

Madhurababu Kunta, Ph.D.

Texas A&M University-Kingsville Citrus Center
312 N. Intl. Blvd, Weslaco, TX 78599
Telephone: 956-447-3369 (work), 956-750-0043 (mobile)
Email: madhura.kunta@tamuk.edu

EDUCATION

Ph.D.	Texas A&M University	2009	Horticulture
M.S.	Texas A&M University-Kingsville	2003	Plant and Soil Science
PGDPM	University of Hyderabad, India	1998	Planning and Project Management
B.Sc.	Andhra Pradesh Agricultural University, India	1995	Agricultural Sciences

EMPLOYMENT HISTORY

Academic

2021-	Research Associate Professor, Department of Agriculture, Agribusiness, and Environmental Sciences (AAES), Texas A&M University-Kingsville (TAMUK), TAMUK Citrus Center
2015-2020	Research Assistant Professor, AAES, TAMUK, TAMUK Citrus Center
2011-2015	Project Director, TAMUK Citrus Center
2005-2011	Research Associate, TAMUK Citrus Center
2004	Research Associate, USDA/ARS Children's Nutrition Research Center, Baylor College of Medicine

Non-Academic

1999-2001	Production Officer, Pioneer Hi-Bred Seeds Limited, India
1996-1997	Sales Officer, EID Parry (India) Limited

GRADUATE FACULTY AND TEACHING

Graduate Faculty Membership

1. 2009-Present: Department of Agriculture, Agribusiness, and Environmental Sciences, TAMUK
2. 2012–Present: Plant–Associated Microorganisms / Plant Health (Horticulture, MEPS) in the Department of Horticulture, Texas A&M-College Station.

Courses taught at Texas A&M University-Kingsville

1. PLSS-5337- Practical Appl. Plant Biotechnology, Spring semester, 2022, 2023, 2024.
1. PLSS-4326 & PLSS5390- Horticulture and Fruit Crop Production, Spring semester, 2021
2. PLSS 5351, Advanced Plant Propagation, Fall semester, 2019
3. Three guest lectures, PLSS 6377, Genetics of Crop Improvement, Fall semester, 2017
4. Three guest lecture classes, PLSS6390, Advanced Biotechnology, Fall semester, 2016
5. One class, PLSS6390, Practical Application of Biotechnology, Fall semester, 2015
6. Two classes, PLSS6390, Introduction to Plant Biotechnology, Fall semester, 2014
7. Two classes, PLSS6377, Genetics of Crop Improvement, Fall semester, 2012
8. 50% classes between Drs. Kunta & Louzada, PLSS6390, Advances in Plant Biotechnology, Fall semester, 2011
9. PLSS 6390, Plant Propagation: Theory and Experiments, Spring semester, 2010

PUBLICATIONS

Refereed Journal Articles (52)

1. de Leon, V. S., J. Chen, G. McCollum, J.-W. Park, E. S. Louzada, M. Sétamou and M. Kunta. 2024. Diversity of “*Candidatus Liberibacter asiaticus*” strains in Texas revealed by prophage sequence analyses. *Plant Disease* 108: 1455-1460. <https://doi.org/10.1094/PDIS-09-23-1994-SR>
2. Singh K; M. Huff, J. Liu, J.-W. Park, T. Rickman, M. Keremane, R. R. Krueger, M. Kunta, M. L. Roose, C. Dardick, M. Staton, and C. Ramadugu. 2024. Chromosome-scale, de novo, phased genome assemblies of three Australian limes, *Citrus australasica*, *C. inodora*, and *C. glauca*, towards finding insights into disease resistance to citrus huanglongbing. *Plants* 13:1460. <https://doi.org/10.3390/plants13111460>
3. Park, J.-W., W.E. Braswell, and M. Kunta. 2023. Co-occurrence analysis of citrus root bacterial microbiota under citrus greening disease. *Plants* 13:80. <https://doi.org/10.3390/plants13010080>
4. Danda, T., J.-W. Park, K. L. Timmons, M. Sétamou, E. S. Louzada, and M. Kunta. 2023. A field deployable real-time loop-mediated isothermal amplification targeting five Copy *nrdB* gene for the detection of ‘*Candidatus Liberibacter asiaticus*’ in citrus. *Plant Pathology*. J. 39(4): 309-318. <https://doi.org/10.5423/PPJ.OA.02.2023.00303>.
5. Choi, J., S. Basu, A. Thompson, K. Otto, E.V. Sineva, M. Kunta, G. Gupta, and P. Trivedi. 2023. A host-derived chimeric peptide protects citrus against Huanglongbing without threatening the native microbial community of the phyllosphere. *Journal of Sustainable Agriculture and Environment* 2023:1–11. <https://doi.org/10.1002/sae2.12089>
6. Louzada, E., O. Vazquez, S. Chavez, M. Setamou, and M. Kunta. 2022. Optimization of vqPCR for reliable detection of viable *Candidatus Liberibacter asiaticus* in citrus. *HortScience* 57:692-697.
7. Basu, S., E. Sineva, L. Nguyen, N. Sikdar, J. W. Park, M. Sinev, M. Kunta & G. Gupta. 2022. Host-derived chimeric peptides clear the causative bacteria and augment host innate immunity during infection: A case study of HLB in citrus and fire blight in apple. *Front. Plant Sci.* 13:929478. doi: 10.3389/fpls.2022.929478
8. da Graça, J. V. and M. Kunta. 2022. A review of citrus diseases and pathogens in Texas. *Subtropical Agriculture and Environments* 73: 17-28.
9. Park, J.-W., J. V. da Graça, M. Gonzalez, E. S. Louzada, O. J. Alabi & M. Kunta. 2022. First report of citrus virus A in Texas associated with oak leaf patterns in *Citrus sinensis*. *Plant Disease* 106: 2005. doi.org/10.1094/PDIS-03-21-0628-PDN.
10. Park, J.-W., J. V. da Graça, M. Sétamou & M. Kunta. 2021. Diversity of Citrus tristeza virus strains in the Upper Gulf Coast of Texas. *Plant Disease* 105: 592-598. <https://doi.org/10.1094/PDIS-02-20-0410-RE>
11. Perez, E., M. Kunta, V. Ancona, J. V. da Graça, C. Ayin, G. Santilla and V. Mavrodieva. 2021. The return of Asiatic citrus canker to Texas: surveys and eradication efforts. *Plant Health Progress* 22: 143-148.
12. Kunta, M., S. Chavez, Z. Vilorio, H. S. del Rio, M. Devanaboina, G. Yanev & E. S. Louzada. 2020. Screening of citrus genotypes for *Phytophthora nicotianae* tolerance. *HortScience* 55:1038-1044.
13. Oke, A., A. Oladigbolu, M. Kunta, O. Alabi and M. Sétamou. 2020. First report of the occurrence of Asian citrus psyllid, *Diaphorina citri* (Hemiptera: Liviidae), an invasive species in Nigeria, West Africa. *Scientific Reports* 10: Article 9418.
14. da Graça, J. V., M. E. Van Ness, and M. Kunta. 2020. The Texas certified virus-free citrus budwood program after 20 years. *Subtropical Agriculture & Environments* 71: 23-28.
15. Braswell, W., J.-W. Park, P. A. Stansly, B. C. Kostyk, E. S. Louzada, J.V. da Graça, and M. Kunta. 2020. Root samples provide early and improved detection of *Candidatus Liberibacter asiaticus* in citrus. *Nature Scientific Reports* 10: Article 16982.
16. Setamou, M., O. J. Alabi, M. Kunta, J. Dale, and J. da Graca. 2020. Distribution of *Candidatus Liberibacter asiaticus* in citrus and the Asian citrus psyllid in Texas over a decade. *Plant Disease* 104:1118-1126.

17. Garza, B., V. Ancona, J. Enciso, H. L. Perotto-Baldivieso, M. Kunta and C. Simpson. 2020. Quantifying citrus tree health using true color UAV images. *Remote Sensing* 12 (1): 170.
18. Chaudhary, S., D. A. Laughlin, M. Setamou, J. V. da Graça, M. Kunta, O. J. Alabi, K. Crosby, K. Ong, and V. Ancona. 2020. Disease incidence and severity of *Phytophthora* foot rot in the LRGV. *Plant Disease*. <https://doi.org/10.1094/PDIS-07-19-1493-RE>.
19. Kunta, M., L. Guzman, A.C. Garcia, H.S. del Rio, J. C. Melgar, and E. S. Louzada. 2019. Evaluation of physiological parameters in citrus plants transformed with cyclic nucleotide gated ion channel (CNGC) gene. *Acta Horticulturae* 1230: 107-115.
20. Salas, B., H.E. Conway, M. Kunta, D. Vacek, and C. Vitek. 2018. Pathogenicity of *Zygosaccharomyces bailii* and Other Yeast species to Mexican fruit fly (Diptera: Tephritidae) and mass rearing implications. *J. Econo. Entomol.* 111(5):2081-2088.
21. Park, J.-W., E. S. Louzada, W. E. Braswell, P. A. Stansly, J. V. da Graça, G. McCollum, J. E. Rascoe and M. Kunta. 2018. A new diagnostic real-time PCR method for Huanglongbing detection in citrus root tissue. *J. General Plant Pathol.* 84(5):359-367.
22. Park, J.-W., M. Kunta, G. McCollum, M. Gonzalez, and J. V. da Graça. 2018. Development of a sensitive real-time PCR detection method for Citrus tatter leaf virus. *J. Plant Pathol.* 100(1):67-73.
23. Nishikawa, F., E. Louzada, J. C. Melgar, M. Kunta and M. Setamou. 2017. Effects of planting bed and plastic mesh as ground cover on flowering of citrus trees. *Bulletin of the NARO Institute of Fruit Tree and Tea Science* 1:1-8.
24. Kunta, M., J.-W. Park, P. Vedasharan, J. V. da Graça and M. D. Terry. 2018. First report of *Colletotrichum queenslandicum* on Persian lime causing leaf anthracnose in the USA. *Plant Disease* 102:677.
25. Kunta, M., Z. Zheng, F. Wu, J. da Graça, J.-W. Park, X. Deng, and J. Chen. 2017. A draft whole genome sequence of “*Candidatus Liberibacter asiaticus*” strain TX2351 from Asian citrus psyllids in Texas, USA. *Genome Announcements* 5: e00170-17.
26. da Graça, J. V., M. Kunta, J.-W. Park, M. Gonzalez, G. Santillana, V. Mavrodieva, D. W. Bartels, B. Salas, M. N. Duffel, and J. Dale. 2017. Occurrence of a citrus canker strain with limited host specificity in south Texas. *Plant Health Progress* 18: 196-203.
27. Setamou, M., O. J. Alabi, M. Kunta, J. L. Jifon, and J. V. da Graça. 2016. Enhanced acquisition rates of ‘*Candidatus Liberibacter asiaticus*’ by the Asian citrus psyllid (Hemiptera: Liviidae) in the presence of vegetative flush growth in citrus. *Journal of Economic Entomology* 109(5):1973-1978.
28. Louzada, E. S., O. Vazquez, E. Braswell, G. Yanev, M. Devanaboina, and M. Kunta. 2016. Distribution of *Candidatus Liberibacter asiaticus* above and below ground in Texas Citrus. *Phytopathology* 106(7):702-709.
29. Malik, N. S. A., A. Nuñez, L. C. McKeever, M. Kunta, D. Douds, and D. S. Needleman. 2016. Mycorrhizal fungi collected from the rhizospheres around different olive cultivars vary in their ability to improve growth and polyphenol levels in leeks. *Journal of Agricultural Sciences* 8:1-10.
30. Satpute, A., N. S. A. Malik, J. L. Perez, J. V. da Graça & M. Kunta. 2015. Changes in polyphenols in ‘Rio Red’ grapefruit leaf in response to *Elsinoë australis* infection. *Phytoparasitica* 43(5): 629-636.
31. Kunta, M., B. Salas, M. Gonzales, and J. V. da Graça. 2015. First report of citrus dry root rot caused by *Fusarium solani* on sour orange rootstock in Texas. *Journal of Citrus Pathology* 2(1): [iocv_journalcitruspathology_27974](http://escholarship.org/uc/item/5jt380gp). <http://escholarship.org/uc/item/5jt380gp>
32. Malik, N. S. A., J. Perez, and M. Kunta. 2015. Inducing flushing in citrus cultivars and changes in polyphenols associated with bud break and flowering. *Journal of Horticulture* 2(3): doi 10.4172/2376-0354.10000148
33. da Graça, J. V., M. Kunta, M. Sétamou, J. Rascoe, W. Li, M. K. Nakhla, B. Salas and D. W. Bartels. 2015. Huanglongbing in Texas: Report on the first detections in commercial citrus. *Journal of Citrus Pathology* 2:1-6. <http://escholarship.org/uc/item/99p100ts>
34. Malik, N. S. A., J. L. Perez, M. Kunta, and M. Olanya. 2015. Changes in polyphenol levels in Satsuma (*Citrus unshiu*) leaves in response to Asian citrus psyllid infestation and water stress. *The Open Agriculture Journal* 9: 1-5.

