

# CURRICULUM VITAE

**Thomas A. Obreza**

## **Current position**

Professor, Soil Fertility and Nutrient Management  
Univ. of Florida/IFAS  
3159 McCarty Hall, P O Box 110290, Gainesville, FL 32611  
Telephone: (352) 294-3154 E-mail: obreza@ufl.edu

## **Personal summary**

I am a motivated, forward-thinking, and experienced academic with multiple abilities including administration. I have a broad knowledge of planning, organizing, and managing the activities and tasks required to support the UF/IFAS effort in plant nutrient management including the Soil Testing Laboratory. I am flexible and I work well both individually and as a team member. I am involved in a wide variety of tasks in areas such as personnel management, resource management, and internal/external relations.

## **Education**

Ph.D. (Soil Science) Univ. of Florida, 1983  
M.Sc. (Soil Science) Univ. of Florida, 1980  
B.Sc. (Agronomy) The Ohio State Univ., 1978

## **Career history**

### March 2023 - present

Professor of Soil, Water, and Ecosystem Sciences  
Director, Univ. of Florida/IFAS Nutrient Management Program  
Supervisor, Univ. of Florida/IFAS Analytical Services Laboratories

### September 2013 – March 2023

Senior Associate Dean for Extension, Univ. of Florida/IFAS

### January 2009 – September 2013

Interim Associate Dean for Extension, Univ. of Florida/IFAS

### August 2002 – Present

Professor, Univ. of Florida/IFAS, Soil and Water Science Dept.

### April 1989 – August 2002

Assistant, Associate (1994), and Full (2000) Professor, Univ. of Florida/IFAS, Southwest Florida Research and Education Center, Immokalee

### July 1983 – April 1989

Crop Protection and Research Superintendent, A. Duda & Sons, Inc., LaBelle, FL

## **Professional experience**

### Administration

UF/IFAS Nutrient Management Program

- Lead and coordinate nutrient management research and extension
- Manage and allocate legislative funding for nutrient management work
- Modernize UF/IFAS fertilizer recommendations
- Supervise the UF/IFAS Soil Testing Lab

#### UF/IFAS Extension personnel leadership and management

- Lead personnel management for UF/IFAS County Operations and its 370 county faculty
- Evaluate candidates for state faculty and unit leader positions
- Evaluate mid-career and tenure/promotion/permanent status applications

#### Overall leadership and management of UF/IFAS Extension

- Budget allocations
- Maintain relationships with county government partners
- Internal and external communications
- Oversee internal programs, e.g. mini-grants and professional development
- Liaison to the Extension Professional Associations of Florida (EPAF)
- Contribute to Association of Southern Region Extension Directors regional projects
- Represent IFAS Extension Administration at internal and external events

#### Research

Soil fertility and nutrient management

Best Management Practices (BMPs) to protect water quality

Irrigation water management

#### Extension

Soil and water resource management to maintain/enhance Florida's agriculture and environment

- Leadership in water resources extension
  - UF/IFAS Extension Water Resources Focus Team
  - USDA-NIFA Southern Region Water Program – Florida Water Resource Coordinator
  - County faculty professional development
- BMP education – Soil, water, and plant nutrients
  - Certified Crop Adviser training program
  - Plant nutrient and water management education
  - Watershed Education Team

#### **Key competencies and skills**

Academic personnel management; planner; written communication; good listener; task-oriented; problem-solver; service-oriented; honest; fair-minded; loyal; trustworthy; supportive of diversity; reliable and responsible; composed; patient; functional and technical.

#### **Leadership development**

Member of LEAD21 Class VIII, 2012-13

#### **Publications, last 20 years**

(Graduate students: Major/co-major advisee\*; committee member†)

##### Refereed journal articles

Dixon, M.†, E. Simonne, T. Obreza, and G. Liu. 2020. Crop response to low phosphorus bioavailability with a focus on tomato. *Agronomy* 10, 617; doi:10.3390/agronomy10050617.

Hendricks, G. S.†, S. Shukla, F. M. Roka, R. P. Sishodia, T. A. Obreza, G. J. Hochmuth, and J. Collee. 2019. Economic and environmental consequences of overfertilization under extreme weather conditions. *J. Soil Water Cons.* 74:160-171.

