

FREDDIE R. LAMM
RESEARCH IRRIGATION ENGINEER
CAREER PUBLICATION RECORD
MAY 1979 – DECEMBER 2015

BOOKS AND BOOK CHAPTERS

Lamm, F. R., J. E. Ayars, and F. S. Nakayama (Eds.). 2007. **Microirrigation for Crop Production - Design, Operation and Management**. Elsevier Publications. 608 pp.

Lamm, F.R. and C.R. Camp. 2007. **Subsurface drip irrigation**. Chapter 13 in *Microirrigation for Crop Production - Design, Operation and Management*. F.R. Lamm, J.E. Ayars, and F.S. Nakayama (Eds.), Elsevier Publications. pp. 473-551.

Ayars, J. E., D. A. Bucks, F. R. Lamm, and F.S. Nakayama. 2007. **Introduction**. Chapter 1 in *Microirrigation for Crop Production - Design, Operation and Management*. F.R. Lamm, J.E. Ayars, and F.S. Nakayama (Eds.), Elsevier Publications. pp. 1-26.

Lamm, F. R. (Ed.). 1995. **Microirrigation for a Changing World: Conserving Resources/Preserving the Environment**. Proc. Fifth Int'l Microirrigation Congress, Apr. 2-6, 1995, Orlando, FL. ASAE, St. Joseph MI. 978 pp.

REFEREED JOURNALS

Lamm, F. R. 2015. **Cotton, Tomato, Corn, and Onion Production with Subsurface Drip Irrigation - A Review**. Trans. ASABE (accepted for publication)

Lamm, F. R., D. M. O'Brien, and D. H. Rogers. 2015. **Economic comparison of subsurface drip and center pivot sprinkler irrigation using spreadsheet software**. *Applied Engineering in Agric.* 31(6):929-936.

Sadeghi, S. H., R. T. Peters; and F. R. Lamm. 2015. **Design of zero slope microirrigation laterals: Effect of the friction factor variation**. *J. Irrig. Drain Eng.* ASCE, ISSN 0733-9437/04015012(9)

Lamm, F. R. and D. H. Rogers. 2015. **The importance of irrigation scheduling for marginal capacity systems growing corn**. *Applied Engineering in Agric.* 31(2): 261-265.

Zhang, T. X. Lin, D. H. Rogers, and F. R. Lamm. 2015. **Adaptation of irrigation infrastructure on irrigation demands under future drought in the USA**. *Earth Interactions*. doi:10.1175/EI-D-14-0035.1.

J. Puig-Bargués and F. R. Lamm. 2013. **Effect of flushing velocity and flushing duration on sediment transport in microirrigation driplines**. Trans. ASABE 56(5):1821-1828.

Liu, L., N. Klocke, S. Yan, D. Rogers, A. Schlegel, F. Lamm, S. I. Chang, and D. Wang. 2013. **Impact of deficit irrigation on maize physical and chemical properties and ethanol yield** *Cereal Chem.* 90(5):453–462.

Harmoney, K. R., F. R. Lamm, A. A. Aboukheira, and S. K. Johnson. 2013. **Reducing water inputs with subsurface drip irrigation may improve alfalfa nutritive value.** Online. Forage and Grazinglands doi:10.1094/FG-2013-117-01-RS. 8 pp.

Lamm, F. R., K. R. Harmoney, A. A. Aboukheira, and S. K. Johnson. 2012. **Alfalfa production with subsurface drip irrigation in the Central Great Plains.** Trans. ASABE 55(4):1203-1212.

Lamm, F.R., J. P. Bordovsky, L. J. Schwankl, G. L. Grabow, J. Enciso-Medina, R. T. Peters, P. D. Colaizzi, T. P. Trooien, and D. O. Porter. 2012. **Subsurface drip irrigation: Status of the technology in 2010.** Trans. ASABE 55(2): 483-491.

Schlegel, A.J., L.R. Stone, T.J. Dumler, and F. R. Lamm. 2012. **Managing diminished irrigation capacity with preseason irrigation and plant density for corn production.** Trans. ASABE 55(2): 525-531.

Kranz, W. L., R. G. Evans, F. R. Lamm, S. A. O'Shaughnessy, R. T. Peters. 2012. **A review of mechanical move sprinkler irrigation control and automation technologies.** Appl. Engr. Agric. 28(3): 389-397.

Enciso-Medina, J., W. L. Multer, and F. R. Lamm. 2011. **Management, maintenance, and water quality effects on the long-term performance of subsurface drip irrigation systems.** Applied Engr. in Agric. 27(6):969-978.

Stone, L. R., N. L. Klocke, A. J. Schlegel, F.R. Lamm and D. J. Tomsicek. 2011. **Equations for drainage component of the field water balance.** Applied Engr. in Agric. 27(3):345-350.

Lamm, F. R., A. A. Aboukheira, and T. P. Trooien. 2010. **Sunflower, soybean, and grain sorghum crop production as affected by dripline depth.** Applied Engr. in Agric. 26(5):873-882.

Arbat, G., F. R. Lamm, and A. A. Aboukheira. 2010. **Subsurface drip irrigation emitter spacing effects on soil water redistribution, corn yield and water productivity.** Applied Engr. in Agric. 26(3):391-399.

Puig-Bargués, J., F. R. Lamm, T. P. Trooien, and G. A. Clark. 2010. **Effect of dripline flushing on subsurface drip irrigation systems.** Trans ASABE 53(1): 147-155.

Puig-Bargués, J., G. Arbat, M. Elbana, M. Duran-Ros, J. Barragán, F. Ramírez de Cartagena, and F. R. Lamm. 2010. **Effect of flushing frequency on emitter clogging in microirrigation with effluents.** Agric. Water Manage. 97(6) 883–891.

Coyne, P. I., R. M. Aiken, S. J. Maas, and F. R. Lamm. 2009. **Evaluating YieldTracker forecasts for maize in Western Kansas.** Agron J. 101:671–680.

Lamm, F. R., R. M. Aiken, and A. A. Aboukheira. 2009. **Corn yield and water use characteristics as affected by tillage, plant density and irrigation.** Trans ASAE: 52(1):133-143.

Stone, L.R., F.R. Lamm, A. J. Schlegel, and N. L. Klocke. 2008. **Storage efficiency of**

off-season irrigation. Agron J. 100:1185–1192.

Lamm, F. R., L. R. Stone, and D. M. O'Brien. 2007. **Crop production and economics in Northwest Kansas as related to irrigation capacity.** Appl. Engr in Agric. 23(6):737-745.

Lamm, F. R. and T. P. Trooien. 2005. **Dripline depth effects on corn production when crop establishment is nonlimiting.** Appl. Engr in Agric. 21(5):835-840.

Clark, G. A., F. R. Lamm, and D. H. Rogers. 2005. **Sensitivity of thin-walled drip tape emitter discharge to water temperature.** Appl. Engr in Agric. 21(5):855-863.

Lamm, F. R., A. J. Schlegel, and G. A. Clark. 2004. **Development of a best management practice for nitrogen fertigation of corn using SDI.** Appl. Engr in Agric. 20(2):211-220.

Lamm, F. R. 2003. **Consumptive water use.** Encyclopedia. of Water Science. pp. 83-86.

Camp, C. A. and F. R. Lamm. 2003. **Irrigation systems, subsurface drip.** Encyclopedia of Water Science. pp. 560-564.

Lamm, F. R. and T. P. Trooien. 2003. **Subsurface drip irrigation for corn production: A review of 10 years of research in Kansas.** Irrig. Sci. 22(3-4):195-200.

Lamm, F. R., T. P. Trooien, H. L. Manges, and H. D. Sunderman. 2001. **Nitrogen fertilization for subsurface drip-irrigated corn.** Trans. ASAE 44(3):533-542.

O'Brien, D. M., F. R. Lamm, L. R. Stone, and D. H. Rogers. 2001. **Corn yields and profitability for low-capacity irrigation systems.** Applied Engr. in Agric. 17(3):315-321.

Lamm, F. R. and H. L. Manges. 2000. **Partitioning of sprinkler irrigation water by a corn canopy.** Trans. ASAE 43(4):909-918.

Trooien, T. P., F. R. Lamm, L. R. Stone, M. Alam, D. H. Rogers, G. A. Clark, and A. J. Schlegel. 2000. **Subsurface drip irrigation using livestock wastewater: Dripline flow rates.** App. Engr. in Agr. 16(5):505-508.

O'Brien, D. M., D. H. Rogers, F. R. Lamm, and G. A. Clark. 1998. **An economic comparison of subsurface drip and center pivot sprinkler irrigation systems.** App. Engr. in Agr. 14(4):391-398.

Lamm, F. R., L. R. Stone, H. L. Manges, and D. M. O'Brien. 1997. **Optimum lateral spacing for subsurface drip-irrigated corn.** Trans. ASAE 40(4):1021-1027.

Darusman, A. H. Khan, L. R. Stone, and F. R. Lamm. 1997. **Water flux below the root zone vs. drip-line spacing in drip irrigated corn.** Soil Sci. Soc. Am. J. 61(6):1755-1760.

Darusman, A. H. Khan, L. R. Stone, W. E. Spurgeon, and F. R. Lamm. 1997. **Water flux below the root zone vs. irrigation amount in drip-irrigated corn.** Agron. J. 89(3):375-379.

Lamm, F. R., H. L. Manges, L. R. Stone, A. H. Khan, and D. H. Rogers. 1995. **Water requirement of subsurface drip-irrigated corn in northwest Kansas.** Trans. ASAE, 38(2):441-448.

Lamm, F. R., D. H. Rogers, and H. L. Manges. 1994. **Irrigation scheduling with planned soil water depletion.** Trans. ASAE, 37(5):1491-1497.

Lamm, F. R., M. E. Nelson, and D. H. Rogers. 1993. **Resource allocation in corn production with water resource constraints.** App. Engr. in Agric., 9(4):379-385.

Rogers, D. H. and F. R. Lamm. 1994. **Soil survey after corn harvest in northwest Kansas.** App. Engr. in Agric., 10(1):37-40.

Sweeney, D. W. and F. R. Lamm. 1993. **Timing of limited irrigation and N-injection for grain sorghum.** Irr. Sci., 14:35-39.

Stone, L. R., A. J. Schlegel, F. R. Lamm, and W. E. Spurgeon. 1994. **Storage efficiency of preplant irrigation.** J. of Soil and Water Cons., 49(1):338-343.

Lamm, F. R. 1991. **Municipal water use in northwestern Kansas.** Trans. Kansas Academy of Sci., 94(3-4):125-136.

Musick, J. T. and F. R. Lamm. 1990. **Preplant irrigation in the Central and Southern High Plains - a review.** Trans. ASAE, 33(6):1834-1842.

Lamm, F. R. and D. H. Rogers. 1985. **Soil water recharge function as a decision tool for preseason irrigation.** Trans. ASAE 28(5):1521-1525.

