XVII PESTICIDE SYMPOSIUM PIACENZA WORKSHOP

September 3, 2024 (afternoon)

Quantitative Mitigation Of Pesticide Runoff In Regulatory Assessments With VFSMOD

Overcoming Hurdles to Regulatory Implementation

Introduction of VFSMOD

- Introduces latest VFSMOD version with upgrades and new scenarios.
- VFSMOD predicts runoff, erosion, and pesticide transport reduction by filter strips.
- Endorsed by SETAC MAgPIE, EU Commission and some EU Member States, and North American regulators.

Resolving Issues & Advancements

- Addresses MAgPIE concerns, including pesticide trapping equation.
- Implements machine-learning-based approach for sediment retention.
- Introduces new pesticide leaching and remobilization algorithm.

Extensive Testing & Validation

- Tested against field studies for hydrology, sediment trapping, & pesticide reduction.
- Mechanistic mass-balance equation for pesticide trapping validated.
- Demonstrates robustness through comprehensive validation dataset.

Regulatory Mitigation and Challenges

- Developed new VFS scenarios for realistic, worst-case pesticide trapping efficiency calculations.
- SWAN tool integration facilitates ease of use and nuanced regulatory predictions.
- Challenges in broader regulatory implementation and pathways to acceptance.

Organizing & Scientific Committee:

Academia: Rafael Muñoz-Carpena, Roger Holton, Others tbc
Industry: Robin Sur, Stefan Reichenberger, Horatio Meyer, Peter Rainbird, Bernhard Jene, Amy Ritter
Regulators: José Luis and/or Elena Alonso Prados, Igor Kondzielski, Others tbc