

Johanna A. (Anita) Dille

Kansas State University
Department of Agronomy
3701 Throckmorton Plant Sciences Center
Manhattan KS 66506-5501

Office: 785-532-7240
FAX: 785-532-6094
e-mail: Dieleman@ksu.edu

Professional Experience

Professor. Weed Ecology. July 2012 to present, 50% Research / 50% Teaching appointment, Department of Agronomy, Kansas State University, Manhattan, KS.

Associate Professor. Weed Ecology. July 2005 to June 2012.

Assistant Professor. Weed Ecology. November 1999 to June 2005.

WeedSOFT Regional Project Coordinator. September 1999 to November 1999. Department of Agronomy, University of Nebraska, Lincoln, NE.

Post Doctoral Research Associate. November 1998 to August 1999. Department of Agronomy, University of Nebraska, Lincoln, NE.

Education

University of Nebraska, Lincoln, Nebraska; Ph.D., 1998, Department of Agronomy.

University of Guelph, Guelph, Ontario, Canada; M.Sc., 1994, Department of Crop Science.

University of Guelph, Guelph, Ontario, Canada; B.Sc.(Agr.), 1991, Department of Crop Science.

Research Experience

Graduate Research Assistant. August 1994 to October 1998. Department of Agronomy, University of Nebraska, Lincoln, NE. Ph.D. dissertation research and teaching.

Graduate Research Assistant. April 1992 to July 1994. Department of Crop Science, University of Guelph, Guelph, ON, Canada N1G 2W1. Master of Science thesis research and teaching.

Teaching Experience

“Weed Science, Agronomy 330”, Dept. of Agronomy, Kansas State University. Undergraduate basic weed science course offered each semester from Spring 2000 – Fall 2003, Fall only 2004-2014.

“Integrated Weed Management, Agronomy 650”, Dept. of Agronomy, Kansas State University. Undergraduate/graduate course taught each Spring 2004 to 2014.

“Agronomy Capstone Experience, Agronomy 602”, Dept. of Agronomy, Kansas State University, Senior undergraduate issues discussion course taught Spring 2012 to 2014.

“Advanced Weed Ecology, Agronomy 824”, Dept. of Agronomy, Kansas State University. Graduate weed ecology course taught in Spring 2001, Spring 2003, Fall 2005, Spring 2008, Fall 2010, 2011, 2013.

“Agronomy Learning Farm Experience, Agronomy 600C”, Dept. of Agronomy, Kansas State University. Senior undergraduate course taught Spring 2010.

“Natural Resources and Environmental Sciences Capstone, GENAG 598”, College of Agriculture, Kansas State University. Senior capstone experience co-taught Fall 2009.

Honors and Awards Received

WSSA-Outstanding Paper in Weed Science, co-author, Wortman et al. 2012, Weed Sci 60:440-450 (2014)

North Central Weed Science Society Distinguished Education Award (2011)

Gamma Sigma Delta, Outstanding Teaching Award, K-State Chapter (2011)

Commerce Bank Outstanding Undergraduate Teaching Award, Kansas State University (2011)

NACTA (North American Colleges and Teachers of Agriculture) Teacher Fellow (2010)

Class of LEAD21 (Leadership for the 21st Century) (2010-2011)

Mentoring Award – ASA-CSSA-SSSA Committee on Women in Agronomy, Crops, Soils, and Environmental Sciences (2009)

North Central Weed Science Society Distinguished Young Scientist Achievement Award (2008)

Gamma Sigma Delta, Outstanding Advising Award, K-State Chapter (2008)

College of Agriculture Faculty of the Semester Award, K-State (Fall 2005)

Gamma Sigma Delta, Early Career Award of Merit, K-State Chapter (2003)

Sigma Xi, Outstanding Junior Scientist Award, K-State Chapter (2003)

Weed Science Society of America Outstanding Graduate Student (1999)

Nebraska Alumni Association Outstanding Graduate Research Assistant (1998)

Professional Membership

Association for Women in Science

Gamma Sigma Delta, ETA chapter, Kansas State University – Secretary 2005-2007; Vice-President, President, Past-President, 2008-2011.

