

# 2017 Workshop on Innovation and Regulation in Agriculture: Public Plenary Session

NC STATE  
UNIVERSITY

October 23, 2017, 8:00 to 11:00 AM

**Topic: Overcoming the Challenges of Incorporating Higher-Tier Data in Ecological Risk Assessments and Risk Management of Pesticides**

StateView Hotel, 2451 Alumni Dr, Raleigh, NC 27606

Hosted by NC State University, College of Ag and Life Sciences and Bayer

Sponsored by Society of Environmental Toxicology and Chemistry (SETAC)



## Public Plenary Session Schedule

8:00	Opening Remarks, Steve Lommel, Associate Dean, NC State College of Ag and Life Sciences
8:15	Workshop Introduction & Center of Excellence for Regulatory Science in Agriculture Concept —Laura McConnell, Bayer CropScience
8:30	Value of Pyrethroids in US Agriculture and Urban Settings —Paul Mitchell, University of Wisconsin Madison
8:55	Overview of US EPA Risk Assessment and Risk Management Approach to the Utilization of Higher Tier Studies —Kevin Costello and Ed Odenkirchen, US EPA OPP
9:20	Break
9:30	Pyrethroid Risk Assessment, Consideration of Higher Tier Studies —Jeff Giddings, Compliance Services International
9:55	Using a Weight of Evidence Approach in Ecological Risk Assessment —Keith Solomon, University of Guelph
10:20	Discussion and Questions for Speakers
11:00	End of Public Session

## Goals of the Workshop

- Identify the greatest challenges to the use of higher tier studies in ecological risk assessments and in risk management decisions.
- Develop a series of recommendations to improve the process for designing and conducting, evaluating and utilizing higher tier studies for risk assessment and risk management of pesticides.

## Expected Outcomes

- Improved quality and quantity of feedback for regulators and involved stakeholders on both the use and interpretation of higher tiered studies.
- Workshop report to be published in an appropriate venue as a means of improving transparency among all stakeholders.

## Background

Participants at the 2016 multi-stakeholder *Workshop on Innovation and Regulation in Agriculture* identified the need for improved engagement and collaboration between public and private entities regarding research needed to support technological innovation in agriculture. Increased transparency was also recommended to improve public understanding and demystify the science of risk assessment. One regulatory science topic where increased communication and multi-stakeholder collaboration could be beneficial centers on the use of higher tier studies in ecological risk assessments.

## About the Workshop Topic

Higher Tier (non-guideline) studies are often conducted by industry and academics to address uncertainties associated with highly conservative Tier I guideline testing. Higher Tier studies are by nature more complex and more difficult to conduct and to interpret. Some classes of compounds have been the subject of numerous higher tier studies e.g., water monitoring, biomonitoring, multiple mesocosms, or spray drift studies. In addition, sometimes studies conducted by different investigators appear to give conflicting results. While scientists can often come to agreement on technical aspects related to a particular study, difficulties arise in the interpretation of multiple studies and use of these studies to make regulatory decisions. For purposes of this workshop, a class of compounds currently under registration review by the US EPA, pyrethroid insecticides, will be used as a case study for discussion. The 2017 workshop is being organized by a committee of academic, government, and industry scientists. Thirty workshop participants will work together over two days to develop recommendations to address the most significant challenges. A report will be published from the workshop.

## Organizers

Laura McConnell, Bayer (chair), Danesha Seth Carley, NCSU (co-chair), Members: Linda Abbot, USDA-ORCBA, George Cobb, Baylor University, Kevin Costello, USEPA, Jeff Giddings, Compliance Services International, Matt Kern, Waterborne Environmental, Ed Odenkirchen, USEPA.