22nd International Akademie Fresenius AGRO Conference

Behaviour of Pesticides in Air, Soil and Water

16 and 17 June 2020 in Mainz/Germany

Highlights

Regulatory issues
- EFSA update on developments
- Harmonisation updates in the Northern, Central and Southern zones
- FOCUS degradation kinetics guidance
- Plant protection regulation update from Health Canada
- KEMI’s dialogue-based multi stakeholder approach

Environmental fate
- Non-extractable residues (NER) in degradation assessment
- Field dissipation studies in the Netherlands
- Lipophilicity of (non-)ionised chemicals and root uptake
- TFA in a long-term semi-field study
- Aquatic exposure assessment of pesticides in Latin America

Exposure, risk assessment and mitigation
- Pesticide monitoring in the Netherlands
- Spatial modelling for groundwater: Use for registration, design, interpretation of monitoring
- Risk assessment measures aimed at preventing pesticide contamination in small catchments
- Guidance document on treated seeds
- Drift modelling and landscape assessment
- Mitigation of surface runoff pesticides with vegetative filter strips

The Experts

The Programme

Get-together on Monday, 15 June 2020
Will you arrive on Monday? Come into the hotel bar at 8 p.m. and meet other participants and experts in a relaxed atmosphere.

Tuesday, 16 June 2020

8.50 Registration & coffee

9.20 Welcoming speech by Akademie Fresenius and the Chair
Christopher Leake, Bayer Crop Science Division, Germany

9.30 Risk assessment in the Southern Zone – updated view from France
Emilie Farama, French Agency for Food, Environmental and Occupational Health and Safety (ANSES), France

9.50 Authorisation of plant protection products and the zonal evaluation system – Central zone view
Gábor Tőkés, National Food Chain Safety Office, Hungary

10.10 Northern zone view, update 2020
• Work planning and work sharing in the zone, Northern Zone Guidance document (ver. 8, updated fate section), Draft Northern Zone Guidance document (ver. 9, updated fate section)
• Common problems
Raimonda Grigaitė, State Plant Service under the Ministry of Agriculture, Lithuania

10.30 Panel discussion
11.00 Coffee break

11.30 Update on EFSA Repair action of the FOCUS surface water scenarios
• Final rules for the Pesticide Application Timer (PAT)
• SWASH (the tool and its features)
• Options for selection of temporal percentile by the SCOPAFF
Paulien Adriaanse, Wageningen University & Research, The Netherlands

11.50 Final proposals for the development of the FOCUS degradation kinetics guidance
• Project initiation, aims and scope
• Key changes and final proposals
• Timelines
James Hingston, Health and Safety Executive, Chemicals Regulation Division (CRD), UK

12.10 Update from Health Canada on pesticide regulation and developments in environmental assessments in Canada
Heather Simmons, Health Canada, Canada

12.30 Panel discussion
13.00 Lunch

Environmental fate

Chair: Harry Vereecken, Forschungszentrum Jülich, Germany

14.30 Comparison of EPA and ECHA Guidance on characterisation of non-extractable residues (NER) in degradation assessment
• Bound residues and extractability
• Polar, less-polar, non-polar solvent
• Weakly sorbed, strongly sorbed
Kalumbu Malekani, Smithers, USA

14.50 Field dissipation studies and the normalisation of these studies in order to derive suitable endpoints for risk assessment
Maarten Klunder, Dutch Board for the Authorisation of Plant Protection Products and Biocides (Ctgb), The Netherlands

15.10 Pesticide contamination of the upper Elbe river and an adjacent floodplain area
• Impact on inundation of pesticide distribution in floodplain
• Relationship between pesticide loads in water and soil contamination
Anneli S. Karlsson, Forschungszentrum Jülich, Germany

15.30 Panel discussion
16.00 Coffee break

16.30 Lipophilicity of (non-)ionised chemicals during root uptake and translocation testing – relationship between log D and TSCF
• Analysis of peer-reviewed experimental Transpiration Stream Concentration Factor (TSCF) values
• Performance of simple TSCF model based on predicted octanol/water distribution coefficient (log D)
Carola Schriever, BASF, Germany

16.50 Plant uptake of TFA in a long-term semi-field study – determination of Transpiration Stream Concentration Factor (TSCF) by inverse modelling
Klaus Hammel, Bayer Crop Science Division, Germany

17.10 Update on aquatic exposure assessment for registration of pesticides in Latin America
Bernhard Jene, BASF, Germany
**Wednesday, 17 June 2020**

**Exposure, risk assessment and risk mitigation**

8.20  **Welcoming speech by the Chair**  
Colin Brown, University of York, UK

8.30  **Pesticide monitoring in a specific network in the Netherlands: An update and new insights**  
Dennis Kalf, Ministry of Infrastructure and Water Management, The Netherlands

