Geophysical Research Abstracts Vol. 21, EGU2019-9287, 2019 EGU General Assembly 2019 © Author(s) 2019. CC Attribution 4.0 license.



Microplastic in the soil environment

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Microplastics (MP) are small but have clear implications for the environment. These artificial particles are found in terrestrial and aquatic systems worldwide. MP have mainly terrestrial sources, but their concentrations and fates in the terrestrial environment are poorly understood. In terrestrial ecosystems, soils are probably the major sinks for MP. It has been estimated that the application of sewage sludge to arable land alone could add an annual MP load to soil greater than that entering the world's oceans.

In this talk I will discuss the analytical techniques used for the analysis of MP and the state of knowledge about the occurrence and fate of MP in soils. Own data from floodplain soils, roadside soils and mountain soils will be presented and the sources, distribution and composition of the MP in soils will be discussed.