

Robert M. Aiken

Associate Professor and Research Crop Scientist
Kansas State University, Northwest Research-Extension Center
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Education

1992 Ph.D. Soil Biophysics. Michigan State University.
1988 M.S. Agronomy. University of Nebraska. Minor: Water Resources Planning and Management.
1977 B.S. Botany. University of Nebraska. Minors: Chemistry, Geography, Economics.

Professional and Academic Appointments Experience

1998 to present: Research Crop Scientist, Northwest Research-Extension Center, Kansas State University.
1995 to 1998: Post-Doctoral Soil Scientist, USDA/ARS Central Great Plains Research Station, Akron, CO.
1992 to 1995: Post-Doctoral Soil Scientist, USDA/ARS Great Plains Systems Research Unit, Fort Collins, CO.
1989 to 1992: USDA Water Science Fellow, Department of Crop and Soil Sciences, Michigan State University.

Selected Professional Advisory/Consultation Activities

USDA Sunflower Crop Germplasm Committee, 2001 to 2015
North Central Regional Committee 1200 Regulation of Photosynthesis, 2004 to present
Central High Plains Working Group, 1997 to present
Team member: US-China Scientific Cooperative Exchange Program 2017: Adjusting Agricultural Practices in Response to Environmental Change—Climate Resilient Agriculture
Member American Society of Agronomy
Crop Science Society of America
Soil Science Society of America

Current Responsibilities

Direct field research with goal of managing crop systems to avoid, mitigate or improve crop tolerance to stress induced by water deficits, chilling or heat in intensive semi-arid cropping systems.

Publications

Refereed Journal Articles

1. Stamm, Michael, Robert Aiken, Sangu Angadi, John Damicone, Scott Dooley, Johnathon Holman, Jerry Johnson, Emi Kimura, Kevin Larson, Josh Lofton, and Dipak Santra. 2021. Registration of 'KS4719' winter canola. *Journal of Plant Registrations / Early View* <https://doi.org/10.1002/plr2.20177>.
2. Nyine, Moses, Elina Adhikari, Marshall Clinesmith, Robert Aiken, Bliss Betzen, Wei Wang, Dwight Davidson, Zitong Yu, Yuanwen Guo, Fei He, Alina Akhunova, Katherine W. Jordan, Allan K. Fritz and Eduard Akhunov. 2021. The haplotype-based analysis of *Aegilops tauschii* introgression into hard red winter wheat and its impact on productivity traits. *Frontiers in Plant Science. Plant Breeding*.
3. Anandhi, A., K. Mankin-Douglas, Srivapu, R. Aiken, Senay, Leung, I. Chaubey, 2020. DPSIR-ESA Vulnerability Assessment (DEVA) Framework: Synthesis, Foundational Overview, and Expert Case Studies. *Transactions of the ASABE*. (doi: 10.13031/trans.13516) @2020

