

TIMOTHY R. PANNKUK

Associate Professor
 Department of Agricultural Sciences
 Sam Houston State University
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Formal Education

Doctor of Philosophy, Agronomy, Aug 2009, Texas A&M University, College Station, TX
 Dissertation title: Evapotranspiration and leachate Quality of Warm-Season Turf and Native grasses under Different Texas Landscape Climates

Master of Science, Horticulture, Aug 1995, Texas A&M University College Station, TX
 Thesis title: Growth of New Guinea impatiens under no-leach drip irrigation

Bachelor of Science, Horticulture, May 1990, Texas A&M University College Station, TX

Professional Experience

- Department of Agricultural Sciences, Sam Houston State University

Associate Professor (9/15 – present)

Assistant professor (9/09 – 8/15)

Lecturer (3/02 – 8/09; completed PhD during this time frame)

- RESEARCH

- Conduct research in amenity landscape water use with focus on the water use relationship compared local evapotranspiration, and on landscape water leachate quality.
- Plant component of aquaponic systems
- Other research studies include characterizing residential outdoor water use, effects of herbicides on selected ornamental plants, and strengthening collaborations between industry and universities.

- TEACHING

- PLSC 2395 Ornamental Plant Identification
- PLSC 3320 Landscape Plant Materials
- PLSC 3374 Production & Management of Ornamentals
- PLSC 3379 Turfgrass Culture
- PLSC 3395 Plant Propagation
- PLSC 3398 Landscape Design
- PLSC 3440 Soil Science
- PLSC 4358 Landscape Operations
- PLSC 4397 Integrated Pest Management
- AGRI 4341 Brewing Technology
- PLSC 5394 Applied Horticulture Science

- SERVICE

- Faculty Advisor – Plant & Soil Sciences Club, 2002 – present
 - Academic Advising – primary advisor for PLSC students
 - Committees
 - Department – FES, Scholarship, Curriculum, Horticulture Facility Planning, Departmental Marketing, SAFE
 - College – ACE committee
 - University - Parking Appeals, and Student Disciplinary Hearing
 - Reviewer
 - HortScience – primarily
 - U.S. Geologic Survey
 - HortTechnology
 - Crop Science
 - Texas FFA Career Development Events
 - State Contest for Landscape event 2009-2021
 - Directed Studies & Special Topics
 - PLSC 4100, PLSC 4396, PLSC 5364
 - Graduate student committees
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- Bunch Wholesale Inc., Texarkana, TX, 2001
 - Colorspot Inc., Waco, TX, 1998-2001
 - Neal Robinson’s Wholesale, Brownsville, TX, 1997
 - Turkey Creek Farms, Humble TX, 1995-1997
 - Graduate Research & Teaching Assistant, Texas A&M University, College Station, TX, 1993-1995
 - Chemlawn Corp., San Antonio, TX, 1990-1992

Peer Reviewed Publications

Pannkuk, T. 2015. Plant Factors for Irrigating Mixed Turfgrass and Shrub Landscapes in a Humid Environment. *HortTechnology* 25(3):322-329. This publication summarizes two-years of data.

Pannkuk, T. and A. Wolfskill. 2015. Residential outdoor water use in one East Texas Community. *Texas Water Journal* 6(1):79-85. This publication summarizes three-years of data.

Wherley, B., **T. Pannkuk**, R. Cabrera, C. Campos. Off-Target Injury to Southern Landscape Species Following Aminocyclopyrachlor Applications. *J. Envir. Hort.* 31(3):189-193. September 2013.

Pannkuk, T. 2012. A Taxonomic Key for Selected Turf-Type Bermudagrasses. *TX J. Agri. & Nat. Resources* 24:83-87.

Pannkuk, T., J. Aitkenhead-Peterson, K. Steinke, J. Thomas, D. Chalmers, and R. White. 2011. Carbon, Nitrogen, and Orthophosphate Leaching from Soil under Single- and Mixed-Species Landscapes. *HortScience* 46(11):1533-1539

Pannkuk, T. and D. Fazzaro. 2011. Strengthening Collaborations with Landscaping Industry and Department of Agricultural Sciences: Using Structured Group Interview Approach for Enhancing the 21st Century Workforce. *Online Journal of Workforce Education and Development*. Vol. V Issue 2 – Summer 2011.

Pannkuk, T., R. White, K. Steinke, J. Aitkenhead-Peterson, D. Chalmers, and J. Thomas. 2010. Landscape Coefficients of Single- and Mixed-Species Landscapes. *HortScience* 45(10):1529-1533.

