

## DESIRE DJIDONOU

### Assistant Professor of Urban & Sustainable Agriculture

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### EDUCATION

Ph.D. - Horticultural Sciences Department, University of Florida, Gainesville, USA	2012
M.S. – Agronomy Department, University of Florida, Gainesville, USA	2008
B.S. – Crop Production, University of Abomey-Calavi, Benin Republic	2000

### POSITIONS & EMPLOYMENT

2019 – Present	Assistant Professor (Tenure-track), College of Agricultural Sciences and Natural Resources, Texas A&M University Commerce
2016 – 2019	Research Associate Texas A&M AgriLife Research and Extension Center, Uvalde, TX
2013 – 2016	Associate Scientist – Plant Physiologist, RICETEC, INC., Alvin, TX

### TEACHING EXPERIENCE

#### Texas A&M University – Commerce

PLS 306 *Plant Propagation* (Spring 2020)

PLS 306L *Plant Propagation Lab* (Spring 2020)

PLS 597 *Hydroponic Crop Production* (Summer 2020)

PLS 397 *Herbs and Vegetables* (Fall 2020)

PLS 381 *Crop Physiology* (Fall 2020)

### RESEARCH PUBLICATIONS

#### Refereed Journals

- Djidonou, D., Leskovar, D.I., Joshi, M., Jifon, J., Avila, C.A., Masabni, J., Wallace, R.W. and Crosby, K., 2020. Stability of yield and its components in grafted tomato tested across multiple environments in Texas. *Scientific Reports*, 10: 1-14.
- Djidonou, D. and D. I. Leskovar. 2020. Pretransplant-N concentration of the nutrient solution influences growth and yield of hydroponic lettuce cultivars. *Acta Horticulturae 1273:395 - 400*.
- Djidonou D, Zhao X, Koch K, Zotarelli L. 2019. Biomass, nitrogen accumulation, and root distribution of grafted tomato as affected by nitrogen fertilization. *HortScience 54: 1907–1914*.
- Djidonou, D., and D. Leskovar. 2019. Seasonal changes in growth, nitrogen nutrition, and yield of hydroponic lettuce *HortScience 54: 76-85*.
- Djidonou, D., X. Zhao, J. K. Brecht, and K. M. Cordasco. 2017. Influence of interspecific hybrid rootstocks on tomato growth, nutrient accumulation, yield, and fruit composition under greenhouse conditions. *HortTechnology 27: 868-877*.
- Djidonou, D., A. H. Simonne, K. E. Koch, J. K. Brecht and X. Zhao. 2016. Nutritional quality of field-grown tomato fruit as affected by grafting with interspecific hybrid rootstocks. *HortScience 51: 1618-1624*
- Djidonou D., K. Lopiano, X. Zhao, E. H. Simonne, J. E. Erickson, K. E. Koch. 2015. Estimating nitrogen nutritional crop requirements of grafted tomatoes under field conditions. *Scientia Horticulturae 182 18–26*.
- Djidonou, D. X. Zhao, E. H. Simonne, K. E. Koch, and J. E. Erickson. 2013. Yield, water-, and nitrogen-use efficiency in field-grown, grafted tomatoes”. *HortScience 48:485–492*.
- Djidonou, D. Z. Gao, and X. Zhao. 2013. “Economic analysis of grafted tomato production in sandy soils in northern Florida”. *HortTechnology 23: 613-621*;

## Published Meeting Abstracts

- **Djidonou, D.**; D. I. Leskovar; M. Joshi; J. Jifon; C. A. Avila; J. G. Masabni; R. W. Wallace and K. Crosby. 2019. Stability of Yield and Yield Components of Grafted Tomato in Multiple Environments in Texas HortScience 54(9): S169
- Joshi, M.; D. I. Leskovar; **D. Djidonou**; J. Jifon; C. A. Avila; J. G. Masabni and K. Crosby 2019. Effect of Grafting on Fruit Quality Traits of Tomato Grown Under High Tunnel and Open-Field Conditions HortScience 54(9): S168
- Masabni, G. J., G. Niu, J. Jifon, D. I. Leskovar, and **D. Djidonou**. 2019. Productivity of Asian Vegetables in South and Northeast Texas. HortScience 54(9) S334
- **Djidonou, D.** and D. I. Leskovar. 2018. Seasonal Changes in Growth Dynamics, Nitrogen Nutrition, and Yield of Hydroponic Lettuce in Response to Nitrogen Fertilization. HortScience 53(9) S47.
- Leskovar, D., **D. Djidonou**, J. Jifon, C. Avila, J. Masabni, and K. Crosby. 2018. High Tunnel and Field Production System Comparison of Grafted Tomato in Texas. HortScience 53(9) S99.
- Masabni, J., D. Leskovar, **D. Djidonou**, and K. Crosby. 2018. Effects of Grafting with Estamino and Multifort on Yield and Plant Growth Parameters of Tycoon and Tamu Hot Tomato under Field. HortScience 53(9) S291.
- **Djidonou, D.** and D. I. Leskovar. 2018. Pretransplant-N concentration of the nutrient solution influences growth and yield of hydroponic lettuce cultivars Proceedings of the VIII International Symposium on Seed, Transplant, and Stand Establishment of Horticultural Crops – ISHS Istanbul (Turkey) August 12-16, 2018.
- Leskovar, D., Y. Othman, and **D. Djidonou**. 2017. Efficacy of 1-MCP in Growth Modulation of Tomato and Pepper Transplants Exposed to Heat Stress. Proceedings of the 44th Annual Meeting of the Plant Growth Regulation Society of America (PGRSA) August 6 – 10, 2017 Anchorage, Alaska.
- **Djidonou, D.**, K. Lopiano, X. Zhao, and E. H. Simonne. 2012. Estimating Nitrogen Fertilization Requirement for Grafted Tomato Grown in the Field. HortScience 47(9) S138.
- **Djidonou, D.** and X. Zhao. 2011. Optimizing Field Grown Tomato Yield: Effects of Grafting, Irrigation, and Nitrogen Inputs. HortScience 46(9): S225.
- **Djidonou, D.** and X. Zhao. 2011. Rootstock Effects on Nitrogen Assimilation in Tomato Plants under Greenhouse Conditions HortScience 46(9): S236.
- **Djidonou, D.** and X. Zhao. 2010. Rootstock Effects on Tomato Yield and Nutrient Uptake under Greenhouse Conditions HortScience 46(9): S130.
- **Djidonou, D.**, K. Boote, J. Jones, J. Bennett, and E. H. Simonne. 2008. Developing a Snap Bean Simulation Model to Predict Fresh Market Production, and Quality Of pods. American Society of Agronomy annual conferences.

## GRANTS, AWARDS, and SCHOLARSHIPS

- Texas Department of Agriculture Specialty Crop Block Grant. Title: Tomato Grafting: Novel Approaches for Conventional and Organic Systems in Texas. Period: 2017-2020.
- Texas A&M AgriLife Research Vegetable Seed Grant. Title: Tomato Grafting: Development and Screening Rootstock Germplasm to Improve Disease Resistance, Yield, and Quality in Protected and Open Field Systems in Texas. Period: 2016-2018.
- Cosmocel – Mexico. Title: Plant and soil bioregulators for high-value crops. Period: 2017-2018.
- USDA Sustainable Agriculture Research and Education Graduate Student Research Grant Title: Enhancing nitrogen and water use efficiency in tomato production by using grafting technique. Period: 2010-2012.
- Alumni Graduate Award Fellow Period: 2008 – 2012