

Sanku Dattamudi, Ph.D.

Assistant professor, Soil Science and Agroecology
Dick and Mary Lewis College of Agriculture and Natural Resources
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Teaching & Research interests

Soil science, Agroecology, Organic agriculture, Environmental quality, Wetland ecology and restoration

Education

- 2016 Ph.D. in Agronomy and Soil Science, Louisiana State University, Louisiana, USA
2010 M.Sc. in Soil Microbiology, Punjab Agricultural University, Punjab, India
2007 B.Sc. in Agriculture (Soil Science major), Visva Bharati University, West Bengal, India
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Professional positions

- 2023 – Present Assistant Professor, Department of Agriculture, Agribusiness, and Environmental Sciences
Texas A&M University – Kingsville (TAMUK), Kingsville, TX
- 2019 – 2022 Research Scientist, Department of Earth and Environment, Florida International University,
Miami, FL
- 2018 – 2019 Postdoctoral Research Scientist, Department of Agronomy and Horticulture, University of
Nebraska-Lincoln, Nebraska, NE
- 2016 – 2018 Postdoctoral Research Scholar, Southeast Environmental Research Center (SERC), Florida
International University, Miami, FL
- 2010 – 2016 Graduate Research Assistant, School of Plant, Environmental, and Soil Sciences, Louisiana
State University, Baton Rouge, LA
- 2009 – 2009 Visiting Research Scholar, Department of Agricultural and Biological Engineering (ABE),
University of Illinois, Urbana-Champaign, IL
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Courses teaching at Texas A&M University – Kingsville (TAMUK)

Spring semester 2023

1. Principles of Soil Science PLSS 3410 (MWF, 9:00 to 9:50 am) Lecture
W (1:00 to 2:50 pm); W (3:00 to 4:50 pm); F (1:00 to 2:50 pm) Lab

Fall semester 2023

1. Principles of Soil Science PLSS 3410 (MWF, 9:00 to 9:50 am) Lecture
W (1:00 to 2:50 pm); W (3:00 to 4:50 pm); F (1:00 to 2:50 pm) Lab
2. Soil Health and Productivity PLSS 4329 (MW, 11:00 to 11:50 am) lecture; F (1:00 to 2:50 pm) Lab
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Research projects (PI ad Co-PI) (Total funding received ~\$510,000)

1. PI: The Use of Cyanobacterial Biofertilizer to Increase Crop Productivity, Improve Soil Health, and Agricultural Sustainability in Florida. Southern SARE, United States Department of Agriculture (USDA); ID # AWD000000012318 Fund **\$242,000** 2021-2024. Project # LS21-354
2. PI: Efficacy of cyanobacteria biofertilizer and two other common organic nutrient sources for snap bean (*Phaseolus vulgaris*) production. United States Department of Agriculture (USDA); Fund **\$4,433** 2022. Project # SUB00002601

3. PI: Efficacy of organic nutrient sources to improve water holding capacity: An experiential learning for young scholar in agricultural science. United States Department of Agriculture (USDA); Fund **\$4,939** 2023. Project # SUB00002601
4. Co-PI: Cross Training on Data Analytic Experience in Agriculture (CODE-AG). USDA NIFA HSI; Total fund **\$1 M**; TAMUK funding: **\$195,024**. 2023 to 2027. Proposal # 2023-04521
5. Co-PI: Fostering sustainable organic cotton production in the US through research and outreach on organic regenerative practices. USDA – Organic Agricultural Research and Extension Initiative; Total fund: **\$3.5 M**; TAMUK funding: **\$61,455**. 2023 to 2026. Proposal # 2023-04469

Academic awards and Honors

- Center for Research Excellence in Science and Technology (CREST) FIU faculty travel grant, 2018
- SERC Earth Educators' Rendezvous award for early career faculty, 2018
- National Association of Geoscience Teachers (NGAT), Activity Review Camp award, 2018
- Florida International University EE Faculty Travel Grant award, 2018
- American Society of Sugarcane Technologists (ASSCT)-Louisiana division fellowship award, 2014
- Air and Waste Management Association (AWMA) graduate student award for excellence in air quality research and study, 2014
- Louisiana Environmental Health Association (LEHA) Frank Dautriol outstanding graduate student award, 2014
- Gamma Sigma Delta merit honor roll award for outstanding graduate student at Louisiana State University, 2014
- School of Plant, Environmental and Soil Sciences (SPESS) graduate student award, 2014 & 2015
- Louisiana State University travel grant award, 2013 & 2014
- Graduate Research Assistantship (USDA-AFRI) at Louisiana State University, 2010 to 2016
- US-India Sandwich Research Program fellow, University of Illinois Urbana-Champaign, 2009

Selected publications (Five only)

1. **Sanku Dattamudi**, Prasanta K. Kalita, Saoli Chanda, A.S. Alquwaizany, and Bikkar Singh Sidhu. 2020. Agricultural nitrogen budget for long-term row crop production in a Midwest US watershed. *Agronomy* 10(11), 1622.
2. **Sanku Dattamudi**, Jim J. Wang, Syam K. Dodla, Ronald DeLaune, April Hiscox, Howard Viator, and Changyoon Jeong. 2020. Mass concentration and size distribution of particles released from harvesting and biomass burning of sugarcane. *Agricultural and Environmental Letters* 5(1). e20028.
3. **Sanku Dattamudi**, Syam K. Dodla, Jim Wang, Sonny Viator, and Ron DeLaune. 2019. Greenhouse Gas Emissions as Influenced by Nitrogen Fertilization and Harvest Residue Management in Sugarcane Production. *Agrosystems, Geosciences, & Environment*, 2 (1), 10 Pp
4. **Sanku Dattamudi**, Jim J. Wang, Syam K. Dodla, Allen. Arceneaux, and H P Viator. 2016. Effect of nitrogen fertilization and residue management practices on ammonia emissions from subtropical sugarcane production. *Atmospheric Environment* 139: 122-130.
5. **Sanku Dattamudi**, Saoli Chanda, and Leonard J. Scinto. 2021. Microbial respiration and enzyme activity downstream from a phosphorus source in the Everglades, Florida, USA. *Land* 10(7) 696.

Professional membership

- Soil Science Society of America (SSSA)
- American Society of Agronomy (ASA)
- Crop Science Society of America (CSSA)
- National Association of Geoscience Teachers (NAGT)
- Gamma Sigma Delta (The honor society for Agriculture)

Google Scholar profile: <https://scholar.google.com/citations?user=7I3ymcMAAAAJ&hl=en>

ResearchGate profile: <https://www.researchgate.net/profile/Sanku-Dattamudi>