European Crop Protection Association (ECPA) cross industry working group on Soil Organism Ecotoxicology, Regulatory Testing and Risk Assessment

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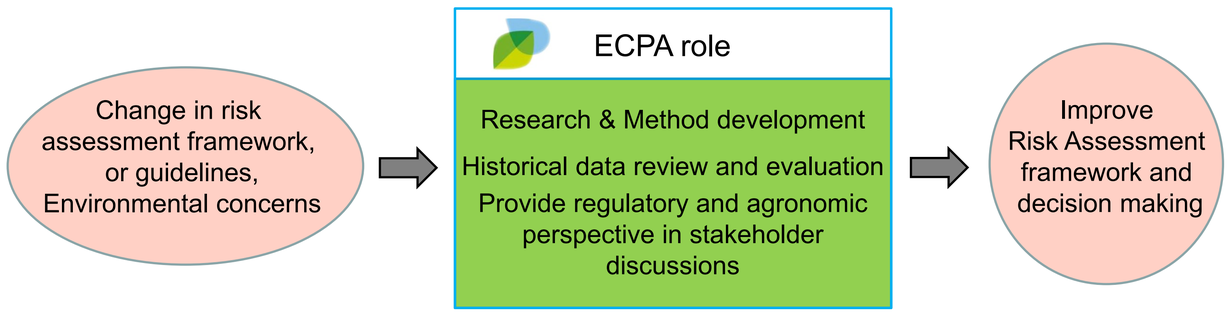
Introducing ECPA Soil organism group…

This posters aims to *introduce and highlight ECPA Soil Organism group and showcase its collaborative work to date, and to highlight current projects and serve as a talking point for encouraging discussion and identification of hot topics in Soil Organism Ecotoxicology to support future joint projects to address risk assessment of Plant Protection Products in Europe.*

ECPA represents the crop protection industry in Europe and is funded by industrial partners. ECPA **brings together scientists**, such as ecotoxicologists, from across industry, **who discuss the key topics and provide input and data on the practicality of new approaches to the regulatory and scientific community from an industry perspective**. Topics include lower tier laboratory and higher tier test systems e.g. field studies, and test guidelines and risk assessment guidance. Together, we advocate for changes to the soil organism risk assessment paradigm that benefit soil biodiversity and sustainable agriculture; we present the industry perspective and promote scientific process. We conduct research to ensure that the risk assessment paradigm is appropriately protective for non-target soil organisms and encourage discussion on the role of Ecosystem Services in the context of setting specific protection goals for Plant Protection Product Registration.

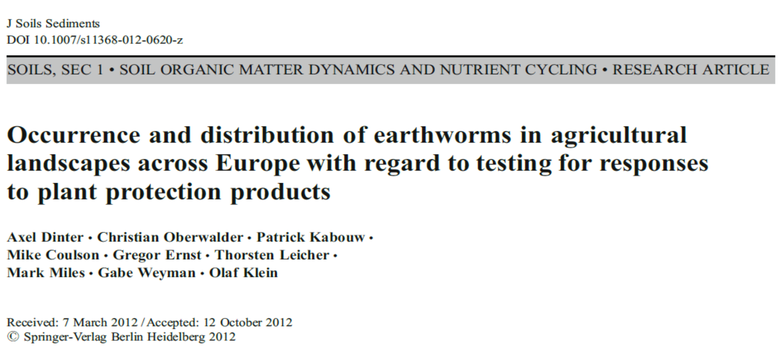
Over the past 10 years the group has worked with independent consultants and academics to bring together the wealth of data, knowledge and expertise from different companies to develop the science to ensure the safety to soil organisms whilst providing plant protection product solutions to farmers.



