

Risk assessment of GMOs and pathogens in Belgium : a review of 20 years of expertise in the field by the Scientific Institute of Public Health

D. Breyer, B. Brosius, A. De Schrijver, C.D. Do Thi, M. Goossens, A. Leunda, K. Pauwels, C. Van Droogenbroeck, B. Van Vaerenbergh, C. Verheust, M. Sneyers and P. Herman

Scientific Institute of Public Health (WIV-ISP), Biosafety and Biotechnology Unit (SBB), Rue Juliette Wytsman 14, B-1050 Bruxelles

Biosafety is defined in Belgium as the assessment of potential risks for human health and the environment linked to the use of genetically modified organisms (GMOs) or pathogens. The concept 'biosafety' was born in the time of Louis Pasteur and of the first concrete measures taken in response to the potential risks linked to the exposure to pathogenic micro-organisms. It then developed into an entirely separate discipline, through definition and the classification of biological risks, the awareness of potential risks associated with the use of recombinant DNA techniques and the development of internationally accepted methodology and principles in relation to the assessment of biological risks.

The first European Directives in the field of biosafety were passed in April 1990. These legislations form the basis of the implementation of biosafety in Belgium. In a complex institutional context Belgium has chosen to set up a biosafety regulatory framework harmonised between the Federal State and the three Regions and consistent on the scientific viewpoint, in which all living organisms (pathogenic and/or genetically modified) which pose a risk to human health and the environment are taken into account. This framework (endorsed by a cooperation agreement) relies on a biological risk assessment system common to the Federal State and to the Regions and is composed of two bodies : The Biosafety Advisory Council (BAC) and the Biosafety and Biotechnology Unit (SBB) of the Scientific Institute of Public Health (WIV-ISP).

Twenty years after the implementation of the first European Directives, the SBB and the Biosafety Council still take a central stage in Belgium in the field of biosafety, and offer a permanent scientific support at federal, community and regional level as well as at European and international level. Over 20 years these two bodies provided a wealth of scientific advice, with the support of most distinguished Belgian experts in a wide range of disciplines. This advice is used as the foundation for Belgium's biosafety policy.

It is this expertise and experience that the SBB is sharing in a book which was just published in December 2010. This book retraces, through an historical overview and detailed facts and figures, the story of 20 years of biosafety in Belgium in its evolutionary context. It emphasizes the privileged place of the SBB in the Belgian biosafety landscape, describing how the unit developed from a one-person organization in 1990 to a flourishing unit with 11 scientists. It shows the essential and recognized role of the SBB as a partner on the European and international stage, and gives a review of the main communication and information activities to which the SBB has contributed in order to meet the needs of the public and various stakeholders. This book also presents some prospective thoughts about what could be the future methodology and substance of the scientific assessment of biological risks.



This historical and descriptive part is completed with several witnesses from people who have been involved, or are still involved, in various ways in the field of biosafety in Belgium, showing how the expertise within the SBB has grown thanks to the permanent interaction and collaboration with partners from different fields.

Through this book, the reader will see how the implementation of a centralized system for the risk assessment of GMOs and pathogens has enabled Belgium to develop highly valued, internationally recognized, scientific expertise in a still highly polemic and constantly evolving domain. This unique combination proves that a central organisation based on multidisciplinary expertise organised so as to allow confrontation of opinions in mutual respect, based on solid data, open to other scientific disciplines, and as transparent as possible, can offer a long-lasting and credible basis for political and public debate on the use of GMOs and pathogens.

The Scientific Institute of Public Health, Belgian focal point for Biosafety 1990-2010 : 20 years of risk assessment of GMOs and pathogens

187 pages. ISBN : 9789074968287 (NUR-code: 884). Legal depot : D/2010/2505/43

Available in English, French and Dutch, in hard and electronic copy to download on the website of SBB (www.biosafety.be)

More information : Dr. Philippe Herman, Tel : 02 6425270, email : philippe.herman@wiv-isp.be

