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9, C470–C471, 2012

Interactive Comment

Interactive comment on "Impacts of conservation tillage on the hydrological and agronomic performance of *fanya juus* in the upper Blue Nile (Abbay) river basin" by M. Temesgen et al.

M. Temesgen et al.

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Received and published: 21 March 2012

Dear Referee,

We are very grateful for your detailed reading and your valuable suggestions. We appreciate all the suggested corrections regarding the figures, which have been addressed in our revised paper. All other editorial corrections are accepted as well and have been addressed. We have also addressed the issue of using more recent data than that of FAO (1986) for soil erosion rates, such as Bai et al. (2008). The fertilizer rates applied in all the experimental plots were the same and followed the local recommendations, which are now specified in the revised version.



Discussion Paper



In Section 3.3, the soil moisture has been observed to be consistently higher in TT than in CT for the 10 cm layer at the downhill part of the plot. The time series data has been analyzed using descriptive statistics.

In section 3.8, it has been stated: "Both biomass and grain yield were consistently higher in CT than in TT in both crops, wheat and tef, with 35 and 28% increment in grain yield of wheat and tef, respectively, although the differences are not statistically significant (α =0.05) (Table 2)." This has been corrected to: "The mean values of both biomass and grain yields from CT are higher than that from TT although the differences are not statistically significant ta α =0.05 (Table 2).

Concerning up-scaling and implications at a larger scale, we accept the suggestion of the referee. We also agree that cost-benefit analysis of the technology has to be carried out carefully, what we consider as an essential step in future research. This has been addressed in Section 4 of the revised manuscript.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 9, 1085, 2012.

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Interactive Comment

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