

Dr. Alexis Eclevia Racelis

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Education

PhD, University of California, Santa Cruz, 2009

Major: Environmental Studies

MS, Florida International University, 2003

Major: Environmental Science

BS, University of California, Santa Barbara, 1998

Major: Biological Sciences

BS, University of California, Santa Barbara, 1998

Major: Environmental Studies

Employment

Academic - Administrative Assignments

Academic - Administrative Assignments, Co-Director, University of Texas Rio Grande Valley, Center for Sustainable Agriculture and Rural Advancement, (2017)

Academic - Administrative Assignments, Associate Dean of Community Engagement and Outreach, University of Texas Rio Grande Valley - College of Sciences, (2016 - 2019)

Academic - Post-Secondary

Academic - Post-Secondary, Associate Professor - School for Earth, Environmental, and Marine Science, University of Texas Rio Grande Valley, (2019)

Academic - Post-Secondary, Assistant Professor, University of Texas Rio Grande Valley - School of Earth, Environmental, and Marine Sciences, (2016 - 2019)

Academic - Post-Secondary, Assistant Professor, University of Texas Rio Grande Valley - Department of Biology, (2015 - 2016)

Academic - Post-Secondary, Assistant Professor of Environmental Science, University of Texas Pan-American - Department of Biology, (2013 - 2015)

Government

Government, Member, Subcommittee of Agriculture, United States Department of Agriculture-Federal Equity Commission, (2022)

Government, Research Ecologist, US Department of Agriculture - Agricultural Research Service, (2009 - 2012)

Licensures and Certifications Start

Multilingual Pedagogy Certification, UTRGV, ()

Professor National Certification, Federal Ministry of Education(PROMEP-SEP, Mexico), (June 2009)

Professor National Certification, Federal Ministry of Education (PROMEP-SEP, Mexico), (June 2006)

Publications

Book Chapters

J Goolsby and P Moran and A Racelis and A Cohen and M Ciomperlik and R Summy and D Sands and A Kirk. Mass-rearing of the stem-galling wasp *Tetramesa romana*, a biological control agent of the invasive weed *Arundo donax*. San Diego, Ca: 163-201.

Alex Racelis and James Barsimantov. Rethinking the Role of Tropical Forest Science in Forest Conservation and Management. New York, NY: *Springer*.: 81-91.

http://dx.doi.org/10.1007/978-1-4614-7161-5_6

A Racelis and A Brovold. The utility of inquiry-based exercises in Mexican science classrooms: Reports from a professional development workshop for science teachers in Quintana Roo, Mexico. San Francisco, CA: *Astronomical Society of the Pacific*. 436, : 459-468.

Journal Article, Academic Journal

Greg Lefoe and John Goolsby and Alexis Racelis. Predicting the realised host-range of *Leptinotarsa texana* with open-field experiments.: *Biocontrol Science and Technology*.

Adegboyega Fajemisin and S. Kaur and Alejandro Vasquez and Alexis Racelis and Rupesh Kariyat. Can trap color affect arthropod community attraction in agroecosystems? A test using yellow vane and colorless trap.: *Environmental Monitoring and Assessment*. (February) 195,

<https://doi.org/10.1007/s10661-023-10972-w>

Adegboyega Fajemisin and Alexis Racelis and Rupesh Kariyat. Cascading effects of cover crops on the subsequent cash crop defense against the polyphagous herbivore Fall armyworm (*Spodoptera frugiperda*)..: *Insects*. (February) 14, : 177.

Alyssa Cavazos and Cristina Trejo and Lionel Cavazos and Stephanie Garza-Ochoa and Yaritza Marin and Alexis Racelis. Teaching Philosophy Statements: The Impact of a Culturally Relevant Pedagogy Faculty Learning Community at a Hispanic Serving Institution.: *Journal of Latinos and Education*. (December): 1-16.

<https://doi.org/10.1080/15348431.2022.2149530>

- Angela Chapman and Amy Weimer and Mirayda Torres Avila and Alma Trejo-Vasquez and Alexis Racelis. The Effects of Teaching Undergraduate Freshmen Biology Courses in Spanish and English.: *SN Social Sciences*. (October (4th Quarter/Autumn))
- George Atisa and Alexis Racelis. Analysis of Urbanization and Climate Change Effects on Community Resilience in the Rio Grande Valley, South Texas . Basel (July (3rd Quarter/Summer)) 14, : 17.
<https://www.mdpi.com/2071-1050/14/15>
- Stephanie Kasper and Faeqa Mohsin and Lindsey Richards and Alexis Racelis. Cover Crops May Exacerbate Moisture Limitations on South Texas Dryland Farms.: *Journal of Soil and Water Conservation*. (January (1st Quarter/Winter)) 77, : 261-269.
<https://doi.org/10.2489/jswc.2022.00088>
- Jesus Chavana and Sukhman Singh and Alejandro Vazquez and Bradley Christoffersen and Alexis Racelis and Rupesh Ram Kariyat Ramachandr. Local adaptation to continuous mowing makes the noxious weed *Solanum elaeagnifolium* a superweed candidate by improving fitness and defense traits.: *Scientific Reports*. 11, : 6634.
<https://doi.org/10.1038/s41598-021-85789-z>
- Kaitlynn Lavalley and Pushpa Soti and Pulahinge Hansapani Rodrigo and Rupesh Ram Kariyat Ramachandr and Alexis Racelis. Pre-Sowing Treatments Improve Germinability of South Texas Native Plant Seeds.: *Plants*. (November) 10, : 2545.
- Alexis Racelis and Pradeep Wagle and Jose Escamilla and John Goolsby and Prasanna Gowda. Interannual Variability and Seasonal Dynamics of Evapotranspiration of *Arundo donax* L. and Populations of its Biological Control Agent (*Tetramesa romana*): *Ecohydrology & Hydrobiology*. (August) 22, : 178-187.
<https://doi.org/10.1016/j.ecohyd.2021.07.002>
- Matthew Kutugata and Jeremy Baumgardt and John Goolsby and Alexis Racelis. Automatic Camera-Trap Classification Using Wildlife-Specific Deep Learning in Nilgai Managemen.: *Journal of Fish and Wildlife Management*. (July (3rd Quarter/Summer)) 12, : 412-421.
<https://doi.org/10.3996/JFWM-20-076>
- Rupesh Kariyat and Jesus Chavana and sukhman singh and stephanie casper and Lekshmi Sasidharan and Alexis Racelis. Exploring the role of soil types on defense and fitness traits of silverleaf nightshade (*Solanum elaeagnifolium*), a worldwide invasive species through a field survey Edinburg: *Plant Signaling and Behavior*.
[1201 W. University Dr.](https://doi.org/10.1002/plb.1201)
- Habraham Lopez and Pushpa Soti and Ganpati Jagdale and Parwinder Grewal and Alexis Racelis. Weeds as Hosts of Plant Parasitic Nematodes in Subtropical Agriculture Systems.: *Subtropical Agriculture and Environments*. (June)
- Allison Kaika and Alexis Racelis. Civic agriculture in review: Then, now, and future directions. *Journal of Agriculture, Food Systems, and Community Development*, : *Journal of Agriculture, Food Systems, and Community Development*. (April (2nd Quarter/Spring)) 10, : 551-572.
<https://doi.org/10.5304/jafscd.2021.102.030>
- Lili Martinez and Pushpa Soti and Jasleen Kaur and Alexis Racelis and Rupesh Ram Kariyat Ramachandr. Impact of Cover Crops on Insect Community Dynamics in Organic Farming.: *Agriculture*. 10, : 209.
- Jasleen Kaur and Jesus Chavana and Pushpa Soti and Alexis Racelis and Rupesh Ram Kariyat Ramachandr. Arbuscular mycorrhizal fungi (AMF) influences growth and insect community dynamics in Sorghum-sudangrass (*Sorghum x drummondii*): *Arthropod-Plant Interactions*.: 1--15.
- John Brush and Timothy Brush and Alexis Racelis. Effects of Urbanization on Buff-bellied Hummingbirds in Subtropical South Texas. Los Angeles, CA: *Cities and the Environment*.
- Pushpa Soti and Alexis Racelis. Cover crops for weed suppression in semiarid subtropical Texas.: *Organic Agriculture*. (February)
- Pushpa Soti and John Goolsby and Alexis Racelis. Agricultural and Environmental Weeds of South Texas and their Management.: *Subtropical Agriculture and Environments* . (January (1st Quarter/Winter))
- Stephanie Kasper and Bradley Christoffersen and Pushpa Soti and Alexis Racelis. Abiotic and biotic limitations to nodulation by leguminous cover crops in South Texas.: *Agriculture*. (September) 9,
- John Goolsby and Diana Cantu and Alejandro Velasquez and Alexis Racelis and W. Clint Hoffman and Phillip Jank. Development of a remotely activated field sprayer and evaluation of temperature and aeration on the longevity of *Steinernema riobrave* entomopathogenic nematodes for treatment of cattle fever tick-infested nilgai.: *Subtropical Agriculture and Environments*. (August): 1-5.
- Alejandro Vazquez and John Goolsby and Ann Vacek and Alexis Racelis and Rupesh Ram Kariyat Ramachandr. Incidence of the Brown dog tick, *Rhipicephalus sanguineus* and its parasitoid, *Ixodiphagus hookeri* on dogs in South Texas . Weslaco, TX: *J. of Subtropical Agriculture and Environments*. 70, : 6-10.
- Pushpa Soti and Alexis Racelis. Laboratory Evaluation of Efficacy of Entomopathogenic Nematodes on Texas Leaf-cutting Ants, *Atta texana*.: *SOUTHWESTERN ENTOMOLOGIST*. 43, : 635-637.
- Madeline Marshall and J. Goolsby and A. Vacek and P. Moran and A Kirk and E. Cortes Mendoza and M Cristafaro and A. Bownes and A. Mastoras and J. Kashfi and A Chaskopoulou and L Smith and B. Goldsmith and Alexis Racelis. Densities of the arundo wasp, *Tetramesa romana* (Hymenoptera: Eurytomidae) across its native range in Mediterranean Europe and introduced ranges in North America and Africa,.: *Biocontrol Science and Technology*. (July (3rd Quarter/Summer))
- Alejandra Fuentes and E. Braswell and R. Ruiz-Arce and A. Racelis. Global genetic variation and population structure of *Diaphorina citri* using cytochrome oxidase I (COI) sequencing.: *PLOS One*. (June)
- Madeline Marshall and John Goolsby and Ann Vacek and Achilles Mastoras and Javid Kashfi and A. Chaskopoulou and Link Smith and Ismael Badillo and Frank Reilly and A. A. Perez de Leon and Alexis Racelis. Biotic and abiotic factors influencing infestation levels of the arundo leafminer, *Lasiopoda donacis*, in its native range in Mediterranean Europe.: *Subtropical Agriculture and Environments*. 69,

