

A. **NORMAN LEE KLOCKE**

Professor (Water Resources Engineering)
Kansas State University
Southwest Research-Extension Center
Garden City, Kansas

B. EDUCATION

Ph.D. (Irrigation Engineering) – 1983, Colorado State University
M.S. (Water Res. Engineering) – 1976, University of Kansas
B.S. (Agricultural Engineering) – 1971, University of Illinois

C. Professional Experience

Professor, Kansas State University. (2001-Present)
President & Chief Engineer, NLK Engineering. (1997-Present)
Professor Emeritus, University of Nebraska, (1997-Present)
Professor, University of Nebraska. (1993-1997)
Associate Professor, University of Nebraska. (1985-1993)
Assistant Professor, University of Nebraska. (1976-1985)
Agricultural Engineer, US EPA, Kansas City, Mo. (1971-1976)
Design Engineer, FMC Corporation, Hoopston, Illinois, 1969.

D. Conduct irrigation and water resources engineering based research to improve the management of irrigated cropping systems in order to enhance water-use efficiency, conserve and protect the water resource, and sustain irrigated crop production systems in western Kansas.

E. Professional Society Affiliations

Licensed Professional Engineer in Kansas
American Society of Agricultural and Biological Engineers (ASABE)
Iowa Section (Vice-Chair 2001-2001)
Mid-Central Region Planning Committee (1994-1997)
ASABE International Technical Committees
SW-244 Irrigation Management Committee (Past Chair)
SW-241 Sprinkler Committee (Member)
SW-213 Evapotranspiration Committee (past member)
SW-223 Erosion Control Research Committee (past member)
American Society of Civil Engineers (ASCE)
National Consumptive Use Committee (past member)
U.S. Bureau of Reclamation Commissioner's Conservation Award, 2004
Kansas Research and Extension-Team Award-Irrigation Mgt. 2006

Note. Publication List is for 1985-2010. Publications for 1976-1984 are not available except refereed manuscripts

Refereed Research Publications:

Klocke, N.L., R.S. Currie, D.J. Tomsicek, and J. Koehn. 2011. Corn yield response to limited irrigation. Trans. of the ASABE. In Review.

Heeren, D.M., T.P. Trooien, H.D. Werner, and N.L. Klocke. 2011. Development of deficit irrigation strategies for corn using a yield ratio model. J. of App. Eng. In Agric. In Review

Klocke, N.L., L.R. Stone, S. Briggeman, D.A. Bolton. 2010. Scheduling deficit irrigation—crop yield predictor. J. of App. Eng. in Agric. 26(3):413-418.

Klocke, N.L., R.S. Currie, L.R. Stone, and D.A. Bolton. 2010. Planning for deficit irrigation. J. of App. Eng. In Agric. 26(3):405-412.

Blanco-Canqui, H, N.L. Klocke., A.L. Schlegel, L.R. Stone, and C.W. Rice. 2010. Impacts of deficit irrigation on carbon sequestration and physical properties in no-till soils. SSSAJ. 74(4):1301-1309.

Davis, H.N., R.S. Currie, N.L. Klocke, and L.L. Buschman. 2010. Winter annual cover crop has only minor effects on major corn arthropod pests. J. of Economic Entomology. Approved for publication

Currie, R.S., N.L. Klocke, H.N., Davis, and L.L. Buschman. 2009. Multiple season reductions in herbicide, downy brome (*Bromus tectorum*), and irrigation in corn. 2009. Weed Tech. 23:(371-378).

Klocke, N.L., R.S. Currie, R.M. Aiken. 2009. Soil water evaporation and crop residues. Trans. of the ASABE. 52(1):103-110.

Stone, L.R, F.R. Lamm, A.J. Schlegel, N.L. Klocke. 2008. Storage efficiency of off-season irrigation. Agron J. 100(4):1185-1192

Klocke, N.L., R.S. Currie, and R.M. Aiken. 2008. Soil water evaporation and crop residues. Trans. ASABE. 52(1):103-110. (Kansas State Experiment Station contribution 08-362-J)

Currie, R. S. and N. L. Klocke. 2008. Impact of irrigation and hail on Palmer Amaranth (*Amaranthus palmeri*) in Corn (*Zea mays*). *Weed Technol.* 22(3): 448-552.

