

Interactive comment on “Estimating hydraulic conductivity of a crusted loamy soil from beerkan experiments in a Mediterranean vineyard” by Vincenzo Alagna et al.

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Received and published: 12 April 2017

Dear authors,

I like the subject of soil crusting and I also like the way you wrote your paper. However, from my point of view you should extend and improve the data interpretation because at the moment the paper is too poor, I miss new scientific information. You could develop it by (i) implementing the data into hydraulic models in order to predict the hydraulic functions vs. time. Secondly I suggest to combine the rainfall intensity (=energy) information (which you have) with the change of the hydraulic conductivity. Some of these aspects have been done in the past. In order to stimulate doing more with your results, I recommend to read the following paper:

C1

C.H. Roth et al. 1999: Impact of Tillage and Field Traffic Induced Variability of Soil Hydraulic Properties on Unsaturated Conductivity and Water Balance Calculations, 489-497. In: Proceedings of the International Workshop (1997) on Characterization and Measurement of the Hydraulic Properties of Unsaturated Porous Media, Part 2, edited by M. Th. van Genuchten, F.J. Leij and L. Wu. Published by the University of California, Riverside. Secondly I add a second paper to stimulate your interpretations.

Critique: Table 3 and Figure 5 are showing the same!

Please also note the supplement to this comment:

<http://www.soil-discuss.net/soil-2016-79/soil-2016-79-SC1-supplement.pdf>

Interactive comment on SOIL Discuss., doi:10.5194/soil-2016-79, 2017.