Buschman, L. L., F. R. Lamm, P. E. Sloderbeck, and G. L. Dick. 1985. **Chemigation in corn: Effects of nonemulsifiable oils and sprinkler package on the efficacy of corn borer (Lepidoptera: Pyralidae) insecticides.** J. Econ. Enty., 78(6):1331-1336.

Lamm, F. R., J. M. Gregory, and H. S. Cengiz. 1981. **The evaluation of a leaf water potential function for corn.** Trans. ASAE, 24(5):1172-1176.

INTERNATIONAL ASABE PAPERS

Lamm, F. R. 2014. **Irrigation and nitrogen management for subsurface drip irrigated corn - 25 years of K-State's efforts.** ASABE paper no. 141914980. Available from ASABE, St. Joseph, MI. 10 pp.

Lamm, F. R. and A. J. Schlegel. 2013. **Effect of nitrogen management on severely deficit subsurface drip-irrigated corn.** ASABE paper no. 131593324. Available from ASABE, St. Joseph, MI. 9 pp.

Lamm, F. R. and A. J. Schlegel. 2013. **Effect of subsurface drip irrigation capacity and nitrogen fertigation timing on corn production.** ASABE paper no. 131593348. Available from ASABE, St. Joseph, MI. 10 pp.

Puig-Bargués, J. and F. R. Lamm. 2013. **Effect of flushing velocity and elapsed time on sediment transport in driplines.** ASABE paper no. 1311594671. Available from ASABE, St. Joseph, MI. 12 pp.

Lamm, F. R. and A. A. Aboukheira. 2012. **Effect of late season water stress on corn in northwest Kansas.** ASABE paper no. 121337206. Available from ASABE, St. Joseph, MI. 10 pp.

Lamm, F. R. and A. A. Aboukheira. 2011. **Effect of early season water stress on corn in northwest Kansas.** ASABE paper no. 1111338. Available from ASABE, St. Joseph, MI. 11 pp.

Lamm, F. R. 2009. **Unique challenges with subsurface drip irrigation.** ASABE paper no. 095927. Available from ASABE, St. Joseph, MI. 25 pp.

Lamm, F. R., D. H. Rogers, M. Alam, D. M. O'Brien, and T. P. Trooien. 2009. **Twenty years of progress with SDI in Kansas.** ASABE paper no. 095923. Available from ASABE, St. Joseph, MI. 23 pp.

Enciso-Medina, J., W. Multer and F. R. Lamm. 2009. **Evaluation of old subsurface drip irrigation systems in Texas.** ASABE paper no. 095725. Available from ASABE, St. Joseph, MI. 17 pp.

Arbat, G., F. R. Lamm and A. A. Aboukheira. 2009. **Effect of emitter spacing on soil water redistribution, corn yield and water productivity under subsurface drip irrigation (SDI).** ASABE paper no. 096578. Available from ASABE, St. Joseph, MI. 17 pp.

Puig-Bargués, J., F. R. Lamm, T. P. Trooien and G. A. Clark. 2009. **Dripline flushing velocities for SDI.** ASABE paper no. 096457. Available from ASABE, St. Joseph, MI. 17 pp.

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.

Lamm, F. R., and R. M. Aiken. 2007. **Tillage and Irrigation Capacity Effects on Corn Production** ASABE paper no. 072283. Available from ASABE, St. Joseph, MI. 16 pp.

Lamm, F. R., L. R. Stone, and D. M. O'Brien. 2006. **Crop Production in Western Kansas as Related to Irrigation Capacity** ASABE paper no. 062208. Available from ASABE, St. Joseph, MI. 13 pp.

Lamm, F. R. 1998. **Uniformity of in-canopy center pivot sprinkler irrigation.** ASAE paper no. 982069. Available from ASAE, St. Joseph, MI. 7 pp.

Lamm, F. R., A. J. Schlegel, and G. A. Clark. 1997. **Nitrogen fertigation for corn using SDI: A BMP.** Presented at the 1997 international ASAE meeting. Paper no. 972174 from ASAE, St. Joseph, MI. 17 pp.

Lamm, F. R., G. A. Clark, M. Yitayew, R. A. Schoneman, R. M. Mead, and A. D. Schneider. 1997. **Installation issues for SDI systems.** Presented at the 1997 international ASAE meeting. Paper no. 972074 from ASAE, St. Joseph, MI. 6 pp.

Lamm, F. R., C. A. Storlie, and D. J. Pitts. 1997. **Revision of EP-458: Field evaluation of microirrigation systems.** Presented at the 1997 international ASAE meeting. Paper no. 972170 from ASAE, St. Joseph, MI. 19 pp.

O'Brien, D. M., D. H. Rogers, F. R. Lamm, and G. A. Clark. 1997. **Economics of SDI for corn in western Kansas.** Presented at the 1997 international ASAE meeting. Paper no.

972072 from ASAE, St. Joseph, MI. 15 pp.

Clark, G. A., P. L. Barnes, F. R. Lamm, and S. McVey. 1997. **Chemigation uniformity in microirrigation materials**. Presented at the 1997 international ASAE meeting. Paper no. 972176 from ASAE, St. Joseph, MI. 10 pp.

Lamm, F. R., D. H. Rogers, and W. E. Spurgeon. 1994. **Corn irrigation requirements under sprinkler irrigation in western Kansas**. Presented at the 1994 international summer meeting of the American Society of Agricultural Engineers. Available as paper no. 942026 from ASAE, St. Joseph, MI. 16 pp.

Rogers, D. H., F. R. Lamm, W. E. Spurgeon, and H. L. Manges. 1994. **Irrigated agricultural trends in Kansas**. Presented at the 1994 international summer meeting of the American Society of Agricultural Engineers. Available as paper no. 942142 from ASAE, St. Joseph, MI. 10 pp.

Lamm, F. R., D. H. Rogers, and H. L. Manges. 1993. **Irrigation scheduling with planned soil water depletion**. Presented at the 1993 international winter meeting of the American Society of Agricultural Engineers. Available as paper no. 932583 from ASAE, St. Joseph, MI. 17 pp.

Lamm, F. R., M. E. Nelson, and D. H. Rogers. 1992. **Management of corn production inputs with water resource constraints**. Presented at the 1992 international winter meeting of the American Society of Agricultural Engineers. Available as paper no. 922606 from ASAE, St. Joseph, MI. 17 pp.

Lamm, F. R., L. R. Stone, and H. L. Manges. 1992. **Optimum lateral spacing for drip-irrigated corn**. Presented at the 1992 international winter meeting of the American Society of Agricultural Engineers. Available as paper no. 922575 from ASAE, St. Joseph, MI. 15 pp.

Lamm, F. R., H. L. Manges, L. R. Stone, and A. H. Khan. 1991. **Water requirement of drip-irrigated corn in northwest Kansas**. Presented at the 1991 international winter meeting of the American Society of Agricultural Engineers, Chicago, IL, Dec. 17-20, 1991. Available as paper no. 902591 from ASAE, St. Joseph, MI. 20 pp.

Lamm, F. R. and H. L. Manges. 1991. **Nitrogen fertilization for drip-irrigated corn in northwest Kansas**. Presented at the 1991 international winter meeting of the American Society of Agricultural Engineers, Chicago, IL, Dec. 17-20, 1991. Available as paper no. 902596 from ASAE, St. Joseph, MI. 17 pp.

Rogers, D. H. and F. R. Lamm. 1991. **Post-corn harvest soil water survey for northwest Kansas**. Presented at the 1991 international winter meeting of the American Society of Agricultural Engineers, Chicago, IL, Dec. 17-20, 1991. Available as paper no. 902560 from ASAE, St. Joseph, MI. 9 pp.

Lamm, F. R. and H. L. Manges. 1990. **Partitioning of the sprinkler irrigation amount by a corn canopy**. Presented at the 1990 international winter meeting of the American Society of Agricultural Engineers, Chicago, IL, Dec. 18-21, 1990. Available as paper no. 902611 from ASAE, St. Joseph, MI. 24 pp.

Lamm, F. R., H. L. Manges, D. H. Rogers, W. E. Spurgeon, and M. H. Farmer. 1990. **Design and installation of a drip irrigation system for research purposes.** Presented at the 1990 international winter meeting of the American Society of Agricultural Engineers, Chicago, IL, Dec. 18-21, 1990. Available as paper no. 902530 from ASAE, St. Joseph, MI. 21 pp.

Koelliker, J. K. and F. R. Lamm. 1982. **Water storage under double fallow.** Presented at the 1982 summer meeting of the American Society of Agricultural Engineers. Available as ASAE paper no. 82-2017, ASAE, St. Joseph, MI. 20 pp.

MID-CENTRAL REGIONAL ASAE PAPERS

Rogers, D. H., F. R. Lamm, and G. A. Clark. 2004. **Subsurface drip irrigation (SDI) system remediation – A case study.** Presented at the Mid-Central ASAE mtg., St. Joseph, MO, March 26-27, 2004. ASAE Paper No. MC04-307. ASAE, St. Joseph MI. 12 pp.

Lamm, F. R., D. M. O'Brien, D. H. Rogers, and T. J. Dumler. 2002. **Sensitivity of center pivot sprinkler and SDI economic comparisons.** Presented at the Mid-Central ASAE meeting., St. Joseph, MO, April 12-13, 2002. ASAE Paper no. MC02-201. ASAE, St. Joseph, MI. 10 pp.

Makens, T. P., W. E. Spurgeon, F. R. Lamm, and H. L. Manges. 1992. **Subsurface dripline length for corn production.** Presented at the 1992 mid-central meeting of the American Society of Agricultural Engineers. Available as paper no. MC92-100 from ASAE, St. Joseph, MI. 12 pp.

Bascom, N. D., F. R. Lamm, and H. L. Manges. 1991. **Designing for maximum length drip tape laterals.** Presented at the 1991 mid-central ASAE meeting, St. Joseph, MO, April 19-20, 1991. Available as paper no. MC91-101 from ASAE, St. Joseph, MI. 14 pp.

Pacey, D. A. and F. R. Lamm. 1988. **Tract_wt, repair, and irrcost1, spreadsheet templates for machinery and irrigation.** Presented at the mid-central regional meeting of the American Society of Agricultural Engineers. Available as paper no. MCR-88-115 from ASAE, St. Joseph, MI. 11 pp.

Lamm, F. R., D. A. Pacey, and H. L. Manges. 1987. **Spreadsheet templates for the calculation of penman reference evapotranspiration.** Presented at the 1987 mid-central regional meeting of the American Society of Agricultural Engineers. Available as ASAE paper no. MCR 87-106, ASAE, St. Joseph, MI. 21 pp.