Lusk, M. G., G. S. Toor, Y. Yang, S. Mechtensimer, M. De, and T. A. Obreza. 2017. A review of the fate and transport of nitrogen, phosphorus, pathogens, and trace organic chemicals in septic systems. *Crit. Rev. Environ. Sci. Tech.* 47(7):455-541. DOI: 10.1080/10643389.2017.1327787.

Baseggio, M.†, Y. C. Newman, L. E. Sollenberger, C. Fraise, and T. Obreza. 2015. Stolon planting rate effects on Tifton 85 bermudagrass establishment. *Agron J.* 1287-1294. DOI: 10.2134/agronj14.0188.

- Baseggio, M. †, Y. C. Newman, L. E. Sollenberger, C. Fraisse, and T. Obreza. 2015. Planting rate and depth effects on Tifton 85 bermudagrass establishment using rhizomes. *Crop Sci.* 55(3):1338-1345. DOI: 10.2135/cropsci2014.09.0605.
- Shukla, S., N. K. Shrestha, F. H. Jaber, S. Srivastava, T. A. Obreza and B. J. Boman. 2014. Evapotranspiration and crop coefficient for watermelon grown under plastic mulched conditions in sub-tropical Florida. *Agricultural Water Mgt.* 132:1-9.
- Morgan, K. \*, J. Scholberg, T. Obreza, and T. Wheaton. 2012. Seasonal nitrogen budgets of mature citrus trees on a sandy Entisol. *J. Plant Nutrition* 35:2009-2023.
- Mann, K.K. \*, A. Schumann, T.A. Obreza, W.G. Harris. 2011. Response of citrus productivity to the root zone soil properties in variable sandy soils. *Soil Sci.* 176:611-624.
- Mann K. K. \*, A. W. Schumann, T. A. Obreza, J. B. Sartain, W. G. Harris, and S. Shukla. 2011. Analyzing the efficiency of soil amendments and irrigation for plant production on heterogeneous sandy soils under greenhouse conditions. *J. Plant Nutrition Soil Sci.* 174(6):925-932.
- Mann K. K. \*, A. W. Schumann, T. A. Obreza, M. Teplitzki, W. G. Harris, and J. B. Sartain. 2011. Spatial variability of soil chemical and biological properties in Florida citrus production. *Soil Sci. Soc. Am. J.* 75: 5: 1863-1873 (posted online doi:10.2136/sssaj2010.0358)
- Mann, K. K. \*, A. W. Schumann, and T. A. Obreza. 2010. Delineating productivity zones in a citrus grove using citrus production, tree growth and temporally stable soil data. *Precision Agriculture*. Published online: 8 Sep 2010 (DOI 10.1007/s11119-010-9189-y).
- Mann, K. K. \*, A. W. Schumann, T. A. Obreza, J. B. Sartain, W. G. Harris, and S. Shukla. 2010. Spatial variability of soil physical properties affecting Florida citrus production. *Soil Sci.* 175(10):487-499.
- Mann, K. K. \*, A. W. Schumann, and T. A. Obreza. 2010. Indicator crop bioassays to define citrus productivity in sandy soils. *HortScience* 45(12):1859-1865.
- Obreza, T. A., and J. B. Sartain. 2010. Improving nitrogen and phosphorus fertilizer use efficiency for Florida's horticultural crops. *HortTechnology* 20:23-33.
- Obreza, T. A., and A. W. Schumann. 2010. Keeping water and nutrients in the Florida citrus tree root zone. *HortTechnology* 20:67-73.
- Agyin-Birikorang, S. †, O. O. Oladeji, G. A. O'Connor, T. A. Obreza, and J. C. Capece. 2009. Efficacy of drinking-water treatment residual in controlling off-site phosphorus losses: A field study in Florida. *J. Environ. Qual.* 38: 1076-1085.
- Medina, L. C. \*, J. B. Sartain, and T. A. Obreza. 2009. Estimation of release properties of slow-release fertilizer materials. *HortTechnology* 19:10-12.
- Obreza, T. A., R. E. Rouse, and K. T. Morgan\*. 2008. Managing phosphorus for citrus yield and fruit quality in developing orchards. *HortScience* 43:2162-2166.
- Medina, L. C. \*, T. A. Obreza, J. B. Sartain, and R. E. Rouse. 2008. Nitrogen release patterns of a mixed controlled-release fertilizer and its components. *HortTechnology* 18:475-480.
- Agyin-Birikorang, Sampson†, G. O'Connor, O. Oladeji, T. Obreza, and J. Capece. 2008. Drinking-water treatment residual effects on the phosphorus status of field soils amended with biosolids, manure, and fertilizer. *Comm. Soil Science Plant Anal.* 39:1700-1719.
- Fares, A., A. Dogan, F. Abbas, L. R. Parsons, T. A. Obreza, and K. Morgan\*. 2008. Water balance components in a mature citrus orchard. *Soil Sci. Soc. Amer. J.* 72:578-585.
- Hendricks, G. S. †, S. Shukla, K. E. Cushman, T. A. Obreza, F. M. Roka, K. M. Portier, and E. J. McAvoy. 2007. Florida watermelon production affected by water and nutrient management. *HortTechnology* 17:328-335.
- Pandey, C. †, S. Shukla, and T. A. Obreza. 2007. Development and evaluation of soil moisture-based seepage irrigation management for water use and quality. *J. Irrig. Drainage Eng.* 133:5(435-443). [DOI: 10.1061/(ASCE)0733-9437(2007)133:5(435)]
- Worthington, C. M. †, K. M. Portier, J. M. White, R. Mylavarapu, T. A. Obreza, W. M. Stall, and C. M. Hutchinson. 2007. Potato (*Solanum tuberosum* L.) yield and internal heat necrosis incidence under

