

SOIL Discuss., referee comment RC1
<https://doi.org/10.5194/soil-2021-103-RC1>, 2021
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Comment on soil-2021-103

Anonymous Referee #1

Referee comment on "Environmental behaviors of (*E*) pyriminobac-methyl in agricultural soils" by Wenwen Zhou et al., SOIL Discuss., <https://doi.org/10.5194/soil-2021-103-RC1>, 2021

General comments:

Pesticides, as chemical compounds widely and excessively used in the world, pose a significant threat to soil and water ecosystems. The presented publication raises the important issue of pesticides behavior in soil and their leaching potential. The manuscript is generally well written and contains many research results, however some issues that need to be improved. The introduction and discussion needs enhancement in some paragraphs and the figures should be corrected as they are illegible. All recommendations are listed in the below comments.

Specific comments:

Abstract:

resents well-organized information reflecting the contents of the manuscript

Keywords:

Should not be included in the title. Please reworded.

Introduction:

I.34-46 What are the national standards/regulations for herbicide use in China and what are the detected exceeding of their concentrations?

I.68: Double parenthesis. Please correct

I.69: Please explain the acronym 'PM'

I.75-83: What is the greater risk - leaching or uptake by plants? How half-life time of EPM affects the residence time of a compound in soil. Please outline the background for the research.

Materials and methods:

I.109-115: Is the method used 'own' or standardized? The individual analytical steps indicate the determination of the available EPM fraction, not the total fraction (usually used with more aggressive / stronger solvents)

I.125: Please provide the determination parameters of the chromatographic method, i.e. repeatability, reproducibility, recovery, measurement uncertainty, detection limit and limit of quantification.

I.126-134: what is the estimated environmental stability of EPM based on the literature data? This information is necessary for appropriate analysis of the presented data.

I.218, 223, 230, 234: Illegible chart. Please correct

I.261-266: How were outliers dealt with?

Results and discussion:

Results are very good described but discussion should be strengthened especially in the first subsection.

I.286-287: The logical statement. Please expand the discussion about sorption affinity.

I.405-406: Repetition. This information is contained in the materials and methods section.

Conclusions:

Conclusions are properly written and do not require corrections.