Lamm, F. R. and D. H. Rogers. 1985. **Corn yield response to different irrigation regimes.** Presented at the 1985 mid-central regional meeting of the American Society of Agricultural Engineers. Available as ASAE paper no. MCR 85-131, ASAE, St. Joseph, MI. 12 pp.

Lamm, F. R. 1984. **Comparison of spray and impact sprinkler performance.** Presented at the 1984 mid-central regional meeting of the American Society of Agricultural Engineers. Available as ASAE paper no. MCR 84-153, ASAE, St. Joseph, MI. 16 pp.

Rogers, D. H. and F. R. Lamm. 1984. **Surge flow irrigation experiences.** Presented at

the 1984 mid-central regional meeting of the American Society of Agricultural Engineers. Available as ASAE paper no. MCR 84-151, ASAE, St. Joseph, MI. 9 pp.

Lamm, F. R. and D. H. Rogers. 1983. **Scheduling irrigation using computed evapotranspiration.** Presented at the 1983 mid-central regional meeting of the American Society of Agricultural Engineers. Available as ASAE paper no. MCR 83-109, ASAE, St. Joseph, MI. 22 pp.

Lamm, F. R. 1983. **Dryland crop production strategies in relation to water use.** Presented at the 1983 mid-central regional meeting of the American Society of Agricultural Engineers. Available as ASAE paper no. MC 83-106, ASAE, St. Joseph, MI. 18 pp.

Lamm, F. R. and D. H. Rogers. 1982. **Efficiency of preseason irrigation of corn in northwest Kansas.** Presented at the 1987 mid-central regional meeting of the American Society of Agricultural Engineers. Available as ASAE paper no. MC 82-124, ASAE, St. Joseph, MI. 7 pp.

Lamm, F. R. 1981. **Experience with relay cropping in western Kansas, a preliminary report.** Presented at the 1981 mid-central regional meeting of the American Society of Agricultural Engineers. Available as ASAE paper no. MCR 81-114, ASAE, St. Joseph, MI. 21 pp.

Lamm, F. R., J. M. Gregory, and H. S. Cengiz. 1980. **The evaluation of a leaf water potential function for corn.** Presented at the 1980 mid-central regional meeting of the American Society of Agricultural Engineers. Available as ASAE paper no. MCR 80-309, ASAE, St. Joseph, MI. 2 pp.

NATIONAL AND INTERNATIONAL CONFERENCE PROCEEDINGS

Lamm, F. R. 2015. **Cotton, Tomato, Corn, and Onion Production with Subsurface Drip Irrigation - A Review.** In: Proc. Emerging Technologies for Sustainable Irrigation – A Tribute to the Career of Terry Howell, Sr., November 9-11, Long Beach, CA. ASABE CR-Rom. 20 pp.

Lamm, F. R., D. H. Rogers, A.J. Schlegel, N. L. Klocke, L. R. Stone, R. M. Aiken and L. K. Shaw. 2014. **Residual soil water in western Kansas after corn harvest.** In: Proc. 2014 Irrigation Association Technical Conference, Nov. 19-20, Phoenix, AZ. CD-Rom. 12 pp.

Lamm, F. R. and D. H. Rogers. 2014. **SDI for corn production -A brief review of 25 years of KSU research.** In: Proc. 2014 Irrigation Association Technical Conference, Nov. 19-20, Phoenix, AZ. CD-Rom. 12 pp.

Lamm, F. R., D. H. Rogers, I. Kisekka, and J.P. Aguilar. 2014. **Successful SDI - Addressing the essential issues.** In: Proc. 2014 Irrigation Association Technical Conference, Nov. 19-20, Phoenix, AZ. CD-Rom. 15 pp.

Lamm, F. R., D. H. Rogers, J.P. Aguilar and I. Kisekka. 2014. **Deficit irrigation of grain and oilseed crops.** In: Proc. 2014 Irrigation Association Technical Conference, Nov. 19-20, Phoenix, AZ. CD-Rom. 18 pp.

Lamm, F. R. and D. H. Rogers. 2014. **SDI for corn production -A brief review of 25 years of KSU research.** In: Proc. 4th Reunion Internacional de Riego – Uso eficiente del agua para riego. October 15-16, Manfredi, Cordoba Argentina. pp. 86-97.

Lamm, F. R., T. A. Howell, and J. P. Bordovsky.. 2014. **Ensuring equal opportunity sprinkler irrigation.** In: Proc. 4th Reunion Internacional de Riego – Uso eficiente del agua para riego. October 15-16, Manfredi, Cordoba Argentina. pp. 98-104.

Lamm, F. R., R. M. Aiken, and A A. Aboukheira. 2013. **Irrigation of sunflowers in northwestern Kansas.** In: Proc. 2013 Irrigation Association Tech. Conf., Austin, Texas, November 5-8, 2013. Available from the IA, Falls Church, VA. CD-Rom,13 pp.

Wang, D., L. Liu, N. Klocke, D. Rogers, F. Lamm, and A.Schegel. 2013. **Impact of deficit irrigation on crop physical and chemical properties and ethanol yield.** In: Proc. 8th International Starch Technology Conf., pp 62-79, K. Rausch, V. Singh, and M. Tumbleson eds., University of Illinois, Campaign, IL.

Lamm, F. R., D. M. O'Brien, D.H. Rogers, and T. J. Dumler. 2012. **Comparison of SDI and center pivot sprinkler economics.** In: Proc. 2012 Irrigation Association Tech. Conf., Orlando, Florida, November 4-5, 2012. Available from the IA, Falls Church, VA. CD-Rom,10 pp.

Lamm, F. R. and D.H. Rogers. 2012. **Hydraulic consideration for SDI systems.** In: Proc. 2012 Irrigation Association Tech. Conf., Orlando, Florida, November 4-5, 2012. Available from the IA, Falls Church, VA. CD-Rom, 9 pp.

Lamm, F. R., K. R. Harmony, A. A. Aboukheira, and S. K. Johnson. 2011. **Subsurface drip irrigation of alfalfa.** In: Proc. 2011 Irrigation Association Tech. Conf., San Diego, California, November 6-8, 2011. Available from the IA, Falls Church, VA. 10 pp.

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. Available from the IA, Falls Church, VA. 10 pp.

Lamm, F. R., J. P. Bordovsky, L. J. Schwankl, G. L. Grabow, J. Enciso-Medina, R. T. Peters, P. D. Colaizzi, T. P. Trooien, and D. O. Porter. 2010. **Subsurface drip irrigation: Status of the technology in 2010.** In: Proc. 5th National Decennial Irrigation Conf., ASABE and the Irrigation Association, Phoenix, Arizona, December 5-8. 14 pp.

Lamm, F. R., P. D. Colaizzi, J. P. Bordovsky, T. P. Trooien, J. Enciso-Medina, D. O. Porter, D. H. Rogers, and D. M. O'Brien. 2010. **Can Subsurface Drip Irrigation (SDI) be a Competitive Irrigation System in the Great Plains Region for Commodity Crops?** In: Proc. 5th National Decennial Irrigation Conf., ASABE and the Irrigation Association, Phoenix, Arizona, December 5-8. 15 pp.

Kranz, W. L., R. G. Evans, F. R. Lamm, S. A. O'Shaughnessy, and T. G. Peters. 2010. **Comparison of center pivot controllers for site-specific water application.** In: Proc. 5th National Decennial Irrigation Conf., ASABE and the Irrigation Association, Phoenix, Arizona, December 5-8. 12 pp.

Porter, D. O., D. Rogers, T. Marek, F. Lamm, N. Klocke, M. Alam, and T. Howell. 2010. **Technology transfer: Promoting irrigation progress and best management practices.** In: Proc. 5th National Decennial Irrigation Conf., ASABE and the Irrigation Association, Phoenix, Arizona, December 5-8. 7 pp.

Schlegel, A. J., L.R. Stone, T. J. Dumler and F. R. Lamm. 2010 **Optimal corn management with diminished well capacities.** In: Proc. 5th National Decennial Irrigation Conf., ASABE and the Irrigation Association, Phoenix, Arizona, December 5-8. 7 pp.

Lamm, F. R. 2009. **Managing the challenges of subsurface drip irrigation.** In: Proc. 2009 Irrigation Association Tech. Conf., San Antonio, Texas, December 2-5, 2009. Available from the IA, Falls Church, VA. 23 pp.

Trooien, T. P., D. J. Hills and F. R. Lamm. 2009. **Using SDI to effectively irrigate with biological effluent.** In: Proc. 2009 Irrigation Association Technical Conference, San Antonio, Texas, December 2-5, 2009. Available from the IA, Falls Church, VA. 7 pp.

Lamm, F. R., D. H. Rogers, M. Alam, D. M. O'Brien, and T. P. Trooien. 2009. **Summary of twenty years of Kansas SDI research.** In: Proc. 2009 Irrigation Association Technical Conference, San Antonio, Texas, December 2-5, 2009. Available from the IA, Falls Church, VA. 24 pp.

Enciso-Medina, J., W. L. Multer, and F. R. Lamm. 2009. **Impact of management on the life expectancy of drip systems.** In: Proc. 2009 Irrigation Association Technical Conference, San Antonio, Texas, December 2-5, 2009. Available from the IA, Falls Church, VA. 11 pp.

O'Brien, D. M., F.R. Lamm, D. H. Rogers, T. J. Dumler. 2009. **Effect of the changing U.S.economy on the relative profitability of center pivot sprinklers and SDI systems.** In: Proc. 2009 Irrigation Association Technical Conference, San Antonio, Texas, December 2-5, 2009. Available from the IA, Falls Church, VA.. 13 pp.

Porter, D. O., F.R. Lamm, L. J. Schwankl, and K. A. Shackel. 2009. **Microirrigation for sustainable water use: Research and outreach through a multi-state collaboration.** In: Proc. 2009 Irrigation Association Technical Conference, San Antonio, Texas, December 2-5, 2009. Available from the IA, Falls Church, VA. 8 pp.

Lamm, F. R. and A. A. Aboukheira. 2008. **Effects of early-season water stresses on corn production.** Proc. 29th Annual Int'l. Irrigation Assoc. Tech. Conf., Anaheim, California, Nov. 2-4, 2008. Available from Irrigation Association, Falls Church, VA. Paper No IA09-1052. 10 pp.

Lamm, F. R., T. A. Howell, and J. P. Bordovsky. 2007. **Ensuring Equal Opportunity Sprinkler Irrigation.** Proc. 28th Annual Int'l. Irrigation Assoc. Tech. Conf., San Diego, California, December 9-11, 2007. Available from Irrigation Association, Falls Church, VA. Paper No. IA07-1013. 7 pp.

Howell, T. A. and F. R. Lamm. 2007. **Is Irrigation Real or Am I Imagining It?** Proc. 28th Annual Int'l. Irrigation Assoc. Tech. Conf., San Diego, California, December 9-11, 2007. Available from Irrigation Association, Falls Church, VA. 8 pp.

