

## ***Interactive comment on “Cooperative effects of field traffic and organic matter treatments on some compaction-related soil properties” by Metin Mujdeci et al.***

**Metin Mujdeci et al.**

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The changes made in light of the second referee's suggestions were written in green. Some specific responses were also given below.

Page – line Page 1- line 6-7 –It is conclusion statement and should go on the end of paragraph.

R: Despite it can be regarded as a concluding sentences this sentence describes the common problem and possible solution to the problem. Therefore we think that the sentence may be used as the rational as well. Page 1 – line 19 –try to use another word (e.g. mitigation R: mitigation was replaced for chasing Page 1 – line 25 – Please

C1

define soil compaction before authors started the introduction. R: The definition of the compaction was given at the start after the rational.

Page 1 – line 27-28 – It depends about depth of compacted soil layer. There are crops that do not need deeper rhizosphere than 20 cm.

R: the case was specified for deep rooting plants

Page 2 – line 4-6 – Definition of compaction goes at the beginning of Introduction section.

R: It moved to the introductory part.

Page 2 –line 6 – Please use term crop instead plant. Do that in whole manuscript.

R: The appropriate ones were replaced.

Page 2 – line 10 - put “differential porosity” instead “soil porosity”. R: it was done. Page 2 – line 17-18 – Authors should add more reference on this statement. This is very broad and attractive subject so please add more references if authors speak about international level.

R: New references were added.

Page 2 – line 31 – Please add reference that supports this statement. This is common research on most of different textured soil types

R: References were added.

Page 3 – line 16-17 - Please state a number of soil cores in total. R: Three soil cores were taken from each plot fro each tractor passeses.

Page 6 – line 28-29 – It will be of great benefit for the paper quality if authors could provide structural stability test.

R: Unfortunately we are not able to present the agragate stability data of soils. Beacause the analysis was not performed in 2013.

C2

Page 6 – line 35 – define ag-lands R: agricultural lands

Page 7 – please remove borders around figures. Also remove horizontal lines. Also state did significance was determined at 0.01 or 0.05 level?

R: The frame and horizontal lines were removed from the Figs. The significance level used was 0.05.

Page 10 – line 15-16 – This is speculation. Where is author's data that support your statement? Authors did not state amount of green manure incorporated into soil.

R: The sentence was omitted in order to avoid from the speculation.

Minor language corrections in the light of referee's suggestions were written in green and therefore specific responses to those comments were not given.

Please also note the supplement to this comment:

<http://www.solid-earth-discuss.net/se-2016-84/se-2016-84-AC4-supplement.pdf>

Interactive comment on Solid Earth Discuss., doi:10.5194/se-2016-84, 2016.

C3

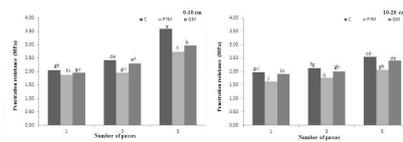


Fig. 1.

C4

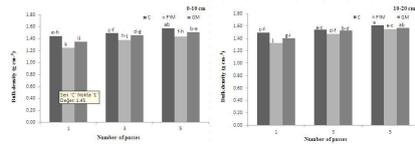


Fig. 2.

C5

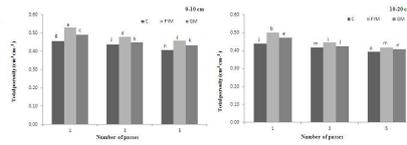


Fig. 3.

C6

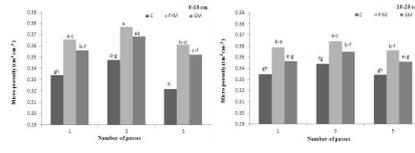


Fig. 4.

C7

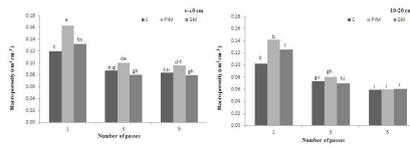


Fig. 5.

C8