



Pesticides Transformation products pollute groundwater

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Topics: Pollutants | Drinking Water

Swiss groundwater contains numerous pesticide degradation products. This has been discovered by an extensive screening by Eawag and ETH Zurich. The transformation products (metabolites) originate predominantly from pesticides from agriculture.

13 substances were detected for the first time in groundwater, 15 were found in concentrations above 100 ng/L. This is the threshold value for pesticides under the Water Protection Ordinance. The researchers are particularly targeting metabolites of chlorothalonil, a product used against fungal attack in cereal, vegetable, wine and ornamental plant cultivation. One chlorothalonil metabolite was found in all 31 samples, partly in concentrations up to 25 times above the threshold value for pesticides in groundwater in the Water Protection Ordinance and for drinking water in food law.

The study was part of a PhD and financed by the Federal Office for the Environment within the "Nationale Grundwasserbeobachtung" (NAQUA). The study was published online yesterday by the journal *Water Research* of the International Water Association (iwa): [\[pdf\]](#)

New relevant pesticide transformation products in groundwater detected using target and suspect screening for agricultural and urban micropollutants with LC-HRMS. Karin Kiefer, Adrian Müller, Heinz Singer, Juliane Hollender; doi: 10.1016/j.watres.2019.114972

Related Links

Information by the Federal Office for the Environment (FOEN) within the "Nationale Grundwasserbeobachtung" (NAQUA), August, 15th, 2019

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