Lamm, F. R. T. P. Trooien, and A. J. Schlegel. 2007. **Application and utilization of livestock effluent through SDI systems.** Intr'l Symposium on Air Quality and Waste Management for Agriculture, Broomfield, Colorado, Sept. 15-19, 2007. ASABE. 8 pp.

Lamm, F. R. T. P. Trooien, and A. J. Schlegel. 2006. **Applying swine effluent with SDI and LEPA sprinkler irrigation.** Proc. 27th Annual Int'l. Irrigation Assoc. Tech. Conf., San Antonio, Texas, November 5-7, 2008. Available from Irrigation Association, Falls Church, VA. Paper No. IA06-1517. pp. 513-526.

Aiken, R. M. and F. R. Lamm. 2006. **Irrigation Guidelines for Oilseed Crops in the U.S. Central Great Plains.** Proc. 27th Annual Int'l. Irrigation Assoc. Tech. Conf., San Antonio, TX, November 5-7, 2008. Available from Irrigation Association, Falls Church, VA. Paper No. IA06-1458. pp. 14-24.

Lamm, F. R., T. A. Howell, and J. P. Bordovsky. 2006. **Concepts of in-canopy and near-canopy sprinkler irrigation.** In Proc. ASCE-EWRI Water Congress, May 21-25, 2006, Omaha, NE. 11 pp.

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., November 6-8, 2005, Phoenix, AZ. Available from Irrigation Assn., Falls Church VA. IA Paper No. IA05-1264.

Lamm, F. R. 2005. **SDI for conserving water in corn production** In Proc. ASCE-EWRI Water Congress, May 15-19, 2005, Anchorage, AK. 12 pp.

Dukes, M. D., D. Z. Haman, F. Lamm, J. R. Buchanan and C. R. Camp. 2005. **Site selection for Subsurface Drip Irrigation Systems in the Humid Region.** Proc. ASCE-EWRI Water Congress, May 15-19, 2005, Anchorage, AK. 11 pp.

Lamm, F. R. 2004. **Comparison of SDI and Simulated LEPA Sprinkler Irrigation for Corn.** In Proc. Irrigation Assn. Int'l. Irrigation Technical Conf., November 14-16, 2004, Tampa, FL. Available from Irrigation Assn., Falls Church VA. IA Paper No. IA04-1098. pp 475-485.

Clark, G. A., F. R. Lamm, and D. H. Rogers. 2004. **Water temperature effects on the discharge rate of collapsible emitting hose.** In Proc. Irrigation Assn. Int'l. Irrigation Technical Conf., November 14-16, 2004, Tampa, FL. Available from Irrigation Assn., Falls Church VA. IA04-1043. pp 424-434.

Lamm, F. R. and T. P. Trooien. 2003. **Effect of dripline depth on field corn production in Kansas.** In Proc. Irrigation Assn. Int'l. Irrigation Technical Conf., Nov.18-20, 2003, San Diego, CA. Available from Irrigation Assn., Falls Church, VA.

Lamm, F. R. 2002. **Advantages and disadvantages of subsurface drip irrigation.** In Proc. International Meeting on Advances in Drip/Micro Irrigation, Puerto de La Cruz,

Tenerife, Canary Islands, Dec. 2-5, 2002. Instituto Canario de Investigaciones Agrarias, Canary Islands. 13 pp.

Lamm, F. R., T. P. Trooien, G. A. Clark, L. R. Stone, M. Alam, D. H. Rogers, and A. J. Schlegel. 2002. **Using beef lagoon wastewater with SDI.** In Proc. Irrigation Assn. Int'l. Irrigation Technical Conf., Oct. 24-26, 2002, New Orleans, LA. Available from Irrigation Assn., Falls Church, VA.

Lamm, F. R., D. M. O'Brien, D. H. Rogers, and T. J. Dumler. 2002. **Sensitivity of center pivot sprinkler and SDI comparisons.** In Proc. Irrigation Assn. Int'l. Irrigation Technical Conf., Oct. 24-26, 2002, New Orleans, LA. Available from Irrigation Assn., Falls Church, VA.

Trooien, T. P., D. J. Hills, and F. R. Lamm. 2002. **Drip irrigation with biological effluent.** In Proc. Irrigation Assn. Int'l. Irrigation Technical Conf., Oct. 24-26, 2002, New Orleans, LA. Available from Irrigation Assn., Falls Church, VA.

Lamm, F. R. and T. P. Trooien. 2001. **Irrigation capacity and plant population effects on corn production using SDI.** In Proc. Irrigation Assn. Int'l. Irrigation Technical Conf., Nov. 4-6, 2001, San Antonio, TX. Pages 73-80. Available from Irrigation Assn., Falls Church, VA.

Lamm, F. R. and T. P. Trooien. 2000. **SDI for corn production: A ten year summary of research.** In proceedings of the 6th International Microirrigation Congress (Micro 2000), Capetown, South Africa, Oct. 22-27, 2000. 9 pp.

Lamm, F. R. and A. J. Schlegel. 2000. **Nitrogen fertilization for corn when using LEPA center pivot sprinklers.** In proceedings of the 4th Decennial National Irrigation Symposium, Phoenix, AZ, Nov. 14-16, 2000.

Camp, C. R., F. R. Lamm, R. G. Evans, and C. J. Phene. 2000. **Subsurface drip irrigation: Past, present and future.** In proceedings of the 4th Decennial National Irrigation Symposium, Phoenix, AZ, Nov. 14-16, 2000. pp. 363-372.

Trooien, T. P., F. R. Lamm, L. R. Stone, M. Alam, D. H. Rogers, G. A. Clark, and A. J. Schlegel. 2000. **Using subsurface drip irrigation with livestock wastewater.** In proceedings of the 4th Decennial National Irrigation Symposium, Phoenix, AZ, Nov. 14-16, 2000. pp. 379-384.

Lamm, F. R. and T. P. Trooien. 1999. **SDI research in Kansas after ten years.** In proceedings of the Irrigation Association International Irrigation Show and Conference. Irrigation Association, Fairfax, VA. pp. 1-8.

Lamm, F. R., A. J. Schlegel, and G. A. Clark. 1998. **Optimum nitrogen fertigation for corn using SDI.** In proceedings of the Great Plains Fertility Conference, Denver, CO, March 3-4 1998. pp. 176-184.

Lamm, F. R., A. J. Schlegel, and G. A. Clark. 1997. **Optimum nitrogen fertigation for corn using SDI.** In proceedings of the 1997 Irrigation Association international exposition and technical conference, Nashville, TN, Nov. 2-4, 1997. Available from Irrigation Association, Fairfax, VA.

- Lamm, F. R. 1997. **Subsurface drip irrigation for corn and KSU's bed management system for SDI.** Presentation to the semi-annual meeting of the Groundwater Management Districts Association, Colby, KS, June 4, 1997.
- Lamm, F. R., T. P. Trooien, G. A. Clark, D. H. Rogers, and M. Alam. 1997. **SDI and electrotechnologies.** In proceedings of the EPRI-Agricultural Technology Alliance semi-annual meeting, Boise, ID, May 28-30, 1997. Available from EPRI-ATA, Palo Alto, CA.
- Lamm, F. R. 1996. **Subsurface drip irrigation for corn.** Presentation to the annual meeting of the Groundwater Management Districts Association, Las Vegas, NV, Dec 9-11, 1996.
- Lamm, F. R., D. H. Rogers, and G. A. Clark. 1996. **Irrigation scheduling for corn: macromanagement.** In Proceedings of the Evapotranspiration and Irrigation Scheduling Conference, San Antonio, TX, Nov. 3-6, 1996. Published by ASAE. pp. 741-748.
- Lamm, F. R., G. A. Clark, M. Yitayew, R. A. Schoneman, R. M. Mead, and A. D. Schneider. 1995. **Installation issues for SDI systems.** In proceedings of the 1995 Irrigation Association (IA) international exposition and technical conference, Phoenix, AZ, Nov. 12-14, 1995. pp 29-35. Available from IA, Fairfax, VA.
- Lamm, F. R., W. E. Spurgeon, D. H. Rogers, and H. L. Manges. 1995. **Corn production using subsurface drip irrigation.** In proceedings of the Fifth International Microirrigation Congress, Orlando, FL, Apr 2-6, 1995. pp. 388-394. Available from ASAE, St. Joseph, MI.
- Dhuyvetter, K. C., F. R. Lamm, and D. H. Rogers. 1995. **Subsurface drip irrigation (SDI) for field corn -- an economic analysis.** In proceedings of the Fifth International Microirrigation Congress, Orlando, FL, Apr 2-6, 1995. pp. 395-401. Available from ASAE, St. Joseph, MI.
- Lamm, F. R. 1994. **Uniformity of in-canopy sprinkler application.** In proceedings of the 1994 Irrigation Association international exposition and technical conference, Atlanta, GA, Nov. 5-8, 1994. Available from Irrigation Association, Fairfax, VA. pp 34-41.
- Lamm, F. R., H. L. Manges, and W. E. Spurgeon. 1993. **Uniform application by center pivot sprinklers -- crop canopy concepts and results.** In proceedings of the 1993 Irrigation Association international exposition and technical conference, San Diego, CA, Oct. 31-Nov. 3, 1993. Available from Irrigation Association, Arlington, VA. pp 203-208.
- Lamm, F. R., W. E. Spurgeon, H. L. Manges, and D. H. Rogers. 1992. **Using drip irrigation for a nontraditional crop -- evaluating the practice for irrigated corn.** In proceedings of the 1992 Irrigation Association international exposition and technical conference, New Orleans, LA, Nov. 1-4, 1992. pp. 142-147. Available from Irrigation Association, Arlington, VA.
- Lamm, F. R., W. E. Spurgeon, H. L. Manges, and D. H. Rogers. 1992. **Using drip irrigation for a nontraditional crop -- evaluating the practice for irrigated corn.** In proceedings of the 24th national agricultural plastics congress, Overland Park, KS, June 4-8, 1993. pp. 136-141. Available from the American Society for Plasticsulture, St. Augustine, FL.

Havlin, J. L. and F. R. Lamm. 1988. **Dryland corn management for the Central Great Plains.** A refereed poster presentation published in the proceedings of the international conference on dryland agriculture, Amarillo, TX, Aug. 1988.

Central Plains Irrigation Conference Proceedings

Lamm, F. R. and D. H. Rogers. 2015. **Irrigation scheduling remains important for low capacity systems.** In: Proc. 27th annual Central Plains Irrigation Conference, Feb. 17-18, 2015, Colby, Kansas. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 35-43.

Lamm, F. R. and D. H. Rogers. 2015. **Frequently and not-so-frequently asked questions about subsurface drip irrigation.** In: Proc. 27th annual Central Plains Irrigation Conference, Feb. 17-18, 2015, Colby, Kansas. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 96-107.