35. LeVesque, C., L. Kumagai, M. Keremane, H. Lin, M. Kunta, J. Morgan, D. G. Hall, J. V. da Graça, and M. Polek. 2014. Detection of *Liberibacter asiaticus* in a single infected Asian citrus psyllid adult or nymph: Impact of dilution with clean Asian citrus psyllids (*Diaphorina citri*) during extraction. *J. Citrus Pathol.* 1(1):87-91.
36. Malik, N.S.A., J. L. Perez, M. Kunta, J. M. Patt and R. L. Mangan. 2013. Changes in free amino acids and polyamine levels in Satsuma leaves in response to Asian citrus psyllid infestations and water stress. *Insect Science* 21: 707-716.
37. Ruiz, A., C. C. Parra, J.V. da Graça, B. Salas, N.S.A. Malik and M. Kunta. 2014. Molecular characterization and pathogenicity assays of *Colletotrichum acutatum*, causal agent for lime anthracnose in Texas. *Revista Mexicana de Fitopatologia* 32: 52-61.
38. Thinakaran, J., E. Pierson, M. Kunta, J. Munyaneza, C. Rush & D. Henne. 2015. Silverleaf nightshade (*Solanum elaeagnifolium*), a reservoir host for ‘*Candidatus Liberibacter solanacearum*’, the putative causal agent of Zebra Chip Disease of potato. *Plant Disease* 99:910-915.
39. Alabi, O., M. Kunta, J. Dale, and M. Setamou. 2014. Survey and detection of ‘*Candidatus Liberibacter asiaticus*’ in a citrus nursery facility in South Texas. *Plant Health Progress* 15:184-188.
40. Kunta, M., Z. Vilorio, H. S. del Rio, and E. S. Louzada. 2014. Diverse DNA extraction methods and PCR primers for detection of Huanglongbing-associated bacteria from roots of 'Valencia' sweet orange on sour orange rootstock. *Scientia Horticulturae* 178: 23-30.
41. Kunta, M., J.V. da Graça, N. Malik, E. S. Louzada, and M. Sétamou. 2014. Quantitative distribution of *Candidatus Liberibacter asiaticus* in the aerial parts of the HLB-infected citrus trees in Texas. *HortScience* 49: 65-68.
42. Malik, N. S. A., J. L. Perez, and M. Kunta. 2013. Changes in free amino acid levels in sour orange leaves in response to cold stress and during recovery from cold stress. *International Journal of Food, Agriculture & Environment* 11: 1086-1089.
43. Kunta, M., M. Palm, J. Rascoe, P. B. de Sa, L. W. Timmer, J. V. da Graça, R. L. Mangan, N. S. A. Malik, B. Salas, A. Satpute, M. Sétamou, and M. Skaria. 2013. Sweet Orange Scab with a new scab disease “syndrome” of citrus in the U.S.A. associated with *Elsinoë australis*. *Tropical Plant Pathol.* 38: 203-212.
44. Schneider, S. J., J. V da Graça, M. Skaria, C. R. Little, M. Sétamou & M. Kunta. 2013. A visual rating scale for quantifying severity of greasy spot disease on grapefruit leaves. *International Journal of Fruit Science* 13: 459-465.
45. Malik, N. S. A., J. L. Perez, and M. Kunta. 2012. The effect of leaf presence on the rooting of stem cutting of bitter melon and on changes in polyamine levels. *Agricultural Sciences* 3: 936-940.
46. Kunta, M., H. S. del Rio, M. Skaria, and E. S. Louzada. 2010. Isolation and molecular characterization of a putative ascorbate peroxidase gene from citrus. *International Journal of Fruit Science* 10: 1-15.
47. Kunta, M., H. Miao, T. Shigaki, J. L. Perez and M. Skaria. 2010. *Ganoderma* infecting citrus in Texas is a unique taxon within the *Ganoderma lucidum* complex: evidence from the ITS region. *Pest Technology* 4: 62-64.
48. Thomas, T. P., M. Kunta, J. V. da Graça, A. Bhattacharya, M. Sétamou, and M. Skaria. 2010. Effect of viroids on resistance to *Phytophthora* infection of citrus. *HortScience* 45(7): 1069-1072.
49. Reddy, V. S., M. Kunta, S. D. Nelson, J. V. da Graça, and M. Skaria. 2010. Gene expression studies in sour orange and C-22 rootstocks challenged with the fungus, *Phytophthora nicotianae* and the nematode, *Tylenchulus semipenetrans*. *Pest Technology* 4(1): 29-34.
50. Kunta, M. and M. Skaria. 2007. Molecular distinction of citrus *Phytophthora* isolates in the Lower Rio Grande Valley of Texas. *Subtropical Plant Science* 58:1-5.
51. Kunta, M., J. V. da Graça, and M. Skaria. 2007. Molecular detection and prevalence of Citrus viroids in Texas. *HortScience* 42(3):600-604.
52. Pitman, J. K., Ning-Hui Cheng, Toshiro Shigaki, M. Kunta and Kendal D. Hirschi. 2004. Functional dependence on calcineurin by variants of the *Saccharomyces cerevisiae* vacuolar Ca²⁺/H⁺ exchanger Vcx1p. *Molecular Microbiology* 54(4):1104-1116.

Nonrefereed Articles (4)

1. McCollum, G., M. Kunta and E. Braswell. 2018. Improving early detection of HLB- affected trees. *Citrograph* 9(1): 50-54.
2. Salas B., M. Kunta, C. Vitek, and A. Jasso. 2013. Efficacy of chemicals on the survival of *Elsinoe australis* on citrus fruits with symptoms of sweet orange scab (SOS). CPHST Mission laboratory annual report, p20-21.
3. Braswell E., M. Kunta, and E. Louzada. 2013. Evaluating citrus root tissue as a target for early and efficient detection of HLB disease, CPHST Mission laboratory annual report, p34-36.
4. Technical Working Group (TWG) Report Sweet Orange Scab (*Elsinöe australis*). 2010. https://www.aphis.usda.gov/plant_health/plant_pest_info/citrus/downloads/sweet_orange/sos-twg-report.pdf

Refereed proceedings (2)

1. Turechek, W., T. R. Gottwald, J. S. Hartung, M. E. Hilf, M. L. Keremane, H. Lin, R. G. Shatters, M. Irey, P. Sieburth, R. Brlansky, J. da Graça, J. Graham, M. Kunta, P. Roberts, M. Rogers, X. Sun & N. Wang. 2009. Evaluation of quantitative real-time PCR assays for detection of citrus greening. P 158-160 in Proceedings of the 10th International Epidemiology Workshop, D.M. Gadoury, R.C. Seem, M.M. Moyer & W.E. Fry, eds. New York State Agricultural Experiment Station, Geneva, NY.
2. J. D. Tanner, M. Kunta, J. V. da Graça, M. Skaria & S. D. Nelson. 2011. Evidence of seed transmission of Citrus tatter leaf virus in citrus. Proceedings, 18th International Organization of Citrus Virologists. <https://doi.org/10.5070/C50b67q81h>

Books, Chapters, Monographs, etc. (4)

1. Kunta, N. and M. Kunta. 2023. Fungi Impacting Human Health. In: Fungal Resources for Sustainable Economy: Current Status and Future Perspectives. Springer. DOI: 10.1007/978-981-19-9103-5 (In press).
2. Jahagirdar, S., D. N. Kambrekar, S. S. Navi, & M. Kunta. Plant growth-promoting fungi: Diversity and classification. In: Bioactive Molecules in Plant Defense (eds. J. Sudisha & A. Mostafa), Springer Nature, Switzerland, Page # 25-34.
3. Park, J.-W., J. C. Melgar & M. Kunta. Plant nutritional deficiency and its impact on crop production. In: Bioactive Molecules in Plant Defense (eds. J. Sudisha & A. Mostafa), Springer Nature, Switzerland, Page# 231 – 248.
4. Kunta, M., J.-W. Park, E. Braswell, J. V. da Graca, and E. Perry. 2020. Modern tools for detection and diagnosis of plant pathogens. In: Singh K.P., Jahagirdar S., Sharma B.K. (eds.) Emerging Trends in Plant Pathology, Springer Nature, Page# 63 – 96.

News Articles (7)

1. da Graça J., M. Kunta, M. Setamou and M. Skaria. Citrus Greening Survey Update. TAMUK Citrus Center Newsletter Vol. 27(6): 1.
2. da Graça J., S. D. Nelson, and M. Kunta. Graduate student demonstrates seed transmission of Citrus tatter leaf virus. TAMUK Citrus Center Newsletter Vol. 28(3): 3.
3. M. Skaria, M. Kunta, J. V. da Graça, and M. Setamou. “Seek, You Will Find” Applies to Sweet orange scab. TAMUK Citrus Center Newsletter Vol. 28(4&5): 5.
4. M. Kunta and J. V. da Graça. Lime anthracnose in Texas. TAMUK Citrus Center Newsletter Vol. 30(2): 3.
5. Research Associate Professor at Citrus Center publishes article on citrus canker eradication efforts, Javelina News, September 28, 2021.
6. Canker eradication efforts underway in Texas. Citrusindustry.net, August 27, 2021.
7. Kunta, research team’s article featured as cover story in "Plants" publication. Javelina News, June 26, 2024.

