

10th March 2025

Dear Editors and Reviewers,

Thank you for your valuable feedback on our manuscript. In the revised version, we have implemented the following changes as detailed in our “Reply on RC1 & Reply on RC2” (Victoria Nasser, 21 Jan 2025):

- We implemented all revisions suggested by reviewers 1, 2, and the topic editor.
- We combined the separate Results and Discussion sections into one integrated “Results and Discussion” section.
- Hypotheses are now referenced with numbers in the discussion.
- We edited the text of the “Results and Discussion” to be more concise by removing redundant descriptive sentences and avoiding iterations, which shortened the Results and Discussion section from approximately 6500 to 4150 words.
- The standalone “3.5 Synthesis over all site-years” section was removed and its content was integrated into sections 3.1 and 3.2 of the revised manuscript. Correspondingly, Table 3 from that section has been moved to the Supplementary Materials as Supplementary Table S5.
- Two new tables were added, as suggested by the reviewers: Table 1, detailing topsoil properties and site information for the different experimental trials, and Table 2, which provides management dates and N fertilizer rates for CC and main crop management across the experimental trials. (Please note that the numbering of tables in both the manuscript and the supplementary materials has been updated accordingly.)
- Several typographical errors have been corrected.
- We have abbreviated “cover crops” as “CCs” throughout the manuscript, following common usage in the literature.
- We ensured that all abbreviations (e.g., nitrogen (N), carbon (C), cover crop (CC), soil organic carbon (SOC)) are used consistently.
- Importantly, we have revised the Materials and Methods sections to consistently employ past tense throughout.
- Additionally, in response to Reviewer #2’s comment regarding the title, we have changed the title to more clearly reflect the geographical and methodological scope of our work. This revision aims to prevent any misunderstanding that the paper is a comprehensive review of cover crops across multiple locations and practices.

We believe these revisions have substantially improved the clarity, conciseness, and overall quality of the manuscript. We appreciate your consideration and look forward to your further feedback.

Sincerely,

Victoria Nasser
Georg August University of Göttingen