8.50  **Lessons learned about the WaterProtect Horizon 2020 project**  
- Catchment management and engagement of multiple actors to adopt mitigation in the different action labs across the EU  
- Successful governance strategies using alternative financing, participatory monitoring, best management practices and software applications  
Ingeborg Joris, VITO, Belgium

9.10  **Panel discussion**

9.30  **Coffee break**

**Chair:** Chris Leake

10.00  **Regulation (EC) No 1107/2009 update**  
Karin Nienstedt, European Commission, Belgium

10.30  **Questions and answers**

**Chair:** Colin Brown

10.40  **Initiative to develop a harmonised framework for spatially distributed leaching modelling of pesticides**  
- Input data (spatial/temporal), modelling requirements, regulatory aspects  
Anton Poot, Dutch Board for the Authorisation of Plant Protection Products and Biocides (Ctgb), The Netherlands

11.00  **Distributed Modelling: How these data can be used to interpret data from large-scale monitoring studies**  
Paul Sweeney, Syngenta, UK

11.20  **A dialogue-based multi stakeholder approach to improve risk assessment and risk management of plant protection products**  
Johan Axelman, Swedish Chemicals Agency (KEMI), Sweden

11.40  **Panel discussion**

12.10  **Lunch**

13.10  **Environmental risk assessment and management of dust drift in Germany – the long “in between”**  
- Guidance document on treated seeds and risk assessment based on scenarios  
- Risk management – ensuring high quality treated seeds therewith minimising exposure  
- Challenges for seed dressing companies and farmers  
Balthasar Smith, German Federal Office of Consumer Protection and Food Safety (BVL), Germany

13.30  **Probabilistic approach to exposure risk assessment for downwind deposits of spray drift in the Netherlands**  
- Modelling spray drift for upward and sideways spray application in fruit orchards and tree nurseries  
- Risk assessment for edge-of-field watercourses next to treated orchards on a countrywide scale  
Henk Jan Holterman, Wageningen University & Research, The Netherlands

13.50  **Mitigation of surface runoff pesticides with vegetative filter strips in long-term exposure assessments: Mechanistic analysis with VFSMOD**  
- Surface pesticides, mitigation and long-term exposure assessments  
- Risk analysis and modelling  
Rafael Muñoz-Carpena, University of Florida, USA

14.10  **Panel discussion**

14.45  **End of the conference**
The Experts

Paulien Adriaanse is a Senior Scientist at Wageningen University & Research. She works on environmental fate and exposure modelling of pesticides mainly in the area of surface waters. She has been a member of the EFSA Panel on Plant Protection Products and their Residues since 2015.

Johan Axelman is a Biologist and Environmental Chemist and has been working as a Strategic Adviser at KEMI with a focus on improving the quality and efficiency of environmental risk assessments and risk management of plant protection products since 2015.

Colin Brown is a Professor in Environmental Science at the University of York. He has more than 20 years of experience of research into the fate and effects of organic contaminants in the environment.

Emilie Farama is a Professor in Environmental Protection Products since 2015.

Raimonda Grigaitė is a Chemist and an Advisor of the Plant Protection Product Authorisation Division of the State Plant Service under the Ministry of Agriculture of Lithuania. Her main responsibilities are coordination of evaluation and authorisation of plant protection products, parallel trade issues and emergency authorisation issues.

Klaus Hammel is an Environmental Modelling Expert at Bayer Crop Science Division with more than 20 years of experience in modelling of soil water flow and transport processes including environmental fate and exposure modelling of pesticides.

James Hingston leads a team of 18 regulatory environmental fate specialists at the Chemicals Regulation Division, part of the UK Health and Safety Executive. CRD is the UK competent authority with responsibility for pesticides, biocides, detergents and general chemicals under REACH.

Henk Jan Holterman is a Research Scientist at the Plant Science Group of Wageningen University & Research (WUR). His scientific background is applied physics. Since 1991 he has been working at the WUR. He is specialised in chemical crop protection research.

Bernhard Jene is an Environmental Scientist at BASF in Limburgerhof with a PhD in soil physics. He has more than 20 years of experience in the area of environmental fate and exposure modelling of pesticides.

Ingебorgh Joris is a Researcher at VITO (Belgium) and is specialised in assessing pesticide fate in soil, groundwater and surface water. She is coordinating the recently ended H2020 WaterProtect project on innovative tools to protect drinking water resources and is a Guest Professor at the University of Antwerp.

Dennis Kalf is a Senior Advisor Specialist Water Quality and Pesticides at the Ministry of Infrastructure and Water Management, Centre for Water Management, The Hague. He has been working with the government for more than 25 years and has many years of experience in the field of monitoring and water quality.