Referred Abstracts (A partial list)

1. Kunta, M and J. Chen. 2023. Microbiome comparison between leaf and root samples within the same citrus tree infected by “*Candidatus Liberibacter asiaticus*” in Texas, USA. *Phytopathology Supplement* S3.33.
2. Sidireddi, S. H., J. W. Park, M. Setamou, & M. Kunta. 2023. A loop-mediated isothermal amplification (LAMP) assay for rapid field detection of citrus canker. *Phytopathology Suppl.* S3.75.
3. Park, J. W., W. E. Braswell & M. Kunta. 2023. Co-occurrence analysis of citrus root bacterial microbiota under Huanglongbing disease pressure in the field. *Phytopathology Suppl.* S3.92.
4. Park, J. W., T. Danda, W. E. Braswell & M. Kunta. 2022. Detection of ‘*Candidatus Liberibacter asiaticus*’ causing citrus Huanglongbing disease by isothermal amplification assays. *Phytopathology Suppl.* S3.138.
5. Park, J. W., K. Timmons, W. E. Braswell & M. Kunta. 2022. Long-term survey of rhizosphere bacterial population of citrus trees under Huanglongbing (HLB) disease pressure in the field. *Phytopathology Suppl.* S3.155.
6. Galan, R. L., R. Uckoo, T. Ferial, M. Setamou & M. Kunta. 2022. Optimization of net selection for excluding Asian citrus psyllid from Rio Red grapefruit transplants grown in South Texas. *HortScience Supplement* 57(9): S18.
7. Singh, K., T. Rickman, J. W. Park³, E. Burchard, C. Dardick, M. Kunta, M. E. Staton, M. L. Roose¹ & C. Ramadugu. 2022. Chromosome-scale reference genomes of three Australian limes. S40. *HortScience Suppl.* 57(9): S18.
8. J. W. Park., M. Kunta, J. V. da Graça, W. E. Braswell. 2020. Detection of ‘*Candidatus Liberibacter asiaticus*’ by recombinase polymerase amplification (RPA) assay. *Phytopathology Suppl.* S2.12.
9. J. W. Park, M. Kunta, J. V. da Graça, M. Gonzalez, E. Louzada. 2020. Identification of a citrus Coguvirus in Texas associated with oak leaf patterns. *Phytopathology Suppl.* S2.24.
10. Park, J.-W., M. Kunta, E. Louzada, M. Gonzalez, & J.V. da Graca. 2019. Investigations into an oak leaf-inducing agent detected in citrus in Texas. *Proceedings of the Joint IOCV XXI and the IRCHLB VI, Journal of Citrus Pathology.* <https://escholarship.org/uc/item/1zp421bn>
11. da Graca, J. V., J.-W. Park, G. Cook, E. S. Louzada, J. E. Rascoe & M. Kunta. 2019. A new real-time PCR method for the detection of *Candidatus Liberibacter africanus* (CLaf) in citrus root tissue. *Proceedings of the Joint IOCV XXI and the IRCHLB VI, Journal of Citrus Pathology.* <https://escholarship.org/uc/item/1zp421bn>
12. Alabi, O. J., M. Setamou, M. Kunta, J. Dale, & J. V. da Graca. 2019. A decade of ‘*Candidatus Liberibacter asiaticus*’ and its Asian citrus psyllid vector in Texas: an epidemiological insight. *Proceedings of the Joint IOCV XXI and the IRCHLB VI, Journal of Citrus Pathology.* <https://escholarship.org/uc/item/1zp421bn>
13. Ramadugu C., J. Snyder, S. Dowling, S. Halbert, E. Rohrig, M. Kunta, O. Alabi, M. Setamou, R. Kubota, D. Jenkins & M. Roose. 2019. Developing field detection systems and characterizing other *Liberibacters* associated with citrus HLB. *Proceedings of the Joint IOCV XXI and the IRCHLB VI, Journal of Citrus Pathology.* <https://escholarship.org/uc/item/1zp421bn>
14. Jenkins, D., C. Ramadugu, J. Snyder, S. Dowling, S. Halbert, E. Rohrig, M. Kunta, O. Alabi, M. Setamou, R. Kubota & M. Roose. 2019. Evaluating lighting preferences to enhance trapping efficacy of Asian Citrus Psyllid. *Proceedings of the Joint IOCV XXI and the IRCHLB VI, Journal of Citrus Pathology.* <https://escholarship.org/uc/item/1zp421bn>
15. da Graca, J. V., M. Setamou, M. Kunta, and M. Keremane. 2019. Case study of Huanglongbing development of a single grapefruit tree in Texas, a decade of incubation. *Proceedings of the Joint IOCV XXI and the IRCHLB VI, J. Citrus Pathol.* <https://escholarship.org/uc/item/1zp421bn>
16. Park, J.-W., J. Brockington, E. Louzada, B. Kostyk, P. Stansly, G. McCollum, J. V. da Graca, W. E. Braswell, & M. Kunta. 2018. Diagnosis of huanglongbing-associated *Candidatus Liberibacter* species in citrus roots by real-time PCR using primers targeting 16s rDNA and *nrdB* genes. *Phytopathology suppl.*108: 1.61.

17. Alabi, O. J., M. Setamou, M. Kunta, J. Dale, & J. V. da Graca. 2018. Prevalence of *Candidatus Liberibacter asiaticus* in citrus and Asian citrus psyllid in Texas over a 10-year period (2007-2016). *Phytopathology* suppl.108: S1.62.
18. Avila, C., J.-W. Park & M. Kunta. 2018. Evaluation of real-time PCR primer sets for the diagnosis of Huanglongbing (HLB) in citrus root tissue. Abstract in FASEB vol 32 Apr. Suppl.
19. Park, J.W., J. Brockington, C. Medelez, M. Gonzalez, E. S. Louzada, J. V. da Graca & M. Kunta. 2018. Citrus fibrous roots: an alternative source material for Huanglongbing (HLB) diagnosis at pre-symptomatic stage.
<http://www.subplantsci.org/wp-content/uploads/2018/04/SAE-Proceedings-2018.pdf>.
20. Kunta, M., S. Chavez, Z. Vilorio, G. Yanev, M. Devanaboina & E. Louzada. 2019. Screening citrus genotypes for *Phytophthora nicotianae* tolerance. *Phytopathology* suppl.109-10: S2.91.
21. Kunta, M., J. W. Park, M. Gonzalez, P. Vedasharan & J. V. da Graca. 2017. Development of a sensitive real-time PCR detection method for *Citrus tatter leaf virus*. *Phytopathology* 107: S5.54.
22. Park, J. -W., W. E. Braswell, P. Stansly, J. Rascoe, E. Louzada, G. McCollum, J. V. da Graca, & M. Kunta. 2017. A new diagnostic real-time PCR method for Huanglongbing detection in citrus root tissue. *Phytopathology* 107: S5.54.
23. M. Kunta., P. Vedasharan, J. -W. Park & E. Louzada. 2017. First report of *Armillaria* spp. infecting citrus trees on sour orange rootstock in the Lower Rio Grande Valley, Texas. *Phytopathology* Suppl. 107: S5.98.
24. da Graca, J.V., M. Kunta, M. Sétamou, V. Ancona, E.S. Louzada, O.J. Alabi, D.W. Bartels, M.N. Duffel, & J. Dale. 2017. Huanglongbing in Texas 2012-2017—an update.
[iocv_journalcitruspathology_34714.](http://www.subplantsci.org/wp-content/uploads/2017/02/71-2017-Proceedings-Poster-abstracts.pdf)
25. Keremane, M.L., M.L. ROOSE, A. Howe, S.E. Halbert, A. Dickens, T. Smith, O. Alabi, M. Kunta, M. Setamou, R. Kubota, D. Jenkins, R. Lee1, & C. Ramadugu. 2017. Development of tools to conduct field-testing of HLB-associated *Liberibacter*s for disease mitigation.
[iocv_journalcitruspathology_34714.](http://www.subplantsci.org/wp-content/uploads/2017/02/71-2017-Proceedings-Poster-abstracts.pdf)
26. Levesque, C., C. Davis, R. Fink, K. Godfrey, H. Jin, M. Keremane, M. Kunta, J. Leveau, W. Ma, G. McCollum, N. McRoberts, J. Morse, & C. Slupsky. 2017. Comparative study of early detection techniques: TX2. [iocv_journalcitruspathology_34714.](http://www.subplantsci.org/wp-content/uploads/2017/02/71-2017-Proceedings-Poster-abstracts.pdf)
27. Louzada, E., O. Vazquez, S. Chavez, J. Park, P. Vedasharan & M. Kunta. 2017. Optimization of PCR for reliable detection of viable *Candidatus Liberibacter asiaticus* (CLAs) in citrus and estimation of viable CLAs in symptomatic grapefruit leaves of different developmental stages during summer and fall.
[iocv_journalcitruspathology_34714.](http://www.subplantsci.org/wp-content/uploads/2017/02/71-2017-Proceedings-Poster-abstracts.pdf)
28. McCollum, G., M. Keremane, M. Kunta, C. LeVesque, R. Niedz, Y. Duan, & C. Armstrong. 2017. Enhanced “early” detection of CLAs infections in citrus. [iocv_journalcitruspathology_34714.](http://www.subplantsci.org/wp-content/uploads/2017/02/71-2017-Proceedings-Poster-abstracts.pdf)
29. Park, J., J. Brockington, W.E. Braswell, B.C. Kostyk, P.A. Stansly, E.S. Louzada, J.V. daGraca, and M. Kunta. 2017. Long-term study of Huanglongbing diagnosis using fibrous root tissue.
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30. Chavez, S., M. Kunta & E. Louzada. 2017. Screening for *Phytophthora nicotianae* resistance of different citrus rootstocks and hybrids.
[http://www.subplantsci.org/wp-content/uploads/2017/02/71-2017-Proceedings-Poster-abstracts.pdf.](http://www.subplantsci.org/wp-content/uploads/2017/02/71-2017-Proceedings-Poster-abstracts.pdf)
31. McColum, G., C. Levesque, M. Keremane & M. Kunta. 2016. Variation within and among laboratories in detection of *Candidatus Liberibacter asiaticus* using qPCR. *Phytopathology*106: S4.97.
32. Kunta, M., J. V. da Graca, B. Salas, D. Bartels, J. Park, G. Santillana, and V. Mavrodieva. 2016. Occurrence of a Citrus canker strain of limited host specificity in Texas. *Phytopathology*106: S4.99.
33. Kunta, M., E. S. Louzada, & P. Vedasharan. 2016. Viability of *Candidatus Liberibacter asiaticus* in grapefruit leaves at different stages of maturity and Huanglongbing disease symptom development. *Phytopathology* Suppl. 106: S4.109.
34. Chaudhary, S., M. Setamou, O. Alabi, J. da Graca, M. Kunta & V. Ancona. 2016. Incidence and severity of *Phytophthora* disease and assessment of inoculum levels in Texas citrus orchards. *Phytopathology*106: S4.141.

35. Chaudhary, S., M. Sétamou, O. J. Alabi, J. L. Jifon, M. Kunta, K. Crosby, J. V. da Graça & V. Ancona. 2015. *Phytophthora nicotianae* and huanglongbing cause different nutritional imbalances in grapefruit trees. *Phytopathology* 105: S4.27.
36. da Graça, J. V. & M. Kunta. 2015. Detection of a *Ca. Liberibacter americanus* variant in Asian citrus psyllids, *Diaphorina citri*, in Texas. *Phytopathology Suppl.* 105: S4.32.
37. Louzada, E. S., O. Vazquez, S.J. Schneider & M. Kunta. 2015. Optimization of the detection of viable 'Candidatus *Liberibacter asiaticus*' bacterium in citrus tissue. *Phytopathology* 105: S4.85.
38. Vazquez, O., E. Louzada, G. Yanev, M. Devanaboina & M. Kunta. 2015. Distribution of 'Ca. *Liberibacter asiaticus*' in roots of sour orange rootstock grafted with sweet orange and in leaves of grapefruit trees. *Phytopathology Suppl.* 105: S4.142.