4. Paudyal, S., J.S. Armstrong, K.L. Giles, W. Hobak, R. Aiken and M.E. Payton. 2020. Differential Responses of Sorghum Genotypes to Sugarcane Aphid Feeding. *Planta* 252, 14. <https://doi.org/10.1007/s00425-020-03419-w>.
5. Kutikoff, Seth, Xiaomao Lin, Steven R. Evett, Prasanna Gowda, David Brauer, Jed Moorhead, Gary Marek, Paul Colaizzi, Robert Aiken, Liukang Xu and Clenton Owensby. 2020. Water vapor density and turbulent fluxes from three generations of infrared gas analyzers. *Atmos. Meas. Tech.*
6. Dhungel, R., R. Aiken, S.R. Evett, P.D. Colaizzi, G. Marek, J.E. Moorhead, R. Louis Baumhardt, D. Brauer, S. Kutikoff and X. Lin. 2020. Energy imbalance and evapotranspiration hysteresis under an advective environment: Evidence from lysimeter, eddy covariance, and energy balance modeling. *Geophysical Research Letters* DOI: 10.1029/2020GL091203.
7. Dhungel, R., R. Aiken, X. Lin, S. Kenyon, P. Colaizzi, R. Luhman, R.L. Baumhardt, D. O'Brien, S. Kutikoff, D. Brauer. 2019. Restricted water allocations: Landscape-scale energy balance simulations and adjustments in agricultural water applications. *Agric. Water Mngt.*
8. Dhungel, R., R. Aiken, P.D. Colaizzi, X. Lin, R.L. Baumhardt, S.R. Evett, D.K. Brauer, G.W. Marek and D. O'Brien. 2019. Increased bias in evapotranspiration modeling due to weather and vegetation indices data sources. *Agron J.* 2019.
9. Dhungel, R., R.M. Aiken, P.D. Colaizzi, X. Lin, D. O'Brien, R.L. Baumhardt, D. Brauer, G. Marek. 2019. Evaluation of the uncalibrated energy balance model (BAITSSS) for estimating evapotranspiration in a semiarid, advective climate. *Hydrol. Process.*
10. Perumal, R., T. Tesso, C. Little, P.V.V. Prasad, T. Herald, S. Bean, J.D. Wilson and R.M. Aiken. 2018. Registration of Six Grain Sorghum Pollinator (R) Lines. *J. Plant Registrations*. In Press.
11. Lamm, F. R., D. H. Rogers, A. J. Schlegel, X. Lin, R. M. Aiken, N. L. Klocke, L. R. Stone, and L. K. Shaw. 2017. Trends in plant available soil water on producer fields of western Kansas. *Applied Engineering in Agric.* 33(6):859-868.
12. Moberly, J.T., R.M. Aiken, X. Lin, A.J. Schlegel, R. L. Baumhardt and R.C. Schwartz. Crop water production functions of Grain Sorghum and Winter Wheat in Kansas and Texas. *J. of Contemporary Water Resource Research and Education.* 162:42-60.
13. Prasifka, J.R., J.D. Bradshaw, and R.M. Aiken. 2017. Reassessment of resistance to sunflower stem weevil, *Cylindrocopturus adspersus* LeConte (Coleoptera: Curculionidae), in Cultivated sunflower germplasm. *J. of the Kansas Ent. Soc.* 90(3):204-210.
14. Yang, H.S., P. Grassini, K.G. Cassman, R.M. Aiken and P.I. Coyne. 2017. Improvements to the Hybrid-Maize model for simulating maize yields in harsh rainfed environments. *Field Crops Research* 204:180-190.
15. Lin, X., R.A. Pielke Sr., R. Mahmood, C.A. Fiebrich and R. Aiken. 2016. Observational evidence of temperature trends at two levels in the surface layer. *Atmos. Chem. Phys.* 16:827-841. Doi:10.5194/acp-16-827-2016.
16. Aiken, R., D. Baltensperger, J. Krall, A. Pavlista and J. Johnson. 2015. Planting methods affect emergence, flowering and yield of spring oilseed crops in the U.S. central High Plains. *Industrial Crops and Products.* 69:273-277.
17. Perumal, R., T. Tesso, K. D. Kofoid, P.V.V. Prasad, R.M. Aiken, S.R. Bean, J.D. Wilson, T. J. Herald, and C.R. Little. 2015. Registration of Nine Grain Sorghum Seed Parent (A/B) Lines. *Journal of Plant Registration*. doi:10.3198/jpr2014.09.0068crp

