

Manuscript title: Limited direct impacts of precipitation changes on microbial resource limitation in a moderately saline-alkaline desert steppe

Journal: SOIL (egusphere-2026-2023)

Dear Editor and Reviewers,

We sincerely thank the reviewer for the careful reading and constructive comments on our manuscript. These comments have helped us substantially improve the clarity, statistical rigor, and interpretation of our results. We have carefully considered each comment and revised the manuscript accordingly. Below, we provide a point-by-point response. All changes in the revised manuscript are highlighted in the tracked-changes version, and line numbers refer to the revised manuscript unless otherwise stated.

Major comment 1: From lines 125 to 128, please provide the references for the measurements and the method used. Also, what is the EC and pH ratio of the extract?

Response: We thank the reviewer for this comment. The specific measurement methods and the references used are all mentioned in Section 2.5, and the soil-to-water ratio of the extract for EC and pH is 1:5.

Major comment 2: Please provide more detailed information about the results, including the best and worst treatments and their values, rather than simply listing the figure number.

Response: We agree and have revised the Results accordingly. We now provide the best and worst treatments and their values for the key variables. For example, in Section 3.1 we now report the specific values for the most pronounced within-month differences (e.g., C_e and P_e under $-P50$ vs. CK in July; $C:P_e$ under $-P30$ vs. CK in May; P_e under $+P30$ vs. CK in June and July; N_e and P_e under $+P50$ vs. CK in June). In Section 3.2 we now report the specific values for vector angle under $+P30$ vs. CK in June and for estimated CUE under $+P50$ vs. CK in July. In Section 3.3 we now report the main contributors to variation in vector length, vector angle, and estimated CUE, with the corresponding values reported in the figures and supplementary tables. We have also added a sentence in the Results stating that within-month differences should be treated as exploratory because the overall $P \times M$ interaction was not significant.

Major comment 3: For the discussion section, please provide additional references and recent studies that support and enrich the research. Also, please specify which studies align with your findings, which differ, and explain these differences.

Response: We thank the reviewer for this suggestion. We have expanded the Discussion with additional recent references (2022–2026) and have added explicit comparisons with studies that report similar or contrasting findings.

Major comment 4: References are generally very good, but they need to be expanded and cite recent research related to the research topic. (The references must be recent, as

there are many articles related to this topic that were published during this period).

Response: We have expanded the References with recent studies published during 2022–2026, including studies on saline-alkaline grasslands, precipitation manipulation, and microbial resource limitation. We have also updated the citation list to ensure that recent relevant work is cited throughout the Introduction, Methods, Results, and Discussion.

Major comment 5: The discussion section needs work. There are no comparisons with other studies.

Response: We agree and have revised the Discussion to include explicit comparisons with other studies. We now specify which studies align with our findings and which differ, and we explain the possible reasons for these differences.

We hope that these revisions fully address the reviewer's concerns. We are grateful for the opportunity to improve our manuscript and look forward to further feedback.

Sincerely,

The Authors