williams, and S. D. Nelson. 2001. Soluble and solid organic matter effects on pesticide adsorption on soil. *In* V. A. Tsirintzis and P. Tsalides (Eds.) Ecological Protection of the Planet Earth. Proceedings of an International Conference, Xanthi, Greece, 5-8 June 2001. Vol. 1:83-94.
  13. Nelson, S. D., S. J. Locascio, L. H. Allen, Jr., D. W. Dickson, and D. J. Mitchell. 1999. Soil flooding and chemical alternatives to methyl bromide in tomato production. *In* 1999 Proceeding of the Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reduction. Methyl Bromide Alternatives Outreach. San Diego, CA. Nov. 1-4, 1999.

### Publications in Progress

1. Kommineni, K., A. Bhandari, G. Schuster, and S. Nelson. 202X. Response of cotton cultivars to foliar potassium application in the south Texas dryland. *Agronomy*. Manuscript ID: agronomy-3222120
2. Russell, J.C., S. Dattamudi, A.O. Anoruo, T. Sinha, S.D. Nelson, and B. Turner. 20XX. Surface water system dynamics: a case study in the Lower Rio Grande Valley, Texas, USA. *J. Water Resources Management*.
3. Camacho, A.M., H.L. Perotto-Baldivieso, A.L. Montemayor, W.A. Gless, J. Exum, T. Yamashita, A. Foley, R. DeYoung, E.P. Tanner, and S.D. Nelson. (2022) Planning aerial wildlife surveys with UAVs. What is the big picture? Perspectives in Ecology and Conservation.
4. Camacho, A.M., H.L. Perotto-Baldivieso, J.A. Ortega-S., E.P. Tanner, A.D. Falk, A.L. Montemayor, W.A. Gless, D. Daniels, T. Kimmet, and S.D. Nelson. (2022) Spectral signatures for ecology: 50 years after Hoffer and Johannsen. *J. Remote Sensing*.
5. Camacho, A.M., H.L. Perotto-Baldivieso, J.A. Ortega-S., E.P. Tanner, A.D. Falk, S.D. Nelson, A.L. Montemayor, W.A. Gless, M.T. Page, M.A. Ramirez, D. Daniels, and T. Kimmet. (2022) Developing Spectral signatures for native grasses using UAV multispectral sensors. *J. Remote Sensing*.
6. Setamou, M., O.J. Alabi, C.R. Simpson, S.D. Nelson, and J.L. Jifon. 202X. Novel citrus planting design: raised beds with plastic mesh groundcover improve citrus tree growth and productivity. (In review: *Scientia Horticulturae*).

## DISSERTATION/THESIS

Vita: Shad D. Nelson

- **Ph.D. Dissertation:** Nelson, S.D. 1998. Complexation of Napropamide with Dissolved Organic Matter from a Sewage Sludge Amended Soil. Dept. of Soil & Environ. Sci., Univ. of California, Riverside.
- **M.S. Thesis:** Nelson, S.D. 1995. The Effects of Soil Physical Properties and Irrigation Method on Denitrification. Department of Agronomy and Horticulture, Brigham Young University, Provo, UT.

## Chair Master of Science Thesis/Research Project Graduates

- **Jerry E. Stratmann.** May 2004. Thesis: The Development of Metam-Sodium Application Methods for Minimizing Volatilization. Chair: S.D. Nelson
- **Viola Gade.** May 2004. Thesis: Molecular Characterization of Citrus Partial Hybrids Produced by Microprotoplast Mediated Chromosome Transfer. Chair: E. Louzada, Co-Chair: S.D. Nelson.
- **K.M. Julien Shantidas.** Aug 2004. Thesis: Comparative Study of the Effect of Different Irrigation Systems and Fertilizers Based on Cost and Productivity on Grapefruit (*Citrus Paradisi* (MACFAD.))
- **Catherine Simpson.** Aug 2005. Thesis: Volatilization Loss of Vapam and K-pam in Different Soil Types and Varying Organic Matter Levels. Chair: S.D. Nelson
- **Veronica Ancona.** Aug 2005. Identification and Molecular Characterization of Genes from *Poncirus trifoliata*, Down and Up Regulated by Low Temperature. Chair: E. Louzada, Co-Chair: S.D. Nelson.
- **Ram M. Uckoo.** Aug 2006. Thesis: Irrigation and Fertilization Efficiency in South Texas Grapefruit Production. Chair: S.D. Nelson
- **Ravi Adla.** Aug 2007. M.S. Research Project: Evaluation of Agricultural Water Conservation Demonstration Initiative Program Progress in Lower Rio Grande Valley, Texas. Chair: S.D. Nelson
- **Millie Jo Stevens.** Dec. 2007. M.S. Research Project: Evaluation of Poultry Litter as a Viable Fertilizer Source. Chair: S.D. Nelson
- **Delfino Rodriguez.** Aug 2008. Thesis: Effectiveness of pesticides on control of foliage-feeding citrus pests. Chair: S.D. Nelson, Co-Chair: M. Setamou.
- **LeeRoy Rock.** Aug 2008. Thesis: Salinity Tolerance of Texas Native and Introduced Grasses and Forbs. Chair: S.D. Nelson
- **Shilpa Marepally.** Aug 2008. Thesis: Molecular Identity, Infectivity and Differential Gene Expression Associated with an *Olpidium*-like Fungus. Chair: E. Louzada, Co-Chair: S.D. Nelson.
- **Yona Netha.** Aug 2008. Thesis: Effect of Host Plant on the Bionomics of Asian Citrus Psyllid *Diaphorina citri* (Homoptera; Psyllidae). Chair: M. Setamou. Co-Chair: S.D. Nelson.
- **Vamsi Pallem Reddy.** Dec 2008. Thesis: Gene Expressions in Sour Orange and C-22 Rootstocks and Rio Red Grapefruit Challenged with Soil-Borne Pest and Disease. Chair: E. Louzada, Co-Chair: S.D. Nelson.
- **Esmeralda Rodriguez.** Dec 2009. Thesis: Off-Target Soil Depositional Loss of Select Foliar Pesticides Applied on Citrus by Air-Blast Sprayer Application. Chair: S.D. Nelson, Co-Chair: M. Setamou.
- **Sravani Garlapati.** Dec 2009. Thesis: Uptake of Soil-Applied Neonicotinoids by Citrus Plants and their Impact on Selected Biological Parameters of the Asian Citrus Psyllid, *Diaphorina citri*. Chair: M. Setamou. Co-Chair: S.D. Nelson.
- **Manjula Talari.** Dec 2009. Thesis: Different Water Regimes on Aldicarb Efficacy for Citrus Rust Mite Control. Chair: M. Setamou. Co-Chair: S.D. Nelson.
- **Raul Ray Hinojosa.** May 2010. Thesis: Aldicarb Degradation in Flood Irrigated South Texas Soils in Relation to Asian Citrus Psyllid Control, *Diaphorina citri* Kuwayama. Chair: S.D. Nelson, Co-Chair: M. Setamou.
- **Madahy Romero.** May 2010. Thesis: Impact of Altering Sugarcane Harvesting Methods on Atrazine Adsorption to Sugarcane Leaf Litter. Chair: S.D. Nelson, Co-Chair: M. Setamou.
- **Juan Raygoza.** May 2010. Thesis: Effects of Organic Production on *Diaphorina citri* Dynamics of and Nutrient Absorption of Citrus Trees. Chair: S.D. Nelson, Co-Chair: M. Setamou.
- **Justin Tanner.** Aug 2010. Thesis: Studies on Citrus Tatter Leaf Virus Seed Transmission. Co-Chair.
- **Haritha Dhanekula.** Aug 2010. Research Project: Effect of Sulfate and Iron Reducing Bacteria on the Uranium (VI) Reduction through Biostimulation with Hydrogen and Ethanol. Chair: S.D. Nelson.
- **Nargarjuna Prasad Peddabhoini.** May 2012. Thesis: Testing the Efficacy of an “Attract and Kill” Strategy for the Control of Citrus Leafminer in Texas. Chair: M. Setamou. Co-Chair: S.D. Nelson.
- **Diego J.E. Garza.** Dec 2012. Research Project: Foliar Applications of Micro and Macro Nutrients and Its Effects on *Diaporina citri* in Citrus. Chair: M. Setamou. Co-Chair: S.D. Nelson.



- **Marisol Esparza.** Dec 2012. Research Project: Effects of Calcium Application to Citrus on the Biology, Survival and Population Dynamics of Asian Citrus Psyllid, *Diaphorina Citri* (Kuwayama) (Hemiptera:Psyllidae). Chair: M. Setamou. Co-Chair: S.D. Nelson.
- **Franciso Melgoza.** May 2013. Thesis: Understanding and Improving Freeze Tolerance in Citrus. Co-Chair: J.C. Melgar, Co-Chair: S.D. Nelson.
- **Beatriz A. Contreras Barragan.** Dec. 2014. Thesis: Evaluation of Water-Saving Irrigation Strategies in Citrus. Chair: J.C. Melgar, Co-Chair: S.D. Nelson.
- **Liliana Cantu.** May 2015. Thesis: Effect of Nitrogen Fertilization on Host Plant Quality and on the Developmental Parameters of Asian Citrus Psyllid and its Nymphal Parasitoid *Tamarixia radiata*. Chair: M. Setamou. Co-Chair: S.D. Nelson.
- **Corina M. Fuentes.** Dec. 2015. Thesis: Irrigation Scheduling: Evaluation of Soil Moisture Sensors and Water Balance to Improve Water Productivity for South Texas Horticultural Crops. Chair: S.D. Nelson, Co-Chairs: J. Enciso, M. Setamou.
- **Pallavi M. Vedasharan.** May 2016. Thesis: Correlation of Viability of *Candidatus Liberibacter Asiaticus* with Symptom Development and Age of Leaf Tissues. Chair: E. Louzada, Co-Chair: S.D. Nelson.
- **Sri L. Telagamsetty.** May 2016. Population Densities of Asian Citrus Psyllid in Response to the Nutritional Quality of Citrus Shoot Flush. Chair: C.R. Simpson, Co-Chairs: M. Setamou, S.D. Nelson.
- **Benjamin O. Parea.** May 2016. Evaluation of Inoculum Sources, Damage, and Control of *Phytophthora nicotianae* in Grapefruit. Chair: V. Ancona, Co-Chair: S.D. Nelson.
- **Carlos X. Martinez.** Aug 2016. Soil Moisture and Soil Quality Effects of Tillage on a South Texas Victoria Clay. Chair: D. Ruppert, Co-Chair: S.D. Nelson.
- **Ana Olivares.** Dec. 2016. Isolation and Characterization of Bacterial Community Associated with Citrus Roots in Texas. Chair: V. Ancona, Co-Chair: S.D. Nelson.
- **Perla Duberney.** Aug 2017. Evaluation of Soil Borne Pathogens *Phytophthora nicotianae* and *Fusarium solani* of Citrus in South Texas. Chair: V. Ancona. NNF Fellow.
- **Julian Gonzales III.** May 2018. Sustainable Management Techniques to Improve Root Distribution and Turnover in Texas Citrus. Chair: C.R. Simpson, NNF Fellow.
- **Ruby Saldana.** May 2018. Developing an Integrated Pest Management Program for Citrus Barnacle Scale in South Texas. Chair: M. Setamou. Grad Research Project. NNF Fellow.
- **Sandy Chavez.** May 2018. Screening for *Phytophthora nicotianae* resistance of different citrus rootstocks and hybrids. Chair: E. Louzada. NNF Fellow

#### **NSF-CREST Sustainable Water Use Grant Award # 1914745 Funded Graduate Students:.**

- **Annalyssa Camacho.** M.S. Aug 2021. RWSC major. Committee member. UAVs in range ecology.
- **Austin Bernier-Vega.** M.S. Mechanical Eng. Dec 2022. Wireless Soil-Data Collection Using UAVs and Comparison of Remote Monitoring Techniques. Chair: Selahattin Ozcelik Committee Member: S.D. Nelson.

#### **Peer-reviewed journal from thesis collaborations:**

Bernier-Vega, A., K. Barton, I. Olson, J. Rodriguez, G. Cantu, and S. Ozcelik. **2023.** Remote data acquisition using UAVs and custom sensor node technology. Drones. 7, 340 pp. 1-19.

<https://doi.org/10.3390/drones706340>

- **Kyle E. Barton.** M.S. Mechanical Eng. Dec 2022. Investigation of RFID-Based Plant Growth and Inventory System. Chair: Selahattin Ozcelik Committee Members: S.D. Nelson, and B. Wei.
- **Juan H. Rodriguez III.** M.S. Mechanical Eng. May 2023. The Design and Implementation of Soil Monitoring Systems Using UAV's. Chair: Selahattin Ozcelik Committee Members: S.D. Nelson, and B. Wei.
- **Desiderio DeLeon.** M.S. May 2023. PLSS major. **Chair:** SD Nelson, Co-Chair: M. Setamou, Member: J.Cabrera. Soil Amendment Strategies to Rehabilitate Freeze Damaged Citrus Trees for Sustainable Crop Management.
- **Horacio E. Rodriguez.** M.S. Dec. 2023. PLSS major. Chair: G. Schuster, Co-Chair: J. McGinty, Members: J. Foster. Yield and cannabinoid profiles of select industrial hemp germplasm in south Texas.
- **Erik Zamora.** M.S. 2022-2025. PLSS major. Chair: S.Dattamudi. Members: G.Schuster. J.Foster.

- **Amberly Zaragoza.** M.S. 2022-2025. PLSS major. **Chair:** S.D. Nelson. Co-chair: S. Dattamudi, Member: B. Turner, Impacts of Organic animal paunch application to rangelands soil moisture and fertility.
- **Kimberly Tanguma.** M.S. 2023-2025. RWSC major. Chair: M.C. Donato-Molina. Co-Chair: H. Perotto. Members: A. Falk, D. Tolleson, and S. Nelson. Measuring water and nutrients in rangeland grass species: What can we learn from drones?
- **Manjula Konakanchi.** M.S. PLSS major. Chair: A. Anoruo. Anatomical development of deficit irrigated Roma tomato (*Solanum lycopersicum*).
- **Niharika Gadde.** M.S. PLSS major. Chair: A. Anoruo. Limit of deficit irrigation without compromising growth, development and yield.
- **Venkata Sai Sravani Arumalla.** M.S. PLSS major. Chair: A. Anoruo. Root biomass and anatomy of deficit irrigated Roma tomato (*Solanum lycopersicum*).
- **Avantika D'Cruz.** M.S. ENSM major. Chair: A. Anoruo. The effects of climate change on North America wetlands.

#### Co-Chair/Committee Member Ph.D. Graduate Dissertations

- **Amanda Lewis. Ph.D. Candidate.** 2018-current. Dissertation: Plant Uptake of Azadirachtin Nanopesticides. Coop Hort Ph.D., Committee member & PhD/ funder: STEP UP grant as PD.
- **Vanessa Almazan. Ph.D. Candidate.** 2021-2024. Coop Hort Ph.D., Committee member
- **Madahy Romero. Ph.D. Candidate.** Aug 2014. Dissertation: Extraction, Degradation, and Microbial Respiration Effects of Mesotrione in Soil. TAMU. Soil Science. Committee Member.
- **Catherine Simpson. Ph.D.** Dec 2013. Dissertation: Water Quality Impacts of Salinity Stress on Grafted Vegetable and Citrus Crops. TAMU/TAMUK. Horticulture. **Coop PhD program. Co-Chair.**
- **Rammohan Uckoo. Ph.D.** Dec 2012. Dissertation: Relationships of water stress and citrus phytochemicals. TAMU. Horticulture. **Co-Chair.**
- **Raul Rivas Cantu. Ph.D.** Dec 2014. Dissertation: Citrus Waste Biorefinery: Process Development and Modeling for Pretreatment and Enzymatic Hydrolysis of Grapefruit Processing Waster Biomass. TAMUK. Environ. Eng. Committee Member.
- **Jessica L. Schnupp. Ph.D.** May 2014. Dissertation: Antimony and Arsenic Fractionation, Partitioning, and Release from Contaminated Streambed Sediment. TAMUK. Environ. Engineering. Committee Member.
- **Sergio Santos. Ph.D. Candidate.** Aug. 2013. Treatment and Modeling of VOC Landfill Biogas Emissions Utilizing Biological Active Cover Material. TAMUK. Environ. Eng. Committee Member.
- **Sreeram G. Singaraju. Ph.D.** Dec. 2012. Dissertation. Watershed and In-Channel Contributions for Nutrient Fate and Transport in Drainage Ditches Carrying Agricultural Runoff. TAMUK. Environ. Eng. Committee Member.
- **Matthew J. Schnupp. PhD.** Dec 2016. Dissertation: The Application of Spatially Explicit Helicopter Survey Data for Northern Bobwhite Management on King Ranch. TAMUK. Wildlife Science. Grad Council Representative.

#### STUDENT RESEARCH ADVISING

*Vitae: Shad D. Nelson*

- Past Undergraduate Research Advisor/Mentor for Ronald E. McNair Scholars:
  - Graduated and entered grad school: **E. Borrego** (earned Ph.D. later); **J. Wilborn** (earned M.S. later), **L. Rock** (earned M.S. later), **R. Mungia** (works as Manager for Environmental Comp.)

**Grant Proposals Funded – Years Funded, Amounts and Project Titles****2002**

**\$ 5,930** TAMU-Kingsville Research Development Funds, University Research Grant Award. PI: S.D. Nelson. June 2002-Aug 2002.

**\$300,000** Optimization of Metam Sodium Application Methods for Maximum Efficacy and Minimum Volatilization. Methyl Bromide Transitions grants. USDA Award # 2002-51102-01922. PI: S.D. Nelson (TAMUK), Co-PIs: H.A. Ajwa (UC Davis), D.Dixon (UFI), D. Sullivan (Sullivan Environmental Consulting, Inc.). Aug. 2002-Aug. 2004.

**\$299,974** Meeting the Experimental Needs of South Texas Students for Career in Agricultural Science. Hispanic Serving Institutions grants. USDA/CSREES Award # 2002-38422-12168. PI: S.D. Nelson, Co-PIs: J.C. Laurenz, R.L. Stanko. July 2002-June 2004.

**\$ 15,000** Task 4: On Farm Irrigation System Management. Rio Grand Basin Initiative, Texas Water Resources Institute grant. PI: S.D. Nelson.

**2003**

**\$ 1,000** Molecular Characterization of Partial Hybrids Produced by Chromosome Transfer. Citrus Producers Board grant. PI: S.D. Nelson, CoPI: E.Louzada. Sept. 2003-Aug. 2004.

**\$ 15,000** Task 4: On Farm Irrigation System Management in Citrus. Rio Grand Basin Initiative, Texas Water Resources Institute grant. PI: S.D. Nelson.

**2004**

**\$300,000** Teaching and Mentoring South Texas Students for Careers in Agricultural Science and Research. Hispanic Serving Institutions grants. USDA/CSREES Award # 2004-38422-14608. PI: S.D. Nelson, Co-PIs: J.C. Laurenz, R.L. Stanko. July 2004-June 2006.

**\$ 13,200** Task 4: On Farm Irrigation System Management for Citrus Producers. Rio Grand Basin Initiative, Texas Water Resources Institute grant. PI: S.D. Nelson.

**2005-2014**

**\$3,775,225** On-Farm Demonstration Projects for Conserving Water with Drip Irrigation in the Lower Rio Grande Valley. \$263,071 Subcontract for: Maximization of On-farm Surface Water Use Efficiency by Integration of On-farm Application and District Delivery Systems. Texas Water Development Board grant. PI: W. Halbert (Harlingen Irrigation District), CoPI: S.D. Nelson (TAMUK). Start date: Feb. 2005 through Nov. 2014.

**2005**

**\$ 35,000** Salinity Tolerance of Native Grasses to South Texas. Negotiated funding with USDA-NRCS Kika de la Garza Plant Materials Center for PLSS graduate student assistantship funding for LeeRoy Rock under direction of Dr. Shad Nelson. PI: J. Lloyd-Reiley, CoPI: G.A. Rasmussen, S.D. Nelson. 2005-2007.

**\$ 15,000** Task 4: On Farm Irrigation System Management for Water Savings in Citrus Production. Rio Grand Basin Initiative, Texas Water Resources Institute grant. PI: S.D. Nelson.

**\$ 1,000** Experiential Learning for Undergraduate and Graduate Students Involved in Citrus and Subtropical Fruits, and Horticulture Club Activities. Student Engagement Funds, College of AgNRHS, TAMUK. PI: S.D. Nelson.

**2006**

**\$296,000** Increasing Student Learning and Career Development Through Agricultural and Natural Resources Based Research. Hispanic Serving Institutions grants. USDA/CSREES Award # 2006-38422-17008. PI: S.D. Nelson, Co-PIs: J.Laurenz, R. Stanko, T. McGehee. 2006- 2008.

**\$ 16,500** Task 4: On Farm Irrigation System Management for Citrus Irrigation Management. Rio Grand Basin Initiative, Texas Water Resources Institute grant. PI: S.D. Nelson.