PRESENTATIONS

International

1. Kunta, M and ES Louzada. 2004. Isolation and characterization of a putative ascorbate Peroxidase from citrus. 101st Annual International Conference of the American Society for Horticultural Sciences, Austin, TX, July 17-20.
2. Kunta, M., Jose L. Perez, Sandra R. Ozuna, and Mani Skaria. 2005. Management of citrus nematode in Texas. APS annual meeting in Austin, TX, July 30-Aug 3.
3. Thomas, T. P., J. V. da Graça, A. Bhattacharya, M. Kunta, M. Setamou and M. Skaria. 2007. Effect of viroid on resistance to *Phytophthora* infection of citrus. 17th Conference, International Organization of Citrus Virologists, Adana, Turkey, October 18-26.
4. Kunta, M., E. S. Louzada, J. V. da Graça, and M. Skaria. Towards the development of broad-spectrum disease resistance in citrus. 2007 APS annual meeting, San Diego, CA, July 28-31.
5. V. P. Reddy, M. Kunta, J. V. da Graça, S. Nelson, and M. Skaria. 2008. Studies in sour orange and C-22 rootstocks challenged with the nematode, *Tylenchulus semipenetrans* and the fungus, *Phytophthora parasitica*. APS Centennial Meeting, Minneapolis, Minnesota, July 26-30.
6. S. Marepally, M. Kunta, J. V. da Graça, S. Nelson, and M. Skaria. 2008. Molecular identity, infectivity, and differential gene expression associated with Olpidium-like fungus in citrus and vegetables. APS Centennial Meeting, Minneapolis, Minnesota, July 26-30.
7. Kunta, M., M. Skaria, J. V. da Graça, and T. E. Mirkov. 2008. Progress on the development of broad-spectrum disease resistance in citrus through transformation with *CNGCcit* and *bcl-2* genes. APS Centennial Meeting, Minneapolis, MN, July 26-30.
8. da Graça, J. V., M. Skaria, M. Setamou, M. Kunta, M. Arredondo, B. Salas, and P. E. Parker. 2008. Texas steps up surveys for huanglongbing and the Asian citrus psyllid. International Research Conference on Huanglongbing, Orlando, FL, December 1-5.
9. Irey, M., P. Sieburth, R. Brlansky, J. V. da Graça, M. Kunta, T. Gottwald, J. Hartung, M. Hilf, M. Keremane, H. Ling, D. Opgenorth, C. Ramadugu, P. Roberts, M. Rogers, R. Shatters, X. Sun, and N. Wang. 2008. Lessons learned from a comparison and evaluation of multiple HLB testing laboratories employing common and different testing methodologies on a common set of samples, International Research Conference on Huanglongbing, Orlando, FL, December 1-5.
10. Kunta, M., H. S. del Rio, and E. S. Louzada. 2009. Isolation and molecular characterization of a putative ascorbate peroxidase gene from citrus. American Society for Plant Biologists Annual Meeting, Hawaii, July 17-23.
11. Kunta, M., J. V. da Graça, M. Setamou, and M. Skaria. 2010. Towards solving 'inconclusive' quantitative PCR for the presence of Huanglongbing (HLB) in orange jasmine leaf samples in Texas. 2010. American Phytopathological Society Annual Meeting, August 7-11.
12. Justin D. Tanner, M. Kunta, J. V. da Graça, M. Skaria, and S. D. Nelson. Evidence for Citrus tatter leaf virus seed transmission in citrus. 2010. XVIII Conference of the International Organization of Citrus Virologists meeting, Campinas, Sao Paulo, Brazil, November 7-12.

13. Kunta, M., J. V. da Graça, M. Sétamou, and M. Skaria. 2010. "Inconclusive" quantitative PCR for the presence of HLB in Texas Orange jasmine plants. XVIII Conference of the International Organization of Citrus Virologists meeting, Campinas, Sao Paulo, Brazil, November 7-12.
14. Kunta, M., J. V. da Graça, M. Sétamou, and M. Skaria. 2011. A perspective on the activities of Texas HLB diagnostic laboratory. 2011 International Conference on HLB, Orlando, Florida, January 10-14.
15. J. D. Tanner, M. Kunta, J. V. da Graça, M. Skaria and S. D. Nelson. 2011. Evidence of a low rate of seed transmission of Citrus tatter leaf virus in citrus. American Phytopathological Society Annual Meeting, Honolulu, HI, August 6-10.
16. Kunta, M., W. Li, J. V. da Graça, and L. Levy. 2011. Search for *Candidatus Liberibacter* spp. in citrus and orange jasmine plants and Asian citrus psyllids in Texas by field surveys and multi-loci PCR assays. American Phytopathological Society Annual Meeting, Honolulu, HI, August 6-10.
17. Kunta, M., M. Palm, J. Rascoe, P.B. de Sa Snow, J. V. da Graça, B. Salas, A. Satpute, M. Setamou, and M. Skaria. 2011. First report of sweet orange scab in USA. American Phytopathological Society Annual Meeting, Honolulu, HI, August 6-10.
18. Kunta, M and Mani Skaria. 2006. Molecular characterization of *Phytophthora* in the Lower Rio Grande Valley (LRGV) citrus. 60th Annual Meeting of the Rio Grande Valley Horticultural Society, Weslaco, TX, 21 January.
19. Kunta, M., H. S. Del Rio, and E. S. Louzada. 2006. Isolation and molecular characterization of ascorbate peroxidase from citrus. 2006 American Society for Horticultural Sciences annual conference in New Orleans, LA July 27-30.
20. Kunta, M., M. Skaria, M. Setamou, and J. V. Da Graça. 2009. Update on ACP and HLB surveys and research in Texas, 8th Citrus genomics workshop, South Padre, TX, October 5-6.
21. Skaria, M., M. Setamou, M. Kunta, and J. V. da Graça. 2009. A pictorial representation of HLB in the east and the west and hope for an optimistic future for citrus in the USA. Citrus HLB and Potato ZC conference, McAllen, TX, November 16-18.
22. da Graça, J. V., M. Skaria, M. Setamou, and M. Kunta. 2009. Update on HLB and psyllid surveys in Texas. Citrus HLB and Potato ZC conference, McAllen, TX, November 16-18.
23. Tanner, J., M. Kunta, J.V. da Graça, M. Skaria, S. D. Nelson. 2009. Citrus tatter leaf virus seed transmission. TAMUS Pathways research Symposium, Laredo, TX, November 13-14. Poster won First Prize.
24. M. Skaria, A. Satpute, M. Kunta, J. V. da Graça, J. L. Perez, and N. A. Malik. Recent studies on sweet orange scab (SOS) in Texas. APS Annual Meeting, Providence, RI, August 4-8.
25. Kunta, M., M. Sétamou, M. Skaria, J. E. Rascoe, W. Li, M. K. Nakhla, and J. V. da Graça. First report of citrus huanglongbing in Texas. 2012. American Phytopathological Society Annual Meeting, Providence, RI, August 4-8.
26. Parra C. C., Kunta, M, and E. S. Louzada. 2012. Effect of HLB on the expression of calcium signal related genes. 12th International Citrus Congress, Valencia, Spain, November 18-23.
27. da Graça J. V., M. Kunta, M. Sétamou and M. Skaria. 2012. Citrus Huanglongbing (HLB) in Texas—Surveys, Detection and Risk Mitigation. 12th International Citrus Congress, Valencia, Spain, November 18-23.
28. Sétamou, M., da Graça J., Kunta, M. 2013. First Detection of Huanglongbing and Implementation of its Mitigation Efforts in Texas. 3rd Intl. Research Conference on Huanglongbing-IRCHLB III, Orlando, FL, February 4-8.
29. LeVesque, C., L. Kumagai, M. Keremane, H. Lin, M. Kunta, J. Morgan, D. G. Hall, J. V. da Graça, and M. Polek. 2013. Detection of *Liberibacter asiaticus* in a single infected Asian citrus psyllid adult or nymph: Impact of dilution with clean Asian citrus psyllids (*Diaphorina citri*) during extraction. 3rd Intl. Research Conference on Huanglongbing-IRCHLB III, Orlando, FL, February 4-8.
30. Kunta, M., Carolina de La Garza, John V. da Graça, Mamoudou Sétamou, and Eliezer S. Louzada. 2013. *Candidatus Liberibacter asiaticus* detection in the leaves, roots from infected trees and leaves of new shoots from the stumps of the infected sweet orange trees in Texas. 3rd Intl. Research Conference on Huanglongbing-IRCHLB III, Orlando, FL, February 4-8.

31. Parra, C. C., M. Kunta, John V. da Graça, and Eliezer S. Louzada. 2013. Transcriptome analysis of Huanglongbing-infected sweet orange leaves using RNA sequencing and quantitative PCR. 3rd Intl. Research Conference on Huanglongbing-IRCHLB III, Orlando, FL, February 4-8.
32. Louzada, E. S., C. C. Parra, J. V. da Graça, M. Sétamou, and M. Kunta. 2013. Transcriptome analysis of 'Valencia' sweet orange response to citrus huanglongbing (HLB) infection. American Phytopathological Society Annual Meeting, Austin, TX, August 10-14.
33. Kunta, M., C. de La Garza, J. V. da Graça, C. C. Parra, M. Sétamou, and E. S. Louzada. 2013. Estimation of *Candidatus Liberibacter asiaticus* populations in Texas citrus trees. American Phytopathological Society Annual Meeting, Austin, TX, August 10-14.
34. Kunta, M., J. V. da Graça, and N. Önelge. 2013. First report of Citrus viroid V infecting citrus plants in Texas. XIXth Conference of the IOCV, Mpumalanga, South Africa, July 28-August 2.
35. Kunta, M., M. Sétamou, E. Louzada, and J. da Graça. 2014. Citrus Huanglongbing incidence spread, and current situation in Texas. American Phytopathological Society Annual Meeting, August 9-13, Minneapolis, MN.
36. Kunta, M., W. Li, J. da Graça, L. Levy, C. deLa Garza, M. Gonzalez, S. Chavez, E. Louzada, M. Nakhla, and M. Sétamou. 2014. A multi-year search for *Candidatus Liberibacter* spp. in orange jasmine plants in Texas by field surveys and multi-loci PCR assays. American Phytopathological Society Annual Meeting, August 9-13, Minneapolis, MN.
37. Vazquez, O., C. Sandy, M. Kunta, E. Braswell, M. Keremane, R. Lee, and E. Louzada. 2014. Development of efficient and reliable *Candidatus Liberibacter asiaticus* detection methods in citrus. American Phytopathological Society Annual Meeting, August 9-13, Minneapolis, MN.
38. Alabi, O and M. Kunta. 2014. Evaluation of quantitative PCR for detection of *Candidatus Liberibacter asiaticus* in composite plant DNA samples. American Phytopathological Society Annual Meeting, August 9-13, Minneapolis, MN.
39. Thinakaran, J., E. Pierson, M. Kunta, and D. Henne. 2014. Over summering of '*Candidatus Liberibacter solanacearum*' in silverleaf nightshade, *Solanum elaeagnifolium*, in the Lower Rio Grande Valley of Texas. American Phytopathological Society Annual Meeting, August 9-13, Minneapolis, MN.
40. Salas, B, E. Braswell, R. Farris, M. Kunta. 2014. Citrus leprosis and Brevipalpus mites in the Lower Rio Grande Valley, TX. American Phytopathological Society Annual Meeting, August 9-13, Minneapolis, MN.
41. Salas, B., E. Braswell, J. da Graça, and M. Kunta. 2014. Studies on isolation of *Elsinoe australis* the causal agent of sweet orange scab. American Phytopathological Society Annual Meeting, August 9-13, Minneapolis, MN.
42. Alabi, O.J., M. Kunta, J. Dale, and M. Sétamou. 2015. Survey and detection of '*Candidatus Liberibacter asiaticus*' in a citrus nursery facility in South Texas. 4th IRCHLB Conference, February 9-13, Orlando, FL.
43. M. Kunta., J. V. da Graca, M. Ciomperlik, I. Gibbs, and M. James. 2015. Surveys to determine HLB presence in Asian citrus psyllids and citrus samples from Barbados. 4th IRCHLB Conference, February 9-13, Orlando, FL.
44. Kunta, M., M. Setamou, J.V. da Graca, O.J. Femi, and D. Bartels. 2015. Incidence, spread, and current situation of Huanglongbing in Texas. 4th IRCHLB Conference, February 9-13, Orlando, FL.
45. Li, W., M. Kunta, L. Kumagai, C. Blomquist, C.A. Webb, J. Rascoe, Zonghe Yana, L. Levy, and M. K. Nakhla. 2015. Ten - year screening and confirmatory PCR tests of citrus huanglongbing – performance, challenges, and improvements. 4th IRCHLB Conference, February 9-13, Orlando, FL.
46. Vazquez, O., S. Chavez, M. Kunta, E. Braswell, M. L. Keremane, R. F. Lee, and E. S. Louzada. 2015. Distribution of *Candidatus Liberibacter asiaticus* in roots of Sour orange rootstock grafted with Valencia Sweet orange in Texas. 4th IRCHLB Conference, February 9-13, Orlando, FL.
47. Kunta, M., Z. Vilorio, H. S. del Rio, and E. S. Louzada. 2015. Detection of Huanglongbing-associated bacteria using diverse DNA extraction methods and RCR primers for roots of 'Valencia' sweet orange on sour orange rootstock. 4th IRCHLB Conference, February 9-13, Orlando, FL.

