21/01/2021

# Subject │ Minutes of the Second Working Groups 2 Meeting of COST Action CA18221: “PEsticide RIsk AssessMent for Amphibians and Reptiles”

1. **Welcome to participants**

The participants (**Annex 1**) were welcomed by Manuel Ortiz, Chair of the Action, Isabel Lopes, Vice Chair of the Action, Miguel Carretero, WG2 Leader, and Marta Biaggini, Task 2.2 Leader.

Given that the meeting is being held online, attendance review is done through a recorded *tour de table* during which attendants introduce themselves.

1. **Adoption of agenda**

The agenda (**Annex 2**) for the meeting was adopted.

1. **Introduction to the meeting objectives**

The Chair presented the meeting objective. This objective consists of planning a strategy to elaborate a report (which could take the form of a review paper for its publication) detailing the aspects of amphibian and reptilian biology and ecology which should be considered while characterizing the exposure to pesticides under realistic scenarios. The abovementioned report will include and widen the Action deliverable #2 (Proposal to relate pesticide use to spatial ecology and phenology of wild amphibian and reptilian populations) that should be elaborated during the next months.

1. **Preliminary work on TKTD modelling**

Andreas Focks and Andreu Rico, leaders of task 1.1, presented an overview of TK/TD models applicable to herpetofauna to determine the relative importance of exposure routes and scenarios.

The group discussed the links between information necessary for TKTD models and biological and ecological features influencing exposure of herpetofauna to pesticides in the field. It was concluded that, although TKTD modelling fits into the goals and tasks of Working Group 1 (individual-level assessment) a link should exist between environmental exposure and the initial step of TKTD modelling through which internal concentrations are estimated from external concentrations, and that link should be considered when elaborating the report detailing the aspects of amphibian and reptilian biology and ecology.

1. **Preparation of a review paper about amphibian and reptile exposure to pesticides in the wild**

Marta Biaggini presented a preliminary, proposed structure and general scheme for the report. The group then discussed the structure and the strategy to implement the next steps of elaboration of such report. The group reached the following agreements:

* The report outline will be as follows:
  1. Introduction. Basic information about herp ecology and how it determines exposure routes and scenarios.
  2. Exposure routes. Description for different taxa and life stages.
  3. (Eco)physiological aspects associated with uptake and absorption.

3.1. Oral exposures.

3.2. Dermal exposures.

* 1. Ecological aspects associated with exposure.

4.1. Distribution at large scale.

4.2. Habitat use and spatial ecology at a fine scale.

4.3. Diet.

4.4. Temporal patterns of activity and phenology.

* 1. Procedural aspects.
  2. How to collect and use the available information.
  3. Data gaps and how to address them.
  4. Concluding remarks.
* Within each section of this outline, summarized information will be presented considering the following assessment groups: caudates, anuran with predominantly terrestrial adults, anurans with predominantly aquatic adults, terrapins, tortoises, saurians, amphisbaenids, fully terrestrial snakes, water snakes. Details at the specific level will be given only when needed to be used as examples.
* Transversal aspects like environmental or individual (e.g. age context) will be considered in each section when relevant.
* Within the next few days, participants will volunteer to be involved in the writing of specific outline section\*assessment group parts within sections 1 to 4. Then, a final assignment of people responsible for each part, which can involve also other action participants, will be agreed.
* Materials corresponding to sections 1 to 4 will be submitted by the responsible authors on April 30th 2021 at the latest. This will be made by text dumping in a shared word document, in such a way that everyone can track the status of the work.
* While writing sections 1 to 4, authors are encouraged to identify contents that can fit into sections 5 and 6.
* After April 30th 2021, the group will coordinate again for the next steps.

1. **Any other business**

Andreas Focks asked about the possibility of having contact information of meeting participants for other PERIAMAR participants potentially interested in contacting partners. The Chair explained that contact information of PERIAMAR participants is supposed to be accessible through the website (https://periamar.com/) as long as people register there, but that in the meantime the contact list can be shared among all Action participants.

1. **Closing**

The Action Chair, Action Vice-Chair, Working Group 2 Leader and Task 2.2 Leader acknowledged the involvement of meeting participants.

## LIST OF ANNEXES

**Annex 1 – Attendance List**

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**Annex 2 – Agenda**

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