Parallel Session: Introduction & Scientific Justification of Data Transportability for Confined Field Testing for ERA of GM plants

Abstract title:

Transportability of conclusions from confined field trials: A case study using the virus resistant transgenic bean

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The conceptual framework for Data Transportability, builds on the premise that well-designed studies conducted for the environmental and food/feed risk assessment of transgenic crops may be transportable across geographies. Beyond individual data, provided that certain criteria are met, the conclusions of comparative assessments of a transgenic crop with its conventional counterpart would also be transportable. With the purpose of testing the applicability of transportability concept, a sub-team from ICCAS (Institute for Scientific Cooperation in Environment and Health, former ILSI Argentina) Biotechnology Working Group was convened to work on a case study based on a virus-resistant transgenic bean. One of the main diseases that produces important yield losses is golden mosaic, caused by the *Bean Golden mosaic virus* (BGMV). In 2011, Brazil approved a transgenic bean resistant to BGMV for cultivation and consumption, that was developed by EMBRAPA (Brazilian Agricultural Research Company) through an RNA interference mechanism. The objective of this work was to propose a criteria to assess the transportability of conclusions from confined field trials (CFTs) carried out in Brazil to gather agro-phenotypic and compositional data, and to discuss if the conclusions of these studies were transportable for the purpose of a potential Environmental and Food and Feed risk assessment in Argentina. The comparative studies included the transgenic bean and its conventional parental line were run in different agroecological environments. The main criteria to enable transportability were set by the sub-team, and with them the CFTs carried out in Brazil were analyzed and found that these criteria were met. It was concluded that the studies could inform a potential risk evaluation for Argentina.

The transportability of the conclusions of these studies to the bean cropping areas in Argentina was assessed as a conceptual exercise, with no intention to conclude on the biosafety of the transgenic bean.