- controlled-release and soluble nitrogen sources and leaching irrigation events. *Am. J. Potato Res.* 84:403-413.
- Morgan, K. T.\*, J. M. Scholberg, T. A. Obreza, and T. A. Wheaton. 2007. Orange tree fibrous root length distribution in space and time. *J. Amer. Soc. Hort. Sci.* 132:262-269.
- Obreza, T. A., and R. E. Rouse. 2006. Long term response of 'Hamlin' orange trees to controlled-release fertilizers. *HortScience* 41:423-426.
- Alva, A. K., S. Paramasivam, T. A. Obreza, and A. W. Schumann. 2006. Nitrogen best management practices for citrus trees. II. Nitrogen fate, transport, and components of N budget. *Scientia Horticulturae* 109:223-233.
- Morgan, K. T.\*, T. A. Obreza, J. M. Scholberg, L. R. Parsons, and T. A. Wheaton. 2006. Citrus water uptake dynamics on a sandy Florida Entisol. *Soil Sci. Soc. Amer. J.* 70:90-97.
- Morgan, K. T.\*, J. M. Scholberg, T. A. Obreza, and T. A. Wheaton. 2006. Size, biomass and nitrogen relationships with sweet orange tree growth. *J. Amer. Soc. Hort. Sci.* 131:149-156.
- Jaber, F. H., S. Shukla, E. A. Hanlon, P. J. Stoffella, T. A. Obreza, and H. H. Bryan. 2006. Groundwater phosphorus and trace element concentrations from organically amended sandy and calcareous soils of Florida. *Compost Sci. Util.* 14:6-15.
- Jaber, F. H., S. Shukla, T. A. Obreza, P. J. Stoffella, and E. A. Hanlon. 2005. Impact of organic amendments on groundwater nitrogen concentrations for sandy and calcareous soils. *Compost Sci. Util.* 13:194-202.
- Makris, K. C.\*, W. G. Harris, G. A. O'Connor, T. A. Obreza, and H. A. Elliott. 2005. Physicochemical properties related to long-term phosphorus retention by drinking-water treatment residuals. *Env. Sci. Tech.* 39:4280-4289.
- Makris, K. C.\*, G. A. O'Connor, W. G. Harris, and T. A. Obreza. 2005. Relative efficiency of a drinking water treatment residual and alum in reducing phosphorus release from poultry litter. *Comm. Soil Sci. Plant Anal.* 36:2657-2676.
- Ozores-Hampton, M., P. A. Stansly, R. McSorley, and T. A. Obreza. 2005. Effects of long-term organic amendments and soil solarization on pepper and watermelon growth, yield, and soil fertility. *HortScience* 40(1):80-84.
- Ozores-Hampton, M., P. A. Stansly, and T. A. Obreza. 2005. Heavy metal accumulation in a sandy soil and in pepper fruit following long-term application of organic amendments. *Compost Sci. Util.* 13:60-64.
- Makris, K. C.\*, W. G. Harris, G. A. O'Connor, and T. A. Obreza. 2004. Phosphorus immobilization in micropores of drinking-water treatment residuals: Implications for long term stability. *Env. Sci. Tech.* 38:6590-6596.
- Makris, K. C.\*, H. El-Shall, W. G. Harris, G. A. O'Connor, and T. A. Obreza. 2004. Intraparticle P diffusion in a drinking water treatment residual at room temperature. *J. Coll. Interface Sci.* 277:417-423.
- Hanselman, T. A. †, D. A. Graetz, and T. A. Obreza. 2004. A comparison of in situ methods for measuring net nitrogen mineralization rates of organic soil amendments. *J. Env. Qual.* 33:1098-1105.

