

Brussels, 3 September 2009

## **Growing number of genetically modified crops worldwide could disrupt international trade**

**The number of commercialised genetically modified (GM) crops in the world is foreseen to multiply by four from about 30 today to over 120 in 2015. This is the forecast presented in the report "The global pipeline of new GM crops: implications of asynchronous approval for international trade", recently published by the European Commission's Joint Research Centre (JRC). It compiles a list of new GM crops to be commercialised and analyses their possible impact on international trade. Their increasing number may cause trade disruptions due to their asynchronous approval.**

This report presents the results of an international workshop organised by the JRC's Institute for Prospective Technological Studies (IPTS) and summarises the different views expressed by the participants. The seminar brought together national regulators, industry representatives, research institutes and participants from the agri-food supply chain.

Participants concluded that the increasing number of new GM crops will intensify the effects of asynchronous approval (different countries do not approve GMOs at the same time) and isolated foreign approval (GM crops are authorised by just one country). Therefore, the likelihood of crop shipments being rejected at the EU border because of low-level presence (LLP) of unapproved GMOs could become considerably higher in future, causing trade disruptions at the international level.

### **Main findings**

- Considerable global increase in the number of commercialised GM crops foreseen. While currently there are around 30 so-called "transgenic events" in commercial GM crops, the forecast is that by 2015 there will be over 120. For soybeans, the number of GM events may increase from 1 to 17; for maize from 9 to 24; for rapeseed from 4 to 8 and for cotton from 12 to 27. In the case of rice, where currently no commercial events are cultivated, the prediction is that by 2015 there will be 15. Potatoes are predicted to move from 0 to 8 events, and events in other minor crops are predicted to grow from currently 7 to 23.
- Individual GM events can easily be combined by conventional crossings by plant breeders to generate new GMOs with multiple desirable traits (commonly known as "stacked" GM events). In the EU, where stacked GM crops are required to go through the regulatory system as a new GM crop, this is expected to cause a significant increase in the workload of the regulatory system, which will likely contribute further to the asynchrony of approvals.
- Most of the existing GM crops have been developed by private technology providers from the USA or Europe. These developers tended to seek broad authorisation of their products in key export markets like the EU and Japan. By 2015, about half GM crops are expected to come from national technology providers in Asia and Latin America, designed for domestic markets. It seems

very improbable that all these new GM crops will be submitted for approval in the EU, but rather become cases of isolated foreign approval. Hence future incidents due to low-level presence of unapproved GMOs in imports of crops or processed foods from these countries become more likely.

- In addition to new GM crops like rice and potatoes, it is also foreseen that a limited number of new traits will be commercialised. Currently the large majority of commercial traits confer insect resistance, herbicide tolerance or a combination of both. In 2015 they will still be dominant but also new commercial traits will be available covering crop composition and abiotic stress tolerance (mainly optimised oil and starch content, improved nutrient profiles, and drought tolerance).

#### **Further information**

Project web page: <http://agrilife.jrc.ec.europa.eu/pipeline.htm>

Report "The global pipeline of new GM crops: implications of asynchronous approval for international trade": <http://ipts.jrc.ec.europa.eu/publications/pub.cfm?id=2420>

#### **Contact:**

Elena González Verdesoto, JRC press officer: [elena.gonzalez-verdesoto@ec.europa.eu](mailto:elena.gonzalez-verdesoto@ec.europa.eu)