

## Regulatory framework and food safety assessment of GMOs in the EU

Yi Liu

European Food Safety Authority, Italy

Legislative instruments are in place in the European Union (EU) to ensure that genetically modified organisms (GMOs) and their derived food and feed products are subject to a risk analysis before their commercialization. In this risk analysis process, the role of the European Food Safety Authority (EFSA) is to independently assess and provide scientific advice to risk managers on any possible risks of GMOs to human and animal health and the environment. EFSA's scientific advice, provided through its GMO Panel and the unit, is mostly given in the form of Scientific Opinions or Guidance Documents. Scientific opinions are issued to applications for market approval, constituting one element of the authorization decision process. Guidance documents explain the strategy and scientific requirements to conduct the safety assessment. Comparative approach is the guiding principle of the assessment, starting with molecular characterization of the GMO in question, followed by evaluation of the compositional, toxicological, immunological and nutritional aspects and the environmental impacts. With the development of nutritional or biotical enhanced plants, as well as new plant breeding techniques, the food safety assessment of GMOs is entering a challenging era.

### Biography

Yi Liu earned her Bachelor on Virology in 1992 and Master on Virology in 1994 in China, her 2<sup>nd</sup> Master on Biotechnology in the Netherland in 1996. She completed her Ph.D. on Microbiology in 2000 at the Swiss Federal Institute of Technology Zurich, and a post doctoral fellow on stem cell research, then group leader on osteoporosis at the University of Genova School of Medicine. Since 2008 she worked as a scientific officer at the European Food Safety Authority. Her job is to deal with food and feed safety assessment of products derived from genetically modified organisms.

[yi.liu@efsa.europa.eu](mailto:yi.liu@efsa.europa.eu)