

## REFERENCES

- Baudron, F., Tittonell, P., Corbeels, M., Letourmy, P., & Giller, K. (2012). Comparative performance of conservation agriculture and current smallholder farming practices in semi-arid Zimbabwe. *Field Crops Research*, 132, 117-128.
- Belder, P., Twomlow, S., & Hove, L. (2007). Early evidence of improved soil quality with conservation farming under smallholder farming conditions in Zimbabwe. ICID Conference, Johannesburg, South Africa, September.
- Blanchart, E., Albrecht, A., Bernoux, M., Brauman, A., Chotte, J., Feller, C., Ganry, F.; Hien, E.; Manlay, R.; Masse, D.; Sall, S.; Villenave, C. (2005). Organic matter and biofunctioning in tropical sandy soils and implications for its management. *Management of Tropical Sandy Soils for Sustainable Agriculture*. Khon Kaen, Thailand : FAO.
- Bruinsma, J. (Ed.). (2003). *World Agriculture: Towards 2015/2030. An FAO Perspective*. London: Earthscan Publications Ltd.
- Card, S. (2004). *Evaluation of Two Field Methods to Estimate Soil Organic Matter In Alberta Soils*. Alberta Agriculture, Food and Rural Development Conservation and Development Branch.
- Chivenge, P., Murwira, H., Giller, K., Mapfumo, P., & Six, J. (2007). Long-term impact of reduced tillage and residue management. *Soil & Tillage Research*, 328-337.
- Department of the Surveyor General, C. (1979). *Provisional Soil Map of Zimbabwe Rhodesia*. Salisbury (Harare): The Surveyor-General.
- Drechsel, P., Gyiele, L., & Cofie, O. (2001). Population density, soil nutrient depletion, and economic growth in sub-Saharan Africa. *Ecological Economics*, 38, 251-258.
- Edwards, L. (2011, October 7). Personal interview regarding CF labor input.
- Erenstein, O. S. (2008). Adapting no-tillage agriculture to the conditions of smallholder maize and wheat farmers in the tropics and sub-tropics. In T. Goddard, M. Zoebisch, Y. Gan, W. Ell, A. Watson, & S. Sombatpanit (Eds.), *No-till farming systems*. (pp. 253-278). Bangkok: Special Publication 3, World Association of Soil and Water Conservation.

- Ezilon. (2009). *Zimbabwe Map - Political Map of The Republic of Zimbabwe*. Retrieved June 6, 2012, from Ezilon: <http://www.ezilon.com/maps/africa/zimbabwe-maps.html>
- FAO. (2006). *Fertilizer use by crop in Zimbabwe*. Rome: FAO.
- FAOSTAT. (2012). *FAOSTAT country profiles*. Retrieved May 9, 2012, from FAOSTAT: <http://faostat.fao.org/site/666/default.aspx>
- FAS. (2012). *USDA Foreign Agricultural Service PSD Online*. Retrieved April 28, 2012, from USDA FAS: [www.fas.usda.gov/psdonline/psdQuery.aspx](http://www.fas.usda.gov/psdonline/psdQuery.aspx)
- FfF. (2012). *Our Message: The Problem*. Retrieved April 28, 2012, from Foundations for Farming: <http://www.foundationsforfarming.org/our-message/the-problem/>
- Fischer, H. (Ed.). (2010). *Das kleine Bodenkochbuch*. (Unpublished manuscript) Institut für Bodenkunde und Standortslehre der Universität Hohenheim.
- Gambiza, J., & Nyama, C. (2000, October/November). *Country Pasture/Forage Resource Profiles: Zimbabwe*. Retrieved May 11, 2012, from FAO: <http://www.fao.org/ag/AGP/AGPC/doc/Counprof/zimbabwe/zimbab.htm>
- Giller, K., Witter, E., Corbeels, M., & Tittonell, P. (2009). Conservation agriculture and smallholder farming in Africa: The heretics' view. *Field Crops Research*, 114, 23-24.
- Haggblade, S., & Tembo, G. (2003a). *Development, diffusion and impact of conservation farming in Zambia*. Lusaka, Zambia: Working Paper No. 8. Food Security Research Project.
- Haggblade, S., & Tembo, G. (2003b). Early Evidence on Conservation Farming in Zambia. *International Workshop on "Reconciling Rural Poverty and Resource Conservation: Identifying Relationships and Remedies"*. Cornell University, Ithaca, New York, May 2-3.
- Haggblade, S., Kabwe, S., & Plerhoples, C. (2011). *Productivity impact of conservation farming on smallholder cotton farmers in Zambia*. Lusaka, Zambia: Food Security Research Project Working Paper No. 47.
- Jobbagy, E., & Jackson, R. (2001). The distribution of soil nutrients with depth: Global patterns and the imprint of plants. *Biogeochemistry*, 53, 51-77.
- Lal, R. (2004). Soil carbon sequestration impacts on global climate change and food security. *Science*, 304, 1623-1627.
- Langmead, P. (2004). *Hoe conservation farming of maize in Zambia*. Retrieved May 18, 2012, <http://www.langmead.com/research/conservationfarming/1234.pdf>.

