

Interactive comment on “Coffee and shade trees show complementary use of soil water in a traditional agroforestry ecosystem” by Lyssette E. Muñoz-Villers et al.

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Review of the manuscript ‘Coffee and shade trees show complementary use of soil water in a traditional agroforestry ecosystem’ by Muñoz-Villers et al. (hess-2019-329)

General comment

Reading this manuscript was pleasant. I particularly liked the idea of including the distribution of roots and nutrients in the mixing model approach, and I think that this point should be better stressed in the manuscript.

Overall, I fully agree with the comments provided by the reviews of Matthias Beyer and

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Adrià Barbeta, and I have only some minor comments to add.

Good job!

Daniele

Minor comments and technical corrections 42-43. This sentence is not immediate to understand without reading the paper. I suggest rephrasing.

45. Double negation (limitation...absent): I suggest simplifying the sentence.

64. Complex sentence, rephrase.

149. I suggest to change into “. . .prevails over competition. . .” or, in any case, to include both the terms “complementary” and “competition” because the latter is logically linked to the second research question.

268. Did you consider using the Normalized Antecedent Precipitation Index (NAPI, Heggen, 2001), instead of API? Heggen, R.J., 2001. Normalized antecedent precipitation index. J. Hydrol. Eng.

385-405. I suggest to condense this part and let the figures talk for themselves.

Fig. 3. Caption: why panel (c) shows the GMWL whereas panels (a) and (b) the LMWL?

Fig. 4. I suggest to replace “(a)” and “(b)” with “2014” and “2017” for more immediate understanding.

Fig. 5. What do error bars represent? Why are there only in panel (a) and not in panel (b)?

Fig. 8. I think that the result and discussion build around this figure should be taken with a bit of caution because based on few point only. I suggest to discuss this limitation in the manuscript.

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