Klocke, N.L., J.O. Payero, and J.P. Schneekloth. 2007. Long-term response of corn to limited irrigation. Trans. of the ASABE. 50(6):2117-2124. (Kansas State Experiment Station Contribution 08-34-J).

Stone, L.R., A.J. Schlegel, A.H. Kahn, N.L. Klocke, and R.M. Aiken. 2006. Water supply: yield relationships developed for study of water management. Journal of Natural Resources and Life Sciences Education. 35:161-173 (Kansas State Experiment Station Contribution No. 05-246-J).

Klocke, N.L., L. R. Stone, G. A. Clark, T. J. Dumler, S. Briggeman. 2006. Water allocation

model for limited irrigation. *J. of App. Eng. In Agric.* 22:3:381-389. (Kansas State Experiment Station Contribution No. 06-28-J).

Schneekloth, J.P., N.L. Klocke, D.R. Davison, J.O. Payero. 2006. Furrow irrigation management with limited water. *J. of App. Eng.* Vol. 22:3:391-398. (Nebraska Journal Series No. 14702 and Kansas State Experiment Station Contribution No. 06-34-J).

Payero, Jose O., N.L. Klocke, J.P. Schneekloth. 2006. Comparison of irrigation strategies for surface-irrigated corn in west central Nebraska. *Irr. Sci.* 24:4:257-265. (Kansas State Experiment Station Contribution No. 05-241-J)

Currie, R. and N.L. Klocke. 2005. Impact of a Terminated Wheat Cover Crop in Irrigated Corn on Atrazine Rates and Water Use Efficiency. *Weed Sci.* 53:709-716. (Kansas State Experiment Station Contribution No. 04-324-J)

Klocke, N.L., J.P. Schneekloth, S.R. Melvin, R.T. Clark, J.O. Payero. 2004. Field scale limited irrigation scenarios for water policy strategies. *J. of App. Eng. in Agric.* 20(5):623-631.

Klocke, N.L., L.R. Stone, T.J. Dumler, G.A. Clark, S. Briggeman. 2004. Crop Water Allocator (CWA): KSU Mobile Irrigation Lab. Available at: www.oznet.ksu.edu/mil Accessed 25 April 2005.

Todd, R.W., S.R. Evett, T.A. Howell, and N.L. Klocke. 2000. Soil temperature and water evaporation of small steel and plastic lysimeters replaced daily. *Soil Sci.* 165:11:890-895.

Klocke, N.L., D.W. Watts, J.P. Schneekloth, D.R. Davison, R.W. Todd, A.M. Parkhurst. 1999. Nitrate leaching in irrigated corn and soybean in a semi-arid climate. *TRANS of the ASAE.* 42:6:1621-1630.

Klocke, N.L., R.W. Todd, and J.P. Schneekloth. 1996. Soil water evaporation in irrigated corn. *App. Eng. In Agric.* 12:3:301-306.

Klocke, N.L., J.P. Schneekloth, and D.G. Watts. 1996. Leaching potential from crop rotations and water management. *J. Soil & Water Cons.* 51:1:84-90.

Schneekloth, J.P., R.T. Clark, S.A. Coady, N.L. Klocke, and G.W. Hergert. 1995. Influence of wheat-feed grain programs on riskiness of crop rotations under alternate irrigation levels. *J. Prod. Agric.* 8:3:321-322 & 415-423.

Coady, S.A., R.T. Clark, J.P. Schneekloth, N.L. Klocke, and G.W. Hergert. 1995. Single and multi-year irrigation allotments under government commodity programs. Selected paper to 1993 Annual Meeting American Agricultural Economics Association Meetings. August 1-4, Orlando, Fl. Published in *Am. J. Agricultural Econ.* 75:5:1295.

Hergert, G.W., N.L. Klocke, J.L. Peterson, P.T. Nordquist, R.T. Clark, and G.A. Wicks. 1993. Cropping systems for stretching limited water supplies in the central Great Plains. *J. Prod. Agric.* 6:4:520-529.

Klocke, N.L., R.W. Todd, G.W. Hergert, D.G. Watts, A.M. Parkhurst. 1993. Design, installation, and performance of percolation lysimeters for water quality sampling. *Tans. of the ASAE.* 36:2:429-435.