18. Zhang, G., R. Aiken, T.J. Martin. 2015. Relationship between Carbon Isotope Discrimination and Grain Yield of Rainfed Winter Wheat in a Semi-arid Region. *Euphytica* 204:39-48 DOI 10.1007/s10681-014-1335-6
19. Prasifka, J.R., J. F. Campbell, R.M. Aiken and J.D. Bradshaw. 2014. Methods for assessing infestations of sunflower stem weevil, *Cylindrocopturus adspersus* LeConte (Coleoptera: Curculionidae), in sunflower stems. *The Canadian Entomologist*. 146:465-469.
20. Narayanan, S., R.M. Aiken, P.V.V. Prasad, Z. Xin, G. Paul and J. Yu. 2014. A Simple Quantitative Model to Predict Leaf Area Index in Sorghum. *Agron. J.* 106:219-226.
21. Paul, G., Gowda, P.H., Vara Prasad, P.V., Howell, T.A., Aiken, R.M., Neale, C.M.U., 2014. Investigating the influence of roughness length for heat transport (Z_{oh}) on the performance of SEBAL in semi-arid irrigated and dryland agricultural systems. *Journal of Hydrology*, 509:231-244. <http://dx.doi.org/10.1016/j.jhydrol.2013.11.040>.
22. Kapanigowda, M.H., R. Perumal, M. Djanaguiraman, R. M. Aiken, T. Tesso, P.V.V. Prasad, C.R. Little. 2013. Genotypic variation in sorghum [*Sorghum bicolor* (L.) Moench] exotic germplasm collections for drought and disease tolerance. *SpringerPlus* 2:650.
23. Kapanigowda, M.H., R. Perumal, R.M. Aiken, T.J. Herald, S.R. Bean, and C.R. Little. 2013. Analyses of sorghum [*Sorghum bicolor* (L.) Moench] lines and hybrids in response to early-season planting and cool conditions. *Can. J. Plant Sci.* (2013) 93: 773_784
24. Todd, R.W., N.A. Cole, H.M. Waldrip, and R.M. Aiken. 2013. Arrhenius Equation for Modeling Feedyard Ammonia Emissions Using Temperature and Diet Crude Protein. *J.E.Q.* 42:666-671.
25. Aiken, R.M., D.M. O'Brien, B.L. Olson and L. Murray. 2013. Replacing Fallow with Continuous Cropping Reduces Crop Water Productivity of Semiarid Wheat. *Agron. J.* 105:199-207.
26. Narayanan, S., R.M. Aiken, P.V.V. Prasad, Z. Xin and J. Yu. 2013. Water and Radiation Use Efficiencies in Sorghum. *Agron. J.* 105:649-656.
27. Aiken, R.M. and N.L. Klocke. 2012. Inferring transpiration control from sap flow heat gauges and the Penman-Monteith equation. *Transactions of the ASABE*. 55(2):543-549.
28. Pavlista, A.D., D.K. Santra, T.A. Isbell, D.D. Baltensperger, G.W. Hergert, J. Krall, A. Mesbach, J. Johnson, M. O'Neil, R. Aiken, A. Berrada. 2011. Adaptability of irrigated spring canola oil production to the US High Plains. *Industrial Crops and Products* 33 (2011) 165–169.
29. Lyon, D.J., A.D. Pavlista, G.W. Hergert, R.N. Klein, C.A. Shapiro, S. Knezevic, S.C. Mason, L.A. Nelson, D.D. Baltensperger, R.W. Elmore, M.F. Vigil, A.J. Schlegel, B.L. Olson and R.M. Aiken. 2009. Skip-Row Planting Patterns Stabilize Corn Grain Yields in the Central Great Plains. Online. *Crop Management* doi:10.1094/CM-2009-0224-02-RS.
30. Coyne, P. I., R. M. Aiken, S. J. Maas and F. R. Lamm. 2009. Evaluating YieldTracker yield forecasts for corn in western Kansas. *Agron. J.* 101:671-680
31. Lamm, F. R., R. M. Aiken, and A. A. Abou Kheira. 2009. Corn yield and water use characteristics as affected by tillage, plant density and irrigation. *Transaction of the ASABE*. 52(1): 133-143.
32. Klocke, N.L., R. S. Currie, R. M. Aiken. 2009. Soil Water Evaporation and Crop Residues. *Trans. ASABE*. 52(1): 103-110.
33. Xin, Z., R.M. Aiken and J. Burke. 2009. Genetic Diversity of Transpiration Efficiency in Sorghum. *Field Crops Research* 111:74-80.