- Larson, E., & Oldham, L. (2008). *Corn Fertilization, Information Sheet 864*. Mississippi State University.
- Lowe, D. (2010). *A Practical Guide to Conservation Agriculture*. Harare.
- Masikati, P. (2011). *Improving the water productivity of integrated crop-livestock systems in the semi-arid tropics of Zimbabwe: an ex-ante analysis using simulation modeling*. Retrieved May 23, 2012, from ZEF: [http://www.zef.de/fileadmin/webfiles/downloads/zefc\\_ecology\\_development/eds\\_78\\_masikati\\_text.pdf](http://www.zef.de/fileadmin/webfiles/downloads/zefc_ecology_development/eds_78_masikati_text.pdf)
- Mazango, N., & Munjeri, C. (2009). Water management in a hyperinflationary environment: Case study of Nakyi district in Zimbabwe. *Physics and Chemistry of the Earth*, 34, 28-35.
- Mazvimavi, K., Nyathi, P., & Murendo, C. (2011). *Conservation Agriculture practices and challenges in Zimbabwe*. Bulawayo, Zimbabwe: International Crops Research Institute for the Semi-Arid Tropics.
- Mazvimavi, K., Twomlow, S., Belder, P., & Hove, L. (2008). *An assessment of the sustainable uptake of conservation farming in Zimbabwe. Global Theme on Agroecosystems Report No. 39*. Bulawayo, Zimbabwe: International Crops Research Institute for the Semi-Arid Tropics.
- Melero, S., Lopez-Garrido, R., Murillo, J., & Moreno, F. (2009). Conservation tillage: Short- and long-term effects on soil carbon fractions and enzymatic activities under Mediterranean conditions. *Soil & Tillage Research*, 292-298.
- Mrabet, R. (2002). Stratification of soil aggregation and organic matter under conservation tillage in Africa. *Soil & Tillage Research*, 66, 119-128.
- Munodawafa, A. (2007). Assessing nutrient losses with soil erosion under different tillage. *Physics and Chemistry of the Earth*, 32, 1135-1140.
- Munodawafa, A., & Zhou, N. (2008). Improving water utilization in maize production through conservation tillage systems in semi-arid Zimbabwe. *Physics and Chemistry of the Earth*, 33, 757-761.
- Mupangwa, W., Love, D., & Twomlow, S. (2006). Soil water conservation and rainwater harvesting strategies in the semi-arid Mzingwane Catchment, Limpopo Basin, Zimbabwe. *Physics and Chemistry of the Earth*, 31, 893-900.
- Mupangwa, W., Twomlow, S., & Walker, S. (2008). Conservation tillage for soil water management in the semi-arid southern Zimbabwe. *Physics and Chemistry of the Earth*, 33, 762-767.

- Nagayets, O. (2005). *Small Farms: Current Status and Key Trends*. Prepared for the Future of Small Farms Research Workshop, Wye College, June 26-29.
- Nyagumbo, I. (1999). Conservation tillage for sustainable crop production systems: Experiences from on-station and on-farm research in Zimbabwe (1988-1997). In K. P.G., & S. T.E (Eds.), *Conservation tillage with animal traction*. Animal Traction Network for Eastern and Southern Africa (ATNES). Harare, Zimbabwe. 173 pg.
- Oldreive, B. (2011). *A Brief Summary of Foundations for Farming*. Retrieved July 16, 2011, from Foundations for Farming: [http://www.foundationsforfarming.org/wp-content/uploads/fff\\_summary\\_english.pdf](http://www.foundationsforfarming.org/wp-content/uploads/fff_summary_english.pdf)
- Oldreive, B. (2005). CF training regarding large-scale hoe trial. Vila Ulongwe, Mozambique.
- Oldreive, B. (n.d.). *The Story of Foundations for Farming*. Retrieved April 26, 2012, from Foundations for Farming: <http://www.foundationsforfarming.org/wp-content/uploads/The-Story.pdf>
- Panagos, P., Jones, A., Bosco, C., & Senthil-Kumar, P. (2011). European digital archive on soil maps (EuDASM): Preserving important soil data for public free access. *International Journal of Digital Earth*, 434-443.
- Phillips, J., Cane, M., & Rosenzweig, C. (1998). ENSO, seasonal rainfall patterns and simulated maize yield variability in Zimbabwe. *Agricultural and Forest Meteorology*, 90, 39-50.
- Raes, D., Sithole, A., Makarau, A., & Mildford, J. (2004). Evaluation of first planting dates recommended by criteria currently used in Zimbabwe. *Agricultural and Forest Meteorology*, 125, 177-185.
- Sanchez, P. (2002, March 15). Soil fertility and hunger in Africa. *Science*, 295, pp. 2019-2020.
- Sanchez, P., Shepherd, K., Soule, M., Place, F., Buresh, R., Izac, A.-M., et al. (1997). Soil fertility replenishment in Africa: an investment in natural resource capital. In R. Buresh, P. Sanchez, & F. Calhoun (Eds.), *Replenishing Soil Fertility in Africa*. SSSA special publication No. 51 (pp. 1-46). Madison, WI: SSSA, ICRAF.
- SAS. (2012). *Means Versus LS-Means*. Retrieved June 14, 2012, from SAS Support: [http://support.sas.com/onlinedoc/913/getDoc/en/statug.hlp/glm\\_sect34.htm](http://support.sas.com/onlinedoc/913/getDoc/en/statug.hlp/glm_sect34.htm)

