Media release

Unintended components in genetically engineered soy

European Food Authority EFSA in favour of market approval

Munich/Parma 11 August 2011. The European Food Safety Authority EFSA has recently published new favorable opinions on two genetically engineered soy. In their dossiers EFSA for the first time confirms unintended changes in the composition of the components of genetically engineered plants. The invasive methods used in genetic engineering cause disturbances in plant metabolism in regard to content of fatty acids, amino acids (Dupont/Pioneer, soy 356043) and vitamin E (Monsanto, soy MON87701).

Genetic manipulation was intended to alter the plants for other, completely different purposes: Dupont/ Pioneer made the plants tolerant to herbicides (glyphosate and ALS-inhibitor) Monsanto inserted a gene for producing insecticides. Despite the actual findings, in July 2011, both applications received favorable opinions from the EFSA. This means that products derived from these plants might soon be imported for usage in food and feed if Member States or the EU Commission do not intervene.

Testbiotech points out that these cases show general technical deficiencies in genetic engineering of plants and also expose failures in risk assessment carried out by EFSA: “These genetically engineered soy plants show that the process of genetic manipulation of plants is based on shotgun methods lacking sufficient technical control. The insertion of gene constructs into the plant genome is non-targeted, their activity is enforced by technical means. These plants inherit specific risks that cannot be compared with those of plants derived from conventional breeding“, says Christoph Then for Testbiotech in Munich. “But EFSA´s risk assessment is still based on the idea of substantial equivalence as a starting point.”

EFSA assessed data from some field trials from industry in which the unintended changes in plant components became evident. But to investigate the risks of those plants more thoroughly, their genetic stability should be tested in a stress test under various defined environmental conditions. Investigations into plant components are highly relevant in the case of soy, because these plants naturally produce allergenic proteins and hormonally active substances. If the content of these components is changed, it can result in hazards for human and animal health. Instead of requiring further investigations, EFSA in its opinion even claims that *“No indication was found …. that the genetic modification of soybean MON 87701 resulted in any unintended changes.”* This statement is simply wrong and in contradiction to the actual findings.

There are further considerable risks for human and animal health caused by the quality of the inserted gene constructs: The insecticidal toxin Cry1Ac produced in the soy of Monsanto is known to be an immune stimulating protein. Despite the concerns of some experts from Member States which refer to significant findings in blood samples from humans, no further investigations were required by EFSA concerning risks for the immune system. Furthermore, the Dupont/Pioneer soybeans contain a new class of residues from glyphosate that are known to have a similar toxicity as the herbicide itself. Some recent investigations show that glyphosate and its formulations such as Roundup pose a higher risk to human and animal health than expected.

Contact: Dr. Christoph Then, Tel +4915154638040, info@testbiotech.org, www.testbiotech.org

Link to the opinions of EFSA: MON87701, http://www.efsa.europa.eu/en/efsajournal/pub/2309.htm
Soja 356043, http://www.efsa.europa.eu/en/efsajournal/pub/2310.htm. **Until August 27 comments can be sent to:** http://ec.europa.eu/food/food/biotechnology/gmo_authorisation_en.htm