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fruits shelflife	Board				
Development of sustainable irrigation and nutrient management for citrus grove in South Texas	Valley Agricultural and Development Council	PI	\$53,000	2023	2022
NRT-HDR Transdisciplinary Research and Education for Air and Water Resources Solutions in Coastal Communities	NSF	Co-PI	\$2,000,000	2023	2028
Evaluation of onion (<i>Allium cepa</i>) and sour orange rootstock performance and physiology under different soil amendments	Greater Texas Foundation Undergraduate Research	PI	\$2,830	2024	
Sustainable organic citrus production using improved agroecological management strategies	NIFA-ICGP	Co-PI	\$2,000,000	2024	2028
Total funding participated			\$4.4 million		
Total funding to my program			\$591,695		

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 January 2022 Major funding sources include TWDB, TCPB, VADC, NSF, USDA-HSI, NIFA-ICGP.

Present job responsibilities (25% teaching, 75% research)

Courses taught	PLSS 532 Advanced Plant Physiology PLSS 4390 Precision Agriculture PLSS 5390 Precision Agriculture PLSS 5390 Environmental Crop Nutrition PLSS 3381 Crop Physiology
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Research description

Experiments in the Cabrera lab focuses on pre and post harvest citrus physiology and horticulture. We conduct research in field and controlled conditions. We explore integrated nutrient management, combining organic and inorganic sources of essential nutrients for sustainable and profitable farming. Integrating chemical and organic fertilizers via a balanced approach is crucial for maximizing crop yield and preserving soil fertility.

Outreach description

Projects in the lab are supported through a variety of funding sources, thereby our extension program seeks to provide science E D V H G L Q I R U P D W L R Q W R L P S U R Y H S U R G X F H U V ¶ operation.

7. ReyesCabrera, J., J.E. Erickson, R.G. Leon, M.L. Silveira, and L.E. Sollenberger. 2019. Amending marginal sandy soils with biochar and lignocellulosic fermentation residual sustains fertility in elephantgrass bioenergy cropping systems. *Cult. Agroecosys.* 115: 69-83.
6. ReyesCabrera, J., J.E. Erickson, R.G. Leon, M.L. Silveira, D. L. Rowland., L.E. Sollenberger, and K.T. Morgan. 2017. Converting bahiagrass pasture land to elephantgrass bioenergy production enhances biomass yield and water quality. *Agr. Ecosyst. Environ.* 248: 2028.
5. ReyesCabrera, J., R.G. Leon, J.E. Erickson, M.L. Silveira, D. L. Rowland., and K.T. Morgan. 2017. Differences in biomass and water dynamics between peanut rotation and sweet sorghum bioenergy crop with and without biochar and vinasse soil amendments. *Field Crop. Res.* 214: 123130.
4. ReyesCabrera, J., R.G. Leon, J.E. Erickson, M.L. Silveira, D. L. Rowland., and K.T. Morgan. 2017. Biochar changes shoot growth and root distribution of soybean during early vegetative stages. *Crop Sci.* 47: 4461.
3. ReyesCabrera, J., L. Zotarelli, M. D. Dukes, D.L. Rowland, and S. A. Sargent. 2016. Soil moisture distribution under drip irrigation and seepage for potato production. *Water Manage* 169: 183192.
2. ReyesCabrera, J., L. Zotarelli, D. L. Rowland, M. D. Dukes. Q q 0.00000912 0 612 792 re W* n BT

27. ReyesCabrera, J. Towards a more resilient and robust citrus production in Texas cover crops. Crop Science Society of America. Crop Ecology, Management and Quality Session II. St. Louis, MO. November 2023.
26. ReyesCabrera, J., Donato, C. Can cover crops do anything for the Texas citrus industry? American Society of Horticultural Sciences

Undergraduate Research & Creative Achievements Forum. University of Missouri.
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2. Makani, M. N., S. A. Sargent, ReyesCabrera, L. Zotarelli. 2012. The effect of irrigation method, harvest time, and storage on mechanical injury and tuber quality of tablestock potato (*Solanum tuberosum* L.). ASHS Annual Conference.
1. Perret J.S.J. ReyesCabrera, V.R. Bazán, B.K. Singh, K.T. Morgan, and A. Gilbert. 2010. Lysimeter experiments to investigate the fate and transport of vinasse application in tropical soils. 21st Century Watershed Technology: Improving Water Quality and Environment, CD-Rom Proceedings, 24 February 2010 (EARTH University, Costa Rica), ASABE Publication Number 701P0210cd.

Extension Publications

Christensen, C.T.J. ReyesCabrera, L.R. Rens, J.E. Pack, L. Zotarelli, C. H. Hutchinson, W.J. Dahl, D. Gergela, and J. White. 2016. Growing potatoes in the Florida home garden. Horticultural Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. EDIS Publication HS933. 9p.
<http://edis.ifas.ufl.edu/hs183>

Teaching experience

2024	Instructor, Crop Physiology undergraduate Texas A&M University Kingsville
2023	Instructor, Environmental Crop Nutrition Texas A&M University Kingsville
2023	Instructor, Precision Agriculture Texas A&M University Kingsville
2022	Instructor, Advanced Crop Physiology Texas A&M University Kingsville
2019	Instructor, Introduction to Soil Sciences Eastern New Mexico University
2019	

University of Florida

Mentoring

2023

Hemanth Reddy Karakala (Master), TAMUK.

2023

Dileep Kumar Alapati (Master), TAMUK.

Awards & Honors

Certificate ineffective college instruction from The Association of College and University Educators (ACUE) (\$500)	2023
Travel grant from Mizzou Postdoctoral Association (\$300)	2019
Third place poster competition Bioenergy Session / ASA (\$150)	2016
Linton E. Grinter Award Recipient (\$2,500)	2013
EARTH University Honors College Outstanding Junior	2008