

Interactive comment on “Potential effects of vinasse as a soil amendment to control runoff and soil loss” by Z. Hazbavi and S. H. R. Sadeghi

Anonymous Referee #1

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The use of alternative materials and substances to improve soil quality and control soil erosion processes is a research topic of increasing interest. In this manuscript, the authors try to assess the potential of vinasse as a soil erosion reducer under control conditions. Despite it is an interesting topic, the experiments are limited and therefore the results, and there are several aspects that must be improved.

Introduction: P 770, L 14-15 and L 20-21. Repetitive. P 770, L 25-26. What it is understood by 'properly used'? P 770-771, L 28-2. Add citations. P 771, L 3. One of the citations seems to be repeated. P 771, L 22-29. This paragraph should be relocated and better connected to other parts of the text. P 772, L 1-11. Please, relocate this paragraph

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Materials and methods: I would suggest to the authors to improve this section. If necessary, divide it in different parts (i) soil properties, (ii) vinasse characteristics, (iii) plot preparation, (iv) rainfall experiments, etc., providing the reader more details such as, the control plot, the rainfall simulator used... P 772, L 13-14. Include the objectives in the introduction. P 772, L 24-26. Maybe, gather this information in a table. P 773, L 4, L 10. Could you describe the natural or the field conditions?

Results and discussion: Could be possible to evaluate the repellency of the vinasse in some laboratory trials to check some of your hypothesis? Did the authors notice differences in the time of runoff initiation among vinasse doses? Could you change the units of runoff data in order to read the data easily? P 774, L 6-8. Not necessary. P 774, L 12-13, L 14-15. Repetitive. P 776, L 3-4, L 5-6. Repetitive. P 777, L 9. Change 'Soil physical' by 'soil physical'.

Conclusions: It is very difficult to conclude with the available data and changes in soil properties are not easily detected in such a short term, specially the physical ones. P 774, L 25-27. No soil property have been measured in this study to conclude on this.

Interactive comment on SOIL Discuss., 2, 767, 2015.

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