48. Louzada, E. S., O. Vazquez, S. J. Schneider, and M. Kunta. 2015. Optimization of the detection of viable 'Candidatus Liberibacter asiaticus' bacterium in citrus tissue. American Phytopathological Society Annual Meeting, August 1-5, Pasadena, CA.
49. Vazquez, O., E. Louzada, G. Yanev, M. Devanaboina, and M. Kunta. 2015. Global distribution of 'Candidatus Liberibacter asiaticus' in roots of sour orange rootstock grafted with Valencia sweet orange and in leaves of Rio Red grapefruit. American Phytopathological Society Annual Meeting, August 1-5, Pasadena, CA.
50. da Graca, J. V., and M. Kunta. 2015. Detection of a *Ca. Liberibacter americanus* variant in Asian citrus psyllids, *Diaphorina citri*, in Texas. American Phytopathological Society Annual Meeting, August 1-5, Pasadena, CA.
51. Chaudhary, S., M. Setamou, O. J. Alabi, J. L. Jifon, M. Kunta, K. Crosby, J. V. da Graca, and V. Ancona. 2015. *Phytophthora nicotianae* and Huanglongbing cause different nutritional imbalances in grapefruit trees. American Phytopathological Society Annual Meeting, August 1-5, Pasadena, CA.
52. Salas, B., A. Jasso, A. Fuentes, E. Braswell, R. Farris, and M. Kunta. 2016. Citrus leprosis and *Brevipalpus* in the Lower Rio Grande Valley. XX Conference of IOCV, April 10-15, Chongqing, China.
53. Park, J-W., J. Brockington, O. Vazquez, E. Louzada, J. V. da Graca, and M. Kunta. 2016. Huanglongbing (HLB) diagnosis in citrus using fibrous root tissue. XX Conference of IOCV, April 10-15, Chongqing, China.
54. M. Kunta., E. Braswell, M. Gonzalez, E. Louzada, J. V. da Graca, and J-W. Park. 2016. Seasonal effects on *Candidatus Liberibacter asiaticus* titers in grapefruit trees in Texas. XX Conference of IOCV, April 10-15, Chongqing, China.
55. da Graca, J. V., M. Kunta, B. Salas, D. Bartels, J.-W. Park, G. Santillana, and V. Mavrodieva. 2016. Occurrence of a Citrus canker strain of limited host specificity in Texas. American Phytopathological Society Annual Meeting, July 30-August 3, Tampa, FL.
56. Vedasharan, P., M. Kunta, E. S. Louzada. 2016. Viability of *Candidatus Liberibacter asiaticus* in grapefruit leaves at different stages of maturity and Huanglongbing disease symptom development. American Phytopathological Society Annual Meeting, July 30-August 3, Tampa, FL.
57. Setamou, M., O. J. Alabi, M. Kunta, J. L. Jifon, and J. V. da Graca. 2016. Enhanced acquisition rates of 'Ca. Liberibacter asiaticus' by the Asian Citrus Psyllid (Hemiptera: Liviidae) in the presence of vegetative flush growth in citrus. American Phytopathological Society Annual Meeting, July 30-August 3, Tampa, FL.
58. McCollum, G., C. LeVesque, M. Keremane, and M. Kunta. 2016. Variation within and among laboratories in detection of *Candidatus Liberibacter asiaticus* using qPCR. American Phytopathological Society Annual Meeting, July 30-August 3, Tampa, FL.
59. McCollum, E. Braswell, M. Keremane, M. Kunta, and C. LeVesque. 2016. Early detection of CLas infection in citrus. International Citrus Congress, September 18-23, Foz Do Iguacu, Brazil.
60. Louzada, E. S., O. Vazquez, G. Yanev, D. Madhavi, and M. Kunta. 2016. Distribution of *Candidatus L. asiaticus* above and below ground in Texas citrus. International Citrus Congress, September 18-23, Foz Do Iguacu, Brazil.
61. Alabi, O. J., M. Setamou, M. Kunta, J. L. Jifon, and J. V. da Graca. 2016. Enhanced acquisition rates of CLas by the Asian Citrus Psyllid in the presence of vegetative flush growth in citrus. International Citrus Congress, September 18-23, Foz Do Iguacu, Brazil.
62. Louzada, E. S., A. Reyes, V. Zenaida, H. S. del Rio, and M. Kunta. 2016. Overexpression of a cyclic nucleotide gated ion channel in citrus induces broad-spectrum disease resistance. International Citrus Congress, September 18-23, Foz Do Iguacu, Brazil.
63. da Graca, J. V., M. Kunta, J.-W. Park, G. Santillana, V. Mavrodieva, D. W. Bartels, B. Salas, M. N. Duffel, and J. Dale. 2016. Occurrence of a citrus canker strain of limited host specificity in Texas. International Citrus Congress, September 18-23, Foz Do Iguacu, Brazil.
64. Park, J-W., J. Brockington, W. E. Braswell, B. C. Kostyk, P. A. Stansly, E. S. Louzada, J. V. da Graca, and M. Kunta. 2017. Long-term Study of Huanglongbing Diagnosis using Fibrous Root Tissue. 5th IRCHLB Conference, March 15-17, Orlando, FL.

Curriculum Vita

65. da Graca, J. V., M. Kunta, M. Setamou, V. Ancona, E. S. Louzada, O. J. Alabi, D. W. Bartels, M. N. Duffel, and J. Dale. 2017. Huanglongbing in Texas 2012-2017—An Update (Oral). 5th IRCHLB Conference, March 15-17, Orlando, FL.
66. Louzada, E. S., O. Vazquez, S. Chavez, J-W. Park, P. Vedasharan, and M. Kunta. 2017. Optimization of PCR for reliable detection of viable *Candidatus Liberibacter asiaticus* (CLas) in citrus and estimation of viable CLas in symptomatic grapefruit leaves of different developmental stages during summer and fall. 5th IRCHLB Conference, March 15-17, Orlando, FL.
67. Keremane, M. L., M. L. Roose, A. Howe, S. E. Halbert, T. Smith, O. J. Alabi, M. Kunta, M. Setamou, R. Kubota, D. Jenkins, R. F. Lee, and C. Ramadugu. 2017. Development of tools to conduct field-testing of HLB-associated *Liberibacter*s for disease mitigation. 5th IRCHLB Conference, March 15-17, Orlando, FL.
68. McCollum, G., M. Keremane, M. Kunta, C. LeVesque, R. Niedz, Y. Duan, and C. Armstrong. 2017. Enhanced “early” detection of CLas infections in citrus. 5th IRCHLB Conference, March 15-17, Orlando, FL.
69. Kunta, M., J. W. Park, M. Gonzalez, P. Vedasharan, J. V. da Graça. 2017. Development of a sensitive real-time PCR detection method for Citrus tatter leaf virus. American Phytopathological Society Annual Meeting, August 5 -August 9, San Antonio, TX.
70. Park, J. -W., W. E. Braswell, P. Stansly, J. Rascoe, E. Louzada, G. McCollum, J. V. da Graça, M. Kunta. A new diagnostic real-time PCR method for huanglongbing detection in citrus root tissue. American Phytopathological Society Annual Meeting, August 5 -August 9, San Antonio, TX.
71. M. Kunta., P. Vedasharan, J. -W. Park, E. Louzada. 2017. First Report of *Armillaria* spp. infecting citrus trees on sour orange rootstock in the Lower Rio Grande Valley, Texas. American Phytopathological Society Annual Meeting, August 5 -August 9, San Antonio, TX.
72. Kunta, M., L. Guzman, A. C. Garcia. H. S. del Rio, J. C. Melgar & E. S. Louzada. 2018. Transformation of citrus plants with cyclic nucleotide-gated channel (CNGC) gene to develop broad-spectrum disease resistance. International Symposium on Citrus Biotechnology, April 2008, Canelones, Uruguay.
73. Park, J.-W., J. Brockington, E. Louzada, B. Kostyk, P. Stansly, G. McCollum, J. V. da Graca, W. E. Braswell, & M. Kunta. Diagnosis of huanglongbing-associated *Candidatus Liberibacter* species in citrus roots by real-time PCR using primers targeting 16s rDNA and nrdB genes. International Congress of Plant Pathology, July/Aug. 2018, Boston MA.
74. Alabi, O. J., M. Setamou, M. Kunta, J. Dale, & J. V. da Graca. Prevalence of *Candidatus Liberibacter asiaticus* in citrus and Asian citrus psyllid in Texas over a 10-year period (2007-2016). International Congress of Plant Pathology, July/Aug. 2018, Boston MA.
75. Avila, C., J.-W. Park & M. Kunta. Evaluation of real-time PCR primer sets for the diagnosis of huanglongbing (HLB) in citrus root tissue. American Society for Biochemistry & Molecular Biology Conference, April 2018, San Diego CA.
76. Park, J.-W., M. Kunta, E. Louzada, M. Gonzalez, and J.V. da Graca. Investigations into an oak leaf-inducing agent detected in citrus in Texas. Joint IOCV-XXI & IRCHLB VI, March 10-15, 2019, Riverside, CA.
77. da Graca, J., J-W PARK, Glynnis Cook, Eliezer S. Louzada, J.E. Rascoe, and M. Kunta. A new real-time PCR method for the detection of *Candidatus Liberibacter africanus* (CLaf) in citrus root tissue. Joint IOCV-XXI & IRCHLB VI, March 10-15, 2019, Riverside, CA.
78. Alabi, J., M. Setamou, M. Kunta, J. Dale, and J.V. da Graca. A decade of ‘*Candidatus Liberibacter asiaticus*’ and its Asian citrus psyllid vector in Texas: an epidemiological insight. Joint IOCV-XXI & IRCHLB VI, March 10-15, 2019, Riverside, CA.
79. Ramadugu, C., J. Snyder, S. Dowling, S. Halbert, E. Rohrig, M. Kunta, O. Alabi, M. Setamou, R. Kubota, D. Jenkins, and M. Roose. Evaluating lighting preferences to enhance trapping efficacy of Asian Citrus Psyllid. Joint IOCV-XXI & IRCHLB VI, March 10-15, 2019, Riverside, CA.