- Nirbhay Singh and John Goolsby and David Shapiro-Ilan and Robert Miller and Donald Thomas and G. Klafke and J. Tidwell and Alexis Racelis and Parwinder Grewal and A. A. Perez De Leon. Efficacy Evaluation of Six Entomopathogenic Nematode Species1 against Engorged Females of Southern Cattle Fever Tick, *Rhipicephalus (=Boophilus) microplus*.: *Southwestern Entomology*. (January (1st Quarter/Winter)) 43, : 1-17.
- A. Racelis and M. Lowman and D. Ojima and E. Waalima. Trade-offs between potential carbon sequestration and biodiversity conservation through management of Brazilian pepper removal in Florida.: *Ecological Restoration*.
- John Brush and Alexis Racelis and Timothy Brush. The breeding bird community of a remnant urban woodland in McAllen, Texas.: *Bulletin of the Texas Ornithological Society*. (November) 50, : 8-18.
- Maricela Martinez-Jimenez and John Goolsby and Alexis Racelis and Adalberto Perez De Leon and David Negrete-Arroyos. Introducción, Establecimiento, y Dispersión en México de la Avispa *Tetramesa romana*, Agente de Control Biológico del Carrizo Gigante.: *Southwestern Entomology*. (June) 42, : 427-434.
- Savannah Rugg and Pushpa Soti and Alexis Racelis. Using cover crops to suppress weeds in subtropical organic vegetable farms.: *Agroecology and Sustainable Food Systems*.
- John Goolsby and Ann Vacek and Crystal Salinas and Alexis Racelis and Patrick Moran and Alan Kirk. Host range of the European leaf Sheath Mining midge, *Lasioptera donacis* Coutin (Diptera: Cecidomyiidae), a biological control agent of giant reed, *Arundo donax* L. : *Biocontrol Science and Technology*. (June) 27, : 781-795.
- J. Escamillia and P. Gowda and J. Goolsby and P. Wagle and A. Racelis. Seasonal and interannual variations in evapotranspiration of *Arundo donax* on the Rio Grande River.: *Agricultural and Forest Meteorology*.
- Patrick Moran and Ann Vacek and Alexis Racelis and Paul Pratt and John Goolsby. Association of biological control impact of the wasp *Tetramesa romana* (Hymenoptera:Eurytomidae) on the invasive weed arundo (*Arundo donax*) (Poaceae: Arundinoideae) with plant diversity along the Rio Grande in Texas. (January (1st Quarter/Winter)) 27, : 96-114.
<http://www.tandfonline.com/doi/full/10.1080/09583157.2016.1258453>
- J. Villarreal and J. Goolsby and Ann Vacek and A. Perez de Leon and Alexis Racelis. Horticultural technique for rearing and redistribution of the sessile biological control agent, *Rhizaspidiotus donacis* on its host plant, *Arundo donax*.: *Subtropical Agriculture and Environments*. 67, : 19-23.
- John Goolsby and F. Guerrero and J. Gaskin and K. Bendele and P. Azhahianambi and D. Amalin and M. Flores-Cruz and J. Kashefi and L. Smith and Alexis Racelis and R. Saini and A Perez de Leon. Molecular Comparison of Cattle Fever Ticks from Native and Introduced Ranges, with Insights into Optimal Search Areas for Classical Biological Control Agents.: *Southwestern Entomology* . 41, : 595-604.
<http://www.bioone.org/doi/abs/10.3958/059.041.0302>
- William Overholt and Purnama Hidayat and Bruno Le Ru and Keiji Takasu and John Goolsby and Alexis Racelis and A. Millie Burrell and Divina Amalin and Winnifred Agum and Mohamed Njaku and Beatrice Pallangyo and Patricia Klein and James Cuda. Potential biological control agents for management of cogongrass, *Imperata cylindrica* (Cyperales: Poaceae) in the southeastern USA.: *Florida Entomologist*. 99, : 734-739.
<http://www.bioone.org/doi/abs/10.1653/024.099.0425>
- Pushpa Soti and Savannah Rugg and Alexis Racelis. Potential of Cover Crops in Promoting Mycorrhizal Diversity and Soil Quality in Organic Farms. 8, : 42-47.
<http://www.ccsenet.org/journal/index.php/jas/article/view/59840>
- Pushpa Soti and Savannah Rugg and Alexis Racelis. Potential of Cover Crops in Promoting Mycorrhizal Diversity and Soil Quality in Organic Farms.: *Journal of Agricultural Science*.
- John Goolsby and Dennis Mays and Greta Schuster and Javid Kashefi and L. Smith and D. Amalin and M. Cruz-Flores and Alexis Racelis and A. Perez De Leon. Rationale for Classical Biological Control of Cattle Fever Ticks and Proposed Methods for Field Collection of Natural Enemies.: *Subtropical Agriculture and Environments*. 66, : 7-15.
<http://www.subplantsci.org/wp-content/uploads/2016/03/SAE-Goolsby-et-al-POST.pdf>
- Millie Burrell and G Hodnett and J Goolsby and W Overholt and R Diaz and Alex Racelis and P Klein. Exploring origins, invasion history and genetic diversity of *Imperata cylindrica* (L.) P. Beauv. (Cogongrass) in the United States using genotyping by sequencing. *Molecular Ecology*.: *Molecular Ecology*. 24, : 2177-2193.
- John Goolsby and Patrick Moran and Alexis Racelis and Kenneth Summy and Maricela Martinez Jimenez and Ronald Lacewell and Adalberto Perez De Leon and Alan Kirk. Impact of the biological control agent *Tetramesa romana* (Hymenoptera: Eurytomidae) on *Arundo donax* (Poaceae: Arundinoideae) along the Rio Grande River in Texas.: *Biocontrol Science and Technology*. 26, : 47-60.
<http://www.tandfonline.com/doi/abs/10.1080/09583157.2015.1074980>
- Carlo Moreno and Alexis Racelis. Attraction, Repellence, and Predation: Role of Companion Plants in Regulating *Myzus persicae*(Sulzer) (Hemiptera: Aphidae) in Organic Kale Systems of South Texas.: *Southwestern Entomologist*. (March) 40, : 1-14.
<http://dx.doi.org/10.3958/059.040.0101>
- Jose Escamilla and Savannah Rugg and John Brush and Jorge Cantu and Alexis Racelis. Ecosystem Services in Agricultural and Urban Landscapes.: *Ecological Restoration*. (March) 33, : 119-120.
<http://dx.doi.org/10.3368/er.33.1.119>
- Kenji Takasu and Y Yoshiyasu and A Burrell and P Klein and Alexis Racelis and J Goolsby and W Overholt. *Acrapex azumai* Sugi (Lepidoptera: Noctuidae) as a possible biological control agent of the invasive weed *Imperata cylindrica* (L.) Beauv. (Poaceae) in the United States. : *Lepidoptera Science* . 65, : 30-35.
- A Racelis and A Vacek and C Goolsby and John Brush and J Goolsby. Arthropod abundance and diversity in street trees of south Texas, USA.: *Journal of Subtropical Plant Science*. 64, : 33-37.
- J Goolsby and J Gaskin and D Tarin and A Pepper and D Henne and A Auclair and A Racelis and K Summy and J Moran and D Thomas and C Yang and M Martinez Jiménez and M Ciomperlik and A Pérez de León and A Kirk. Establishment and Spread of a

Single Parthenogenic Genotype of the Mediterranean arundo wasp, *Tetramesa romana*, In the Variable Climate of Texas. .: *Southwestern Entomologist*. 39, : 675-689.

A Rubio and A Racelis and T Vaughan and J Goolsby. Riparian soil seed banks and the potential for passive restoration of Giant Reed infested areas in Webb County, TX.: *Ecological Restoration* . 32, : 347-349.

John Goolsby and Alexis Racelis and Julia Goolsby and Alan Kirk and Massimo Cristafaro and Michael Grusak and A Perez de Leon . Evaluation of biogeographical factors in the native range to improve the success of biological control agents in the introduced range.: *Biocontrol Science and Technology*. 23, : 1213-1230.

A Racelis and P Moran and J Goolsby. Cutting of *Arundo donax* as a pre-treatment to biological control. *Subtropical Plant Science* .: *Journal of Subtropical Plant Science*. 64, : 54-60.

A Racelis and J Goolsby and A Perez de Leon and K Varner and R Duhaime . Facilitative ecological interactions between invasive species: *Arundo donax* (Poaceae) stands as favorable habitat for the non-parasitic stages of cattle ticks (Acari: Ixodidae).: *Journal of Medical Entomology* .: 61-66.

Alexis Racelis and A Rubio and T Vaughan and J Goolsby. Passive restoration potential of areas invaded with giant reed in south Texas.: *Ecological Restoration*. 30, : 102-105.

Alex Racelis and J. Goolsby. Rapid assessment of *Arundo donax* biomass using visibility measures.: *Subtropical Plant Science*.: 61-66.

M DiGiano and A Racelis. Robustness, adaptation and innovation: Forest communities in the wake of Hurricane Dean.: *Applied Geography*. 33, : 151-158.

M DiGiano and A Racelis. Robustness, adaptation and innovation: Forest communities in the wake of Hurricane Dean.: *Applied Geography*. (April (2nd Quarter/Spring)) 33, : 151-158.

https://www.researchgate.net/publication/256972414_Robustness_Adaptation_and_Innovation_Forest_Communities_in_the_Wake_of_Hurricane_Dea

J Goolsby and A Kirk and J Adamczyk and A Racelis and E Cortez-Mendoza and M Jimenez and K Summy and M Ciomperlik and D Sands. Establishment of the armored scale *Rhizaspidotus donacis*, a biological control agent of *Arundo donax*.: *Southwestern Entomologist*. 36, : 373-374.

A Racelis and P Gowda and J Goolsby and T Howell. Estimating Water Use by Giant Reed Along the Rio Grande Using a Large Aperture Scintillometer.: *Journal of Subtropical Plant Science*. 63, : 1-6.

Alexis Racelis and S Aswani. Hopes and disenchantments of religious community forestry in the Western Solomon Islands.: *Ecological and Environmental Anthropology*. 6, : 26-38.

E Cortez-Mendoza and A Kirk and J. Goolsby and P Moran and A. Racelis and M. Marcos-Garcia. Impact of the *Arundo* scale *Rhizaspidotus donacis* (Hemiptera: Diaspididae) on the weight of *Arundo donax* (Poaceae: Arundinoideae) rhizomes in Languedoc southern France and Mediterranean Spain.: *Biological Control Science and Technology*. 21, : 1369-1373 .

<http://www.tandfonline.com/doi/abs/10.1080/09583157.2011.606558?journalCode=cbst20>

Alexis Racelis and R. Davey. New survival record of southern cattle tick in subfreezing temperatures.: *Southwestern Entomologist*. 36, : 383-385.

