

PEER REVIEWED:

- Prunty, L. 2003. Soil water retention and conductivity when vapor flow is important. *J. Irrigation and Drainage Engrg., ASCE.* 129:201-207.
- Prunty, L., J. Bell, and M. Rivers. 2003. Synchrotron radiation for detecting movement of a volatile soil liquid. *J. Envir. Engrg., ASCE.* 129:479-482
- Prunty, L. and F.X.M. Casey. 2002. Soil water retention curve description using a flexible smooth function. *Vadose Zone Journal.* 1:179-185.
- Prunty, L. 2002. Soil water heat of transport. *J. Hydrologic Engrg., ASCE.* 7:435-440.
- Prunty, L., J.S. Bell, and R.L. Mulvaney. 2000. Fertilizer 15N presence in lysimeter drainage water. *Journal of Environmental Engineering.* 126:439-445.
- Prunty, L. and G. Padmanabhan. 1999. Revisiting steady state water flow in a saturated, inclined soil slab. *Water Resour. Res.* 35:1435-1442.
- Prunty, L.D., J.S. Bell, and M.K. Zellis. 1998. Soil water content by Karl Fischer titration. p. 97-106. In Calabrese E.J., P.T. Kosteki, and M. Bonazountas (ed.) *Contaminated Soils.* Vol. 3. Amherst Scientific Publishers, Amherst, MA.
- Zellis, M.K., J.S. Bell, and Lyle Prunty. 1998. Soil water content determination by Karl Fischer titration. *Soil Sci. Soc. Am. J.* 62:257-262.
- Prunty, Lyle and Richard Greenland. 1997. Nitrate leaching using two potato-corn N-fertilizer plans on sandy soil. *Agriculture, Ecosystems, and Environment.* 65:1-13.
- Rieder, William.G. and Lyle D. Prunty. 1997. An alternative modeling procedure for describing coupled heat and mass transfer in semi-dry porous media samples. *Proceedings of the ASME Fluids Engineering Division.* FED-Vol. 244:389-399.
- Steele, D.D., T.F. Scherer, L.D. Prunty, and E.C. Stegman. 1997. Water balance irrigation scheduling: Comparing crop curve accuracies and determining the frequency of corrections to soil moisture estimates. *Applied Engineering in Agriculture.* 13:593-599.
- Steele, D.D., A.H. Sajid, and Lyle Prunty. 1996. New corn evapotranspiration crop curves for southeastern North Dakota. *Trans. Am. Soc. Agric. Eng.* 39(3):931-936.
- Costa, Jose Luis, R.E. Knighton, and Lyle Prunty. 1994. Model comparison of unsaturated steady-state solute transport in a field plot. *Soil Sci. Soc. Am. J.* 58:1277-1287.
- Prunty, Lyle and Robert Horton. 1994. Steady state temperature distribution in nonisothermal, unsaturated closed soil cells. *Soil Sci. Soc. Am. J.* 58:1358-1363.
- Spanne, P., K.W. Jones, L.D. Prunty, and S.H. Anderson. 1994. Potential applications of synchrotron computed microtomography to soil science. p. 43-57. In S.H. Anderson and J.W. Hopmans

- (ed.) Tomography of soil-water-root processes. SSSA Spec. Publ. #36. SSSA, Madison, WI.
- Alessi, R.S., L. Prunty, and W.M. Schuh. 1992. Infiltration simulations among five hydraulic property models. *Soil Sci. Soc. Am. J.* 56:675-682.
- Prunty, Lyle. 1992. Thermally driven water and octane redistribution in unsaturated, closed soil cells. *Soil Sci. Soc. Am. J.* 56:707-714.
- Prunty, Lyle and B.R. Montgomery. 1991. Lysimeter study of nitrogen and irrigation rates on quality of recharge water and corn yield. *J. Environ. Qual.* 20:373-380.
- Prunty, Lyle, B.R. Montgomery, and M.D. Sweeney. 1991. Water quality effects on soils and alfalfa: I. Water use, yield, and nutrient concentration. *Soil Sci. Soc. Am. J.* 55:196-202.
- Costa, J.L., Lyle Prunty, B.R. Montgomery, J.L. Richardson, and R.S. Alessi. 1991. Water quality effects on soils and alfalfa: II. Soil physical and chemical properties. *Soil Sci. Soc. Am. J.* 55:203-209.
- Knuteson, J.A., J.L. Richardson, D.D. Patterson, and Lyle Prunty. 1989. Pedogenic carbonates in a calciaquoll associated with a recharge wetland. *Soil Sci. Soc. Am. J.* 53:495-499.
- Montgomery, B.R., Prunty, L. and Bauder, J.W. 1987. Vacuum trough extractors for measuring drainage and nitrate flux through sandy soils. *Soil Sci. Am. J.* 51:271-276.
- Alessi, R.S. and Lyle Prunty. 1986. Soil water determination using fiber optics. *Soil Sci. Soc. Am. J.* 50:860-863.
- Prunty, Lyle, J.L. Richardson, and R.S. Alessi. 1986. Classroom demonstrations of electrokinetic phenomena for Soil Science. *J. Agron. Ed.* 15(2):89-96.
- Brun, L.J., Lyle Prunty, J.K. Larsen, and J.W. Enz. 1985. Evapotranspiration and soil water relationships for spring wheat and soybean. *Soil Sci.* 139:547-552.
- Conta, J.F., J.L. Richardson, and Lyle Prunty. 1985. Percolation tests, soil texture and saturated hydraulic conductivity in lacustrine soils in North Dakota. *J. Environ. Qual.* 14:191-194.
- Morrison, M.W., Lyle Prunty, and J.F. Giles. 1985. Characterizing strength of soil crusts formed by simulated rainfall. *Soil Sci. Soc. Am. J.* 49:427-431.
- Lang, K.J., L. Prunty, S.A. Schroeder, L.A. Disrud. 1984. Interrill erosion as an index of mined land soil erodibility. *Trans. Am. Soc. Agric. Eng.* 27(1):99-104, 109.
- Prunty, Lyle. 1983. Curve fitting with smooth functions that are piecewise-linear in the limit. *Biometrics.* 39:857-866.
- Prunty, Lyle. 1983. Soil water and population influence on hybrid sunflower yield and uniformity of stand. *Agron. J.* 75:745-749.