80. da Graca, J.V., M. Setamou, M. Kunta, and M. Keremane. Case study of Huanglongbing development of a single grapefruit tree in Texas, a decade of incubation. Joint IOCV-XXI & IRCHLB VI, March 10-15, 2019, Riverside, CA.
81. Park, J.W., E.S. Louzada, W. E. Braswell, P.A. Stansly, T. G. McCollum, J.V. da Graca, and M. Kunta. Long-term evaluation of *Candidatus Liberibacter asiaticus* detection in citrus root tissue as a tool for improved CLas detection. Joint IOCV-XXI & IRCHLB VI, March 10-15, 2019, Riverside, CA.
82. Park, J.-W., M. Kunta, M. Gonzalez, E. S. Louzada and J.V. da Graça. Identification of a citrus Coguvirus in Texas associated with oak leaf patterns. American Phytopathological Society Annual Meeting, August 10 -August 14, 2020. Virtual meeting.
83. Park, J.-W., W. E. Braswell, J.V. da Graça, and M. Kunta. Detection of ‘*Candidatus Liberibacter asiaticus*’ by recombination polymerase amplification (RPA) assay. American Phytopathological Society Annual Meeting, August 10 -August 14, 2020. Virtual meeting.
84. Invited talk- Transcriptome and microbiome studies to manage citrus HLB in Texas. 2022. International Citrus Congress, Mersin, Turkey.
85. Galan, R. L., R. Uckoo, T. Ferial, M. Setamou & M. Kunta. Optimization of net selection for excluding Asian citrus psyllid from Rio Red grapefruit transplants grown in South Texas. 2022. Amer. Soc. Hort. Sci. Annual Meeting, Chicago, IL.
86. Park, J. W., K. Timmons, W. E. Braswell & M. Kunta. Long-term survey of rhizosphere bacterial population of citrus trees under Huanglongbing (HLB) disease pressure in the field. 2022. Amer. Phyto. Path. Soc. Annual Meeting, Pittsburgh, PA.
87. Park, J. W., T. Danda, W. E. Braswell & M. Kunta. Detection of ‘*Candidatus Liberibacter asiaticus*’ causing citrus Huanglongbing disease by isothermal amplification assays. 2022. Amer. Phyto. Path. Soc. Annual Meeting, Pittsburgh, PA.
88. Novel genomes of three Australian Limes: Towards the identification of resistance source against Huanglongbing (HLB) disease. 2022. 2nd Congress of the International Society for Citrus Huanglongbing and Phloem-Colonizing Bacterial Pathosystems (IS-CHPP), Clearwater Beach, FL
89. Finding Genetic Solutions for a Serious Citrus Disease – Huanglongbing, 2023 Plant & Animal Genome Conference (January 13-18, 2023) San Diego, CA
90. Rapid and portable LAMP assay for citrus canker detection, Amer. Phyto. Path. Soc. Annual Meeting (August 12-16, 2023), Denver, CO
91. Park, J. W., W. E. Braswell & M. Kunta. Co-occurrence analysis of citrus root bacterial microbiota under huanglongbing disease pressure in the field, Amer. Phyto. Path. Soc. Annual Meeting (August 12-16, 2023), Denver, CO
92. Kunta, M & J. Chen. Microbiome comparison between leaf and root samples within the same citrus tree infected by “*Candidatus Liberibacter asiaticus*” in Texas, USA Amer. Phyto. Path. Soc. Annual Meeting (August 12-16, 2023), Denver, CO.
93. New therapies for controlling plant bacterial diseases, American Society for Horticultural Sciences (ASHS) Meeting (July 31- August 4, 2023), Orlando, FL.
94. Sidireddi, S.H., J. W. Park, M. Sétamou & M. Kunta. Development of a lateral flow assay system for the detection of Asiatic citrus canker type A (*Xanthomonas citri* subsp. *citri*) and its variant Aw in the field. International Citrus Congress (November 10-15, 2024), Jeju Island, South Korea.
95. Park, J. W., J. L. Hernandez & M. Kunta. Exploring soil bacteria associated with citrus plants to improve tree health with HLB. International Citrus Congress (November 10-15, 2024), Jeju Island, South Korea.
96. Park, J. W., W. E. Braswell, J. L. Hernandez & M. Kunta. Bacterial association network analysis in the citrus root system with different HLB status. International Citrus Congress (November 10-15, 2024), Jeju Island, South Korea.
97. Singh, S., J. W. Park, M. Setamou & M. Kunta. Studies on greasy spot disease in citrus orchards of the Rio Grande Valley, Texas, USA. International Citrus Congress (November 10-15, 2024), Jeju Island, South Korea.

National

1. da Graça J. V., M. Sétamou, M. Skaria and M. Kunta. Surveys for Citrus Huanglongbing in Texas led to Early Detection. The Caribbean Division of American Phytopathological Society (APS-CD) 52nd annual meeting, South Padre Island, TX, April 16-17.
2. Kunta, M., J. V. da Graça, and M. Sétamou. 2012. Within plant distribution of *Candidatus Liberibacter asiaticus* in HLB-infected citrus trees in Texas. 2012. 3rd Annual Citrus Health Research Forum, Ft. Collins, CO, August 27-30.
3. Sétamou, M., J. V. da Graça, and M. Kunta. 2013. Citrus greening in Texas: Steps to mitigate this deadly disease. Entomological Society of America, Southeastern Branch Meeting, Baton Rouge, LA, March 3-6.
4. Ramadugu, C., M. Roose, M. L. Keremane, D. Jenkins, R. Kubota, A. Howe, J. Snyder, S. Sharma, S. Halbert, O. Alabi, M. Kunta, and M. Setamou. 2018. Characterization of *Liberibacter* populations and development of field detection system for citrus huanglongbing. National Institute of Food and Agriculture annual meeting, January 25-26.

Regional

1. Subtropical Agriculture and Environments Annual Meetings (**31presentations**)
2. da Graça, J. V., M. Kunta, E. Braswell, W. Li, and M. Nakhla. 2013. First detection of *Ca. Liberibacter americanus* (Lam) in Asian citrus psyllid in Texas. Texas Citrus Showcase, Weslaco, TX, April 4.
3. Parra, C. C., M. Kunta, and E. S. Louzada. 2012. Effect of Huanglongbing (HLB) infection in gene expression of sweet orange (*Citrus sinensis*). Project Directors Conference at the University of Texas-Pan American, Edinburg, TX, May 30.
4. Garcia, A., E. S. Louzada, and M. Kunta. 2012. Molecular characterization of calcium signal modifier gene (CSM-1) transgenic sweet orange cultivars and evaluation for tolerance to *P. nicotianae* and Citrus canker. USDA-HSI 2012 Project Directors Conference at the University of Texas-Pan American, Edinburg, TX, May 30.
5. Singh, K., T. Rickman, J.-W. Park, E. Burchard, C. Dardick, M. Kunta, M. Staton, M. Roose, C. Ramadugu. 2021. Draft de novo genome assemblies of three Australian limes. California Citrus Conference, Visalia, CA, October 6.
6. Galan, R. L., P. R. Gudipelly, J. Gadiwan, E. M. Lopez, R. Uckoo, T. Fera, M. Sétamou and M. Kunta. 2021. Tracking HLB disease in South Texas: before and after February 2021 freeze. California Citrus Conference, Visalia, CA, October 6.
7. Park, J.-W., K. Singh, T. Rickman, E. Burchard, C. Dardick, M. Staton, M. Roose, C. Ramadugu, and M. Kunta. 2021. Transcriptome analysis of F1 hybrids derived from a cross between a mandarin and an Australian lime. California Citrus Conference, Visalia, CA, October 6.

RESEARCH AND SCHOLARLY ACTIVITIES

Funded Grants (Total = \$32,259,143. Kunta - \$4,090,699)

1. PI, \$194,921, Development of an environmentally safe, effective biological control method of citrus canker and citrus black spot diseases, USDA (United States Department of Agriculture) PPDMDPP PPA Sec. 7721, 2024.
2. PI at TAMUK, \$3,281,160 (Kunta - \$160,000), Evaluation of promising, HLB resistant/tolerant citrus scion hybrids generated by breeding, USDA NIFA ECDRE, 2023.
3. Co-PI, \$140,000. The Texas Citrus Producers Board award for the “Citrus Center Core Research Support” project (2024-2025).
4. Co PI, \$120,000 (Kunta & Park) - \$30,000, Sustainable Support for CORE Research Programs at TAMUK Citrus Center (2022-2023).
5. PI, \$205,213, Microbial control of *Candidatus Liberibacter asiaticus*, USDA APHIS (Animal Plant Health Inspection Services), 2022.

