
**LMOS AND THE ENVIRONMENT:
AN INTERNATIONAL CONFERENCE**

PROGRAMME

**Sheraton Imperial Hotel
Durham, North Carolina
United States
27 - 30 November 2001**

Hosted by the Government of the United States

Programme

Tuesday, 27 November 2001

15:00 - 20:00 Registration on site - Hotel Lobby

18:30 Welcome

19:00 Reception - Crystal Coast Ballroom

Wednesday, 28 November 2001

07:30 Registration - Hotel Lobby

08:30 Welcoming Address and Opening Remarks

Conference Chair:

The Conference was chaired initially by Rita Colwell, Director, National Science Foundation, USA, and then by Calestous Juma, Harvard University

Conference Rapporteurs:

Calestous Juma, Harvard University
Iain Gillespie, OECD
Audia Barnett, Jamaica

Welcoming Addresses:

Donald Johnston, Secretary-General, OECD
James Butler, Deputy Under Secretary for Marketing and Regulatory Programs, USDA
Suzie Hazen, Deputy Assistant Administrator for Prevention, Pesticides, and Toxic Substances, US EPA
Meg Scott Phipps, North Carolina Commissioner of Agriculture and Consumer Services

Session 1: Genetic Modification: Current and Future Applications

This session will review the history and development of commercial transgenic crop applications, providing a platform for the focus of subsequent sessions on scientific assessment and related considerations utilising the perspectives of both the developed and developing worlds. In addition to identifying the extent of current applications, it will look to identify applications expected in both the near and more distant future.

09:30 Introduction by the Chair

- Joke Waller-Hunter (OECD)

Presentations :

- *Overview of Current Commercial Applications*
Martina McGloughlin (USA)
- *Overview of Crops of Importance to the Developing World*
Zhangliang Chen (China)
- *Future Applications/Research Trends*
John Hamer (USA)

10:30 Panel Discussion 1

The panel will be comprised of the three speakers, plus the three additional experts listed below. This will be followed by general discussion.

- Ana Mercedes Espinoza (Costa Rica)
- Willy de Greef (BIAC)
- Purvi Mehta-Bhatt (India)

12:00 Lunch

Session 2: The Practice of Environmental Assessment

This session will identify how science is currently used in assessment, including information from public and other sources used in national frameworks. This session will, for example, examine how appropriate data sets are selected, the role of the baseline, and how the assessment process addresses uncertainty.

13:00 Introduction by the Chair

- Piet van der Meer (The Netherlands)

13:10 Presentations

Session 2A - Risk Assessment Issues: Mechanisms of Assessment; Baselines; Appropriate Data Sets

- Jorge Soberon-Mainero (Mexico)
- Alan Gray (UK)
- Joaquim Machado (Brazil)

Session 2B - Risk Management Issues: How a scientific assessment addresses uncertainty; The relationship between the assessment and identification of mitigation measure(s); How to factor environmental benefits into an assessment

- Phil MacDonald (Canada)
- Werner Mueller (Austria)

- Jennifer Thomson (South Africa)

16:30 Panel Discussion 2

The panel will be comprised of the six speakers, plus the three additional experts listed below. This will be followed by general discussion.

- Walter Kloepffer (Germany)
- John Kough (USA)
- Beatrix Tappeser (Germany)

17:30 End of Day 2

Thursday, 29 November 2001

Session 3: Scientific Framework for Assessing Transgenic Organisms in the Environment

At the core of the Conference, this session will focus on the identification of potential mechanisms by which use of transgenic plants and other LMOs might affect the environment. It will assess scientifically identified issues, including those associated with specific eco-regions or other areas.

