Vikram Bradley Baliga, PhD

Lecturer of Horticulture
Greenhouse and Horticultural Gardens Manager
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Academic Background	
Texas Tech University Ph.D. Plant and Soil Science	2020
Dissertation: Behaviors, attitudes, and technologies influencing urban landscape water conservation in the Texas High Plains; Vikram B. Baliga*, Joey R. Young, Ryan Williams	
Texas Tech University M.S. Horticulture	2012
Thesis: Effects of drought stress and climatic conditions on Olea europaea L. physiology and fruit set; Vikram B Baliga*, Thayne Montague, Cynthia McKenney	,
Texas A&M University B.A. Horticulture	2010
Landscape Design Emphasis	
Academic and Professional Experience	
Texas Tech University, Department of Plant and Soil Science Assistant Professor of Practice of Horticulture	2023-Present
Texas Tech University, Department of Plant and Soil Science Lecturer of Horticulture, Greenhouse and Gardens Manager	2021-2023
Texas Tech University, Department of Plant and Soil Science Research Associate, Greenhouse and Gardens Manager	2018-2021
Texas A&M AgriLife Extension Service, Lubbock County County Extension Agent – Horticulture	2014-2018
Texas Tech University, Department of Plant and Soil Science Teaching/Research Assistant	2010-2012
Baliga Woodworks Owner/Operator	2015-Present

Noble Farms Owner/Operator	2012-Present
Thrive Gardens and Landscapes Owner/Operator	2012-2014

Membership in Professional Societies

•	Botanical Society of America	2022-Present
•	American Society of Horticultural Science	2019-Present
•	Crop Science Society of America	2018-Present
•	Texas Nursery and Landscape Association	2018-Present
•	Texas County Agricultural Agents Association	2014-2018

Honors and Awards

- TTU Davis College Instructor Award, 2022
- Texas Tech TLPDC Diamond Award for Innovative Teaching, 2021
- Wolfforth, TX Chamber of Commerce "Walter Drop Award", 2016
- NCAAA Regional Communication Award, "Should I Run My Sprinklers" fact sheet, 2016
- NCAAA Regional Communication Award, "Aquaponics" publication, 2016
- TCAAA Communication Award, "Should I Run My Sprinklers" fact sheet, 2016
- TCAAA Communication Award, "Aquaponics" publication, 2016
- TCAAA Communication Award, "KFYO radio- grapes" audio recording, 2016
- TCAAA Communication Award, "Frost damage on turf" published photo & caption, 2016
- TCAAA Communication Award, "Tree Pruning" video presentation, 2016
- TCAAA District 2 Early Career Agent award, 2016
- Texas A&M AgriLife District 2 Excellence in Team Programming award, 2015
- Texas A&M AgriLife District 2 New Agent Award, 2015
- Texas A&M AgriLife Superior Service Award- Strawberry Project, 2015

Areas of Expertise

- Urban landscape water conservation
- Controlled environment horticulture
- Urban and small farm food production and market gardening
- Multi-purpose landscape design
- In-person and virtual science communication and outreach

Teaching Responsibilities

- PSS 1411- Principles and practices of horticulture
 - Develop curriculum and teach 1 to 2 lecture sections per full semester as well as lab sections as needed

- Oversee 2 additional lecture instructors, 5 teaching assistants, and overall course management
- o Approximately 800 students per year, total

5-year Teaching Evaluation Summary

	# Students	Followed Course Objectives	Instructor Overall Question #2	Course Valuable Learning Experience
Term/Class	(# Responding)	Question #1 Mean	Mean	Question #3 Mean
Fall 2023	, ,			
PSS 1411-				
001	137 (70)	4.9	4.9	4.7
Fall 2023				
PSS 1411-	()			
518 XCL	26 (11)	4.8	4.8	4.8
Fall 2023				
PSS 1411-	46 (24)	4.4	4.2	4.2
D01	46 (24)	4.4	4.2	4.3
Fall 2023- PSS 1411-				
D02	20 (20)	4.6	4.5	4.3
Spring 2023	20 (20)			
PSS 1411-				
001	121 (62)	4.9	4.9	4.8
Fall 2022				
PSS 1411-				
003	151 (85)	4.9	4.9	4.7
Fall 2022				
PSS 1411-				
501 XCL	28 (11)	4.7	4.7	4.4
Spring 2022				
PSS 1411-	126 (70)	4.0	4.0	4.0
003	126 (70)	4.8	4.9	4.8
Spring 2022 PSS 1411-				
001	45 (21)	5	5	4.9
Fall 2021	(==/			
PSS 1411-				
003	153 (90)	4.9	4.9	4.8
Spring 2021				
PSS 1411-				
001	104(39)	4.8	4.8	4.8
	Average:	4.79	4.77	4.66

Publications

Published Books: 1

• Baliga, V. B. (2023). *Plants to the rescue*. Neon Squid.