<http://www.bioone.org/doi/abs/10.3958/059.036.0318?journalCode=swen>

Alexis Racelis and R Davey. New survival record of southern cattle tick in subfreezing temperatures.: *Southwestern Entomologist*. 36, : 383-385.

A Racelis and J Goolsby and R Penk and W Jones and T Roland. Development of an Inundative, Aerial Release Technique for the *Arundo* Wasp 1 , Biological Control Agent of the Invasive *Arundo donax* L .: *Southwestern Entomologist*. 35, : 495-501.

J Barsimantov and A Racelis and M Digiano and G Barnes. Tenure, tourism and timber in Quintana Roo, Mexico: land tenure changes in forest ejidos after agrarian reforms.: *International Journal of the Study of Commons*. 4,

M Digiano and A Racelis and J Barsimantov and K Biedenweig. When Collective Action and Tenure Allocations Collide: Outcomes from Community Forests in Quintana Roo, Mexico and Petén, Guatemala.: *Journal of Land Policy*. 28, : 343-352.

Alexis Racelis and J Goolsby and P Moran and J Adamczyk. Seasonality and Movement of Adventive Populations of the *Arundo* Wasp (Hymenoptera: Eurytomidae), a Biological Control Agent of Giant Reed in the Lower Rio Grande Basin in South Texas.: *Southwestern Entomologist*. 34, : 347-357.

Alexis Racelis and J Barsimantov. The management of small diameter, lesser-known hardwood species in forest communities of central Quintana Roo, Mexico.: *Journal of Sustainable Forestry*. 27, : 122-144.

M Rayachhetry and T Van and T Center and J Goolsby and P Pratt and Alexis Racelis. Biological attributes of the canopy-held melaleuca seeds in Australia and Florida.: *Journal of Aquatic Plant Management*. 40, : 87-93.

Conference Proceedings

P Moran and J Goolsby and A Racelis and A Cortes and E Marcos-Garcia and M Kirk and A Adamczyk. *Rhizaspidotus donacis*, an armored scale released for biological control of giant reed, *Arundo donax*. Morgantown, WV: *USDA-Forest Service*.

A Racelis and P Moran and J Goolsby and A Kirk and J Adamczyk. *Tetramesa romana* (Hymenoptera: Eurytomidae), a parthenogenic stem-galling wasp released for giant reed, *Arundo donax*. Morgantown, WV: *USDA-Forest Service*. (July (3rd Quarter/Summer)): 120.

A Racelis and A Perez de Leon and J Goolsby. Biological control as a tool to mitigate economic impacts of facilitative ecological interactions between the giant reed and cattle fever ticks . Waikaloa, Hawaii : *Proceedings of the XII International Symposium on Biological Control of Weeds*. (July (3rd Quarter/Summer)): 357.

A Racelis and M DiGiano and G Barnes and J Barsimantov. The Varying Effects of Neoliberal Land Policy on Communal Property in Mexic. Cheltenham, UK: *Proceedings of the Meeting of the International Association of the Study of the Commons*. (July (3rd Quarter/Summer))

Others

Alexis Racelis. COMMENTARY: McAllen Community Garden benefits. McAllen, TX: *The Monitor*. (December)
https://www.themonitor.com/opinion/columnists/article_1d0b05c2-da06-11e7-a55b-572d6adbd0ca.html

Under Submission

Journal Article, Academic Journal

Qulina Rai and Robin Choudhury and Pushpa Soti and Alexis Racelis. Rhizobial adhesives enhance nodule formation and activity in sunn hemp.: *Frontiers in Agronomy*.

<https://www.biorxiv.org/content/10.1101/2021.09.27.461990v1.full.pdf+html>

Pushpa Soti and Rupesh Ram Kariyat Ramachandr and Alexis Racelis. Effective farm management promotes native AMF and benefit organic farming systems.: *Agriculture, Ecosystems & Environment*.

Rupesh Ram Kariyat Ramachandr and Pushpa Soti and Alexis Racelis. Cover crops influence population dynamics of herbivores and beneficial insects in organic vegetable farms.: *BioControl*.

Contracts, Grants and Sponsored Research

Alexis Eclevia Racelis and Colin Cain and Christopher A Gabler and Engil Isadora Pujol Pereira Mikita and Veerachandra K Yemmireddy. Grant Conservation, Community, and Equity in Food and Agriculture in the Rio Grande Valley (CEFAIR) USDA NRCS Conservation Outreach: Racial Equity and Justice Conservation Cooperative Agreements Federal , 592800\$ (August 2022 - August 2026)

Alexis Racelis and Pushpa Gautam Soti. Grant Building Agriculture Science Education (BASEII) for Hispanic Students through Florida-Texas-New Mexico Consortium. Florida International University/ USDA Federal , 300000\$ (August 2021 - August 2025)

Alexis Racelis and Christopher A Gabler and Savannah Rugg and Ismael Baldillo and Merritt Drewery and Jorge Cantu and Ken Mix. Grant South Texas Agricultural Roadmap for Teaching, Research, Experiential Learning, and Careers (STARTREC) in Food, Agriculture, and Natural Resources USDA-NIFA Hispanic-Serving Institutions (HSI) Education Grants Program Federal , 975314\$ (August 2021 - August 2025)

Alexis Racelis and Rupesh Ram Kariyat Ramachandr and Bradley O'Donnell Christoffersen and Pushpa Gautam Soti and Liu Xiangping. Grant Subtropical Soil Health Demonstration: On-Farm Trials of Cover Crops for Conservation Innovation in arid farms of south Texas United States Department of Agriculture - Natural Resource Conservation Service Federal , 1899545\$ (April 2021 - May 2025)

Pushpa Gautam Soti and Alexis Racelis. Grant Intersections among soil health, soil moisture and weed management in water limited farms of south Texas USDA-NRCS Federal , 175000\$ (August 2022 - August 2024)

Alexis Eclevia Racelis and Timothy Joseph Sears. Grant Agroecology Professional Development Institute (APDI) at the University of Texas Rio Grande Valley United States Department of Agriculture-National Institute of Food and Agriculture Federal , 149984\$ (January 2019 - September 2023)

Alexis Racelis and Angela Marie Chapman and Alyssa Guadalupe Cavazos and Dongkyu Kim and Amy Weimer. Grant Transforming Undergraduate Education in STEM Through Culturally Relevant Pedagogy and Community Engagement National Science Foundation Federal , 1480002\$ (September 2018 - September 2023)

Engil Isadora Pujol Pereira Mikita and James JiHoon Kang and Chu-Lin Cheng and Mirayda Torres Avila and Bradley O'Donnell Christoffersen and Christopher A Gabler and Kristine Lowe and Alexis Eclevia Racelis. Grant Training, Research, and Education in Soil Science (TRESS) USDA/NIFA Hispanic-Serving Institutions (HSI) Education Grants Program Federal , 274988\$ (August 2018 - August 2023)

Robin Alan Choudhury and Alexis Racelis. Grant To support transformation of food systems through research, education, and community engagement at the University of Texas Rio Grande Valley Cynthia & George Mitchell Foundation Private , 85000\$ (March 2022 - March 2023)

Alexis Racelis and Owen Frederick Temby and Dongkyu Kim and Barber Jessie. Sponsored Research Exploration of methods to improve access to Healthy Foods in Food Deserts of Texas Texas Department of Agriculture State , 107259\$ (August 2021 - December 2022)

Alexis Racelis and Christopher De la Rosa and . Grant Effectiveness of tarping and tillage as weed management strategies in South Texas Southern SARE (Sustainable Agriculture Research and Education) Other , 16500\$ (August 2021 - August 2022)

Alexis Eclevia Racelis. Grant Building Soil Science Capacity through Research and Education at UT Rio Grande Valley, a Premier Hispanic Serving Institution in South Texas United States Department of Agriculture-Natural Resources Conservation Service Federal , 100000\$ (August 2019 - August 2022)

Alexis Racelis and Rupesh Kariyat and Samikshya Subedi. Sponsored Research Phase 2: Biological control of silverleaf nightshade *Solanum elaeagnifolium* State of Victoria, Department of Economic Development, Jobs, Transport, and Resources Other , 49986\$ (December 2020 - June 2022)

Alexis Eclevia Racelis and Christopher A Gabler and Yuanbing Mao and Parwinder Grewal and George Bennack. Grant An Integrated Approach to Graduate Research, Education, and Engagement USDA-NIFA-National Needs Fellows Program Federal , 242000\$ (July 2017 - June 2022)

Alexis Racelis. Sponsored Research Subtropical Soil Health Initiative National Center for Appropriate Technology Other , 305276\$ (September 2017 - February 2022)

Alexis Racelis and Engil Isadora Pujol Pereira Mikita and James JiHoon Kang. Sponsored Research Science of Soil Health and Dynamic Soil Properties in Arid Subtropical Environments of South Texas USDA-Natural Resources Conservation Service Federal , 250000\$ (March 2020 - December 2021)

Alexis Eclevia Racelis and Joe Fox. Grant Experiential training in use of Unmanned Aerial Systems (UAS) technology for agriculture applications USDA-NIFA-HSI Federal , 220000\$ (August 2016 - August 2021)

Alexis Eclevia Racelis. Grant Building Soil Science Capacity through Research and Education at UT Rio Grande Valley, a Premier Hispanic Serving Institution in South Texas United States Department of Agriculture-Natural Resources Conservation Service Federal ,

100000\$ (September 2019 - August 2021)

Alexis Racelis and Rupesh Kariyat. Sponsored Research Biological control of silverleaf nightshade *Solanum elaeagnifolium* State of Victoria, Department of Economic Development, Jobs, Transport, and Resources Other , 36364\$ (September 2019 - March 2020)

Alexis Eclevia Racelis and Stephanie Kasper and . Grant Investigating Controls Over Nodulation and Nitrogen Fixation in Leguminous Cover Crops in Subtropical South Texas Southern Sustainable Agriculture Research and Education , 16500\$ (August 2018 - August 2019)

Alexis Racelis and Krish Jayachandran. Grant Building Agriculture Science Education through a Florida-Texas-New Mexico Consortium □ USDA-NIFA-HSI Federal , 300000\$ (August 2015 - August 2019)

Alexis Racelis. Sponsored Research Biological Control of *Arundo Donax* USDA- Agricultural Research Service Federal , 368000\$ (October 2014 - December 2018)

Alexis Eclevia Racelis. Contract NRCS High Tunnel Workshop and Demonstration Natural Resources Conservation Service Federal , 10000\$ (September 2017 - September 2018)

Alexis Racelis and Mike Morris. Grant Subtropical Organic Agriculture Research (SOAR) Partnership USDA-NIFA-Organic Transitions Program Federal , 746973\$ (August 2013 - August 2018)

