

Dorivar A. Ruiz Diaz

Professor

Soil Fertility and Nutrient Management, Dept. of Agronomy
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Education:

- Ph.D. 2007 Soil Fertility, **Iowa State University, Ames, IA**
M.S. 2004 Soil Fertility, **University of Illinois at Urbana- Champaign, IL**
B.S. 2000 Agronomy, **Pan-American School of Agriculture, Zamorano, Honduras**

Professional Experience:

- 2017 - present: Professor, Soil Fertility. Dep. of Agronomy, Kansas State University.
2013 - 2017: Associate Professor, Soil Fertility. Dep. of Agronomy, Kansas State University.
2008 - 2013: Assistant Professor, Soil Fertility. Dep. of Agronomy, Kansas State University.
2007 - 2008: Postdoctoral Research Associate. Dep. of Agronomy, Iowa State University.
2004 - 2007: Graduate Research Assistant. Dep. of Agronomy, Iowa State University.
2002 - 2004: Graduate Research Assistant. Dep. of Natural Resources and Environmental Science, University of Illinois at Urbana-Champaign.
2001 - 2002: Assistant Scientist, Illinois Natural History Survey, University of Illinois at Urbana-Champaign.

National and International Service:

- Chair, Soil Fertility and Plant Nutrition Division, Soil Science Society of America (SSSA) (2017-2019)
- Chair, NCERA 13, Soil Testing and Plant Analysis Regional Committee. 2014-2016.
- Technical Editor for *Agronomy Journal* (2012-2017).
- Associate Editor for *Agronomy Journal* (2009-2011).
- Session Chair: Nutrient Management and Soil and Plant Analysis, S8. ASA-SSSA-CSSA Annual Meeting, 2009, 2010, 2011, 2012, and 2013.
- Nyle C. Brady Frontiers of Soil Science Lectureship Committee. Soil Science Society of America (SSSA). 2011 - 2012.

Awards:

- Excellence in Extension Award. Gamma Sigma Delta. 2015.
- Early Career Professional Award. Soil Science Society of America (SSSA), 2014.
- Extension Education Award. American Society of Agronomy (ASA). 2013.
- Early Career Award of Merit. Gamma Sigma Delta. 2013.
- Outstanding Associate Editor. *Agronomy Journal*. 2012.
- North Central Extension-Industry Soil Fertility Graduate Student Award, 2005
- North Central Branch ASA Outstanding Graduate Student, 2004

Professional Memberships:

- American Society Agronomy (ASA), Soil Science Society of America (SSSA), and Crop Science Society of America (CSSA)
- The International Biometric Society
- Kansas Academy of Science
- Gamma Sigma Delta

Student Advising (since 2008):

- Supervision of graduate degree candidates (major professor): 15 total (PhD: 4, MS: 11)
- Membership on advisory committees: 22 total (MS: 17, PhD: 5)
- Short term internships and visiting scholars: 17 total

Recent Peer Reviewed Publications:

Preston, C.L. D.A. Ruiz Diaz and D.B. Mengel. 2019. Corn response to long-term phosphorus fertilizer application rate and placement with strip-tillage. *Agron. J.* 111:1–10.

Obour, A.K., A.J. Schlegel, R. Perumal., J.D. Holman, and D.A Ruiz Diaz. 2019. Evaluating grain sorghum hybrids for tolerance to iron chlorosis. *J. Plant Nutrition*. DOI: 10.1080/01904167.2018.1549677

Arruda M.J., D.A. Ruiz Diaz, F.D. Hansel, G. Hettiarachchi and P. Pavinato. 2019. Long-term fertilizer placement in a corn-soybean rotation affect soil phosphorus fractions and legacy. *Geoderma*. 18:228

Rosa, A.T., D.A. Ruiz Diaz, F.D. Hansel, V.S.J. Sunoj and P.V.V. Prasad. 2019. Effect of genotypic variation on root growth and nutrient uptake in corn and soybean. *Agrosystems, Geosciences & the Environment*. In press.

