

The presented work is excellent, with a complete state-of-the-art on the Oxalate-carbonate pathway presented at full, a clear local Indian/monsoon context, and a transparent experimental design. The results are essential for supporting understanding of our planet's natural carbon removal mechanisms, via plant-microbial-soil interactions, that can be supported in OCP-enabling forest ecosystems, as long as Ca sources are additional, and plant oxalate inputs sufficient for alkalinity.

I find the overall quality of the work to be stellar, with the exception of low replication, though the authors have dealt this with transparent and appropriate statistical methods. In my sense, this work should be considered as a primer, for larger extensive field studies, supported by local Indian scientists and beyond. It showcases the potential of the OCP. Other than that I have no other criticisms. What I find exciting is the potential quantities stored as calcium carbonate in bark, with perhaps another avenue to explore, using bark content as another stable inorganic carbon stock (easily measurable, and verified), in addition to soil carbonates, and flushed bicarbonate. Perhaps the authors could dedicate a few sentences in their discussion to showcase a comparison between inorganic carbon stock (in bark), and potential bicarbonate flushing underground. These are essential for project developers, and MRV requirements.

None technical corrections noted.

Dear anonymous reviewer 2,

We sincerely thank you for the very positive and encouraging feedback on our work. We hope that this work is only, but the first step, in a broader collaboration with other local colleagues to further investigate the OCP in India. We agree that bark represents a relevant stable inorganic carbon stock, in addition to bicarbonate flushing, but that these would need to be quantified in more detail. We have therefore added a cautious point in the discussion to underline its importance for future research, at the end of 4.4 paragraph:

“In addition, CaCO_3 precipitation, inorganic carbon stocks, and bicarbonate export both above and belowground deserves further investigation in any monitoring, reporting, and verification of OCP-systems.”

We thank you for your review of our article.