The projects from the ECPA Soil organism group…

The ECPA group has established many collaborative projects that have been made available through posters and platform presentations at SETAC conferences and beyond, in addition to peer reviewed articles. Some of these papers have been discussed in the recent EFSA Opinion (Ockleford et al. 2017) 'addressing the state of the science on risk assessment of plant protection products for in-soil organisms'. Some examples of projects to date include:

- Broader use of historical control data e.g. from earthworm field studies, to jointly evaluate the occurrence and distribution of earthworms in agricultural landscapes across Europe (Dinter et al, 2012)


J Soils Sediments
DOI 10.1007/s11368-012-0620-z

SOILS, SEC 1 • SOIL ORGANIC MATTER DYNAMICS AND NUTRIENT CYCLING • RESEARCH ARTICLE

Occurrence and distribution of earthworms in agricultural landscapes across Europe with regard to testing for responses to plant protection products

Axel Dinter · Christian Oberwalder · Patrick Kabouw · Mike Coulson · Gregor Ernst · Thorsten Leicher · Mark Miles · Gabe Weyman · Olaf Klein

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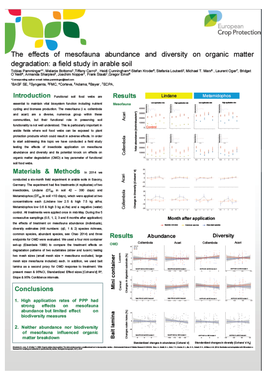
- The role of functional vs structural endpoints in risk assessment (SESSS SETAC Conference, 2019; publication in preparation)

see as well the poster of Pamminger et al.
Poster ID: 2.10P.4



- Experiences with the Litterbag test (Dinter et al, 2008): Sensitivity to pesticides and usefulness in the risk assessment for soil organisms


J Soils Sediments (2008) 8:333–339
DOI 10.1007/s11368-008-0028-y

SOILS, SEC 4 • ECOTOXICOLOGY • REVIEW ARTICLE

Technical experiences made with the litter bag test as required for the risk assessment of plant protection products in soil

Axel Dinter · Mike Coulson · Fred Heimbach · Jürgen Keppler · Wolfgang Krieg · Uschi Kölzer

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- Recalibration of the Earthworm Tier 1 Risk assessment of plant protection products, showing the protectiveness of the currently used Tier 1 risk assessment (Christl et al, 2016). Data behind the evaluation were made available to authorities.


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Recalibration of the Earthworm Tier 1 Risk Assessment of Plant Protection Products

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- ECPA supported stakeholder workshop on effect modelling for earthworms: FORESEE workshop held on 28th – 30th of January, 2020 in Düsseldorf on TKTD modelling of earthworms in context of ecological risk assessment

Conclusions

The ECPA Soil Organism Group is a cross-industry working group bringing together technical and regulatory experience on pesticide testing and risk assessment for soil organisms. The wealth of data generated in context of risk assessment for pesticides are used in case studies to assess the appropriateness of current and future risk assessment frameworks. The group represents European Chemical Industry in discussions related to risk assessment of pesticides on soil organisms, e.g. development of new guidance documents and guidelines, and can share experiences on practicality of new risk assessment approaches (EFSA 2015, Ockleford et al. 2017, EFSA 2019) in regulatory context.

References

Christl et al. (2016): Recalibration of the earthworm tier 1 risk assessment of plant protection products. Integrated Environmental Assessment and Management 12 (4), 643-650.

Dinter et al. (2008): Technical experiences made with the litter bag test as required for the risk assessment of plant protection products in soil. Soils Sediments 8, 333–339.

Dinter et al. (2012): Occurrence and distribution of earthworms in agricultural landscapes across Europe with regard to testing for responses to plant protection products. J Soils Sediments 13, 278–293

EFSA (2015): Outcome of the pesticides peer review meeting on general recurring issues in ecotoxicology. EFSA Supporting publication 2015:EN-924.

EFSA (2019): Outcome of the pesticides peer review Meeting on general recurring issues in ecotoxicology. EFSA Supporting publication 2019:EN-1673

Ockleford et al. (2017): Scientific Opinion addressing the state of the science on risk assessment of plant protection products for in-soil organisms. EFSA Journal 2017;15(2), 4690.