Lamm, F. R., D. M. O'Brien, and D. H. Rogers. 2015. **Using the K-State center pivot sprinkler and SDI economic comparison spreadsheet – 2015.** In: Proc. 27th annual Central Plains Irrigation Conference, Feb. 17-18, 2015, Colby, Kansas. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 108-116.

Aguilar, J., D. H. Rogers, I. Kisekka, and F. R. Lamm. 2015. **SDI applications in Kansas and the US.** In: Proc. 27th annual Central Plains Irrigation Conference, Feb. 17-18, 2015, Colby, Kansas. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 71-82.

Rogers, D. H., J. Aguilar, I. Kisekka, P. L. Barnes, and F. R. Lamm. 2015. **Agricultural crop water use.** In: Proc. 27th annual Central Plains Irrigation Conference, Feb. 17-18, 2015, Colby, Kansas. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 1-18.

Rogers, D. H., J. Aguilar, I. Kisekka, and F. R. Lamm. 2015. **Long term water strategy planning using Crop Water Allocator (CWA).** In: Proc. 27th annual Central Plains Irrigation Conference, Feb. 17-18, 2015, Colby, Kansas. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 50-60.

Schlegel, A., L. Stone, T. Dumler, and F. R. Lamm. 2015. **Effective use of crop rotation and residue for irrigated agriculture.** In: Proc. 27th annual Central Plains Irrigation Conference, Feb. 17-18, 2015, Colby, Kansas. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 19-23.

Lamm, F.R. 2014. **Examining the toolbox for deficit irrigation of grain and oilseed crops.** In: Proc. 26th annual Central Plains Irrigation Conference, Feb. 25-26, 2014, Burlington, Colorado. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 82-98.

Lamm, F. R., D. H. Rogers, J. Aguilar, and I. Kisekka. 2014. **Successful SDI - Addressing the essential issues.** In: Proc. 26th annual Central Plains Irrigation Conference, Feb. 25-26, 2014, Burlington, Colorado. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 40-54.

Lamm, F. R. and D. H. Rogers. 2014. **SDI for corn production -A brief review of 25 years of KSU research.** In: Proc. 26th annual Central Plains Irrigation Conference, Feb.

25-26, 2014, Burlington, Colorado. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 55-66.

Lamm, F. R., D. M. O'Brien, and D. H. Rogers. 2014. **Using the K-State center pivot sprinkler and SDI economic comparison spreadsheet – 2014.** In: Proc. 26th annual Central Plains Irrigation Conference, Feb. 25-26, 2014, Burlington, Colorado. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 67-76.

Evetts, S. R., P. D. Colazzi, S. A. O'Shaughnessy, F. R. Lamm, T. J. Trout, and W. L. Kranz. 2014. **The future of irrigation on the U.S. Great Plains.** In: Proc. 26th annual Central Plains Irrigation Conference, Feb. 25-26, 2014, Burlington, Colorado. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 2-25.

Schlegel, A., L. Stone., T. Dumler, and F. Lamm. 2014. **No-till crop rotations with limited irrigation.** In: Proc. 26th annual Central Plains Irrigation Conference, Feb. 25-26, 2014, Burlington, Colorado. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 77-81.

Lamm, F.R. and D.H. Rogers. 2012. **SDI, the basics of successful systems.** In: Proc. 24th annual Central Plains Irrigation Conference, Feb. 21-22, 2012, Colby, Kansas. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 133-149.

Lamm, F.R. and D.H. Rogers. 2012. **Hydraulic considerations for SDI systems.** In: Proc. 24th annual Central Plains Irrigation Conference, Feb. 21-22, 2012, Colby, Kansas. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 150-158.

Lamm, F. R., D. M. O'Brien, D. H. Rogers, and T.J. Dumler. 2012. **Using the K-State center pivot sprinkler and SDI economic comparison spreadsheet - 2012.** In: Proc. 24th annual Central Plains Irrigation Conference, Feb. 21-22, 2012, Colby, Kansas. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 159-169.

Lamm, F.R., D.H. Rogers, A.J. Schlegel, N.L. Klocke, L.R. Stone, R. M. Aiken, and L.K. Shaw. 2012. **Assessment of plant available soil water on producer fields in western Kansas.** In: Proc. 24th annual Central Plains Irrigation Conference, Feb. 21-22, 2012, Colby, Kansas. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 37-50.

Lamm, F.R., T.A Howell, and J.P. Bordovsky. 2012. **Erraticity of sprinkler irrigated corn in 2011.** In: Proc. 24th annual Central Plains Irrigation Conference Feb. 21-22, 2012, Colby, Kansas. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 88-101.

Rogers, D.H. and F.R. Lamm. 2012. **Kansas irrigation trends.** In: Proc. 24th annual Central Plains Irrigation Conference Feb. 21-22, 2012, Colby, Kansas. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 1-15.

Schlegel, A.J., L.R. Stone, T.J. Dumler, and F. R. Lamm. 2012. **Optimizing cropping systems under limited irrigation conditions.** In: Proc. 24th annual Central Plains Irrigation Conference Feb. 21-22, 2012, Colby, Kansas. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 31-36.

Schlegel, A.J., L.R. Stone, T.J. Dumler, and F. R. Lamm. 2012. **A return look at dormant season irrigation strategies.** In: Proc. 24th annual Central Plains Irrigation Conference Feb. 21-22, 2012, Colby, Kansas. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 51-58.

Bordovsky, J.P., A.M. Cranmer, P.D. Colaizzi, F.R. Lamm, S.R. Evett, and T. A. Howell. 2012. **Investigating strategies to improve crop germination when using SDI.** In: Proc. 24th annual Central Plains Irrigation Conference Feb. 21-22, 2012, Colby, Kansas. Available from CPIA, 760 N. Thompson, Colby, Kansas. pp. 112-127.

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. Available from CPIA, 760 N. Thompson, Colby, Kansas. 169-180.

Lamm, F. R., D. H. Rogers, M. Alam, D. M. O'Brien, and T. P. Trooien. 2011. **Twenty-two years of SDI research in Kansas.** In: Proc. 23rd annual Central Plains Irrigation Conference, Burlington, Colorado, Feb. 22-23, 2011. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 68-92.

Lamm, F. R., D. M. O'Brien, D. H. Rogers, and T.J. Dumler. 2011. **Using the K-State center pivot sprinkler and SDI economic comparison spreadsheet - 2011.** In: Proc. 23rd annual Central Plains Irrigation Conference, Burlington, Colorado, Feb. 22-23, 2011. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 93-103.

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. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 181-189.

Schlegel, A. J., L. R. Stone, T. J. Dumler, and F. R. Lamm. 2011. **Preseason irrigation of corn with diminished well capacities.** In: Proc. 23rd annual Central Plains Irrigation Conference, Burlington, Colorado, Feb. 22-23, 2011. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 11-18.

Lamm, F. R., D. H. Rogers, M. Alam, D. M. O'Brien, and T. P. Trooien. 2010 **Twenty-One Years of SDI Research in Kansas.** In: Proc. Central Plains Irrigation Conference, Kearney, NE., Feb. 23-24, 2010. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 73-96.

O'Brien, D. M., F. R. Lamm, D. H. Rogers and T. J. Dumler. 2010. **How economic factors affect the profitability of center pivot sprinkler and SDI systems.** In: Proc. Central Plains Irrigation Conference, Kearney, NE., Feb. 23-24, 2010. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 97-109.

Lamm, F. R. 2009. **A look at twenty years of SDI research in Kansas.** In: Proc. Central Plains Irrigation Conference, Colby, NE., Feb. 24-25, 2009. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 152-176.

Lamm, F. R. and A. A. Aboukheira. 2009. **Corn irrigation macromanagement at the seasonal boundaries – Initiating and terminating the irrigation season.** In: Proc.

Central Plains Irrigation Conference, Colby, KS., Feb. 24-25, 2009. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 40-60.

Rogers, D. H. and F. R. Lamm. 2009. **Keys to successful adoption of SDI: Minimizing problems and ensuring longevity.** In: Proc. Central Plains Irrigation Conference, Colby, KS., Feb. 24-25, 2009. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 140-151.

Lamm, F. R., D. M. O'Brien, D. H. Rogers, and T. J. Dumler. 2009. **Using the K-State center pivot sprinkler and SDI economic comparison spreadsheet – 2009.** In: Proc. Central Plains Irrigation Conference, Colby, KS., Feb. 24-25, 2009. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 177-187.

Lamm, F. R., R. M. Aiken, and A. A. Aboukheira. 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.

Lamm, F. R., D. M. O'Brien, D. H. Rogers, and T. J. Dumler. 2008. **Using the K-State center pivot sprinkler and SDI economic comparison spreadsheet – 2008.** In: Proc. Central Plains Irrigation Conference, Greeley, CO., Feb. 19-20, 2008. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 61-70.

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.

Rogers, D. H. and F. R. Lamm. 2007. **Criteria for successful adoption of SDI systems.** In: Proc. Central Plains Irrigation Conference, Kearney, NE., Feb. 27-28, 2007. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 62-71.

Lamm, F. R. and R. M. Aiken 2006. **Effect of tillage and irrigation capacity on corn production.** In: Proc. Central Plains Irrigation Conference, Colby, KS., Feb. 21-22, 2006. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 122-135.

Lamm, F.R. 2006. **Progress with SDI research at Kansas State University.** In: Proc. Central Plains Irrigation Conference, Colby, KS., Feb. 21-22, 2006. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 67-85.

Lamm, F. R., D. M. O'Brien, D. H. Rogers, and T. J. Dumler. 2006. **Using the K-State center pivot sprinkler and SDI economic comparison spreadsheet.** In: Proc. Central Plains Irrigation Conference, Colby, KS., Feb. 21-22, 2006. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 86-93.

Rogers, D. H. and F. R. Lamm. 2006. **Criteria for successful adoption of SDI systems.** In: Proc. Central Plains Irrigation Conference, Colby, KS., Feb. 21-22, 2006. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 57-66.

Colaizzi, P. D., F. R Lamm, T. A. Howell, and S. R. Evett. 2006. **Crop production comparison under various irrigation systems.** In: Proc. Central Plains Irrigation Conference, Colby, KS., Feb. 21-22, 2006. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 189-207.

Aiken, R. M. and F. R. Lamm. 2006. **Irrigation of oilseed crops.** In: Proc. Central Plains Irrigation Conference, Colby, KS., Feb. 21-22, 2006. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 162-172.

Lamm, F. R. and L. R. Stone. 2005. **Summer crop production as related to irrigation capacity.** In proceedings of the Central Plains Irrigation Conference, Sterling, CO, Feb. 16-17, 2005. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 51-67.

Rogers, D. H. and F. R. Lamm. 2005. **Key considerations for a successful subsurface drip irrigation (SDI) system.** In proceedings of the Central Plains Irrigation Conference, Sterling, CO, Feb. 16-17, 2005. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 113-118.

