

Angers, D.A., M.H. Chantigny, P. Rochette and B. Gagnon. 2006. Dynamics of soil water-extractable organic C following application of dairy cattle manures. *Can. J. Soil Sci.* 86:851-858.

Aulakh, M.S., T.S. Khera, J.W. Doran and K.F. Bronson. 2001. Denitrification, N₂O and CO₂ fluxes in rice-wheat cropping system as affected by crop residues, fertilizer N and legume green manure. *Biol Fertil Soils* 34:375-389.

Ball-Coelho, B.R., R.C. Roy and A.J. Bruin. 2005. Long-term effects of late-summer overseeding of winter rye on corn grain yield and nitrogen balance. *Can. J. Plant Sci.* 85: 543-554.

Beckwith, C.P., J. Cooper, K.A. Smith and M.A. Shepherd. 1998. Nitrate leaching loss following application of organic manures to sand soils in arable cropping. I. Effects of application time, manure type, overwinter cover crop and nitrification inhibition. *Soil Use and Management* 14:123-130.

Christensen, S. and J.M. Tiedje. 1990. Brief and vigorous N₂O production by soil at spring thaw. *J. Soil Sci.* 41:1-4.

Christensen, S. and B.T. Christensen. 1991. Organic matter available for denitrification in different soil fractions: effect of freeze/thaw cycles and straw disposal. *J. Soil Sci.* 42: 637-647

Clemens, J. and A. Huschka. 2001. The effect of biological oxygen demand of cattle slurry and soil moisture on nitrous oxide emissions. *Nutrient Cycling in Agroecosystems* 59: 193-198.

Clough, T.J., K. Addy, D.Q. Kellogg, B.L. Nowicki, A.J. Gold and P.M. Groffman. 2007. Dynamics of nitrous oxide in groundwater at the aquatic-terrestrial interface. *Global Change Biology* 13:1528-1537.

Davidson, E.A. 2009. The contribution of manure and fertilizer nitrogen to atmospheric nitrous oxide since 1860. *Nature Geoscience* 2: 659-662.

Drinkwater, L.E., C.A. Cambardella, J.D. Reeder and C.W. Rice. 1996. Potentially mineralizable nitrogen as an indicator of biologically active soil nitrogen. P. 217-229 *In* Doran, J.W. and A.J. Jones. (Eds.), *Methods for Assessing Soil Quality*. Soil Science Society of America, Special Publication 49, Madison, WI.

Edmeades, D.C. 2003. The long-term effects of manures and fertilizers on soil productivity and quality: a review. *Nutrient Cycling in Agroecosystems* 66: 165-180.

Fageria, N.K. 2007. Green manuring in crop production. *J. Plant Nutr.* 30:691-719.

Herndandez-Ramirez, G., S.M. Brouder, D.R. Smith, G.E. van Scoyoc and G. Michalski. 2009. Nitrous oxide production in an eastern corn belt soil: sources and redox range. *Soil Sci. Soc. Am. J.* 73:1182-1191.

IPCC. 2006. 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Prepared

by the National Greenhouse Gas Inventories Programme, Eggleston H.S., Buendia L., Miwa K., Ngara T. and Tanabe K. (eds). Published: IGES, Japan.

IPCC. 2007. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

Jarecki, M.K., T.B. Parkin, A.S.K. Chan, T. C. Kaspar, T.B. Moorman, J.W. Singer, B.J. Kerr, J.L. Hatfield and R. Jones. 2009. Cover crop effects on nitrous oxide emission from a manure-treated Mollisol. *Agriculture, Ecosystems and Environment* 134:29-35.

Kaspar, T.C., D.B. Jaynes, T.B. Parkin and T.B. Moorman. 2007. Rye cover crop and gamagrass strip effects on NO₃ concentration and load in tile drainage. *J. Environ. Qual.* 36: 1503–1511.

Keeney, D.R. and D.W. Nelson. 1982. Nitrogen - inorganic forms. In A.L. Page (eds.) *Methods of soil analysis, part 2. Agron. Monogr. 9, 2nd ed.* ASA and SSSA, Madison, WI. p. 643-698.

Kettler, T.A., Doran, J.W., Gilbert, T.L., 2001. Simplified method for soil particle- size determination to accompany soil-quality analyses. *Soil Sci. Soc. Am. J.* 65: 849–852.

Knowles, R. 1982. Denitrification. *Microbiol Rev.* 46:43–70.

McClain, M.E., E.W. Boyer, C. L. Dent, S.E. Gergel, N.B. Grimm, P.M. Groffman, S.C. Hart, J.W. Harvey, C.A. Johnston, E. Mayorga, W.H. McDowell and G. Pinay. 2003. Biogeochemical hot spots and hot moments at the interface of terrestrial and aquatic ecosystems. *Ecosystems* 6:301-312.

McSwiney, C.P., S.S. Snapp and L.E. Gentry. 2010. Use of N immobilization to tighten the N cycle in conventional agroecosystems. *Ecological Applications* 20:648-662.