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6. PI at TAMUK, \$8,589,573 (Kunta-\$503,020), Development, evaluation, and delivery of citrus HLB management approaches by targeting its nature as a pathogen-triggered immune disease, USDA NIFA CAP, 2022.
7. PI, \$89,500. Investigation into the active inoculum sources and other factors contributing to the canker infections of new growth in citrus trees. Texas Department of Agriculture, 2022.
8. PI at TAMUK, \$4,670,000 (Kunta-\$333,778). Evaluation and validation of novel, huanglongbing resistant/tolerant citrus hybrid scion cultivars, USDA NIFA ECDRE CAP, 2021.
9. PI at TAMUK, \$4,759,531(Kunta-\$352,338). Providing practical solutions for HLB treatment and prevention, USDA NIFA ECDRE CAP, 2021.
10. PI, \$200,521, Microbial control of *Candidatus Liberibacter asiaticus*, USDA PPDMDPP PPA Sec. 7721, 2020.
11. PI, \$22,500, Validating HLB detection in ACP using RNR assay. USDA APHIS cooperative agreement, 2020.
12. PI, \$57,467, Studies on the effectiveness of peraclean®5, electrolyzed water, and electro-biocide on the viability of *Elsinoë australis*, the causal agent of sweet orange scab (SOS) disease. USDA APHIS cooperative agreement, 2020.
13. Co-PI, \$433,860 (Kunta-No budget), Enhancing productivity of HLB-endemic orchards via improved soil health, HLB-MAC, 2020.
14. Co-PI, \$120,000, (Kunta-\$30,000), TCPB, Sustainable support for core research programs at TAMUK Citrus Center (2020-21), 2020.
15. PI at TAMUK, \$3,941,090 (Kunta- \$300,000), USDA NIFA CDRE, Development of huanglongbing resistant/tolerant citrus through genomic approaches, 2020.
16. PI at TAMUK, \$349,996 (Kunta-\$130,446), HLB MAC, Field deployable leaf sensor for rapid, asymptomatic screening of HLB, 2019.
17. Co-PI, \$129,008 (Kunta-\$30,000), TCPB, Sustainable support for core research programs at TAMUK Citrus Center (2019-20), 2019.
18. Co-PI, \$536,840, USDA APHIS, Citrus commodity pest survey, 2019.
19. PI, \$90,953, USDA APHIS, Development of improved methods to detect *Ca. Liberibacter asiaticus* from citrus root tissues, 2018.
20. Co-PI, \$169,107, USDA APHIS/TCPDMC, Amplified multi-pest citrus commodity survey, 2018.
21. co-PI, \$155,911 (Kunta-\$13,200), USDA APHIS, Strengthening ACP control through evaluation of biological control through evaluation of resident predators using biological control & mol. Techniques to ID promising candidates for augmentative releases, 2018.
22. Co-PI, \$536,840, USDA APHIS, Citrus commodity pest survey, 2018.
23. Co-PI, \$148,500 (Kunta-\$74,250), Citrus Research Board (CRB), Improved early detection of CLas infections in citrus, 2017.
24. Co-PI, \$113,000 (Kunta - \$56,500), Citrus Research Board (CRB), Improving Early Detection of HLB via ACP Nymph/Citrus Flush Sampling, 2016.
25. PI, \$6,000, Texas Citrus Producers Board (TCPB), Screening citrus rootstock and scion, and transgenic plants for Huanglongbing tolerance/resistance, 2016.
26. Co-PI, \$230,892 (Kunta-\$28,000), CRB, Testing of early HLB detection protocols using TX samples along with several labs in California, 2016.
27. Co-PI, \$34,770 (No funds for Kunta), USDA APHIS, Determination of the strain identity of three recent TX citrus canker isolates, 2016.
28. PI, \$744,675, USDA APHIS PPQ (Plant Protection and Quarantine) MAC, Validation of early detection method and development of high throughput diagnosis of HLB using root samples, 2015.
29. Co-PI, \$39,848, USDA APHIS PPQ CPHST Cooperative agreement, Chemical control of sweet orange scab (SOS) caused by *Elsinoe australis* on citrus fruits, 2015.
30. Co-PI, \$1,683,429 (Kunta- \$78,923), USDA NIFA, Characterization of *Liberibacter* populations and development of field detection system for citrus huanglongbing, 2015.

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31. Co-PI, \$254,618 (Kunta- \$23,039), CRB, Testing of early HLB detection protocols using Texas samples, 2015.
32. Cooperator, \$95,510, CRB, Development of consumer-friendly transgenic citrus plants with potential broad-spectrum resistance to HLB, Citrus Canker, *Phytophthora*, and other exotic diseases, 2013.
33. Co-PI, \$62,000, USDA APHIS PPQ, Evaluating citrus root tissue as a target for early and efficient HLB detection, 2013.
34. Co-PI, \$5,000, TCPB, Evaluation of conventional and quantitative PCR for detection of HLB in composite plant DNA samples, 2013.
35. Co-PI, \$9,500, TAMUK, Visualization of cytosolic Ca²⁺ distribution in plant cells of transgenic and non-transgenic plants, 2012.
36. Co-PI, \$32,500 (Kunta-\$15,000), USDA APHIS, Studies on sweet orange scab (SOS) caused by *Elsinoe australis*, 2012.
37. Co-PI, \$5,000, (TCPB), Avoiding false positives in HLB PCR tests and studies on infection-induced protein changes, 2009.

Proposals Submitted but Pending Decision (Total = \$12,167,350, Kunta - \$1,472,631)

1. Co PI, \$531,261, TDA USDA AMS SCMP, Analyzing ecological effects of oxytetracycline (OTC) treatment on structure and function of citrus microbial communities to provide insights into development of eco-friendly HLB disease management.
2. Co-PI, \$1,200,000 (Kunta - \$100,000), CISE-MSI: RPEP: CPS: Center for Innovative Agriculture: From phenotyping to autonomous cultivation and harvesting. TAMU Corpus Christi is the lead institution.
3. Co-PI, \$10,000,000 (Kunta- \$599,977), USDA NIFA ECDRE CAP, Speed up the release of non-GMO HLB resistant/tolerant citrus varieties via multi-tiered decision-making research.
4. PI, \$241,393, USDA PPDMDPP PPA Sec. 7721, Microbial control of *Candidatus Liberibacter asiaticus*: Follow up.
5. Co-PI, \$194,696, USDA PPDMDPP PPA Sec. 7721, Exploring diagnostic techniques for early pre-symptomatic detection of a U.S. regulated citrus fungal pathogen '*Elsinoe australis*' in Texas citrus groves.

Proposals Submitted but Not Funded

1. PI, \$35,766, CRDF, pre-proposal was invited for full proposal submission. Identifying key proteins mediating the interactions of Ca. *Liberibacter* with their host plants as well as vector insect ACP in the U.S., 2009.
2. Co-PI, \$496,755, USDA-AFRI, Comparative transcriptomic, proteomic, and metabolomic analysis of compatible and incompatible plant-pathogen interaction, 2011.
3. Co-PI, \$120,000, CRDF, Identification of proteins that signal the onset of flushing to develop sensors for efficient management of Asian Citrus Psyllids in citrus orchards, 2012.
4. Co-PI, \$120,000, CRDF, Potential for early HLB detection using transcriptome analysis, 2012.
5. Co-PI, \$299,354, USDA-NIFA-Hispanic-Serving Institutions (HSI) Education Grants Program, Inspiring students in STEM (Science, Technology, Engineering, and Mathematics) careers through university science fair, 2013.
6. PI, \$362,688, USDA- Agriculture and Food Research Initiative (AFRI), Field screening of transgenic citrus plants for HLB, Citrus canker, and *Phytophthora* diseases and understanding the disease resistance mechanisms, 2013.
7. PI, \$39,562, Texas Citrus Producers Board, Efficacy of using root sample for an efficient and early detection of HLB and verification of possible HLB root transmission, 2013.
8. Co-PI, \$10,216, Texas Citrus Producers Board, Using biochemicals for improving Citrus production under water deficit conditions, 2013.
9. Co-PI, \$53,138, USDA Specialty Crop Farm Bill, A study to solve the "inconclusive" PCR test results in *Diaphorina citri* for the presence of *Candidatus Liberibacter asiaticus*, a causal agent of Huanglongbing/Citrus greening, 2013.

Curriculum Vita

10. Cooperator, \$406,454, Citrus Research Board, Development of consumer – friendly transgenic citrus plants with potential broad-spectrum resistance to HLB, Citrus Canker, Phytophthora, and other exotic diseases, 2013.
11. Co-PI, \$362,351, HLB-MAC, Evaluation of the effect of Chitosan on the establishment of citrus plant in nursery and field, in the prevention of fruit drop in mature trees, and as an antimicrobial agent, 2014.
12. Co-PI, \$10 M, USDA-NIFA, A systems approach to HLB mitigation through production solutions, producer education, and consumer outreach, 2014.
13. PI, \$250,000, CRB, Enhancing natural antibiotic production in soils and citrus roots to mitigate the effects of HLB, 2015.
14. Co-PI, \$88,964, CRB, Population Dynamic of *Liberibacter asiaticus* (Las) in infected citrus under field & controlled conditions, 2015.
15. Co-PI, \$452,200, USDA Specialty Crop Research Program, Direct Electrochemical Oxidative Stress for Treatment of HLB, 2015.
16. Co-PI, \$4.6M, USDA NIFA, Development of Consumer-Friendly, HLB-Resistant Citrus Utilizing Only Plant-derived or Citrus-derived Genetic Constructs, 2015.
17. Co-PI, \$467,849, CDFR, Field evaluation of Huanglongbing early detection methods, 2015.
18. PI, \$6,000, TCPB, Screening citrus rootstock and scion, and transgenic plants for Huanglongbing tolerance/resistance, 2015.
19. Co PI, \$27,000, TCPB, Development of Phytophthora-resistant sour orange and sour orange-like rootstocks for Texas growers, 2015.
20. Cooperator, \$3,861,180, USDA NIFA, Imparting huanglongbing resistance to citrus from Australian citrus relatives through breeding and therapeutic treatments, 2016.
21. PI, \$171,295, USDA APHIS PPQ, Establishment of *Candidatus Liberibacter asiaticus* early detection by comparison of four different real time PCR systems, 2016.
22. Cooperator, \$274,949, USDA NIFA HSI, Bridging students from a 2-year college to a 4-year University and retention through internships, 2016.
23. Co-PI, \$17,545, TCPB, Production of *Phytophthora*-resistant sour orange rootstock plants for Texas growers, 2016.
24. PI, \$49,873, CRB, Enhancing natural antibiotic production in soils and citrus roots to mitigate the effects of HLB, 2016.
25. PI, \$15,000, Survey to determine the prophage types in *Candidatus Liberibacter asiaticus* strains from Asian citrus psyllids and citrus trees in Texas, 2016.
26. Co-PI, \$1,500,000, USDA NIFA SREP, Detection of Huanglongbing in pre-symptomatic trees by testing roots and monitoring *Liberibacter* acquisition in psyllids, 2017.
27. PI, \$150,000, CRB, Monitoring of live *Candidatus Liberibacter asiaticus* (CLAs) populations in relation to psyllid bacterial acquisition potential: Consequences for effective vector management, 2017.
28. Co-PI, \$4,995,997, USDA NIFA CDRE, Systems biology to elucidate the CLAs-citrus-psyllid interactions needed to culture, inhibit, and detect CLAs for Successful HLB Management, 2017.
29. PI, \$15,000, TAMUK University Research Award, Production of consumer-friendly transgenic citrus plants with enhanced tolerance to the pathogens, 2017.
30. Co-PI, \$500,000, USDA APHIS PPQ MAC, A novel therapy for CLAs suppression and HLB mitigation via exploitation of select citrus phloem sap amino acids systems, 2017.
31. PI, \$99,645, USDA NIFA WAMS, Empowering women and minorities in agriculture and STEM disciplines by providing opportunities for research and leadership skills development, 2018.
32. PI, \$365,430, USDA HLBMAC, Microbial control of *Candidatus Liberibacter asiaticus*, 2018.
33. PI, \$206,066, TDA specialty block grant program, Screening to select citrus rootstocks that confer tolerance to citrus, 2018.
34. Co-PI, \$5,000, USDA APHIS, HLB MAC travel funds request: Transgenic-HLB interstate movement, 2018.
35. Co-PI, \$85,000, Collapse of citrus on trifoliolate and hybrid rootstocks in California and on sour orange rootstock in Texas – Citrus Research Board (CRB), 2019.

