Supplementary material S3:

Table S7: Meta-analyses used to compare the simulated effect of measures versus control conditions on soil erosion and soil organic matter.

1	Aguilera et al. 2013	Aguilera E., Lassaletta L., Gattinger A., Gimeno B.S. 2013. Managing soil carbon for climate change mitigation and adaptation in Mediterranean cropping systems: A meta-analysis. Agriculture, Ecosystems and Environment 168: 25–36. http://dx.doi.org/10.1016/j.agee.2013.02.003
2	Angers and Eriksen-Hamel 2008	Angers D.A., Eriksen-Hamel N.S. 2008. Full-Inversion Tillage and Organic Carbon Distribution in Soil Profiles: A Meta-Analysis. Soil Sci. Soc. Am. J. 72: 1370-1374. doi:10.2136/sssaj2007.0342
3	Chen et al. 2020	Chen G., Liu S., Xiang Y., Tang X., Liu H., Yao B., Luo X. 2020. Impact of living mulch on soil C:N:P stoichiometry in orchards across China: A meta-analysis examining climatic, edaphic, and biotic dependency. Pedosphere 30(2): 181–189. doi:10.1016/S1002-0160(20)60003-0
4	Cooper et al. 2016	Cooper J., Baranski M., Stewart G. et al. 2016. Shallow non-inversion tillage in organic farming maintains crop yields and increases soil C stocks: a meta-analysis. Agron. Sustain. Dev. 36: 22. https://doi.org/10.1007/s13593-016-0354-1
5	Gao et al. 2019	Gao H., Yan C., Liu Q., Li Z., Yang X., Qi R. 2019. Exploring optimal soil mulching to enhance yield and water use efficiency in maize cropping in China: A meta-analysis. Agricultural Water Management 225: 105741. https://doi.org/10.1016/j.agwat.2019.105741
6	Jian et al. 2020b	Jian J., Du X., Reiter M.S., Stewart R.D. 2020b. A meta-analysis of global cropland soil carbon changes due to cover cropping. Soil Biology and Biochemistry 143: 107735. https://doi.org/10.1016/j.soilbio.2020.107735.
7	Jian et al. 2020a	Jian J., Lester B.J., Du X., Reiter M.S., Stewart R.D. 2020a. A calculator to quantify cover crop effects on soil health and productivity. Soil & Tillage Research 199: 104575. https://doi.org/10.1016/j.still.2020.104575
8	Keizer and Hessel 2019	Keizer J.J., Hessel R. 2019. Quantifying the effectiveness of stakeholder-selected measures against individual and combined soil threats. Catena 182: 104148. DOI: 10.1016/j.catena.2019.104148.
9	Knapp & van der Heiden 2018	Knapp S., van der Heijden M.G. 2018. A global meta-analysis of yield stability in organic and conservation agriculture. Nature communications 9(1): 1-9.
10	Li et al. 2018	Li Q., Li H., Zhang L., Zhang S., Chen Y. 2018. Mulching improves yield and water-use efficiency of potato cropping in China: A meta-analysis. Field Crops Research 221: 50–60. https://doi.org/10.1016/j.fcr.2018.02.017
11	Lu 2014	Lu F. 2014 How can straw incorporation management impact on soil carbon storage? A meta-analysis. Mitig Adapt Strateg Glob Change. DOI 10.1007/s11027-014-9564-5
12	Luo et al. 2010	Luo Z., Wang E., Sun O.J. 2010. Can no-tillage stimulate carbon sequestration in agricultural soils? A meta-analysis of paired experiments. Agriculture, Ecosystems and Environment 139: 224–231. doi:10.1016/j.agee.2010.08.006
13	Marcillo and Miguez 2017	Marcillo G.S., Miguez F.E. 2017. Corn yield response to winter cover crops: An updated meta-analysis. Journal of Soil and Water Conservation 72: 3. doi: 10.2489/jswc.72.3.226
14	Morugán-Coronado et al. 2020	Morugán-Coronado A., Linares C., Gómez-López M.D., Faz Á., Zornoza R. 2020. The impact of intercropping, tillage and fertilizer type on soil and crop yield in fruit orchards under Mediterranean conditions: A meta-analysis of field studies. Agricultural Systems 178: 102736.
15	Nunes et al. 2020	Nunes M.R., Karlen D.L., Veum K.S., Moorman T.B., Cambardella C.A. 2020. Biological soil health indicators respond to tillage intensity: A US meta-analysis. Geoderma 369: 114335. https://doi.org/10.1016/j.geoderma.2020.114335
16	Pittelkow et al. 2015	Pittelkow C.M., Linquist B.A., Lundy M.E., Liang X., van Groenigen K.J., Lee J., van Gestel N., Six J., Venterea R.T., van Kessel C. 2015. When does no-till yield more? A global meta-analysis. Field Crops Research 183: 156–168. http://dx.doi.org/10.1016/j.fcr.2015.07.020

17	Qin et al. 2015	Qin W., Hu C., Oenema O. 2015. Soil mulching significantly enhances yields and water and nitrogen use efficiencies of maize and wheat: a meta-analysis. Scientific Reports 5: 16210. DOI: 10.1038/srep16210
18	van den Putte et al, 2010	Van den Putte A., Govers G., Diels J., Gillijns K., Demuzere M. 2010. Assessing the effect of soil tillage on crop growth: A meta-regression analysis on European crop yields under conservation agriculture. European Journal of Agronomy 33(3): 231–241. doi:10.1016/j.eja.2010.05.008