- Prunty, Lyle. 1981. Interrelationship between the one-step and increment methods of determining diffusivity. Soil Sci. Soc. Am. J. 45:998.
- Prunty, Lyle. 1981. Saturated flow above a terraced barrier. Soil Sci. Soc. Am. J. 45:833-837.
- Prunty, Lyle. 1981. Sunflower cultivar performance as influenced by soil water and plant population. Agron. J. 73:257-260.
- Prunty, Lyle and Don Kirkham. 1980. Seepage versus terrace density in reclaimed mineland soil. J. Environ. Qual. 9:273-278.
- Prunty, Lyle and Don Kirkham. 1979. A drainage model for a reclaimed surface mine. Soil Sci. Soc. Am. J. 43:28-34.

OTHER:

- Prunty, Lyle, J.S. Bell, and M.K. Zellis. 1997. Soil water content by Karl Fischer titration. p. 229-241. In Proceedings of the 12th Annual Conference on Hazardous Waste Research 1997. Kansas City, MO. 19-22 May 1997. Kansas State Univ. Engineering Extension, Manhattan, KS.
- Prunty, Lyle and R.J. Goos. 1993. Yield variability considerations for spring wheat yield goals. Better crops. 77(3):12-15.
- Jones, K.W., P. Spanne, L.D. Prunty, and S.H. Anderson. 1992. Possible applications of synchrotron computed microtomography to soil physics studies. p. 219. In Agronomy Abstracts. ASA, Madison, WI.
- Prunty, Lyle. 1992. Transport of immiscible liquids due to a temperature gradient in unsaturated soil. p. 117-126. In Proc. of the Conference on Hazardous Waste Research. Boulder, CO. 1-2 June 1992. Kansas State Univ. Engineering Extension, Manhattan, KS.
- Miller, R.S., R.M. Vanden Heuvel, R.L. Mulvaney, B.R. Montgomery, and L. Prunty. 1991. Evaluation of natural abundance 15N techniques for groundwater nitrate studies. p. 272. In Agronomy Abstracts. ASA, Madison, WI.
- Prunty, L.D. 1991. Temperature driven water and octane redistribution. p. 229. In Agronomy Abstracts. ASA, Madison, WI.
- Montgomery, B.R., Lyle Prunty, and E.C. Stegman. 1990. Influence of irrigation and nitrogen management on nitrate leaching losses. p. 95-114. In North Dakota groundwater quality symposium proceedings. Fargo, ND. 20-21 Mar. 1990. North Dakota State Univ. Extension Service, Fargo, ND.
- Prunty, Lyle and Bruce R. Montgomery. 1990. Lysimeter comparison of 15N enriched and natural 15N abundance techniques for distinguishing nitrate sources in ground water. p. 163. In North Dakota groundwater quality symposium proceedings. Fargo, ND. 20-21 Mar. 1990. North Dakota State Univ. Extension Service, Fargo, ND.
- Montgomery, B.R., Lyle Prunty, A.E. Mathison, E.C. Stegman, and W. Albus. 1988. Nitrate and pesticide concentrations in shallow