Cahoon, J.E., W.L. Kranz, N.L. Klocke. 1993. Irrigators response to system type, in-season precipitation and geography. *Agric. Water Mgt.* 23:41-49.

Schneekloth, J.P., N.L. Klocke, G.W. Hergert, D.L. Martin, R.T. Clark. 1991. Crop rotations with full and limited irrigation and dryland management. *Trans. of the ASAE.* 34:6:2372-2380.

Todd, R.W., N.L. Klocke, G.W. Hergert and A.M. Parkhurst. 1991. Evaporation from soil influenced by crop shading, crop residue and wetting regime. *Trans. of the ASAE.* 34:2:461-466.

Ferguson, R.B., C.A. Shapiro, G.W. Hergert, W.L. Kranz, N.L. Klocke, and D.H. Krull. 1991. Nitrogen and irrigation management practices to minimize nitrate leaching from irrigated corn. *J. Prod. Agric.* 4:186-192.

Klocke, N.L., D.L. Martin, R.W. Todd, D.L. DeHaan, A.D. Polymenopoulos. 1990. Evaporation measurements and predictions from soils under crop canopies. *Trans. of the ASAE.* 33:5:1590-96.

Specht, J.E., R.W. Elmore, D.E. Eisenhauer and N.L. Klocke. 1989. Growth stage scheduling criteria for sprinkler irrigated soybeans. *Irr. Sci.* 10:99-111.

Klocke, N.L., J.T. Nichols, P.H. Grabouski, R. Todd. 1989. Intercropping corn in perennial cool-season grass on irrigated sandy soil. *J. Prod. Agric.* 2:1:42-46.

Klocke, N.L., D.E. Eisenhauer, J.E. Specht, R.W. Elmore, and G.W. Hergert. 1989. Irrigation soybeans by growth stages in Nebraska. *App. Eng. in Agric.* 5:3:361-366.

Todd, R., N.L. Klocke, E.C. Dickey, and D. Bauer. 1988. Surface cover from corn residue on sandy soils. *App. Eng. in Agric.* 4:3:234-236.

Klocke, N.L., D.F. Heermann, and H.R. Duke. 1985. Measurement of evaporation and transpiration with lysimeters. *Trans. of the ASAE.* 28:1:183-189 & 192.

Book Chapters

Todd, R.W., N.L. Klocke and T.J. Arkebauer. 1996. Latent heat fluxes from developing canopy partitioned by energy balance-combination models, pp. 606-612, *In*: C.R. Camp, E.J. Sadler and R.E. Yoder (eds) *Evapotranspiration and Irrigation Scheduling*, American Society of Agricultural Engineers, St. Joseph, MI.

Symposium or Workshop Proceedings

Klocke, N.L. and R.S. Currie. 2010. Potential for water conservation when using stripper combine heads to harvest dryland in irrigated wheat in a no-till management system. Agricultural Experiment Station and Cooperative Extension Service Report of Progress. 1034:25-28.

Klocke, N.L., J. Holman, and R.S. Currie. 2010. Alfalfa production with limited irrigation. .

Agricultural Experiment Station and Cooperative Extension Service Report of Progress. 1034:29-32.

Klocke, N.L. and R.S. Currie. 2010. Soil water gain and use in deficit-irrigated corn. . Agricultural Experiment Station and Cooperative Extension Service Report of Progress. 1034:33-34.

Klocke, N.L., R.S. Currie. 2009. Corn and grain sorghum production with limited irrigation. Agricultural Experiment Station and Cooperative Extension Service Report of Progress. 1014:34-38.

Klocke, N.L. L.R. Stone, T.J. Dumler and S. Briggeman. 2009. Crop selections and water allocations for limited irrigation. In Central Plains Irrigation Conference & Exposition Proceedings. Colby, KS. Feb. 24-25, 2009. p. 61-65.

Klocke, N.L., R.S. Currie, and T.J. Dumler. 2009. Water savings form crop residue management. In Central Plains Irrigation Conference & Exposition Proceedings. Colby, KS. Feb. 24-25, 2009. p. 66-73.

Klocke, N.L., R.S. Currie, A. Schlegel, and M. Brouk. 2008. Grain and forage production with limited irrigation cropping systems. Agricultural Experiment Station and Cooperative Extension Service Report of Progress. 997:26-29.

