

# Media release



## Monsanto warning on negative effects of growing its genetically engineered soybean “Intacta”

Unintended effects might be favourable to the spread of pest insects

**2 October 2014 / A new scientific publication co-authored by Monsanto employees, is warning that the cultivation of the genetically modified soybean Intacta (MON 87701 × MON 89788) could promote the spread of specific pest insects. According to the authors, the effects are likely to be caused by unintended effects in the plants, possibly arising from the insertion of the additional DNA. The genetically engineered soybean produced by Monsanto is resistant to herbicides containing glyphosate and produces a Bt insecticide. Brazilian scientists in collaboration with Monsanto employees have discovered that certain pest insects (*Spodoptera eridania*, southern armyworm), which can cause considerable damage in soybean fields, develop faster and live longer if their larvae feed off the plants.**

The scientific publication states: “Our results should be viewed as an alert that *S. eridania* populations may increase in Bt soybeans” and the observed effects are “favorable to pest development”. Monsanto now recommends releasing other predator insects that act as natural enemies of the southern armyworm if the genetically engineered soybeans are grown.

The article states that “these differences are less likely to directly result from the toxin presence but indirectly from unintended changes in plant characteristics caused by the insertion of the transgene or the breeding steps following transformation.” Not only was the genome of the soybean Intacta genetically engineered it was, in fact, subsequently crossed to combine the traits of herbicide resistance and insect toxicity. This may result in unintended interactions in the plants.

In the EU, the Intacta soybean is approved for import and processing in food and feed. Although there have been numerous significant findings indicating a change in the composition of the plants, the European Food Safety Authority EFSA came to the conclusion that these differences are not biologically relevant. Testbiotech and other organisations filed a lawsuit opposing the approval of Intacta at the European Court of Justice in 2013, which is still pending.

"The observed results do not surprise us too much. In the risk assessment of genetically engineered plants, indications of unintended effects, probably caused by the process of genetic engineering itself, are very common. However, these are rarely examined in detail. And also the mode of action of Bt insecticides is far from being well understood. There are many possible explanations for the observed effects. As a result, the EU approval for the Intacta soybean should be withdrawn, since there is an obvious need for thorough reassessment and further investigations," says Christoph Then for Testbiotech. "The newly published findings have unknown causes and could affect food safety."

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**The new publication:** Bortolotto, O.C., Silva G.V., de Freitas Bueno A., Pomari A.F. Martinelli S. Head G.P., Carvalho R.A., Barbosa G.C. (2014) Development and reproduction of *Spodoptera eridania* (Lepidoptera:Noctuidae) and its egg parasitoid *Telenomus remus* (Hymenoptera:Platygastridae) on the genetically modified soybean (Bt) MON 87701 × MON 89788, Bulletin of Entomological Research, <http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=9360220&fileId=S0007485314000546>

**Link to court action against Intacta:** [www.testbiotech.org/en/node/781](http://www.testbiotech.org/en/node/781)