

Lecture: gementechnology & animal experiments / transgenic animals

## **Animal testing of genetically modified food and feed: can it be justified?**

*Roman Kolar*

Deutscher Tierschutzbund / German Animal Welfare Federation (Neubiberg) (DE)

e-mail: roman.kolar@tierschutzakademie.de

In Europe, a political controversy about the bringing onto the market of food and feed based on genetically modified plants has been going on for years. One main aspect of this controversy is the potential risk for human health. The placing on the market of genetically modified food or feed products is governed by Regulation 1829/2003/EU. According to this regulation, such food and feed must not show any harmful effects. The European Food Safety Authority (EFSA) is the keystone of European Union (EU) risk assessment regarding food and feed safety. EFSA has published a guidance document for the risk assessment of genetically modified plants and derived food and feed that inter alia explicitly demands animal data, so animal experiments are carried out or commissioned by the applicants. However, the interpretation of the results of such experiments is highly controversial. This is due to the fact that a great uncertainty exists to whether the effects observed in animal studies can be regarded significant as such, whether they can be transferred to humans, and which conclusions could be drawn with regard to potential effects in the food chain. Therefore, such animal tests are questionable, and initiatives to even increase animal testing for genetically engineered products, e.g. by introducing long-term studies, must be regarded critically.

A similar situation exists concerning the risk assessment of milk or meat derived from cloned or genetically manipulated animals. Animal experiments for this purpose are carried out in a smaller scale compared to those for crops but deserve attention particularly with a view to the current discussions in the EU around the authorisation of cloning of animals for food production purposes.

All above issues have in common that the question whether the animal experiments can be regarded ethically acceptable needs to be asked. According to legislation in Europe, an animal experiment is regarded ethically acceptable if the benefit resulting from it outweighs the suffering of the animals involved. In this case, however, like in many fields of animal experimentation, it is neglected that the benefit of proving the safety of genetically manipulated food and feed is merely a commercial one.

### **References**

Kolar, R. and Rusche, B. (2008). An Animal Welfare Perspective on Animal Testing of GMO Crops. *ALTEX* 25, 121-124.

*Keywords: animal testing, genetically modified food and feed, Regulation 1829/2003/EU*