Yonts, C. D., F. R. Lamm, W. Kranz, J. Payero and D. Martin. 2005. **Impact of wide drop spacing and sprinkler height for corn production.** In proceedings of the Central Plains Irrigation Conference, Sterling, CO, Feb. 16-17, 2005. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 99-106.

Lamm, F. R. 2004. **Corn production as related to irrigation capacity.** In proceedings of the Central Plains Irrigation Conference, Kearney, NE, Feb. 17-18, 2004. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 23-36.

Rogers, D. H. and F. R. Lamm. 2004. **Key considerations for a successful subsurface drip irrigation (SDI) system.** In proceedings of the Central Plains Irrigation Conference, Kearney, NE., Feb. 17-18, 2004. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 87-92.

Yonts, C. D., F. R. Lamm, W. Kranz, J. Payero and D. Martin. 2004. **Impact of wide drop spacing and sprinkler height for corn production.** In proceedings of the Central Plains Irrigation Conference, Kearney, NE, Feb. 17-18, 2004. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 69-76.

Heermann, D. and F. Lamm. 2003. **History of CPIA.** In proceedings of the Central Plains Irrigation Conference, Colby, KS, Feb. 4-5, 2003. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 29-36.

Lamm, F. R. 2003. **Long-term effects of the drought on the Central Great Plains.** In proceedings of the Central Plains Irrigation Conference, Colby, KS, Feb. 4-5, 2003. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 6-15.

Yonts, C. D., F. R. Lamm, W. Kranz, and J. Payero. 2003. **Impact of wide drop spacing and sprinkler height for corn production.** In proceedings of the Central Plains Irrigation Conference, Colby, KS, Feb. 4-5, 2003. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 99-108.

Lamm, F. R. 2003. **Corn production in the Central Great Plains as related to irrigation capacity.** In proceedings of the Central Plains Conference, Colby, KS, Feb. 4-5, 2003. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 151-165.

Lamm, F. R., D. M. O'Brien, D. H. Rogers, and T. J. Dumler. 2003. **Center pivot sprinkler and SDI economic comparisons.** In proceedings of the Central Plains

Irrigation Conference, Colby, KS, Feb. 4-5, 2003. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 199-211.

Lamm, F. R. 2003. **KSU research for corn production using SDI: 14 years of progress.** In proceedings of the Central Plains Irrigation Conference, Colby, KS, Feb. 4-5, 2003. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 230-245.

Lamm, F. R., D. H. Rogers, and W. E. Spurgeon. 2003. **Design and management considerations for subsurface drip irrigation systems.** In proceedings of the Central Plains Irrigation Conference, Colby, KS, Feb. 4-5, 2003. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 189-198.

Rogers, D. H., F. R. Lamm, and M. Alam. 2003. **SDI water quality assessment guidelines.** In proceedings of the Central Plains Irrigation Conference, Colby, KS, Feb. 4-5, 2003. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 220-229.

Alam, M., D. H. Rogers, F. R. Lamm, and T. P. Trooien. 2003. **Filtration: A basic component for SDI to avoid clogging hazards.** In proceedings of the Central Plains Irrigation Conference, Colby, KS, Feb. 4-5, 2003. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 212-219.

Lamm, F. R., D. H. Rogers, and W. E. Spurgeon. 2002. **Design and management considerations for subsurface drip irrigation systems.** In proceedings of the Central Plains Irrigation Short Course, Lamar, CO, Feb. 5-6, 2002. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 93-101.

Lamm, F. R., T. P. Trooien L. R. Stone, M. Alam, D. H. Rogers, G. A. Clark, and A. J. Schlegel. 2002. **Using livestock wastewater with SDI: A status report after four seasons.** In proceedings of the Central Plains Irrigation Short Course, Lamar, CO, Feb. 5-6, 2002. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 8-15.

Lamm, F. R. and T. P. Trooien. 2002. **Irrigation capacity and plant population effects on corn production using SDI.** In proceedings of the Central Plains Irrigation Short Course, Lamar, CO, Feb. 5-6, 2002. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 122-130.

Alam, M., T. P. Trooien, F. R. Lamm, and D. H. Rogers. 2002. **Filtration and maintenance considerations for SDI systems.** In proceedings of the Central Plains Irrigation Short Course, Lamar, CO, Feb. 5-6, 2002. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 110-121.

Lamm, F. R., D. H. Rogers, and W. E. Spurgeon. 2001. **Design and management considerations for subsurface drip irrigation systems.** In proceedings of the Central Plains Irrigation Short Course, Kearney, NE, Feb. 5-6, 2001. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 29-37.

Lamm, F. R., T. P. Trooien, L. R. Stone, M. Alam, D. H. Rogers, G. A. Clark, and A. J. Schlegel. 2001. **Using livestock wastewater with SDI: A status report after three seasons.** In proceedings of the Central Plains Irrigation Short Course, Kearney, NE, Feb. 5-6, 2001. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 97-104.

Lamm, F. R. 2000. **Who wants to be an in-canopy irrigator?** In proceedings of the Central Plains Irrigation Short Course, Garden City, KS, Feb. 9-10, 2000. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 118-127.

Lamm, F. R., D. H. Rogers, and W. E. Spurgeon. 2000. **Design and management considerations for subsurface drip irrigation systems.** In proceedings of the Central Plains Irrigation Short Course, Garden City, KS, Feb. 9-10, 2000. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 72-80.

Trooien, T. P, F. R. Lamm, L. R. Stone, M. Alam, D. H. Rogers, G. A. Clark, and A. J. Schlegel. 2000. **Using livestock wastewater with SDI.** In proceedings of the Central Plains Irrigation Short Course, Garden City, KS, Feb. 9-10, 2000. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 81-87.

O'Brien, D. M., F. R. Lamm, L. R. Stone, and D. H. Rogers. 2000. **The economics of converting from surface to sprinkler irrigation systems for lower pumping capacity wells.** In proc. of the Central Plains Irrigation Short Course, Garden City, KS, Feb. 9-10, 2000. Available from CPIA, 760 N.Thompson, Colby, KS. pp. 88-98.

Lamm, F. R., A. J. Schegel, and G. A. Clark. 1999. **Optimum nitrogen fertigation for corn using SDI.** In proceedings of the Central Plains Irrigation Short Course, Sterling, CO, Feb. 9-10, 1999. Available from CPIA, 760 N. Thompson, Colby, KS. pp. 52-61.

O'Brien, D. M. and F. R. Lamm. 1999. **Economics of surface and sprinkler irrigation system conversion for lower capacity systems.** In proceedings of the Central Plains Irrigation Short Course, Sterling, CO, Feb. 9-10, 1999. Available from CPIA, 760 N. Thompson, Colby. KS. pp. 86-96.

Lamm, F. R., D. H. Rogers, and W. E. Spurgeon. 1998. **Design and management considerations for subsurface drip irrigation systems.** In proceedings of the 1998 Central Plains Irrigation Short Course, North Platte, NE, Feb. 17-18, 1998. Available from CPIA, 760 N. Thompson, Colby, KS. pp. 6-12.

Lamm, F. R., W. E. Spurgeon, D. H. Rogers, and H. L. Manges. 1998. **KSU research for corn production using SDI.** In proceedings of the 1998 Central Plains Irrigation Short Course, North Platte, NE, Feb. 17-18, 1998. Available from CPIA, 760 N. Thompson, Colby, KS. pp. 13-21.

Trooien, T. P., M. Alam, and F. R. Lamm. 1998. **Filtration and maintenance considerations for SDI systems.** In proceedings of the 1998 Central Plains Irrigation Short Course, North Platte, NE, Feb. 17-18, 1998. Available from CPIA, 760 N. Thompson, Colby, KS. pp. 22-26.

O'Brien, D. M., D. H. Rogers, F. R. Lamm, and G. A. Clark. 1998. **Economic comparison of SDI and center pivots for various field sizes.** In proceedings of the 1998 Central Plains Irrigation Short Course, North Platte, NE, Feb. 17-18, 1998. Available from CPIA, 760 N. Thompson, Colby, KS. pp. 27-38.

Lamm, F. R. 1997. **In-canopy sprinkler application for corn -- what works and what doesn't.** In proceedings of the Central Plains Irrigation Short Course, Colby, KS, Feb. 4, 1997. Available from CPIA, 760 N. Thompson, Colby, KS. pp. 14-23.

Lamm, F. R. 1997. **Improvements in irrigation efficiency.** In proceedings of the Central Plains Irrigation Short Course, Colby, KS, Feb. 4, 1997. Available from CPIA, 760 N. Thompson, Colby, KS. pp. 49-52.

Lamm, F. R., D. H. Rogers, and W. E. Spurgeon. 1997. **Design and management considerations for subsurface drip irrigation systems.** In proceedings of the Central Plains Irrigation Short Course, Colby, KS, Feb. 4, 1997. Available from CPIA, 760 N. Thompson, Colby, KS. pp. 65-71.

Lamm, F. R., W. E. Spurgeon, D. H. Rogers and H. L. Manges. 1997. **KSU research for corn production using SDI.** In proceedings of the Central Plains Irrigation Short Course, Colby, KS, Feb. 4, 1997. Available from CPIA, 760 N. Thompson, Colby, KS. pp. 72-80.

O'Brien, D. M., D. H. Rogers, F. R. Lamm, and G. A. Clark. 1997. **Irrigation system economics as affected by field size.** In proceedings of the Central Plains Irrigation Short Course, Colby, KS, Feb. 4, 1997. Available from CPIA, 760 N. Thompson, Colby, KS. pp. 81-93.

O'Brien, D. M., D. H. Rogers, and F. R. Lamm. 1996. **An economic comparison of alternative irrigation systems on small and irregularly shaped fields.** In proceedings of the Central Plains Irrigation Short Course, Burlington, CO, Feb. 6-7, 1996. pp. 74-88.

Lamm, F. R. and D. H. Rogers. 1995. **Center pivot sprinkler irrigation requirements for corn in northwest Kansas.** In proceedings of the Central Plains Irrigation Short Course, Garden City, KS, Feb. 7-8, 1995. pp. 43-48.

Lamm, F. R. 1995. **Uniformity of in-canopy center pivot sprinkler application in fully developed corn canopies.** In proceedings of the Central Plains Irrigation Short Course, Garden City, KS, Feb. 7-8, 1995. pp. 64-72.

Dhuyvetter, K. C., F. R. Lamm, and D. H. Rogers. 1995. **An economic comparison of subsurface drip irrigation (SDI) and center pivot sprinkler for field corn.** In proceedings of the Central Plains Irrigation Short Course, Garden City, KS, Feb. 7-8, 1995. pp. 139-147.

