

## German Federal Agricultural Research Centre Data Shows No Danger to Soil Microorganisms through Genetically Modified Maize

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The alleged ecological dangers of planting genetically modified Bt-maize in Germany are presented by the environmental organization Greenpeace e.V. in comprehensive brochure available in Internet since Wednesday, July 19, 2006. Bt-maize plants are so changed through genetic engineering that they develop one or more substances (proteins) to repel certain insects when they feed on the plants. In the brochure, Greenpeace draws upon results garnered by different research agencies, including the Institute for Agroecology of the German Federal Agricultural Research Centre (FAL) in Braunschweig.

In long term field studies with BT Maize MON810, the FAL researchers studied how long the insect repellent proteins (Cry-protein, also known as BT Toxin) survived in soil and whether the presence of such proteins could have an impact on the natural soil microorganisms. Modern, highly sensitive molecular methods were developed and implemented in the course of these studies. The results, which have, in the meantime, been published in the highly-recognized journal *Molecular Ecology* were definitive: the Cry proteins released from growing plants and plant harvest residues are not sufficient to cause toxic effects on non-targeted organisms, insects and other small living organisms on the field. Nor are the naturally-occurring and organically-important soil microorganisms harmed by the Cry proteins.

These results directly contradict the statements made in the Greenpeace brochure. How is that possible? The director of the FAL research team, Dr. Christoph Tebbe, explains: “In the Greenpeace brochure individual results were taken out of the context of our research and selectively chosen, apparently to support a previously formed opinion. Measurements values were mentioned without pointing out that these levels are generally hundreds or thousands of times under the effective dose. Similarly, changes in the composition of the diverse soil microorganism community are very natural. Our studies showed that changes through Bt-maize, if at all evident, had less impact, for example, than those caused naturally by the weather. These scales of effects were not mentioned by Greenpeace, thus giving an impression of a risk which does not actually exist.”

A careful look at the Greenpeace Internet Brochure shows the word “Draft” on Page One perhaps providing a good opportunity for Greenpeace to reconsider the validity of their report and to correct false information.

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