Hansel, F.D., D.A. Ruiz Diaz, A.T. Rosa, C.J. Moorberg. 2019. Phosphorus fertilizer placement and rate affect soybean root growth and nutrient uptake under a high fertility soil. *Agronomy Science and Biotechnology*. In Press

Sweeney, D. W., D.A. Ruiz Diaz, and D. J. Jardine. 2018. Nitrogen management and uptake by corn on no-till and ridge-till claypan soil. *Agrosystems, Geosciences & the Environment* 1:180034. doi:10.2134/age2018.09.00

Lollato, R.P., D.A. Ruiz Diaz, E. De Wolf, M. Knapp, D. Peterson and A. Fritz. 2018. Agronomic practices for reducing wheat yield gaps: a quantitative appraisal of progressive producers. *Crop Science* 59:333-350. doi:10.2135/cropsci2018.04.0249

Jaenisch, B.R., A.O. Silva, E. DeWolf, D.A. Ruiz Diaz and R.P. Lollato. 2018. Plant population and fungicide economically reduced winter wheat yield gap in Kansas. *Agron. J.* 111:1–16. doi:10.2134/agronj2018.03.0223

Ferreira, A.O., T.J.C. Amado, C.W. Rice, D.A Ruiz Diaz, C. Briedis, T.M. Inagaki. 2018. Driving factors of soil carbon accumulation in Oxisols in long-term no-till systems of South Brazil. *Science of the Total Environment*. 622:735-742.

- Hansel, F.D., T.J.C. Amado, D.A. Ruiz Diaz, L.H.M. Rosso, F.T. Nicoloso, M. R. W. Schorr. 2017. Phosphorus fertilizer placement and tillage affect soybean root growth and drought tolerance. *Agron. J.* 109:2936-2944
- Preza Fontes, G., P. Tomlinson, K. Roozeboom, and D.A. Ruiz Diaz. 2017. Grain Sorghum Response to Nitrogen Fertilizer Following Cover Crops Planted after Winter Wheat. 2017. *Agron. J.* 109:2723-2737
- Eagle, A.J., L.E. Christianson, R.L. Cook, R.D. Harmel, F.E. Miguez, S.S. Qian, and D.A. Ruiz Diaz. 2017. Meta-analysis Constrained by Data: Recommendations to Improve Relevance of Nutrient Management Research. *Agron. J.* 109:2441-2449
- Hansel, F.D., D.A. Ruiz Diaz, T.C. Amado, L.M. Rosso. 2017. Deep banding increases phosphorus removal by soybean grown under no-tillage production systems. *Agron. J.* 109:1091-1098
- Ferreira, A.O., T. Amado, C.W. Rice, D.A. Ruiz Diaz, C. Keller, T.M. Inagakia, 2016. Can no-till grain production restore soil organic carbon to levels natural grass in a subtropical Oxisol? *Agriculture, Ecosystems & Environment.* 229:13-20.
- Adee E, F. Hansel, D.A. Ruiz Diaz and K. Janssen. 2016. Corn response as affected by planting distance from the center of strip-till fertilized rows. *Front. Plant Sci.* 7:1232-1235.
- Adee, E., D.A. Ruiz Diaz and C. Little. 2016 Effect of soil test and phosphorus fertilization on soybean sudden death syndrome severity. *Crop, Forage and Turfgrass Manag.* doi: 10.2134/cftm2015.0193
- Woli, K.P., D.A. Ruiz Diaz, D.E. Kaiser, A.P. Mallarino, and J.E. Sawyer. 2015. Field-scale evaluation of poultry manure as a combined nutrient resource for corn production. *Agron. J.* 107:1789-1800
- Sweeney, D.W. and D.A. Ruiz Diaz. 2014. Assessing the residual from fertilizer nitrogen applied to failed corn on the following wheat crop. *Crop Management* 13:1-2. doi:10.2134/CM-2014-0005-BR.
- Mueller, N.D., D.A. Ruiz Diaz, J.A. Dille, D. Shoup, D.B. Mengel, and L. Murray. 2013. Winter annual weed management effects on corn nitrogen supply and yield. *Agron. J.* 105:1077-1086.
- Liesch, A.M., D.A. Ruiz Diaz, D.B. Mengel, and K.L. Roozeboom. 2012. Interpreting relationships between soil variables and soybean iron deficiency using factor analysis. *Soil Sci. Soc. Am. J.* 76:1311-1318.
- Ruiz Diaz, D.A., J.E. Sawyer, and D.W. Barker. 2012. Residual poultry manure nitrogen supply to corn the second and third year after application. *Soil Sci. Soc. Am. J.* 76:2289-2296.
- Ruiz Diaz, D.A., D.B. Mengel, R.E. Lamond, S.R. Duncan, D.A. Whitney, and T.M. Maxwell. 2012. Meta-Analysis of Winter Wheat Response to Chloride Fertilization in Kansas. *Commun. Soil Sci. Plant Anal.* 43:1-11.
- Liesch, A.M., D.A. Ruiz Diaz, K.L. Martin, B.L. Olson, D.B. Mengel, and K.L. Roozeboom. 2011. Management Strategies for Increasing Soybean Yield on Soils Susceptible to Iron Deficiency. *Agron. J.* 103:1870-1877.
- Holmes, J.D., J.E. Sawyer, P. Kassel, and D.A. Ruiz Diaz. 2011. Using Ground Eggshells as a Liming Material in Corn and Soybean Production. *Crop Management.* doi:10.1094/CM-2011-1129-01-RS.

