

Literature Cited:

- Albrecht, H. (2005). Development of arable weed seedbanks during the 6 years after the change from conventional to organic farming. *Weed Research*, 45(5), 339-350. doi: 10.1111/j.1365-3180.2005.00472.x
- Bàrberi, P., & Lo Cascio, B. (2001). Long-term tillage and crop rotation effects on weed seedbank size and composition. *Weed Research*, 41(4), 325-340. doi: 10.1046/j.1365-3180.2001.00241.x
- Bossio, D. A., Scow, K. M., Gunapala, N., & Graham, K. J. (1998). Determinants of Soil Microbial Communities: Effects of Agricultural Management, Season, and Soil Type on Phospholipid Fatty Acid Profiles. *Microbial Ecology*, 36(1), 1-12. doi: 10.1007/s002489900087
- Buchholz, D. D., Brown, J. R., Garret, J., Hanson, R., & Wheaton, H. (2004). Soil test interpretations and recommendations handbook: University of Missouri-College of Agriculture, Division of Plant Sciences.
- Burnside, O. C., & Wicks, G. A. (1967). The Effect of Weed Removal Treatments on Sorghum Growth. *Weeds*, 15(3), 204-207. doi: 10.2307/4041203
- Buyer, J. S., & Sasser, M. (2012). High throughput phospholipid fatty acid analysis of soils. *Applied Soil Ecology*, 61, 127-130. doi: <http://dx.doi.org/10.1016/j.apsoil.2012.06.005>
- Buyer, J. S., Teasdale, J. R., Roberts, D. P., Zasada, I. A., & Maul, J. E. (2010). Factors affecting soil microbial community structure in tomato cropping systems. *Soil Biology and Biochemistry*, 42(5), 831-841. doi: <http://dx.doi.org/10.1016/j.soilbio.2010.01.020>
- Cardina, J., Herms, C. P., & Doohan, D. J. (2002). Crop rotation and tillage system effects on weed seedbanks. *Weed Science*, 50(4), 448-460. doi: doi:10.1614/0043-1745(2002)050[0448:CRATSE]2.0.CO;2
- Carr, P., Gramig, G., & Liebig, M. (2013). Impacts of Organic Zero Tillage Systems on Crops, Weeds, and Soil Quality. *Sustainability*, 5(7), 3172.
- Cavigelli, M. A., Teasdale, J. R., & Conklin, A. E. (2008). Long-Term Agronomic Performance of Organic and Conventional Field Crops in the Mid-Atlantic Region. *Agronomy Journal*, 100(3), 785-794. doi: 10.2134/agronj2006.0373
- Chen, M., & Alexander, M. (1973). Survival of soil bacteria during prolonged desiccation. *Soil Biology and Biochemistry*, 5(2), 213-221. doi: [http://dx.doi.org/10.1016/0038-0717\(73\)90004-7](http://dx.doi.org/10.1016/0038-0717(73)90004-7)
- Clark, M. S., Horwath, W. R., Shennan, C., & Scow, K. M. (1998). Changes in Soil Chemical Properties Resulting from Organic and Low-Input Farming Practices. *Agronomy Journal*, 90(5), 662-671. doi: 10.2134/agronj1998.00021962009000050016x
- Clark, S., Klonsky, K., Livingston, P., & Temple, S. (1999). Crop-yield and economic comparisons of organic, low-input, and conventional farming systems in California's Sacramento Valley. *American Journal of Alternative Agriculture*, 14(03), 109-121. doi: doi:10.1017/S0889189300008225

- Creamer, N. G., & Baldwin, K. R. (2000). An Evaluation of Summer Cover Crops for Use in Vegetable Production Systems in North Carolina. *HortScience*, 35(4), 600-603.
- Creamer, N. G., Bennett, M. A., Stinner, B. R., Cardina, J., & Regnier, E. E. (1996). Mechanisms of Weed Suppression in Cover Crop-based Production Systems. *HortScience*, 31(3), 410-413.
