

Interactive comment on “CO₂ emission and structural characteristics of two calcareous soils amended with municipal solid waste and plant residue” by N. Yazdanpanah

Anonymous Referee #1

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This is an interesting manuscript that provides important information from a region where such information is needed. The study appears to be well designed and well carried out. The techniques used are sound. The manuscript needs to be read and edited by a native English speaker. It should be possible to get a native English speaking colleague to do so, because the English is not bad, it just isn't at international publication quality and needs improvement in places.

Page 3152, Lines 24-25 – suggest adding Brevik et al. (2015) to the list of references.

Page 3153, Line 2 – suggest adding Alexander et al. (2015) to the list of references.

Page 3153, Line 7 – Turgut, 201 should be 2015.

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Page 3153, Line 24 – suggest adding Zornoza et al. (2015) in addition to Yazdanpanah et al. (2013).

Page 3154, Line 9 – suggest adding Thomas et al. (2015) in addition to Ferreras et al. (2006).

Page 3154, Lines 20-21 – suggest adding Cerdà et al. (2014) to the list of references.

Page 3155, Lines 10 and 11 – should clarify here that the US system of Soil Taxonomy is being used. Also, which Keys to Soil Taxonomy was used to classify the soils? That Key should be referenced.

Page 3155, Lines 14-18 – What crops were grown in these fields prior to the experiment? What exactly is meant by “conventional management”? How was irrigation accomplished (flood, sprinkler, drip, etc.)? When the fields were rested in two years of fallow before the experiment, were weeds controlled? If so, were they controlled by tillage or by chemical treatment? This section on previous management should be expanded and better explained.

Page 3156, Lines 26-27 – No crops were planted and no fertilizers applied during the experiment, but were weeds/volunteer plants allowed to grow? If not, how were they controlled?

Page 3157, Lines 21-22 – How many samples from each treatment were analyzed for aggregate stability?

Page 3158, Lines 4-5 – How many samples from each treatment were analyzed for porosity?

Page 3163, Line 7 – suggest adding Smith et al. (2015) in addition to Koranda et al. (2013).

Tables 1, 2, and 3 – For each property reported in the tables, what was the sample size? n should be added to each table, and if it differed for different properties, the n

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as appropriate to each property should be reported. Standard deviations would also improve the reporting of data.

Figures 1, 2, and 3 – It is not always clear which regression line goes with MSW versus AR, especially on Figures 2 and 3. The regression lines and data points should be done in colour, with one colour indicating MSW and another colour indicating AR.

References Alexander, P., Paustian, K., Smith, P., Moran, D.: The economics of soil C sequestration and agricultural emissions abatement, *SOIL*, 1, 331-339, doi:10.5194/soil-1-331-2015, 2015.

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