**\$ 500** Hort Club Student Engagement Funds, College of AgNRHS, TAMUK. PI: S.D. Nelson.

**2007**

\$ 30,000	Effects of Water Stress on the Efficacy of Selected Pesticides in Citrus Pest Management. TAMU-Kingsville Research Development Funds, University Research Grant Award. PI: M. Setamou, CoPI: S.D. Nelson. Sept. 1, 2007-Aug. 15, 2008.
\$ 15,000	Task 4: On Farm Irrigation System Management for Citrus Irrigation Management. Rio Grand Basin Initiative, Texas Water Resources Institute grant. PI: S.D. Nelson.
\$ 750	Grant Writers Workshop in Washington, D.C. USDA Travel Grant. PI: S.D. Nelson. 11-07.
\$ 900	Vegetative Propagation of <i>Bambusa malingensis</i> . Texas Bamboo Society. PI: J. Tanner, Co-PI: S.D. Nelson. Aug. 2007.
<u>2008</u>	
\$ 9,000	Experimental Techniques in Animal & Wildlife Sciences. Quality Enhancement Plan grants, Texas A&M University-Kingsville. PI: K. McCuistion, CoPIs: S.D. Nelson, M. Garcia. 2008.
\$ 21,000	Bayer Crop Science. Effects of Water Stress on the Efficacy of Temik and Effectiveness of Selected Bayer Products. PI: M. Setamou, CoPI: S.D. Nelson. April 2008-March 2009.
\$ 30,000	USDA/CSREES Rio Grande Basin Initiative Grant. Effects of Water Deficit Irrigation on the Efficacy of Pesticides in Citrus Pest Management. PI: S.D. Nelson, Co-PI: M. Setamou. June 2008-May 2009.
\$ 7,000	Texas Citrus Producers Board. PI: S.D. Nelson, Co-PI: M. Setamou, H. Esquivel. Sept. 2008-Aug 2009. Approach for a Sustainable Organic System for Organic Farming in the LRGV.
<u>2009</u>	
\$ 20,000	Bayer Crop Science. Field Testing for Awareness of Movento, Envidor, and Temik in Texas Citrus. PI: M. Setamou, CoPI: S.D. Nelson. Feb 2009-Jan 2010.
\$295,000	Experiential Learning and Career Development in Agricultural and Natural Resources. July 2009-June 11. PD: S.D. Nelson CoPDs: R.L. Stanko, K.C.McCuistion. USDA/CSREES HSI Grants.
\$ 28,000	USDA/CSREES RGBI. On-Farm Water Savings Project in South Texas Citrus Production. PI: S.D. Nelson, CoPI: M. Setamou. June 2009-May 2010.
\$ 7,000	Texas Citrus Producers Board. PD: S.D. Nelson CoPD: M. Setamou. Sept. 2009-Aug 2010. Approach for a Sustainable Organic System for Citrus in South Texas.
<u>2010</u>	
\$ 7,500	Experimental Techniques in Animal & Wildlife Sciences, ANSC 4385. P.I.: K. McCuistion, C-PI: S. Nelson, and M. Garcia. Jan 2010-Dec 2010. QEP 2010 Quality Enhancement Plan Grants. TAMU-Kingsville.
\$ 5,000	Impact of Saline Irrigation Water on Citrus Rootstocks in the Lower Rio Grande Valley. PD: S.D. Nelson, CoPD: C.R. Simpson. Mar 2010-Feb 2011. Texas Water Resources Institute graduate research grants. Funding provided by United States Geological Survey.
\$290,000	Developing an Experiential Learning and Career Development Program to Foster and Mentor Students in Agricultural and Natural Resources. Jun 2010-May 2012. PD: R. Hanagriff, CoPD: R.D. Rhoades, C.R. Simpson, K.C. McCuistion, F. Hernandez, S.D. Nelson. USDA-NIFA HSI.
\$ 42,669	USDA-FAS. Proposed Research Program for North African Borlaug Fellows in Irrigation Management and Water Resources. PI: S.D. Nelson, Co-PI: M. Setamou, J. daGraca, J. Enciso. Sept. 2010-Aug. 2011.
\$ 2,300	American Public Gardens Association <i>Travel Grant</i> , June 2010. P.I. S.D. Nelson. American Public Gardens Association Annual Conference, Atlanta, GA. Presentation: Incorporating College Students into a South Texas Public Landscape Horticulture Project. S.D. Nelson, C.R. Simpson, and D.T. Gardiner.
<u>2011</u>	
\$ 12,500	Texas Citrus Producers Board. Micro and Macro Nutrient Impacts at Improving Citrus Health to Combat Key Citrus Pests. P.I. Shad Nelson, Co-PI: M. Setamou, J.C. Melgar. Apr.-Aug. 2011. Project Yr 1 funding.
\$ 40,000	Title V/PPOHA Program proposal. 3D Printing for TAMUK Graduate Students. PD: L. Peel, Co-PIs: S. Ozcelik, H. Zhou, H. Li, K. Jin, F. Heidari, C. Montiel, P. Mills, L. McLauchlan, S. Nelson. 2011.
\$800,000	\$3,200,000 Total Award. USDA-NIFA HSI Collaborative Grants. STEP UP to USDA Career Success: Science, Technology and Environmental Programs for Undergraduate Preparation to

	USDA Career Success. PD: S.D. Nelson(TAMUK Lead), CoPDs: E. Louzada, R. Stanko, D. Ruppert; (DelMar College) J. Halcomb; (STC) Debbie Villalon; (TSTC) A. Duarte; (UTPA) M. Persans. 2011-2015. \$396,000/yr x 4 yrs = \$1,584,000 to TAMUK. \$800K/yr x 4yrs (2011-2015).
\$150,000	\$600,000 Total Award. USDA-NIFA HSI Collaborative Grants. BGREEN: BuildinG Regional Energy and Educational alliances: A Partnership to Integrate Efforts and Collaboration to Shape Tomorrow's Hispanic Sustainable Energy Leaders. PD: (UTEP) H.A. Taboada, J.F. Espirtu, W.Hargrove, S.Hernandez, J. Noveron; (TAMUK) PD: S.D. Nelson, G.Schuster, R.D. Hanagriff; (TSU-San Marcos); (NMSU)T.Jin, L.Sun, R.Richarson D.Valles, H.Sohn,N.Khandan, R.Acharya. 2011-2015. \$150,000/yr x 4 yrs (\$600,000 total) to TAMUK (2011-2015). Total Grant Award Distributed Through UTEP: \$3,200,000 (2011-2015).
\$ 25,000	Texas Citrus Producers Board. Micro and Macro Nutrient Impacts at Improving Citrus Health to Combat Key Citrus Pests. P.I. Shad Nelson, Co-PI: M. Setamou, J.C. Melgar. Sept. 2011 - Aug. 2012. Continued project funding support Yr 2.
\$ 2,000	TAMUK Council for Undergraduate Research (TCUR). TAMUK Oak Tree Survey and Citrus Water Management Projects. P.I. Shad Nelson, Co-PI: Juan D. Vargas. Oct 2011-Aug 2012.
<u>2012</u>	
\$850,000	USDA-NIFA HSI Collaborative Grants. STEP UP to USDA Career Success: Science, Technology and Environmental Programs for Undergraduate Preparation to USDA Career Success. PD: S.D. Nelson(TAMUK Lead), CoPDs: E. Louzada, R. Stanko, D. Ruppert; (DelMar College) J. Halcomb; (STC) Debbie Villalon; (TSTC) A. Duarte; (UTPA) M. Persans. 2012-13.
\$150,000	USDA-NIFA HSI Collaborative Grants. BGREEN: BuildinG Regional Energy and Educational alliances: A Partnership to Integrate Efforts and Collaboration to Shape Tomorrow's Hispanic Sustainable Energy Leaders. PD: (UTEP) H.A. Taboada, J.F. Espirtu, W.Hargrove, S.Hernandez, J. Noveron; (TAMUK) PD: S.D. Nelson, G.Schuster, R.D. Hanagriff; (TSU-San Marcos); (NMSU)T.Jin, L.Sun, R.Richarson D.Valles, H.Sohn, N.Khandan, R.Acharya. 2012-13.
\$136,982	TWDB. Developing and Promoting Water Saving Irrigation Strategies to Increase Water Use Efficiency in Citrus. J.C. Melgar (PD), and S.D. Nelson (Co-PD). (2012-2014).
\$ 71,300	TDA-Crop Specialty Grant Funds. PD: I. Volder, S. King, Co-PD: C. Simpson, J. Franco, S. Nelson. Using Halophytes to Mitigate Salinity in Intercropping of Watermelons. (2012-13).
\$ 14,960	Texas A&M Univ.-Kingsville. Developing Water Saving Irrigation Strategies to Increase Water Use Efficiency in Citrus. J.C. Melgar (PD), M. Setamou, S.D. Nelson and D. Ruppert (Co-PDs). (2012-13).
\$ 10,000	Texas Citrus Producers Board. Integrated Citrus Fertilizer Management Strategies for Calcareous Soils in South Texas. J. Jifon (PD), M. Setamou, J.C. Melgar, J. daGraca, and S.D. Nelson.
\$ 7,200	TAMUK. QEP Proposal. Graduate Students as Mentors of High School Students. J.C. Melgar (PD), E. Louzada, M. Setamou, G. Schuster, and S.D. Nelson.
\$ 3,000	TAMUK. 2012-13 TCUR Proposal. Potential Plant Bioaccumulation of Caffeine in Sandy Soils. S.D. Nelson, M. Dupnik, and C. Hagen. 2012-2013.
<u>2013</u>	
\$ 10,000	Title V/PPOHA Program. Equipment Request that will Enhance the Long Term Sustainability of Agriculture-Based of Graduate Research. G. Schuster, S. Nelson, D. Ruppert, K. McCuistion, S. Lukefahr.
\$232,552	USDA/NRCS 2013 Conservation Innovation Grant. Developing Irrigation Management Strategies Under Drought Conditions in Texas. J. Enciso (PD), and Co-PDs L. Ribera, S.D. Nelson, H. Perea. 2013-2015. USDA-NRCS-NHQ-13-01.
\$825,000	USDA-NIFA HSI Collaborative Grants. STEP UP to USDA Career Success: Science, Technology and Environmental Programs for Undergraduate Preparation to USDA Career Success. PD: S.D. Nelson(TAMUK Lead), CoPDs: (DelMar College) (STC) (TSTC) (UTPA) 2013-14.
\$150,000	USDA-NIFA HSI Collaborative Grants. BGREEN: BuildinG Regional Energy and Educational alliances: A Partnership to Integrate Efforts and Collaboration to Shape Tomorrow's Hispanic Sustainable Energy Leaders. PD: (UTEP) H. Taboada; (TAMUK) PD: S.D. Nelson. 2013-14.
\$279,000	NSF. AGEP-T: Collaborative Research: Advancing Interdisciplinary STEM Graduate Studies in Energy and Sustainability Disciplines. PD: L. Challoo Co-PDs: J. Ren, S. Nelson, R. Challoo, A. Martinez. 2013-2017.

\$ 50,000 Title V/PPOHA Program. Mini-Grant Equipment. High Performance Liquid Chromatography in Graduate Student Research Experiments. S. Nelson, J.C. Melgar, E. Louzada, M. Setamou, D. Ruppert, G. Schuster, and J. da Graca. 2013-14.

## 2014

\$164,000 USDA-NIFA NNF grants. Sustainable Agriculture in Semiarid Areas: an International and Interdisciplinary Approach to Graduate Education. JC Melgar(PD), (Co-PDs) SD Nelson, M. Setamou, E. Louzada, and M. Brewer. (2/14-2/19)

\$ 4,500 Faculty Fellowship to Israel. Media Center International. National Jewish Fund.(5/2014-6/2014).

\$840,000 USDA-NIFA HSI Collaborative Grants. STEP UP to USDA Career Success: Science, Technology and Environmental Programs for Undergraduate Preparation to USDA Career Success. PD: S.D. Nelson(TAMUK Lead), CoPDs: (DelMar College) (STC) (TSTC) (UTPA) 2014-15.

\$150,000 USDA-NIFA HSI Collaborative Grants. BGREEN: BuildinG Regional Energy and Educational alliances: A Partnership to Integrate Efforts and Collaboration to Shape Tomorrow's Hispanic Sustainable Energy Leaders. PD: (UTEP) H. Taboada; (TAMUK) PD: S.D. Nelson. 2014-15.

\$ 5,000 USDA-NRCS. Contribution Agreement between TAMUK and NRCS. PD: S.D. Nelson, and Co-PD: T. Machado, C. Donato.

## 2015

\$200,000 TWDB Ag Water Conservation Grant. Development of a Novel Planting Design and Irrigation Strategy for Water Use Efficiency and Conservation in Citrus. S.D. Nelson (PD), M. Setamou, and C. Simpson. 2/1/15-10/31/20.

\$ 15,000 TAMUK Univ. Research Award Grant. The Impact of Foliar Nutrient Sprays on Asian Citrus Psyllid Development and Population Densities. C. Simpson (PD), S. Nelson, M. Setamou. 9/1/15-6/30/16.

\$361,000 USDA-NIFA HSI Standard Grant. Lead-UT Pan American. TAMUK-Subcontract. Title:STEP UP 2 USDA Research Success: South Texas Excellence Program to Research Success. Lead-UT Pan American R. Gilkerson (PD), M. Persans, et al. TAMUK subcontract: Stanko (PD), Nelson, Machado, Schuster. \$90,250/yr TAMUK; \$1,000,000 total. 9/1/15-8/31/19.

\$440,000 USDA-NIFA HSI Collaborative Grant. Lead-UT El Paso. TAMUK-Subcontract. Title: Wheels of Change: A Consortium to Develop Leaders in Agriculture in the Areas of Sustainable Energy and Natural Resources. Lead-UT El Paso J. Espiritu (PD), H. Taboada, et al. TAMUK subcontract: Nelson (PD), Stanko, Machado, Schuster. \$110K/yr TAMUK; \$2,000,000 total. 9/1/15-8/31/19.

## 2016

\$2,000,000 USDA-NIFA HSI Standard Proposal. START NOW: Student Training in Agricultural Research Techniques by Novel Occupational Workshops. S.D. Nelson (PD), D. Ruppert, G. Schuster, R. Stanko, T. Machado (TAMUK), and 3 4-Yr HSIs: (FIU), (UTEP), (UPRM). 9/1/16-8/31/20.

\$ 220,000 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), R. Stanko, G. Schuster, C. Simpson-; R. Gilkerson (PD)-UTRGV; J. Halcomb (PD)-DMC; J. Landivar-Texas A&M AgriLife. 1,000,000 9/1/16-8/31/20.

\$ 61,600 USDA-NRCS Preparing Underrepresented Students for Careers in NRCS. T. Machado (PD), S. Nelson, and C. Donato. 10/24/16-10/24/17.

\$ 39,998 Borlaug Fellowships Program USDA-Foreign Agricultural Service (FAS). 2016 Fellow #9, Algeria, Climate Change in Citrus Rootstocks. M. Setamou (PD), C. Simpson, S. Nelson. 9/09/2016-12/31/2018.

\$ 40,000 Texas Water Development Board. Lower Rio Grande Valley Irrigation Education and Outreach Program. Collaborative Water Conservation Grant. Subcontract to TAMUK-\$40,000 for CoPDs: S.D. Nelson, C.R. Simpson, (and M. Young, TAES, Corpus). PD: K. Wagner, R. Lacewell (Texas A&M AgriLife-\$150,000 total. 6/1/2016-12/31/2018.

\$ 222,194 NSF-MRI Grant. Acquisition of a Liquid Chromatograph-Inductively-Coupled Plasma-Mass Spectroscopic Instrument (LC-ICP-MS) for Speciation of Metal Ions in the Environment. L.M. Camacho (PD), and (Co-PDs): D. Ramirez, L. Clapp, C. Xiao, and S.D. Nelson. 10/1/16-9/30/19.

## 2017

\$ 504,027 NSF-AGEP grant. Collaborative Research: The Texas A&M System AGEPE Alliance: A Model to Advance Historically Underrepresented Minorities in the STEM Professoriate. TAMU College Station



- (Lead \$2,800,000 total), \$504,027 TAMUK: L. Chaloo(PD) , L. Clapp, R. Chaloo, M. Green, S. Nelson. TAMU System Collaborative Grant. 9/1/17-8/31/22.
- \$ 100,000** **USDA-NRCS Preparing Underrepresented Students for Careers in NRCS.** T. Machado (PD), S. Nelson, and C. Donato. 10/24/17-10/24/18.
- \$ 18,000** **USDA-NIFA NNF grants.** Sustainable Agriculture in Semiarid Areas: an International and Interdisciplinary Approach to Graduate Education. SD Nelson (PD), Catherine Simpson(Co-PDs), M. Setamou, E. Louzada, and M. Brewer. (2/14-2/19)
- 2018**
- \$ 175,000** **USDA-NIFA Post-Doctoral Fellows grants.** START ACTING: Student Track & Awareness in Relation to Agriculture Careers, Transition between Institutions & Novel Gain. M.C. Donato (PD), S.D. Nelson (Co-PD). (6/18-5/21).
- \$ 155,000** **USDA-NRCS.** Provide NRCS Educational Tours, Internships and Career Opportunities for Hispanic and Other Students. T. Machado (PD), S.D. Nelson, M.C. Donato, R. Stanko, D. Sotomayor (UPRM). 9/1/2018-07/01/2020.
- 2019**
- \$ 150,000** **USDA-NRCS.** Provide NRCS Educational Tours, Internships and Career Opportunities for Hispanic and Other Students. T. Machado (PD), S.D. Nelson, M.C. Donato, R. Stanko, D. Sotomayor (UPRM). 9/1/2019-07/01/2021
- \$2 million** **NSF-CREST Center for Sustainable Water Use.** Collaborative Grant. TAMUK Colleges of ENG & AGNR: M. Hosur (PD lead-ENG); S. Nelson (Co-PD lead AG), L. Clapp, T. Sinha, B. Turner, S. Ozcelik, C. Simpson, V. Ancona, and G. Schuster. 9/1/19-8/31/24. (years 1&2)
- 2020**
- \$275,000** **USDA-NIFA HSI Regular Project. AgriCULTURE:** Agriculture Connections to USDA: Lifestyle and Training of Undergraduates thru Real World Experiences in Puerto Rico. PD: M. Velez-Hernandez, Co-PDs: T. Machado, S Nelson, Schuster. 9/1/20-8/31/24.
- 2021**
- \$150,000** **USDA-NRCS.** Natural Resource Career Development Program and NRCS Educational Tours. T. Machado (PD), M.C. Donato, R. Stanko, and S.D. Nelson. 9/1/2021-07/01/2023
- \$200,000** **USDA Multicultural Scholars Pre-Vet Experiential Agriculture Learning (M-SPEAL).** PD: T. Machado, Co-PDs: C. Donato, M. Garcia, J. Apple, S. Nelson. 9/1/21-8/31/24.
- \$975,314** **USDA-NIFA HSI collaborative grant program. GO START NOW.** TAMUK lead, FIU and UPRM. PD: R. Stanko, CoPDs: S. Nelson, S. Chumbley, M. Consuelo Donato, T. Machado, A. Bhandari, G. Schuster, K. Jayachandran (FIU), D. Sotomayor (UPRM), et. al. 9/1/21-8/31/25.
- \$1 million** **NSF-CREST Center for Sustainable Water Use.** Collaborative Grant. TAMUK Colleges of ENG & AGNR: M. Hosur (PD lead-ENG); S. Nelson (Co-PD lead AG), L. Clapp, T. Sinha, B. Turner, S. Ozcelik, V. Ancona, and G. Schuster. 9/1/21-8/31/24. (year 3)
- 2022**
- \$150,000** **USDA-NRCS.** Natural Resource Career Development Program and NRCS Tour. PD: T. Machado, R. Stanko, C. Donato, and S.Nelson. 9/01/22-8/31/24.
- \$1 million** **NSF-CREST Center for Sustainable Water Use.** Collaborative Grant. TAMUK Colleges of ENG & AGNR: M. Hosur (PD lead-ENG); S. Nelson (Co-PD lead AG), L. Clapp, T. Sinha, B. Turner, S. Ozcelik, V. Ancona, and G. Schuster. 9/1/22-8/31/25. (year 4).
- \$ 34,250** **Partners of the Americas Foundation** (in collaboration with the Bureau of Western Hemisphere Affairs of the U.S. Department of State-WHA/DOS). Data Analysis and Entrepreneurship: A Binational (U.S. – Brazil) Faculty and Student Exchange Program. J. Espiritu (PD Lead), C. Donato, F.O. Aguirre, H.A. Taboada, and S.D. Nelson.
- \$950,000** **USDA-NIFA.** Manager Education and Agriculture Technical Skills (MEATS) Workforce. T. Machado (PD), J. Apple, and S.D. Nelson.
- 2023**
- \$1 million** **NSF-CREST Center for Sustainable Water Use.** Collaborative Grant. TAMUK Colleges of ENG & AGNR: M. Hosur (PD lead-ENG); S. Nelson (Co-PD lead AG), L. Clapp, T. Sinha, B. Turner, S. Ozcelik, V. Ancona, and G. Schuster. 9/1/22-8/31/25. (year 5).

**PROFESSIONAL ADDRESSES** (Chronological Order)

Vita: Shad D. Nelson

- Dec 2024 **S.D. Nelson**, R.L. Stanko, C. Donato-Molina, T. Machado, S. Chumbley, D. Sotomayor, K. Jayachandran, and M. Bhat. Getting occupational student training in agricultural research through novel workshops. Panel: *Investing in Equity & Agriculture: USDA-funded Collaborations at Hispanic-Serving Institutions*. A Community on Ecosystem Services (ACES) Conference. Austin, TX. Dec. 9-12, 2024 (Invited).
- Sept 2024 **S.D. Nelson**, D. DeLeon, E. Zamora, A. Zaragoza, M. Setamou and J. Cabrera. Soil amendment strategies to rehabilitate freeze damaged citrus trees for sustainable crop production. American Society of Horticultural Science, Honolulu, HI, Sept 23-27, 2024.
- July 2024 **S.D. Nelson** (TAMUK), A. Anderson (WTAMU), M. Abelrahman (TAMUSA), S. Gibson (TAMU), T. Vacha-Haase (TAMUC). New Academic Leader Training: Deans and Provosts Panel. Texas A&M University System. K. Rynearson (TAMU System host). Invited Panelists to address new Dept Chairs and Heads. Online: July 25, 2024.
- June 2024 **S.D. Nelson**, D. DeLeon, A. Zaragoza, E. Zamora, M. Setamou and J. Cabrera. Under canopy compost application for water management to encourage yield rebound in freeze damaged grapefruit trees. NSF CREST-Center for Sustainable Water Use. Virtual Workshop & External Advisory Committee Meeting, Kingsville, TX, June 20, 2024.
- Nov 2023 **S.D. Nelson**. The Impact of One Dirtologist: Inspiring Generations of Soils Enthusiasts and Scientists. Key Note Speaker Address. Plant and Wildlife Science Emeritus Faculty Lecture, Brigham Young University, Provo, UT. Nov. 16, 2023. **(Invited)**
- Sept 2023 M.Setamou, S.Nelson, and A. Satpute. Water Saving Strategies for Sustainable Grove Management in Texas. Texas Water Development Board meeting. Weslaco, TX Sept 12, 2023.
- Feb 2023 **S.D. Nelson**. Incorporation of Applied Agricultural Practices for Enhanced Mental Wellness. Rural Mental Health Conference. Kingsville, TX. Feb 23-24, 2023. **(Invited)**
- Oct 2022 **S.D. Nelson**, M. Setamou, and C.F. Williams. Preparing for Water Reuse in South Texas Perennial Crop Production. Oct. 23-27, 2022. Kibbutz Hagoshrim, Israel. treWAG2022 Conference: Understanding and mitigating effects of treated wastewater reuse in agriculture: From risks to policy and new opportunities. **(Invited)**
- Apr 2022 **S.D. Nelson**, S. Ozcelik, D. De Leon, E. Zamora, and E. Morgan. CREST-Center for Sustainable Water Use. Virtual Workshop & External Advisory Committee Meeting. Kingsville, TX. April 21, 2022. Soil moisture management and monitoring in citrus and pepper crops in south Texas.
- Apr 2022 **S.D. Nelson**, R. Stanko, T. Machado, and M.C. Donato. 27<sup>th</sup> Annual National Capitol Forum on Hispanic Higher Education. Virtual Event. April 4-6, 2022. Empowering Hispanic Students in Higher Education and Career Choice through HSI and USDA Collaborations.
- Sept 2020 **S.D. Nelson**. Sustainable Water Use and Citrus Crop Productivity Virtual Workshop. Kingsville, TX. Sept. 17, 2020. Virtual Field Day and Workshop coordinator. Saving Water in Raised Bed and Border Flood Citrus Production. (S.D. Nelson organized and led virtual workshop)
- Aug 2020 ASHS Annual Meeting, Orlando, FL. Aug 13, 2020. **S.D. Nelson** and M.C. Donato. Impact of International Workshops for Increasing Students in Horticulture. Virtual Presentation and Panel.
- Nov 2019 ASA-SSSA-CSSA Annual Conference, San Antonio, TX. Nov. 10-13, 2019.
- S.D. Nelson**, S. Cardenas, J. Trevino, G. Schuster, D. Sotomayor, K. Jayachandran, J. Espiritu. Utilizing Multi-Institutional Soils Educational Workshops and Soil Judging as a Means of Increasing Diversity in Soil Sciences. Oral Presentation-SSSA division: soil education & outreach.
- Aug 2019 **S.D. Nelson**, Horticulture for Human Health & Healing. S. Bain, et. al., Roundtable: Tackling Isolation and Fostering Connections. Remote Communities Conference. Inverness, Scotland. Aug 12, 2019. **(Invited)**
- Jun 2019 Universities Council on Water Resources (UCOWR) and National Institutes of Water Resources (NIWR), 2019 Annual Water Resources Conference. Snowbird, UT June 11-13, 2019.
- S.D. Nelson**, C.F. Williams, C. Ray. Stakeholder Engagement in Answering to Water Quality and Quantity Problems. Panel Discussion **(Invited)**.
- Jan 2019 2019 Soil Science Society of American Conference, San Diego, CA Jan 6-9. **S. D. Nelson**, Moderator. General Oral Sessions I and II: Soil and Water Management and Conservation. START NOW: An Interdisciplinary Summer Internship Program to Enhance Student Involvement in Soil, Environmental and Crop Sciences. D. Sotomayor, B. Alvarez, S. Nelson, K. Jayachandran. Soil Education and Outreach (Poster) Jan 8, 4-6pm.

