

**JESSICA G. DAVIS**

Colorado Agricultural Experiment Station

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Academic Credentials

Cornell University	Agronomy (Minor in International Agriculture)	B.S., 1983
Texas Tech University	Soil Science	M.S., 1984
Texas A&M University	Soil Science	Ph.D., 1989
Boston University	Entrepreneurship	Graduate Certificate, 2013

Academic Positions

Instructor, Texas A&M University, 1985-1986

Junior Scientist, Tropical Soils Collaborative Research Support Program, U.S. Agency for International Development (USAID), Niger, West Africa, 1986-1987

Assistant Professor, Department of Crop & Soil Sciences, Coastal Plain Experiment Station, University of Georgia, 1989-1995

Associate Professor and Extension Specialist, Department of Soil & Crop Sciences, Colorado State University, 1995-2001

Professor and Extension Specialist, Department of Soil & Crop Sciences, Colorado State University, 2001-2016

Director, Institute for Livestock and the Environment, Colorado State University, 2008-2012

Deputy Director, USAID Collaborative Research Support Program on Adapting Livestock Systems to Climate Change, Colorado State University, 2010-2011

Affiliate Faculty, School of Plant Science and Horticulture, Hawassa University, Ethiopia, 2012-2016

Department Head, Department of Horticulture & Landscape Architecture, Colorado State University, 2016-2021

Professor of Pulse Agronomy, Agricultural Experiment Station, Colorado State University, 2022-present

Fellowships in Scientific Societies

American Society of Agronomy (2004)

Soil Science Society of America (2004)

Soil and Water Conservation Society (2009)

Publications and Presentations

Journal Articles: 76

Book Chapters: 9

Proceedings: 70

Bulletins: 21

Extension Factsheets: 47

Newsletter Articles: 105

Abstracts: 184

Popular Articles: 8

Reports: 125+

Invited Presentations: 80+

Extension Presentations: 400+

Journal Articles Published in Last Five Years (2017-2021)

Afkairin, A., J.A. Ippolito, M. Stromberger, and J.G. Davis. 2021. Solubilization of organic phosphorus sources by cyanobacteria and a commercially available bacterial consortium. *Applied Soil Ecology* 162. <https://doi.org/10.1016/j.apsoil.2021.103900>

Asmamaw, M., G. Wolde, M. Yohannes, S. Yigrem, E. Woldemeskel, A. Chala, and J.G. Davis. 2019. Comparison of cyanobacterial bio-fertilizer with urea on three crops and two soils of Ethiopia. *African Journal of Agricultural Research* 14: 588-596.

- Erwiha, G.M., J. Ham, A. Sukor, A. Wickham, and J.G. Davis. 2020. Organic fertilizer source and application method impact ammonia volatilization. *Communications in Soil Science and Plant Analysis* <https://doi.org/10.1080/00103624.2020.1784919>
- Gebre, E., T. Degefu, E. Wolde-meskel, A. Lelago, and J. Davis. 2017. Response of kale (*Brassica oleracea* L.) crop to cyanobacterial biofertilizer in Ziway area, Ethiopia. *Chemistry and Materials Research* 9 (9) ISSN 2225-0956.
- Gray, J.L., T. Borch, E.T. Furlong, J.G. Davis, T.J. Yager, Y. Yang, and D.W. Kolpin. 2017. Rainfall runoff of anthropogenic waste indicators from agricultural fields applied with municipal biosolids. *Science of the Total Environment* 580: 83-89. <http://dx.doi.org/10.2016/j.scitotenv.2016.03.033>.
- Hurisso, T.T., J.G. Davis, A. Chala, A. Getachew, and E. Wolde-meskel. 2021. Impacts of Grinding and Acidification of Animal Bones with Coffee Wastewater on Plant Dry Matter Yield and Recovery of Phosphorus. *Communications in Soil Science and Plant Analysis*, DOI: 10.1080/00103624.2021.1872603
- Isweiri, H., Y. Qian, and J. Davis. 2021a. Comparison of fresh versus effluent water irrigation on soil chemical properties of golf course greens and fairways. *International Turfgrass Society Research Journal*. DOI: 10.1002/its2.42.
- Isweiri, H., Y. Qian, and J. Davis. 2021b. Interactive effects of waterlogging and salinity on perennial ryegrass and alkaligrass. *International Turfgrass Society Research Journal*. DOI: 10.1002/its2.60
- Mikha, M.M., D.P. Widiastuti, T.T. Hurisso, J.E. Brummer, and J.G. Davis. 2017. Influence of composted dairy manure and perennial forage on soil carbon and nitrogen fractions during transition into organic management. *Agriculture* 7: 37. doi:10.3390/agriculture7050037.
- Sterle, D.G., F. Stonaker, S. Ela, and J.G. Davis. 2021. Cyanobacterial biofertilizer as a supplemental fertilizer for peaches: Yield, trunk growth, leaf nutrients and chlorosis. *Journal of the American Pomological Society* 75(3): 165-175. [http://www.pubhort.org/aps/75/v75\\_n3\\_a5.htm](http://www.pubhort.org/aps/75/v75_n3_a5.htm)
- Wenz, J., J.G. Davis, and H. Storteboom. 2019. Influence of light on endogenous phytohormone concentrations of a nitrogen-fixing *Anabaena* sp. cyanobacterium culture in open raceways for use as fertilizer for horticultural crops. *Journal of Applied Phycology* 31: 3371-3384.
- Widiastuti, D., and J.G. Davis. 2020. Optimization of the nutrient growing solution and inoculation rate for *Azolla mexicana* production and use as fertilizer. *Journal of Plant Nutrition*. DOI: 10.1080/01904167.2020.1849287
- Wolde, G., M. Asmamaw, M.Y. Sido, S. Yigrem, E. Wolde-meskel, A. Chala, H. Storteboom, and J.G. Davis. 2020. Optimizing a cyanobacterial biofertilizer manufacturing system for village-level production in Ethiopia. *Journal of Applied Phycology* <https://doi.org/10.1007/s10811-020-02221-1>
- Yoder N., and J.G. Davis. 2020. Organic fertilizer comparison on growth and nutrient content of three kale cultivars. *HortTechnology* 30: 176-184.

#### Selected Honors and Awards

- 1999, President, Colorado Extension Specialists Association.
- 2000, F.A. Anderson Distinguished Service Award, Colorado State University Cooperative Extension.
- 2004, Agronomic Extension Education Award, American Society of Agronomy.
- 2012, Team Award, Colorado State University Cooperative Extension.
- 2016-2018, President-Elect, President, and Past President, American Society of Agronomy.
- 2020, Who's Who in Agriculture (Denver Business Journal).