- Twomlow, S., Hove, L., Mupangwa, W., Masikati, P., & Mashingaidze, N. (2008a). Precision conservation agriculture for vulnerable farmers in low-potential zones. *Proceedings from the Workshop on Increasing the Productivity and Sustainability of Rainfed Cropping Systems of Poor, Smallholder Farmers*. Tamale, Ghana, 22-25 September.
- Twomlow, S., Rohrbach, D., Dimes, J., Rusike, J., Mupangwa, W., Ncube, B., et al. (2010). Micro-dosing as a pathway to Africa's Green Revolution: evidence from broad-scale on-farm trials. *Nutrient Cycling in Agroecosystems*, 88, 3-15.
- Twomlow, S., Urolov, J., Jenrich, M., & Oldreive, B. (2008b). Lessons from the field— Zimbabwe's Conservation Agriculture Task Force. *Journal of SAT Agricultural Research*, 6.
- Vogel, H. (1992). Effects of conservation tillage on sheet erosion from sandy soils at two experimental sites in Zimbabwe. *Applied Geography*, 12, 229-242.
- vonBraun. (2005). Small scale farmers in a liberalized trade environment. In T. Huvio, J. Kola, & T. Lundström (Ed.), *Small-scale farmers in liberalised trade environment* (pp. 21-52). Haikko, Finland: Department of Economics and Management Publications No. 38. Agricultural Policy. Helsinki: University of Helsinki.
- Weil, R., Islam, K., Stine, M., Gruver, J., & Sampson-Liebeg, S. (2003). Estimating active carbon for soil quality assesment: A simplified method for laboratory and field use. *American Journal of Alternative Agriculture*, 18 (1), 3-17.
- Willcocks, T., & Twomlow, S. (1993). A review of tillage methods and soil and water conservation in southern Africa. *Soil & Tillage Research*, 27, 73-94.
- Woodring, C., & Braul, A. (2011). *Conservation Farming in Zimbabwe-- Evaluation Report*. Winnipeg , MB: Canadian FoodGrains Bank.
- WorldClimate. (n.d.). *Nkayi, Zimbabwe*. Retrieved June 6, 2012, from World Climate: <http://www.worldclimate.com/cgi-bin/data.pl?ref=S19E028+2100+6786104G1>
- WorldWeatherOnline. (n.d.). *Nkayi Weather, Zimbabwe Weather Averages*. Retrieved June 6, 2012, from World Weather Online: <http://www.worldweatheronline.com/Nkayi-weather-averages/Matabeleland-North/ZW.aspx>
- WRB, I. W. (2007). *World Reference Base for soil resources 2006, first update 2007. World Soil Resources Reports No. 103*. FAO, Rome.
- ZCATF. (2008). *Conservation Agriculture toolbox for Zimbabwe*. Retrieved April 24, 2012, from FAO: [http://www.fao.org/ag/ca/Training\\_Materials/CA\\_toolbox\\_Zimbabwe.pdf](http://www.fao.org/ag/ca/Training_Materials/CA_toolbox_Zimbabwe.pdf)

Zimbabwe Minister of Agriculture, M. a. (2011). *Second Round Crop and Livestock Assessment Report.*

Zimbabwe Minister of Agriculture, M. a. (2012). *Second Round Crop and Livestock Assessment Report.*

Zingore, S., Murwira, H.K., Derve, R.J., & Giller, K. (2007). Influence of nutrient management strategies on variability of soil fertility, crop yields and nutrient balances on smallholder farms in Zimbabwe. *Agriculture, Ecosystems and Environment*, 119, 112-126.