

Workshop

Estimating initial pesticide distribution fractions in life cycle assessment

Saturday 10 May 2014

8:00 – 18:00

Radisson Blu Hotel, Steinentorstrasse 25, Basel, Switzerland

(back to back with the SETAC Europe 24th Annual Meeting)

Organisers

Technical University of Denmark (Peter Fantke, chair), Dr. Knoell Consult GmbH (Ronnie Juraske, co-chair), Quantis (Xavier Bengoa, organization), and the EU project TOX-TRAIN (<http://toxtrain.eu>).

Participants

Up to 40 experts from all continents working with/on LCA (application or method development), or representing pesticide producers, users, researchers, or regulators

Costs

Participation is free of charge, lunch and coffee breaks are offered (the workshop is kindly co-sponsored by Syngenta)

Registration

Required via email to xavier.bengoa@quantis-intl.com by 30-April-2014. Affiliation, expertise and motivation for participation shall be briefly explained when registering.

Introduction

Life Cycle Assessment (LCA) helps establishing and comparing environmental performance profiles of a product or service, comparing e.g. various pesticides applied in conventional agriculture to alternative (functionally equivalent) solutions, such as organic or integrated farming practices, identifying the “best-in-class” solution(s). A typical challenge in practice is to quantify the pesticide amount emitted to the different environmental media (off-field), while usually only the amount applied to the agricultural field (on-field) is known.

Aiming to establish a recommended and operational solution, an expert workshop was organized on 11 May 2013 in Glasgow, UK. About 30 specialists participated, representing industry, government, and academia from 15 countries and four continents. Consensus was reached on distinct sets of qualitative recommendations for emissions (on-/off-field) and impact assessment, respectively. Next steps and future work were identified, notably:

- 1) establishing recommended default “emission fractions to environmental media via initial pesticide distribution” for integration into emission databases, and
- 2) interaction among impact model developers to extend current methods with new elements/processes mentioned in the recommendations, including targeted technical workshops on “how to” model specific processes.

As follow-up, the Technical University of Denmark (DTU), Dr. Knoell Consult GmbH and Quantis will implement the first “how-to” workshop in Basel, Switzerland, on **Saturday 10 May 2014 (8:00-18:00)**, back to back with the SETAC Europe 24th Annual Meeting (<http://basel.setac.eu/>).

Objective

To establish recommended default “emission fractions to environmental media via initial pesticide distribution”. More specifically, to discuss how to consistently model in life cycle assessment (LCA) the fractions of applied pesticides that enter air, water, soil, and agricultural crops as emissions. We will thereby target the feasibility to implement these applied pesticide fractions along with associated data requirements into current LCA emission software.

Expected results and outcomes

The workshop output will be published in a relevant scientific journal, so that it can be referred to and referenced by all stakeholders.

Draft agenda

- 08:00 - 08:30 Arrival of participants, tea/coffee
- 08:30 - 09:00 Welcome, introduction to the workshop, introduction of participants
- 09:00 - 10:00 Framing presentation (Glasgow output) with discussion
- 10:00 - 10:30 Input presentations for the discussion (15 min each incl. Q&A)
- 10:30 - 11:00 Tea/coffee break*
- 11:00 - 12:00 Plenary discussion
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- 12:00 - 13:00 Lunch (all participants are invited to a buffet)*
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- 13:00 - 15:30 Plenary discussion
- 15:30 - 16:00 Tea/coffee break*
- 16:00 - 17:00 Plenary discussion
- 17:00 - 18:00 Wrap up and next steps
- 18:00 Closure of the workshop