Alexis Eclevia Racelis and Madeline Marshall. Grant Agroecological methods to manage brassica pests on organic farms Southern SARE (Sustainable Agriculture Research and Education) Other , 11000\$ (August 2016 - February 2018)

Alexis E Racelis. Sponsored Research *Brevipalpus* mite species on Rutaceous and non-rutaceous plants in dooryards in the Lower Rio Grande Valley of Texas USDA-APHIS Federal , 39906\$ (July 2014 - September 2017)

Alexis Eclevia Racelis and Eric Cantu. Grant Variations of Soil Quality in Local Farms Across the Rio Grande Valley University of Texas RGV- Office of Engaged Scholarship & Learning The University of Texas Rio Grande Valley , 2000\$ (December 2016 - August 2017)

Alexis E Racelis and Timothy Joseph Sears and Danika Brown and Kenneth Summy and Daniel Plas. Grant Curricula development, Experiential Learning, Networking in Agroecology: Overcoming barriers to agricultural education and careers for south Texas students USDA-NIFA-HSI Federal , 294999\$ (August 2013 - August 2017)

Alexis Eclevia Racelis and Savannah Rugg. Grant Multi-functionality of Cover crops in south Texas: Looking at multiple benefits of cover cropping on small farms in a subtropical climate Southern SARE (Sustainable Agriculture Research and Education) Other , 8950\$ (August 2015 - December 2016)

Alexis Racelis. Sponsored Research Insect Testing and Research USDA-Agricultural Research Service Federal , 29995\$ (October 2014 - December 2016)

Alexis Eclevia Racelis and Jose E. Gonzalez. Grant Using Aquaponic Growing Methods to Grow Food Crops while Reducing Water Usage UTRGV Undergraduate Research Initiative The University of Texas Rio Grande Valley , 2000\$ (September 2015 - August 2016)

Danika Brown and Alexis Eclevia Racelis. Grant Curricula Development, Experiential Learning, Networking, and Agroecology for a diverse student clientele (CENA): overcoming barriers to agricultural education and careers in south Texas: (Funded by the USDA-Hispanic Serving Institutions Program) United States Department of Agriculture Federal , 300000\$ (August 2013 - August 2016)

Alexis E Racelis. Grant Developing farmer-appropriate integrated pest management strategies in South Texas: The potential of push-pull technologies to regulate organic brassica pests Southern SARE (Sustainable Agriculture Research and Education) Other , 15000\$ (March 2015 - March 2016)

Alexis E Racelis. Grant Huitlacoche Production as an Alternative Crop in South Texas Southern SARE (Sustainable Agriculture Research and Education) Other , 14962\$ (February 2013 - March 2016)

Alexis E Racelis. Sponsored Research UTPA-City of McAllen Interlocal Agreement: McAllen Botanical Garden Survey City of McAllen Local , 30000\$ (August 2013 - December 2015)

Alexis E Racelis. Sponsored Research Determining the origin of HLB-positive Asian Citrus Psyllids and Estimating Dispersal of *Tamarixia radiata* USDA-APHIS Federal , 29994\$ (July 2014 - August 2015)

Alexis Eclevia Racelis and Richard Marez. Grant Evaluating Companion Planting Among Various Cultivars in Organic Tomato Production UTPA Undergraduate Research Initiative The University of Texas Rio Grande Valley , 2000\$ (January 2014 - August 2014)

Alexis Eclevia Racelis and Heather Hernandez. Grant Biological Control of Leaf Cutting Ants Using Castorbean and *Eucalyptus* leaves UTPA Undergraduate Research Initiative The University of Texas Rio Grande Valley , 2000\$ (December 2013 - August 2014)

Awards and Honors

Ecological Society of America Education Scholar. (2016)

University of Texas Regents Outstanding Teacher Award. (2016)

UT-Rio Grande Valley Excellence in Education for Sustainable Development. (2016)

Agroecology Program nominated for Excelencia in Education. (2015)

UT-Rio Grande Valley STEM Champion of Engaged Scholarship. (2015)

Department Recommendation for UTPA Faculty Award for Achievement in Research. (2014)

UTPA finalist for ORAU Ralph E. Power Junior Faculty Enhancement Award. (2013)

Outstanding Performance Award . USDA-ARS (2012)

Outstanding Performance Award. USDA-ARS (2011)

Outstanding Performance Award. USDA-ARS (2010)

Outstanding Performance Award. USDA-ARS (2009)

Eclevia Foundation Scholastic Achievement Award. (2007)

Robert and Patricia Switzer Foundation Environmental Fellowship. (2007)

Fulbright Garcia Robles Research Fellowship (Mexico) . (2006)
 Science Fellow, NSF-funded Center for Informal Learning in Schools. (2005)
 US Environmental Protection Agency STAR Graduate Research Fellowship. (2004)
 Center of Tropical Research Education and Development Fellowship. (2003)
 Delores Azuene Foundation Graduate Student Fellow. (2002)
 Graduate Student Fellowship, Florida International University . (2001)

Leadership

UTRGV Executive Vice President Appreciation Award. (April 2018)
 AAAS Public Engagement Fellow (Food and Water). American Association for the Advancement in Science (February 2018)

Scholarship/Research

COS Faculty Excellence Award in Community Engagement. College of Science (April 2023)
 Houston Endowed Chair for Science, Math, and Technology. Univ. of Texas Rio Grande Valley (August 2022)
 Social Impact Award. W.K. Kellogg Foundation (June 2022)
 USDA Kika de la Garza Science Fellow. United States Department of Agriculture (May 2018)

Service, Community

Inspirational Service Award. Rotary International (District 5390) (May 2019)

Service, Professional

Member. USDA Federal Equity Commission, Subcommittee of Agriculture (February 2022)

Teaching

Founding Fellow. UTRGV Academy of Distinguished Teachers (August 2022)
 Fellow. University of Texas System Academy of Distinguished Teachers (May 2022)
 UTRGV Accessibility Excellence Award. UTRGV (2020)

Presentations

James Arthur Brownlow and Alyssa Guadalupe Cavazos and Colin Todd Charlton and Alexis Eclevia Racelis."Documenting Strategies for Active Learning and Instructional Technology".ROTA Workshop, UTRGV Office of Faculty Success & Diversity, online. (April 13, 2023)

Alexis Eclevia Racelis."Subtropical Soil Health Demonstration: On- Farm Trials of Cover Crops in Arid Farms of South Texas—Year 1 Results".77th SWCS International Annual Conference, Soil and Water Conservation Society, Denver, CO. (August 2, 2022)

Manish Gautam and Bradley O'Donnell Christoffersen and Alexis Racelis."Evaluating the dynamics of plant available water (PAW) under cover cropping system ".Annual Meeting of the Subtropical Agriculture and Environments Society (SAES), SAES, Weslaco, TX. (March 11, 2022)

Daphne Zapsas and Manish Gautam and Adegboyega Fajemisin and Daisy Delgado and Satinderpal Kaur and Pushpa Soti and Rupesh Kariyat and Bradley O'Donnell Christoffersen and Xianping Liu and Alexis Racelis."Subtropical Soil Health Demonstration: On-Farm Trials of Cover Crops for Conservation Innovation in Arid Farms of South Texas".Texas Organic Farmers and Gardeners Association, TOFGA, Austin, TX. (January 27, 2022)

Luzyannet Ballesteros and Temiloluwa Awotoye and Rocio Hernandez and Stephanie Kasper and Engil Isadora Pujol Pereira Mikita and James JiHoon Kang and Alexis Eclevia Racelis."Changes in Dynamic Soil Properties Across Different Tillage Regimes in the Lower Rio Grande Valley ("2022 Dynamic Soil Properties for Soil Health (DSP4SH) Virtual Symposium, USDA-NRCS, Virtual. (January 7, 2022)

Manish Gautam and Bradley O'Donnell Christoffersen and Alexis Eclevia Racelis."Exploring the Impact of Cover Crops in Soil moisture Conservation".UTRGV College of Sciences Annual Research Conference, UTRGV, Edinburg, TX. (November 19, 2021)

Alexis Eclevia Racelis."Research, Education, and Community @ UTRGV".Minority Landowners Annual Conference, Minority Landowners, Virtual. (September 24, 2021)

Alexis Eclevia Racelis."Healthy Soils – Why They Matter & How We Get There".Southern Family Farmers and Food Systems Conference, FARFA, San Marcos, TX. (August 10, 2021)

Mike Morris and Alexis Eclevia Racelis and Robert Maggiani and ." Subtropical Soil Health Initiative".Expanding Horizons: Where Conservation Meets Innovation, Soil and Water Conservation Society, Virtual. (July2021)

Alexis Eclevia Racelis."Long-term Impacts of Flooding".Museum of South Texas Speaker Series, Museum of South Texas History, Edinburg TX (Virtual). (July 25, 2021)

Allison Kaika and Owen Temby and Dongkyu Kim and Alexis Eclevia Racelis."Growing Food Sovereignty: Impacts of Civic Agriculture on Civic Engagement in the Rio Grande Valley".Annual Conference of the New England Political Science Association, New England Political Science Association, video conference. (April 23, 2021)

Alexis Eclevia Racelis and Alma Christina Trejo-Vasquez and Tina Parankimmootil Thomas and Aaron Wilson and I Flores and Kristen Hallas and J Rodriguez."Transforming Undergraduate Education in STEM at a Hispanic Serving Institution: A Candid Conversation with Students and Faculty About Culturally Relevant Pedagogy and Community Engagement".4th Annual STEM Education Conference, McAllen, TX. (February2021)

Alexis Eclevia Racelis.""On Becoming a Hispanic Serving Agricultural University: Research, Education, and Community at the University of Texas Rio Grande Valley".75th Annual Meeting , Subtropical Agriculture and Environments Society, Weslaco, TX. (February2021)

Alexis Eclevia Racelis."Building Relationships Across Higher Education Institutions to Address Racism in the Food System".Racial Equity in the Food Systems Workgroup, MSU Center for Regional Food Systems, Virtual . (February 11, 2021)

Luzyannet Ballesteros and Rocio Hernandez and Temiloluwa Awotoye and Stephanie Kasper and Engil Isadora Pujol Pereira Mikita and Alexis Eclevia Racelis."Changes in Dynamic Soil Properties across a Conservation Tillage Chrono-Sequence in the Lower Rio

Grande Valley".2021 Soil Survey & Land Resource Workshop, Texas A&M Agrilife, Virtual. (February 5, 2021)

Alexis Eclevia Racelis."2020 Collaboration Project NRCS/UTRGV".2021 Soil Survey & Land Resource Workshop, Texas A&M Agrilife, Virtual. (February 4, 2021)