- Culman, S. W., Snapp, S. S., Freeman, M. A., Schipanski, M. E., Beniston, J., Lal, R., . . . Wander, M. M. (2012). Permanganate Oxidizable Carbon Reflects a Processed Soil Fraction that is Sensitive to Management. *Soil Science Society of America Journal*, 76(2), 494-504. doi: 10.2136/sssaj2011.0286
- Dabney, S. M., Delgado, J. A., & Reeves, D. W. (2001). Using Winter Cover Crops To Improve Soil And Water Quality. *Communications in Soil Science and Plant Analysis*, 32(7-8), 1221-1250. doi: 10.1081/CSS-100104110
- de Ponti, T., Rijk, B., & van Ittersum, M. K. (2012). The crop yield gap between organic and conventional agriculture. *Agricultural Systems*, 108, 1-9. doi: <http://dx.doi.org/10.1016/j.agrsy.2011.12.004>
- Delate, K., & Cambardella, C. A. (2004). Agroecosystem Performance during Transition to Certified Organic Grain Production. *Agronomy Journal*, 96(5), 1288-1298. doi: 10.2134/agronj2004.1288
- Delate, K., A. McKern, B. Burcham. (2007). Evaluation of organic no-till system for organic corn, soybean and tomato production; Neely-Kinyon Trial. <http://extension.agron.iastate.edu/organicag/researchreports/nk07notill.pdf>
- Delate, K. and C.A. Cambardella. (2008). Improving soil quality during and after organic transition. <http://extension.agron.iastate.edu/organicag/researchreports/nk09soilquality.pdf>
- Doran, J. W., & Zeiss, M. R. (2000). Soil health and sustainability: managing the biotic component of soil quality. *Applied Soil Ecology*, 15(1), 3-11. doi: [http://dx.doi.org/10.1016/S0929-1393\(00\)00067-6](http://dx.doi.org/10.1016/S0929-1393(00)00067-6)
- Doucet, C., Weaver, S. E., Hamill, A. S., & Zhang, J. (1999). Separating the Effects of Crop Rotation from Weed Management on Weed Density and Diversity. *Weed Science*, 47(6), 729-735. doi: 10.2307/4046141
- Eghball, B., & Power, J. F. (1999). Composted and Noncomposted Manure Application to Conventional and No-Tillage Systems: Corn Yield and Nitrogen Uptake. *Agronomy Journal*, 91(5), 819-825. doi: 10.2134/agronj1999.915819x
- Einhellig, F., & Souza, I. (1992). Phytotoxicity of sorgoleone found in grain Sorghum root exudates. *Journal of Chemical Ecology*, 18(1), 1-11. doi: 10.1007/BF00997160
- Eivazi, F., & Tabatabai, M. A. (1988). Glucosidases and galactosidases in soils. *Soil Biology and Biochemistry*, 20(5), 601-606. doi: [http://dx.doi.org/10.1016/0038-0717\(88\)90141-1](http://dx.doi.org/10.1016/0038-0717(88)90141-1)
- Gallandt, E. R. (2006). How can we target the weed seedbank? *Weed Science*, 54(3), 588-596. doi: [doi:10.1614/WS-05-063R.1](http://dx.doi.org/10.1614/WS-05-063R.1)

- Gomiero, T., Pimentel, D., & Paoletti, M. G. (2011). Environmental Impact of Different Agricultural Management Practices: Conventional vs. Organic Agriculture. *Critical Reviews in Plant Sciences*, 30(1-2), 95-124. doi: 10.1080/07352689.2011.554355
- Griffin, G., Jokela, W., Ross, D., Pettinelli, D., Morris, T., & Wilf, A. (2009). Recommended soil nitrate tests. *Recommended Soil Testing Procedures for the Northeastern United States. Cooperative Bulletin(493)*, 27-38.
- Grossman, R., & Reinsch, T. (2002). 2.1 Bulk density and linear extensibility. *Methods of Soil Analysis: Part 4 Physical Methods (methodsofsoilan4)*, 201-228.
- Gunapala, N., & Scow, K. M. (1998). Dynamics of soil microbial biomass and activity in conventional and organic farming systems. *Soil Biology and Biochemistry*, 30(6), 805-816. doi: [http://dx.doi.org/10.1016/S0038-0717\(97\)00162-4](http://dx.doi.org/10.1016/S0038-0717(97)00162-4)
- Helgason, B. L., Walley, F. L., & Germida, J. J. (2009). Fungal and Bacterial Abundance in Long-Term No-Till and Intensive-Till Soils of the Northern Great Plains. *Soil Science Society of America Journal*, 73(1), 120-127. doi: 10.2136/sssaj2007.0392
- Hepperly, P. R., Douds, D., Jr., & Seidel, R. (2006). The Rodale Institute Farming Systems Trial 1981 to 2005: long-term analysis of organic and conventional maize and soybean cropping systems ISOFAR Scientific Series (pp. 15-31). Berlin: Verlag Dr. H. J. Köster.