Currie, R.S and N.L. Klocke. 2008. Effects of hail injury of Palmer Amaranth and irrigated corn at different corn population and levels of irrigation. Agricultural Experiment Station and Cooperative Extension Service Report of Progress. 997:37-39.

Klocke, N.L., R.S. Currie, L.R. Stone. 2008. Deficit irrigation of corn in a no-till environment. In Proceedings. World Environmental & Water Resources Congress. Honolulu, HI, May, 2008.

Klocke, N.L., J.O. Payero, and J.P. Schneekloth.2008. Response of corn to deficit irrigation and crop rotations. In Central Plains Irrigation Conference & Exposition Proceedings. Feb. 19-20, 2008. Greeley, CO. p. 20-27. (Kansas Experiment Station Contribution No. 08-383-A)

Klocke, N.L, R.S. Currie, and T.J. Dumler. 2008. Water savings from crop residue management. In Central Plains Irrigation Conference & Exposition Proceedings. Feb. 19-20, 2008. Greeley, CO. p. 71-79. (Kansas Experiment Station Contribution No. 08-384-A)

Klocke, N.L, R.S. Currie, and T.J. Dumler. 2008. Water savings from crop residue management. In Cover Your Acres Winter Conference Proceedings. Jan. 22-23, 2008. Oberlin, KS. p. 50-54. (Kansas Experiment Station Contribution No. 08-391-A)

Currie, R.S, N.L. Klocke and J.M. Lee. 2007. The impact of Multiple-Season Reductions in Herbicide and Irrigation Inputs on Corn Yield and Water use Efficiency. Agricultural Experiment Station and Cooperative Extension Service Report of Progress. 980:51-43

Holman, J., N. Klocke, A. Schlegel, D. Tomsicek, G. Miller, and S. Maxwell. 2007. Annual forage crop production in rotation with winter wheat. Agricultural Experiment Station and Cooperative Extension Service Report of Progress. 980:23-25.

Klocke, N.L., R.S. Currie, M. Brouk, and L.R. Stone. 2007. Cropping systems for limited irrigation. In Report of Progress 980. Kansas State University, AES and CES, Aug. 30, 2007, Garden City, KS. p. 32-33.

Klocke, N.L., R. Aiken, L.R. Stone, and R.S. Currie. 2007. Soil water evaporation as influenced by crop residue management. In Report of Progress 980. Kansas State University, AES and CES, Aug. 30, 2007, Garden City, KS. p. 34-35.

Klocke, N.L., T.J. Dumler, L.R. Stone, and J. Peterson. 2007. Trends in income from limited irrigation using the crop water Allocator. In Report of Progress 980. Kansas State University, AES and CES, Aug. 30, 2007, Garden City, KS. p. 36-37.

Klocke, N.L., R.S. Currie, and Troy J. Dumler. 2007. Water savings from crop residue management. In Central Plains Irrigation Conference & Exposition Proceedings. Feb. 27-28, 2006. Kearney, NE. p. 20-27. (Kansas Experiment Station Contribution No.

Currie, R.S., N.L. Klocke. 2006. Is downy brome (*Bromus Tectorum L.*) a noxious weed or valued cover crop in irrigated corn? In Report of Progress 961. Kansas State University, AES and CES, Aug. 31, 2006, Garden City, KS. p. 39-40.

Klocke, N.L., R. Aiken, R.S. Currie and L.R. Stone. 2006. Soil water evaporation as influenced by crop-residue management in sprinkler irrigation. In Report of Progress 961. Kansas State University, AES and CES, Aug. 31, 2006, Garden City, KS. p. 25-28.

Klocke, N.L., L.R. Stone, T.J. Dumler and G. Clark. 2006. Optimization of water among crops for limited irrigation. In Report of Progress 961. Kansas State University, AES and CES, Aug. 31, 2006, Garden City, KS. p. 29-31.

Klocke, N.L. and R.S. Currie. 2006. Limited irrigation cropping systems. In Report of Progress 961. Kansas State University, AES and CES, Aug. 31, 2006, Garden City, KS. p. 32-33.

Klocke N.L., R.S. Currie, and T.J. Dumler. 2006. Effect of crop residue on sprinkler irrigation management. In Central Plains Irrigation Conference & Exposition Proceedings. Feb. 21-22, 2006. Colby, KS. p. 115-121. (Kansas Experiment Station Contribution No. 06-202-A).