Alexis Eclevia Racelis."Research, Education, and Community at the University of Texas Rio Grande Valley, a federally designated Hispanic Serving Agricultural University".Texas Hispanic Farmers and Ranchers Conference, UTRGV Center for Sustainable Agriculture and Rural Advancement, Virtual. (January2021)

Pushpa Soti and Alexis Racelis."Challenges of cover cropping in the semi-arid subtropics".Soil Health: The Foundation for Regenerative Agriculture, Soil Health Institute, Online. (July 31, 2020)

Alexis Racelis and Stephanie Kasper and Lindsey Richards and Fallon Fraustro."oil Moisture is a Major Obstacle to Cover Cropping on Water Limited Farms in South Texas".75th Soil and Water Conservation Society Annual Meeting, Soil and Water Conservation Society , Virtual Event. (July 27, 2020)

Alexis Eclevia Racelis."Framing Student Success".JUMPSTART GRANTSMANSHIP WEBINAR SERIE, NSF HSI - STEM HUB , Virtual . (May 26, 2020)

Alexis Racelis."Developing Research Questions about STEM education at Hispanic Serving Institutions".National Science Foundation HSI STEM HUB, National Science Foundation, Virtual . (May 26, 2020)

Alexis Racelis."Environmental Stewardship".Rotary McAllen Evening Lecture Series, Rotary International , Virtual. (April 15, 2020)

Joy Youwakim and Luzyanet Ballesteros and Natalia Nevarez and Alexis Racelis."Exploring Social and Environmental Predictors of Heavy Metal Contamination in The Rio Grande Valley".74th Annual Meeting of the Subtropical Agriculture and Environments Society, Weslaco, TX. (February 7, 2020)

Katie Lavallee and Alexis Racelis."Investigating the use of Native Plants of South Texas in Agroecosystem through Germination Experiments".74th Annual Meeting of the Subtropical Agriculture and Environments Society, Weslaco, TX. (February 7, 2020)

Stephanie Kasper and Lindsey Richards and Fallon Fraustro and Alexis Racelis."Monitoring the Impact of Cover Crops on Soil Moisture in South Texas".74th Annual Meeting of the Subtropical Agriculture and Environments Society, Weslaco, TX. (February 7, 2020)

Kutugata Matthew and Alexis Racelis."Integrating Emerging Technologies in Understanding Complex Agroecosystems: Evaluating Cover Crops Using Unmanned Aerial Systems in South Texas".74th Subtropical Agriculture and Environments Society Annual Meeting, Weslaco, TX. (February 7, 2020)

Qulina Rai and Pushpa Soti and Alexis Racelis."Using different adhesives to inoculate Sunn hemp for enhancing nodule formation".74th Subtropical Agriculture and Environments Society Meeting, Subtropical Agriculture and Environments, Weslaco, TX. (February 7, 2020)

Alexis Racelis."Developing a Land Ethic ".Masters Naturalist (McAllen), McAllen, TX. (February 4, 2020)

Alexis Racelis."Agriculture in the Rio Grande Valley".National Sustainable Agriculture Coalition Annual Member Meeting, McAllen, TX. (January 26, 2020)

Allison Kaika and Schroeder Vanessa and Alexis Racelis."Building Food Sovereignty on the Border".Community Food Systems Conference, Savannah, GA. (December 11, 2019)

Pushpa Soti and Alexis Eclevia Racelis."Spatial Variability in the Arbuscular Mycorrhizal Fungi Spore Distribution in Agricultural Fields ".ASA-CSSA-SSSA International Annual Meeting, American Society of Agronomy, the Crop Science Society of America, and Soil Science Society of America , San Antonio. (November 13, 2019)

Orlando Garcia and Habraham Lopez and Alexis Eclevia Racelis and Pushpa Soti."Analyzing the Weed-Soil Microbiome in Subtropical Organic Vegetable Farms".ASA-CSSA -SSSA International Annual Meeting, The American Society of Agronomy, the Crop Science Society of America, and the Soil Science Society of America, San Antonio. (November 11, 2019)

Alexis Racelis."Re-envisioning the Role of Universities in Shaping Food Systems".An Agroecological Worldview in Action, The Land Insitutue/Huston Tillotson University , Austin, TX. (November 2, 2019)

Alexis Racelis."Boundary Spanning and Building Pathways to Equitable Food System".An Agroecological Worldview in Action, The Land Institute/Huston Tillotson University , Austin, TX. (November 1, 2019)

Lili Martinez and Alexis Racelis and Pushpa Soti and Rupesh Kariyat."Effects of cover crops on insect community dynamics in organic farming".2019 College of Sciences Annual Research Conference, University of Texas, Rio Grande Valley, Edinburg. (March 29, 2019)

Juan Salinas and Alexis Eclevia Racelis and Angela Chapman."Transforming STEM Education Through Culturally Relevant Pedagogy and Community Engagement".RGV STEM Education Conference, UTRGV, (February2019)

Jasleen Kaur and Alexis Racelis and Pushpa Soti and Jesus Chavana and Rupesh Ram Kariyat Ramachandr."Beneficial microbes enhance growth and defense against insect herbivores in Sudan grass (*Sorghum drummondii*".Subtropical Agriculture and Environments Society 73rd Annual Meeting, Subtropical Agriculture and Environments Society, Weslaco, TX. (February2019)

Lili Martinez and Pushpa Soti and Alexis Racelis and Rupesh Ram Kariyat Ramachandr."Using cover crops to attract beneficial insects and reduce herbivory in cash crops".Subtropical Agriculture and Environments Society 73rd Annual Meeting, Subtropical Agriculture and Environments Society, Weslaco, TX. (February2019)

Stephanie Kasper and Bradley O'Donnell Christoffersen and Pushpa Gautam Soti and Alexis Eclevia Racelis."Maximizing Legume Efficiency in South Texas".Texas Organic Farmers and Gardners Association Annual Conference, Texas Organic Farmers and Gardners Association , Corpus Christi. (February2019)

Pushpa Gautam Soti and Stephanie Kasper and Habraham Lopez and Alexis Eclevia Racelis."Challenges of Cover Cropping in Semi-Arid Subtropics".Soils Across Latitudes, Soil Science Society of America, San Diego, CA. (January 9, 2019)

Pushpa Gautam Soti and Suzanne El-Haj and Alexis Eclevia Racelis."Evaluation of Potential Benefits of Mycorrhizal Fungi in Improving the Quality and Yield of Commercial Aloe Plants".Soils Across Latitudes, Soil Science Society of America, San Diego, CA. (January 9,

2019)

Stephanie Kasper and Habraham Lopez and Pushpa Gautam Soti and Alexis Eclevia Racelis."Investigating Controls over Nodulation and Nitrogen Fixation in Leguminous Cover Crops in Subtropical South Texas".Soils Across Latitudes, Soil Science Society of America, San Diego, CA. (January 9, 2019)

Alexis Eclevia Racelis."Lessons Learned from Participatory Research on the Potential of Cover Crops to Improve Subtropical Soil Health. ".Soils Across Latitudes, Soils Society of America, San Diego, CA. (January 9, 2019)

HAbraham Lopez and Stephanie Kasper and Pushpa Gautam Soti and Alexis Eclevia Racelis."Managing Plant Parasitic Nematodes through Cover Cropping and Improved Soil Biodiversity.".Soils Across Latitudes , Soil Science Society of America, San Diego, CA. (January 9, 2019)

Engil Isadora Pujol Pereira Mikita and James JiHoon Kang and Chu-Lin Cheng and Mirayda Torres Avila and Bradley O'Donnell Christoffersen and Christopher A Gabler and Kristine Lowe and Alexis Eclevia Racelis."Increasing Hispanic Workforce in Soil Science through Training, Research, and Education: A New Integrated Program for the Rio Grande Valley in South Texas".SSSA International Soils Meeting, Soil Science Society of America, San Diego, California. (January 7, 2019)

Diana Cantu and John Goolsby and Alexis Eclevia Racelis."Evaluation of temperature on the longevity of Steinernema riobrave infective juvenile nematodes in a water solution".Entomological Society of America Annual Meeting, Vancouver, Canada. (November 11, 2018)

Alexis Eclevia Racelis."Engaging the Public on Food and Water Security".AAAS Colloquim, American Association for the Advancement of Science, Washington, DC. (June 13, 2018)

Stephanie Kasper and Habraham Lopez and Alexis Systems Racelis."Calculating Edinburg's Current and Potential Self-Reliance in Food".College of Science Annual Research Conference, University of Texas Rio Grande Valley College of Sciences , Edinburg, TX. (April 13, 2018)

Tianna Piquet and Ivy Hinson and Alexis Systems Racelis."How can the city of Brownsville become self reliant?".College of Science Annual Research Conference, University of Texas Rio Grande Valley College of Sciences, Edinburg, TX. (April 13, 2018)

Madeline Marshall and Alexis Eclevia Racelis."Progress and potential of two biological control agents of the invasive giant reed (Arundo donax L.)".College of Science Annual Research Conference, UTRGV College of Science, Edinburg, TX. (April 13, 2018)

Jose Garcia and Adam Flores and Darla Ortega and Pushpa Soti and Alexis Racelis and James JiHoon Kang."Soil physical health in the Rio Grande valley agricultural land during cover crop growth".UTRGV College of Sciences Annual Research Conference, UTRGV College of Sciences, Edinburg. (April 13, 2018)

John Brush and Alexis Eclevia Racelis and Timothy Brush."Pattern and structure of a suburban bird community in subtropical South Texas".American Ornithological Society Annual Meeting, American Ornithological Society, Tucson, Arizona. (April 12, 2018)

Alisha Janiga and Alexis Eclevia Racelis and Erin L Schuenzel and Christopher A Gabler and Kristine Lowe."Characterization of Bacteria Communities from Texas Rio Grande Valley Reservoirs for Polychlorinated Biphenyl Metabolism Potential,".UTRGV Graduate Research Symposium, Brownsville. (February 28, 2018)

Habraham Lopez and Stephanie Kasper and Lindsey Richards and Pushpa Soti and Alexis Eclevia Racelis."Cover crop interseeding for weed suppression in organic broccoli systems".Subtropical Agriculture and Environments Annual Conference, Rio Farms, Monte Alto, TX. (February 9, 2018)

Stephanie Kasper and Habraham Lopez and Lindsey Richards and Pushpa Soti and Alexis Eclevia Racelis."Impacts of Winter Cover Crops on Soil Respiration in the Rio Grande Valley".Subtropical Agriculture and Environments Annual Conference, Rio Farms, Monte Alto, TX. (February 9, 2018)

Madeline Marshall and John Goolsby and Ann Vacek and Alexis Eclevia Racelis."Progress and potential of two biological control agents of the invasive giant reed (Arundo donax L.)".Subtropical Agriculture and Environments Annual Conference, Rio Farms, Monte Alto, TX. (February 9, 2018)