34. Charlet, L. R.M. Aiken, J. Miller and G. Seiler. 2008. Resistance Among Cultivated Sunflower Germplasm to Stem-Infesting Pests in the Central Great Plains. *Journal of Economic Entomology*. 102:1281-1290.
35. Charlet, L.D., R.M. Aiken, G.J. Seiler, A. Chirumamilla, B.S. Hulke, and J.J. Knodel. Resistance in Cultivated Sunflower Resistance to the Sunflower Moth (Lepidoptera: Pyralidae). 2008. *Journal of Agricultural & Urban Entomology*. 25(4):245-257
36. Charlet, L.D., R.M. Aiken, R.F. Meyer and A. Gebre-Amlak. 2007. Impact of Irrigation on Larval Density of Stem-Infesting Pests of Cultivated Sunflower in Kansas. *J. Econ. Entomol.* 100(5):1555-1559.
37. Charlet, L.D., R.M. Aiken, R.F. Meyer and A. Gebre-Amlak. 2007. Impact of Combining Planting Date and Chemical Control to Reduce Larval Densities of Stem-Infesting Pests of Sunflower in the Central Plains. *J. Econ. Entomol.* 100(4):1248-1257.
38. Kozak, J.A., R. Aiken, G. Flerchinger, D. Nielsen, L. Ma and L. Ahuja. Comparison of Modeling Approaches to Quantify Residue Architecture Effects on Soil Temperature and Water. *Soil and Tillage Research* 95:84-96.
39. Stone, L.R., A.J. Schlegel, A.H. Khan, N.L. Klocke and R.M. Aiken. 2006. Water supply: yield relationships developed for study of water management. *J. Nat. Resour. Life Sci. Educ.* 35:161-173. <http://www.JNRLSE.org>
40. Charlet, L.D. and R.M. Aiken. 2005. Impact of planting date on sunflower stem weevil (Coleoptera: Curculionidae) larval density and parasitism in oilseed and confection sunflower in western Kansas. *Crop Management*.
41. Aiken, R.M. 2005. Applying thermal time scales to sunflower development. *Agron. J. Agron. J.* 97:746-754
42. Aiken, R.M., D.C. Nielsen, and L.R. Ahuja. 2003. Scaling effects of standing crop residues on the wind profile. *Agron. J.* 95:1041-1046
43. Flerchinger, G.N., T.J. Sauer and R.M. Aiken. 2003. Effects of crop residue cover and architecture on heat and water transfer at the soil surface. *Geoderma*. 1997:1-17.
44. McMaster, G.S., R.M. Aiken, and D.C. Nielsen. 2000. Optimizing wheat harvest cutting height for harvest efficiency and soil and water conservation. *Agron. J.* 92:1104-1108.
45. Bowman, R.A., D.C. Nielsen, M.F. Vigil, and R.M. Aiken. 2000. Effects of sunflower on soil quality indicators and subsequent wheat yield. *Soil Science*. 516-522.
46. Flerchinger, G.N., R.M. Aiken, K.W. Rojas, and L.R. Ahuja. 2000. Development of the Root Zone Water Quality Model (RZWQM) for Over-Winter Conditions. *Trans. ASAE* 43(1):59-68.
47. Anderson, R.L., R.A. Bowman, D.C. Nielsen, M.F. Vigil, R.M. Aiken, and J.G. Benjamin. 1999. Alternative crop rotations for the central Great Plains. *J. Prod. Agric.* 12:95-99.
48. Nielsen, D.C., R.L. Anderson, R.A. Bowman, R.M. Aiken, M.F. Vigil and J.G. Benjamin. 1999. Winter wheat and proso millet yield reduction due to sunflower in rotation. *J. Prod. Agric.* 12:193-197.
49. Nielsen, D.C. and R.M. Aiken. 1998. Wind speed above and within sunflower stalks varying in height and population. *J. Soil and Water Cons.* 53:347-352.
50. Aiken, R.M., G.N., Flerchinger, H.J. Farahani, and K.E. Johnsen. 1997. Energy Balance Simulation for Surface Soil and Residue Temperatures with Incomplete Cover. *Agron. J.* 89:404-415.

51. Aiken, R.M. and A.J.M. Smucker. 1996. Root System Regulation of Whole Plant Growth. Annual Review of Phytopathology. 34:325-46.
52. Jawson, M.D., D.K. Galusha, A.J. Franzluebbers, and R.M. Aiken. 1993. Soil Fumigation within Monoculture and Rotations: Response of Corn and Mycorrhizae. Agronomy Journal. 85:1174-1180.
53. Smucker, A.J.M. and R.M. Aiken. 1992. Dynamic Root Responses to Water Deficits. Soil Science 154: 281-289.
54. Aiken, R.M., M.D. Jawson, K. Grahammer, and A.D. Polymenopoulos. 1991. Positional, Spatially Correlated and Random Components of Variability in Carbon Dioxide Efflux. J. of Environ. Qual. 20:301-308.

Book Chapters

1. Flerchinger, G.N., R.M. Aiken, K.W. Rojas, L.R. Ahuja, K. Johnsen, and C.V. Alonso. 1998. Soil Heat Transport, Soil Freezing and Snowpack Conditions. *In* Root Zone Water Quality Model—Modeling management effects on water quality and crop production. Water Resources Publications. pp. 281-314.

