

IOBC GMO Guidelines Project

A.N.E. Birch & R.E. Wheatley

The GMO Guidelines project is an international initiative of public sector scientists to establish scientific tools and methods to assess potential environmental impacts. The IOBC GMO Guidelines Project has an important goal in which international and scientifically acknowledged guidelines and methods will be developed to evaluate risks posed by the cultivation of genetically modified organisms. The guidelines are drafted by the project core group of more than 200 public sector scientists from 26 countries and around 100 public sector institutions, including SCRI. Dr Nick Birch leads the group on “Non Target and Biodiversity Impact” and Dr Ron Wheatley leads the subgroup on “Soil ecology”. During the project scientists are invited to participate actively in the discussion and to present their ideas for developing the guidelines. These are being developed and tested with local scientists and invited external experts at three workshops; in Kenya (Bt maize case study; November 2002), Brazil (Bt cotton case study; June 2003) and Vietnam (Bt cotton and rice case study; April 2004). Full reports and summaries of the workshops will be published in at least 2 books by CABI, sponsored by UNEP-GEF-STAP for international distribution.

What are the GMO Guidelines?

They consist of:

- Inter-linked modules of scientific questions related to risk assessment and corresponding scientific methodologies.
- Advice to regulatory authorities, who can choose to implement parts or all of the guidelines.
- Designed for use on a case-by-case basis and before approval is given for GM release.
- Cover both environmental and agricultural impacts of GMOs, applicable to most GM crops.

- Do not cover human health impacts or ethical implications.
- Presently focused on Bt crops as specific case studies, but will later be developed into generic guidelines.

The scientific scope of the Guidelines is divided into five sections:

- Problem formulation and options assessment.
- Transgene expression and locus structure.
- Non-target and biodiversity impacts.
- Gene flow and its consequences.
- Pest resistance management.

The project is coordinated by an international Steering Committee of 14 scientists and policy makers. There is also an Advisory Board, comprised of representatives from international and national organizations who have the scientific expertise to critically advise the project, and who can influence the adoption of the guidelines internationally.

The list of contributing institutions can be found on the website below.

The first two GMO workshops (Kenya, Brazil) have provided illustrative and contrasting agricultural, climatic, socio-economic and ecological situations. Although the main case study crop in Vietnam will be the same as in Brazil, Bt cotton, a different transgene construct will be investigated, and cultivation conditions are very different. The project gratefully acknowledges funding from the Swiss Agency for Development and Cooperation (SDC) and the International Organisation for Biological Control (IOBC Global).

For further details see: www.gmo-guidelines.info.



Figure 1 Brasilia Workshop June 2003.