Lamm, F. R., D. H. Rogers, and W. E. Spurgeon. 1995. **Design and management considerations for subsurface drip irrigation systems.** In proceedings of the Central Plains Irrigation Short Course, Garden City, KS, Feb. 7-8, 1995. pp. 148-155.

Lamm, F. R., W. E. Spurgeon, H. L. Manges, and D. H. Rogers. 1995. **Subsurface drip irrigation research for corn.** In proceedings of the Central Plains Irrigation Short Course, Garden City, KS, Feb. 7-8, 1995. pp. 156-159.

Lamm, F. R., D. H. Rogers, and W. E. Spurgeon. 1994. **Design and management considerations for subsurface drip irrigation systems.** In proceedings of the Central Plains Irrigation Short Course, Kearney, NE, Feb. 7-8, 1994. pp. 98-106.

Lamm, F. R., W. E. Spurgeon, H. L. Manges, and D. H. Rogers. 1994. **Subsurface drip irrigation for corn production.** In proceedings of the Central Plains Irrigation Short Course, Kearney, NE, Feb. 7-8, 1994. pp. 107-110.

Lamm, F. R. 1992. **Effect of system capacity and nozzle type on corn production.** In proceedings of the Central Plains Irrigation Short Course, Goodland, KS, Feb. 4-5, 1992. pp. 23-25.

Lamm, F. R., W. E. Spurgeon, H. L. Manges, and D. H. Rogers. 1992. **Drip irrigation for corn production -- the research approach in western Kansas.** In proceedings of the Central Plains Irrigation Short Course, Goodland, KS, Feb. 4-5, 1992. pp. 87-92.

Rogers, D. H. and F. R. Lamm. 1990. **Center pivot runoff.** In proceedings of the Central Plains Irrigation Short Course, Wray, CO, Feb. 5-6, 1990. pp. 29-35.

Lamm, F. R. 1989. **Crop response under various irrigation scheduling criteria.** In proceedings of the Central Plains Irrigation Short Course, Colby, KS, Feb. 13-14, 1989. pp. 97-104.

KWRRI REPORTS

Lamm, F. R. 1996. **Narrow corn row spacing for cost effective, water efficient subsurface drip irrigation, 1994-1995.** Kansas Water Resources Research Institute, Manhattan, KS. KWRRI Contribution No. 323. 19 pp.

Lamm, F. R. 1995. **Narrow corn row spacing for cost effective, water efficient subsurface drip irrigation.** Kansas Water Resources Research Institute, Manhattan, KS. KWRRI Contribution No. 316. 20 pp.

Lamm, F. R. 1994. **Center pivot sprinkler package comparison under various system capacities -- (Year 2).** Kansas Water Resources Research Institute, Manhattan, KS. KWRRI Contribution No. 309. 26 pp.

Lamm, F. R. 1993. **Center pivot sprinkler package comparison under various system capacities.** Kansas Water Resources Research Institute, Manhattan, KS. KWRRI Contribution No. 302. 23 pp.

Koelliker, J. K. and F. R. Lamm. 1982. **Effect of length of fallow period on water storage and drainage.** Kansas Water Resources Research Institute, Manhattan, KS. KWRRI Contribution No. 227. 50 pp.

EXPERIMENT STATION PUBLICATIONS

Reports of Progress

Single Topic

Williams, J. R., R. V. Llewelyn, M. S. Reed, F. R. Lamm, and D. R. Delano. 1996. **Economic analysis of alternative irrigation systems for continuous corn and grain sorghum in western Kansas.** Report of Progress 766, July 1996. KAES, Manhattan, KS. 46 pp.

Hickman, J. S. (Editor). 1988. **Conservation tillage research 1988.** Report of Progress

542, July 1988. Kansas Agricultural Experiment Station. KAES Contribution No. 88-419-S. 185 pp.

Hickman, J. S. (Editor). 1986. **Conservation tillage research 1985**. Report of Progress 492. March 1986. Kansas Agricultural Experiment Station. KAES Contribution No. 86-302-S. 183 pp.

Lamm, F. R. 1985. **Relay cropping of soybeans into wheat**. Report of Progress 567. March 1985. Kansas Agricultural Experiment Station. KAES Contribution No. 85-281-S. 11 pp.

Nilson, E. B., P. W. Stahlman, C. A. Thompson, R. E. Gwin, C. A. Norwood, F. R. Lamm, and M. E. Mikesell. 1985. **Wheat-grain sorghum-fallow using reduced tillage with herbicides**. Report of Progress 482. Aug. 1985. Kansas Agricultural Experiment Station. KAES Contribution No. 85-506-S. 17 pp.

Annual Series

Sunderman, H. D. and F. R. Lamm. 1996. **1996 agricultural research**. Report of Progress 741. June 1996. Kansas Agricultural Experiment Station. KAES Contribution No. 96-476-S. 72 pp.

Lamm, F. R. and H. D. Sunderman. 1995. **1995 agricultural research**. Report of Progress 741. Nov. 1995. Kansas Agricultural Experiment Station. KAES Contribution No. 94-2-S. 66 pp.

Lamm, F. R., H. D. Sunderman, and J. R. Lawless. 1993. **1993 agricultural research**. Report of Progress 688. Aug. 1993. Kansas Agricultural Experiment Station. KAES Contribution No. 94-2-S. 56 pp.

Sunderman, H. D., F. R. Lamm, and J. R. Lawless. 1992. **1992 agricultural research**. Report of Progress 660. June 1992. Kansas Agricultural Experiment Station. KAES Contribution No. 92-584-S. 89 pp.

Lawless, J. R., H. D. Sunderman, and F. R. Lamm. 1991. **1991 agricultural research**. Report of Progress 635. Aug. 1991. Kansas Agricultural Experiment Station. KAES Contribution No. 91-564-S. 87 pp.

Lamm, F. R., J. R. Lawless, and H. D. Sunderman. 1990. **1990 agricultural research**. Report of Progress 602. June 1990. Kansas Agricultural Experiment Station. KAES Contribution No. 90-520-S. 78 pp.

Sunderman, H. D., F. R. Lamm, and J. R. Lawless. 1989. **1989 agricultural research**. Report of Progress 576. Aug. 1989. Kansas Agricultural Experiment Station. KAES Contribution No. 89-531-S. 82 pp.

Lawless, J. R., H. D. Sunderman, F. R. Lamm, and R. S. White. 1988. **1988 agricultural research**. Report of Progress 546. June 1988. Kansas Agricultural Experiment Station. KAES Contribution No. 88-474-S. 95 pp.

Lamm, F. R., J. R. Lawless, and H. D. Sunderman. 1987. **1987 agricultural research**. Report of Progress 521. May 1987. Kansas Agricultural Experiment Station. KAES

Contribution No. 87-412-S. 114 pp.

Sunderman, H. D., F. R. Lamm, L. D. Robertson, and J. R. Lawless. 1986. **1986 report of agricultural research**. Report of Progress 502, June 1986. Kansas Agricultural Experiment Station. KAES Contribution No. 86-396-S. 97 pp.

Lawless, J. R., H. D. Sunderman, F. R. Lamm, and L. D. Robertson. 1985. **1985 report of agricultural research**. Report of Progress 476. June 1985. Kansas Agricultural Experiment Station. KAES Contribution No. 85-395-S. 92 pp.

Robertson, L. D., J. R. Lawless, H. D. Sunderman, and F. R. Lamm. 1984. **1984 report of agricultural research**. Report of Progress 454. June 1984. Kansas Agricultural Experiment Station. KAES Contribution No. 84-405-S. 73 pp.

Lamm, F. R., L. D. Robertson, J. R. Lawless, and H. D. Sunderman. 1983. **1983 report of agricultural research**. Report of Progress 435. June 1983. Kansas Agricultural Experiment Station. KAES Contribution No. 83-162-S. 70 pp.

Sunderman, H. D., F. R. Lamm, L. D. Robertson, and J. R. Lawless. 1982. **1982 report of research results**. Report of Progress 418. June 1982. Kansas Agricultural Experiment Station. KAES Contribution No. 82-352-D. 68 pp.

Lawless, J. R., H. D. Sunderman, and F. R. Lamm. 1981. **1981 report of research results**. Report of Progress 402. June 1981. Kansas Agricultural Experiment Station. KAES Contribution No. 80-359-S. 49 pp.

Lamm, F. R., J. R. Lawless, and H. D. Sunderman. 1980. **1980 report of research results**. Report of Progress 382. June 1980. Kansas Agricultural Experiment Station. KAES Contribution No. 80-323-S. 44 pp.

Keeping Up With Research

Gwin, R. E., C. A. Norwood, and F. R. Lamm. 1984. **Research on wheat-sorghum-fallow in western Kansas**. Keeping Up With Research 76. April 1984. Kansas Agricultural Experiment Station. KAES Contribution No. 84-372-S. 2 pp.

COOPERATIVE EXTENSION PUBLICATIONS

Rogers, D., J. Aguilar, I. Kisekka, P. L. Barnes and F. R. Lamm. 2015. **Agricultural crop water use**. KSU Coop. Ext. Irrigation Mgmt. Series, L-934. January 2015. 12 pp.

Rogers, D., J. Aguilar, I. Kisekka, P. L. Barnes and F. R. Lamm. 2015. **Important agricultural soil properties**. KSU Coop. Ext. Irrigation Mgmt. Series, L-935. January 2015. 8 pp.

Rogers, D., J. Aguilar, I. Kisekka, P. L. Barnes and F. R. Lamm. 2014. **Soil, water, and plant relationships**. KSU Coop. Ext. Irrigation Mgmt. Series, L-904. December 2014. 8 pp.

Rogers, D., F. Lamm, T. Trooien, and M. Alam. 2006. **Subsurface drip irrigation (SDI) with livestock wastewater**. KSU Coop. Ext. Irrigation Mgmt. Series, MF2727. 4 pp.

Lamm, F. R., D. H. Rogers, M. Alam and G. A. Clark. 2003. **Management considerations for operating a subsurface drip irrigation (SDI) system.** KSU Coop. Ext. Irrigation Mgmt. Series, MF-2590. 8 pp.

Lamm, F. R., D. H. Rogers, M. Alam, and G. A. Clark. 2003. **Design considerations for subsurface drip irrigation (SDI) systems.** KSU Coop. Ext. Irrigation Mgmt. Series, MF-2578. 8 pp.

Rogers, D. H., F. R. Lamm, M. Alam, and G. M. Powell. 2003. **Shock chlorination for treatment for irrigation wells.** KSU Coop. Ext. Irrigation Mgmt. Series, MF-2589. 4 pp.

Rogers, D. H., F. R. Lamm, and M. Alam. 2003. **Subsurface drip irrigation systems (SDI) water quality assessment guidelines.** KSU Coop. Ext. Irrigation Mgmt. Series, MF-2575. 8 pp.

