

[Greenpeace](#)

Genetically-engineered food: potential threat to fertility

Study shows that genetically engineered maize affects reproductive health in mice

11 November 2008

Vienna, Austria — A study published today by the Austrian government identified serious health threats of genetically engineered (GE) crops. In one of the very few long-term feeding studies ever conducted with GE crops, the fertility of mice fed with GE maize was found to be severely impaired, with fewer offspring being produced than by mice fed on natural crops. Considering the severity of the potential threat to human health and reproduction, Greenpeace is demanding a recall of all GE food and crops from the market, worldwide.

The study, sponsored by the Austrian Ministries for Agriculture and Health, was presented today at a scientific seminar in Vienna, Austria. Prof. Dr. Jürgen Zentek, Professor for Veterinary Medicine at the University of Vienna and lead author of the study, summarised the findings: Mice fed with GE maize had less offspring in the third and fourth generations, and these difference were statistically significant. Mice fed with non-GE maize reproduced more efficiently. This effect can be attributed to the differences in the food source.

"GE food appears to be acting as a birth control agent, potentially leading to infertility - if this is not reason enough to close down the whole biotech industry once and for all, I am not sure what kind of disaster we are waiting for," said Dr. Jan van Aken, GE expert at Greenpeace International. "Playing genetic roulette with our food crops is like playing Russian roulette with consumers and public health".

The Austrian scientists performed several long-term feeding trials with laboratory mice over a course of 20 weeks. One of the studies was a so-called reproductive assessment by continuous breeding (RACB) trial, in which the same parent generation gave birth to several litters of baby mice. The parents were fed either with a diet containing 33% of a GE maize variety (NK 603 x MON 810), or a closely related non-GE variety. A decrease in litter size and weight was found to be statistically significant in the third and fourth litters in the GE-fed mice compared to the control group.

Owned by Monsanto, the GE maize variety tested in this study is tolerant to a herbicide and resistant to certain insect pests. It has been approved for planting and food use in a variety of countries, including the US, Argentina, Japan, Philippines and South Africa. In Mexico and the European Union(1), it is approved for food and feed use.

"This study is yet another example that the food and feed safety of GE crops and food cannot be guaranteed. The reproductive toxicity of this GE maize was a totally unexpected result, but regulators around the world had considered this GE maize variety as safe as non-GE varieties - a potentially devastating error," said Dr. van Aken.

Notes to Editor

(1) In 2005, the European Food Safety Agency EFSA gave a green light for this variety. Without conducting any independent studies and just relying on Monsanto's data, EFSA wrote it "considers it unlikely that NK603 x MON810 maize will have any adverse effect on human and animal health". This exemplifies how flawed and ill-designed the European risk assessment for GE crops is.

Contact information

- *Dr. Jan van Aken, Greenpeace International agriculture expert:*
+49 151 1805 3415

Dr. Janet Cotter, Greenpeace International Science Unit:
+44 7812 174783