- Dec 2018 2<sup>nd</sup> Annual National Center for Appropriate Technology (NCAT), 2018 Hispanic Farmer and Rancher Conference. McAllen, TX Dec 6-7, 2018. **S.D. Nelson**. Functional Solutions in Water Conservation (**Invited**).
- Sept 2018 Hispanic Heritage Month at USDA-NIFA, HSI grant via WebEx Presentations. Sept 27, 2018. **S.D. Nelson**, R. Stanko and T. Machado. Advancing Student Career Opportunities through HSI & USDA Collaborations. (**Invited**)
- Aug 2018 SIWI World Water Week, Stockholm, Sweden. Aug 26-31, 2018. **S.D. Nelson**. Panel Discussion: Agriculture, Freshwater Quality, and Public Health: Tying It All Together. Border-related water challenges for agriculture between South Texas and Mexico, and freshwater quality and quantity near the Gulf of Mexico. (**Invited**)
- Feb 2018 Subtropical Ag and Environment Society Annual Meeting. Rio Farms, Inc. Feb. 9., 2018. **S.D. Nelson**. Advancing Student Learning Opportunities in the Agricultural and Biological Sciences through Hispanic Serving Institutional Collaborations. (**Invited**)
- Jan 2018 Prairie View A&M University College of Agriculture Research Seminar Series. Jan. 25, 2018. **S.D. Nelson**. Water Savings and Crop Production Impacts from a 10 Year On-Farm Demonstration Project with Citrus Producers (**Invited**).
- Sept 2017 ASHS Annual Conference, Wiakoloa, HI. Sept 19-22, 2017. **S.D. Nelson**, C.R. Simpson, J. Gonzalez III, S. Telagamsetty, and M. Setamou. Adoption of a New Orchard Planting Design as an Integrated On-Farm Management Approach Strategy to Improve Citrus Production in South Texas.
- Sept 2017 2017 International Conference: Cutting-Edge Solutions to Wicked Water Problems. American Water Resources Association, Water Research Center-Tel Aviv University. Tel Aviv, Israel. Sept 10-11, 2017.
1. **S.D. Nelson**, C.R. Simpson, M. Setamou, B. Turner, J. Gonzales III, and S. Telagamsetty. Alternative on-farm orchard designs in citrus irrigation management that improve water savings for flood and drip irrigation systems.
  2. B. Turner, S. Nelson. Improving rangeland management models with ecohydrology connectivity.
- May 2017 Water Conservation in Citrus workshop and field day, May 17, 2017.
1. **S.D. Nelson**, M. Young, C. Simpson. Impacts of Narrow Border Flood Irrigation to Improve for Saving Water Resources in Citrus Production. (**Invited**)
  2. M. Young and **S.D. Nelson**. Economics of Water Technologies in Citrus in the LRGV.
  3. C. Simpson, **S.D. Nelson**, M. Setamou. Raised Beds and Plastic Mesh Cover for Water Savings.
- Apr 2016 30<sup>th</sup> Anniversary BioCycle WestCoast16 Conference. San Diego, CA, April 4-7, 2016 **S.D. Nelson**, M. Setamou, A. Kusakabe, and C. Simpson. Using Compost to Enhance Citrus Tree Health to Combat Drought Stress and Greening Disease. (**Invited**).
- Dec 2015 Water Workshop and Forum, Santa Cruz Irrigation District #15 in partnership with TAMUK & Texas Dept of Agriculture. Weslaco, TX Dec. 9, 2015. **S.D. Nelson**. Strategies for Water Conservation: Overcoming the 'Hydro-illogical Cycle'. (**Invited**).
- Oct 2015 Texas Ag Industries Association, South Texas Regional Meeting, Kingsville, TX Oct 1, 2015. **S.D. Nelson**, C. Simpson, and M. Young. On-Farm Orchard Management Strategies the Improve Water Sustainability & Economic Profitability for South Texas. (**Invited**).
- Aug 2015 ASHS Annual Conference, New Orleans, LA. Aug 4-7, 2015. **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. (**Invited**).
- May 2015 LRGV 17<sup>th</sup> Annual Water Quality Management & Planning Conference. South Padre Island, TX. May 19-23, 2015.
1. **S.D. Nelson**, M. Young, J. Enciso, and T. McLemore. Irrigation Management Practices in Citrus Groves for Advancing Sustainable Water Supplies for South Texas. (**Invited**).
  2. T. McLemore. Provided by **S.D. Nelson**, M. Young, and J. Enciso. Texas Agricultural Water Efficiency (AWE)-From River to Farm. (**Invited**).
- Aug 2014 29<sup>th</sup> International Horticultural Congress, Brisbane, Australia. Aug. 17-22, 2014. **S.D. Nelson**, B.A. Contreras-Barragan, A. Kusakabe, and J.C. Melgar. Efficient use of partial rootzone-drying in citrus in semiarid areas.

Jan	2014	Albion Minerals Annual Conference. Park City, UT. Jan. 13-16, 2014. Nelson, S.D., M. Setamou, D. Garza, J. Melgoza, and M. Esparza. Nutritional Metalosate® supplements with calcium that reduce pest pressure in citrus production. <b>(Invited)</b> .
Jan	2014	USDA-NIFA HSI PDs Annual Meeting. Washington, DC. Jan. 8-9, 2014. Nelson, S.D., T. Machado, and R. Stanko. STEP UP to USDA Career Success. Poster.
Nov	2013	ASA-CSSA-SSSA Annual Meeting. Tampa, FL. Nov. 3-6, 2013. Nelson, S.D., M. Setamou, D. Garza and M. Esparza. Reduction in Psyllid Populations Using Supplemental Calcium to Trees Grown in High Calcareous Soils.
Sept	2013	Texas Ag Industry Association Meeting. Kingsville, TX. Sept. 19, 2013. Nelson, S.D. <b>(Invited)</b> . Improving Soil Fertility through the Use of Compost Application in Texas Citrus Production.
Aug	2013	Center for Education and Training in Agricultural and Related Sciences (CETARS) Symposium. Mayaguez, Puerto Rico. Aug. 10-14, 2013. Nelson, S.D., R.L. Stanko, G. Schuster, and T. Machado. STEP UP to USDA Career Success: A Bridge Model for 2-Yr and 4-Yr HSI Institutions. <b>(Invited)</b> .
Jun	2013	NACTA Conference. Blacksburg, VA. June 25-29, 2013. Providing Underrepresented Agriculture Students a STEP UP to USDA Career Success. S.D. Nelson, R. Stanko, T. Machado, and G. Schuster.
Apr	2013	Rio Grande Basin Initiative Meeting. San Antonio, TX. April 16, 2013. Proven Irrigation Strategies that Improve Water Conservation in Citrus. S.D. Nelson, J. Enciso, and M. Young
Apr	2013	Texas Citrus Showcase. Weslaco, TX. April 4, 2013. Water Conservation Techniques for Citrus: Narrow Borders. S.D. Nelson. <b>(Invited)</b>
Mar	2013	Texas A&M AgriLife Research, Spring Seminar Series. Crop & Water Management Strategies for Sustaining Citrus Production in South Texas. S.D. Nelson. Corpus Christi, TX. Mar. 4, 2013. <b>(Invited)</b>
Feb	2013	73rd Annual Meeting of the Southern Region American Society for Horticultural Science, Orlando, FL. S.D. Nelson, J. Enciso, H. Perea, L. Beniken, M. Setamou, M. Young, and C.F. Williams. Alternative flood irrigation strategies that improve water conservation in citrus production. Feb. 2-5, 2013.
Jan	2013	On-Farm Irrigation Advances for Producers. Tools, Techniques & Technology for Producers 2013 Workshop Series. S.D. Nelson. Soil water sensors and irrigation scheduling. Harlingen, TX. Jan. 24, 2013. <b>(Invited)</b>
Jan	2013	5 <sup>th</sup> International Symposium on Human Health Effects of Fruits and Vegetables (FAV Health), Dharwad, India. S.D. Nelson, M. Setamou, D.E. Garza, J. Melgoza and M. Esparza. Nutritional supplements that fortuitously reduce pest pressure for sustainable citrus production and quality. Jan. 7-11, 2013. <b>(Invited)</b>
Oct	2012	USDA/NIFA HSI Project Directors Conference, Washington, D.C. <b>(Invited)</b> Outcomes and Impacts of Year 1, STEP UP to USDA Career Success. Nelson, S.D., R. Stanko, T. Machado, G. Schuster, M. Persans, D. Villalon, A. Duarte, and J. Halcomb.
Aug	2012	American Society of Horticultural Science Annual Conference, Miami, FL <b>(Invited)</b> S.D. Nelson, M. Young, D.E. Garza, M. Esparza, M. Setamou. Potential Benefits of Supplemental Calcium Additions for Sustaining Citrus Production and Quality. Workshop: 'Tropical Fruits and Vegetables: Impact on the US Economy, Quality, Health and Food Safety'.
May	2012	2012 Project Directors' Conference. USDA Hispanic-Serving Institutions Education Grants Program. Edinburg, TX. STEP UP to USDA Career Success. Nelson, S.D., R. Stanko, T. Machado, G. Schuster, M. Persans, D. Villalon, A. Duarte, and J. Halcomb.
Apr	2012	Horticulture Dept. Graduate Seminar, College Station, TX. <b>(Invited)</b> Irrigation and Nutrient Management Strategies for Preserving Citrus in the LRGV.
Mar	2012	Texas A&M University Student Research Week. March 20-23, 2012 The Effects of Grafting on Citrus Salinity Tolerance. Oral Presentation. Simpson, C.R., Volder, A., Nelson, S.D., Schuster, G., Melgar, J.C., Jifon, J., and King, S.
Jan	2012	Soil & Crop Dept. Graduate Seminar, College Station, TX. <b>(Invited)</b> Soil and Water Management Strategies in Citrus Production.
Jan	2012	2012 W-2082 Annual Meeting, Weslaco, TX

- Irrigation Management Impacts on Agricultural Chemical Movements in Soil. S.D. Nelson
- Dec 2011 2011 2<sup>nd</sup> Annual Texas Irrigation Expo, McAllen, TX. **(Invited)**  
Citrus Irrigation Management Strategies for Saving Water. S.D. Nelson  
Posters:  
*Garcia, L.*, and S. Nelson. Nutrient Load Trends in Six Kleberg County Texas Streams. 2<sup>nd</sup> Annual Texas Irrigation Expo, McAllen, TX. Dec 8-9, 2011. (1<sup>st</sup> place undergraduate winner)  
*Melgoza, F.*, Kusakabe, A., Melgar, J.C., and Nelson, S.D. Absciscic Acid Increases Cold Tolerance in Citrus. (1<sup>st</sup> place Graduate winner)  
*Gomez, M.*, C. Simpson, S. Nelson, A. Volder, S. King, J. Melgar, and G. Schuster. Salinity Impacts on Growth and Physiology of Grafted and Non-Grafted Citrus Trees. (2<sup>nd</sup> place graduate winner)
- Sept 2011 American Society of Horticultural Science Annual Conference, Waikoloa, HI.  
Relating On-Farm Level Irrigation Water Use to 'Rio Red' Grapefruit Pack-Out  
S.D. Nelson, M. Young and J. Enciso
- June 2011 NACTA 2011 Annual Conference, Alberta, Canada  
The Power of Experiential Learning and Mentoring to Increased Underserved Minority Undergraduate Students into Graduate School.  
S.D. Nelson, K. McCuiston, R. Stanko, and E. Louzada
- Apr 2011 Texas Citrus Showcase, McAllen, TX **(Invited)**  
Citrus Tree Nutrition. S.D. Nelson, M. Young, M. Setamou, J. Sauls.
- Feb 2011 71<sup>st</sup> Annual Meeting of the Southern Region of ASHS, Corpus Christi, TX.  
Water Use Efficiency and Water Savings in South Texas Grapefruit Production  
S.D. Nelson, J. Enciso, X. Peries and M. Young  
Engaging Underserved Undergraduate Student Populations through Experiential Learning for Careers in the Horticultural Sciences. S.D. Nelson and M. Setamou.
- Jan 2011 MRP Project W-2082 Annual Meeting, Honolulu, HI.  
Potential Impact of Agricultural Chemical Fate in Subtropical Agricultural Systems.  
S.D. Nelson, M. Romero, R.R. Hinojosa and M. Setamou
- Nov 2010 Annual ASA-CSSA-SSSA Conference, Long Beach, CA.  
Implications of Sugarcane Harvesting Methods on Atrazine Movement.  
S.D. Nelson, M. Romero, M. Setamou, and G. Schuster.
- Oct 2010 1<sup>st</sup> Annual Texas Irrigation Expo, Mercedes, TX.  
On-Farm Water Conservation Strategies in Citrus Production for the LRGV.  
S.D. Nelson, M. Young, J. Enciso, X. Peries. Oral and  
3 Poster presentations, and guide for citrus and vegetable farm tour.  
a. Evaluation of Compost Use in Rio Red Grapefruit Production.  
b. Water savings and Irrigation Use Efficiency in South Texas Grapefruit Production.  
c. Assessing Irrigation Methods Based on Grapefruit Pack-Out in the Lower Rio Grande Valley.
- June 2010 American Public Gardens Association Annual Conference, Atlanta, GA  
Incorporating College Students into a South Texas Public Landscape Horticulture Project  
**Invited**, S.D. Nelson, C.R. Simpson, and D.T. Gardiner.
- May 2010 2010 Annual Rio Grande Basin Initiative Conference, Alpine, TX.  
Project Overview in On-Farm Water Conservation in South Texas.  
S.D. Nelson, J. Enciso J. Jifon, D. Roland, and D. Leskovar.  
**(Invited)**, Dr. Nelson serving as RGBI Task 4 Project Coordinator for Texas).
- Apr 2010 Annual Consortium for Irrigation Research and Education (CIRE) Conference, Weslaco, TX.  
'Master's Project Overview in Water Conservation and Management.' S.D. Nelson, R.R. Hinojosa, and M. Romero. **(Host)**; Dr. Nelson serving as CIRE Chairman elect for 2009-10).
- Nov 2009 USDA/NIFA HSI Education Grants Program Grantees' Conference, Washington D.C.  
Experiential Learning and Career Development in Agricultural and Natural Resources.  
S.D. Nelson, K. McCuiston and R.L. Stanko.
- Oct 2009 5<sup>th</sup> International Symposium on Seed and Seedling Establishment and Transplants. Murcia, Spain.  
Flowering Native Plants Able to Withstand Elevated Abiotic Salt Stress.  
S.D. Nelson, L. Rock, J. Lloyd-Rielley.
- Aug 2009 2009 Annual Rio Grande Basin Initiative Conference, McAllen, TX.  
On-Farm Water Conservation and Management in South Texas.

- S.D. Nelson, D. Roland, D. Leskovar, J. Jifon, B. Wiedenfeld, and J. Enciso.  
(**Invited**, Dr. Nelson serving as RGBI Task 4 Project Coordinator for Texas).
- May 2009 Annual Consortium for Irrigation Research and Education (CIRE) Conference, Amarillo, TX. 'Overview of Agricultural Water Conservation Demonstration Initiative (ADI) Projects in the Lower Rio Grande Valley.' S.D. Nelson, T. McLemore, J. Enciso, X. Peries, M. Young, S. Klose. (**Invited**; Dr. Nelson serving as CIRE Chairman elect for 2009-10).
- May 2009 National Cooperative Soil Survey Conference 2009, Las Cruces, NM. 'Beyond State Borders: Increasing Student Career Development Through Experiential Learning and Research.' S.D. Nelson. (**Invited**)
- Jan. 2009 Annual Meeting of the Multistate Research Project, W-1082, Riverside, CA. 'Evaluating the Physical and Biological Availability of Pesticides and Pharmaceuticals in Agricultural Contexts.' Monitoring Pesticide Fate and Movement in Soils in the LRGV. S.D. Nelson. (**Invited**)
- Oct. 2008 11<sup>th</sup> International Citrus Congress. Wuhan, China  
Using Alternative Irrigation and Water Monitoring Technologies for Improving On-Farm Water Conservation in South Texas Citrus Production.  
S.D. Nelson, H. Esquivel, R. Uckoo, X. Peries and J. Enciso.
- Nov. 2007 ASA-CSSA-SSSA Annual Meetings, New Orleans, LA.  
Promoting Water Conservation Practices throughout the LRGV of Texas.  
S.D. Nelson, R.M. Uckoo, H. Esquivel, and J.M. Enciso.
- Oct. 2007 USDA/CSREES HSI Education Grants Program Grantees' Conference, Washington D.C.  
Increasing Student Learning and Career Development through Agricultural and Natural Resources Based Research. S.D. Nelson, R.L. Stanko, J.C. Laurenz and T.L. McGehee.  
<http://www.csrees.usda.gov/nea/education/pdfs/2006-38422-17080.pdf> (**Invited**)
- May 2007 Annual Rio Grande Basin Initiative Meeting, South Padre Island, TX.  
Agricultural Demonstration Water Conservation Initiative for the LRGV of Texas.  
H. Esquivel and S.D. Nelson
- Nov. 2006 ASA-CSSA-SSSA Annual Meetings, Indianapolis, IN.  
Seed and Seedling Salinity Tolerance of South Texas Native Plants.  
S.D. Nelson, L. Rock, and J.L. Reilley.
- Oct. 2006 Texas Vegetation Management Association Annual Conference, Kerrville, TX.  
Salt Tolerance of Plants for South Texas Revegetation Programs.  
S.D. Nelson, R. Uckoo, J. Shantidas, and J. Enciso. (**Invited**)
- Apr. 2006 USDA/CSREES HSI 2006 Proposal Reviewers Panel, Washington, D.C. *Invited*.  
Experiential Learning as a Means of Increasing Student Recruitment and Retention.  
S.D. Nelson. (**Invited**)
- Nov. 2005 ASA-CSSA-SSSA Annual Meetings, Salt Lake City, UT.  
On-Farm Water Conservation Strategies in South Texas Citrus Production.  
S.D. Nelson, R. Uckoo, J. Shantidas, and J. Enciso.
- Nov. 2005 ASA-CSSA-SSSA Annual Meetings, Salt Lake City, UT.  
Vapam and K-Pam Fate and Movement Under Varying Soil Properties  
S.D. Nelson and C.R. Simpson.
- Mar. 2005 USDA CSREES/SERD Project Directors' Conference, New Orleans, LO *Invited*.  
Teaching and Mentoring Students Through Experiential Learning Opportunities for Careers in Science. S.D. Nelson. (**Invited**)
- Nov. 2004 ASA-CSSA-SSSA Annual Meetings, Seattle, WA.  
Minimizing soil fumigant off gassing by using a soil surface water seal.  
S.D. Nelson, J.E. Stratmann, H.A. Ajwa, and C.R. Simpson.
- Nov. 2003 ASA-CSSA-SSSA Annual Meetings, Denver, CO.  
Environmental implications of a new organic-based fertilizer source.  
S.D. Nelson, R. Munguia, and L. Rock.
- Aug. 2003 Dept. of Agronomy and Agricultural Engineering, Tec of Monterrey, Monterrey, Mexico.  
Fate and transport of chemicals in soil systems. S.D. Nelson. (**Invited**)
- Jan. 2003 Environmental Science Graduate/Undergraduate Seminar, BYU, Provo, UT. (**Invited**)  
Alternatives to Methyl Bromide: Drip Fumigation. S.D. Nelson and H.A. Ajwa.
- Dec. 2002 Biochemistry Faculty Alumni Seminar, Brigham Young University, Provo, UT. (**Invited**)



- Nov. 2002 Drip Fumigation as an alternative to Methyl Bromide. S.D. Nelson  
ASA-CSSA-SSSA Annual Meetings, Indianapolis, IN.  
Soil-Gas Phase Distribution of Metam-Sodium Under Drip Fumigation. **(Invited)**  
S.D. Nelson, H.A. Ajwa and M. Schutter.
- June 2002 USDA-ARS Field Day, Salinas, CA. **(Invited)**  
Strawberry Response to Alternative Chemicals Applied by Drip Fumigation and Shank.  
H.A. Ajwa, C. Winterbottom, M. Schutter, T. Trout, S.D. Nelson, and M. Hoque.
- Nov. 2001 Annual International Research Conference on Methyl Bromide Alternatives and Emissions  
Reductions, San Diego, CA. Invited.  
Physico-chemical properties of chloropicrin with various surfactants.  
S. D. Nelson and H. A. Ajwa.
- Oct. 2001 ASA-CSSA-SSSA Annual Meetings, Charlotte, N.C. **(Invited)**  
Physicochemical properties of chloropicrin in various surfactants. S. D. Nelson and H. Ajwa.
- Mar. 2001 Strawberry Commission Conference, Oxnard, CA. *Invited*.  
Water and Fumigant Distribution in Soil Under Drip Fumigation.  
S.D. Nelson, H. A. Ajwa, T. Trout, and M. Schutter.
- Mar. 2001 Strawberry Commission Conference, Irvine, CA. Invited.  
Growth and Yield of Strawberries Under Drip Fumigation.  
S.D. Nelson, H. A. Ajwa, T. Trout, and M. Schutter.
- Nov. 1999 ASA-CSSA-SSSA Annual Meetings, Salt Lake City, UT.  
Soil Flooding and Alternative Chemical Replacements for Methyl Bromide.  
S.D. Nelson, S.J. Locascio, L. H. Allen, Jr., D.W. Dickson, and D.J. Mitchell.
- Sept. 1999 Soil and Crop Science Society of Florida, Sarasota, FL.  
Can Virtually Impermeable Films Reduce the Amount of Fumigant Required for Nematode  
and Weed Control? S.D. Nelson, L. Allen, Jr., S. Locascio, D. Dickson, and D. Mitchell.
- May 1999 American Society of Plasticulture, Tallahassee, FL.  
Methyl Bromide Emissions Reduction: Potential for Barrier Films, Catalysts, Reactants,  
Absorbents, and Bacterial Metabolism. S. D. Nelson and L. H. Allen, Jr.
- Oct. 1998 ASA-CSSA-SSSA Annual Meetings, Baltimore, MD.  
Transport of Napropamide by Dissolved Organic Matter in Soil Columns.  
S. D. Nelson, J. Letey, W. J. Farmer, and C. F. Williams.
- Oct. 1997 ASA-CSSA-SSSA Annual Meetings, Anaheim, CA.  
Under Estimation of Herbicide Transport by Batch Equilibria.  
S. D. Nelson, J. Letey, W. J. Farmer, and C. F. Williams.
- Jan. 1997 California Plant and Soil Conference. Visalia, CA. Invited.  
Facilitated Transport of Devrinol® by Dissolved Organic Matter through Soil Columns.  
S. D. Nelson, C. F. Williams, J. Letey, and W. J. Farmer.
- Nov. 1996 ASA-CSSA-SSSA Annual Meetings, Indianapolis, IN.  
The Role of Dissolved Organic Matter from Sewage Sludge on Facilitating Napropamide  
Transport through Soil. S. D. Nelson, J. Letey, W. J. Farmer, and C. F. Williams.
- Nov. 1994 ASA-CSSA-SSSA Annual Meetings, Seattle, WA. S.D. Nelson, and R.E.Terry.  
The Effects of Soil Physical Properties and Irrigation Method on Denitrification.
- Aug. 1994 AAAS Annual Meetings, Western Region. San Francisco, CA. S.D. Nelson, and R.E.Terry.  
The Role of Soil Physical Properties and Irrigation on Denitrification.