Klocke N.L., L.R. Stone, T.J. Dumler, G.A Clark, and S. Briggeman. 2006. Crop selections and water allocations for limited irrigation. In Central Plains Irrigation Conference & Exposition Proceedings. Feb. 21-22, 2006. Colby, KS. p. 157-161. (Kansas Experiment Station Contribution No. 06-201-A).

Klocke, N.L., R. Aiken, and L.R. Stone. 2005. Soil water evaporation as influenced by crop residue management and plant transpiration in sprinkler irrigation systems. In Report of Progress 945. Kansas State University, AES and CES, Aug. 25, 2005, Garden City, KS.

Klocke, N.L., G.A. Clark, L.R. Stone, T.J. Dumler, and S. Briggeman. 2005. Water allocation among crops for limited irrigation decisions. In Report of Progress 945. Kansas State University, AES and CES, Aug. 25, 2005, Garden City, KS.

Klocke, N.L., R.S. Currie, and M. Brouk. 2005 Cropping systems for limited irrigation management. In Report of Progress 945. Kansas State University, AES and CES, Aug. 25,

2005, Garden City, KS.

Klocke N. L. 2005. Crop residue and soil water evaporation. In Central Plains Irrigation Conference & Exposition Proceedings. Feb. 16-17, 2005. Sterling, CO. pp 22-28. (Kansas Experiment Station Contribution No. 05-198-A).

Melvin, S., J. Payero, N. Klocke, and J. Schneekloth. 2004. Irrigation management strategies for corn to conserve water. In Central Plains Irrigation Conference & Exposition Proceedings. Feb. 16-17, 2005. Kearney, NE. pp 76-83.

Klocke, N.L., G. A. Clark, S. Briggeman, L.R. Stone, and T.J. Dumler. 2004. Crop water allocator for limited irrigation. In Proc. High Plains Groundwater Conference. Lubbock, TX. Dec. 7-9, 2004. 196-206. (Kansas Experiment Station Contribution No. 05-132-A).

Klocke, N.L. and T.J. Dumler. 2004. Water savings from crop residues in irrigated soybeans. In Report of Progress 927. Kansas State University, AES and CES, Aug. 26, 2004, Garden City, KS. pp. 37-40.

Klocke N. L. 2004. Water savings from crop residue in irrigated corn. In Central Plains Irrigation Short Course & Exposition Proceedings. Feb. 17-18, 2004. Kearney, NE. pp133-141. (Kansas Experiment Station Contribution No. 04-360-A).

Melvin, S., J. Payero, N. Klocke, and J. Schneekloth. 2004. Irrigation management strategies for corn to conserve water. In Central Plains Irrigation Short Course & Exposition Proceedings. Feb. 17-18, 2004. Kearney, NE. pp 37-44. (Kansas Experiment Station Contribution No. 04-359-A).

Klocke N. L. 2003. Water savings from crop residue in irrigated corn. In Central Plains Irrigation Short Course & Exposition Proceedings. Feb. 4-5, 2003. Colby, KS. pp 134-137.

Klocke, N.L. Soybean and grain sorghum irrigation—Summer 2002. 2003. In Report of Progress 910. Kansas State University, AES and CES, Aug. 28, 2003, Garden City, KS. pp. 11-15.

Watts, D.G, D. Fekersillassie, J.S. Schepers, D.E. Eisenhauer, R.F. Spalding, and N.L. Klocke. 2000. Integrated management of irrigation and nitrogen for groundwater quality improvement. In Proceedings of National irrigation symposium. Nov. 14-16, 2000. Phoenix, AZ pp. 144-152.

Klocke, N.L., J.P. Schneekloth, and D.G. Watts. 1996. Leaching from best irrigation management in semi-arid climate. In Proceedings of International Conference on Evapotranspiration and Irrigation Scheduling. San Antonio, TX. Nov. 3-6, 1996. (Reviewed).

Schneekloth, J.P., N.L. Klocke, R.T. Clark, and N.A. Norton. 1996. Irrigation management strategies to reduce leaching. In Proceedings of International Conference on Evapotranspiration and Irrigation Scheduling. San Antonio, TX. Nov. 3-6, 1996. (Reviewed).