Fazzaro, D., **T. Pannkuk,** D. Pavelock, and D. Hubbard. 2009. The effectiveness of instructional methods based on learning style preferences of agricultural students: a research tool for continuous improvement for faculty in career and technical programs. *Journal of Industrial Teacher Education*. 45(3):84-104.

Lang, H. and **T. Pannkuk.** 1998. Effects of fertilizer concentration and minimum-leach drip irrigation on the growth of New Guinea Impatiens. *Hortscience* 33 (4):600-606.

Peer Reviewed Presentations, Posters and Proceedings/Abstracts

Pannkuk, T. Oral session - virtual. Use of ET data in landscape water conservation. Texas Nursery & Landscape Assoc Water Summit. May 14, 2021. Virtual delivery.

Pannkuk, T. Oral session. Water Conservation and St. Augustinegrass – How do they piece together? Texas Nursery & Landscape Assoc EXPO. Aug 8, 2019. San Antonio, TX.

Pannkuk, T. and R. Saucier. Poster. Response of Five St. Augustinegrass Cultivars to Drought and Recovery. Jul 23, 2019. Amer Soc Hort Sciences. Las Vegas, NV.

Pannkuk, T. and R. Saucier. Poster. Response of Five St. Augustinegrass Cultivars to Drought and Recovery. Aug 3, 2018. Amer Soc Hort Sciences. Washington D.C.

Pannkuk, T., S. Frey, and M. McBeth. Poster. Aquaponics Production of Tomato and Sweet Pepper Cultured in Two Types of Media. Sept 21, 2017. Amer Soc Hort Sciences. Waikoloa, HI.

Pannkuk, T. Oral session. Evapotranspiration (ET) Data for Landscape Irrigation Decisions. Texas Nursery & Landscape Assoc EXPO. Aug 7, 2017. Dallas, TX

Evers, L., M. Anderson, and **T. Pannkuk.** Poster. Consumers of Texas Alternative Agriculture: A Brief Study of Preferences and Beliefs. Aug 10, 2016. Amer Soc Hort Sciences. Atlanta, GA.

- Evers, L., M. Anderson, and **T. Pannkuk**. Poster. Producers of Texas Alternative Agriculture: A Brief Study of Beliefs. Aug 10, 2016. Amer Soc Hort Sciences. Atlanta, GA.
- Evers, L., M. Anderson, and **T. Pannkuk**. Poster. Texas Alternative Agriculture: A Brief Comparison of the Beliefs of Consumers and Producers. Aug 10, 2016. Amer Soc Hort Sciences. Atlanta, GA.
- Pannkuk, T.** and R. Lane. Poster. Evaluation of Organic Fertilizer on Performance of St. Augustinegrass Cultivars. Aug 6th, 2015. Amer Soc Hort Sciences. New Orleans, LA.
- Pannkuk, T.,** K. Ferrell, M. Anderson, and S. Kelley. Poster. SAFE: Sustainable Agriculture and Food Environments. Aug 6th, 2015. Amer Soc Hort Sciences. New Orleans, LA.
- Ferrell, K., **T. Pannkuk**, and M. Anderson. Poster. Texas Sustainable Agriculture and Food Environments Program: Producer Perceptions. Crop Science Society International Annual Meeting. Nov 3, 2014. Long Beach, CA.
- Pannkuk, T.** and R. Lane. Poster. Effects of organic nitrogen source on growth of five cultivars of St. Augustinegrass. Poster. Jul 30, 2014. Amer Soc Horticultural Sciences. Orlando, FL.
- Pannkuk, T.** and R. Smith. Poster. Nutrient Leaching from Soil in Mixed Turfgrass and Woody Plant Landscapes. Nov 4, 2013. American Society of Agronomy, Tampa, FL.
- Pannkuk, T.** Poster. Landscape Coefficients of Mixed Turf and Woody Plant Landscapes. Jul 24, 2013. American Society of Horticultural Sciences Annual Meeting, Palm Desert, CA.
- Pannkuk, T.** Poster. Landscape Coefficients of Mixed Turf and Woody Plant Landscapes. Oct 24, 2012. Soil and Crop Science Societies of America Annual Meeting, Cincinnati, OH.
- Pannkuk, T.** Poster. Landscape Coefficients of Mixed Turf and Woody Plant Landscapes. Soil and Crop Science Societies of America Annual Meeting, San Antonio, TX. Oct 17, 2011.
- Pannkuk, T.,** J. Aitkenhead-Peterson, K. Steinke, J. Thomas, D. Chalmers, and R. White. Poster. Leachate Chemistry from Soil under Turf and Nativegrasses in Southern Texas. Soil and Crop Science Society of America Annual Meeting, Pittsburgh, PA. Nov 1-5, 2009
- Pannkuk, T.,** K. Steinke, J. Aitkenhead-Peterson, J. Thomas, R. White, and D. Chalmers. 2008. Presentation. Landscape coefficients of newly planted mixed- and single-species urban landscapes. Poster. Joint Meeting - Geologic Society, Crop Science Society, and Soil Science Society. Houston, TX Oct 6, 2008.
- Pannkuk, T.,** G. Wingenbach, S. Degenhart, J. White, and J. Smith. Abstract. Relationship of student teachers' knowledge and teaching comfort levels with agricultural science and technology objectives. NACTA 2006 Annual Conference, Vancouver, BC.