36. Co-PI, \$400,000, Systematic study to evaluate reliable sink tissue and seasonality for consistent detection of ‘*Candidatus Liberibacter asiaticus*’ (CLAs) by qPCR – HLB MAC, 2019.
37. Co-PI, \$1,028,000, Providing Research Experiential Learning Opportunities in Animal and Biological Sciences (PREPLABS), 2019.
38. Co-PI, \$34,000, Characterization of citrus heat tolerant genotypes using tissue culture, high throughput phenotyping and throughput phenotyping genotyping, VFIC TAMU, 2021.
39. PI, \$110,328, Development of a simple, rapid, sensitive, and cost-effective tool for on-site field screening of citrus canker disease, TDA, 2022.
40. Co PI, \$2,100,000, Legume mixture intercropping in citrus orchard: An approach to increase production efficiency, improve soil health, and overall agricultural sustainability, 2023.
41. Co PI, Kunta- \$616,631, USDA, CRISPR-enabled microbes as a novel precision biocontrol method for HLB, 2023.
42. Co PI, \$627,882, Characterizing genotypic and phenotypic differences between strains of *Candidatus Liberibacter asiaticus* and their impacts on vector competency, 2023.
43. Co PI, \$740,816, USDA AFRI, Genetic and phenotypic characterization of strains of *Candidatus Liberibacter asiaticus*, the causal agent of Citrus Greening in the US, 2023.
44. Co PI, \$846,540, USDA AFRI, Soil amendments for improved soil microbiome and health and sustainable citrus production in Texas, 2023.
45. Co-PI, (Kunta- \$1,249,507), USDA NIFA ECDRE CAP Design and delivery of effective, safe, and affordable citrus-derived products for HLB treatment and protection, 2024.
46. Co-PI, (Kunta- \$148,970), USDA NIFA ECDRE CAP, Unraveling nuclear and organelle genome crosstalk: A gateway to enhancing disease resistance in citrus species, 2024.

PROFESSIONAL GROWTH AND ACTIVITIES

Reviewer & Editorial activities

1. Reviewer for over 31 scientific journals
2. Managing Editor – Subtropical Agriculture and Environments
3. Editor – aBIOTECH (Springer)
4. Senior Editor, Journal of Plant Disease Sciences
5. Guest editor for special issue Disease Control Strategies in Citrus Plants in Plants journal (MDPI)

Elected Professional Society Positions

1. President, 2018-19, Subtropical Agriculture and Environments Society
2. Treasurer, 2020-Present, Subtropical Agriculture and Environments Society

Invited Talks/Scientific committee assignment

1. Invited talk- Transcriptome and microbiome studies to manage citrus HLB in Texas. 2022. International Citrus Congress, Mersin, Turkey.
2. Invited talk - Exotic, emerging, and prevalent citrus diseases of economic importance in South Texas at UT RGV. Seminar series for scientists in the field of agriculture through a USDA funded program: Experiential Learning Program at Two Hispanic Serving Institutions on Water for Agriculture, Food Safety and Childhood Obesity & Prevention, 2019.
3. Invited talk - The role of Disease Diagnostic Laboratory in safeguarding Texas citrus industry, ICAR Winter School, University of Agricultural Sciences, Dharwad, India, Nov 2018).
4. Invited talk - Early detection of citrus Huanglongbing in Texas and potential expanded disease detection & management strategies in collaboration with the ICAR-National Research Center, 14th International *Trichoderma* and *Gliocladium* Workshop, Nagpur, India, November 27-30, 2016. Received an award for the best lecture.
5. Invited talk - Sweet Orange Scab and Citrus Greening, TAMU, College Station, May 3, 2012.
6. Selected faculty member to participate in the faculty fellowship summer institute in Israel program along with 14 other faculty members from different universities in the USA, May 28-June 8, 2016.
7. Member in Sweet Orange Scab Diagnostic and Research Technical Working Group

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8. Member of the HLB Early Detection Working Group/EDT Task Force
9. Member of the Citrus Black Spot Technical Working Group

Membership in Professional Societies

1. Member of the American Phytopathological Society (APS)
2. Member of the Plant Pathogen and Disease Detection Committee, APS
3. Member of the International Organization of Citrus Virologists (IOCV)

Professional Training

1. Citrus leprosis, sweet orange scab, and citrus black spot workshop, March 12-15, 2012, USDA-APHIS-CPHST, Beltsville, MD
2. Bioinformatics Workshop, March 28-30, 2011, USDA-APHIS-CPHST, Beltsville, MD
3. HLB qPCR diagnostics workshop, 2007 and 2010. Received National Plant Protection Laboratory Accreditation Program (NPPLAP) certified diagnostician status to perform HLB molecular diagnostic tests
4. 2017 PlantSEED Metabolic Modeling Workshop at UFL, Gainesville, FL
5. Distance Education Certification - Summer 2023 Professional service activities

SERVICE ACTIVITIES

1. Member of Institutional Biosafety Committee (IBC), 2019-Present
2. Member of College AGNR Recruitment and Retention Taskforce Committee AY22
3. Judge for 10th and 13th Javelina Annual Research Symposiums
4. Editor – Citrus Center Highlights magazine
5. Student training and recruitment
6. Member, Horticulture faculty search committee
7. Chair, PLSS Graduate student Admission Committee

HONORS AND AWARDS

1. Faculty research awards for 2017 and 2020, TAMUK
2. Employee of the Year 2008, TAMUK, 2009
3. Young Citrus Phytopathologist travel award, 18th International Organization of Citrus Virologists, São Paulo, Brazil, 2010
4. Jimmie and Barbara Steidinger graduate scholarship, TAMUK, 2009
5. Pathways to Doctorate Fellowship, TAMU, 2004
6. Red Grapefruit License Plate Scholarship, TAMUK, 2002-2003
7. Outstanding PLSS Graduate Student Award, TAMUK, 2002-2003

GRADUATE STUDENT RESEARCH

Graduate Student Advisement

Current M.S. students

I. Chair/Co-Chair of Thesis Committee

1. Julianna Leal (**Chair**)

Thesis title: TBD

2. Ajith Babburu (**Chair**)

Thesis title: TBD

3. Priyanka Kesoju (**Chair**)

Thesis title: Examination of efficacy of oxytetracycline (OTC) trunk injection for Huanglongbing (HLB) management in grapefruit trees in Texas

4. Kimberly Timmons (**Co-Chair**)

Thesis title: Investigation into the active inoculum sources contributing to the canker infections of new growth in citrus trees of the Rio Grande Valley

II. Committee Member

Current M.S. students

1. Ruth Galan

Thesis title: TBD

Graduated M.S. students (34)

1. Justin D. Tanner (2010)[¶] - Outstanding graduate student awardee (2009-2010)
Thesis title: Seed transmission of Citrus tatter leaf virus.
2. Cynthia C. Parra (2012)[¶] - Outstanding graduate student awardee (2011-2012)
Thesis title: Effect of Huanglongbing infection on gene expression in sweet orange.
3. Aditi Satpute (2012)[¶] – Outstanding graduate student awardee (2010-2011)
Thesis title: Biological and biochemical characterization of a new pathogen of citrus, *Elsinoe australis*, causal agent of sweet orange scab in Texas.
4. Amanda Garcia (2012)
Thesis title: Over expression of calcium signal modifier gene (CSM-1) in sweet orange cultivars and molecular characterization of transgenic plants.
5. Yadira B. Zapata (2012)[¶]
Thesis title: Determining the pathogenicity of *Elsinoe australis* on different citrus cultivars and efficacy of organic packinghouse treatments on the viability of *E. australis*.
6. Carolina da La Garza (2013)[¶]
Thesis title: Testing for *Candidatus Liberibacter asiaticus* in leaf and root tissue of citrus and orange jasmine.
7. Cecilia Lott (2014) – Outstanding graduate student awardee (2012-2013)
Thesis title: Genetic transformation of Micro-Tom tomato with a calcium signal modifying gene and analysis of transgenic plants challenged with *Ca. L. solanacearum*.
8. Omar Vazquez (2015) * **(Co-Chair)**
Thesis title: Studies on the quantitative distribution of *Candidatus Liberibacter asiaticus* in the roots and canopy of Huanglongbing-infected citrus trees.
9. Pallavi Vedasharan (2016) * **(Co-Chair)**
Thesis title: Estimation of viable *Candidatus L. asiaticus* in grapefruit leaves with symptoms and developmental stages.
10. Jaime Alejandro (2017) (Course-only)
11. Naga Rajitha Kavuri (2019)
Thesis title: Optimization of recombinase mediated marker excision in citrus protoplasts.
12. Venkata B. Kunduru (2019) (Course-only)
13. Emma Perez (2019)[¶]
Grad Project: Citrus canker in Texas and its current situation.
14. Venkata Boyapati (2019) * **(Co-Chair)**
Thesis title: Over expression of RhNAC2 and RhEXPA4 genes in Carrizo citrange to develop potential drought tolerance
15. Estephanie B. Jimenez (2019)
Project title: Development of recombinase technology to produce consumer-friendly transgenic citrus plants.
16. Cecilia Villegas (2021)
Thesis title: Development of a technique for reliable recovery of testable Asian citrus psyllid from field deployed sticky cards.
17. Victoria de Leon (2021) * **(Co-Chair)** - Outstanding graduate student awardee (2019-2020).
Thesis title: Investigation of '*Candidatus Liberibacter asiaticus*' prophages in Texas and Florida.
18. Pramod Reddy Gudipelly (2021) * **(Chair)**
Thesis title: Field deployable sensor for rapid, asymptomatic screening of HLB in citrus.
19. Tirumalareddy Danda (2021) * **(Chair)**
Thesis title: Field deployable loop mediated isothermal amplification (LAMP) assay for

Curriculum Vita

- the detection of ‘*Candidatus Liberibacter asiaticus*’ in citrus.
20. Sonia Munoz (2021)
Project title: Assessment of post freeze Arthropod population in Texas citrus.
 21. Steven M. Ramírez (2021)
Project title: Mature citrus grove HLB as edge-effect on adjacent young citrus grove.
 22. Teresa Salazar (Course only, 2021)
 23. Jaffer Gadiwan (2021)***(Chair)**
Project title: Estimation of live *Candidatus Liberibacter asiaticus* (CLAs) titer in HLB-positive tissue Sample.
 24. Franco Guerra (2022)***(Co-Chair)**
Thesis title: Transgenic Valencia orange and sour Orange challenged with *Phytophthora*: A gene expression analysis.
 25. Yovanna Soto (2022)
Thesis title: Effects of citrus tree phenology on color morphology and *Candidatus Liberibacter asiaticus* acquisition potential of *Diaphorina citri* Kuwayama (Hemiptera: Liviidae).
 26. Tofunmi Ijila (2022)
Thesis title: Field evaluation of different citrus scion and rootstock combinations for tolerance to *Candidatus Liberibacter asiaticus*.
 27. Amit Sharma UTRGV (University of Texas Rio Grande Valley), 2022)[¶]
Thesis title: Weather parameters influencing the incidence of citrus canker caused by A^w strain in the Rio Grande Valley
 28. Jennifer Belcher (Course-only) (2022).
 29. Olivia Segura (Course-only) (2022).
 30. Sree Harsha Sidireddi (2023)***(Chair)**
Thesis title: Rapid and portable loop-mediated isothermal amplification (LAMP)
 31. Manoj Gaddam (2023) * **(Co-Chair)**
Project title: Evaluation of the efficacy of peptides against citrus Huanglongbing (HLB or citrus greening
 32. Cecilia Segura (Course only, 2023)
 33. Marissa Gonzalez (2024) * **(Chair)** - Outstanding graduate student awardee (2022-2023)
Thesis title: Growth evaluation of citrus rootstock seedlings and graft-transmission of citrus viruses and viroids in different rootstocks.
 34. Sajjan Singh (2024) * **(Chair)** Outstanding graduate student awardee (2023-2024)
Thesis title: Studies on greasy spot disease in citrus orchards of the Rio Grande valley
- * **Chair or Co-Chair/ [¶]Supervised/mentored the entire research project of the thesis.**

Graduated PhD Student (Cooperative PhD program TAMU-K and TAMU)

1. Shima Chaudhary (2018) (Committee Member)
Dissertation title: Incidence, distribution, and epidemiology of *Phytophthora* diseases of citrus in South Texas and their interaction with Huanglongbing.