#### **PRESENTATIONS / PUBLISHED ABSTRACTS (Chronological Order)**

1. Subtropical Agriculture and Environmental Sciences Annual Meeting, McAllen, TX. Feb. 27-28, 2025.
  - a. Zaragoza, A.L., S. Nelson, S. Dattamudi, and B. Turner. *Sorghum bicolor* growth as affected by varying rates of cattle paunch application: a greenhouse study. Poster
2. Soil Survey and Land Management Workshop. College Station, TX. Feb. 5-6, 2025.
  - a. Zaragoza, A.L., S. Nelson, S. Dattamudi, and B. Turner. Variable application rates of slaughterhouse by-product waste on grain sorghum (*Sorghum bicolor*) growth. Poster
3. Southern Region American Society of Agronomy, Irving, TX. Feb. 2-4, 2025
  - a. Zaragoza, A.L., S. Nelson, S. Dattamudi, and B. Turner. Variable application rates of slaughterhouse by-product waste on grain sorghum (*Sorghum bicolor*) growth. Poster
4. Leading Hispanics Annual Conference, Mayaguez, Puerto Rico. Nov. 13-16, 2024

Updated (Sept 2024)

- a. Zaragoza, A.L., S. Dattamudi, D. Parker, B. Turner, S. Nelson and G. Schuster. Soil and water conservation under cattle paunch application to improve soil physiochemical properties in south Texas. Poster
5. ASA-SSSA-CSSA Annual Conference, San Antonio, TX. Nov 10-11, 2024
  - a. Zaragoza, A.L., S. Dattamudi, D. Parker, B. Turner, S. Nelson and G. Schuster. Soil and water conservation under cattle paunch application to improve soil physiochemical properties in south Texas. Poster
  - b. Tanguma, K.M., H.L. Perotto-Baldivieso, M.C. Donato, A. Falk, D. Tolleson, and S. Nelson. The impact of soil moisture on reflectance values from very high fine scale remote sensing imagery.
  - c. Zamora, E., S. Dattamudi, J. Foster, D. Sanyal, G. Schuster, and J. McGinty. Effect of cover crop mixtures and tillage practices on soil health and agricultural sustainability in a long term research field.
  - d. Zaragoza, A.L., S. Dattamudi, D. Parker, B. Turner, S. Nelson and G. Schuster. Cattle paunch can pack a punch! Rapid Oral Presentation.
6. American Society of Horticultural Science, Honolulu, HI, Sept 23-27, 2024.
  - a. Nelson, S.D., D. DeLeon, and M. Setamou. Impacts of compost amendment to rehabilitate citrus trees health and sustain yield after freeze damage.
7. NSF-CREST Sustainable Water Use External Advisory & Annual Meeting, Kingsville, TX, June 17 & 20, 2024
  - a. Zaragoza, A.L., S. Dattamudi, D. Parker, B. Turner, S. Nelson and G. Schuster. The short-term effects of composted cattle paunch on soil properties in south Texas.
  - b. Ozcelik, S., S. Nelson, J. Cantu, J. Martinez, and M. Tran. Remote Soil Monitoring. Effect of organic biostimulant on seashore paspalum (*Paspalum vaginatum*).
  - c. Anoruo, A.O., M.L. Meagher, B.L. Turner, P.W. Holland, S.D. Nelson, and M.C. Donato-Molina.
  - d. Perotto-Baldivieso, H.L., Tanguma, K.M., M.C. Donato, A. Falk, D. Tolleson, and S. Nelson. Linking soil moisture and photosynthetic activity with high resolution imagery.
  - e. Ancona, V. Evaluation of alternative water-use-efficient specialty crops for south Texas.
  - f. Dattamudi, S., E. Zamora. Effects of tillage practices and cover crop mixtures on soil physicochemical properties.
  - g. Turner, B. Surface water system dynamics: a case study in the Lower Rio Grande Valley, Texas.
8. Subtropical Agriculture and Environments Annual Conference, South Padre Island, Tx. Feb. 8-9, 2024.
  - a. Zaragoza, A.L., D. Parker, B. Turner, S. Nelson, and G. Schuster. Evaluation of cattle paunch on soil properties and forage production in South Texas. Poster. CREST-funded
  - b. Zamora, E., S. Dattamudi, J.L. Foster Malone, and G.L. Schuster. Effects of cover crop mixtures on soil health and agricultural sustainability in south Texas. Poster. CREST-funded
9. Southern Region of the American Society of Horticultural Science, Atlanta, GA, Feb 2-4, 2024.
  - a. Meagher, M., A. Anoruo, S. Nelson. Effects of organic bio stimulant on gold green Seashore Paspalum (*Paspalum vaginatum*). Oral Presentation. CREST-funded
10. Southern American Society of Agronomy Annual Meeting, Atlanta, GA, Feb 3-5, 2024.
  - a. Zaragoza, A.L., D. Parker, B. Turner, S. Nelson, and G. Schuster. Evaluation of cattle paunch on soil properties and forage production in South Texas. Poster. CREST-funded
  - b. Zamora, E., S. Dattamudi, J.L. Foster Malone, and G.L. Schuster. Effects of cover crop mixtures on soil health and agricultural sustainability in south Texas. Poster. CREST-funded
  - c. Vurranki, S.V.G., S. Ramasamy, and S. Dattamudi. Effect of silicon application on physiological parameters and nutrient uptake in rice (*Oryza sativa* L.). Poster. CREST-funded
  - d. Meagher, M., A. Anoruo. Effects of organic biostimulant on golf green Seashore Paspalum (*Paspalum vaginatum*). Oral Presentation. CREST-funded
11. ERN Conference, Washington D.C., Mar. 2024
  - a. Meagher, M.L., A.O. Anoruo, S.D. Nelson. Effects of Organic Biostimulant on Golf Green Seashore Paspalum (*Paspalum vaginatum*).
12. Texas Chapter of the Wildlife Society, Houston, TX. Feb 21-23, 2024
  - a. Tanguma, K.M., H.L. Perotto-Baldivieso, M.C. Donato, A. Falk, D. Tolleson, and S. Nelson. Linking soil moisture with photosynthetic activity with very high-resolution imagery.
13. Subtropical Plants and Environments Society Meeting. South Padre Island, TX. Feb 8-9, 2024.
  - a. Zaragoza, A.L., S. Dattamudi, D. Parker, B. Turner, S. Nelson and G. Schuster. Short term effects of cattle paunch application on soil properties in south Texas.
14. Society for Range Management annual meeting, Sparks, AZ. Jan 28-Feb 1, 2024.

- a. Tanguma, K.M. H.L. Perotto-Baldivieso, A. Falk, D. Tolleson, M.C. Donato, and S.Nelson. Linking soil moisture and photosynthetic activity with high resolution imagery.
15. ASA-SSSA-CSSA Annual Conference, St. Louise, MO. Oct 29-Nov 3, 2023.
  - a. Zaragoza, A., D. Parker, B. Turner, S. Nelson, and G. Schuster. Evaluation of Soil Improvement Potential via Application of Composted Cattle Paunch in South Texas Dryland.
  - b. Zaragoza, A., K. Biggs, and B. Turner. A Generic Systems Model for Analyzing Alternative Soil Nutrient Management Strategies in South Texas.
  - c. Zamora, E., S. Dattamudi, J. Foster, D. Sanyal, and J. McGinty. Effects of land management and cover crops mixture on soil physicochemical properties in a long term research field.
16. Texas Section Society for Range Management annual meeting, Bastrop, TX. Oct 18-20, 2023.
  - a. Tanguma, K.M. H.L. Perotto-Baldivieso, A. Falk, D. Tolleson, M.C. Donato, and S.Nelson. Linking soil moisture and photosynthetic activity with high resolution imagery.
17. NACTA Annual Conference, Las Cruces, NM. June 20-23, 2023
  - a. Jayachandran, K., M.C. Donato, S.D. Nelson, D. Sotomayor, R. Stanko, and J. Espiritu. Promoting undergraduate students in soil, environmental, and crop sciences careers through special experimental learning activities.
18. Society for Range Management, Boise, ID. Feb 12-16, 2023
  - a. Tanguma, K.M., H.L. Perotto-Baldivieso, A. Falk, L. Massey, J.S. Avila S., J.A. Ortega S., E.P. Tanner, M.C. Donato, and S.D. Nelson. Water nutrients and palatability in rangeland species: what can we learn from drones?
19. Subtropical Plants and Environments Society Meeting. South Padre Island, TX. Feb 9-10, 2023.
  - a. De Leon, D., S.D. Nelson, and M. Setamou, A. Bhandari. Soil amendment strategies to rehabilitate freeze damaged citrus trees for sustainable crop management.
  - b. Morgan, Eva, E. Zamora, M. Setamou, and S.D. Nelson. Deficient irrigation effects on Greenhouse Pepper plant production. (**1<sup>st</sup> Place** undergrad poster winner).
20. ASHS Annual Conference, Chicago, IL. July 31-Aug 4, 2022.
  - a. De Leon, D., S.D. Nelson, M. Setamou, and A. Bhandari. Evaluation of nitrogen fertilizer and compost application on freeze damaged citrus trees in south Texas.
21. NSF-CREST: Center for Sustainable Water Use, Students Symposium. Kingsville, TX July 27, 2022.
  - a. De Leon, D., S.D. Nelson, M. Setamou, and A. Bhandari. Evaluation of nitrogen fertilizer and compost application on freeze damaged citrus trees in south Texas.
  - b. Baty, R., S.D. Nelson, and G. Schuster. Sesame crop yield and charcoal root rot (*Macrophomina phaseolina*) in relation to varying water regimes.
  - c. Morgan, E., E. Zamora, and S.D. Nelson. The effects of water deficiency in pepper plants.
  - d. Camacho, A., H. Perotto-B., E. Tanner, S.D. Nelson, et. al. Developing spectral signatures for south Texas grasses.
  - e. Meyer, J., J. Foster, G. Schuster, S.D. Nelson, and A. Bhandari. Effect of cover crops and tillage on soil moisture availability in a semi-arid region in a grain sorghum-cotton rotation.
22. Texas Chapter of the Wildlife Society Meeting. Marble Falls, TX Feb. 24-26, 2022.
  - a. Camacho, A.M., A.L. Montemayor, W.E. Glass, M.T. Page, M.A. Ramirez, H.L Perotto, J.A. Ortega-S., E.P. Tanner, A.D. Falk, D. Daniels, T. Kimmet, and S.D. Nelson. Developing spectral signatures for south Texas native grasses using multispectral sensors.
23. ASA-CSSA-SSSA International Meeting. Salt Lake City, UT November 10-13, 2021.
  - a. Cardenas, S., A.B. Bhandari, S. Nelson. Yield response of dryland cotton (*Gossypium hirsutum* L) varieties to potassium fertilizer application. (presentation)
24. NSF-CREST: Center for Sustainable Water Use Students Symposium. Kingsville, TX August 9, 2021.
  - a. De Leon, D., A. Bhandari, S. Nelson, M. Setamou. Evaluation of Nitrogen Application and Compost for Yield, Quality, and Soil Moisture Conservation in Citrus.
  - b. Meyer, J., A. Bhandari, S. Nelson, et.al. Assessing Agriculture Conservation Practices in a South Texas Dryland Cropping System.
  - c. Bernier-Vega, A., S. Ozcelik, S. Nelson, et.al. Remote Field Monitoring of South Texas Soils.
  - d. Camacho, A., H. Perotto-B., S. Nelson, et. al. Developing spectral signatures for bunch grasses using UAV mounted multispectral sensors.
25. ASHS Annual Conference, Denver, CO. Aug 5-8, 2021.
  - a. C.R. Simpson, M. Setamou, and S.D. Nelson. Citrus root distribution and characteristics in different management systems. (**Invited**).

26. Society for Range Management Annual Meeting, Virtual. Feb. 15-18, 2021
  - a. Camacho, A.M., W.A. Gless, M.T. Page, M.A. Ramirez, J.A. Ortega-S., E. Tanner, F. Smith, A.D. Falk, D. Daniels, T. Kimmert, S.D. Nelson, and H.L. Perotto-Baldivieso. Developing spectral signatures for South Texas grasses using UAV mounted multispectral sensors.
  - b. Gless, W.A., A.M. Camacho, M.T. Page, M.A. Ramirez, J.A. Ortega-S., E. Tanner, F.S. Smith, A.D. Falk, D. Daniels, T. Kimmert, S.D. Nelson, and H.L. Perotto-Baldivieso. Identifying spectral signatures for bunch grasses using UAV mounted multispectral sensors.
27. Texas Chapter of The Wildlife Society. Virtual. February 24-26, 2021
  - a. Camacho, A.M., W.A. Gless, T. Yamashita, J. Exum, A. Foley, R. DeYoung, E.P. Tanner, S.D. Nelson, and H.L. Perotto-Baldivieso. When is the best time to fly a drone for wildlife surveys?
  - b. Gless, W.A., A.M. Camacho, M.T. Page, M.A. Ramirez, J.A. Ortega-S., E. Tanner, F.S. Smith, A.D. Falk, D. Daniels, T. Kimmert, S.D. Nelson, and H.L. Perotto-Baldivieso. Identifying spectral signatures for bunch grasses using UAV mounted multispectral sensors.
28. ASA-CSSA-SSSA International Meeting. Virtual., Phoenix, AZ. November 9-13, 2020.
  - a. Cardenas, S., A.B. Bhandari, S. Nelson, J. Foster, G. Schuster, J. Landivar, A. Umphres, and N. Dube. Response of high yield cotton (*Gossypium hirsutum* L) varieties to potassium fertilizer application in dryland south Texas.
  - b. Bhandari, A.B., S. Cardenas, and S. Nelson. Cotton (*Gossypium hirsutum* L) response to potassium fertilizer application under limited irrigation in south Texas.
29. North American Colleges of Teachers of Agriculture (NACTA) conference, Las Cruces, NM. June 16, 2020.
  - a. Chumbley, S.B., M.C. Donato Molina, S.D. Nelson. Measuring the impact of USDA internships.
30. Subtropical Agriculture & Environments Society Annual Meeting, Weslaco, TX. Feb. 7, 2020.
  - a. Garcia, A., A. Umphres-Lopez, G. Schuster, J. Macinty and S.D. Nelson. Weed management systems in imidazolinone tolerant sorghum (*Sorghum bicolor*) in South Texas. (poster) **2<sup>nd</sup> place grad winner.**
31. ASA-SSSA-CSSA Annual Conference, San Antonio, TX. Nov. 10-13, 2019.
  - a. P. Ramos, V. Gomez, N. Dube, S.D. Nelson, J. Landivar, C. Donato, R. Stanko. Using UAS Acquired Data to Quantify the Effects of Tillage and No Tillage on Cotton and Sorghum Growth and Development. Poster-ASA section-Education and Extension.
  - b. D. Sotomayor, S. Nelson, R. Stanko, J. Espiritu, K. Jayachandran, C. Donato. Promoting Undergraduate Students in Soil, Environmental, and Crop Sciences Careers Through an Interdisciplinary Summer Internship Program. Poster
32. American Society of Horticultural Sciences Annual Meeting, Las Vegas, NV. July 21-26, 2019.
  - a. 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.
  - b. Rodriguez, J., Jifon, J., Anorou, A., and Simpson, C.R. The effects of sunburn on grapefruit peel physiochemical properties.
  - c. Lewis, A., Cisneros-Zevallos, L., Nelson, S.D., Schuster, G., and Simpson, C.R. Infrared thermography applications in stomatal conductance and drought stress.
33. Javelina Research Symposium. April 18, 2019. Kingsville, TX (poster). **1<sup>st</sup> place grad winner.**
  - a. N. Edmund, A. Anoruo, S. Nelson, G. Schuster, R. Williams. Superabsorbent Polymer-South Texas Soil Interactions: Effects on Plant Growth, Development, Water Use Efficiency and Soil Leachate.
34. American Society of Horticultural Science. July 30-Aug. 3, 2018. Washington, DC. (posters)
  - a. C. Simpson, J. Gonzales III, M. Setamou, and S.D. Nelson. Citrus Root Production and Fruit Yield Improves with Raised Bed and Groundcovers.
  - b. A. Lewis, L. Cisneros-Zevallos, S.D. Nelson, G. Schuster, and C. Simpson. Infrared Thermography Applications in Stress Response.
  - c. B.N. Garza, V. Ancona, J. Enciso, H. Perotto, and C. Simpson. Quantifying Citrus Tree Health & Disease Progression Using True Color UAS Images. (**NNF and UAS grant**)
  - d. Meena Gurung, C.R. Simpson, and V. Ancona. Field Evaluations of *Trichoderma Asperellium* as Biocontrol Agent against *Phytophthora* Foot and Root Rot in Citrus.
35. Caribbean Food Crops Society Meeting. Belize. July 8-13, 2018.
  - a. D. Sotomayor-Ramirez, S. Argirakis, G. Martinez, S. Nelson and D. Ruppert. START NOW: An Interdisciplinary Summer Internship Program to Enhance Student Involvement in Soil, Environmental and Crop Sciences. (poster)

36. Subtropical Ag and Environment Society Annual Meeting. Rio Farms, Inc., Monte Alto, TX . Feb. 9, 2018.  
(posters)
  - a. R.T. Reddy Neelipally, A. Anoruo, S. Nelson. Hydroponic Barley Fooder Provides Higher Nutrition to Livestock than Barley Grain Feed.
  - b. N. Edmund, A. Anoruo, S. Nelson, G. Schuster, R. Williams. Effects off Superabsorbent Polymer-Soil Interaction on Plant Growth, Development, Water Use Efficiency and Soil Leachate.
  - c. M. Pudota, V. Chowdary Anche, A. Anoruo, S. Nelson, G. Schuster and R. Williams. Comparability of Timed Plant Growth and Development due to Biomass and Inorganic Nutrients.
  - d. A.M. Lewis, L. Cisneros-Zevallos, S. Nelson, G. Schuster, and C. Simpson. Infrared Thermography Pre- and Post-harvest Applications. **START NOW grant.**
  - e. R.A. Saldana and M. Setamou. Development of Integrated Pest Management for Barnacle Scale in South Texas Citrus. (2<sup>nd</sup> place winner) **NNF grant.**
  - f. J. Rodriguez, and C. Simpson. Sunburn in Citrus: Assessing Physiological Impacts and Mitigation Treatments. **START NOW grant.**
37. Southern Region ASHS Annual Conference, Birmingham, AL. February 1-4, 2019.
  - a. 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.
38. American Society of Horticultural Science. Sept. 19-22, 2017. Wiakaloa, HI.
  - a. S.D. Nelson, C.R. Simpson, J. Gonzalez III, S. Telagamsetty, and M. Setamou. Adoption of a New Orchard Planting Design as an Integrated On-Farm Management Approach Strategy to Improve Citrus Production in South Texas.
  - b. C. Simpson, J. Gonzales III, D.E. Ruppert, M. Setamou, and S.D. Nelson. Citrus Root Distribution and Turnover as a Result of Different Orchard Management Practices.
  - c. S. Telagamsetty, M. Setamou, S.D. Nelson, and C. Simpson. Improved Irrigation and Management Practices for Water Conservation and Plant Growth in Citrus.
39. Workforce Diversity and Career Opportunities within the USDA for Current and Recent Graduates Conference. Feb 16, 2017. Albuquerque, NM.
  - a. D. Ruppert, S. Nelson, R. Stanko, G. Schuster, T. Machado, and C. Donato. Student Training in Agricultural Research Techniques by Novel Occupational Workshops (START NOW).
40. Southern Region of Amer. Soc. Hort. Sci. Feb 1-3, 2017. Mobile, AL
  - a. C. Simpson, S.L. Telagamsetty, J. Gonzales III, J.C. Melgar, S.D. Nelson and M. Setamou. Partnerships to Improve Sustainable Citrus Production in the Lower Rio Grande Valley.
41. 54<sup>th</sup> Annual Soil Survey & Land Resource Workshop, College Station, TX. February 2-3, 2017.
  - a. Gonzales III, Julian; Nelson, Shad D., Ruppert, D., and Simpson, C. Evaluating Roots in South Texas Citrus.
42. Texas Plant Protection Conference, College Station, TX. Dec, 2016.
  - a. Perla Duberney, S. D. Nelson & V. Ancona. Fusarium dry rot of citrus is present in commercial orange production in Texas.
43. Pathways to the Doctorate Symposium, Texas A&M Univ. System, Prairie View, TX. Nov.4-5, 2016.
  - a. Julian Gonzales III, Telagamsetty, S., Nelson, S.D., Setamou, M., and Simpson, C.R. Evaluating Root Distribution on Different Management Techniques in Citrus. (2<sup>nd</sup> place graduate poster)
  - b. R. Mendez, G. Schuster, A. Garcia, T. Mays, and S. Nelson. Evaluation of Transgenic Bt Insect Resistant Corn Hybrids for Mycotoxin Reduction.
  - c. D. Salinas, R. Heiniger, D. Herrington, G. Schuster, and S. Nelson. Key Elements of Management for High Corn Yields within Eastern North Carolina.
  - d. A. Garcia, K.A. Wise, N.R. Anderson, J.D. Ravellette, S. Nelson, and G. Schuster. Field Inoculation Methods for Screening Corn Germplasm to Northern Corn Leaf Blight (*Exserohilum turcicum*) and Diplodia Leaf Streak (*Stenocarpella macrospora*).
  - e. K.I. Gonzalez, A. Anoruo, S. Nelson, G. Schuster, G. Perrigo, and R. Williams. Seedling Regeneration, Growth, and Development on Abandoned Farmland.
  - f. G.J. Odreman-Noriega, D. Ruppert, S. Nelson, J. Jung, M. Maeda, J. Landivar. Unmanned Aerial System (UAS) based High-Throughput Phenotyping (HTP) of Sorghum.
  - g. K.N.Labrador-Rodriguez, H.L. Perotto-Baldivieso, A.Ortega-Santos, C. Wather, S.D. Nelson, and J. Jung. Biomass Estimation Before and After of Prescribed Fires using UAS (Unmanned Aerial System) Technology.
44. American Society of Horticultural Science Annual Meeting. Aug 7-11, 2016. Atlanta, GA.