Published Book Chapters: 2

- Hill, P., Seger, J., & Baliga, V. B. (2018). Go the Extra Mile to Become Indispensable. In We've tried that before: 500 Years of Extension wisdom. Essay.
- Hill, P., Seger, J., & Baliga, V. B. (2018). Seek Out Influencers and Cultivate Relationships. In We've tried that before: 500 Years of Extension wisdom. Essay.

Book Chapters in Press: 1

• Baliga, V.B. (2024). Animal Senses: Acacia Trees and Giraffes. In *Benchmark Education Reading Curriculum*.

Refereed Journal Articles: Total Published 1

Baliga, V.B., Young, J.R. and Carrillo, M.A. (2019), Evaluation of Water Retention
 Products to Conserve Urban Water Resources in Home Lawns. Crop, Forage & Turfgrass
 Management, 5: 1-9 190051. https://doi.org/10.2134/cftm2019.07.0051

In Press: Total of <u>0</u>

Popular Press: Total of 0

Proceedings: Total of <u>0</u>

Abstracts: Total of <u>5</u>

- Baliga, V. 2024. Using our space wisely: Urban foodscaping and the multi-purpose landscape. Texas Nursery and Landscape Association.
- Newberry, K.*, C. Simpson, and V. Baliga. 2022. Comparing Lettuce Production in Aeroponic and Hydroponic Production Systems. American Society of Horticultural Science.
- Newberry, K.*, C. Simpson, and V. Baliga. 2022. The Effects of Aeroponic Production on Lettuce Growth and Root Development.. American Society of Horticultural Science.
- Baliga*, V. and J. Young. 2017. Effects of consumer end conservation products on bermudagrass quality in severe drought conditions. Crop Science Society of America Abstract #107197.
- Baliga*, V. and J. Young. 2017. Motivations for water conservation among homeowners in semiarid West Texas. Crop Science Society of America Abstract #128-3.

Technical Reports: Total of 0

Other Publications: Total of 10

- Rainwater harvesting demonstration, creator, 2014, original
- "Texas Olives", creator, 2015, original
- "Maintaining a Healthy Lawn", creator, 2015, original
- "Lubbock County Rain Facts", creator, 2015, original
- "Trusty Fall Favorites", creator, 2015, original
- "Good bug, Bad bug", creator, 2015, original
- "Fall Color", creator, 2015, original
- "Should I Run My Sprinklers?", creator, 2015, original
- "Create Your Own Aquaponics System", creator, 2015, original

Media Contribution: Total of 7

- Planthropology Podcast- 127 episodes and 198,000 downloads as of 12/31/2023
- In the Grow Podcast/NPR Radio Show w/ TTU Public Media- 76 episodes and 17,000 downloads as of 12/31/2023
- The Plant Prof Podcast- 40 episodes and 5,000 downloads as of 12/31/23
- Podcast Guest Appearances 50 as of 12/31/2023
- Radio Guest Appearances- 150 as of 12/31/2023
- TV News Appearances- 32 as of 12/31/2023
- Print News Articles (quoted)- 35 as of 12/31/2023

