

Environmental Science & Technology

To the editor

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Submission of article

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Dear Editor,

enclosed is a manuscript to be considered for publication in Environmental Science & Technology titled

Pesticides in small streams in Germany

Pesticides enter freshwater ecosystems from agricultural areas and may have adverse effects on biota. However, relatively little is known about their large-scale distribution and dynamics. Especially, small streams may be at high risk because of adjacency to fields and small water columns.

We compiled and homogenized monitoring data from all German Federal States with a focus on small to mid-size streams. Our results show that there is currently a lack of knowledge for small streams. Using new and appropriate modeling techniques we show that the influence of agricultural land use is non-linear. Measured pesticide concentrations are influenced by precipitation before sampling and show a temporal pattern with a peak during summer. Especially, neonicotinoid pesticides may pose a risk to small agricultural freshwaters.

Our study should be of general interest and provides valuable information on chemical monitoring, pesticide occurrences and ecological risk arising from them.

If you have any further questions do not hesitate to contact me.

Yours sincerely,

Eduard Szöcs