



# **ASSESSING THE EVIDENCE OF HEALTH, ENVIRONMENTAL AND SOCIO-ECONOMIC IMPACTS OF GMOs**

Stakeholder Workshop on the Results of the GRACE Systematic Reviews and Evidence Maps and on their Role in Future GMO Risk Research and Assessment

**5-6 October 2015**

**Modul Conference Center  
Peter-Jordan-Straße 78, 1190 Vienna**

## **DRAFT AGENDA**

### **Context**

In the course of the European Commission funded research project GRACE (GMO Risk Assessment and Communication of Evidence) published evidence of health, environmental and socio-economic impacts of GM crops will be reviewed – considering both risks and benefits. GRACE reviews go beyond what has been done so far and are conducted in a highly systematic, transparent and inclusive way, based on concepts of systematic reviews and evidence maps. Both types of evidence synthesis tasks have been proposed or used as a valuable tool to support policy making in many areas including medicine, environmental studies, social studies, and - more recently - food safety. As a main difference to normal narrative reviews explicit review questions and a detailed review protocol describing all steps and methods of the review process are being developed before the review starts. The literature search is typically more extensive and the conduct of the review is documented in detail to allow for verification as well as for updating. For systematic reviews two sets of criteria are being developed – one for study inclusion and another one for assessing the quality of the evidence. Data can be qualitative and/or quantitative. In case of quantitative data a meta-analysis can be conducted.

Based on these concepts GRACE developed and tested a general framework for Good Review Practice in assessing health, environmental and socio-economic impacts of GM crops. All key steps of these reviews were/are subjected to stakeholder scrutiny and feed-back. The final results of the reviews as well as all data generated in the process will be made available via the open access database CADIMA designed to serve professional users of and interested parties in GMO impact assessment. This work stream of GRACE will result in two deliverables: (i) the results and conclusions of the individual reviews and maps and (ii) a proposal for a framework of Good Review Practice which can be used in GMO impact research and assessment. Both deliverables are expected to support evidence-based policy making in GMO impact assessment.

This workshop is funded by the European Commission 7<sup>th</sup> Framework Programme in the context of the large collaborative project GRACE (Grant Agreement No 311957).



## Objective

The aim of this workshop is twofold (i) to discuss the results and draft conclusions of the individual systematic reviews and evidence maps conducted in the context of GRACE and, (ii) to discuss the overall conclusions and recommendations for using evidence synthesis methods in the context of health, environmental and socio-economic impact research and assessment of GMOs.

## Consultation Procedure and Anticipated Output

Feed-back can be provided in the workshop and/or in writing to [GRACE-consultation@aau.at](mailto:GRACE-consultation@aau.at) (Deadline for comments in writing: 19 October 2015). The feed-back received in the course of the stakeholder consultation will be summarised in a stakeholder report which will be published at the GRACE website. The conclusions on the individual reviews and maps as well as the overall conclusions and recommendations on evidence synthesis will be reconsidered based on comments received and published in their final version on the GRACE website.

## Attendance

This consultation is open to all stakeholders interested in health, environmental, and socio-economic impacts of GMOs. This includes but is not limited to GMO risk assessors, risk managers as well as representatives of all relevant sectors (industry, professional organisations, civil society organisations and academia). Participation is free of charge but registration is required to [GRACE-consultations@aau.at](mailto:GRACE-consultations@aau.at) by 4 Sept 2015 the latest. Early registration is encouraged, as places are limited. Travel information is provided in a separate document.

## Contacts



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## DAY ONE 5 OCTOBER 2015

12:00 **Registration**

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### 13:00 WELCOME AND INTRODUCTION

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13:00 **Introduction to GRACE Evidence Synthesis**

Joachim Schiemann  
Christian Kohl, Institute for Biosafety in Plant Biotechnology,  
Julius Kühn Institut, Quedlinburg

13:15 **Stakeholder and User Involvement in GRACE  
Introduction to the Stakeholder Consultation**

Armin Spök, IFZ-Inter-University Research Centre for Technology, Work  
and Culture, Graz

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### 13:30 REVIEW OF ENVIRONMENTAL IMPACTS OF GM CROPS

CHAIR: PATRICK RÜDELSHEIM, PERSEUS, ZWIJNAARDE, BELGIUM

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13:30 **Effects of the cultivation of GM herbicide tolerant crops on botanical  
diversity**