- aquifers underlying sandy soils. p. 76-100. In North Dakota groundwater quality symposium proceedings. Bismarck, ND. 29-30 Mar. 1988. North Dakota State Univ. Extension Service, Fargo, ND.
- Montgomery, B.R., Lyle Prunty, A.E. Mathison, E.C. Stegman, and W. Albus. 1988. Nitrate and pesticide concentrations in shallow aquifers underlying coarse textured soils of S.E. North Dakota. p. 361-387. In Agricultural impacts on ground water conference proceedings. Des Moines, IA. 21-23 Mar. 1988. National Water Well Assoc., Dublin, OH.
- Prunty, L. and R.S. Alessi. 1987. Prospects for fiber optic sensing in soil. p. 261-265. In Proc. of International Conference on Measurement of Soil and Water Status, Logan, UT. 6-10 July 1987. Utah State University Logan, UT.
- Prunty, L. and B.R. Montgomery. 1987. Temporal pesticide leaching through irrigated sandy loam soil. U.S. Department of Interior Research Project Technical Completion Report, Project No. 5551, Contract/Grant No. 14-08-001-G1036. North Dakota Water Resource Research Institute, Fargo, ND.
- Prunty, Lyle and B.R. Montgomery. 1987. Lysimeter measurement of groundwater recharge and quality under irrigation. p. 311-318. In Pre-Conference Proceedings of the International Conf. on Infiltration Development and Application, Honolulu, HI. 6-9 Jan. 1987. Water Resources Research Center, University of Hawaii at Manoa, Honolulu, HI.
- Foss, J.E., J.L. Richardson, L.D. Prunty, M.D. Sweeney, D.K. Cudworth, and B.K. Hoag. 1986. Identification of salt-affected areas from oilfield brine pits. p. 15-45. In Doll, E.C., J.E. Foss, G.J. McCarthy, and E.C. Murphy. Characterization of detrimental effects of salt and other chemical constituents carried in surface and subsurface waters from brine and drilling fluid disposal pits buried during oil development. Water Resource Research Institute, North Dakota State University, Fargo, ND.
- Prunty, Lyle. 1984. Environmental quality in primary concern of soil scientists. Fargo Forum (Farmer's Forum). June 29.
- Prunty, Lyle and B.R. Montgomery. 1984. Soil bulk density and irrigation water quality: a greenhouse study. Proc. of the North Dakota Academy of Science. 38:42.
- Prunty, Lyle, B.R. Montgomery, and M.D. Sweeney. 1984. Laboratory characterization of the effects of irrigation on some slowly permeable soils in North Dakota. Final report, United States Department of the Interior, Bureau of Reclamation contract number 9-07-60-V0025, project 2. North Dakota Agric. Exp. Stn., Fargo, ND.
- Lang, Kent J. and Lyle Prunty. 1983. Eroded concentrations of clay, organic matter, and available N and P from interrill areas on Strip-mine land topsoils. North Dakota Farm Res. 41(2):18-21.
- Lang, K.J., S.A. Schroeder, L. Prunty, L.A. Disrud. 1983. Interrill erosion as an index of mined land soil erodibility. Paper No. 83-2145 of 1983 Summer Meetings of the Am. Soc. Agric. Eng., St. Joseph, MI.

- Prunty, Lyle, M.D. Sweeney, and Alexandru Maianu. 1983. Studying water, salt and nutrient movement in North Dakota soils. North Dakota Farm Res. 41(1):14017.
- Prunty, Lyle. 1982. Sunflower response to selected physiological stress factors. Final report, USDA specific cooperative agreement number 12-14-3001-768. North Dakota Agric. Exp. Stn., Fargo, ND.
- Prunty, Lyle and Dale A. Shay. 1982. Unconfined groundwater movement near an undulating barrier. p. 165. In Agronomy Abstracts. ASA, Madison, WI.
- Montgomery, B.R. and Lyle Prunty. 1982. An evaluation of in situ soil solution extractors for monitoring nitrate leaching in North Dakota coarse textured soils. p. 254. In Agronomy Abstracts. ASA, Madison, WI.
- Prunty, Lyle. 1981. Theory of saturated groundwater flow for a region with a periodic surface profile or water table using the Gram-Schmidt approach. Proc. North Dakota Acad. Sci. 35:10.
- Prunty, Lyle. 1980. Saturated flow above a terrace barrier. Agronomy Abstracts. ASA, Madison, WI.
- Prunty, L. and D. Kirkham. 1979. A Drainage Model for a Reclaimed Surface Mine. p. 273. In Abstracts for Papers Presented at Commission Sessions 11th International Congress of Soil Science Vol. 1. ISSS.
- Kirkham, Don and Lyle Prunty. 1977. Upslope recharge, downslope waterlogging and interceptor drains. p. 40-50. In Third National Drainage Symposium Proceedings. Am. Soc. Agric. Eng., St. Joseph, MI.