Rupesh Ram Kariyat Ramachandr and Pushpa Gautam Soti and Alexis Eclevia Racelis."Cover cropping for attracting pests and predators in subtropical organic vegetable farms.".Annual Meeting of Texas Organic Farmers and Gardners Association (TOFGA), Texas Organic Farmers and Gardners Association (TOFGA), Georgetown. (February 1, 2018)

Alejandra Fuentes and Evan Braswell and Alexis Eclevia Racelis."Diversity of Brevipalpus mites in south Texas from different citrus host plants".Entomological Society of America Annual Conference, Denver, CO . (November 5, 2017)

Alexis Eclevia Racelis and Parwinder Grewal and Colleen Hook."Strategic partnerships in research, education, and community engagement to better understand and conserve ecosystem services in urban areas of south Texas".ENVIRONMENT, WELLNESS, AND COMMUNITIES, Association for Environmental Studies and Sciences, Tuscon, AZ. (June 22, 2017)

Diana Cantu and Pushpa Soti and Quentin Van Camp and Alexis Eclevia Racelis."Integrating Cover Crops in Organic Vegetable Farming Systems in South Texas".Engaged Scholars Symposium, University of Texas Rio Grande Valley, Edinburg TX. (April 19, 2017)

Eric Cantu and Pushpa Soti and Alexis Eclevia Racelis."Soil Quality in Organic Farms of South Texas".Engaged Scholars Symposium, University of Texas Rio Grande Valley, Edinburg, TX. (April 19, 2017)

Madeline Marshall and Pushpa Soti and Alexis Eclevia Racelis."Agroecological methods to manage brassica pests on organic farms".College of Sciences Annual Conference, University of Texas Rio Grande Valley, Edinburg TX. (March 31, 2017)

Alejandra Fuentes and W. Evan Braswell and Raul Ruiz-Arce and Alexis Eclevia Racelis."Diversity of Brevipalpus mites in South Texas from different citrus host plants".College of Sciences Annual Conference, UTRGV College of Science, Edinburg TX. (March 31, 2017)

Lindsey Richards and Alexis Eclevia Racelis."Silver Plastic Mulch and Neem Oil as a Method for Whitefly Control in Tomato Plants in South Texas,".College of Sciences Annual Conference, University of Texas Rio Grande Valley, Edinburg TX. (March 31, 2017)

Alisha Janiga and Alexis Eclevia Racelis and Erin L Schuenzel and Christopher A Gabler and Kristine Lowe."Characterization of Bacteria Communities from Texas Rio Grande Valley Reservoirs for Polychlorinated Biphenyl Metabolism Potential,".UTRGV College of Science Symposium, Edinburg. (March 31, 2017)

Alexis Eclevia Racelis."Integrating Education for Sustainable Development through Tree Campus USA ".Texas Regional Alliance for Campus Sustainability Summit , Texas Regional Alliance for Campus Sustainability (TRACS), Commerce, TX. (March 6, 2017)

Habraham Lopez and John Goolsby and Ann Vacek and Alexis Eclevia Racelis."Comparison of nitrogen sources to improve mass rearing of the arundo scale; a biological control agent of Arundo donax (updated)".USDA Hispanic-Serving Institution Annual Meeting, USDA-HSI, Albuquerque, NM. (February 18, 2017)

Amrita Singh and Bradley Christofferson and Dan Johnson and Liang Wei and Chionggang Xiu and Nate McDonald and . "Gap Filling Plant Trait Data for Earth System Models".USDA Hispanic-Serving Institution Annual Meeting, USDA-HSI, Albuquerque, NM. (February 18, 2017)

Diana Cantu and Pushpa Soti and Alexis Eclevia Racelis."Integrating Cover Crops in Organic Vegetable Farming in south Texas".USDA Hispanic-Serving Institution Annual Meeting, USDA-HSI, Albuquerque, NM. (February 18, 2017)

Robert Mier and Evan Braswell and Raul Ruiz-Arce and Alexis Eclevia Racelis."Mitochondrial DNA variation within the ND2-COI tRNA region for the members of the Anastrepha fraterculus group (updated poster)".USDA Hispanic-Serving Institution Annual Meeting, USDA-HSI, Albuquerque, NM. (February 18, 2017)

John Brush and Timothy Brush and Alexis Eclevia Racelis."Avian Communities in an Urbanizing Region: Abundance Patterns and Effects of Local Habitat Features".71st Annual Meeting, Subtropical Agriculture and Environments Society, Weslaco, TX. (February 3, 2017)

John Goolsby and Felix Guerrero and Javid Kashefi and Lincoln Smith and Alexis Eclevia Racelis and Divina Amalin and Mary Jane Flores and N. Abes and K Verly and Nirbhay Singh and Pambi Azhahianambi and A. Jesudasan and Paul De Barro and Alan Sheppard."Biological control of cattle fever ticks,".71st Annual Meeting, Subtropical Agriculture and Environments Society, Weslaco, TX. (February 3, 2017)

Habraham Lopez and John Goolsby and Ann Vacek and Alexis Eclevia Racelis."Comparison of nitrogen sources to improve mass rearing of the arundo scale; a biological control agent of Arundo donax,".71st Annual Meeting, Subtropical Agriculture and Environments Society, Weslaco, TX. (February 3, 2017)

Alejandra Fuentes and W. Evan Braswell and Alexis Eclevia Racelis."Diversity of Brevipalpus mites in South Texas from different citrus host plants".71st Annual Meeting, Subtropical Agriculture and Environments Society, Weslaco, TX. (February 3, 2017)

Robert Mier and w. Evan Braswell and Raul Ruiz-Arce and . "Mitochondrial DNA variation within the ND2-COI tRNA region for the members of the Anastrepha fraterculus group".71st Annual Meeting, Subtropical Agriculture and Environments Society, Weslaco, TX. (February 3, 2017)

Alexis Racelis."Bridging the gap between the potential and the practice of organic agriculture in Texas".Texas Organic Farmers and Growers Association, UTRGV Agroecology, Mesquite TX. (January 12, 2017)

Alexis Eclevia Racelis and Parwinder Grewal."Sustainable & Resilient Community Food Systems.".Valley Environmental Summit, Valley Environmental Coalition, South Padre Island, TX. (September 23, 2016)

Elora Cortes and Jason Vargas and Pushpa Soti and Madeline Marshall and Diana Cantu and Alexis Racelis."Organic and pesticide-free method to control pests on brassica plants".College of Science High School Scholars Program, , Edinburg, TX. (August 5, 2016)

Savannah Rugg and Pushpa Soti and Alexis Racelis."On-farm benefits of four warm season cover crops in subtropical organic farms".Southern Cover Crop Conference, Goldsboro, NC. (July 18, 2016)

Alexis ."Implementation of Agroecology Summer Institutes for Secondary Teachers in South Texas ".National Association of Colleges and Teachers in Agriculture, Honolulu HI. (June 20, 2016)

Alexis Racelis."Building Ecological Literacy through Challenge-Based Instruction and Culturally Relevant Pedagogy".National Association of Colleges and Teachers in Agriculture, Honolulu HI. (June 20, 2016)

Alexis Racelis."Agroecology as a Tool to Improve Science Capacity In Agriculture Through Participatory Research, Education, and Extension".National Association of Colleges and Teachers in Agriculture, , UTRGV Agroecology, (June 20, 2016)

Alexis Racelis."Building Ecological Literacy through Challenge-Based Instruction".Challenge Based Instruction Workshop, UTRGV Agroecology, Edinburg, tx. (April 30, 2016)

Katherine Jones and Summy K and Alexis Racelis."Cultural Ecosystem Services of Urban Trees in the Lower Rio Grande Valley, Texas".Subtropical Agriculture and Environment Society Annual Meeting, Weslaco, TX. (February 6, 2016)

J Escamilla and P Gowda and P Wagle and J Goolsby and Alexis Racelis."Interannual measurements of evapotranspiration of Arundo donax on the Rio Grande River".Subtropical Agriculture and Environment Society Annual Meeting, Weslaco, TX. (February 6, 2016)

Savannah Rugg and C Moreno and Pushpa Soti and Alexis Racelis."Multi-functionality of Cover Crops in South Texas: Looking at multiple benefits of cover cropping on small famers in a subtropical climate. ".Subtropical Agriculture and Environment Society Annual Meeting, Weslaco, TX. (February 6, 2016)

J. Brush and T. Brush and Alexis Racelis."Retention on native forest birds in the urban habitats of the LRGV".Subtropical Agriculture and Environment Society Annual Meeting, Weslaco, TX. (February 6, 2016)

Amrita Singh and Diana Cantu and Pushpa Soti and Alexis Racelis."Using Mycorrhizal fungi to increase productivity in organic farming.".Subtropical Agriculture and Environment Society Annual Meeting, Weslaco, TX. (February 6, 2016)

A Fuenetes and B Salas and E Braswell and Alexis Racelis."Novel Hosts of Brevipalpus spp., vector of the citrus leprosis virus, in the Lower Rio Grande Valley".Subtropical Agriculture and Environment Society Annual Meeting. , Weslaco, TX. (February 6, 2016)

Robert Mier and A Arce-Ruiz and E Braswell and Alexis Racelis."Novel Markers to distinguish tephritid pest species".Entomological Society of America Annual Meeting, Minneapolis, MN. (November2015)

Katharine Jones and Ohelar D and Summy K and Alexis Racelis."Potential Tradeoffs of Regulating And Cultural Ecosystem Services In Urban Areas Of The Lower Rio Grande Valley, Texas".Texas Society of Ecological Restoration Annual Meeting, San Antonio, TX. (November2015)

Savannah Rugg and Alexis Racelis."Multifunctionality of Cover Crops in South Texas: Restoring ecosystem services in agroecosystems".Texas Society of Ecological Restoration Annual Meeting,, San Antonio, TX. (November 2015)

Alexis Racelis."Agroecology as an academic platform to improve science capacity and sustainability in agriculture".Entomological Society of America Annual Meeting, Minneapolis MN. (November 15, 2015)

Alexis Racelis."Agroecology as an academic platform to improve science capacity and sustainability in agriculture".Entomological Society of America Annual Meeting, Minneapolis MN. (November 15, 2015)

Alexis Eclevia Racelis."Conservation of Ecosystem Services through Classical Biological Control".Research talk at USDA- Agricultural Research Service-Invasive Plant Research Laboratory, Ft. Lauderdale FL. (November 2, 2015)

Alexis Eclevia Racelis."Update on the Biological Control of Cogongrass, *Imperata cylindrica*". De La Salle University, Manila, Philippines. (March 20, 2015)

Alexis Racelis."Direct and Indirect Biological Control of Livestock Disease Vector on the Texas-Mexico Border". Philippine Carabao Center, Munoz, Nueva Ecija, Philippines. (March 17, 2015)