Todd, R.W., N.L. Klocke, and T.J. Arkebauer. 1996. Latent heat fluxes from developing canopy partitioned by energy balance-combination models. In Proceedings of International Conference on Evapotranspiration and Irrigation Scheduling. San Antonio, TX. Nov. 3-6, 1996. (Reviewed).

Klocke, N.L. and J.P. Schneekloth. 1993. Leaching potential from crop rotations and water management. In Proceedings SWCS Conference on Agricultural Research to Protect Water Quality. Minneapolis, MN. Feb. 21-24, 1993. (Reviewed)

Hergert, G.W., N.L. Klocke, and J.P. Schneekloth. 1993. Quantifying nitrate leaching under continuous corn versus a corn-soybean rotation. In Proceedings SWCS Conference on Agricultural Research to Protect Water Quality. Minneapolis, MN. Feb. 21-24, 1993. (Reviewed)

Eniciso, J., D.L. Martin, D.E. Eisenhauer, and N.L. Klocke. 1992. Predicting furrow infiltration rates under water limiting conditions. In Proceedings Irrigation and Drainage Division ASCE, Baltimore, MD, Aug. 2-6, 1992. (Reviewed)

Klocke, N.L., J.P. Schneekloth, G.W. Hergert, R.T. Clark. 1992. Irrigation and crop management to sustain an aquifer. In Proceedings of the International Conference on Advances in Planning, Design and Management of Irrigation Systems as Related to Sustainable Land Use. Leuven, Belgium, Sept. 14-17, 1992.

Klocke, N.L., G.W. Hergert, R.W. Todd, D.G. Watts. 1991. Percolation lysimeters for water quality sampling. In Proceedings of the ASCE International Symposium on Lysimetry. Honolulu, HI., July 23-25, 1991. (Reviewed)

Klocke, N.L., R.W. Todd, D.L. Martin. 1991. Lysimetry for evaporation and transpiration measurement. In Proceedings of the ASCE International Symposium on Lysimetry. Honolulu, HI., July 23-25, 1991. (Invited and Reviewed)

Coady, S.A., R.T. Clark, J.P. Schneekloth, N.L. Klocke, and G.W. Hergert. 1991. Crop rotations, program participation, net farm income and the Food, Agriculture, Conservation and Trade Act of 1990. In Proceedings of the 1991 Annual Meeting of the Western Agricultural Economics Association. Portland, Oregon, July 7-10, 1991. (Reviewed and competitive selection)

Hergert, G.W., N.L. Klocke, P.T. Nordquist, R.T. Clark, and G.A. Wicks. 1988. Cropping Systems for Soil and Water Conservation in the Great Plains. Intl. Conf. on Dryland Farming, Amarillo, TX. p 59. (Reviewed)

Hubbard, K.G. and N.L. Klocke. 1986. Climate and irrigation in Nebraska. In Proceedings of Climate and Water Management - A Critical Era. Asheville, NC. August 4-7, 1986.

Klocke, N.L., D.L. Martin, D.F. Heermann. 1985. Soil evaporation and plant transpiration from irrigated crops. In Proceedings of the ASAE National Symposium on Advances in Evapotranspiration. Chicago, IL., Dec. 16-17, 1985. (Reviewed).

Martin, D.L., N.L. Klocke, D.L. DeHaan. 1985. Measuring evaporation using mini-lysimeters. In Proceedings of the ASAE National Symposium on Advances in Evapotranspiration. Chicago, IL., Dec. 16-17, 1985. (Reviewed).

Published Abstracts and Technical Papers

H. Blanco-Canqui, N.L. Klocke, A.J. Schlegel, and L.R. Stone. 2010. Deficit irrigation and carbon concentration in no-till soils, *Agronomy Experiment Field Reports*, pp. 59-64, Jan 2010.

Klocke, N.L., L.R. Stone, D.A. Bolton. 2009. Irrigation Scheduling for Deficit Irrigation. In Proceedings: EWRI-ASCE Conference. Kansas City, MO. May 19-21.

Blanco, H., N.L. Klocke, A.J. Schlegel, L.R. Stone. 2009. Changes in soil carbon concentration and structural properties with deficit irrigation. E-Update. K-State Extension Agronomy. Number 223. December 18, 2009

Klocke, N.L., L.R. Stone, S. Briggeman. 2009. Crop yield predictor for deficit irrigation scheduling. In Proceedings 2009 Innovations in Irrigation Conference. San Antonio, TX. Dec. 2-4, 2009.