- a. J. Gonzales III, S. Telagamsetty, S.D. Nelson, M. Setamou, and C.R. Simpson. Impact of Nutrient Application on Plant Physiology and Asian Citrus Psyllid Populations.
45. American Pathological Society Annual Meeting. Aug 1-4, 2016. Tampa, FL
  - a. P.M. Vedasharan, M. Kunta, E.S. Louzada, S. D. Nelson. Viability of *Candidatus Liberibacter asiaticus* in grapefruit leaves at different stages of maturity and Huanglongbing disease symptom development.
  - b. A.L. Olivares, J.L. Hernandez, S.D. Nelson and V. Ancona. Isolation of Endophytic Bacteria Associated with Roots from Citrus Infected with *Phytophthora nicotianae*.
  - c. Perla Deberney, J.L. Hernandez, S.D. Nelson, and V. Ancona. Evaluation of Soil Conditioner ORO79 for the Optimization of Mefenoxam in Control of *Phytophthora nicotianae*.
  - d. D.T. Mays, G. Schuster, P. Porter, M. Setamou, and S.D. Nelson. Reducing Mycotoxin Levels in Corn via Lepidopteran Insect Control and Application of Atoxigenic Fungi.
46. Southern Region American Society of Horticultural Science Annual Conf. Feb 5-7, 2016 San Antonio, TX.
  - a. A. Kusakabe, C.R. Simpson, S.D. Nelson, J.C. Melgar, and M. Setamou. The Effects of Water Management Strategies on Citrus Growth and Yield.
47. Annual Subtropical Agriculture and Environments Society. Weslaco, TX. Feb 5, 2016. *Subtrop Ag Envirion J.* Vol. 67.
  - a. Gonzales III, J., Nelson, S.D., Setamou, M., and Simpson, C.R. Impact of nutrient applications on plant physiology and Asian citrus psyllid populations.
  - b. Perla R. Duberney, Setamou, M., Hernandez J.L., Ancona, V. 2016. Evaluation of soil adjuvant OR-079 with Metalaxyl for Phytophthora root rot control in citrus.
  - c. Sandy Chavez, M. Kunta, E. Louzada and S. Nelson. 2017. Screening for *Phytophthora nicotianae* resistance of different citrus rootstocks and hybrids.
48. ASA-CSSA-SSSA International Annual Meeting. Nov. 15-18, 2015. Minneapolis, MN.
  - a. D.E. Ruppert, and S.D. Nelson. Comparison of Two Different Measures of Soil Quality in an Orchard Context. (oral)
  - b. C.X. Martinez, D.E. Ruppert, D.B. Wester, S.D.Nelson, G. Schuster, G. Perrigo and J. Enciso. Sensitivity of Neutron Probe Moisture Measurements to Use in Suboptimal Setttings. (poster).
  - c. C.X. Martinez, D.E. Ruppert, G. Schuster, S.D. Nelson, D.B. Wester and J.L. Foster. Effects of Tillage on Soil Water Content in a Hyperthermic Vertisol Under Dryland Management in a Subhumid/Semi-Arid Climate. (poster).
49. 39<sup>th</sup> Bilingual Conference at Texas A&M University-Kingsville. Nov. 6, 2015. Kingsville, TX.
  - a. C. Donato, S. Nelson, G. Schuster, R. Stanko, and T. Machado. Hispanic Students in Science, Technology, Engineering and Math. (poster).
50. NNF Project Directors Conference, Washington, DC. Aug. 26-27, 2015.
  - a. C. Fuentes, J. Gonzalez, J. Enciso, S.D. Nelson, J. Anciso, and M. Setamou. Comparing Water Use Efficiency in South Texas Furrow and Drip Irrigated Watermelon. (poster).
51. ASHS Annual Conference, New Orleans, LA. Aug 4-7, 2015.
  - a. 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. **(Invited)**.
  - b. C.R. Simpson, S.D. Nelson, A. Kusakabe, B. Contreras, S. Chaudhary, J.C. Melgar, and M. Setamou. On-Farm demonstrations of novel planting strategies: Working with growers to optimize soil environments, reduce water loss, and manage pests and diseases. **(Invited)**.
  - c. C. Fuentes, J. Enciso, S.D. Nelson, J. Anciso, and M. Setamou. Irrigation scheduling: a water balance approach to improve water efficiency for South Texas horticultural crops. (poster).
  - d. A.L. Olivares, C.R. Simpson, A. Kusakabe, M. Setamou, S.D. Nelson, and V. Ancona. Effects of citrus planting design on soil properties and Phytophthora nicotianae propagule counts in flood irrigated soil. (poster).
  - e. S. Telagamsetti, C.R. Simpson, S.D. Nelson, and M. Setamou. Impact of Young Citrus Flush Nutrients and Phloem Sap Composition on Asian Citrus Psyllid Populations. (poster).
  - f. B.O. Perea, S.D. Nelson, O.J. Alabi, and V. Ancona. Inoculum Sources of Phytophthora nicotianae in South Texas Nurseries and Groves. (poster).
52. NACTA Annual Conference. June 16-20, 2015. Athens, GA.



- a. Stanko, R.L., S.D. Nelson, T.J. Tanner, G.L. Schuster and C. Donato-Molina. Engaging Challenges and Opportunities for Underrepresented Agriculture Students in Obtaining USDA Job Training in the STEP UP to USDA Career Success Program. (poster)
53. Subtropical Agriculture & Environments Society Conference. Feb. 6, 2015. Weslaco, TX
  - a. L. Cantu, S. Nelson, D. Flores, and M. Setamou. Effect of Nitrogen Fertilization on Host Plant Quality and on the Development Parameters of Asian Citrus Psyllid and its Nymphal Parasitoid *Tamarixia radiata*. (1<sup>st</sup> place winner- poster/oral competition).
  - b. C. Fuentes, J. Enciso, S. Nelson, J. Anciso, and M. Setamou. Comparing Water Use Efficiency in South Texas Furrow and Drip Irrigated Watermelon. (poster/oral competition).
  - c. J. Ball, C. Simpson, S.D. Nelson, and M. Setamou. Nutrient Application to Citrus and its Interaction with Asian Citrus Psyllid (Hemiptera: Liviidae) Populations. (poster/oral).
  - d. S. Telagamsetti, C.R. Simpson, S.D. Nelson, and M. Setamou. Assessment of Citrus Flush Shoot Nutrient Content and Phloem Sap Composition and their Effects on Asian Citrus Psyllid Population Densities. (poster/oral competition).
54. Water Workshop and Forum –Santa Cruz Irrigation District #15. Dec. 9, 2015. Weslaco, TX.
  - a. C.R. Simpson, S.D. Nelson, A. Kusakabe, B. Contreras, S. Chaudhary, J.D. Melgar, and M. Setamou. Partnerships in Water Conservation: On-Farm Demonstrations of Water Saving Strategies.
55. National Agri-Science Education Conference. Nov. 19-22, 2014. Miami, FL.
  - a. Donato-Molina, C., R. Stanko, S. Nelson, T. Machado, and G. Schuster. Engaging Underrepresented Students through Ag-Related Career and Research Training in the ‘STEP UP to USDA Career Success’ Program (poster).
  - b. Lujano, G., and S.D. Nelson. Internship Experience at APHIS Florida Field Station National Wildlife Research Center (poster).
  - c. Fuentes, C., J. Enciso, S.D. Nelson, and J. Anciso. Comparing Water Use Efficiency for Furrow and Drip Irrigated Watermelon (poster).
  - d. Pena, P., G. Sample, R. Stanko, S. Nelson. STEP UP Summer Internship with USDA-ARS Veterinary Animal Research Service (poster).
  - e. Cantu, L., M. Setamou, and S.D. Nelson. Effect of Nitrogen Fertilization on Host Plant Quality and on the Development Parameters of Asian Citrus Psyllid and its Nymphal Parasitoid *Tamarixia radiata* (poster).
  - f. Carmona, G., K.A. Wise, C. Woloshuk, G. Schuster, and S.D. Nelson. Effect of Geography and Crop Rotation on *Aspergillus flavus* Soil Populations in Indiana (poster).
  - g. Garcia, A., G. Burow, J. Burke, C. Woloshuk, G. Schuster, and S. Nelson. Molecular Techniques for Genetic Analysis of Sorghum (poster).
56. International Biotechnology Conference. Nov. 10-14, 2014. Shizouka, Japan.
  - a. Contreras-Barragan, B.A., A. Kusakabe, J.C. Melgar, and S.D. Nelson. Understanding partial rootzone drying in citrus (poster).
57. ASA-CSSA-SSSA International Annual Meeting. Nov. 3-6, 2014. Long Beach, CA.
  - a. Abreu, A., C.F. Williams, and S.D. Nelson. Sorption of the human drug carbamazepine to soil in the presence of other trace organics. (poster).
58. 29<sup>th</sup> International Horticultural Congress, Brisbane, Australia. Aug. 17-22, 2014
  - a. S.D. Nelson, B.A. Contreras-Barragan, A. Kusakabe, and J.C. Melgar. Efficient use of partial rootzone-drying in citrus in semiarid areas (oral).
  - b. Schuster, G., B. Bextine, J. Munyaneza, S. Nelson, A. Ochoa, and J. Lopez. Impact of potato planting time on zebra chip incidence in south Texas (oral).
  - c. Simpson, C.R., J. Franco, A. Volder, S.D. Nelson, G. Schuster, and S. King. Intercropping with halophytes to mitigate salinity stress on watermelons (poster).
  - d. Simpson, C.R., S.D. Nelson, A. Volder, G. Schuster, J.C. Melgar, J. Jifon, and S. King. Grafting reduces salt tolerance in citrus. (oral).
59. 2014 Summer Internship Presentation, STEP UP to USDA Career Success, USDA-ARS, Lubbock, TX. July 24.
  - a. Garcia, Alvaro. Marker Assisted Selection for Sorghum multiseeded1 (*msd1*) Trait Under Controlled Conditions. (oral).
60. NACTA Annual Conference. June 25-28, 2014. Bozeman, MT.

- a. Stanko, R.L., S.D. Nelson, T.J. Tanner, G.L. Schuster and C. Donato-Molina. Engaging Underrepresented Agriculture Students through Research and Job Training in the STEP UP to USDA Career Success Program.
  - b. Donato, C., S. Nelson, G. Schuster, R. Stanko and T. Machado. Preparing Hispanic Students to be Leaders in their Communities.
61. American Society of Horticultural Science Annual Meeting. July 28-30, 2014. Orlando, FL.
  - a. Fuentes, C., Enciso, S.D. Nelson, M. Setamou, R. Lopez, and J. Anciso. Comparing Water Use Efficiency in South Texas Furrow and Drip Irrigated Cabbage. (poster)
  - b. Contreras-Barrangan, B., A. Kusabe, J.C. Melgar, and S.D. Nelson. Partial-Rootzone Drying an Effective Water Saving Strategy in Citrus. (oral-invited)
62. Javelina Research Symposium. April 29, 2014. Kingsville, TX
  - a. Fuentes, C., J. Enciso, S.D. Nelson, M. Setamou, R. Lopez, and J. Anciso. Comparing Water Use Efficiency in South Texas Furrow and Drip Irrigated Cabbage.
  - b. Contreras-Barrangan, B., A. Kusabe, J.C. Melgar, and S.D. Nelson. Partial-Rootzone Drying an Effective Water Saving Strategy in Citrus.
  - c. Cantu, L., M. Setamou, and S.D. Nelson. Life History Parameter of *Tamarixia radiata* nymphal parasitoid of Asian citrus psyllid as affected by host plant nitrogen fertilization.
63. Subtropical Agriculture & Environments Society Annual Conference. Feb 21, 2014. Weslaco, TX
  - a. Contreras-Barrangan, B., A. Kusabe, J.C. Melgar, and S.D. Nelson. Partial-Rootzone Drying an Effective Water Saving Strategy in Citrus. (1<sup>st</sup> place winner).
  - b. Dupnik, M., C. Woloshuk, S. Nelson, G. Schuster, and K. Wise. Growth of *Aspergillus flavus* and Aflatoxin Production under Low Oxygen Conditions.
  - c. Lewis, A., G. Schuster, S. Nelson, and J.C. Melgar. Vermicompost Solution as a Nutrient Source in Hydroponic Crop Production. (2<sup>nd</sup> place winner).
64. ASA Southern Branch 2014 Annual Meeting. Feb. 2-4, 2014. Dallas, TX.
  - a. Dupnik, M., C. Woloshuk, S. Nelson, G. Schuster, and K. Wise. Effects of Low Oxygen on the Growth of *Aspergillus flavus* and Aflatoxin Production.
  - b. Lewis, A., G. Schuster, S. Nelson, and J.C. Melgar. Vermicompost Solution as a Nutrient Source in Hydroponic Crop Production.
65. ASA-CSSA-SSSA International Annual Meeting. Nov. 3-6, 2013. Tampa, FL.
  - a. Nelson, S.D., M. Setamou, D. Garza and M. Esparza. Reduction in Psyllid Populations Using Supplemental Calcium to Trees Grown in High Calcareous Soils (oral).
  - b. Simpson, C.R., S.D. Nelson. Physiological Effects of Salinity Stress on Grafted and Non-Grafted Fruit Trees (oral).
  - c. Simpson, C.R. Using Halophytes to Mitigate Salinity Stress on Watermelons. (poster, 3<sup>rd</sup> place grad competition).
  - d. Romero, M., Gentry, S.D. Nelson. Accelerated Solvent Extraction of the Herbicide Mesotrione from Soils (oral).
66. AIChE 2013 Annual Meeting. Nov. 3-8, 2013. San Francisco, CA.
  - a. Rivas, R.C, P. L. Mills, K.D. Jones, and S. Nelson. Multifunctional Reactor Engineering for Galacturonic Acid (GA) Production: Enzymatic DePolymerization of Pectin-Rich Biomass with Simultaneous Adsorption of GA onto Anion Exchange Resins.
67. CETARS Symposium, USDA/NIFA HSI Collaborative Grants Annual Meeting. Aug. 10-15, 2013. Mayaguez, Puerto Rico.
  - a. Nelson, S.D., R.L. Stanko, G. Schuster, and T. Machado. Step Up to USDA Career Success: A Bridge Model for 2-Yr and 4-Yr HSI Institutions. (oral)
  - b. Stanko, R.L., L. Ayala, M.D. Mahan, M.A. Ramirez, E.A. Aguirre, A. Calderon, A. Arellano, F. Xie, and M.R. Garcia. Influence of Weaning Age, Diet, and Season of Birth on Age at Puberty in *Bos Indicus* Influenced Heifers. (oral)
  - c. Schuster, G., B. Bextine, J. Trevino, S.D. Nelson, A.P. Ochoa, and A. Arp. Effects of Potato Planting Timing in Texas on Zebra Chip Incidence and *Candidatus* Liberibacter Infection Rate in Potato Psyllids. (oral)
  - d. Ayala, L., A. Calderon, A.A. Arrellano, E. Taylor, R. Taylor, R. Flores, R.L. Stanko, and M.R. Garcia. The Effect of Age on the Expression of Estrogen Receptors Alpha and Beta in the Choroid Plexus. (poster)

- e. Montemayor, K., T. Machado, K. McCuiston, M. Rouquette, and J. Paschal. The Correlation of Residual Feed Intake on Carcass Characteristics of Brahman and Brahman Influenced Steers. (poster)
- f. Donato, C., S.D. Nelson, R.L. Stanko, and T. Machado. Preparing Hispanic Students to be Leaders in Their Communities. (poster)
- 68. 59<sup>th</sup> Annual NACTA Conference. June 25-29, 2013. Blacksburg, VA.
  - a. Nelson, S.D., R. Stanko, T. Machado, and G. Schuster. Providing Underrepresented Agriculture Students a STEP UP to USDA Career Success. (oral)
- 69. Rio Grande Basin Initiative Meeting. April 15-16, 2013. San Antonio, TX
  - a. S.D. Nelson, J. Enciso, and M. Young. Proven Irrigation Strategies that Improve Water Conservation in Citrus.
  - b. J. Enciso, S. Nelson, and M. Young. Irrigation Management Strategies for Water Conservation in the Lower Rio Grande Basin Initiative.
- 70. 67<sup>th</sup> Annual Meeting of the Subtropical Plant Science Society. Feb 15, 2013. Weslaco, TX. *Subtrop. Plant Sci.* Vol. 65 (posters)
  - a. Melgoza, Francisco, A. Kusakabe, J.C. Melgar and S. Nelson. Understanding and Improving Cold Tolerance in Citrus. (2<sup>nd</sup> place winner)
  - b. Young, Blake, S. Biles, G. Schuster and S. Nelson. Economic Thresholds for Boll Feeding Bugs in Cotton.
  - c. Mays, Tyler, G. Schuster and S. Nelson. Evaluation of *Bacillus thuringiensis* against *Helioverpa* populations in cotton varieties grown in the upper coastal bend of Texas.
  - d. Dupnik, Megan, G. Schuster, S. Nelson and J. Halcomb. Incidence and prevalence of bacterial boll rot in Coastal Bend and Rio Grande Valley cotton production.
  - e. Ortiz, Stephanie, M. Chapa, K. Rod Summy, and F.W. Judd. Enhancing Rooting Success of Black Mangrove Propagules (UTPA-HSI grant funded poster)
  - f. Velez, Aida, K. Summy, J. Goolsby, W. Osbrink and D. Thomas. Evolution of Ant Diversity and Phenology at Field Sites for the Biological Control Program for *Arundo donax* on the Rio Grande. (UPTA-HSI grant funded poster), [Also presented at: 61st Annual Meeting of the Southwestern Branch of the Entomological Society of America and the Annual Meeting of the Society of Southwestern Entomologists. 25-28 February 2013, Las Cruces, NM. 1<sup>st</sup> place winner, poster)
- 71. 73<sup>rd</sup> Annual Meeting of the Southern Region American Society for Horticultural Science, Orlando, FL. Feb. 2-5, 2013.
  - a. S.D. Nelson, J. Enciso, H. Perea, L. Beniken, M. Setamou, M. Young, and C.F. Williams. Alternative flood irrigation strategies that improve water conservation in citrus production.
- 72. 5<sup>th</sup> International Symposium on Human Health Effects of Fruits and Vegetables (FAV Health), Dharwad, India. Jan. 7-11, 2013
  - a. S.D. Nelson, M. Setamou, D.E. Garza, J. Melgoza and M. Esparza. Nutritional supplements that fortuitously reduce pest pressure for sustainable citrus production and quality. (**Invited**, oral)
- 73. 2013 Beltwide Cotton Conference, San Antonio, TX. Jan. 7-10, 2012
  - a. K.N. Field, G.L. Schuster, S. Nelson, E.G. Medrano, J. Woodward, and K. Ong. Isolation of bacteria from cotton bolls in the Texas Coastal Bend and Rio Grande Valley. (poster)
  - b. T. Mays, C. Crumley, G. Schuster, and S. Nelson. Evaluation of *Bacillus thuringiensis* against *Helioverpa* populations in cotton varieties grown in the upper coastal bend of Texas. (poster)
  - c. B. Young, S.P. Biles, G. Schuster, and S. Nelson. Evaluation of economic thresholds for boll feeding bugs in cotton. (poster)
  - d. L.S. Pruter, M.J. Brewer, J. Halcomb, and J.J. Nelson. Regional Cropping and Landscape Analysis Applied to Cotton Pest Management: Risk Assessment of a Sucking Bug. (poster). Del-Mar College student (HSI grant funded intern-Collaborative funds).
- 74. Clute Institute Annual Conference, Maui, HI. Jan 2, 2013.
  - a. R.D. Hanagriff, T. Whitis, R. Rhoades, and S. Nelson. Assessment of an Experimental Learning/Mentoring and Research Program for Recruitment, Retention and Career Development into Agriculture, Natural Resource and Human Sciences for Hispanic Students.
- 75. 2012 SCRI Zebra Chip Annual Reporting Session, San Antonio, TX. Oct. 30-Nov 2, 2012.
  - a. J. Trevino, G. Schuster, S. Nelson, and B. Bextine. Evaluating the impact of planting dates on psyllid populations and ZC disease incidence in Pearsall, TX.
- 76. American Institute of Chemical Engineers (AIChE) Annual Meeting. Pittsburg, PA. Oct 28-Nov 2, 2012.