- Hill, N. M., Patriquin, D. G., & Kloet, S. P. V. (1989). Weed Seed Bank and Vegetation at the Beginning and End of the First Cycle of a 4-Course Crop Rotation with Minimal Weed Control. *Journal of Applied Ecology*, 26(1), 233-246. doi: 10.2307/2403664
- Hu, S., Grunwald, N. J., van Bruggen, A. H. C., Gamble, G. R., Drinkwater, L. E., Shennan, C., & Demment, M. W. (1997). Short-Term Effects of Cover Crop Incorporation on Soil Carbon Pools and Nitrogen Availability. *Soil Science Society of America Journal*, 61(3), 901-911. doi: 10.2136/sssaj1997.03615995006100030027x
- Karlen, D. L., Wollenhaupt, N. C., Erbach, D. C., Berry, E. C., Swan, J. B., Eash, N. S., & Jordahl, J. L. (1994). Long-term tillage effects on soil quality. *Soil and Tillage Research*, 32(4), 313-327. doi: [http://dx.doi.org/10.1016/0167-1987\(94\)00427-G](http://dx.doi.org/10.1016/0167-1987(94)00427-G)
- Kieft, T. L., soroker, E., & firestone, M. K. (1987). Microbial biomass response to a rapid increase in water potential when dry soil is wetted. *Soil Biology and Biochemistry*, 19(2), 119-126. doi: [http://dx.doi.org/10.1016/0038-0717\(87\)90070-8](http://dx.doi.org/10.1016/0038-0717(87)90070-8)
- Kuo, S., Sainju, U. M., & Jellum, E. J. (1997). Winter Cover Cropping Influence on Nitrogen in Soil. *Soil Science Society of America Journal*, 61(5), 1392-1399. doi: 10.2136/sssaj1997.03615995006100050016x
- Liebhardt, W. C., Andrews, R. W., Culik, M. N., Harwood, R. R., Janke, R. R., Radke, J. K., & Reiger-Schwartz, S. L. (1989). Crop Production During Conversion from Conventional to Low-Input Methods. *Agronomy Journal*, 81(2), 150-159. doi: 10.2134/agronj1989.00021962008100020003x
- Lachat. (1990a). Operations manual for the QuikChem automated ion analyzer. Quikchem 12-107-06-2-A (ammonium). Lachat, Milwaukee.
- Lachat. (1990b). Operations manual for the QuikChem automated ion analyzer. Quikchem 12-107-04-1-B (nitrate). Lachat, Milwaukee.

- Lundquist, E. J., Jackson, L. E., Scow, K. M., & Hsu, C. (1999a). Changes in microbial biomass and community composition, and soil carbon and nitrogen pools after incorporation of rye into three California agricultural soils. *Soil Biology and Biochemistry*, 31(2), 221-236. doi: [http://dx.doi.org/10.1016/S0038-0717\(98\)00093-5](http://dx.doi.org/10.1016/S0038-0717(98)00093-5)
- Lundquist, E. J., Scow, K. M., Jackson, L. E., Uesugi, S. L., & Johnson, C. R. (1999b). Rapid response of soil microbial communities from conventional, low input, and organic farming systems to a wet/dry cycle. *Soil Biology and Biochemistry*, 31(12), 1661-1675. doi: [http://dx.doi.org/10.1016/S0038-0717\(99\)00080-2](http://dx.doi.org/10.1016/S0038-0717(99)00080-2)
- Martini, E. A., Buyer, J. S., Bryant, D. C., Hartz, T. K., & Denison, R. F. (2004). Yield increases during the organic transition: improving soil quality or increasing experience? *Field Crops Research*, 86(2–3), 255-266. doi: <http://dx.doi.org/10.1016/j.fcr.2003.09.002>
- Mathew, R. P., Feng, Y., Githinji, L., Ankumah, R., & Balkcom, K. S. (2012). Impact of No-Tillage and Conventional Tillage Systems on Soil Microbial Communities. *Applied and Environmental Soil Science*, 2012, 10. doi: 10.1155/2012/548620
- Mirsky, S. B., Ryan, M. R., Teasdale, J. R., Curran, W. S., Reberg-Horton, C. S., Spargo, J. T., . . . Moyer, J. W. (2013). Overcoming Weed Management Challenges in Cover Crop-Based Organic Rotational No-Till Soybean Production in the Eastern United States. *Weed Technology*, 27(1), 193-203. doi: doi:10.1614/WT-D-12-00078.1
- Nathan, M., Stecker, J., & Sun, Y. (2006). Soil testing in Missouri: A guide for conducting soil tests in Missouri. Ext. Circ, 923.
- Nimmo, J. R., & Perkins, K. S. (2002). 2.6 Aggregate Stability and Size Distribution. *Methods of Soil Analysis: Part, 4*, 317-328.