Jose R. Escamilla and J Goolsby and P Gowda and Alexis Racelis."Seasonal measurements of evapotranspiration from the invasive water-using weed, *Arundo donax* on the Rio Grande".Subtropical Agriculture and Environments Annual Meeting, Weslaco, TX. (February 9, 2015)

Alejandra Fuentes and E Braswell and R Ruiz-Arce and Alexis Racelis."Genetic Variation And Population Structure Of *Diaphorina citri*".Subtropical Agricultural and Environments Annual Meeting, Weslaco, TX. (February 9, 2015)

John Brush and T Brush and Alexis Racelis."Bird Use of native, restored, and urban habitats: The lower Rio Grande Valley of Texas".Subtropical Agriculture and Environments Annual Meeting, Weslaco, TX. (February 9, 2015)

Alexis Racelis."Agroecology as Culturally Relevant Pedagogy in South Texas".21st Century Agri-Science Education Conference, Miami, FL. (November 20, 2014)

Alexis Eclevia Racelis."Agroecological research, education, and extension: An integrated approach to improving educational engagement in food systems".Ecological Society of America Annual Meeting, Sacramento, CA . (August 14, 2014)

Alexis Eclevia Racelis."Apparent Competition among field-released genotypes of *Tetramesa romana*, biological control agent of giant reed".Entomological Society of America Annual Meeting, Austin, TX. (November 8, 2013)

Alexis Eclevia Racelis."Agroecology in South Texas".Annual Meeting of the Society for Subtropical Plant Science, Weslaco, TX. (February 15, 2013)

Alexis Eclevia Racelis."Ecological Restoration in South Texas".Texas Society of Ecological Restoration, Weslaco, TX. (October 5, 2012)

Abigail Lyles and J Goolsby and Kenneth Summy and P Moran and Alexis Eclevia Racelis and A Vacek and C Salinas."Abiotic factors affecting development of the arundo armored scale *Rhizaspidotus donacis* in mass rearing systems".USDA-NIFA-HSI Annual Project Directors Conference, The University of Texas-Pan American, Edinburg, TX. (May 30, 2012)

Ramon Vicencio and J Goolsby and Kenneth Summy and P Moran and Alexis Eclevia Racelis and A Perez de Leon and A Vacek and C Salinas."Behavior of *Rhizaspidotus donacis* in the presence of diverse *Arundo donax* stimuli".USDA-NIFA-HSI Annual Project Directors Conference, The University of Texas-Pan American, Edinburg, TX. (May 30, 2012)

Andromeda Mares and J Goolsby and Kenneth Summy and Alexis Eclevia Racelis and A Perez de Leon and A Vacek and C Salinas."Behavioral observations of the arundo leafminer (*Lasioptera donacis*)".USDA-NIFA-HSI Annual Project Directors Conference, The University of Texas-Pan American, Edinburg, TX. (May 30, 2012)

Kari Skalitsky and J Goolsby and Kenneth Summy and P Moran and Alexis Eclevia Racelis and A Perez de Leon and A Vacek and C Salinas."Effect of micronutrients on growth of *Arundo donax* and its biological agent *Rhizaspidotus donacis*".USDA-NIFA-HSI Annual Project Directors Conference, The University of Texas-Pan American, Edinburg, TX. (May 30, 2012)

Abigail Lyles and J Goolsby and Kenneth Summy and P Moran and Alexis Eclevia Racelis and A Vacek and C Salinas."Abiotic factors affecting development of the arundo armored scale *Rhizaspidotus donacis* in mass rearing systems".66th Annual Institute of the Subtropical Plant Science Society, Weslaco, TX. (February 29, 2012)

Ramon Vicencio and J Goolsby and Kenneth Summy and P Moran and Alexis Eclevia Racelis and A Perez de Leon and A Vacek and C Salinas."Behavior of *Rhizaspidotus donacis* in the presence of diverse *Arundo donax* stimuli".66th Annual Institute of the Subtropical Plant Science Society, Weslaco, TX. (February 29, 2012)

Andromeda Mares and J Goolsby and Kenneth Summy and P Moran and Alexis Eclevia Racelis and A Perez de Leon and A Vacek and C Salinas."Behavioral observations of the arundo leafminer (*Lasioptera donacis*) to develop rearing and host-range testing procedures for biological control".66th Annual Institute of the Subtropical Plant Science Society, Weslaco, TX. (February 29, 2012)

Martin Hernandez and J Goolsby and Kenneth Summy and P Moran and Alexis Eclevia Racelis and A Perez de Leon and A Vacek and C Salinas."Potential impact of parasitoids on the biological control agent *Tetramesa romana* (Hymenoptera: Eurytomidae)".66th Annual Institute of the Subtropical Plant Science Society, Weslaco, TX. (February 29, 2012)

Kari Skalitsky and J Goolsby and Kenneth Summy and P Moran and Alexis Eclevia Racelis and A Perez de Leon and A Vacek and C Salinas."Rearing technique development: rearing of the armored arundo scale (*Rhizaspidotus donacis*) using *Arundo donax* micro plants supplemented with micro-nutrients".66th Annual Institute of the Subtropical Plant Science Society, Weslaco, TX. (February 29, 2012)

Jesus Sainz and J Goolsby and Kenneth Summy and P Moran and Alexis Eclevia Racelis and A Perez de Leon and A Vacek and C Salinas."The role of predators in limiting the establishment of the arundo armored scale *Rhizaspidotus donacis*".66th Annual Institute of the Subtropical Plant Science Society, Weslaco, TX. (February 29, 2012)

Alexis Eclevia Racelis."Invasive plant-invasive insect interactions: Giant reed invasions as suitable refuge for cattle fever ticks (Acari: Ixodidae)".Entomological Society of America, San Diego, CA . (December 12, 2011)

Alexis Eclevia Racelis."Invasive grasses of south Texas and their potential for biological control".Texas Invasive Plant and Pest Council Conference, Austin, TX. (November 8, 2011)

Alexis Eclevia Racelis."When worlds collide: Evidence of facilitative interactions between giant reed and cattle fever ticks in south Texas".Texas Invasive Plant and Pest Council Conference, Conference, Austin, TX. (November 8, 2011)

Alexis Eclevia Racelis."Restoration of riparian ecosystems in the Southwestern U.S., through biological control of the pyrogenic invader *Arundo donax*".Biocontrol for Nature Conference, Northampton, MA. (October 4, 2011)

Alexis Eclevia Racelis."Biological control as a tool to mitigate economic impacts of facilitative ecological interactions between the giant reed and cattle fever ticks".International Symposium for the Biological Control of Weeds, Kohala, HI. (September 11, 2011)

Alexis Eclevia Racelis."Tetramesa romana, a parthenogenic stem galling wasp released for the biological control of invasive giant reed".International Symposium for the Biological Control of Weeds, Kohala, HI. (September 11, 2011)

Alexis Eclevia Racelis."Plant level impacts of the arundo scale (*Rhizaspidiotus donacis*) on growth and eco-physiology of the invasive giant reed".Ecological Society of America, Austin, TX. (August 7, 2011)

Alexis Eclevia Racelis."Weed Biocontrol up in the Air? Development of Aerial Release Technology for the biocontrol of *Arundo donax*".International Organization for Biological Control, Niagra Falls, Canada. (May 10, 2011)

Alexis Eclevia Racelis."Examining the intersection of plant and insect biology: interdisciplinary implications of the biological control of the invasive giant reed".Southwestern Association of Naturalists, Junction, TX. (April 22, 2011)

Alexis Eclevia Racelis."Preliminary investigations of the potential biological control of guineagrass, elephant ear and Chinese privet.".Texas Invasive Plant and Pest Council Conference, San Antonio, TX . (November 18, 2009)

Alexis Eclevia Racelis."Un-common goods in common property forests: the case of polewood commodification in Quintana Roo Mexico".Biannual conference for the International Association for the Study of the Commons, Cheltenham, England. (July 14, 2008)

Alexis Eclevia Racelis."Ecological impacts of the harvesting of small diameter tropical trees in Quintana Roo, Mexico".Conference of the Association of Tropical Biology and Conservation, Morelia, Michoacan Mexico. (July 15, 2007)

Alexis Eclevia Racelis."Aprendizaje Inquisitivo: una Técnica Didáctica en la Enseñanza de Ciencias Básicas".Segundo Conferencia Regional de la Enseñanza de Ciencias Básicas, Cancún, Quintana Roo, México. (March 9, 2007)

Alexis Eclevia Racelis."Información científica para visualizar la conexión entre el turismo y la selva.".3rd Mesoamerican Conference of Sustainable Tourism, Tulum, Quintana Roo, Mexico. (December 6, 2006)

Alexis Eclevia Racelis."Analyzing the sustainability of the commercialization of small-diameter tropical trees using graphic density models".Ecological Society of America International Conference., Merida, Yucatan, México. (January 8, 2006)

Alexis Eclevia Racelis."Teaching Interdisciplinarity in the sciences". Bay Area Institute, San Francisco CA. (June2005)

Alexis Eclevia Racelis."Linking Social and Ecological Dimensions of Agroforestry Projects: A Case Study from Central Quintana Roo, Mexico".World Congress of Agroforestry, Orlando, Florida. (June 29, 2005)

Alexis Eclevia Racelis."The use and management of small diameter tropical trees as polewood in central Quintana Roo, Mexico.".Working Forests in the Tropics Conference, Gainesville, Florida. (February 14, 2005)

Alexis Eclevia Racelis."Comparative Ecology of *Melaleuca quinquenervia* in South Florida and Australia".Queensland Department of Primary Industries Guest Speaker Seminar Series, Indooroopilly, Australia.2000)

Teaching

Teaching Experience

BIOL 1401, General Biology, 1 Course(s)

BIOL 1402, General Biology, 3 Course(s)

BIOL 2403, Anatomy and Physiology, 2 Course(s)

BIOL 3409, Ecology, 20 Course(s)

BIOL 4100, Biology Seminar, 1 Course(s)

BIOL 4201, Biology Problems I, 8 Course(s)

BIOL 4202, Biology Problems II, 8 Course(s)

BIOL 4429, Agroecology, 10 Course(s)

BIOL 6303, Advanced Ecology, 4 Course(s)

BIOL 6385, Graduate Research, 1 Course(s)

BIOL 6429, Advanced Agroecology, 4 Course(s)

BIOL 7100, Thesis Proposal, 2 Course(s)

BIOL 7300, Thesis I, 1 Course(s)

BIOL 7301, Thesis II, 2 Course(s)

CESL 3301, Community Engagement I, 1 Course(s)

CESL 3302, Community Engagement II, 1 Course(s)

EEMS 6100, Systems Science and Appl, 5 Course(s)

EEMS 6185, Graduate Research, 2 Course(s)

