

Christopher Graham

Department of Plant Science, South Dakota State University
SDSU West River Ag Center, 1905 Plaza Blvd, Rapid City, SD 57702

Education

- 2012 Ph.D. Cornell University. Department Crop and Soil Science. Dissertation title: Balancing nitrogen sinks and sources across diverse agroecosystems (advisor: Prof. Harold van Es).
- 2008 M.P.A. Columbia University. Environmental Science and Policy
- 2006 B. S. Arizona State University. Geography. Summa cum laude

Professional Appointments

- 2013- Assistant Professor and Extension Agronomist, South Dakota State University, Department of Plant Science
- 2012-2013 Agricultural Specialist, Water Stewardship Inc., Annapolis, MD
- 2009-2012 Research Assistant, Cornell University, Department of Crop and Soil Science
- 2009-2010 Teaching Assistant, Cornell University, Department of Crop and Soil Science

Additional Relevant Experience

- 2017 Farmer-to-Farmer Volunteer – Democratic Republic of Congo
- 2016 Farmer-to-Farmer Volunteer - Ethiopia
- 2008 Columbia University/Rockefeller Foundation research grant evaluating agricultural water projects in Kenya, Ethiopia, Rwanda and Uganda
- 2006-2007 Fulbright Fellowship, Mauritius, Developing Indexes for Drought Monitoring across the Island

Primary Departmental Responsibilities

Research – 25%, Extension – 75%

Research focus is on water- and nitrogen-use efficiency in dryland farming systems. Additional responsibilities include coordinating crop performance trials for western South Dakota, crops include sorghum, corn, winter wheat, spring wheat, field peas, safflower and oats.

Selected peer-reviewed journal publications

1. **Graham, C.J.**, D. Thavarajah, R. Beck. 2018. Dietary reference intake and nutritional yield of lentils in the northern Great Plains. *Crop Sci. Accepted*.
2. Adhikari, A. D., Nielsen, K., Harveson, R. M., **Graham, C.**, Beck, R. and Mathew, F. 2018. Bacterial blight of Lentil (*Lens culinaris*) caused by *Pseudomonas syringae* pv. *syringae*. *Plant Health Progress Accepted*
3. **Graham, C.J.**, D. Thavarajah. 2017. Carbohydrate content in lentils (*Lens culinaris* Medikus): Genotypic and environmental effects. *Comm Soil Sci Plant An.* 48:2447-2454.
4. **Graham, C.J.** and J. Varco. 2017. The effect of stabilized urea and split-applied nitrogen on sunflower yield and oil content. *Am. J. Plant Sci.* 8:1842-1854.
5. **Graham, C.J.**, A. Bly, H. Woodard and P. Fixen. 2017. Chloride Fertilizers Increase Spring Wheat Yields in the Northern Great Plains. *Agron. J.* 109:327-334.
6. Morrell, F. J., P. Grassini, H.S Yang; K. G. Cassman, J. Van Wart, R. W. Elmore, M. Licht, J. A. Coulter, I. A. Ciampitti, C. M. Pittelkow; S. M. Brouder, P. Thomison; J. Lauer, **C. Graham** and R. Massey. 2016. Can crop simulation models be used to predict local to regional maize yields and total production in the U.S. Corn Belt? *Field Crops Research.* 192:1-12.
7. **Graham, C.J.**, H.M. van Es and J.J. Melkonian. 2013. Nitrous oxide emissions are greater in silt loam soils with a legacy of manure application than without. *Biol Fertil Soils* 49:1123-1129.
8. Xue, Y, H.M. van Es, R.R. Schindelbeck, B.N. Moebius-Clune, J.J. Melkonian, **C.Graham** and P. Yang. 2013. Effects of N placement, carbon distribution and temperature on N₂O emissions in clay loam and loamy sand soils. *Soil Use and Management* 29:240-249.
9. Foshee, J., A. Ghosh, **C. Graham**, W. Murray, C. Salama and T Siegfried. 2008. Thirsty for change: Considering water privatization in developing nations. *Consilience: Journal of Sustainable Development*

Book and Production Manual Chapters

1. **Graham, C.J.**, D. Clay and S. Bruggman. 2017. Developing yield response curves for fertilizers and seeding rates. In. Clay et al. (Eds.) *Practical Mathematics for Precision Farming*. American Society of Agronomy, Wisconsin
2. **Graham et al. (Eds)**, Northern Great Plains Sorghum Production Manual. *In Publication*
3. **Graham, C.J.** and G. Carlson. 2016. Corn Seeding Rates in South Dakota. In. Clay et al. (Eds.), *Best Management Practices for Corn Production in South Dakota*. South Dakota State University, College of Agriculture and Biological Sciences, AgBio Communications Unit, Box 2218A, Brookings, South Dakota 57007
4. **Graham, C.J.** and A. Bly. 2016. Corn Nitrogen Timing. In. Clay et al. (Eds.), *Best Management Practices for Corn Production in South Dakota*. South Dakota State University, College of Agriculture and Biological Sciences, AgBio Communications Unit, Box 2218A, Brookings, South Dakota 57007