#### Extension publications

Please visit <https://edis.ifas.ufl.edu/experts/obreza>

#### **Selected grants and contracts, last 20 years**

- 2023-24 \$6.2 million from the Florida Legislature for nutrient management work to improve UF/IFAS fertilizer recommendations. Role: PI
- 2022-23 \$8.76 million from the Florida Legislature for nutrient management work to improve UF/IFAS fertilizer recommendations. Role: PI
- 2009-12 \$120,000 from USDA-NIFA for "The Southern Region Water Quality Coordination Project." Role: PI

- 2005-10 \$71,496 from Georgia-Pacific Corp. for "Slow-Release Nitrogen Fertilizer Trial on Young Citrus Trees." Role: Co-PI.
- 2005-07 \$132,965 from Florida Dept. of Agriculture and Consumer Services (FDACS) for "Towards Acceptance of a Short-Term Lab Test to Measure N Release Characteristics of Controlled-Release Fertilizer." Role: PI.
- 2005-07 \$378,933 from FDACS for "Rapid Soil & Tissue Analysis Techniques Using Near Infrared Reflectant Spectroscopy." Role: Co-PI.
- 2004-08 \$193,359 from USDA-NIFA for "The Southern Region Water Quality Coordination Project." Role: PI
- 2004-07 \$60,325 from FDACS for "Phosphorus Soil Test Calibration for Florida Citrus Trees." Role: PI.
- 2002-05 \$45,000 from The Scotts Co. for: "Nutrient Release Characteristics of Agrocoate and CitriBlen Fertilizers in Florida." Role: Co-PI.
- 2002-04 \$140,000 from USDA-CSREES for "Southern Region Watershed Resources Management." Role: PI.

**Teaching and advising, last 20 years**

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|----------------------------|-----------------------------------|
| Ph.D. graduate committees  | Chair, 2; Co-chair, 2; Member, 19 |
| D.P.M. graduate committees | Member, 1                         |
| M.Sc. graduate committees  | Chair, 2; Member, 8               |

**Selected university service, last 20 years**

- 2006-07 IFAS Senior Vice President's Advisory Committee (Secretary)  
IFAS Graduate Research Awards Committee
- 2005-07 UNIFAS advisory committee
- 2005-06 IFAS Extension Faculty Advisory Committee
- 2004-06 IFAS Tenure & Promotion Committee (Chair in 2005-06)
- 2003-05 IFAS Faculty Search & Screen Committees: Chair, 2; Member, 1
- 2002-07 Faculty mentor to three new Extension Specialists

**Honors and awards**

- 2022 UF/IFAS Research Large Grant Leadership Award
- 2008 Dallas Townsend Extension Professional Enhancement Award (One-year term professorship for demonstrating an outstanding ability to plan and implement extension programs that address clientele needs).
- 2007 Art Hornsby Distinguished Extension Professional Enhancement Award (A term professorship for creative contributions and outreach programs related to soil and water sciences).
- 2005 Award of Excellence for Graduate Research (Co-chair of supervisory committee for the graduate student who won the "Best Ph.D. Dissertation in IFAS" award for the 2004-05 academic year).