Non-Peer Reviewed Publications

Pannkuk, T. Four e-mails during Aug and Sept 2011 to about 1200 residents of Elkins Lake Subdivision. E-mails provided educational outreach on landscape water conservation. This was coordinated with the general manager of the subdivision and the Public Utilities director of the City of Huntsville.

Landscape Coefficients Prove Useful for Urban Water Conservation Efforts. June 10, 2011. HighBeam Research. (press release)

Landscape Coefficients Prove Useful for Urban Water Conservation Efforts; New Strategies Provide Important Irrigation Information, Promote Water Savings. June 23, 2011. ScienceDaily. (press release)

Landscape Coefficients Prove Useful for Urban Water Conservation Efforts. June 23, 2011. eScienceNews. (press release)

Landscape Coefficients Prove Useful for Urban Water Conservation Efforts. June 23, 2011. Bio-Medicine. (press release)

Landscape coefficients prove useful for urban water conservation efforts. June 27, 2011. TerraDaily. (press release)

Grants and Funding Received

Ma, J., R. Pecan, F. Yildez, **T. Pannkuk**, and A. Smith-Herron. USDA Specialty Crop Grant. \$139,000 (Sep '21 – Aug '22). A Handheld Infrared Thermography-Minirhizotron Device for Nondestructive Rapid Detection of Cyst Nematode.

Pannkuk, T. and A. Schwede. Micro-grant to establish native trees on Gibbs Ranch new addition. Texas Forest Service. Fall 2019. \$1500.

Pannkuk, T. and R. Saucier. Establish rain-out structure for turfgrass plots. Dept. of Agri. Sciences Agri. Development Fund. Fall 2017. \$2600.

Pannkuk, T. and M. Anderson. NIFA/USDA. Online Master's Degree in Alternative Agriculture Systems. Awarded Sept 2013. \$291,092 over three years (Sep '13 – Aug '16).

Pannkuk, T. Apr 2012. Establish new turfgrass research plots. SHSU College of Sciences. \$11,000.

Wherley, B. and **T. Pannkuk**. Jan 2012. Evaluate effects of elevated application rates of MAT28 products on potted ornamental plants in Texas. TexasAgriLife \$72,000 (\$23,000 to SHSU).

Hammond, R. and **T. Pannkuk**. Mar 2011. Landscape Coefficients of Turfgrass and Woody Plant Combinations. Texas Water Resources Institute. \$5000

Pannkuk, T. and D. Kingman. Fall 2009. Graduate research grant for weather station construction. SHSU Department of Graduate Studies. Huntsville, TX. \$2347.

Pannkuk, T. 2009. Graduate research grant for data acquisition equipment. SHSU Department of Graduate Studies. Huntsville, TX. \$4457. Fall 2009.

Pannkuk, T. and R. White. 2007. A Comparison of Actual and Reference Evapotranspiration between Mixed Grassy and Woody Landscapes under Different Texas Climates. Texas Nursery & Landscape Association. Austin, TX. \$7600. Dec 2007 – Aug 2008.

Professional Memberships

American Society of Horticultural Sciences

Previous Chair-elect, and Chair, Ornamental Landscape & Turf Working Group

Texas Nursery and Landscape Association

Invited speaker to educational sessions for industry professionals

Labor Task Force Committee

National Association of Landscape Professionals

Member of 10-person Faculty Advisory Committee

Professional Development

Crop Science and Soil Science Societies of America annual national meetings. 2008-2014

American Society of Horticultural Sciences annual national meeting. 2013 - 2020