Proceedings, International Conferences

1. Aiken, R.M., X. Lin and Z. Zambreski. 2017. Winter wheat yield responses to climate variation in the U.S. Central Great Plains. ASABE Meeting Paper 1701661. Invited. DOI: <https://doi.org/10.13031/aim.201701661> Invited.
2. Aiken, R.M., X. Lin and J. Moberly. 2016. Assessing drought impacts on semi-arid cropping systems: Field evidence and crop water production functions. ASABE NRES-26: Vulnerability assessment of land resources for sustainable development. Invited.
3. G. Paul, P. Gowda, V. Prasad, T. Howell, R. Aiken, S. Hutchinson. 2013. Role of hot and cold pixel concept in remote sensing based single source surface energy balance algorithms. Seventh International Conference on Irrigation and Drainage, 103-117. U.S. Committee on Irrigation and Drainage
4. Xin, Z., M.L. Wang, R. Aiken, J. Burke. 2009. Sorghum transpiration efficiency. Proceedings of 3rd International Conference on Integrated Approaches to Improve Crop Production Under Drought Prone Environments (InterDrought-III). October 12-16, 2009. Shanghai.
5. L.D. Charlet, R.M. Aiken, G.J. Seiler, J.F. Miller, K.A. Grady, and J.J. Knodel. 2008. Development of Resistance to Insect Pests Attacking the Stem and Head of Cultivated Sunflower in the Central and Northern Production Areas of North America. Proceedings 17th International Sunflower Conference. June 2008. Spain.
6. Lamm, F.R. and R.M. Aiken. 2005. Effect of irrigation frequency for limited subsurface drip irrigation of corn. In Proc. Irrigation Assn. Int'l. Irrigation Technical Conf., 6-8 November 2005. Phoenix, AZ. Available from Irrigation Assn., Falls Church, VA. IA Paper No. IA05-1264.
7. Aiken, R.M., D.C. Nielsen, and L.R. Ahuja. 2002. Scaling effects of standing crop residues on aerodynamic transfer processes. Proc. of the 2002 International Conference on Wind Erosion and Aeolian Processes. 22–25 July 2002. Lubbock, TX.

8. Aiken, R.M., V. Thomas, and W. Waltman. 2001. AgriFACTs: Agricultural Farm Analysis and Comparison Tool. Invited presentation, Geospatial Information in Agriculture Conference. July 17, 2001, Sydney, AU.
9. Sinclair, H.R., W.J. Waltman, S.W. Waltman, R.M. Aiken, and R.L. Anderson. 1999 A method for evaluating inherent soil quality for crops across major land resource areas. *In: Proceedings of the Fourth International Conference on Precision Agriculture.* pp. 429-440.
10. Anderson, R.L., R.M. Aiken, H.R. Sinclair, S.W. Waltman, and W.J. Waltman. 1999. Identifying Agroecozones in central Grain Plains. *In: Proceedings of the Fourth International Conference on Precision Agriculture.* pp. 1347-1355.
11. Aiken, R.M., D.C. Nielsen, M.F. Vigil, and L.R. Ahuja. 1998. Field Evaluation of Energy Balance Simulation of Surface Soil Temperatures. *Proceedings of the International Symposium on Wind Erosion.* USDA-ARS

