

AG Name: Dung Organism Toxicity Testing (DOTTS)

Submitted by: Jörg Römbke

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Council/Board Liaison:

Organization

DOTTS has a flat structure. Since 2002, the group is organized by a small group of active members. Decisions are made during the annual meetings, usually by acclamation. Several non-members regularly contribute to the group activities.

Activities Summary

Usually, a group meeting (and several times a session too) takes place during the SE Annual Conference.

- Recent publications:
Lumaret, J-P., Errouissi, F., Floate, K., Roembke, J. & Wardhaugh, K. (2012): A review on the toxicity and non-target effects of macrocyclic lactones in the terrestrial and aquatic environment. *Curr. Pharm. Biotech.* 13: 1004-1060.
Adler, N., J. Bachmann and J. Römbke (2013): New test strategy for dung beetles during the authorization process of parasiticides. *Integ. Envir. Assess. Manag.* In press
- The work of the group is regularly presented at SETAC conferences (e.g. with a poster in Long Beach, USA).

Future Plans

Since the work concerning the standardization of test guidelines is almost completed the focus of the group has shifted to the improvement of test strategies and risk assessment procedures (see the publication of Adler et al. in IEAM. Starting from a joint meeting during the Berlin Conference, DOTTS will intensify its cooperation with people working on the fate of veterinary pharmaceuticals in dung.

Business and Planning Meetings

DOTTS members will meet during the next SETAC Europe conference in Glasgow in May 2013. Depending on the outcome of a meeting with EMA staff, further meetings may become necessary.

Membership Communications

Due to its small size, most communication is performed in the annual meetings (face-to-face) or by e-mails.

Issues/Problems

None.

Current Steering Committee

The group is chaired by Jörg Römbke. The affiliation of members is: business (= 9), academia (= 9) and government (= 9).

No. active members:13

Total membership:27



Dung Organism Toxicity Testing Standardization (DOTTS) Advisory Group

Background and aims of DOTTS:

In 2002, following requirements by US, EU and Japanese authorities (VICH initiative) the Dung Organism Toxicity Testing (DOTTS) Advisory Group was established to:

- ▶ exchange information about testing the effects of veterinary drugs on dung organisms;
- ▶ develop test protocols for toxicity testing with dung flies and dung beetles;
- ▶ perform ring tests with dung species in order to standardize and validate the test protocols.

Today, these aims are fulfilled but new appeared, e.g. to work on the design of field studies.

Example of test organisms: dung beetles



Activities of DOTTS:

- ▶ Preparation of SOPs and draft guidelines;
- ▶ Performance of ring tests (so far, three)
- ▶ Publication of supporting information;
- ▶ Support of the standardization process in close co-operation with OECD and EMA;
- ▶ Annual meetings at SETAC-EU conferences
- ▶ Irregular technical meetings in order to discuss test strategies (the Aveiro-Group).



Main output of DOTTS: Two guidelines

- ▶ OECD (2008): Determination of developmental toxicity of a test chemical to dipteran dung flies (*S. stercoraria*), *M. autumnalis*). Paris, France; Guideline No. 228.
- ▶ OECD (2010): Guidance document on the determination of the toxicity of a test chemical to the dung beetle *A. constans*. Paris, France; GD No. 122.

Additional output - various publications, e.g.:

- ▶ Jochmann et al. (2010): How to test non-target effects of veterinary pharmaceutical residues in livestock dung in the field. *Integr. Envir. Assess. Manag.* 7: 287–296.

SETAC AG: Dung Organism Toxicity Testing Standardisation (DOTTS).

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