

Timothy S. Griffin

Address: Friedman School of Nutrition Science and Policy
Tufts University
150 Harrison Avenue, Room 125
Boston, MA 02111

Phone: 617-636-3613

E-mail: Timothy.Griffin@tufts.edu

Education:

Ph.D. 1990 **Michigan State University**, East Lansing, MI
Major: Crop and Soil Science
Topic: Nitrogen Cycling, Economics, and Pathogens in Legume-Potato Rotations

M.S. 1986 **University of Nebraska**, Lincoln, NE
Major: Agronomy
Topic: Use of Seed Treatments in Native Grass Establishment

B.S. 1984 **University of Nebraska**, Lincoln, NE
Major: Forage and Range Management

Work Experience:

2009-Present **Director**, Agriculture Food and Environment Program
Friedman School of Nutrition Science and Policy, Tufts University

2008-Present **Associate Professor**, Friedman School of Nutrition Science and Policy
Tufts University, Boston, MA

2000-2008 **Research Agronomist and Lead Scientist**
USDA-ARS New England Plant Soil and Water Lab, Orono ME

1999-2000 **Associate Extension Professor, Sustainable Agriculture Specialist**
University of Maine Cooperative Extension
Associate Professor, Sustainable Cropping Systems
Maine Agricultural and Forestry Experiment Station

1998-1999 **Visiting Research Scientist** (sabbatical leave from Univ. of Maine)
USDA-ARS, New England Plant Soil and Water Lab

1997-1999 **Associate Extension Professor, Sustainable Agriculture Specialist**
University of Maine Cooperative Extension

1992-1997 **Assistant Extension Professor, Sustainable Agriculture Specialist**
University of Maine Cooperative Extension

1990-1991 **Post-Doctoral Research Associate**
Michigan State University

1987-1990 **Graduate Research Assistant and Instructor**
Department of Crop and Soil Science
Michigan State University

1985-1986 **Graduate Research and Teaching Assistant**
Agronomy Department
University of Nebraska

Primary Areas of Activity:

Leadership:

Director, Agriculture Food and Environment Program: Rapidly growing program, focusing on linkages and interactions between food system components. Currently more than 50 M.S. students, and three Ph.D. candidates.

Faculty Steering Committee, Water: Systems, Science and Society. Interdisciplinary graduate certificate program at Tufts University, including students from nearly every college or school at Tufts.

Current research interests: Adoption and environmental impact of conservation practices funded by federal conservation programs; production capacity and infrastructure for development and implementation of local- to regional-scale food systems; innovation in school food service, including local procurement and farm to school; resiliency of food systems under climate and economic scenarios; contribution of agricultural to climate change.

Past research responsibilities have included: field and lab components addressing: crop management, alternative crop development, short- and long-term effects of cropping systems on potato yield and quality, management strategies to improve soil quality, manure nitrogen and phosphorus availability, soil carbon sequestration and cycling, emission of greenhouse gases from high-value production systems, and grain production for organic dairy systems.

Teaching (at Tufts University):

| | |
|---------|------------------------------------|
| NUT 215 | Fundamentals of U.S. Agriculture |
| NUT 233 | Agricultural Science and Policy I |
| NUT 333 | Agricultural Science and Policy II |

Peer-Reviewed Publications, Last 5 Years:

1. **Griffin, T.S.** 2010. Linking agriculture and nutrition. *Public Health Nutrition*. 13:1941-1944.
2. Mallory, E.B., **T.S. Griffin**, and G.A. Porter. 2010. Seasonal nitrogen availability from current and past applications of manure. *Nutrient Cycling in Agroecosystems*. 88:351-360.
3. Steiner, J, and **T.S. Griffin**. 2009. World Food Availability and the Natural Land Resources Base. Prepared for Strategic Multi-Layer Assessment (SMA) and the US Army Corps of Engineers, R&D Directorate.
4. **Griffin, T.S.**, and C.W. Honeycutt. 2009. Effectiveness and efficacy of conservation options after potato harvest. *Journal of Environmental Quality*. 38:1627-1635.

