

wageningen soil conference

MASTERCLASS

M26: Pesticide residues in soil – prioritization of compounds to health assessment and mixture data analysis

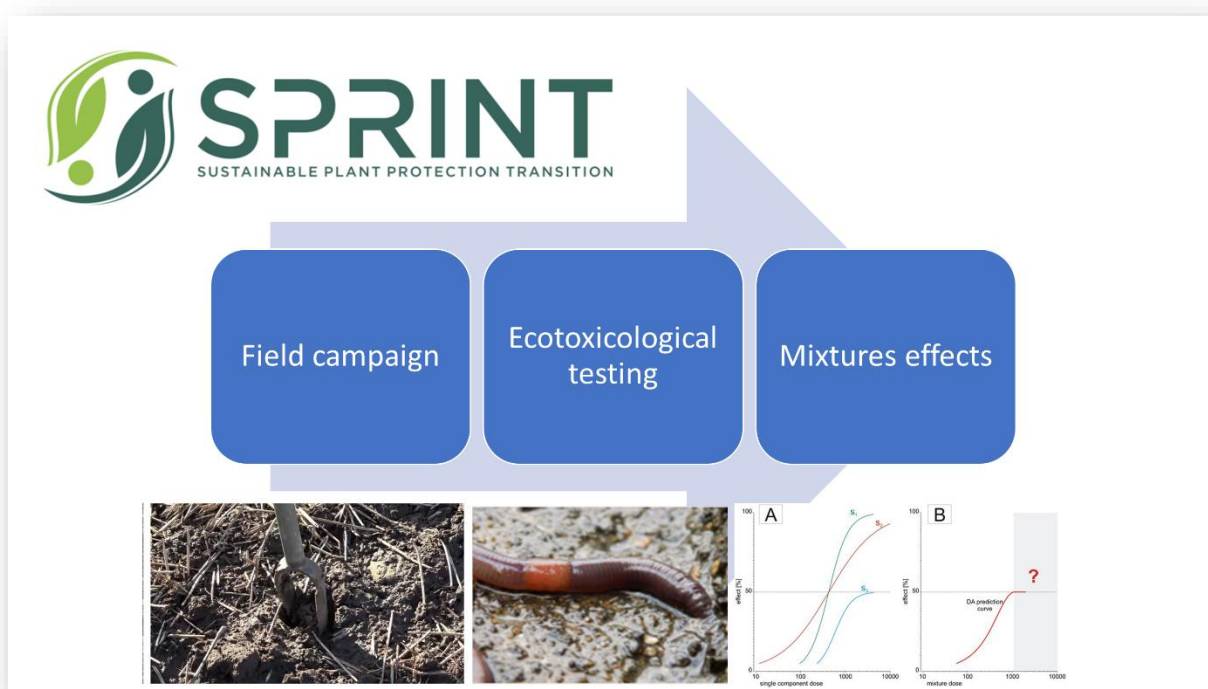
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Short description:

Mixtures of pesticide residues are the rule rather than the exemption in the terrestrial ecosystem, but their biological meaning is still not clear. This course will provide a hands-on training about mixtures, from monitoring data to risk characterization. The course will elaborate on a prioritization method for pesticides, a requisite for multi-compound ecotoxicological assays. The participants will obtain a fast understanding of the theory, and method caveats, via an Excel-embedded prioritization function. The course will also focus on the data analysis and interpretation of the results of ecotoxicity experiments. The toxic unit approach will be applied, and data will be analysed by the dose addition model. For more complex mixtures, statistical analyses will be run in R. Final discussion will cover interactions of compounds, the challenges of mixtures assessments, and the regulations necessary to support the Farm to Fork goals (50% reduction in use and risk of pesticides).



Theme: Soils for society

Keywords: pesticides, mixtures, prioritization method, ecotoxicity, statistical analyses

Type of masterclass: Tutorial

Maximum number of participants: 20