- a. R.C. Rivas, P.L. Mills, K.D. Jones, and S. Nelson. Adsorption of Galacturonic Acid onto Anion-Exchange Resins to Enhance the Enzymatic Hydrolysis in a Proposed Citrus Processing Waste Biorefinery. (oral)
- b. R.C. Rivas, K.D. Jones, P.L. Mills, and S. Nelson. Utilization of Citrus Processing Waste as a Renewable Feedstock for Biorefinery Applications: Technical Advances, and Analysis of Engineering Challenges for the Pretreatment and Enzymatic Hydrolysis Steps. (oral)
77. Texas Section Society of Range Management. Fredericksburg, TX. Oct. 10-12, 2012.
  - a. R. Silguero, E. Biediger, M. Clayton, R. Lyons, E. Montemayor, H. Martinez, R. Stanko, and S. Nelson. Invasive tanglehead management using broadcast herbicide applications. (poster).
  - b. E. Biediger, R. Silguero, M. Clayton, B. Yarta, G. Gonzales, R. Stanko, and S. Nelson. Supplemental requirements for beef cattle fed native and improved forage using fecal analysis. (poster).
78. American Society of Horticultural Science Annual Conference. Miami, FL. July 31-Aug 3, 2012
  - a. S.D. Nelson, M. Esparza, D.E. Garza, M. Setamou, and M. Young. Potential Benefits of Supplemental Calcium Additions for Sustaining Citrus Production and Quality. (**invited**, oral)
  - b. C.R. Simpson, S.D. Nelson, A. Volder, G. Schuster, S. King, J. Jifon, and J.C. Melgar. Water Quality Effects on Grafted and Non-Grafted Citrus (oral).
  - c. F. Melgoza, A. Kusakabe, S.D. Nelson, and J.C. Melgar. Foliar and Ground Application of Absciscic Acid to Increase Cold Tolerance in Citrus. (poster)
  - d. D.E. Garza, S.D. Nelson, and M. Setamou. Foliar Applications of Micro and Macro Nutrients to Control ACP in Citrus. (poster)
79. 2012 Project Directors' Conference. USDA/NIFA HSI Grants Program. May30-June 1, Edinburg, TX.
  - a. S.D. Nelson, R. Stanko, T. Machado, G. Schuster, M. Persans, D. Villalon, A. Duarte, and J. Halcomb. STEP UP to USDA Career Success. (oral)
  - b. F. Melgoza, A. Kusakabe, S.D. Nelson, and J.C. Melgar. Foliar and Ground Application of Absciscic Acid to Increase Cold Tolerance in Citrus. (poster)
80. 27<sup>th</sup> Annual MANRRS Conference. Mar. 29-Apr. 1, 2012. Atlanta, GA.
  - a. Vargas, D., J.D. Garza, and S. Nelson. The TAMUK Southern Live Oak Tree Survey.
81. 2012 Southeastern/Southwestern Joint Annual Branch Meeting of the Entomological Society of America. Sharing Insect Science Globally. Little Rock, Arkansas Mar. 4-7, 2012
  - a. Esparza, M., Raygoza, J., Nelson, S.D. and Setamou, M. Effect of Soil and Foliar Calcium Sources on the Survivorship and Population Dynamics of Asian Citrus Psyllid. (poster).
  - b. Garza, D., Nelson, S. and Setamou, M. Effects of Micro and Macro Nutrients on Major Citrus Pests in Texas. (oral).
82. 66<sup>th</sup> Annual Meeting of the Subtropical Plant Science Society. Feb 29, 2012. Weslaco, TX. *Subtrop. Plant Sci.* Vol. 64 (posters)
  - a. Garza, D., Nelson, S. and Setamou, M. Effects of Micro and Macro Nutrients on Major Citrus Pests in Texas.
  - b. Melgoza, F., Kusakabe, A., Melgar, J.C., and Nelson, S.D. Absciscic Acid Increases Cold Tolerance in Citrus.
  - c. Ochoa, A.P., Schuster, G.L., Bextine, B., Nelson, S., and Munyaneza, J. Using Biotyping to Establish Temporal and Spacial Relationship Between Potato Psyllid *Bactericera cockerii*, Populations Colonizing Potatoes in Texas.
  - d. Field, K., Schuster, G., Nelson, S., Medrano, E., Woodward J., and Ong, K. Isolation of Bacteria from Isolated Cotton Bolls of South Texas.
  - e. Kaiser, T.N., Schuster, G.L., Hewitt, D.G., Ortega, J.A., Phillips, P.L., and Nelson, S.D. Effects of Microclimate Changes in Different Vegetation Types on Cattle Fever Tick Larval Survival.
  - f. Trevino, J., Schuster, G. Nelson, S. Bextine, B. and Munyaneza, J. Effects of Potato Planting Timing in Texas on Zebra Chip Incidence and *Liberibacter* Infection Rate in Potato Psyllids.
83. Southern Agricultural Economics Association annual meeting. Feb 4-7, 2012. Birmingham, AL.
  - a. M. Young, S.D. Nelson, S. Klose and J. Enciso. Assessing Irrigation Methods Based on Grapefruit Pack-Out in the Lower Rio Grande Valley.
84. The Economics, Finance and International Business Research Conference, Miami, FL. Dec. 9, 2011
  - a. S. Nelson, M. Young, R. Hanagriff and S. Klose. An Evaluation of Flood Irrigation and Compost Use in South Texas Rio Red Grapefruit Production: Are There Economic Values?
85. 9<sup>th</sup> Annual Texas A&M System Pathways to the Doctorate Symposium, College Station, TX. Nov. 11, 2011

- a. Gomez, M., C. Simpson, S. Nelson, A. Volder, S. King, J. Melgar and G. Schuster. Salinity Impacts on Growth and Physiology of Grafted and Non-Grafted Citrus Trees.
- b. De Leon, V., and S. Nelson. Impact of Organic Matter on Carbon Dioxide Evolution.
- c. Garcia, L., and S. Nelson. Nutrient Load Trends in Six Kleberg County Texas Streams.
- d. Vargas, D., and S. Nelson. The TAMUK Southern Live Oak Tree Survey.
- e. Field, K., G. Schuster, S. Nelson, K. Ong, and J. Woodward. Isolation of Organisms Causing Boll Rot from Feeding Insects of South Texas.
- f. Trevino, J., G. Schuster, S. Nelson, B. Bextine, and J. Munyaneza. Effects of Potato Planting Timing in Texas on Zebra Chip Incidence and *Liberibacter* Infection Rate in Potato Psyllids.
- g. Gomez, M., C. Simpson, S. Nelson, A. Volder, S. King, J. Melgar, and G. Schuster. Salinity Impacts on Growth and Physiology of Grafted and Non-Grafted Citrus Trees.
86. Annual Meeting of the ASA-CSSA-SSSA. Oct. 2011. San Antonio, TX
  - a. Simpson, C.R., A. Volder, S. Nelson, G. Schuster, J.C. Melgar, J. Jifon, and S. King. *Assessing the Impact of Salinity on Citrus Rootstocks in the Lower Rio Grande Valley*.
  - b. Williams, C.F., S. Castle, S.D. Nelson, and N. Prabhaker. *Linking Soil Sorption to Plant Uptake of the Systemic Insecticide Imidacloprid in Viticulture*.
87. Annual Meeting of the American Society of Horticultural Sciences. Sept 2011. Waikoloa, HI.
  - a. S.D. Nelson, M. Young and J. Enciso. *Relating On-Farm Level Irrigation Water Use to 'Rio Red' Grapefruit Pack-Out*. HortScience 46(9):S139. (Abstr.).
88. NACTA 2011 Annual Conference, June 2011, Edmonton, Alberta, Canada.
  - a. S.D. Nelson, K. McCuistion, R. Stanko, and E. Louzada. *The Power of Experiential Learning and Mentoring to Increased Underserved Minority Undergraduate Students into Graduate School*. 2011 Abstracts: NACTA Journal. Vol. 55, Suppl. 1, No. 015, p. 8-9.
89. Joint American Phytopathological Society APS-IPPC meeting. Aug 2011. Honolulu, HI
  - a. Tanner, J.D., M. Kunta, J.V. da Graca, M. Skaria and S.D. Nelson. *Evidence of a Low Rate of Seed Transmission of Citrus Tatter Leaf Virus in Citrus*.
90. 65<sup>th</sup> Annual Meeting of the Subtropical Plant Science Society. Feb 9, 2011. Weslaco, TX. *Subtrop. Plant Sci.* Vol. 63.
  - a. Esparza, M., Raygoza, J., Nelson, S.D. and Setamou, M. *Effect of Soil and Foliar Calcium Sources on the Survival of Asian Citrus Psyllid*. (1<sup>st</sup> place winner).
  - b. Peddabhoini, N.P., Setamou, M., Saldana, R. and Nelson, S.D. *Testing the Efficacy of an "Attract and Kill" Strategy for the Control of Citrus Leafminer in Texas*. (3<sup>rd</sup> place winner).
91. 71<sup>st</sup> Annual Meeting of the Southern Region ASHS. Feb 5-8, 2011. Corpus Christi, TX.
  - a. S.D. Nelson, and M. Setamou. Engaging Underserved Undergraduate Student Populations through Experiential Learning for Careers in Horticultural Sciences. HortScience 46(9):S15. (Abstr.).
  - b. C.R. Simpson, S.D. Nelson, S. Cornell and M. Setamou. Evaluation of Salinity on Citrus and Watermelon Rootstock Seed Germination. (oral, 2<sup>nd</sup> place winner, PhD contest)
  - c. M. Esparza, J. Raygoza, M. Setamou and S.D. Nelson. Impact of Plant Available Calcium to Reduce Asian Citrus Psyllid Survival in 'Rio Red' Grapefruit. (poster)
  - d. S.D. Nelson, M. Young, M. Setamou, X. Peries and J. Enciso. Evaluation of Compost Management in Citrus for Improved Crop Sustainability. (poster)
92. ASA-CSSA-SSSA annual conference. Oct 31-Nov 4, 2010. Long Beach, CA.
  - a. Romero, M., S.D. Nelson, M. Setamou, and G. Schuster. Implications of Sugarcane Harvesting Methods on Atrazine Movement.
93. USDA-NIFA, Hispanic Serving Institution leadership meeting, Sept. 26-29. 2010. Washington, D.C.
  - a. M. Esparza, J. Raygoza, M. Setamou and S.D. Nelson. Impact of Plant Available Calcium to Reduce Asian Citrus Psyllid Survival in Citrus Production.
94. 2010 Javelina Research Symposium, Kingsville, TX. Apr 26, 2010.
  - a. H. Dhanekula, S.D. Nelson, and L.W. Clapp. Sulfate and Iron Reducing Bacteria for the Reduction of Uranium (VI).
95. 2010 MANNRRS Conference, Orlando, FL. Mar. 15-19, 2010.
  - a. Romero, M., S.D. Nelson, and M. Setamou. Impacts of Sugarcane Organic Matter on Atrazine Adsorption in Soils.
  - b. Lozano, J., G. Schuster, K. Ong, S. Nelson, and J. Anciso. Lethal Yellowing and Date Palm Lethal Decline in South Texas.
96. 64<sup>th</sup> Annual Subtropical Science Society Meeting, Weslaco, TX. Jan. 25, 2010.

- a. Romero, M., S.D. Nelson, M. Setamou, and G. Schuster. Impact of Altering Harvesting Methods on the Adsorption of Atrazine to Sugarcane Residues.
  - b. Tanner, J., M. Kunta, J.V. da Graca, M. Skaria, and S.D. Nelson. Studies on Citrus Tatter Leaf Virus Seed Transmission. (2<sup>nd</sup> place graduate winner)
  - c. Raygoza, J, M. Setamou, and S.D. Nelson. Organic Production Practices on the Dynamics of Major Citrus Pests.
97. 2010 Texas A&M AgriLife Conference, Texas A&M Univ., College Station, TX. Jan. 11-14, 2010.
- a. Romero, M., S.D. Nelson, M. Setamou, and G. Schuster. Impact of Altering Harvesting Methods on the Adsorption of Atrazine to Sugarcane Residues.
98. 7<sup>th</sup> Annual Texas A&M System Pathways to the Doctorate Symposium, Laredo, TX. Nov. 13-14, 2009
- a. Saenz, N., J. Yu, and S. Nelson. GIS-Based Crime Occurrence Analysis for City of Alice, TX (1<sup>st</sup> place undergraduate winner)
  - b. Romero, M., and S.D. Nelson. Impacts of Sugarcane Leaf Litter and Organic Matter on Atrazine Adsorption in Soil.
  - c. Simpson, C.R., D. Gardiner, and S.D. Nelson. Incorporating Horticulture into a South Texas Community.
  - d. Raygoza, J, M. Setamou, and S.D. Nelson. Organic Production Practices on the Dynamics of Major Citrus Pests. (2<sup>nd</sup> place graduate winner)
  - e. Hinojosa, R.R., S.D. Nelson, and M. Setamou. Movement and Efficacy of Aldicarb in Relation to Flood Irrigation Timing.
  - f. Rodriguez, E., S.D. Nelson, M. Setamou, and R.R. Saldana. Off-Target Soil Depositional Loss of Select Foliar Pesticides Applied to Citrus.
  - g. Galindo, A.N., S.D. Nelson, J. Tanner, M. Setamou, and M. Skaria. Cultivation and Yield Performance of Oyster Mushroom on Various Substrates.
  - h. Dhunekula, H., S.D. Nelson, and L.W. Clapp. Sulfate and Iron Reducing Bacterial Reduction of Uranium (VI).
  - i. Tanner, J., M. Kunta, J.V. da Graca, M. Skaria, and S.D. Nelson. Studies on Citrus Tatter Leaf Virus Seed Transmission. (1<sup>st</sup> place graduate winner)
  - j. Talari, M., M. Setamou, S.D. Nelson, and J.V. da Graca. Different Water Regimes on Aldicarb Efficacy for Citrus Rust Mite Control.
  - k. Ritchie, R., G. Schuster, S. Nelson, and D.D. Fromme. Evaluating Skip Row to Conventional Cotton in Lint Yield and Quality.
  - l. Buzek, C., G. Schuster, S. Nelson, and D.D. Fromme. Plant Population Effects on Lint Yield Among New Technology Varieties.
99. 5<sup>th</sup> International Symposium on Seed, Transplant and Stand Establishment of Horticultural Crops (SEST2009). Murcia, Spain. Sept. 27-Oct. 1, 2009. Nelson, S.D., L. Rock, J. Lloyd-Rielley. Flowering Native Plants Able to Withstand Elevated Abiotic Salt Stress.
100. NOPHNRCSE (National Org. of Prof. Hispanic Natural Resource Conservation Service Employees) 2009 Conference, Philadelphia, PA. Aug. 3-7. Hinojosa, R.R., S.D. Nelson, M. Setamou, and E. Rodriguez. Adsorption, Degradation, and Efficacy of Aldicarb in Relation to Flood Irrigation Timing in South Texas Soils.
101. Joint Annual Meeting ADSA-CSAS-ASAS, Montreal, Canada. July 12-16, 2009. Stanko, R.L., S.D. Nelson, J.C. Laurenz, and M.R. Garcia. Enhancing underrepresented, minority student learning through agricultural and natural resources based research. *J. Anim. Sci.* Vol.87: E-Suppl. 2, p. 382.
102. National Cooperative Soil Survey Conference 2009, Las Cruces, NM. May 9-16.
- a. Hinojosa, R.R., S.D. Nelson, M. Setamou, and E. Rodriguez. Aldicarb Degradation in Flood Irrigated South Texas Soils in Relation to Citrus Pest Efficacy.
  - b. Rodriguez, E., S.D. Nelson, M. Setamou, R.R. Saldana, and R.R. Hinojosa. Off-Site Soil Quantification of Foliar Pesticides Applied on Citrus.
  - c. Romero, M., S.D. Nelson, J.M. Enciso, and X. Peries. Sugarcane Leaf Litter and Ash Organic Matter Effects on Atrazine Sorption and Movement in Soils.
103. Southern Association of Agricultural Sciences Annual Conference. Atlanta, GA. Jan. 31-Feb. 3, 2009. Young, M., S. Klose, G. Kaase, S. Nelson, and J. Enciso. Evaluating Alternative Irrigation Systems and Water Pricing in Rio Red Grapefruit Production in the Lower Rio Grande Valley.
104. 63<sup>rd</sup> Annual Meeting of the Rio Grande Valley Horticultural Society. Jan. 21. 2009. Weslaco, TX.
- a. Romero, M., S.D. Nelson, J.M. Enciso, X. Peries, and R.R. Hinojosa. Assessing the Agricultural Nonpoint Source Contaminants of the Arroyo Colorado.

- b. Hinojosa, R.R., S.D. Nelson, M. Setamou, and E. Rodriguez. Movement and Citrus Pest Control Efficacy of Aldicarb in South Texas Heavy Textured Soils.
  - c. Rodriguez, E., S.D. Nelson, M. Setamou, R.R. Saldana, R.R. Hinojosa, and M. Romero. Non-target Environmental Assessment of Chemical Spray Application and Quantification of Active Ingredient Persistence in Soil and Foliage.
  - d. Raygoza, J., S.D. Nelson, and M. Setamou. Effects of Organic Production Practices on the Dynamics of Major Citrus Pests and the Productivity of Citrus Trees.
  - e. Garlapati, S., M. Setamou, S.D. Nelson, and J.V. da Graca. Concentration of Neonicotinoid Insecticides in Citrus Leaves and Their Impact on Asian Citrus Psyllid (*Diaphorina citri* Kuwayama).
  - f. Talari, M., M. Setamou, S.D. Nelson, and J.V. da Graca. Effect of Different Water Regime on the Efficacy of Aldicarb in the Control of Major Citrus Pests.
  - g. Tanner, J., and S.D. Nelson, and J. Lozano. Sodium Chloride Tolerance of Sea Breeze Bamboo, *Bambusa malingensis*.
105. Annual TAMUS Pathways to the Doctorate Symposium. Commerce, TX. Nov. 3-4, 2008. Saenz, N., J. Yu, and S. Nelson. GIS based traffic demands estimation for hurricane evacuation: A case study for Corpus Christi, TX. (1<sup>st</sup> place winner, undergraduate environmental science section).
  106. 11<sup>th</sup> International Citrus Congress. Wuhan, China. Oct. 26-30. Nelson, S.D., H. Esquivel, R. Uckoo, X. Peries and J. Enciso. 2008. Using Alternative Irrigation and Water Monitoring Technologies for Improving On-Farm Water Conservation in South Texas Citrus Production.
  107. American Society for Horticultural Science Annual Conference. Orlando, FL. July 21-24. Uckoo, R.M., G.K. Jayaprakash, B.S. Patil and S.D. Nelson. 2008. Simultaneous Determination of Amines and Organic Acids in Citrus using a Rapid HPLC Technique.
  108. American Pathological Society Annual Meetings. July 26-30, 2007. St. Paul, MN.
    - a. Reddy, V.R., M. Kunta, J.V. daGraca, S.D. Nelson and M. Skaria. Infectivity Studies in Sour Orange and C-22 Rootstocks Challenged with the Nematode *Tylenchulus semipenitrans* and the Fungus *Phytophthora parasitica*.
    - b. Marepally, S., M. Kunta, J.V. daGraca, S.D. Nelson and M. Skaria. Molecular Identity, Infectivity, and Differential Gene Expression Associated with an *Olpidium*-like Fungus in Citrus and Vegetables.
  109. 9<sup>th</sup> World Rabbit Science Association (WRSA) Congress. Verona, Italy. June 10-13, 2008. Mudunuru, U, S.D. Lukefahr, S.D. Nelson, and D.O. Flores. Performance of Growing Rabbits Fed Lablab purpureus with Molasses Mini-Blocks and Restricted Commercial Pellets.
  110. Assoc. of Amer. Geographer's Annual Conf. Boston, MA. Apr. 15-19. Saenz, N., J. Yu and S. Nelson. 2008. GIS Based Traffic Demands Estimation for Hurricane Evacuation: A Case Study of Corpus Christi, TX.
  111. Southern Section of the ASA. Dallas, TX. Feb. 3-5. Rodriguez, D., S.D. Nelson, M. Setamou and R. Saldana. 2008. Effects of Soil-Applied Imidacloprid on the Control of Two Foliage Feeding Citrus Pests. (2<sup>nd</sup> Place graduate student competition award winner).
  112. 62<sup>nd</sup> Annual Meeting of the Rio Grande Valley Horticultural Society. Jan. 30, 2008. Weslaco, TX. Abstracts:
    - a. Saldana, R.R., M. Setamou, D. Rodriguez, S.D. Nelson and V. French. Uptake of Imidacloprid Level in Citrus Leaves and Evaluation of its Effects in the Control of Citrus Pests.
    - b. Marepally, S., M. Kunta, J.V. daGraca, S.D. Nelson and M. Skaria. Molecular Identity, Infectivity, and Differential Gene Expression Associated with an *Olpidium*-like Fungus in Citrus and Vegetables.
    - c. Netha, Y., M. Setamou, S.D. Nelson, and J.V. daGraca. Effect of Host Plant on the Bionomics of Asian Citrus Psyllid *Diaphorina citri* (Hemiptera: Psyllidae).
    - d. Reddy, V.R., M. Kunta, J.V. daGraca, S.D. Nelson and M. Skaria. Infectivity Studies in Sour Orange and C-22 Rootstocks Challenged with the Nematode *Tylenchulus semipenitrans* and the Fungus *Phytophthora parasitica*.
  113. 28<sup>th</sup> Annual Irrigation Association Show. San Diego, CA. Dec. 9-11. Enciso, J., J. Morales, B. Wiedenfeld, S.D. Nelson and X. Peries. 2007. Irrigating Onions with Subsurface Drip Irrigation Under Different Stress Levels.
  114. ASA-CSSA-SSSA annual conference. Nov. 4-8, 2007. New Orleans, LA.
    - a. Nelson, S.D., R.M. Uckoo, H. Esquivel and J.M. Enciso. Promoting Water Conservation Practices Throughout the Lower Rio Grande Valley of Texas.
    - b. Uckoo, R.M., S.D. Nelson, J.M. Enciso, I. Wesselman and K. Jones. Assessment of Compost Application in South Texas Grapefruit Production.
  115. 5<sup>th</sup> Annual TAMUS Pathways to the Doctorate. Nov. 2-3, 2007. Stevensville, TX.
    - a. Borrego, E., L. Rock and S.D. Nelson. High salinity tolerance of native grass seed and seedlings.