- Ranells, N. N., & Wagger, M. G. (1996). Nitrogen Release from Grass and Legume Cover Crop Monocultures and Bicultures. *Agronomy Journal*, 88(5), 777-882. doi: 10.2134/agronj1996.00021962008800050015x
- Reinbott, T. M., Conley, S. P., & Blevins, D. G. (2004). No-Tillage Corn and Grain Sorghum Response to Cover Crop and Nitrogen Fertilization. *Agronomy Journal*, 96(4), 1158-1163. doi: 10.2134/agronj2004.1158
- Riemens, M. M., Groeneveld, R. M. W., Lotz, L. A. P., & Kropff, M. J. (2007). Effects of three management strategies on the seedbank, emergence and the need for hand weeding in an organic arable cropping system. *Weed Research*, 47(5), 442-451. doi: 10.1111/j.1365-3180.2007.00582.x
- Snapp, S. S., Swinton, S. M., Labarta, R., Mutch, D., Black, J. R., Leep, R., . . . O'Neil, K. (2005). Evaluating Cover Crops for Benefits, Costs and Performance within Cropping System Niches. *Agronomy Journal*, 97(1), 322-332. doi: 10.2134/agronj2005.0322
- Spedding, T. A., Hamel, C., Mehuys, G. R., & Madramootoo, C. A. (2004). Soil microbial dynamics in maize-growing soil under different tillage and residue management systems. *Soil Biology and Biochemistry*, 36(3), 499-512. doi: <http://dx.doi.org/10.1016/j.soilbio.2003.10.026>

- Teasdale, J. R. (1996). Contribution of Cover Crops to Weed Management in Sustainable Agricultural Systems. *Journal of Production Agriculture*, 9(4), 475-479. doi: 10.2134/jpa1996.0475
- Tu, C., Louws, F. J., Creamer, N. G., Paul Mueller, J., Brownie, C., Fager, K., . . . Hu, S. (2006). Responses of soil microbial biomass and N availability to transition strategies from conventional to organic farming systems. *Agriculture, Ecosystems & Environment*, 113(1–4), 206-215. doi: <http://dx.doi.org/10.1016/j.agee.2005.09.013>
- Wander, M. M., Traina, S. J., Stinner, B. R., & Peters, S. E. (1994). Organic and Conventional Management Effects on Biologically Active Soil Organic Matter Pools. *Soil Science Society of America Journal*, 58(4), 1130-1139. doi: 10.2136/sssaj1994.03615995005800040018x
- Wiebold, Mason, Knerr, Hasty, Belt, Schwab, Burdick, Angotti. (2012). Agriculture Experiment Station - College of Agriculture, Food & Natural Resources - University of Missouri-Columbia Special Report 589. <http://varietytesting.missouri.edu/archive/2012-Soybean-Complete.pdf>.
- Wiebold, Mason, Knerr, Hasty, Belt, Schwab, Burdick, Angotti. (2014a). Agriculture Experiment Station - College of Agriculture, Food & Natural Resources - University of Missouri-Columbia Special Report 571. <http://varietytesting.missouri.edu/archive/2014-Sorghum-Complete.pdf>.
- Wiebold, Mason, Knerr, Hasty, Belt, Schwab, Burdick, Angotti. (2014b). Agriculture Experiment Station - College of Agriculture, Food & Natural Resources - University of Missouri-Columbia. <http://varietytesting.missouri.edu/archive/2014-Corn-Complete.pdf>.
- Wiebold, Mason, Knerr, Hasty, Belt, Schwab, Burdick, Angotti. (2013a). Agriculture Experiment Station - College of Agriculture, Food & Natural Resources - University of Missouri-Columbia. <http://varietytesting.missouri.edu/archive/2013-Corn-Complete.pdf>.
- Wiebold, Mason, Knerr, Hasty, Belt, Schwab, Burdick, Angotti. (2013b). Agriculture Experiment Station - College of Agriculture, Food & Natural Resources - University of Missouri-Columbia. <http://varietytesting.missouri.edu/archive/2013-Wheat-Complete.pdf>. 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(01), 3-17. doi: doi:10.1079/AJAA200228
- Zhang, B., He, H., Ding, X., Zhang, X., Zhang, X., Yang, X., & Filley, T. R. (2012). Soil microbial community dynamics over a maize (*Zea mays L.*) growing season under conventional- and no-tillage practices in a rainfed agroecosystem. *Soil and Tillage Research*, 124, 153-160. doi: <http://dx.doi.org/10.1016/j.still.2012.05.011>