

Interactive comment on “Global concentrations of microplastic in soils, a review” by Frederick Büks and Martin Kaupenjohann

Anonymous Referee #1

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As microplastic has been commonly recognized as a threat for ecological environment and human health, and the research on microplastic pollution in terrestrial environment came into focus. The references on microplastic concentration in soils around the world was collected and analyzed in the present manuscript, this work is very important for the further research on microplastic in terrestrial ecosystem especially agricultural soil environment. Although the topic is of value for the scientific community, some questions should be considered before this paper can be considered for publication in Soil.

1. The methods for extracting microplastics from soils is not uniform among those studies listed in this reviewer, and different density suspensions can separated different types of microplastics. Whether is it meaningful to analyze and compare the concentration of microplastics extracted by different separation methods? E.g. line

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272-274.

2. The sample base is small, is the conclusion representative? E.g. line 20 “Microplastic concentrations in soils in the vicinity to municipal areas were thereby 10 times larger compared to rural sites”; line 368-370, the microplastic concentrations in sites with sewage sludge application are approximately one order of magnitude above values measured in fields with plastic mulching.; line 385-386. ...

3. Notices some of the details, please. E.g. line 119: 0-10 and 10-20 mm? line 200: double “for” etc.

Interactive comment on SOIL Discuss., <https://doi.org/10.5194/soil-2020-50>, 2020.

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