Anneli S. Karlsson is a Doctorate Researcher at the Forschungszentrum Jülich, University of Bern and Christian-Albrechts-University of Kiel. Her current research topic for the doctorate thesis is glyphosate degradation and microbial incorporation of glyphosate and elucidating which factors trigger these processes.

Maarten Klunder is working as a Regulatory Assessor (fate and behaviour) at the plant protection product authorisation authority in the Netherlands (Ctgb). He has worked for seven years in the field of fate and behaviour of pesticides of which two years in the industry and more than five years at Ctgb.

Christopher Leake is an Environmental Safety Manager at Bayer Crop Science Division responsible for the areas of environmental fate, ecotoxicology and risk assessment. He has over 30 years of experience in this area.

Kalumbu Malekani is the North American Technical Director and Director of the Environmental Fate and Metabolism Department at Smithers, USA. He previously worked for Bayer Crop Science and DuPont Crop Protection. He has over 20 years of experience in this area.

Rafael Muñoz-Carpena is a Full Professor in Hydrology and Water Quality at the Department of Agricultural and Biological Engineering at the University of Florida and a Visiting Professor at the Department of Environmental Engineering at the Public University of Navarre. He focuses on integrated environmental modelling.

Karin Nienstedt is a Biologist and joined the European Commission in 2002. Since then, she has been working with the unit in charge of approval of active substances and placing of plant protection products on the market. Since 2014, she has been heading the sector for placing on the market of pesticides within the unit on pesticides and biocides.

Anton Poot is a Geochemist and Environmental Scientist and has been working in the field of modelling and monitoring groundwater at both governmental and contract research organisations. He has been employed as Environmental Risk Assessor at Ctgb for the past 8 years.

Carola Schriever is a Geocologist and has been working as an Environmental Fate Modeller at BASF since 2007. She has more than 10 years of expertise in the area of environmental exposure and risk assessment of pesticides.

Heather Simmons is currently Director, Environmental Assessment in the Pest Management Regulatory Agency of Health Canada.

Balbhasar Smith has been working as an Executive Officer in the Department Plant Protection Products of the German BVL since 2004. His tasks include risk management of fungicides within the authorisation procedures of plant protection products, but also the development of new risk mitigation measures and guidance documents.

Paul Sweeney is a Syngenta fellow in Mathematical Modelling. He has over 25 years’ experience in environmental modelling of pesticides in Europe and was a FOCUS Groundwater II working group member and secretary of the FOCUS Air group as well.

Gábor Tőkés is the Head of the Authorisation Department in the Hungarian Food Chain Safety Office (NEBIH). His scientific background is bioengineering and plant physiology. Since 2010 he has been responsible for authorisation of both plant protection products and yield enhancers (fertilisers).

Harry Vereecken is a Professor and the Director of the Institute Agrosphere within the Department of Bio- and Geosciences at the Forschungszentrum Jülich, Germany.
The Organiser

For 25 years, Akademie Fresenius has been your partner for practice-orientated training on all the latest topics surrounding the safety and quality of food, consumer goods and chemical products along the whole production chain. Our portfolio not only includes international conferences but also offers national trade meetings, intensive practical seminars and training in small work groups.

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Groups that should take part:
Managing directors, boards of directors, members of supervisory boards, managers and scientists in the fields of:
- Environmental behaviour
- Field inspection
- Research & development
- Legal & regulatory affairs
- Registration
- Ecotoxicology
- Exposure & risk assessment
- Monitoring & computer modelling

Sectors that should take part:
- Agrochemical industry
- Research institutes from the area of agriculture, soil, hydrology and air
- Authorities (agricultural inspection offices, registration and control authorities)
- Water supply enterprises
- Professional associations

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Use the attached fax reply sheet to request our information material. Or simply call us. We would be more than pleased to assist you personally.

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“Worker, Operator, Bystander and Resident Exposure and Risk Assessment”

Date and location to be announced shortly.

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Do you have any questions?

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We have reserved a limited number of rooms for our participants at reduced rates at the hotel. These rooms can be booked up to four weeks prior to the start of the event. Please book early and directly through the hotel quoting "Akademie Fresenius" as reference.

Participation
- I would like to take part in the 22nd International Akademie Fresenius AGRO Conference „Behaviour of Pesticides in Air, Soil and Water“, 16 and 17 June 2020 in Mainz/Germany. Fee: € 1,895.00 plus VAT.
- I am a representative of an authority or a public university and therefore eligible for a reduced fee of € 795.00 plus VAT (please provide evidence). The reduced fee cannot be combined with other rebates.
- I would like to take part in the evening event on 16 June 2020 (included in the above price).

Event Documentation
- Unfortunately, I am unable to attend. Please send me the complete documentation for € 295.00 plus VAT.

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- Please send me information on available options for trade exhibition and presenting product information.

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