Dear authors,
I have to apologize for the slow response due to some difficulties in getting a re-review of your manuscript. However, I have now again in detail reviewed the revised version of your manuscript and your responses to the reviewer comments and am pleased to inform you that I recommend the manuscript for publication with minor technical corrections (see note to authors).
Thank you once again for sending your scientific work to SOIL.
With best regards
Peter Fiener

Additional private note (visible to authors and reviewers only):
Dear authors,
in the following, some specific comments you should account for in the final version of the manuscript.

Line 32-33: I think it would be fair to add 'slightly reduced BMD degradation' as the overall effect is not that substantial.

>Changed

Line 152: L-arginine should be in 'mg' and not 'mg/L'.

>corrected

Line 285-286: I am wondering that you give 1309.41 µg and not just 1309 µg?

>Changed to 1309

Line 323: Give some details how you removed the outliers.

>Added

Line 363: In Table S3 you give the reduction in C:N values but not the reduction in %C and %N.

>We added the %C and %N data for the initial samples to Table S3 so that this reduction can be seen.

Figure 6b and 6c are very small and labels hard to read.

>We changed the layout of this figure so the panels are all stacked vertically, which allowed us to make b and c larger and more readable.

Line 555: "… while there are constraints …" a reference would be good.

>added two references to support this argument

Line 566: "… here that the 1% reduction in mulch…" should be "…here that the 1 percent point reduction in mulch …"

>corrected

Line 569: replace "repression" by "reduction".

>replaced

Line 705: As the differences in biodegradation are small (but significant), I suggest making this also clear in the conclusion, e.g. "… plastic biodegradation was slightly but significantly reduced …"

>changed to suggested wording

Figure S1: The caption of the figure does not fit to the figure (e.g. bars, standard error, lowercase letters etc. are not shown in the figure.
>corrected