Solid Earth Discuss., 6, C419–C421, 2014
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Solid Earth
Discussions
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Interactive comment on "Coffee husk mulch on soil erosion and runoff: experiences under rainfall simulation experiment" *by* H. Moreno-Ramón et al.

Anonymous Referee #1

Received and published: 15 May 2014

This paper aims to investigate the eïňĂectiveness of coïňĂee husk mulch to reduce soil and water losses. Rainfall simulation experiments were conducted and the results showed that coïňĂee husk is an efficient mulch to decrease soil erosion, indicating that large quantities of coïňĂee husk can be used as mulch in agriculture, forestry and gardening to reduce the soil and water losses. It provides a viable way to solve the problem of coïňĂee husk waste. Some points need to be addressed, however, before this paper can be considered for publication. My major concerns are: 1. The major results of the paper are not novel (as expected): mulch cover can reduce soil and water losses effectively. It will be great if the authors could highlight the novel aspects of the study. 2. Authors are only list their data but in my view lacks a very critical an in-depth discussion of the results. Please present further explanation of the results and give deeper discussion! 3. There are a number of grammatical and spelling errors

in the manuscript. Of more concern is the wordiness of a number of long sentences or inappropriate wording that diminishes its readability in places. I would recommend editing by a native English speaker.

Other specific comments for the authors: P1129, L25: Residues buried in soils may improve soil qualities, including the improvement of the capacity of soil resist to erosion. So the different effect between "applied on soil surface" and "buried" may be not due to changes of soil qualities. Please give accurate and further explanation.

P1130, L9-11: Mulch cover influences not only the formation of soil crust, but also the erosion forces, especially the raindrop kinetic energy and the stream power, which play an important role in soil erosion. Please add these information in this paragraph. It is recommended to read papers below: Shi, Z.H., Yue, B.J., Wang, L., Fang, N.F., Wang, D., Wu, F.Z., 2013. Effects of mulch cover rate on interrill erosion processes and the size selectivity of eroded sediment on steep slopes. Soil Sci. Soc. Am. J. 77, 257-267. Wang, L., Shi, Z.H., Wang, J., Fang, N.F., Wu, G.L., Zhang, H.Y., 2014. Rainfall kinetic energy controlling erosion processes and sediment sorting on steep hillslopes: A case study of clay loam soil from the Loess Plateau, China. J. Hydrol. 512, 168-176.

P1130, L 12-22: These two paragraphs are very blurring, it should be rewritten, and give specific research objects.

P1130, L25; P1131, L5: Please differentiate "factors" and "treatments" here. This problem exists in the abstract as well.

P1133, L7: Why t the rainfall intensity of 122 mm h-1 have been selected in the paper?

P1134, L10: Replace "C treatments showed $p < 0.01$ between coïňĂee husk incorporation (S or B)" with "C treatments showed significant difference from coïňĂee husk incorporation (S or B) ($p < 0.01$)".

P1135, L15, 25: Can soil properties be changed in such a short time?

P1137, L10: Please explain these results here.

P1137, L25: In general, soil crust may influence sediment concentration effectively. Please explain why “the presence or absence of the crust did not signiïňĄcantly aïňĂect the sediment concentration”

Interactive comment on Solid Earth Discuss., 6, 1127, 2014.