08:30 Introduction by the Chair

- Mark Lonsdale (Australia)

Session 3A: Transgenic Crops in the Environment

08:40 Presentations

- *Fitness Effects: The Importance of Baselines*
Achim Gathmann (Germany)
- *Unintended Effects of Plant LMOs: What Constitute Appropriate Data Sets*
Angelika Hilbeck (Switzerland)
Jim Lynch (UK)
Mark Sears (Canada)
- *Intended Effects of Plant LMOs: Identifying Mitigation Measures*
Fred Gould (USA)
Hector Quemada (USA)
- *Environmental Benefits: Defining and Measuring*
Leda Mendonça (Brazil)
Sujatha Sankula (USA)

12:00 Lunch

13:30 Panel Discussion 3A

The panel will be comprised of the eight speakers, plus the two additional experts listed below. This will be followed by a general discussion.

- Les Firbank (UK)
- Ervin Balazs (Hungary)

Session 3B: Transgenic LMOs in the Environment: Additional Considerations

14:30 Presentations

- *Plants in Uses Other than Food Production*
Dave Heron (USA APHIS)
- *Forestry*
Linda DeVerno (Canada)
- *Fish*
Wayne Knibb (Australia)
- *Biological control*
David O'Brochta (USA)

15:30 Panel Discussion 3B

The panel will be comprised of the eight speakers, plus the two additional experts listed below. This will be followed by a general discussion.

- Hans Bergmans (The Netherlands)
- Jan Husby (Norway)

17:30 End of Session 3

19:30 Evening Session: Maize at the Center of Origin and Diversity

- *Introduction*
Antonio Serratos-Hernandez (Mexico)

19:35

- *In Situ Conservation and Gene Flow*
Mauricio Bellon (CIMMYT)
- *Potential Concerns*
Doreen Stabinsky (Greenpeace)
- *Mexican Approach: Overview and Status*
Exequiel Ezcurra (Mexico)

20:30 Panel Discussion - Evening Session

The panel will be comprised of the eight speakers, plus the two additional experts listed below. This will be followed by a general discussion.

- Juan Pablo Martinez Soriano (Mexico)
- Laura Silva (Mexico)

21:15 End of Evening Session

Friday, 30 November 2001

Session 4: Future Needs: Unique Challenges and Opportunities for Environmental Assessment

This session will address, as a follow up to Session 3, the future needs in research and capacity building with respect to scientific assessments of environmental issues. It will explore the challenges and possibilities associated with establishing baselines and setting-up scientific monitoring programs; the relationship of monitoring to assessment parameters and criteria; and gaps in the information base and potential uncertainties (e.g., how the acquisition of a single fitness trait might affect a plant population(s) over the long term). Attention will be given to the perspectives of developed and developing countries, both in terms of challenges faced and opportunities presented.

08:30 Introduction by the Chair

- Calestous Juma, (USA)

09:00 Presentations

- *Monitoring Case Study: Insect Resistance Management (Bt IRM)*
Janet Andersen (USA)
- *Monitoring Case Report: Transgenic Crops and Farmland Diversity*
Antoine Messean (France)
- *Research and Monitoring in the Developing World*
Zaida Lentini (Colombia)
- *Research and Monitoring in the Industrialised World*
Charles Kessler (European Commission)
- *Capacity Building for Research and Monitoring in the Developing World: Unique Challenges and Opportunities*
Joel Cohen (CGIAR)
Decio Ripandelli (ICGEB)

11:00 Panel Discussion 4

The panel will be comprised of the eight speakers, plus the three additional experts listed below. This will be followed by a general discussion.

- Exequiel Ezcurra (Mexico)
- Giovanni Ferraiolo (UNEP)
- Ken-ichi Hayashi (Japan)

12:00 Lunch

Session 5: Conclusions and Next Steps

13:00 Introduction by the Conference Chair

- Calestous Juma, (USA)

13:05 Presentation by Rapporteurs

The rapporteurs will present the draft summaries of each of the four preceding sessions, with an emphasis on six areas:

1. factual information reported;
2. areas where consensus exists;
3. main areas of uncertainty and/or disagreement;
4. topics for further scientific investigation;
5. implications for international harmonisation and co-operation; and
6. suggestions for further development and improvement of approaches to assessing LMOs in the environment.

14:30 Discussion

16:00 Closing Remarks

16:30 End of the Conference