Proceedings, National and Regional Conferences

1. Aiken, R. M., F. R. Lamm, and A. A. Aboukheira. 2017. Irrigation and tillage management effects on canopy formation in corn. *In: Proc. 29th annual Central Plains Irrigation Conference, Feb. 21-22, 2017, Burlington, Colorado.* pp. 100-110.
2. Lamm, F. R., R. M. Aiken, A. A. Aboukheira, and G. J. Seiler. 2017. Irrigated sunflowers in northwest Kansas: Productivity and canopy formation. *In: Proc. 29th annual Central Plains Irrigation Conference, Feb. 21-22, 2017, Burlington, Colorado.* pp. 143-154.
3. Lamm, F.R. and R.M. Aiken. 2016. Timing of irrigation for tall and short stature sunflower hybrids to help improve land allocation decisions. *Proc. 38th Sunflower Research Workshop, Nat. Sunflower Assoc., Fargo, ND, 12-14 January 2016.*
4. Aiken, R., I. Kisekka and J. Aguilar. 2015. A place for grain sorghum in deficit irrigation production systems? *Proceedings of the 27th annual Central Plains irrigation Association, Colby, KS. February 17-18, 2015.*
5. Schneekloth, J., D.C. Nielsen and R.M. Aiken. 2014. Impact of drought genetics on irrigated corn production. *Proceedings of the 26th Annual Central Plains Irrigation Conference. Burlington, CO. February 25-26, 2014.*
6. Aiken, R.M., F.R. Lamm and G. Seiler. 2013. Sunflower canopy and oilseed yield formation under deficit irrigation. *Proc. 35th Sunflower Research Workshop, Nat. Sunflower Assoc., Fargo, ND, 7 January 2013.*
7. Aiken, R.M., F. R. Lamm, and A. A. Aboukheira. 2011. Oilseed crop water use and water productivity. *In: Proc. 2011 Irrigation Association Tech. Conf., San Diego, California, November 6-8, 2011.*
8. Aiken, R. M., F. R. Lamm, and A.A. Aboukheira. 2011. Water use of oilseed crops. *In: Proc. 23rd annual Central Plains Irrigation Conference, Burlington, Colorado, Feb. 22-23, 2011.*
9. Lamm, F.R., R.M. Aiken and A.A. Aboukheira. 2011. Irrigation research with sunflowers in Kansas. *In: Proc. 23rd annual Central Plains Irrigation Conference, Feb. 22-23, 2011, Burlington, Colorado.*

10. Aiken, R.M., P.I. Coyne and A. A. Aboukheira. 2011. A Field Procedure to Derive Heat, Water Vapor and Carbon Dioxide Exchange Rates from Digital Images of Vegetative Canopies. In: Proc. 2011 ASABE Annual International Meetings. Louisville, Kentucky, August 7 – 10, 2011
11. Aiken, R. and B. Olson. 2010. Long Term Crop Rotation Results. Proceedings. Cover Your Acres Winter Conference. January 2010. K-State Research and Extension.
12. Aiken, R.M. and N.L. Klocke. 2010. Operational Characteristics of Sap Flow Heat Gauges to Quantify Transpiration Flux in Corn. 5th National Decennial Irrigation Conference Sponsored jointly by ASABE and the Irrigation Association Phoenix, Arizona, December 5 - 8, 2010.
13. Aiken, R.M.. Climate change impacts on crop growth in the Central High Plains. 2009. Proceedings of the 21st Annual Central Plains Irrigation Conference, Colby Kansas, February 24-25, 2009. Available from CPIA, 760 N Thompson, Colby, KS. pp. 14-24.
14. Charlet, L.D., R.M. Aiken, G.J. Seiler, J.J. Knodel, K.A. Grady, A. Chirumamilla, and B.S. Hulke. 2009. Development of host-plant resistance as a strategy to reduce damage from the major sunflower insect pests. Proc. 31st Sunflower Research Workshop, Nat. Sunflower Assoc., Fargo, ND, 13-14 January 2009.
15. Aiken, R.M. and P.I. Coyne. Eye in the sky: Yield Forecasts from satellite images? 2009. Proceedings. Cover Your Acres Winter Conference. January 2009. K-State Research and Extension.
16. Lamm, F. R., R. M. Aiken, and A. A. Abou Kheira. 2008. Effect of tillage practices and deficit irrigation on corn. In: Proc. Central Plains Irrigation Conference, Greeley, CO., Feb. 19-20, 2008. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 84-100.
17. Lamm, F. R., and R. M. Aiken. 2008. Comparison of Temperature-Time Threshold-and ET-based Irrigation Scheduling for Corn Production. ASABE paper no. 084202. Available from ASABE, St. Joseph, MI. 12 pp
18. Aiken, R., L. Stone and A. Schlegel. 2008. Evaluating an Inverse Solution for Crop Stress Factors in Kansas Water Budget. Proceedings of the 38th Annual Biological Systems Simulation Group Conference. 8-10 April 2008. Temple, TX.
19. Aiken, R.M. and D. O'Brien. 2008. Ten Crop Sequences, Transition to No-till. Proceedings, Cover Your Acres Winter Conference. January 2008. K-State Research and Extension.
20. Aiken, R.M. and P. Stahlman. 2008. Atrazine Tolerance/Resistance in Sunflower Isolines. Proc. 30th Sunflower Research Workshop, Natl. Sunflower Assoc., Fargo, ND, 8-9 January 2008.
21. Charlet, L.D.,R.M. Aiken, J.F. Miller, G.J. Seiler, K.A. Grady and J.J. Knodel. 2007. Germplasm Evaluation for Resistance to Insect Pests of the Sunflower Head. Proc. 29th Sunflower Research Workshop, Natl. Sunflower Assoc., Fargo, ND, 10-11 January 2007.
22. Lamm, F. R. and R. M. Aiken 2007. Conventional, strip, and no tillage corn production under different irrigation capacities In: Proc. Central Plains Irrigation Conference, Kearney, NE., Feb. 27-28, 2007. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 32-47.
23. Olson, B.L.S., J. Falk and R. Aiken. 2006. Sunflower yield as affected by strip-till. Proc. 28th Sunflower Research Workshop, Natl. Sunflower Assoc., Fargo, ND, 11-12 January 2006.
24. Aiken, R.M. 2006. Cropping intensity, water use and productivity under drought conditions. Proceedings. Cover Your Acres Winter Conference. February 2, 2006. K-State Research and Extension. pp. 20–21.