EEMS 6285, Graduate Research, 5 Course(s)

EEMS 6305, Adv Sustainable Agriculture, 2 Course(s)

EEMS 6385, Graduate Research, 14 Course(s)

EEMS 6386, Non-thesis Research, 1 Course(s)
 EEMS 6390, Graduate Internship, 2 Course(s)
 EEMS 6685, Graduate Research, 1 Course(s)
 EEMS 7100, Continuing Thesis, 16 Course(s)
 EEMS 7300, Thesis I, 11 Course(s)
 EEMS 7301, Thesis II, 9 Course(s)
 ENVR 3305, Sustainable Agriculture, 4 Course(s)
 ENVR 4303, Envr Sci Res Proj, 3 Course(s)
 ENVR 4304, Envr Sci Internship, 3 Course(s)
 ENVR 5370, Top: App of Unmand Aerial Sys, 2 Course(s)
 GEOL 4309, UG Research Geoscience, 1 Course(s)
 GEOL 4385, ST in Geol:IntroToUnmanAerSyst, 1 Course(s)
 GEOL 4385, Sp Top: Intro Unmand Aeria Sys, 1 Course(s)
 MARS 5370, Top: App of Unmand Aerial Sys, 1 Course(s)
 SAFS 4429, Agroecology, 2 Course(s)
 UNIV 4000, Directed Research, 2 Course(s)

Non-Credit Instruction

- Continuing Education, USDA- NIFA (grant funded), 25. (June 2019 - June 2019)
- Workshop, College of Science/National Science Foundation, 24. (January 2019 - May 2019)
- Workshop, USDA-NIFA-Hispanic Serving Institutions Progarm, 20. (June 1, 2016 - June 30, 2016)
- Workshop, 11. (March 2016 - April 2016)
- Workshop, USDA-NIFA-Hispanic Serving Institutions Program, 21. (June 1, 2015 - June 30, 2015)
- Workshop, USDA-NIFA-Hispanic Serving Institutions Program, 19. (June 1, 2014 - June 30, 2014)

Directed Student Learning

Master's Thesis Committee Chair,Roberto Oyveda. TBD, School of Earth, Environmental, and Marine Sciences. (August 2019)
 Master's Thesis Committee Chair,Kaitlynn Lavallee. Assessment of Native Plants as Cover Crops in the Rio Grande Valley, School of Earth, Environmental, and Marine Sciences. (January 2019)
 Master's Thesis Committee Chair,Qulina Rai. Appropriate Technology to improve capacity for nitrogen fixation of subtropical legumes, School of Earth, Environmental, and Marine Sciences. (January 2019)
 Master's Thesis Committee Chair,Allison Kaika. School of Earth, Environmental, and Marine Sciences. (August 2018)
 Master's Thesis Committee Chair,Joy Youwakim. School of Earth, Environmental, and Marine Sciences. (August 2018)
 Master's Thesis Committee Chair,Matthew Kutugata. School of Earth, Environmental, and Marine Sciences. (June 2018)
 Master's Thesis Committee Chair,Ricardo Ramirez Garcia Rojas. Effects of Entomopathogenic Fungi Conidia and Blastospores on Aedes aegypti Pupae, School of Earth, Environmental, and Marine Sciences. (January 2017)
 Master's Thesis Committee Chair,Habraham Lopez. INVESTIGATING THE POTENTIAL OF WEEDS AS HOST RESERVOIR FOR PLANT PARASITIC NEMATODES IN SOUTH TEXAS, School of Earth, Environmental, and Marine Sciences. (September 2017 - July 2019)
 Master's Thesis Committee Chair,Stephanie Kasper. INVESTIGATING LIMITATIONS TO NITROGEN FIXATION BY LEGUMINOUS COVER CROPS IN SOUTH TEXAS, School of Earth, Environmental, and Marine Sciences. (September 2017 - May 2019)
 Master's Thesis Committee Chair,Alisha Janiga. Characterization of Bacteria Communities from Texas Rio Grande Valley Reservoirs for Polychlorinated Biphenyl Metabolism Potential, School of Earth, Environmental, and Marine Sciences. (September 2016 - August 2018)
 Master's Thesis Committee Chair,Madeline Marshall. PROGRESS AND POTENTIAL OF TWO BIOLOGICAL CONTROL AGENTS OF THE INVASIVE GIANT REED (ARUNDO DONAX L.), Department of Biology. (January 2016 - May 2018)
 Master's Thesis Committee Chair,Katharine Jones. Patterns of Diversity and Abundance of Bats in South Texas, School of Earth, Environmental, and Marine Sciences. (January 2016 - December 2017)
 Master's Thesis Committee Chair,Roberto Escamilla. CALCULATING EVAPOTRANSPIRATION OF ARUNDO DONAX ALONG THE RIO GRANDE, Department of Biology. (September 2015 - December 2017)
 Master's Thesis Committee Chair,Alejandra Fuentes. Genetic variation of arthropod vectors of plant diseases in citrus, Department of Biology. (September 2015 - May 2017)
 Master's Thesis Committee Chair,Savannah Rugg. Multifunctionality of Cover Crops in Subtropical Organic Farms of South Texas, Department of Biology. (September 2015 - May 2017)
 Master's Thesis Committee Chair,John Brush. AVIAN COMMUNITIES IN AN URBANIZING REGION: PATTERNS AND EFFECTS OF LOCAL HABITAT, Department of Biology. (September 2014 - December 2016)
 Master's Thesis Committee Chair,Jorge Cantu. ECOSYSTEM SERVICES OF URBAN TREES AND THE IMPACTS OF URBANIZATION, Biology (UTPA). (September 2013 - June 2015)

Service

Department Service

Committee Member, Annual Review Committee-School for Earth Environmental and Marine Sciences (September 2016)

Committee Member, Greenhouse Oversight Committee (September 2016)

Committee Member, Curriculum Committee-School for Earth, Environmental, and Marine Sciences (September 2015)

Faculty Mentor, STEM Earth Day (April 22, 2017)

Committee Member, Graduate Committee-Department of Biology (September 1, 2013 - August 31, 2016)

Committee Member, Greenhouse Planning Committee (Dept. of Biology) (September 2013 - June 2014)

College Service

Committee Member, COS Annual Research Conference (March 30, 2019)

Faculty Advisor, CoS Advisory Council Committee (September 2017)

Committee Chair, Search Committee Chair (September 2018 - March 2019)

Committee Chair, Faculty Search Committee -- Urban Ecology and Sustainability (SEEMS) (September 2017 - March 2018)

Committee Member, College of Sciences Annual Conference (March 31, 2017)

Other, College of Sciences Annual Conference (March 31, 2017)

University Service

Other, Center for Sustainable Agriculture and Rural Advancement (March 2017)

Other, UTRGV Agroecology Research and Teaching Garden (October 2014)

Committee Member, Community Engagement Committee (September 2017 - August 2020)

Committee Member, International Oversight Committee (September 2017 - August 2020)

Committee Chair, UTRGV Annual Food Security Forum (April 2014 - April 2018)

Guest Speaker, Grant Writing Workshop-Border Studies (May 6, 2017)

Program Coordinator, 3rd Annual Food Security Forum (April 4, 2017)

Faculty Advisor, UTRGV Tree Campus USA (September 2013 - August 2016)

Committee Chair, Tree Advisory Committee (September 2013 - 2015)

Program Organizer, HESTEC-Middle School Challenge (September 2014 - October 2015)

Development Activities Attended

- Workshop, "Environmental Data Science Inclusion Network", National Science Foundation / NEON (April 1, 2019 - April 4, 2019)

- Conference Attendance, "Urban Ecology Center 4 Day Intensive", Urban Ecology Center (July 23, 2018 - July 27, 2018)

- Faculty Fellowship, "USDA-Kika De la Garza Science Fellowship Week", United States Department of Agriculture (June 17, 2018 - June 29, 2018)

- Faculty Fellowship, "Public Engagement in Science ", American Association for the Advancement of Science (June 10, 2018 - June 14, 2018)

- Workshop, "Community Engaged Scholarship and Learning", UTRGV Division of Community Engagement (January 2018 - April 2018)

- Self-Study Program, "Faculty Mentoring Network", Ecological Society of America (January 1, 2016 - June 2016)

- Workshop, "Challenge Based Instruction (CBI) Workshop", UTPA Center for STEM Excellence (January 2014 - June 2014)

Professional Service

Task Force Member, Environmental Data Science Inclusion Network. (April 2019)

Advisory Board Member, AAAS Scientific Committee "How do we respond?". Washington, D.C. (January 2018)

Board Member, Farm and Ranch Freedom Alliance. Austin, TX (May 2017)

Advisory Board Member, The Organic Center. Washington, DC (October 2014)

Discussant, Horticulture/ Urban Ag Committee. Edinburg, TX (September 2014)

Grant Proposal Reviewer, External, USDA-NIFA-Organic Research and Education Initiative. Washington, , D.C. (April 2019 - June 2019)

Editor, Senior Editor, Subtropical Agriculture and Environments Journal. Weslaco, TX (February 2015 - February 2019)

Discussant, Cuba US Agroecology Network. Boston, MA (May 2016 - May 2016)

Officer, President/Elect/Past, Subtropical Agriculture and Environments Society. (February 2015 - February 2016)

Reviewer, Grant Proposal, USDA-National Institute of Food and Agriculture. Washington, DC (June 2015 - June 2015)

Program Organizer, Ecological Society of America. San Diego, CA (February 2014 - August 2014)

Professional Memberships

Texas OneGulf Network of Experts, (TONE) (November 2015)

Sistema de Monitoreo de los Manglares de Mexico, (SMMM) (May 2014)

Society for Biological Conservation, (SBC) (2006)

Tamoanchan Conservacion,(July 2004)

Association Quebecoise de Specialistes en Sciences du Sol, (AQSSS) (1997)

Society for Ecological Restoration, (SER) (2015 - 2021)

Public Service

Other, Boy Scouts of America (Pack 358). Edinburg, TX (August 2018)

Committee Member, McAllen Mayor's Wellness Council. McAllen, TX (June 2018)

Guest Speaker, Eco Rio. Edinburg, TX (April 2018)

Committee Member, RGV Food Policy Council. McAllen, TX (January 2018)

Other, Boy Scouts of America. Harlingen, TX (May 2016)

Other, Center for Urban Ecology (Quinta Mazatlan). McAllen, TX (May 2016)

Session Chair, Sierra Club. McAllen, Texas (April 12, 2017 - April 19, 2017)

Expert Witness, Legislative Testimony, Texas House Committee on Homeland Security and Public Safety. Brownsville, TX (September 28, 2016 - September 28, 2016)

Expert Witness, Legislative Testimony, US Senate Panel on Border Security. Laredo, TX (May 12, 2016 - May 12, 2016)