Jeremy Sweet, Sweet Environmental Consultants, Cambridge

14:00 **Impacts on Bt maize on abundance or ecological function of non-target  
animals**

Michael Meissle, Agroscope, Zürich

14:30 **Impacts of Bt crops on population abundances and biomasses of soil  
invertebrates**

Paul Henning Krogh, Aarhus University

15:00 Coffee Break

15:30 **Are soil microbial endpoints changed by Bt crops?**

Niels Bohse Hendriksen, Aarhus University

16:00 **Susceptibility of lepidopteran/coleopteran maize pests to Bt-proteins**

Achim Gathman, Federal Office of Consumer Protection and Food Safety,  
Berlin

16:30 **Inheritance of resistance alleles in populations of lepidopteran/  
coleopteran maize pest species:**

Kai Priesnitz, Federal Office of Consumer Protection and Food Safety, Berlin

17:00 Session Discussion

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, Adjourn for Day 1  
18:00

## DAY TWO 6 OCTOBER 2015

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### 8:30 REVIEW OF HEALTH AND SOCIO-ECONOMIC IMPACTS OF GM CROPS PARALLEL SESSIONS

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#### Room A – Review of health impacts of GM crops

Chair: Armin Spök

- 8:30  **Characteristics of comparative studies of assessment of key chemical crop constituents in GM crops**  
N.N.
- 9:00  **Characteristics of studies on the risk of allergic sensitization and elicitation in humans and animals exposed to an allergenic plant**  
N.N.
- 9:30  **Characteristics of toxicity studies with newly expressed proteins from GM crops**  
N.N.
- 10:00  **Characteristics of whole food or feed repeated-dose feeding studies with GM crops**  
N.N.
- 10:30 Coffee Break
- 11:00  **Session Discussion**

#### Room B – Socio-economic impacts of GM crops

Chair: N.N.

- 8:30  **Socio-economic impacts of genetically modified crops worldwide - a comprehensive systematic map**  
Jaqueline Garcia-Yi, Center of Life and Food Sciences  
Weihenstephan, Technische Universität München
- 9:20  **Impact on GM regulation of political actors and other drivers in the EU in comparison to the US**  
Maria Garrone, Centre for European Policy Studies, Brussels
- 9:45  **Welfare effects of GM crops**  
Maria Garrone, Centre for European Policy Studies, Brussels
- 10:10 Coffee Break
- 10:40  **Impact of trade restrictions on the competitiveness of partner countries and corresponding sectors**  
Maria Garrone, Centre for European Policy Studies, Brussels
- 11:05  **Session Discussion**

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## DAY TWO 6 OCTOBER 2015 CONT.

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### 12:00 USE OF EVIDENCE SYNTHESIS IN GMO IMPACT RESEARCH AND IMPACT ASSESSMENT

CHAIR: ARMIN SPÖK

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12:00 □ **Transparency and Accessibility of Review Data**

Wendy Craig, International Centre for Genetic Engineering and Biotechnology, Trieste

Ralf Wilhelm, Julius Kühn Institut, Quedlinburg

12:30 □ **Stakeholder Involvement – Experiences and Lessons taken**

Armin Spök, IFZ-Inter-University Research Centre for Technology, Work and Culture, Graz

13:00 Lunch Break

14:00 □ **Wrapping up the main characteristics of Evidence Synthesis**

Christian Kohl, Julius Kühn Institut, Quedlinburg

14:20 □ **Advantages and Challenges in Applying Systematic Reviews and Evidence Maps on GMO impact research – Practitioner's Comments**

Gijs Kleter, Gijs Kleter, RIKILT-Institute of Food Safety, Wageningen

Jeremy Sweet; Sweet Environmental Consultants, Cambridge

Jaqueline Garcia-Yi, Technische Universität München

Maria Garonne, Centre for European Policy Studies, Brussels

Geoff Frampton, University of Southampton

15:00 □ **Draft Conclusions and Recommendations on the Use of Systematic Reviews and Evidence Maps in GMO Risk Research and Assessment**

N.N., Julius Kühn Institut, Quedlinburg

15:30 Coffee Break

16:00 **Breakout Groups or World Cafe Setting**

17:20 **Plenary Discussion**

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### 18:00 CONCLUDING REMARKS

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18:15 End of Workshop

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