## Response to Topic Editor

## **Topic editors' comments:**

**Topic editor:** The authors have correcly addressed most of the comments with few final details to address prior publication.

A: Thank you for the valuable feedback. Detailed responses are provided below.

1. Thanks for the revision. One (hopefully) last statistical doubt I would need to clarify: Manure was only applied to one of the crop types (Sorghum) however it is included in the ANOVA analysis as a treatment equivalent to to Fertilization rate. When doing so, you will be comparing the 3 plots of shorgum+manure vs the 9 plots of shorgum/Barley/Wheat. In my opinion that is not a correct approach to evaluate the effect of manure, as the crop type effect is also confounded there. I would suggest the manure effect is tested in a separate ANOVA for only the Sorghum crop type, so the comparison is 3 with manure vs. 3 without manure.

**A:** We have revised the manuscript and have now used only sorghum crop type to assess the effect of manure. A separate ANOVA has been conducted for the sorghum crop type, comparing three sorghum plots treated with manure to three sorghum plots without manure amendment. The results are presented in Table 1B in the main text.

In Figure 6A, we have now also included a comparison between three sorghum plots treated with manure and three sorghum plots without manure.

2. In addition, it would be better to have both the ANOVAs and LME results in tables inleuded in the main text.

**A:** We have provided the ANOVA tables and LME results are also included in the main text.