Meisinger, J.J., W.L. Hargrove, R.L. Mikkelsen, J.R. Williams and V.W. Benson. 1991. Effects of cover crops on groundwater quality. p. 57–68 *In* Hargrove, W.L. (Ed.), *Cover Crops for Clean Water. Proceedings of an International Conference, April 9–11, 1991, Jackson, TN.* Soil and Water Conservation Society, Ankeny, IA.

Millar, N. and E.M. Baggs. 2004. Chemical composition, or quality, of agroforestry residues influences N₂O emissions after their addition to soil. *Soil Biology & Biochemistry* 36:935-943.

Miller, M.N., B.J. Zebarth, C.E. Dandie, D.L. Burton, C. Goyer and J.T. Trevors. 2009. Influence of liquid manure on soil denitrifier abundance, denitrification and nitrous oxide emissions. *Soil Sci. Soc. Am. J.* 73:760-768.

Muller, C., Martin, M., Stevens, R.J., Laughlin, R.J., Kammann, C., Ottow, J.C.G. 2002. Processes leading to N₂O emissions in grassland soil during freezing and thawing. *Soil*

Biology & Biochemistry 34: 1325–1331.

Oenema, J., S. Burgers, K. Verloop, A. Haijboer, L. Boumans and H. Berge. Multiscale effects of management, environmental conditions and land use on nitrate leaching in dairy farms. *J. Environ. Qual.* 39:2016-2028.

Ogden, C.B., H.M. van Es, and R.R. Schindelbeck. 1997. A simple rainfall simulator for measurement of soil infiltration and runoff. *Soil Sci. Soc. Am. J.* 61:1041-1043.

Paul, J.W. and E.G. Beauchamp. 1989. Effect of carbon constituents in manure on denitrification in soil. *Can. J. Soil Sci.* 69:49-61.

Parkin, T.B., T.C. Kaspar and J.W. Singer. 2006. Cover crop effects on the fate of N following soil application of swine manure. *Plant Soil* 289:141-152.

Parkin, T.B. 1987. Soil microsites as a source of denitrification variability. *Soil Sci. Soc. Am. J.* 51:1194-1199.

Reay, D.S., K.A. Smith and A.C. Edwards. 2003. Nitrous oxide emission from agricultural drainage waters. *Global Change Biology* 9:195-203.

Sauer, T.J., S.R. Compston, C.P. West, G. Hernandez-Ramirez, E.E. Gbur and T.B. Parkin. 2009. Nitrous oxide emissions from a bermudagrass pasture: Interseeded winter rye and poultry litter. *Soil Biology & Biochemistry* 41:1417-1424.

Smith, K.A., C.P. Beckwith, A.G. Chalmers and D.R. Jackson. 2002. Nitrate leaching following autumn and winter application of animal manures to grassland. *Soil Use and Management* 18:428-434.

Smith M.S. and J.M. Tiedje. 1979. The effect of roots on soil denitrification. *Soil Sci. Soc. Am. J.* 43:951–955

Thorup-Kristensen, T., J. Magid and L.S. Jensen. 2003. Catch crops and green manures as biological tools in nitrogen management in temperate zones. *Advances in Agronomy* 79:227-302.

Tiedje, J.M. 1988. Ecology of denitrification and dissimilatory nitrate reduction to ammonium. p. 179–244. In A.J.B. Zehnder (ed.) *Environmental microbiology of anaerobes*. John Wiley & Sons, New York.

Tiedje, J.M. 1982. Denitrification. p. 1011–1026. In A.L. Page et al. (ed.) *Methods of soil analysis. Part 2: Chemical and microbiological properties*. 2nd ed. Agron. Monogr. 9. ASA and SSSA, Madison, WI.

USDA. 2011. U.S. Agriculture and Forestry Greenhouse Gas Inventory: 1990-2008. Del Grosso, S.J., M.D. Eve (ed.) Technical bulletin 1930. Office of the Chief Economist, U.S. Department of Agriculture, Washington, D.C.

van Es, H., C. Gomes, M. Sellmann, and C. van Es. 2007. Spatially-Balanced Designs for

Experiments on Autocorrelated Fields. *Geoderma* 140:346-352.

van Es, H.M., J.M. Sogbedji, and R.R. Schindelbeck. 2006. Nitrate Leaching under Maize and Grass as Affected by Manure Application Timing and Soil Type. *J. Environmental Quality* 35:670-679.

Wagner-Riddle, C., G.W. Thurtell, G.K. Kidd, E.G. Beauchamp and R. Sweetman. 1997. Estimates of nitrous oxide emissions from agricultural fields over 28 months. *Can. J. Soil Sci.* 77: 135-144.

Wagner-Riddle, C., Q.C. Hu, E. van Bochove and S. Jayasundara. 2008. Linking nitrous oxide flux during spring thaw to nitrate denitrification in the soil profile. *Soil Sci. Soc. Am. J.* 72: 908-916.

Wander, M.M., S.J. Traina, B.R. Stinner and S.E. Peters. 1994. Organic and conventional management effects on biologically active soil organic matter pools. *Soil Sci. Soc. Am. J.* 58:1130-1139.

Weil, R.R., Islam, K.R., Stine, M.A., Gruver, J.B., Samson-Liebig, S.E., 2003. Estimating active carbon for soil quality assessment: a simplified method for laboratory and field use. *American Journal of Alternative Agriculture* 18: 3-17.