- Ruiz Diaz, D.A., J.E. Sawyer, and A.P. Mallarino. 2011. On-farm Evaluation of Poultry Manure as a Nitrogen Source for Corn. *Soil Sci. Soc. Am. J.* 75:729-737.
- Ruiz Diaz, D.A., R.G. Darmody, J.C. Marlin, G.A. Bollero, and F.W. Simmons. 2010. Trace Metal Bioaccumulation and Plant Growth on Dredged River Sediments and Biosolids Mixtures. *Water Air Soil Pollut.* 206:321-333.
- Sawyer J.E., P. Pedersen, D.W. Barker, D.A. Ruiz Diaz, and K.A. Albrecht. 2010. Intercropping Corn and Kura Clover: Response to Nitrogen Fertilization. *Agron. J.* 102:568-574.
- Ruiz Diaz, D.A., J.E. Sawyer, D.W. Barker, and A.P. Mallarino. 2010. Runoff Nitrogen Loss with Simulated Rainfall Immediately Following Poultry Manure Application for Corn Production. *Soil Sci. Soc. Am. J.* 74:221-230.
- Ruiz Diaz, D.A., P. Pedersen, and J.E. Sawyer. 2009. Soybean Response to Inoculation and Nitrogen Application Following Long-Term Grass Pasture. *Crop Sci.* 49: 1058-1062.
- Ruiz Diaz, D.A. and J.E. Sawyer. 2008. Plant-Available Nitrogen from Poultry Manure as Affected by Time of Application. *Agron. J.* 100:1318-1326.
- Ruiz Diaz, D.A., J.E. Sawyer, and A.P. Mallarino. 2008. Poultry Manure Supply of Potentially Available Nitrogen with Soil Incubation. *Agron. J.* 100:1310-1317.
- Ruiz Diaz, D.A., J.A. Hawkins, J.E. Sawyer, and J.P. Lundvall. 2008. Evaluation of In-Season Nitrogen Management Strategies for Corn Production. *Agron. J.* 100: 1711–1719.

Selected Extension Publications:

- Ruiz Diaz, D.A. 2012. Nutrient Management for Efficient Water Use. Cooperative Extension Service, Kansas State University, Manhattan, KS. MF3066
- Roozeboom, K.L., D.A. Ruiz Diaz, D. Jardine, C. Thompson, and R. J. Whitworth. 2012. Kansas Sorghum Management 2012. Cooperative Extension Service, Kansas State University, Manhattan, KS. MF3046.
- Ruiz Diaz, D.A., K.L. Martin, and D.B. Mengel. 2011. Diagnosis of Nutrient Deficiencies in the Field. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-3028.
- Ruiz Diaz, D.A., D.B. Mengel, and K.L. Martin. 2011. Phosphorus Facts: Soil, Plant, and Fertilizer. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. C-665.
- Roozeboom, K.L., D.A. Ruiz Diaz, D.J. Jardine, R.J. Whitworth, and C.R. Thompson. 2011. Diagnosing Corn Production Problems in Kansas. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. S-54.
- Tomlinson, P. J. Roe, D. Devlin, J. DeRouchey, J. Leatherman, N. Nelson, A. Sheshukov, C. Rice, D. Ruiz Diaz, P. Barnes. 2015. Water Quality Best Management Practices, Effectiveness, and Cost for Reducing Contaminant Losses from Cropland. Cooperative Extension Service, Kansas State University, Manhattan, MF2572.
- Ciampitti, I.A., D.A. Ruiz Diaz, D. Jardine, C. Thompson, and R. J. Whitworth. 2015. Kansas sorghum management 2015. Cooperative Extension Service, Kansas State University, Manhattan, KS. MF3046.

Ciampitti, I.A., D.A. Ruiz Diaz, D. Jardine, D. Peterson, and R. J. Whitworth. 2015. Kansas soybean management. Cooperative Extension Service, Kansas State University, Manhattan, KS. MF3152.

Summary of publications since 2008:

- Extension circulars and newsletter articles: 181
- Abstracts: 32
- Conference proceedings: 48