Kansas Academy of Science

NACTA – North American Colleges and Teachers of Agriculture

North Central Weed Science Society, Western Society of Weed Science

Sigma Xi, Kansas State University

Weed Science Society of America

Grants Received

Women and Minorities in Science, Technology, Engineering, and Mathematics (WAMS), USDA-NIFA. Oct. 1, 2011-Sept. 31, 2013. “Transfer Student BRIDGE – Bridging Relationships to Internships and Diverse Group Experiences”. **J.A. Dille** and Z.Z. Wiley. Kansas State University, \$113,915.

Agriculture and Food Research Initiative, USDA-NIFA, Foundational Program A1131 Controlling Weedy and Invasive Plants. Jan. 1, 2012-Dec. 31, 2015. “Evolution, Spread, and Mechanisms of Glyphosate Resistance in Kochia.” P. Westra, S. Chisholm, P.W. Stahlman, and **J.A. Dille**. Colorado State University \$500,000 (subcontract with Kansas State University, \$200,000).

Kansas Grain Sorghum Commission. Oct. 1, 2011-Sept. 30, 2013. “Dynamics of nitrogen rate and form, annual weeds, and soil-applied herbicides.” **J.A. Dille** and C.L. Thompson. Kansas State University, \$10,000.

North Central Integrated Pest Management Program, USDA-CSREES. June 13, 2007-June 14, 2009. “Decision matrix for weed management: cover crops, Palmer amaranth density, water, and nitrogen.” **J.A. Dille**, J.D. Holman, K.L. Roozeboom, N.L. Klocke, and A. Schlegel. Kansas State University, \$157,735.

Johanna A. Dille - Publications

Referred Publications (since 2009)

- Clay, S., A.S. Davis, **J.A. Dille**, J.L. Lindquist, A.H.M. Ramirez, C. Sprague, G. Reicks, and F. Forcella. 2014. Common sunflower seedling emergence across the US Midwest. *Weed Sci.* 62:63-70.
- Lou, Y., S.A. Clay, A.S. Davis, **A. Dille**, J. Felix, A.H.M. Ramirez, C.L. Sprague, and A.C. Yannarell. 2014. An affinity-effect relationship for microbial communities in plant-soil feedback loops. *Microbial Ecology* online: doi: 10.1007/s00248-013-0349-2.
- Mueller, N.D., D.A. Ruiz Diaz, **J.A. Dille**, D.E. Shoup, D.B. Mengel, and L.W. Murray. 2013. Winter annual weed management and nitrogen rate effects on corn yield. *Agron. J.* 104:1077-1086 (doi:10.2134/agronj2012.0344).
- Godar, A.S., P.W. Stahlman, and **J.A. Dille**. 2013. Efficacy of tribenuron alone and following preemergence herbicides in tribenuron-resistant sunflower. Online. *Crop Management* doi:10.1094/CM-2013-0621-01-RS.
- Davis, A.S., S. Clay, J. Cardina, **A. Dille**, F. Forcella, J. Lindquist, and C. Sprague. 2013. Seed burial physical environment explains departures from regional hydrothermal model of giant ragweed (*Ambrosia trifida*) seedling emergence in U.S. Midwest. *Weed Science* 61:415-421.
- Ruf-Pachta, E.K., D.M. Rule, and **J.A. Dille**. 2013. Corn and Palmer amaranth (*Amaranthus palmeri*) interactions with nitrogen in dryland and irrigated environments. *Weed Science* 61:249-258. AES#11-385-J.
- Wortman, S.E., A.S. Davis, B.J. Schutte, J.L. Lindquist, J. Cardina, J. Felix, C.L. Sprague, **J.A. Dille**, A.H.M. Ramirez, G. Reicks, and S.A. Clay. 2012. Local conditions, not regional gradients, drive demographic variation of giant ragweed (*Ambrosia trifida*) and common sunflower (*Helianthus annuus*) across northern US maize belt. *Weed Science* 60:440-450.
- Godar, A.S., P.W. Stahlman, and **J.A. Dille**. 2011. Single and sequential applications of tribenuron on broadleaf weed control and crop response in tribenuron-resistant sunflower. *Weed Technology* 25:391-397.
- Jeschke, M.R., D.E. Stoltenberg, G.O. Kegode, **J.A. Dille**, and G.A. Johnson. 2009. Weed community emergence time affects accuracy of predicted corn yield loss by WeedSOFT. *Weed Technology* 23:477-485.

