



## **Natural organic matter properties in Swedish agricultural streams**

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We have analysed natural organic matter (NOM) properties in 18 agricultural streams in Sweden covering a broad range of environmental (climate, soil type), land use and water quality (nutrient and concentrations, pH, alkalinity) characteristics. Stream water samples collected every two weeks within an ongoing Swedish Monitoring Programme for Agriculture have been analysed for total/dissolved organic carbon, absorbance and fluorescence spectroscopy. A number of quantitative and qualitative spectroscopic parameters was calculated to help to distinguish between terrestrially-derived, refractory organic material and autochthonous, labile material indicative of biogeochemical transformations of terrestrial NOM and recent biological production. The study provides insights into organic matter properties and carbon budgets in agricultural streams and improves understanding of how agricultural catchments transform natural and anthropogenic fluxes of organic matter and nutrients to signals observed in receiving waters.