

## 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

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Dear Natascha Töpfer Copernicus Publications Editorial Support

September 9, 2015

Greetings;

Referring your decision letter on my submitted manuscript (soil-2015-40) and encour-

C444

aging me to revise the manuscript after addressing the comments and suggestions of the respected reviewer. Here, Please find enclosed the revised version of the manuscript entitled "Potential effects of vinasse as a soil amendment to control runoff and soil loss" by Z. Hazbavi and S.H.R. Sadeghi. All comments and suggestions of the respected reviewer have been addressed in the revised version as detailed below. The entire revisions were highlighted by different color. The acknowledge receipt of the same and informing me about the status of the progress in paper evaluation is much obliged in advance. Should you need to contact me, please use the address given above or in the manuscript.

**Revision Notes** 

Special thanks are due to respected anonymous referee for the review and his/her very constructive comments and suggestions.

Anonymous Referee #2 Received and published: 7 September 2015 Dear Authors, Although the present work presents and interesting approach, I would suggest MA-JOR REVISIONS before considering it for publishing. There are several scientific and presentation lacks that the authors should change before reconsidering for publication. Also there is a high need of bibliography that should be taken into account. I quite not see/understand the point/aim of this work as it you don not discuss your results but the results from Tejada and González. I would encourage the authors to send the manuscript to an English-native speaker as it is difficult to follow the ideas as it is now. Ans. All comments and suggestions of the respected reviewer have been addressed in the revised version as detailed below. The manuscript was carefully amended based on the English grammatical structure.

ABSTRACT Line 5 I would suggest to give a brief description of 'vinasse' (just a few words) Ans. The reviewer suggestion was incorporated. A brief description of 'vinasse' (just a few words) was added to sentence as follow and hoping to be understood. "So, the present research focused on evaluating the effectiveness of vinasse, a byproduct

mainly of the sugar-ethanol industry, on soil conservation under simulated rainfall."

Line 8 Revise the units (intensities are in mm!!!) Ans. The unit of intensity was revised. We sorry for this unwanted mistake which occurred just in this sentence.

Line 15 So the main result is that vinasse could not descrease runoff and soil loss???? Ans. Yes, as mentioned in the text, the vinasse didn't reduce the runoff and soil loss significantly. It is a good results that guide the researcher application from vinasse on the study condition of experiment didn't decrease the water erosion. So we must try to find another new solution for the management of the massive production of vinasse. It is possible to use it with else soil amendment to this subject. Further research is needed.

INTRODUCTION Line 20 Please change to 'about 150 M US dolars' Ans. The reviewer suggestion was done.

Line 24-25 References needed Ans. The related references was added to text.

Line 5-6 Which literature review? When was it done? Where are the citations? Ans. The references was added.

Line 11 The aims of the work are highly missing. Ans. With aim of soil erosion control. The sentence was revised.

MATERIALS AND METHODS Line 15We need more detail on how the simulations were performed and type of rainfall simulator. Ans. The necessary details was added to the text as follow: The rainfall simulator laboratory consists of a 4000-L water tank and 27 precalibrated nozzles in three parallel lines with the ability to simulate raindrops of 1.3 mm average size. The drops fall from a height between 4 and 6 m at the upper and lower parts of the plot, respectively, which creates an average terminal velocity of about 7 m s-1 for the entire length or area of the study plot (Gholami et al., 2013).

Line 8-14 The levels were selected before or after? It is not clear. Ans. We relocated and adjusted the mentioned paragraph.

C446

Line 18 I would suggest some numbers on the IDF (Intensity–duration–frequency) curves Ans. We added necessary details to the text.

Line 24 Please, revise the English Ans. The mentioned sentence was revised as follow: The time of runoff commencement and cessation times, and regular measurement of runoff volume were measured by a chronometer and standard gauged cylinders, respectively.

RESULTS AND DISCUSSION 1) RUNOFF Line 21 If the effect of vinasse on runoff was not significant...what was then the aim of the work? Ans. These results were obtained after the research experiment. We didn't know what occurred after vinasse application. This amendment may control the runoff and soil loss but under different treatment such as more time retention of vinasse before rainfall simulation. It is needed more experiment and deeper research to take comprehensive conclusion.

Line 27-8 But have you measured what you state in the paragraph? Ans. No, we didn't measure water repellency rate, it is concluded from author's observation among the experiment.

Line 15-17 Please explain why Line 20 You need to explain this Ans. To make it clearer.

2) SOIL LOSS Line 22 You need to show values here. It is in the RESULTS AND DISCUSSION SECTION where you have to show and explain your data so the rest of the scientific community can understand your work. Ans. It has been followed up.

Line 9-20 And what about your results? You explain other researchers work but not yours. Ans. It was little bit explained.

TABLES Please check the format (same number of decimals, font) Ans. The decimals of numbers was adjusted to three same as others.

FIGURES Please provide a new version of figure 1 as it needs more resolution Please present all the figure with the same format and not a 'copy-paste' version of them. Ans. It was done. We hope the final emendations caused to consent the respected reviewer

and made our paper well qualified for final acceptance and publication.

Sincerely, S.H.R. Sadeghi

## Enclosure

Please also note the supplement to this comment: http://www.soil-discuss.net/2/C444/2015/soild-2-C444-2015-supplement.pdf

C448

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