GRADUATE STUDENT THESES / DISSERTATIONS

Major Professor:

Master of Science (8)

- Blinka, E.L. 2004. Growth analysis of shattercane (*Sorghum bicolor*), common sunflower (*Helianthus annuus*), Palmer amaranth (*Amaranthus palmeri*), and corn (*Zea mays*).
- Deines, S.R. 2002. Shattercane (*Sorghum bicolor* (L.) Moench) and common sunflower (*Helianthus annuus* L.) interference in corn (*Zea mays* L.) and light level influence on their relative competitiveness.
- Petrosino, J.S. 2010. Response of weeds to the intensification of Kansas crop rotations with cover cropping.
- Riffel, J.D. 2012. Yield response and economic impact of variable-rate nitrogen applications in grain sorghum.
- Ruf, E.K. 2007. Corn and weed interactions with nitrogen in dryland and irrigated environments.
- Schirmacher, K. 2004. Interference of eight annual weeds in corn (*Zea mays* L.) and soybean (*Glycine max* (L.) Merr.) in Kansas.
- Unruh, B.J. 2012. Influence of nitrogen on weed growth and competition with grain sorghum.

- Vogel, J.W. 2005. Implementing site-specific weed management in Kansas row crops.

Doctor of Philosophy (6)

- Liphadzi, K.B. 2004. Weed competitiveness and soil health response to weed management practices.
- Ndou, A.M. 2009. Interaction of weed emergence, weed density, and herbicide rate in soybean.
- Ramierz, A.H.M. 2010. Dynamics of giant ragweed and common sunflower in Kansas: distribution, plant-soil feedback, and demography.
- Refsell, D.E. 2013. Integrated weed management in Kansas winter wheat.
- Rule, D.M. 2007. Corn and Palmer amaranth interactions in dryland and irrigated environments.
- Schuster, C.L. 2007. Weed science education and research: the Agronomy Learning Farm and mesotrione and sulfonylurea herbicide interactions.

BOOK CHAPTERS & ENCYCLOPEDIA ENTRIES

- Dille, J.A.** 2014. Plant morphology and critical period of weed control. Chapter 4 In: Automation: The Future of Weed control in Cropping Systems. (S.L. Young and F.J. Pierce, eds.) Springer Science+Business Media Dordrecht.
- Dille, J.A., J.W. Vogel, T.W. Rider, and R.E. Wolf.** 2011. Creating and using weed maps for site-specific management. Chapter 17 In: GIS Applications in Agriculture, Volume Three: Invasive Species. (S.A. Clay, ed.) CRC Press, Boca Raton, FL. (available Feb. 2011)

Abstracts

- DeGreeff, R., A.S. Godar, **A. Dille**, D.E. Peterson, and J. Mithila. 2013. Differential response of lambsquarters from Kansas to glyphosate. Proc. NCWSS Abstr. 68:56 (Dec. 2013).
- Dille, A., P. Stahlman, P. Geier, R. Currie, R. Wilson, G. Sbatella, A.R. Kniss, and P. Westra.** 2013. Field persistence of kochia seed in the central Great Plains. Proc. WSSA Abstr. 53:87 (Feb. 2013).
- Esser A.R. and **J.A. Dille.** 2013. Kochia seed characteristics under different crop canopies. Proc. NCWSS Abstr. 68:113 (Dec. 2013).
- Godar, A.S., P.W. Stahlman, M. Jugulam, and **A. Dille.** Kochia populations response to glyphosate and EPSPS gene copy number. Proc. NCWSS Abstr. 68:134 (Dec. 2013).
- Mithila, J., A.S. Godar, R.S. Currie, **A. Dille**, C.R. Thompson, and P.W. Stahlman. 2013. Multiple herbicide-resistant kochia from Kansas. Proc. NCWSS Abstr. 68:58 (Dec. 2013).
- Putman, J.A., D. Peterson, and **A. Dille.** 2013. Palmer amaranth control in established alfalfa under dryland and irrigated conditions. Proc. WSSA Abstr. 53:124 (Feb. 2013).
- Clay, S.A., F. Forcella, A. Davis, C. Sprague, **J. Dille**, G. Reicks, A. Ramirez, and E. Taylor. 2012. Giant ragweed emergence across the Midwestern United States. Proc. ASA-CSSA-SSSA Abstr. 200-5 (Oct. 2012).
- Dille, J.A.** and A.H. Ramirez. 2012. Common sunflower and giant ragweed emergence profiles in Kansas. Proc. North Central Weed Sci. Soc. Abstr. 67:80 (Dec. 2012).
- Dille, J.A., P.W. Stahlman, P.W. Geier, J.D. Riffel, R.S. Currie, R.G. Wilson, G.M. Sbatella, P. Westra, A.R. Kniss, M.J. Moechnig, and R.M. Cole.** 2012. Kochia emergence profiles across the central Great Plains. Proc. Weed Sci. Soc. Am. Abstr. 52:122 (Feb. 2012).
- Esser, A. and **J.A. Dille,** 2012. Crop canopy effects on *Kochia scoparia* in Kansas. Proc. North Central Weed Sci. Soc. Abstr. 67:74 (Dec. 2012).
- Godar, A.S., P.W. Stahlman, and **J.A. Dille.** 2012. Kochia in western KS: Prevalence, post-wheat harvest management, and glyphosate resistance. Proc. Western Soc. Weed Sci. Abstr. 65:48 (March 2012).