- b. Saenz, N., J. Yu and S. Nelson. 3D GIS model and animation, Texas A&M University-Kingsville campus.
- 116. 5<sup>th</sup> Annual TAMUS Pathways to the Doctorate. Stevensville, TX. Nov. 2-3. Gonzalez, O., T. McGehee and S. Nelson. Groundwater doming adjacent to red mud impoundments.
- 117. Soc. for the Advancement of Chicanos and Native Americans in Science (SACNAS) conference. Kansas City, MO. Oct. 10-14. Borrego, E., L. Rock and S.D. Nelson. 2007. Influence of high salinity on seed germination of native grasses and forbs species.
- 118. 2<sup>nd</sup> International Symposium on Human Health Effects of Fruits and Vegetables. Houston, TX. Oct. 9-13. Uckoo, R.M., S.D. Nelson, G.K. Jayaprakasha, and B.S. Patil. 2007. Impact of Low Water Use Systems on Bioactive Flavonoids of Grapefruit.
- 119. Annual Joint Rio Grande Basin Initiative meeting. May 14-17, 2007. South Padre Island, TX.
  - a. Esquivel, H. and S.D. Nelson. Agricultural demonstration water conservation initiative (ADI) for the lower Rio Grande Valley of Texas.
  - b. X. Peries, J. Enciso, J. Morales and S. Nelson. Using Flexible Pipe (poly-pipe) with Surface Irrigation.
  - c. X. Peries, J. Enciso, J. Morales and S. Nelson. Improving Irrigation Use Efficiency in the LRGV: Result Demonstration Reports.
- 120. 61<sup>st</sup> Annual Rio Grande Horticultural Society meeting. Jan. 30, 2007. UT-PanAm, Edinburg, TX.
  - a. Uckoo, R.M., S.D. Nelson, and J.M. Enciso. Effect of compost application in South Texas grapefruit production. (1<sup>st</sup> place poster contest winner).
  - b. Esquivel, H., and S.D. Nelson. Water conservation initiative project for the Lower Rio Grande Valley of Texas.
- 121. Rock, L., S.D. Nelson, and J.L. Reilley. 2006. Screening South Texas native plant seedlings for salinity tolerance. ISHS 4<sup>th</sup> International Symposium on Stand Establishment. San Antonio, TX. Dec. 3-6.
- 122. ASA-CSSA-SSSA annual conference. Nov. 12-16, 2006. Indianapolis, IN.
  - a. Esquivel, H., and S.D. Nelson. Water conservation agricultural demonstration initiative project for the Lower Rio Grande Valley.
  - b. Rock, L., S.D. Nelson, and J.L. Reilley. Seed and seedling salinity tolerance of South Texas native plants.
- 123. Texas Vegetation Management Association Annual Conference. Oct. 23-25, 2006. Kerrville, TX.
  - a. Esquivel, H., and S.D. Nelson. Vegetative control using herbicide adjuvant CT-301 to glyphosate.
  - b. Rock, L., S.D. Nelson, and J.L. Reilley. Salt tolerance of plants for South Texas revegetation programs.
- 124. ASA-CSSA-SSSA annual conference. Nov. 6-10, 2005. Salt Lake City, UT.
  - a. Nelson, S.D., R.M. Uckoo, J. Shantidas, and J.M. Enciso. On-farm water conservation strategies in South Texas citrus production.
  - b. Simpson, C.R., and S.D. Nelson. Vapam and K-pam fate and movement under varying soil properties.
  - c. Khan, A.R., H.A. Ajwa, and S.D. Nelson. Adsorption and transformation of chloropicrin as affected by surfactants.
- 125. 3<sup>rd</sup> Annual Texas A&M Univ. System Pathways to the Doctorate Symposium. Nov. 4-5, 2005. Kingsville, TX.
  - a. Rodriguez, D., A. Galindo, and S.D. Nelson. Impact of South Texas heat on the efficacy of Stabitol.
  - b. Vela, A.J., H. Esquivel, and S.D. Nelson. Evaluation of weed suppression using a herbicide additive to glyphosate.
  - c. Uckoo, R.M., S.D. Nelson, and J. Enciso. Management strategies for irrigation use efficiency in grapefruit production.
- 126. Southern Section of American Society of Agronomy. June 19-20. 2005. San Antonio, TX.
  - a. Simpson, C., and S.D. Nelson. Soil organic matter effects on fumigant fate and movement in soils. Southern Section of American Society of Agronomy. San Antonio, TX. June 19-20.
  - b. Ancona, V., S.D. Nelson, and E. Louzada. Identification of cold responsive genes from *Poncirus trifoliata*.
- 127. 7<sup>th</sup> Annual Texas National McNair Scholars' Research Conference. University of North Texas, Denton, TX. Feb. 18-20, 2005. Rock, L., and S.D. Nelson. Influence of biosolid vs. inorganic nitrogen-based fertilizer additions on greenhouse pepper plant production.
- 128. 2005 Agriculture Program Conference. Jan. 11-12, 2005. Texas A&M, College Station, TX.
  - a. Munguia, R., Jr., and S.D. Nelson. Water infiltration rates on varying soil types from phytase applied swine effluent.
  - b. Simpson, C.R., and S.D. Nelson. Soil fumigant fate and movement in soil organic matter systems. Agriculture Program Conference Student Poster Competition.



129. Symposium on the State of Science of Animal Manure & Waste Management. San Antonio, TX. Jan. 5-7, 2004. Munguia, R., Jr., and S.D. Nelson. Evaluation of phytase in the swine waste stream to reduce P loading in soils.
130. Annual ASA-CSSA-SSSA Meetings, Seattle, WA. Oct. 31-Nov. 4, 2004. Nelson, S.D., J.E. Stratmann, H.A. Ajwa, and C.R. Simpson. 2004. Minimizing soil fumigant off gassing by using a soil surface water seal.
131. TAMUS 2<sup>nd</sup> Annual Pathways to the Doctorate Symposium. Oct. 15-16, 2004. TAMU-Corpus Christi.
  - a. Ancona, V., S.D. Nelson, and E. Louzada. Cold Tolerance Genes in Citrus.
  - b. Simpson, C.R., and S.D. Nelson. Volatilization loss of vapam and K-pam in different soil types and varying organic matter levels.
  - c. Rock, L., and S.D. Nelson. Influence of biosolid vs. inorganic nitrogen-based fertilizer additions on greenhouse pepper plant production.
  - d. Wilborn, J.C., and S.D. Nelson. Post-emergence application of pre-emergence herbicides in growing corn.
132. 63<sup>rd</sup> Annual Conference of the Soil and Crop Science Society of Florida. May 19-21, 2004. Allen, L.H. Jr., and S.D. Nelson. 2004. Can Rhizoma perennial peanut sequester soil carbon?
133. 1<sup>st</sup> Annual Pathways Research Symposium. Nov. 14-15, 2003. Galveston, TX.
  - a. Gade, V., S.D. Nelson, and E.S. Louzada. Molecular characterization of partial hybrids in citrus by microplast mediated chromosome transfer.
  - b. Munguia, R. Jr., S.D. Nelson, and K.M.J. Shantidas. Evaluation of nitrate leaching potential of a biosolid-based fertilizer, Xtend.
  - c. Rock, L., and S.D. Nelson. Compost application and various fertilizer impacts on greenhouse tomato production.
  - d. Shantidas, K.M.J., S.D. Nelson, and T. Cadena. Water conservation and fertility management strategies on citrus cost and productivity.
  - e. Stratmann, J., S.D. Nelson, and L. Rock. Development of metam-sodium application methods for minimizing volatilization.
134. Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions. San Diego, CA. Nov. 3-6, 2003. Ajwa, H.A., S.D. Nelson, and T. Trout. Water and methyl isothiocyanate distribution in soil after drip fumigation with metam sodium. Published *In Proceedings* 2003.
135. Annual ASA-CSSA-SSSA Meetings. Nov. 2-6, 2003. Denver, CO.
  - a. Nelson, S. D., R. Munguia, and L. Rock. Environmental implication of using a new organic-based fertilizer source.
  - b. Sharmasarkar, S., H.A. Ajwa, and S.D. Nelson. MITC distributions in soil fumigated with metam sodium.
136. Annual ASA-CSSA-SSSA Meetings, Indianapolis, IN. Nov. 10-14, 2002. Nelson, S. D., and H. A. Ajwa. Soil-Gas Phase Distribution of Metam-Sodium Under Drip Fumigation. (Invited).
137. 2001 Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions. San Diego, CA. Nov. 5-8, 2001.
  - a. Nelson, S. D., and H. A. Ajwa. 2001. Physico-chemical properties of chloropicrin with various surfactants. *In* 95:1-4. Invited.
  - b. Ajwa, H. A., M. Schutter, S. D. Nelson, and T. Trout. Efficacious application rates of propargyl bromide and iodomethane/chloropicrin for strawberry production. 24:1-3. Invited.
  - c. Ajwa, H. A., T. Trout, S. D. Nelson, and M. Schutter. 2001. Drip fumigation: water and fumigant distribution in soil. 50:1-2. Invited.
138. Annual ASA-CSSA-SSSA Meeting. Charlotte, NC. Oct. 15-18, 2001.
  - a. Nelson, S. D., and H. A. Ajwa. Physico-chemical properties of chloropicrin with various surfactants. Invited.
  - b. Ajwa, H. A., T. Trout, S. D. Nelson, and M. Schutter. Dissipation of methyl bromide alternative fumigants in soils. Invited.
139. Riegel, C., S. D. Nelson, D. W. Dickson, and L. H. Allen, Jr. 2000. Efficacy of Telone (1,3-dichloropropene) on plant parasitic nematodes in non- and composted soils. Annual Nematology Conference. Tallahassee, FL.
140. Annual ASA-CSSA-SSSA Meeting. Oct. 31-Nov. 4, 1999. Salt Lake City, UT..
  - a. Nelson, S. D., S. J. Locascio, L. H. Allen, Jr., D. W. Dickson, and D. J. Mitchell. 1999. Soil flooding and alternative chemical replacements for methyl bromide. p. 103.
  - b. Williams, C. F., J. Letey, W. J. Farmer, S. D. Nelson, and T. Arteaga. Facilitated transport of napropamide: molecular weight of the DOM-napropamide complexes. p. 346.

141. Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions. San Diego, CA. Oct. 31-Nov. 4. 1999. Locascio, S. J., S. D. Nelson, L. H. Allen, Jr., D. W. Dickson, and D. Mitchell. Soil flooding and chemical alternatives to methyl bromide in tomato production.
142. Annual ASA-CSSA-SSSA Meeting Abstracts. Oct., 1998. Baltimore, MD.
  - a. Nelson, S. D., J. Letey, W. J. Farmer, and C. F. Williams. Transport of napropamide with dissolved organic matter in soil columns. p. 354.
  - b. Williams, C. F., J. Letey, W. J. Farmer, and S. D. Nelson. The effect of application method on DOM-napropamide complexation. p. 355.
143. Annual ASA-CSSA-SSSA Meeting Abstracts. Oct., 1997. Anaheim, CA.
  - a. Nelson, S. D., J. Letey, W. J. Farmer, and C. F. Williams. Under estimation of herbicide transport by batch equilibria. p. 34.
  - b. Williams, C. F., J. Letey, W. J. Farmer, and S. D. Nelson. The effect of soil chemical properties on the efficiency of hexane extraction of napropamide from simulated soil. p. 36.
144. Annual ASA-CSSA-SSSA Meeting Abstracts. Nov., 1996. Indianapolis, IN.
  - a. Nelson, S. D., J. Letey, W. J. Farmer, and C. F. Williams. 1996. The role of dissolved organic matter from sewage effluent on facilitating napropamide transport. *In* 1996 p. 35.
  - b. Williams, C. F., J. Letey, W. J. Farmer, and S. D. Nelson. 1996. Facilitated transport of napropamide by dissolved organic matter through soil columns. p. 29.
145. Annual ASA-CSSA-SSSA Meeting Abstracts. Seattle, WA. Nov., 1994. Nelson, S. D., and R. E. Terry. 1994. The effects of soil physical properties and irrigation method on denitrification. p. 279.

**Lay Article Publications:**

Sept 2020 Rethink citrus irrigation if you are replanting. L.Gregory, S.Nelson.  
AgMag: Agricultural Lifestyle of South Texas. Issue 37: pg 16-17.

**Published Newsletters:**

***Texas A&M University Kingsville Citrus Center Newsletter***, <http://kcc-weslaco.tamu.edu>

Nov 2012 Water Savings in Citrus Production for 2011 On-Farm Water Conservation Demonstration Sites.  
S.D. Nelson. Fall 2012. Vol. 30. No.2. Pgs 1-2.  
[http://kcc-weslaco.tamu.edu/files/newsletter/2012/Fall\\_2012\\_Vol\\_30\\_No\\_2.pdf](http://kcc-weslaco.tamu.edu/files/newsletter/2012/Fall_2012_Vol_30_No_2.pdf)

Mar 2011 Student Recognition for Research at the 65<sup>th</sup> Annual Meeting of the Subtropical Plant Science  
Society, S.D. Nelson, President, 2010 Subtropical Plant Science Society. Vol. 29. No. 1. Pg 4.  
Department Has New Name. S.D. Nelson. Vol. 29. No. 1. Pg 4.  
Evaluating Water Use and Yield from Various Irrigation Systems in Citrus Production.  
S.D. Nelson, M. Young, and J. Enciso. Vol. 29. No. 1. Pg 2-3.

Dec 2010 Drip Irrigation Line Placement for Adequate Soil Moisture in Citrus Production Systems.  
S.D. Nelson, J. Enciso, and M. Young. Vol. 28. No. 6, pg.

Dec 2009 TAMU-Kingsville Citrus Center Students Sweep Graduate Agricultural Division Awards  
S.D. Nelson. Vol. 27, No. 6. Pg 1-2.

June 2009 Compost Use for Citrus Water Conservation and Sustaining Yield.  
S.D. Nelson and J. Enciso. Vol. 27, No. 3, pg. 3.

Apr 2008 Water Conservation Researchers Receive Texas Environmental Excellence Award.  
H. Esquivel and S.D. Nelson. Vol. 26, No. 2, pg. 6.

Feb 2004 Water Conservation and Fertilizer Management Strategies on Citrus.  
S.D. Nelson and J. Shantidas.

***Rio Grande Basin Initiative Outcomes Newsletter***, <http://riogrande.tamuk.edu>

Dec 2008 Comparing Citrus Irrigation Averages Versus Traditional Flood.  
H. Esquivel and S.D. Nelson. Vol. 7, No. 2, pg. 4.

May 2007 Agricultural Demonstration Initiative Collaborators Evaluate Irrigation Water Use Efficiency  
in Citrus. D. Supercinski, S.D. Nelson, and H. Esquivel. Vol. 6, No. 2, pg. 2.

***Harlingen Irrigation District Newsletter, ADI newsletter***. <http://www.hidcc1.org>

Mar 2011 Evaluating Water Use and Yield from Various Irrigation Systems in Citrus Production.  
S.D. Nelson, M. Young, and J. Enciso.

Dec 2010 Drip Irrigation Line Placement for Adequate Soil Moisture in Citrus Production Systems.  
S.D. Nelson, J. Enciso, and M. Young.

Dec 2007 Results of an ADI Survey from the Perspective of Participating ADI Growers.  
S.D. Nelson, R. Adla and H. Esquivel. Vol. 7, pg. 2.

Oct 2006 TAMUK On-Site Installations with Citrus Farmers.  
S.D. Nelson and H. Esquivel. Vol. 5, pg. 3.

May 2006 Soil Moisture Monitoring to Improving Irrigation Scheduling.  
S.D. Nelson, R. Uckoo, and H. Esquivel. Vol. 4, pg. 2.

Feb 2006 ADI-TAMU-K. Update on ADI Program Progress.  
S.D. Nelson. Vol. 3. pg.

**YouTube Videos: Water Savings-Water Conservation Research & Extension Projects**

Sept 2020 **Raised Beds for new citrus plantings:** S.Nelson, M. Setamou  
<https://youtu.be/xknybLF1JkE>

June 2013 **Narrow Border flood in mature citrus groves:** S.Nelson, M. Young  
<https://texasawe.com/>

**USDA-NIFA Hispanic Serving Institution grant Success Videos and Publications.**

Fall 2018	USDA-NRCS Soil Judging Contest winner participants in START NOW program <a href="http://arccg.is/1iXHiu">http://arccg.is/1iXHiu</a>
Fall 2016	USDA-NRCS Earth Team Volunteer Program with TAMUK STEP UP student interns <a href="https://www.youtube.com/watch?v=WGMMfBHGEyA&amp;feature=share">https://www.youtube.com/watch?v=WGMMfBHGEyA&amp;feature=share</a> <a href="https://www.youtube.com/watch?v=WGMMfBHGEyA">https://www.youtube.com/watch?v=WGMMfBHGEyA</a>
Spring 2019	College Students Gain Valuable Experience Through USDA Partnerships <a href="http://www.tx.nrcs.usda.gov">www.tx.nrcs.usda.gov</a> <a href="https://www.nrcs.usda.gov/wps/portal/nrcs/detail/tx/newsroom/stories/?cid=NRCSERPD1429454">https://www.nrcs.usda.gov/wps/portal/nrcs/detail/tx/newsroom/stories/?cid=NRCSERPD1429454</a>
Spring 2020	Soils Judging Team Take Top Honors at Regional Competition with the Help of NRCS. START NOW grant funded. <a href="https://www.nrcs.usda.gov/wps/portal/nrcs/detail/tx/newsroom/stories/?cid=nrcseprd1524620">https://www.nrcs.usda.gov/wps/portal/nrcs/detail/tx/newsroom/stories/?cid=nrcseprd1524620</a>
Summer 2020	Sustainable, Secure Food Blog. How do the various soil types in Puerto Rico support different crops? Beverly Alvarez and David Sotomayor. START NOW grant funded graduate student. <a href="https://sustainable-secure-food-blog.com/2020/07/22/how-do-the-various-soil-types-in-puerto-rico-support-different-crops/?_cldee=c2hhZC5uZWxzbn25AdGFtdWsuZWRI&amp;recipientid=contact-b9c3f12f8b33db1197e1001279d6310b-a4ceb797d98a4b56bf648efdec7eaa3d&amp;esid=bb3641b8-ceca-ea11-8123-005056a7afa5">https://sustainable-secure-food-blog.com/2020/07/22/how-do-the-various-soil-types-in-puerto-rico-support-different-crops/?_cldee=c2hhZC5uZWxzbn25AdGFtdWsuZWRI&amp;recipientid=contact-b9c3f12f8b33db1197e1001279d6310b-a4ceb797d98a4b56bf648efdec7eaa3d&amp;esid=bb3641b8-ceca-ea11-8123-005056a7afa5</a>

**PROFESSIONAL SERVICE ASSIGNMENTS**

2024-26	NSF NRT-TREAWS grant Internal Advisory Board member.
2024	TAMUS Academic Leaders Conference. Deans and Provosts Panel. Panel member.
2023-25	SRASHS Paul Smeal Leadership Award Selection Committee.
2023-25	ASHS Outstanding Undergraduate Educators Award Selection Committee.
2023	USDA-NIFA A1411 Water Quantity and Quality Panel priority program area. Invited Panelist.
2023	SRASHS undergrad and doctoral judging competition committee.
2020-21	Panel Manager, USDA-NIFA HEC grants program review
2017-21	Chair, Research Advisory Board; USDA-NIFA Water for Ag grant (PA, NE, AZ)
2016-21	International Arid Lands Consortium; committee member, TAMUK representative
2015-18	Outstanding Graduate Educator Awards Committee, Amer. Soc. of Hort. Science
2015-17	Distinguished Educators Awards Committee, Southern Region Amer. Soc. Hort Sci.
2015-17	Southern Region ASHS Professional Educators Awards Committee
2015-16	ASHS Membership Committee
2014	ASHS Undergraduate Student Competition Judge
2012-15	Editorial Board, Agronomy Section, Subtrop. Ag & Environments J.
2011-12	Program Coordinator, W-2082 Multistate Research Project Group
2010-15	TAMUK Council for Undergraduate Research Proposal Panel Review Committee
2010-15	Associate Editor-Agronomy, Editorial Board, Journal of the Subtropical Plant Science Society
2010	Pathways to the Doctorate, TAMU System Student Research Competition Judge
2010-15	TAMUK Council for Undergraduate Research Proposal Panel Review Committee
2009-10	President Elect, Subtropical Plant Science Society
2009-10	Chairman Elect, Texas Consortium for Irrigation Research and Education (CIRE)
2008-11	On-Farm Task 4 Group, Appointed Coordinator for Texas, Rio Grande Basin Initiative (RGBI)
2008-09	TAMUK Council for Undergraduate Research Grant Program Chair and Review Panel Manager
2006	USDA-CSREES Hispanic Serving Institutions Grant Panel Reviewer

**Elected Professional Society Service Positions**

Chair, Research Advisory Board	(2017-21)	USDA-NIFA Water for Ag grant (PA, NE, AZ)
W-2082 2012 Meeting Coordinator	(2011-12)	W-2082 National Specialty Research Working Group
RGBI Task 4 Group Coordinator	(2008-09)	Rio Grande Basin Initiative, On-Farm Irrigation
CIRE Vice-Chair, Chair elect	(2008-09, 09-10)	Consortium for Irrigation Research & Education
President Elect	(2009-10)	Rio Grande Valley Horticultural Society
Vegetables Section Director	(2008)	Rio Grande Valley Horticultural Society
Vegetables Section Vice Pres	(2006-07)	Rio Grande Valley Horticultural Society
Elected Official to Board of Directors	(Jan 2007)	Rio Grande Valley Horticultural Society

**Host and Conference Organizer**

Jan 2012	W-2082 National Research Working Group Annual Meeting. Jan 4-5, 2012. Weslaco, TX.
Feb 2011	The 65 <sup>th</sup> Annual Meeting of the Subtropical Plant Science Society, Feb. 9, 2011. Weslaco, TX “Facing the Challenges for Agriculture and the Environment in an Era of Sustainability” Shad D. Nelson, 2011 President of Subtropical Plant Science Society
Oct 2010	1 <sup>st</sup> Annual Texas Irrigation Expo, Mar. 20-22, 2011. Mercedes, TX Agricultural Water Conservation Demonstration Initiative (ADI) Showcase Shad D. Nelson, Lead Scientist for Field Tours, Presentations, and Student Poster Contest.
Apr 2010	The 4 <sup>th</sup> Annual Consortium for Irrigation Research and Education (CIRE) Meeting, Weslaco, TX. Shad D. Nelson, 2010 CIRE Chairman