5. **Griffin, T.S.**, R.P. Larkin, and C.W. Honeycutt. 2009. Delayed tillage and cover crops effects in potato systems. *American Journal of Potato Research* 86:79-86.
6. He, Z. C. Wayne Honeycutt, **Timothy S. Griffin**, Barbara J. Cade-Menun, Perry J. Pellechia and Zhengxia Dou. 2009. Phosphorus forms in conventional and organic dairy manure identified by solution and solid state P-31 NMR spectroscopy. *Journal of Environmental Quality*. 39:1909-1918.
7. Harry H. Schomberg,, Sirio Wietholter, **Timothy S. Griffin**, D. Wayne Reeves, Miguel L. Cabrera, Dwight S. Fisher, Dinku M. Endale, Jeff M. Novak, Kip S. Balkcom, Randy L. Raper, Newell R. Kitchen, Martin A. Locke, Kenneth N. Potter, Robert C. Schwartz, Clinton C. Truman and Don D. Tyler. 2009. Assessing indices for predicting potential nitrogen mineralization in soils under different management systems. *Soil Science Society of America Journal*. 73:1575-1586.
8. Olanya, O. Modesto, C. Wayne Honeycutt, Robert P. Larkin, **Timothy S. Griffin**, Zhongqi He, and John M. Halloran. 2009. The effect of cropping systems and irrigation management on development of potato early blight. *Journal of General Plant Pathology*. 75:267-275.
9. **Griffin, T.S.** 2008. Nitrogen availability. pp. 616-646 in J.S. Schepers and W.R. Raun (eds.), *Nitrogen in Agricultural Soils*. Agronomy Monograph 49. American Society of Agronomy, Madison WI.
10. **Griffin, T.S.**, C.W. Honeycutt, S.L. Albrecht, K.R. Sistani, H.A. Torbert, B.J. Wienhold, B.L. Woodbury, R.K. Hubbard, and J.M. Powell. 2008. Nationally- coordinated evaluation of soil nitrogen mineralization rate using a standardized aerobic incubation protocol. *Communications in Soil Science and Plant Analysis* 39:257-268.
11. Hutchinson, M., and **T.S. Griffin**. 2008. Evaluation of fiber content relative to other measures of compost stability. *Compost Science and Utilization* 15: 6-11.
12. Starr, G.C., D. Rowland, **T.S. Griffin**, and O.M. Olanya. 2008. Soil water in relation to irrigation, water uptake and potato yield in a humid climate. *Agricultural Water Management* 95:292-300.
13. **Griffin, T.S.** 2007. Estimates of gross transformation rates of dairy manure N using ¹⁵N pool dilution. *Communications in Soil Science and Plant Analysis* 38: 1451-1465.
14. **Griffin, T.S.**, and M. Hutchinson. 2007. Compost maturity effects on nitrogen and carbon mineralization and plant growth. *Compost Science and Utilization* 13:228-236.
15. Mallory, E.B., and **T.S. Griffin**. 2007. Impacts of soil amendment history on nitrogen availability from manure and fertilizer. *Soil Science Society of America Journal* 71: 964-973

16. Olanya, O.M., G.C. Starr, C.W. Honeycutt, **T.S. Griffin**, and D.H. Lambert. 2007. Microclimate and potential for late blight development in irrigated potato. *Crop Protection* 26:1412-1421.
17. He, Z., A.M. Fortuna, Z.N. Senwo, I.A. Tazisong, C.W. Honeycutt, and **T.S. Griffin**. 2006. Hydrochloric fractions in Hedley fractionation may contain inorganic and organic phosphates. *Soil Science Society of America Journal* 70:893-899.
18. He, Z., **T.S. Griffin**, and C.W. Honeycutt. 2006. Soil phosphorus dynamics in response to dairy manure and inorganic fertilizer applications. *Soil Science* 171:598-609.
19. Heckman, J. R. W. Jokela, T. Morris, D.B. Beegle, J.T. Sims, F.J. Coale, S. Herbert, **T. Griffin**, B. Hoskins, J. Jemison, W.M. Sullivan, D. Bhumbra, G. Estes, and W.S. Reid. 2006. Soil test calibration for predicting corn response to phosphorus in the Northeast USA. *Agronomy Journal* 98:280-288.
20. Larkin, R.P., and **T.S. Griffin**. 2006. Control of soilborne diseases of potato using Brassica green manures. *Crop Protection* 25: 1067-1077.
21. Piper, A., M.S. Erich, G.A. Porter, and **T.S. Griffin**. 2006. Root growth effects on soluble C and P in manured and non-manured soils. *Plant and Soil* 283:353-366.