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Dear Dr. Martin de Kauwe,

Thank you for your helpful comments on our recent submission to New Phytologist (NPH-MS-2024-46044, “Nitrogen demand, availability, and acquisition strategy control plant responses to elevated CO2 at different scales”). I have been going through the reviews and have found them to be very helpful for improving our manuscript. After a conversation with the other co-authors (cc’ed), I wanted to bring some concerns about the second reviewer’s general comments to your attention, as we suspect they were created using an AI text-generation tool.

We suspect that general comments were created by an AI-generation tool for a few reasons. The comments provided are quite general and can be applied to almost any paper. Furthermore, they are categorized in a way that is often seen when an AI text generator is prompted to summarize a body of work. I asked ChatGPT to summarize the abstract of one of my existing papers (DOI: <https://doi.org/10.1093/jxb/erab253>) and found similar verbiage when I asked it to evaluate the abstract using the subcategories provided by the second reviewer. I would be happy to provide such evidence if it would be useful.

The major comments are eloquently written, yet do not offer guidance on how to proceed with addressing these apparent major changes. Additionally, many of the major comments contradict themselves. For example, “the discussion adeptly connects the study's findings with broader ecological and evolutionary theories” is abruptly followed with “Yet, a more thorough comparison with conflicting or supporting studies would enrich the narrative, offering a broader perspective on the study's implications within the current scientific discourse”. We have observed this type of circular and contradictory logic used frequently in AI-generated texts.

The sentence structure of the line comments is also dissimilar to those of the general comments. The eloquent syntax of the sentence structure and vocabulary used in the general comments is contrasted with haphazard notes in the line comments, which is puzzling and demonstrates an inconsistency in the review. We have also noticed that AI-generated text seems to replace “acclimation” with “adaptation” as the two words are often wrongly used synonymously. The review exclusively refers to our observations as adaptive responses (e.g., “Utilizing Glycine max seedlings as a model, the study employs a full-factorial experimental design to explore these interactions, offering insightful contributions to the discourse on plant adaptation strategies in the face of climatic changes.”).

Finally, I have put general comments 1-5 into several online AI text detectors. Although AI text detectors have limitations, every detector I have used suggests that the comments were highly likely to have been generated using AI text generation tools. These findings support some of the anecdotal observations I have briefly explained above. I would be happy to share the output of the detection tools with you if it would be helpful.

Of course, it is impossible to prove beyond a reasonable doubt that this review was generated using AI-generated text. However, the evidence suggests that this review was likely created using such tools. My co-authors and I are concerned that our unpublished work was used in a language-learning algorithm without our consent. We also have concerns that this review has undermined the peer review process. We therefore wanted to convey these concerns to you and the editorial team at *New Phytologist*, as we feel that the use of AI text-generation tools is not an appropriate method for reviewing papers.

To be clear, I am not writing to request that our review decision be reconsidered. We agree with many of the other comments and are pleased with the improvements these comments have made to our manuscript. If there is a more appropriate channel to direct these concerns, please let me know.

Many thanks for your time and again for your helpful review.

Best,

Evan A. Perkowski, Ph.D.

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*On behalf of coauthors Ezinwanne Ezekannagha and Nicholas G. Smith*