Presentations and Lectures: Total of 155

Public Presentations and Invited Guest Lectures- Selected Titles

- PSS 4323- "Organic Fruit Tree Crops", 2022
- Lubbock Avalanche Journal Live- "Winter Landscape Tips", 2022
- TTU Climate Science Center Science by the Glass- "Multi-Purpose Landscapes", 2022
- TTU Museum- "Cacti and life in the desert", 2022
- JOUR 4350- "Building Your Personal and Professional Brand", 2022
- TTU Public Media- "In the Grow Live", 2022
- West Texas Golf Course Superintendent Association- "Multi-Purpose Landscapes", 2021
- PSS 1100- "Using Social Media Effectively", 2022
- Lubbock Master Gardener Intern Class- "Plant Growth and Development", 2022
- West Texas Golf Course Superintendent Association- "Water Resource Management", 2021
- Lubbock Master Gardener Intern Class- "Plant Biology", 2021
- Lubbock Arboretum Second Saturday- "Urban Tree Care", 2021
- Texas Master Gardener Association Meeting- "Garden Tour", 2020
- PSS 4314- "Greenhouse Management", 2020
- Perian Sorosis- "Landscape Water conservation", 2020
- Ag Comm3301- "Podcasting", 2020
- PSS 4323- "Organic Fruit Tree Crops", 2019
- West Texas Golf Course Association- "Wetting Agents and Conservation", 2019
- Lubbock Master Gardener Association- "Succulents", 2019
- Ag Comm 2302- "Social Media in Ag Communication", 2019
- Texas Pest Control Association West Texas Conference- "Tree Care", 2019
- City of Lubbock Water Smart Series- "Mulch", 2019
- City of Lubbock Water Smart Series- "West Texas Soils", 2019
- TTABS- "Making Succulent Arrangements", 2019
- Lubbock Arboretum Second Saturday- "Spring Landscapes", 2019
- Lubbock Master Gardener Intern Class- "Plant Pathology", 2019
- Lubbock Master Gardener Intern Class- "Plant Nutrient Management", 2019
- Ag Comm 2302- "Social Media in Ag Communication", 2018
- Ag Comm 2302- "Social Media in Ag Communication", 2018
- South Plains Food Bank- "Production of Winter Crops", 2018
- Lubbock Stored Grain Workshop- "Weed control in industrial areas", 2018
- Growing Healthy Texas- "Building coalitions for community garden projects", 2014
- Growing Healthy Texas- "Community garden leadership training", 2014
- Texas Pest Control Association Lubbock Workshop- "Water-smart plant selection and xeriscaping", 2014
- Texas Pest Control Association Lubbock Workshop- "Tree care and management", 2014
- Wichita Falls Master Gardener class (via Lync)- "Rainwater harvesting and municipalities", 2014
- Texas Pest Control Association Lubbock Workshop- "Weed Control in the West Texas Landscape",
 2015
- Texas Pest Control Association Lubbock Workshop- "Urban Tree Care", 2015
- Texas Pest Control Association Lubbock Workshop- "IPM Principles for the Urban Landscape", 2016
- Texas Pest Control Association Lubbock Workshop- "Lawn and Garden Management", 2016
- Tarrant County Earth-Kind Short Course- "Landscape Turf Management and Selection", 2016
- Tarrant County Earth-Kind Short Course- "IPM: Weeds, the plants you didn't ask for", 2016

- Tarrant County Pros in Parks, Fort Worth- "IPM Weed control", 2017
- Tarrant County Pros in Parks, Arlington- "IPM Weeds Control", 2017
- Amarillo Ornamental and Turf Conference- "Landscape Maintenance Principles", 2016
- West Texas American Society of Landscape Architects CEU workshop- "Rain gardens", 2017
- Hale County Master Gardeners intern class- "Xeriscaping", 2014
- South Plains Underground Water Conservation District workshop- "Xeriscaping", 2014
- Mitchell County- "Gardening basics", 2015
- District 2 Spring Agent Training- "Event and Program Marketing", 2015
- Small Farm and Local Foods Conference- "Building a healthy soil", 2016
- WATTS Conference- "Selecting Drought Tolerant Landscape Plants", 2016
- High Plains Water District Rainwater Harvesting Workshop, Levelland- "Xeriscape 101", 2016
- High Plains Water District Rainwater Harvesting Workshop, Plainview- "Xeriscape 101", 2016
- South Plains Water Expo- "Xeriscape 101", 2016
- Llano Estacado Water District Rainwater Harvesting Workshop- "Xeriscape 101", 2016
- Small Farm and Local Foods Conference- "Pomegranates for West Texas", 2017
- Small Farm and Local Foods Conference- "Marketing your local food business: putting your best foot forward", 2017
- Commercial Turf and Ornamental Workshop- "Resources for selecting well adapted plants to reduce pest complex issues", 2014
- Lubbock Arboretum 'Second Saturday' program- "Water-smart plant selection in west Texas", 2014
- Lubbock Arboretum spring break kids' camp- "Composting", 2014
- Lubbock Arboretum spring break kids' camp- "Drip irrigation", 2014
- South Plains Iris Society monthly meeting- "Water-smart companion planting", 2014
- Lubbock Area Republican Women monthly meeting- "Water-smart landscape design", 2014
- Lubbock Master Gardener Association monthly meeting- "Texas olive cultivation", 2014
- Turfgrass Field Day (TTU)- "Xeriscaping and native plants", 2014
- Wolfforth Water Exposition- "Water-smart plant selection", 2014
- Lubbock United Neighborhood Association annual meeting- "Community gardens and water conservation", 2014
- Heart of Lubbock Community Garden Harvest Festival- "Rainwater harvesting", 2014
- Heart of Lubbock Community Garden Harvest Festival- "Water-smart landscape design principals",
 2014
- Frenship DECA practice competition and workshop- "Attitudes and traits of an effective leader", 2014
- Commercial Turf and Ornamental Workshop- "Urban Tree Care and Pest Management", 2015
- New Deal High School financial management class- "Game of Life", 2015
- New Deal High School financial management class- "Hire Me", 2015
- Lubbock Municipal Arboretum Second Saturday program- "Tree Care in the Urban Landscape", 2015
- Buddy Holly Center Arid Lands Workshop- "Xeriscaping 101", 2015
- Lubbock Church of Latter-Day Saints Annual Preparedness Fair- "Basics of Emergency Preparedness", 2015
- Wolfforth Water Expo- "Xeriscaping 101", 2015
- Wolfforth Water Expo- "Plant Selection", 2015
- Turfgrass Management Field Day- "Tree-Turf Relations", 2015
- Earth-Kind Workshop- "Earth-Kind Priciples," 2015
- OL Slaton Jr. High School- "Plant Biology 101," 2015
- Science Spectrum Taste of Science- "From Seed to Table", 2015
- Texas Tech Museum Science Made Simple educational booth- Aquaponics and Seed Bombs, 2015