**UNIVERSITY SERVICE ASSIGNMENTS (TAMUK)**

2024	Chair, Dean Education & Human Performance Search Committee
2024	Member, Teacher Load Report Credit Taskforce Committee
2024	Member, Faculty Ombudsperson to President Search Committee
2023	Chair, VP Research and Innovation Search
2023	Member, Strategic Planning Committee
2023	Member, Core Values Planning Committee
2023	Member, 4DX Leadership Committee
2023	Member, Faculty Equity Study Committee
2023	Member, Compensation Study Committee
2023	Member, Market Feasibility Research Committee
2022-23	Co-Chair, College AGNR Retention Committee
2022-23	Member, Quality Enhancement Planning (QEP) Committee
2021	Chair, Dean of College of Engineering Search Committee
2018-21	Member, University level committees and task forces
2016-17	Member, Customer Service Task Force Committee
2016-17	Member, Faculty Reassigned Time Standards for Release Ad Hoc Committee
2016-17	Member, College AGHS Annual Evaluation Criteria Committee
2015-16	Chair, Task Force for Center of Innovative Teaching Pedagogy Committee
2015-16	Member, University Strategic Planning Steering Committee
2015-16	Member, Annual Faculty Evaluation Instrument Ad Hoc Committee
2015-16	Member, TAMUK Research Council
2014-15	Member, TAMUK Phi Kappa Phi Chapter Establishment Committee
2013-14	Member, University Appeals Committee
2013-14	Member, Workload Issues for Chairs Committee
2013-14	Member, College AGHS Annual Evaluation Criteria Committee
2012-17	Chair/Member, Dept AAES Undergraduate Curriculum Review Committee
2012-17	Member, College AGHS Awards Selection Committee
2011-14	Member, Radiation Safety Committee and Kleberg Ag Building Emergency Safety
2010-16	Chair/Founding Member, TAMUK Council for Undergraduate Research (TCUR)
2007-08	Member, Executive Committee of Graduate Council
2005-08	Member, Graduate Council College Representative
2005-07	Member, College Student Engagement Proposal Selection Committee
2005-06	Member, Graduate Program Review Committee
2004-07	Member, General Education Committee
2004-05	Member, International Business Management Ad Hoc Committee
2004-06	Co-Chair, Dept AGRS Graduate Student Symposium & Grad Seminar Committees
2004-05	Member, Faculty Senate Educational Technology Committee
2002-06	Member, Undergraduate Program Review Committee (Chair-CIS, Finance, English reviews)
2003-05	Member, College AGNRHS Farm Management Committee
2003-04	Member, College AGHS Retention and Recruitment Committee
2003-04	Member, College AGHS Raise Appeals Committee
2003-04	Member, College ENG CREST-RESSACA International Review Team
2002-03	Member, Undergraduate Curriculum Review Committee
2002-03	Member, College AGHS Curriculum Review Committee

2002-03	Member, Dept AGRS Grad and Undergrad Student Excellence Awards Committee
2001-03	Member, College AGHS Faculty Scholarly Achievement Awards Committee
2001-02	Member, Citrus Center Research Advisory Committee

## PROFESSIONAL DEVELOPMENT

<b>Human Resource Management</b>	Certificate of Attendance, KRIRM	Sept 2016
<b>Supervisor Training</b>	<b>Excelling as a First-Time Supervisor</b>	
	Certificate of Attendance USDA-ARS	Dec., 2000
	Fred Pryor Seminars; CareerTrack; Evelyn Wood Reading Dynamics	
	Supervisory Training TAMUK	Sept. 2007
	Web-based Instruction, 30 hours course	
<b>Grant Writer's Workshop</b>	<b>Grant Writing Seminars and Workshops</b>	
	Steven Russel and Texas A&M University	Feb, 2001
	Tom Fretz & Michael Harrington, USDA	Oct. 2007
<b>Horticulture Workshop</b>	<b>National Turfgrass Evaluation Program (NTEP)</b>	
	Certificate of Training	Nov 2006
<b>Cooperative Learning</b>	<b>Foundation Course in Cooperative Learning</b>	
	Certificate of Completion TAMUK	June 2005
	Johnson & Johnson 30 hr course, Center for Teaching Effectiveness	
<b>Web-based Instruction</b>	<b>Jump Start: Introduction to Web-Based Teaching</b>	
	Certificate of Completion TAMUK	May 2006

## SEARCH COMMITTEE ASSIGNMENTS

2023	Chair, Vice President for Research and Innovation
2021-22	Chair, Dean of College Engineering Search Committee
2015-16	Chair, College AGHS Business Administrator
2014-15	Co-Chair/Member, Dept AAES Search Committees (AGBU, AGSC)
2013-14	Member, Dept AAES Search Committees (PLSS, AGBU, AGSC)
2012-13	Member, Dept AAES Search Committee (PLSS)
2005-06	Chair, Dept AGRS Search Committees (AGBU; PLSS-Co-Chair)
2005-06	Chair, Dept AGRS Search Committees (PLSS; FARM manager)

### College Memorandum of Understanding: Dean related activities

**MOU with TAMU VET School, College Station.** 5 years agreement 2017, and renewed 5 year 2022. TAMU College Station Vet School sets aside 5 seats annually for TAMUK Pre-Vet students.

**MOU with ITESS, Salvatierra, Mexico.** Graduate students come to TAMUK College AGNR with full funding. 2021 agreement signed.

**MOU with University of Caldas, Colombia.** Student and Faculty Exchange program. 2022 agreement signed.

**MOU with Brazil.** Student and Faculty Exchange program with two Brazilian institutions. 2022 agreement signed.

**Publications by students funded by Grants: *Research Promotional Related Published Works:*****Other Manuscripts Published (by Dr. Nelson Securing Funding for Graduate Students)**

- Garza, B., V. Ancona, J. Enciso, H. L. Perotto-Baldivieso, M. Kunta & C. Simpson. 2020. Quantifying citrus tree health using true color UAV images. *Remote Sensing* 12 (1), 170 (doi.org/10.3390/rs1201070)
- Kunta, M., S. Chavez, Z. Vioria, H. S. del Rio, M. Devanaboina, G. Yanev, J.-W. Park & E. S. Louzada. 2020. Screening potential citrus rootstocks for *Phytophthora nicotianae* tolerance. *HortScience* 55: 1038-1044.
- Simpson, C. R., J. Gonzalez III, J. Enciso, S. D. Nelson & M. Sétamou. 2020. Root distribution and seasonal fluctuations under different grove floor management systems. *Scientia Horticulturae* 272: Article 109364.

**STEP UP to USDA Career Success grant; START NOW grant published works: USDA-NIFA HSI grants**

- Ruiz, Amy, C.C. Parra, J.V. daGraca, B. Salas, N.S.A. Malik, and M. Kunta. 2014. Molecular characterization and pathogenicity assays of *Colletotrichum acutatum*, causal agent for lime anthracnose in Texas. *Revista Mexicana de Fitopatología*. Vol. 32:52-61.
- Donato-Molina, Maria Consuelo. Aug 2018. PhD Dissertation: Sueños Y Pesadillas De Trabajadores Rurales Migrantes En Tres Novelas Chicanas: ...Y No Se Lo Tragó La Tierra, Barefoot Heart Y Under The Feet Of Jesus. *Cooperative PhD: TAMU & TAMUK*. pp. 204.
- Garcia, Claudia L., S. Dattamudi, S. Chanda, and K. Jayachandran. 2019. Effect of salinity stress and microbial inoculations on glomalin production and plant growth parameters of snap bean (*Phaseolus vulgaris*). *Agronomy* 9:545. doi:10.3390/agronomy9090545. START NOW grant funded project: United States Department of Agriculture- NIFA- Hispanic-Serving Institutions Higher Education Grants Program (2016-38422-25542).

**Other Manuscripts Published (by Dr. Nelson Securing Funding for Graduate Students)**

- R.C. Rivas-Cantu, K.D. Jones and P.L. Mills. 2013. A citrus waste-based biorefinery as a source of renewable energy: technical advances and analysis of engineering challenges. *Waste Manag. Res.* 31:413-420.
- R.C. Rivas-Cantu. PhD. Dissertation, TAMUK. Environmental Engineering. Dec. 2014. 'Citrus Waste Biorefinery: Process Development and Modeling for Pretreatment and Enzymatic Hydrolysis of Grapefruit Processing Waste Biomass.'

**Research Promotional Related Published Works:**

*Texas Project for Ag Water Efficiency published works.* [http:// www.TexasAWE.org](http://www.TexasAWE.org)

***On-Farm AWEsome Facts on Agricultural Water Conservation and Efficiency. Factsheet.***

Feb 2013      Narrow-Border Flood for Citrus: Saving Water While Improving Yields and Net Cash Farm Income. S.D. Nelson and M. Young.

***Texas AWE Reporter. Newsletter.***

Fall      2014      Partial Root-Zone Drying Augments Water-Savings in Citrus Production. Vol. 2, Issue 2.

Summer    2013      Raised Beds & Furrow Flood Irrigation Reduce Risk of Citrus Diseases. Vol. 1, Issue 1.

***TexasAWE Videos.* Texas Project for Ag Water Efficiency: From River to Farm.**

Spring 2013      On-Farm Irrigation Efficiencies (Video). [www.texasawe.org/videos](http://www.texasawe.org/videos)

Fall 2014      Narrow Border Flood in Citrus (Video). NBF: <http://youtu.be/wHZ0tBCGlms>

Surge Irrigation: <http://youtu.be/pQeFdGIB3qw>

***TAMUK Publications******Javelina Today. Official Magazine of Texas A&M University-Kingsville.***

Spring 2013      Saving Water is Top Priority for Research Scientists. J.C. Melgar and S.D. Nelson. p. 12-16.

**Published Newsletters:**

Nov 2020      College of AG iN Review. Initial online publication, 1<sup>st</sup> edition. Initiated by Dean.

**Social Media:**

Oct 2020      College of AGNR Facebook page. [www.facebook.com/agnr](http://www.facebook.com/agnr) Initiated by Dean.

**External Donation Funding Support; TAMUK Foundation Funding: Kleberg College AGNR:**

<u>Year</u>	<u>New Operating funds</u>	<u>New Endowment Funds</u>	<u>Annual CoAGNR Endowment/Scholarship Fund Earnings</u>	<u>Total CoAGNR Annual</u>
<b>2016</b>	\$ 288,000	\$3,359,710	\$2,501,581	\$6,149,290
<b>2017</b>	\$ 163,000	\$3,687,702	\$3,141,550	\$6,992,251
<b>2018</b>	\$ 594,334	\$3,560,755	\$3,005,358	\$7,160,447
<b>2019</b>	\$ 266,457	\$3,231,232	\$2,756,796	\$6,254,485
<b>2020</b>	\$ 643,330	\$3,044,298	\$2,605,902	\$6,293,530
<b>2021</b>	\$ 346,573	\$3,044,163	\$3,118,043	\$6,508,778
<b>2022</b>	\$1,170,438	\$3,394,071	\$3,187,803	\$7,752,312
<b>2023</b>	\$1,208,538	\$3,368,941	\$1,485,366 (thru 7/23)	\$6,062,844
<b>Total Sum*</b>	<b>\$4,680,670</b>	<b>\$5,383,485</b>	<b>\$21,802,398</b>	<b>\$31,866,553</b>

\*2024 still being tallied by office of advancement

Total College AGNR Endowed Earnings makes up about 70% of total TAMUK's Endowment Portfolio

**Significant Philanthropic Accomplishments with College AGNR:*****Largest Single Philanthropic Donation in TAMUK University History:***

\$30.7 Million, Smith Ranch (3.7 M operating + 27 M current ranch value (2023), KRIRM

***6 New Endowed Faculty Positions:***

\$1.3 M, Jo and Bruce Gunn Endowed Director for Veterinary Technology, VETT

\$1.1 M, C.F. Dick Schendel Family Endowed Professorship Soil Science/Scholarships, Dept AGSC

\$1.0 M, Frances and Peter Swenson Endowed Chair in Rangeland & Restoration Research, CKWRI

\$1.0 M, Alfred C. Glassell, Jr. Endowed Chair for Quail Research, CKWRI

\$1.0 M, Laura and Robert Underbrink Endowed Fund for Excellence in Agribusiness, KRIRM

\$1.0 M, Killam Endowed Chair for Wildlife Livestock Interactions, CKWRI

***2 Completed Endowed Faculty Positions:***

\$1.0 M, Paul Genho Endowed Chair for Ranch Management (completed), KRIRM

\$0.5 M, Dan Duncan Endowed Director of South Texas Natives/TX Native Seeds (added funds), CKWRI

***New Endowed Research Operating Funds:*** (short list of examples)

\$5.0 M, Annova LNG. Wild Cat Conservation Endowment, CKWRI.

\$2.5 M: Created **Patton Center for Deer Research**, CKWRI

\$2.0 M, Anonymous Operational Endowment, South Texas Natives & Texas Native Seeds, CKWRI

\$1.0 M, Laurie and Duane Leach Avian Research Endowment, CKWRI

\$1.0 M, Caesar Kleberg Foundation Fred C. Bryant Director's Infrastructure Endowment, CKWRI

\$0.5 M, Ed & Linda Williams Whitacre Endowment (\$500K added), CKWRI

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## DEAN – COLLEGE AGNR OVERSIGHT

### College AGNR Overall FY24 Budget: \$25.0 million

College State level funding contributing to Salaries and Operating FY24: \$7.1 million

College Research funding contributing to Salaries and Operating FY24: \$17.9 million

**College AGNR Total faculty FTEs: 50** [44 Tenure/TT and 6 non-Tenure/TT]

College AGNR Total personnel: **150+**

**College enrollment growth as dean: 34.8% growth: 847 to 1139 headcount (Fall 2016 to Fall 2024:-current)**

**College AGNR Annual Research Expenditures as dean: 68.6% growth: \$12.1 M to \$20.4 M (2016 to 2024)**

**17 New faculty lines due to College growth: 9 T/TT and 8 non-T/TT (2016-2024)**

- **Dept AAES: AGBU: 2 T/TT; PLSS: 1 Non T/TT; AGSC: 1 Non T/TT**
- **Dept ASVT: ANSC: 1 T/TT and 2 non T/TT; KRIRM: 3 T/TT; VETT: 1 DVM & 3 Vet Techs**
- **Dept RWSC: RWSC: 3 T/TT**

## DEAN - STRATEGIC IMPLEMENTATIONS

### College AGNR Strategic and Academic Programmatic Planning:

- AY18 Reorganized College AGNR structure with new Departments and leadership
  - Dept Agriculture, Agribusiness and Environmental Sciences
  - Dept Animal Science and Veterinary Technology
  - Dept Rangelands and Wildlife Sciences
- AY18 Established New BS Environmental Science emphasis in Agriculture Science degree
- AY18 Strengthened Vet Technology program for curriculum changes to enhance transfer student enrollment
  - Established Vet Nursing positions and Vet Nursing courses in 4 year VETT program
- AY19 Established New MS Environmental Systems Management degree with certificate in Business Manag.
- AY19 Established Citrus Center as a SACS Accredited education Off-campus site
- AY19 Established Wildlife Photography certificate option, working towards a minor in Wildlife Photography
- AY20-21 State Legislative Initiatives acquired: \$200K/year biennium Citrus Center Restoration Funding.
- AY20 Established largest Accredited Range BS program in Nation based on student headcount.
- AY21 Established New BS Agribusiness program at RELIS campus located in Bryan, Texas
- AY21 Established Doctoral PhD Rangeland and Wildlife Sciences by title change from Doctoral PhD Wildlife
- AY21-22 Acquired \$1.5 million Exceptional Item Line to support Citrus Center.
- AY22 Negotiated \$3 million Deferred Maintenance funds to University Farm improvements & new swine unit.
- AY22 Proposed State Legislative support: Exceptional and Non-Formula Funding Line Items: FY24-25
  - \$1.5 million/year Citrus Center proposal, and \$750 Exceptional Item requests
  - \$90 million Tuition Revenue Bond. Ag Building Complex, VETT, Farm, CITR expansion.
- AY23 Moved National Natural Toxin Research Center into College AGNR to facilitate research support.
- AY23 Acquired 2 new ANSC faculty and 2 VETT faculty/staff positions
- AY24 Acquired 2 new ANSC and 2 new AGBU faculty positions
- AY24 Advocated university administration to increase Citrus Center budget from \$400K to \$1.5 M per year to state legislative session. Acquired \$1.31 Million per year. 1<sup>st</sup> increase to CITR state line in over 2 decades.
- AY25 Provided consistent College strategic vision to college presidents to ensure New College AGNR building is presented to TAMU System and State Legislature. The new building is now one of the top priorities submitted to the state legislature by current university president due to the continual upward growth in student enrollment, consistent increase in external research dollars, and growth of new hires in faculty and staff that have led to the College of AGNR to now being housed across 12 buildings on campus to accommodate our growth and needs.

**College Facilities: Strategic Improvements:** implemented by Dean

- AY25: Lab remodel, new faculty office created, new farm animal upgrades, new citrus irrigation facilities
- AY24: Constructed 4 New faculty offices and multi-use copy room; New beef animal unit research facilities
- AY23: Remodeled 2 Dept Chair & staff offices and deans suite; Acquired 2 new vehicles, tractor, hay barn
- AY22: New VETT portable bldg.; Renovated staff office; KLAG bldg.; technology upgrade dean's office.
- AY21: Renovated 1 Research lab and 3 faculty offices; KLAG bldg., University Farm and South Pasture
- AY20: Renovated Soils Lab KLAG, Created new photography Lab KLAG bldg
- AY19: Renovated 3 Classrooms, 2 KLAG, 1 HOWE bldg
- AY18: Created 4 New Faculty Offices, KLAG bldg
- AY17: Created New MS Grad Offices to house 50 grad cubicles, HS bldg., Digital Signage in College Hallway

**Previous Provost Directives Accomplished:**

- **Get Enrollment in VETT program to 30 students per Cohort year.**
  - Oversaw and implemented VETT program curriculum changes
  - Changes helped to move Cohort enrollment from <15 in AY17 to near 30 students by AY21.

AY25 Total enrollment: 57 students, program is near 60 student capacity for the two cohorts.

**College Recruiting/Retention: Outreach Engagement Initiatives**

- AY25 Implemented College Student Government Association student reps to plan & oversee student focused college retention activity events
- AY24 Incorporated student peer-mentoring program to freshman students at high risk
- AY23 Enhanced College student ambassador program for student retention
- AY22 Established College Ag Ambassadors program for Recruiting
- AY21 Established New College Newsletter: **College AG iN Review**
- AY21 Established New College AGNR Facebook page: [www.facebook.edu/tamukagnr](https://www.facebook.edu/tamukagnr) ; Other social media
- AY20 Created 5 College/Dept Program Specific Recruitment Videos during COVID
  - [https://youtu.be/axsT7\\_cIC8M](https://youtu.be/axsT7_cIC8M) RWSC program video
  - <https://youtu.be/FDcdnc0bUlc> College AGNR Facilities video
  - <https://youtu.be/JZFPePv3Fa8> AGSC-PLSS program video
  - <https://youtu.be/xszkE2UKdSU> College Hands-On Opportunities
  - <https://youtu.be/x4RAigfrk68> AGSC program video

**References:**

<b>Dr. Clay Mathis</b> <b>Department Head and Professor, Animal Science</b> <b>Texas A&amp;M University</b> <b>Kleberg 133C</b> <b>College Station, TX 78363</b> <b>Office: 979-314-8490</b> <a href="mailto:clay.mathis@tamu.edu">clay.mathis@tamu.edu</a>	Dr. Mathis served as the Executive Director of the King Ranch Institute for Ranch Management at TAMU-Kingsville, where we worked together as I served as his former Dept Chair and Dean
<b>Dr. Mamoudou Setamou</b> <b>Executive Director, TAMUK Citrus Center</b> <b>Professor, Citrus Entomology</b> <b>Texas A&amp;M University-Kingsville Citrus Center</b> <b>312 N. International Blvd.</b> <b>Weslaco, TX 78596</b> <b>Office: 956-447-3370</b> <a href="mailto:mamoudou.setamou@tamuk.edu">mamoudou.setamou@tamuk.edu</a>	Dr. Setamou and I have collaborated together as research colleagues and mentored grad student projects for the citrus industry for over a decade and continue to work together as his former Dept Chair and currently as Dean
<b>Dr. Jason Apple</b> <b>Department Chair,</b> <b>Dept of Animal Science and Veterinary Technology</b> <b>Professor, Meat Science</b> <b>Texas A&amp;M University-Kingsville</b> <b>700 University Blvd., MSC 228</b> <b>Kingsville, TX 78363</b> <b>Office: 361-593-2211</b> <a href="mailto:Jason.apple@tamuk.edu">Jason.apple@tamuk.edu</a>	Dr. Apple and I have work together for over 5 years as dean as he oversees the department that has grown in enrollment to become the largest single major (animal science) at TAMUK. We collaborate on student recruitment, retention, and advancement of pre-vet, vet tech, and animal science program.
<b>Dr. Clinton Williams</b> <b>Lead Research Soil Scientist</b> <b>Irrigation and Water Quality Research</b> <b>Arid Lands Agricultural Research Center</b> <b>21881 N. Cardon Lane</b> <b>Maricopa, AZ 85138</b> <b>Office: 520-316-6379</b> <a href="mailto:Clinton.williams@ars.usda.gov">Clinton.williams@ars.usda.gov</a>	Dr. Williams and I have been research colleagues for over 3 decades, since graduate school. We collaborate on projects, proposals, and federal grant initiatives in water related issues., and in undergraduate and graduate student mentoring.
<b>Dr. Catherine Simpson,</b> <b>Endowed Associate Professor, Horticulture</b> <b>Texas Tech University</b> <b>2911 15<sup>th</sup> Street, MS 42122</b> <b>Lubbock, TX 79409</b> <b>Office: 806-834-5691</b> <a href="mailto:Catherine.Simpson@ttu.edu">Catherine.Simpson@ttu.edu</a>	Dr. Simpson has the unique perspective to know me since I was an Assistant Professor, where I was her research mentor Chair in MS and co-Chair PhD, and we have continued research collaborations and student mentoring.
<b>Dr. Randall Williams, Agricultural Education</b> <b>Regent's Professor Texas A&amp;M University System</b> <b>Minnie Stevens Piper Professor of Ag Science</b> <b>Texas A&amp;M University-Kingsville</b> <b>6230 Colony Creek</b> <b>San Antonio, TX 78240</b> <b>Cell: 361-455-1186</b> <a href="mailto:randall.williams@retiree.tamuk.edu">randall.williams@retiree.tamuk.edu</a>	Dr. Randall Williams is an emeritus professor (retired 09-2020), as one of the most recognized and honored Ag Science educators in the state of Texas, he has known me since I was hired at TAMUK, where we worked together the 10 years I served as his Dept Chair and the following 4 years as college dean until his retirement. As emeritus professor, he still serves to advance graduate student education at TAMUK

**Note: If references are desired for current Provost or former Dean of College of Ag and Natural Resources, that can be arranged and provided by Dr. Shad Nelson.**