Rogers, D. H., F. R. Lamm, and M. Alam. 2003. **Subsurface drip irrigation (SDI) components: Minimum requirements.** KSU Coop. Ext. Irrigation Mgmt. Series, MF-2576. 4 pp.

Alam, M., T. P. Trooien, F. R. Lamm, and D. H. Rogers. 2002. **Filtration and maintenance considerations for subsurface drip irrigation (SDI) systems.** KSU Coop. Ext. Irrigation Mgmt. Series, MF-2361. Revised. 4 pp.

O'Brien, D. M., F. R. Lamm, L. R. Stone, and D. H. Rogers. 2000. **The economics of converting from surface to sprinkler irrigation for various pumping capacities.** Irrigation water management series, MF-2471. K-State Research and Extension, Manhattan, KS. 8 pp.

Alam, M., T. P. Trooien, F. R. Lamm, and D. H. Rogers. 1999. **Filtration and maintenance considerations for subsurface drip irrigation (SDI) systems.** KSU Coop. Extension Irrigation Mgmt. Series, MF-2361. 4 pp.

Rogers, D. H., F. R. Lamm, M. Alam, T. P. Trooien, G. A. Clark, P. L. Barnes, and K. Mankin. 1997. **Efficiencies and water losses of irrigation systems.** KSU Coop. Extension Irrigation Management Series, MF-2243. 6 pp.

O'Brien, D., D. H. Rogers, F. Lamm, and G. Clark. 1997. **Economic comparison of SDI and center pivots for various field sizes.** KSU Coop. Extension Irrigation Management Series, MF-2242. 6 pp.

Dhuyvetter, K. C., F. R. Lamm, and D. H. Rogers. 1994. **Subsurface drip irrigation for field corn: An economic analysis.** KSU Coop. Extension Irrigation Management Series, L-909. 6 pp.

Rogers, D. H. and F. R. Lamm. 1994. **Large acreage center pivot systems.** KSU Coop. Extension Irrigation Management Series, L-902. 6 pp.

Rogers, D. H., F. R. Lamm, and W. E. Spurgeon. 1993. **LEPA irrigation management for center pivots.** KSU Coop. Extension Irrigation Management Series, L-907. 4 pp.

Rogers, D. H., W. E. Spurgeon, F. R. Lamm, and H. L. Manges. 1993. **Managing LEPA**

bubblers and flat sprays on corn. KSU Coop. Extension Irrigation Management Series, L-879. 4 pp.

Pacey, D. A., F. R. Lamm, and M. C. Schrock. 1987. **Developing a spreadsheet template for calculating tractor ballasted weight.** KSU Coop. Extension Ag Facts, AF-160. 4 pp.

Pacey, D. A. and F. R. Lamm. 1987. **Developing a spreadsheet template for comparing irrigation energy costs.** KSU Coop. Ext. Ag Facts, AF-161. 6 pp.

Pacey, D. A., F. R. Lamm, and S. C. Young. 1987. **Estimating farm machinery repair costs.** KSU Coop. Extension Ag Facts, AF-163. 4 pp.

Lamm, F. R. and D. A. Pacey. 1984. **Conservation tillage, is it for you?** KSU Coop. Extension Ag Facts, AF-126. 2 pp.

MAGAZINE ARTICLES

Reichenberger, L. 2015. **Drip is making waves.** The Furrow. March 2015. 120(3):15-16.

Stalcup, L. 2013. **Switch to Drip Irrigation -Subsurface drip irrigation systems reduce net irrigation needs by nearly 25% while maintaining yields.** Corn and Soybean Digest, February 1, 2013. 3 pp.

Shannahan, J., M. Rupert, J. Schussler, J. Groeteke, F. Lamm, M. Dowgert, J. Vikupitz and J. Hunt. 2012. **Subsurface drip irrigation for corn production and research.** Crop Insights 22(11):1-4.

Lamm, F., D. Rogers, J. Schneekloth, and R. Aiken. 2012. **Tips for Improved Sunflower Management.** The Sunflower 38(2) 12Y-13Y. February 2012.

Lamm, F. R. and R. Aiken. 2011. **Managing Deficit Sprinkler Irrigation of Sunflower.** The Sunflower 37(2) 14-15. February 2011.

Johnson, C.. 2009. **Drip by Drip.** Magazine article including photo of Freddie Lamm, October 29, 2009. Farm Journal. 1 pp.

Peter, M. L. 2009. **Drip irrigation cuts corn irrigation needs by 25%.** Magazine article in Corn and Soybean Digest., September 24, 2009. 1 pp.

Johnson, C. 2009. **Water Smarts.** Magazine article in Farm Journal, May 29, 2009. 1 pp.

Stalcup, L. 2009. **Drip irrigation keeps making big yields after two decades.** Farm Press, September 2009. 1 pp.

Lamm, F. R., T. A. Howell, and J. P. Bordovsky. 2009. **Ensuring Equal Opportunity Sprinkler Irrigation.** Arab Water World 33(1):34-36.

Holcombe, G. 2007. **Subsurface drip irrigation offers water-saving alternatives.** KSRE Informal Report to Kansas Legislature. pp. 26-27.

Stalcup, L. 2006. **Drip irrigation saves water, energy and time without hurting corn yields.** Corn and Soybean Digest. December 2006. 2 pp.

Lilleboe, D. 2005. **SDI primer.** The Sunflower 31(2):7. February.

Krebs, Candace. 2004. **Researcher helps row-crop farmers adopt drip irrigation.** 2 page article with one photo. Ag. Journal 57(25):6,19. August 20, 2004.

Reichenberger, L. 2004. **How much water is in supper.** The Furrow, 109(2):26-27 with one photo.

Reichenberger, L. 2004. **Outlook for the Ogallala.** The Furrow, 109(2):20-21 with one photo.

Yonts, C. D., F. Lamm, B. Kranz, J. Payero, and D. Martin. 2003. **Impact of nozzle spacing on sprinkler performance and crop yield.** International Water and Irrigation 23(4):34-38.

Reichenberger, L. 2003. **Drip irrigation makes a splash.** The Furrow, 108(1):34-36.

Lamm, F. R. 2002. **Stop the abuse of application efficiency.** Resource 9(9):11-12. ASAE.

Spiegel, B. 2002. **Design SDI for the long haul.** Kansas Farmer (April) 140(7):12-13.

McCabe, D. 2002. **Undercover water.** Nebraska Farmer (March) 144(5):12-13.

Smith, S. 2002. **Converting to drip – the basics of converting from furrow to drip irrigation.** Irrigation Business and Technology, Feb. 2002. pp. 26-28.

Ress, S. 2001. **Four States Irrigation Council tour visits western Kansas in July.** Water Current 33(5):5.

Lamm, F. R. 2001. **The ins and outs of in-canopy sprinkler irrigation.** Irrigation J. 51(2):14-16.

Rangel, V. 2000. **Lagoon wastewater re-use project in third season.** Irrigation Journal 50(5):17.

Spiegel, B. 2000. **Moo-ving wastewater by drip.** Irrigation Extra, pages IE1- IE4 with 3 color photos, a section in Kansas Farmer, (mid-January). Also published in Nebraska and Texas magazines.

Newport, A. 2000. **Pivots or drip?** Irrigation Extra, pages IE10- IE13 with 2 color photos, a section in Kansas Farmer, mid-January 2000. Also published in Nebraska and Texas magazines.

Trooien, T. P., F. R. Lamm, L. R. Stone, and M. Alam. 1999. **Irrigating corn with subsurface drip irrigation and lagoon wastewater.** Irrigation Journal 49(5):6-7.

Lamm, F. R., A. J. Schlegel, and G. A. Clark. 1998. **Optimum nitrogen fertigation for corn using SDI.** International Water and Irrigation Review 18(2):13-14, 16-18.

Ernst, T. 1998. **SDI reduces water losses from evaporation, runoff.** Feature article in KSU Natural Resources and Environmental Management, Fall 1998. pp. 4.

Peterson, C., Jr. 1998. **Subsurface drip irrigation saves water.** Feature article about SW Kansas farmers using SDI with side box entitled **The good and the bad of subsurface drip irrigation**, covering comments by F. Lamm. Successful Farming, March 1998.

McCabe, D. 1998. **Plunging into drip.** Feature article about Nebraska farmer using SDI with comments by F. Lamm. Nebraska Farmer, mid-Feb. 1998. pp. 8-9.

Lamm, F. R. 1998. **Lets talk about agricultural irrigation.** 5th of series. Feature article. Irrigation Business and Technology, 6(6):7.

Lamm, F. R. 1998. **Lets talk about agricultural irrigation.** 4th of series. Feature article. Irrigation Business and Technology, 6(2):9.

Lamm, F. R. 1998. **Lets talk about agricultural irrigation.** 3rd of series. Feature article. Irrigation Business and Technology, 6(1):9.

Lamm, F. R. 1997. **Improvements in irrigation efficiency.** Feature article with 3 color photos. Irrigation Journal 47(7)18-20.

Lamm, F. R. 1997. **Lets talk about agricultural irrigation.** 2nd of series. Feature article. Irrigation Business and Technology, 5(6):8-9.

Lamm, F. R. 1997. **Lets talk about agricultural irrigation.** 1st of series. Feature article. Irrigation Business and Technology, 5(1):9.

McAlavy, T. 1997. **K-State's drip irrigation research holds promise for farmers.** Feature article with 1 b/w photo in KSU Ag Report. Fall 1997. pp. 5.

McAlavy, T. 1997. **Drip irrigation research holds promise.** Feature article with 1 b/w photo in K-State Research and Extension Communicator. Jan-Mar. 1997. pp. 4.

Claerhout, L. 1996. **SDI research: Taking water conservation one drop at a time.** Feature article with 1 b/w photo in Kansas State Agriculturalist. Spring 1996. pp 19.

Lamm, F. R., M. E. Nelson, and D. H. Rogers. 1993. **Efficient irrigation design: The impact of deficit irrigation on corn.** Feature article with 1 photo, edited by Bruce Shank. Irrigation Journal, March 1993. pp. 22-25.

Lamm, F. R., W. E. Spurgeon, H. L. Manges, and D. H. Rogers. 1993. **Using drip irrigation for a non-traditional crop.** Feature article with 1 photo. Arab Water World, March/June 1993, Vol 17:2-3, pp. 5-6.

Lamm, F. R., W. E. Spurgeon, H. L. Manges, and D. H. Rogers. 1992. **Drip irrigation for corn--a promising prospect.** Feature article with 3 photos, edited by Holly Gibson. Irrigation Journal, March 1992, pp. 12, 14-16.

Hallowell, L. 1992. **Drip irrigation in corn? A KSU study indicates it may be feasible.** Feature article with two color photos in NC+ Down to Earth Ideas. 26(2):6-7.

Relay cropping beats the freeze. 1985. Farm Journal, (February) 1 pg. with color photo.

Copies of any publication available on request.