

Reply on RC2

Jörg Schneckner et al.

Author comment on "Microbial activity responses to water stress in agricultural soils from simple and complex crop rotations" by Jörg Schneckner et al., SOIL Discuss.,
<https://doi.org/10.5194/soil-2021-35-AC2>, 2021

Thank you for your comments. We think that they will improve the manuscript. Below we have replied to your specific comments and have adapted the manuscript accordingly.

Specific comments:

- Since the abstract includes microbial biomass among the key parameters analyzed, I would like to see it addressed explicitly in the results section. As it stands, this variable is lumped with "other parameters" in section 3.4. Though included in Figures 4 and 5, the interpretation is challenging for the reader.

>> Thank you for the comment. We have added information on MBC to the results section. Lines 227-232

- In the experimental setup, section 2.2, I found it hard to keep track of "sets" to determine the degree of replication within a sampling site and treatment. Please add clarifying details.

>> We added some sentences for clarification in the methods section. Lines 100, 113-115

Technical corrections:

- Line 55: Remove "of" before nitrous oxide. >> Done. Line 55
- Line 72: Change "crops yields" to "crop yields." >> Done. Line 72
- Line 77: Change "drought and flooding" to "drought or flooding." >> We would like to keep the wording here as it is, since the point we wanted to make is that in most drought experiments, rewetting causes flooding, which we explicitly tried to avoid in our experiment.
- Line 80: Be consistent with line 94, where simple means two crops in rotation, not one or two. >> Done. Line 80
- Line 83: Change "drought or flooding" to "drought and/or flooding." >> Done. Line 83
- Line 99: Adjust format on degrees C. >> Done. Line 99
- Line 121: Change "was determined" to "were determined." >> Done. Line 123
- Line 131: Here and elsewhere, be consistent in spacing between numbers and units. >> Done. Lines 121, 128, 133, 144, 147, 155, 161, 197
- Line 149: Change "was measured" to "were measured." >> Done. Line 151
- Line 151: Remove authors names from parenthetical citation. >> Done. Line 153

- Line 168: Here and elsewhere, use subscripted numbers in chemical formulas. >> Done
Lines 170,172, 177
- Line 251: Make use of your abbreviation, WHC. >> Done. Line 257
- Line 277: Use a semicolon to prevent a run-on sentence. >> We changed the sentences here. Line 289