Foreword

This publication constitutes the proceedings of the OECD conference on the “Environmental Uses of Micro-Organisms: An Overview of the State-of-the-Art and Implications for Biotechnology Risk/Safety Assessment”. This event, organised under the auspices of OECD’s Working Group on the Harmonisation of Regulatory Oversight in Biotechnology (WG-HROB), was held on 26-27 March 2012. A total of 100 participants attended the conference, which was open to OECD delegates as well as external scientists, regulators and interested individuals. It was developed in collaboration with the OECD Co-operative Research Programme under the Trade and Agriculture Directorate.

OECD has undertaken activities related to the safety of the environmental uses of transgenic organisms (also known as genetically-modified organisms) since the mid-1980s. The Working Group was established in its current form in 1995. Since that time, its programme of work has included activities related to the environmental risk/safety assessment of transgenic organisms with a major focus on transgenic plants.

In addition to this core activity on agricultural crops, the Working Group has long had a number of projects related to the safety of environmental applications involving micro-organisms. This has resulted in a number of publications, some of them dealing with specific groups of micro-organisms which have been used in environmental applications such as *Pseudomonas*, *Acidithiobacillus*, *Acinobacter* and Baculoviruses. Other publications have addressed issues of importance in the risk/safety assessment of bacteria such as taxonomy, detection methods, horizontal gene transfer and pathogenicity factors.

There have been many scientific developments in recent years related to the use of micro-organisms in the environment and the conference was an opportunity to provide an overview of the current situation, focusing on concrete or expected developments involving the use of transgenic micro-organisms in the environment.

Following the conference, the Working Group discussed the outcomes and identified a number of areas in which the use of transgenic micro-organisms is either already underway or is likely to be forthcoming in the near future. At the time of writing, the Working Group has agreed to launch a project for developing a guidance document on the use of micro-algae. This document will aim to provide background information which could be used in an environmental risk assessment. As for the other topics addressed at the conference, some may be included in the programme of work of the Working Group at a later stage, but this will depend on the resources available.
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