- Godar, A.S., P.W. Stahlman, and **J.A. Dille**. 2012. Kochia distribution and management practices following wheat harvest in Kansas. Proc. Weed Sci. Soc. Am. Abstr. 52:23 (Feb. 2012).
- Godar, A.S., P.W. Stahlman, **J.A. Dille**, and P. Westra. 2012. Widespread presence of glyphosate-resistant kochia in Kansas. Proc. Weed Sci. Soc. Am. Abstr. 52:418 (Feb. 2012)
- Godar, A.S., P.W. Stahlman, **J.A. Dille**, and P. Westra. 2012. Glyphosate resistance in several kochia populations in Kansas. Proc. Western Soc. Weed Sci. Abstr. 65:165 (March 2012)
- Refsell, D. and **J.A. Dille**. 2012. Differential root and shoot uptake of flumioxazin and pyroxasulfone in three plant species. Proc. North Central Weed Sci. Soc. Abstr 67:130 (Dec. 2012).
- Refsell, D., **J.A. Dille**, D. Peterson, P.W. Stahlman, and J. Pawlak. 2012. Flumioxazin's fit in Kansas winter wheat. Proc. Weed Sci. Soc. Am. Abstr. 52:24 (Feb. 2012).
- Wortman, S.E., A.S. Davis, B. Schutte, J.L. Lindquist, J. Cardina, J. Felix, C.L. Sprague, **J.A. Dille**, A.H.M. Ramirez, G. Reicks and S.A. Clay. Local conditions, not spatial gradients, drive demographic variation of *Ambrosia trifida* and *Helianthus annuus* across northern US maize belt. Proc. Weed Sci. Soc. Am. Abstr 52:121 (Feb. 2012).
- Ramirez, A.H.M., **J.A. Dille**, S.A. Clay, A.S. Davis, J. Felix, F. Menalled, R. Smith, and C.L. Sprague. 2011. Contributions of plant soil feedback in giant ragweed invasion. Proc. North Central Weed Sci. Soc. Abstr. 66:161 (Dec. 2011).
- Stahlman, P.W., P.W. Geier, **J.A. Dille**, T.W. Rider, J.D. Riffel, R.S. Currie, P. Westra, R.G. Wilson, G.M. Sbatella, A.R. Kniss, and R.M. Cole. 2011. Seasonal emergence of kochia in the central Great Plains. Proc. Western Soc. Weed Sci. Abstr. 64:123 (March 2011).
- Wortman, S.E., A.S. Davis, B.J. Schutte, J.L. Lindquist, J. Cardina, J. Felix, C.L. Sprague, **J.A. Dille**, A.H.M. Ramirez, and S.A. Clay. 2011. Regional scale variation in giant ragweed and common sunflower demography. Proc. North Central Weed Sci. Soc. Abstr. 66:49 (Dec. 2011).