

Aquatic plant Models for pesticide Risk Assessment (AMoRA)

Pre-proposal for a SETAC Europe Technical Workshop

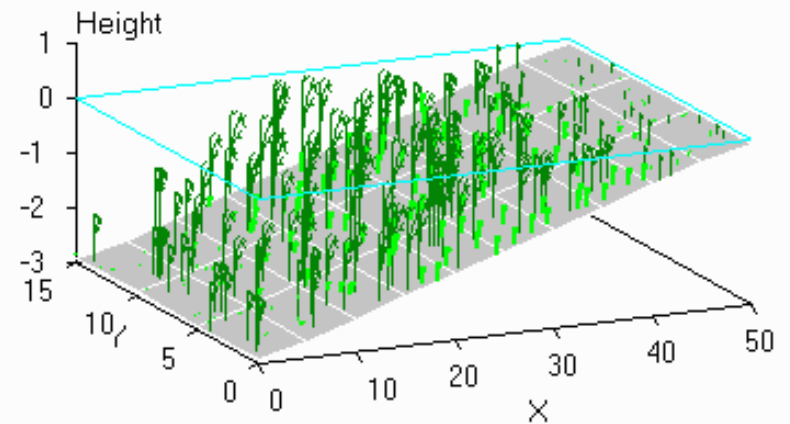
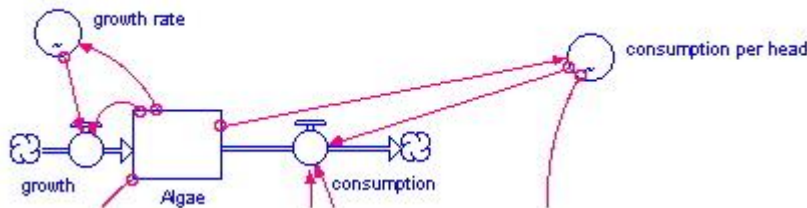
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Gertie?, Eric?, Hank?

(we could consider this as an activity of a PLANT recovery WG?)

Workshop topic

The use of macrophyte and algae models for environmental risk assessment of plant protection products in the EU



Background / motivation

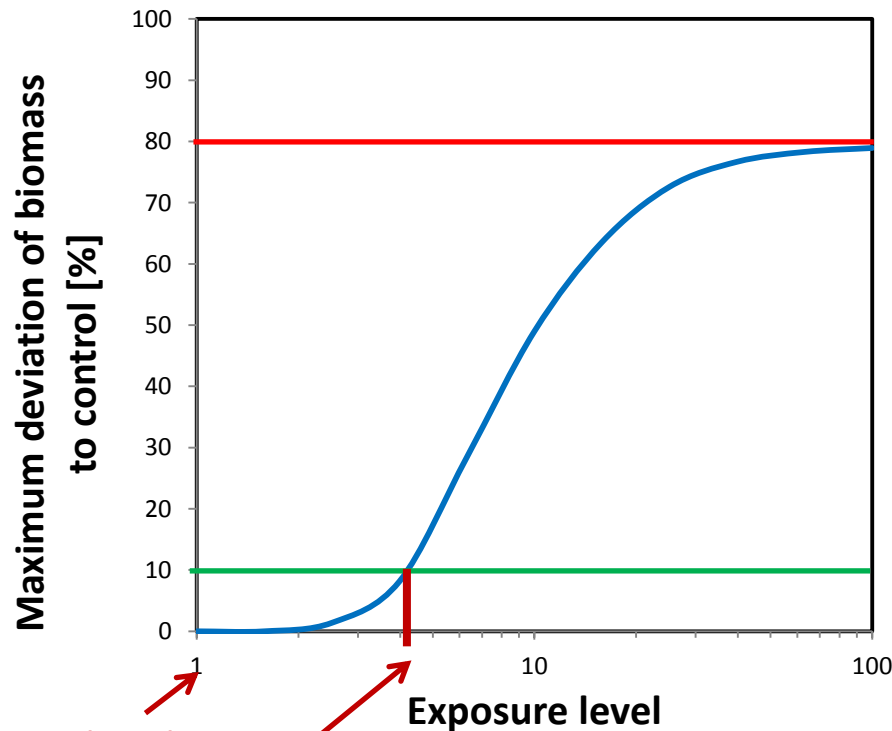
- See recovery presentation...
- Effect models as higher tier option to supplement experimental approaches, e.g. in order to extrapolate effects and recovery
 - to longer time scale
 - to field situations or between field situations
 - to other exposure scenarios
- Some models are available but uncertainty on which to use, how to use and how the model applications are accepted for the risk assessment

Existing challenges

- Quality of the models
 - Relevance of the species modelled?
 - Relevance of the processes included?
 - Validation sufficient?
- Ecological scenarios
 - What are realistic environmental conditions which can be linked with the exposure scenarios and which can be considered to be together representative for Europe
- From Specific to Operational or Quantitative Protection Goals
 - What is e.g. a 'small' or 'medium' effects and what would be an acceptable time period for recovery (how many 'weeks' or 'months'?)
- The remaining uncertainty
 - Do mechanistic models introduce additional uncertainty into the risk assessment or do they reduce uncertainty compared to e.g. the use of the ErC50 / 10 compared to a PECmax?

Example for challenge 3 and 4

- Let's assume we have a well documented and validated model providing the following output for 3 scenarios



Unacceptable large effect?

Acceptable duration of small or medium effects?

Acceptable negligible effect?

Exposure level
(Exposure profile to be considered multiplied with a factor)

If this is the exposure level to be assessed, what is the margin of safety needed?

Workshop objectives

- Review available **models**
 - Agree on a set of models suitable for risk assessment already
 - Recommend models to be developed or model refinements if needed
 - Indicate if validation is sufficient or needs more effort
- Define a set of **ecological scenarios** linked to FOCUS scenarios
- Provide decision criteria (**Operational Protection Goals**)
- Provide guidance on how to deal with remaining uncertainty (**assessment factor** or **margin of safety**)

Participants

- Invitation only
- SETAC tripartite balance among academia, business and government
- Ecotoxicologists, ecologists, modelers, risk assessors, risk managers
- Focus on European risk assessment, but include participants from outside Europe

Benefit

- by providing a set of agreed models, scenarios and guidance how to use these in higher tier assessments, the workshop will allow a more reliable risk assessments for macrophytes and algae.

Time lines

- Now:
 - discussion on the pre-proposal, collecting comments and suggestions
 - Set up a first list of people interested to participate in such a workshop
- Within the next 2 weeks:
 - consider the comments and submit the pre-proposal to the council
- After approval
 - Establish an SC and elaborate a full proposal
- Spring 2016
 - Intended date for the workshop