Blanco, H., N.L. Klocke, A.J. Schlegel, and L.R. Stone. 2009. Carbon sequestration in no-till soils managed under different levels of sprinkler irrigation in the Central Great Plains. *In* 2009 Agronomy Abstracts. ASA-SSSA-CSA, Annual Meetings, Pittsburgh, PA (**Oral Presentation**).

Klocke, N.L. 2009. Value of crop residues for evaporation suppression and deficit irrigation. In Proceedings 21st High Plains No-till Conference. Greeley, CO. Feb. 3-4. p. 27.

Klocke, N.L. and R.S. Currie. 2009. Corn and grain sorghum production with limited irrigation. In Proceedings Sustainability Management Conference. Denver, CO. Feb. 11-13, 2009.

Klocke, N.L. L.R. Stone, T.J. Dumler and S. Briggeman. 2009. Crop selections and water allocations for limited irrigation. In Proceedings Sustainability Management Conference. Denver, CO. Feb. 11-13, 2009.

Stone, L.R., F. Lamm, A. Schlegel, N.L. Klocke. Storage efficiency of off-season irrigation. 2008. Water and the Future of Kansas Conference. Topeka, KS, March 25, 2008.

Aiken, R. and N.L. Klocke. 2008. Transpiration quantified by sap flow heat gauges and the Penman-Monteith equation. Proc. ASA. Houston, TX

Currie, R.S., and N.L. Klocke. 2007. The Impact of Multiple Season Reductions in herbicide and Irrigation Inputs on Corn Yield. Proc. WSWS. 60:71.

Currie, R. S. and N.L. Klocke. 2007. Impact of Corn Population, Irrigation, and hail injury on Palmer Amaranth. Proc. NCWSS. 62:156

Klocke, N.L., L.R. Stone, T.J. Dumler, and S. Briggeman. 2007. Risk income return from limited irrigation using the Crop Water Allocator. In Proc. 28th Annual Irrigation Association Technical Conference. San Diego, CA, Dec. 12, 2007.

Klocke, N.L., L.R. Stone, T.J. Dumler, and G.A. Clark. 2007. Optimizing irrigation water use with limited irrigation. Abstracts of: Water and the future of Kansas Conference. Topeka, KS, March 15, 2007. 1 p.

Klocke, N.L., J.O. Payero, and J.P. Schneekloth. 2007. Long-term response of corn to limited irrigation and crop rotations. ASAE Paper No. 072282. June 17-20, 2007. Minneapolis, MN. 14

pp.

Klocke, N.L. 2006. Water conservation from crop residue management in sprinkler irrigation. Abstracts of No-till on the Plains winter conference. Salina, KS. Jan. 30-31, 2006. p. 91-94.

Klocke, N.L. 2006. Water conservation from crop residues in sprinkler irrigation. Abstracts of F.A.C.T. conference. Liberal, KS. Jan. 10-11, 2006. 4 pp.

Klocke, N.L., L.R. Stone, and T.J. Dumler. 2006. Optimizing water use for irrigation under limited supplies. Abstracts of: Water and the future of Kansas Conference. Topeka, KS, March 16, 2006. 1 p.

Currie, R.S., N.L. Klocke, P. Sloderbeck, H. Davis and L. Buschman. 2006. Is downy brome (*Bromus Tectorum L.*) a noxious weed or valued cover crop in irrigated corn? Proc. West. Soc. Weed Sci. 59:80.

Klocke, N.L., R.S. Currie, T.J. Dumler. 2006. Soil water evaporation and residue management in sprinkler irrigation. Proc. 27th Annual Irrigation Association Tech. Conf. Nov. 5-7, 2006. San Antonio, TX. 9 pp.

Klocke, N.L., L.R. Stone, G.A. Clark, T.J. Dumler, S. Briggeman. 2005. Optimizing water allocations and crop selections for limited irrigation. 26th Annual Irrigation Association Tech. Conf. Nov. 6-8, 2005. Phoenix, AZ. 4 pp. (Kansas Experiment Station Contribution No. 06-123-A).

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