- Commercial Turf and Ornamental Workshop- "IPM Principles for the Urban Landscape", 2016
- Metropolitan Rotary Club Meeting- "Xeriscape 101", 2016
- Ag-to-Youth- "Rainfall simulation", 2016
- Ambucs lunch meeting- "Conservative Landscape Design", 2016
- TTU/AgriLife Turfgrass management field day- "Wetting agents in turf", 2016
- Lubbock Conservation Workshop- Panel discussion and event MC, 2016
- Commercial Turf and Ornamental Workshop- "Understanding Sprayer Calibration", 2017

Student Advising and Oversight

Graduate Student Committees

Completed: 1 M.S.

Chaired: 0

Co-Chaired: 0

Committee Member: 1

• Newberry, K.*, C. Simpson, V. Baliga, R. Wallace. 2023. Increasing Efficiency of Aeroponic Vegetable Production.

In Progress: 1

Chair:

Co-chair:

Committee Member: 1

• Ph.D. Jonah Trevino- Community horticulture

Undergraduate Advising

- Fall 2023- 26 Students
- Spring 2023- 25 students
- Fall 2022- 27 Students
- Spring 2022- 7 students

Grants and Awards: total funded- \$18,191.36

Funded:

- Longing, Scott (Lead Principal Investigator), Young, Joey (Principal Investigator), Baliga, Vikram, "A Demonstration Garden to Promote Pollinators, Urban Water Conservation and Community Outreach," Sponsored by High Plains Underground Water District No. 1, \$9,232.00. (October 1, 2019 September 30, 2021).
- Young, Joseph (Lead Principal Investigator), Montague, David (Principal Investigator), Baliga, Vikram (Supporting), "Effect of shade on growth, water use, and photosynthetic rate of common turfgrass species," Sponsored by High Plains Underground Water District No. 1, Local Govt, \$5,912.80. (October 1, 2019 September 30, 2020).
- (Lead Principal Investigator), "A Demonstration Garden to Promote Pollinators, Urban Water Conservation and Community Outreach," Sponsored by High Plains Underground Water District No. 1, \$3,046.56. (October 1, 2019 September 30, 2020).

Non-Funded:

- Young, Joseph (Lead Principal Investigator), Plowman, Russell (Principal Investigator), Baliga,
 Vikram (Principal Investigator), "Conquering sustainability hurdles in golf course native areas,"
 Sponsored by United States Golf Association, Other Nonprofit Org, \$107,664.00.
- Young, Joseph (Lead Principal Investigator), Longing, Scott (Principal Investigator), Montague, David, Baliga, Vikram (Supporting), Plowman, Russell (Supporting), "Water Conserving, Perennial Landscape Plants for Pollinator and Personal Attraction," Sponsored by Horticulture Research Institute, Industry/For Profit, \$21,526.00.

Gifts and In-Kind Donations: total of \$147,000

- Burkhart Center Sensory Garden Donor Support- \$50,000 (2023)
- Funds raised through plant sales and fundraisers for the TTU PSS Greenhouse and Horticultural Gardens- \$70,000 (2018-2023)
- Land and resources for the Heart of Lubbock Community Garden- \$27,000 (in-kind)
 (2020)