25. Olson, B., B. Gordon, J. Falk and R. Aiken. 2006. Dryland strip-till. Proceedings. Cover Your Acres Winter Conference. February 2, 2006. K-State Research and Extension. pp. 69-73.
26. Aiken, R.M. and F.R. Lamm. 2006. Irrigation of oilseed crops. In proceedings of the Central Plains Irrigation Conference, Colby, KS Feb. 21-22, 2006. Available from CPIA, 760 N. Thompson, Colby, KS. pp 162-172.
27. Lamm, F.R. and R.M. Aiken. 2006. Effect of tillage and irrigation capacity on corn production. In proceedings of the Central Plains Irrigation Conference, Colby, KS Feb. 21-22, 2006. Available from CPIA, 760 N. Thompson, Colby, KS. pp. 122-135.
28. Olson, B.L.S and R. M. Aiken. 2005. Dryland Strip Till Production. Proc. 27th Sunflower Research Workshop, Natl. Sunflower Assoc., Fargo, ND, 11-13 January 2005.
29. Charlet, L. D., R. Aiken, J. Miller, G. Seiler, K. Grady, & R. Meyer. 2006. Prospects and challenges in developing sunflower with resistance to seed and stem infesting insects. Proc. 28th Sunflower Research Workshop, Natl. Sunflower Assoc., Fargo, ND, 11-12 January 2006. http://www.sunflowerlsa.com/research/research-workshop/documents/Charlet_StemWeevils_06.pdf
30. Charlet, L. D., R. M. Aiken, R. R. Meyer, and A. Gebre-Amlak. 2004. Management of sunflower stem insect pests. Proc. 26th Sunflower Research Workshop, Natl. Sunflower Assoc., Fargo, ND, 14-15 January 2004.
31. Aiken, R.M., D. Inloes, and S. Hutchinson. 2004. Precipitation maps: Can they support a regional soil water balance? *In* Rainwater, K.A. and T.M. Zobeck, Eds. High Plains Groundwater Resources: Challenges and Opportunities. Conference Proceedings, Texas Tech University Water Resources Center, Lubbock, TX.
32. Schlegel, A., R.M. Aiken, and L.R. Stone. 2004. Effect of tillage on soil water recharge and crop production. High Plains Sunflower Research. Nat. Sunflower Assoc.
33. Aiken, R.M. 2003. Transition from summer crop to winter wheat in the central High Plains. Proc. Four-State Cropping Systems Conference. PHREC 03-29. pp. 49-52. 20–21 March 2003. Sidney, NE.
34. Aiken, R.M., R.L. Vanderlip, L.R. Stone, and R.D. Stockton. 2003. Can crop simulation models support sunflower production? Proc. Nat. Sunflower Assoc. 16–17 January 2003. Fargo, ND.
35. Aiken, R.M. 2003. Transition from summer crop to winter wheat in the central High Plains. Proceedings: Four-State Cropping Systems Conference. PHREC 03-29. pp. 49-52.
36. Aiken, R.M. 2002. Available soil water, sunflower canopy development, and productivity. Proc. Nat. Sunflower Assoc. 17-18 January 2002. Fargo, ND.
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