

Maize MON 88017 × MON 810

Organisation: The European GMO-free Citizens De Gentechvrije Burgers
Country: The Netherlands
Type: Others...

a. Assessment:

b. Food Safety Assessment:

Toxicology

Histopathological Investigation of the Stomach of Rats Fed a 60 Genetically Modified Corn Diet Irena M. Zdziarski¹ Judy A. Carman^{2,3} John W. Edwards³ ¹ Discipline of Anatomy and Pathology School of Medicine University of Adelaide Australia ² The Institute of Health and Environmental Research IHER Kensington Park Australia ³ Health and Environment College of Science and Engineering Flinders University Bedford Park Australia Abstract Genetic modification GM represents new opportunities for enhanced crop features such as improved insect resistance and herbicide tolerance. The technology allows for cross-species alterations therefore potentially allowing a vast array of novel traits. Many GM crops have been developed and approved for human and animal consumption. The present study investigated a triple-stacked GM corn variety containing modifications for insect resistance via cry1Ab and cry3Bb1 genes and herbicide tolerance Roundup via an EPSPS gene which was fed to rats for six months.

The study investigated the mucosa of the stomach. Alterations to tight junction apposition gland dilatations with epithelial elongation and dysplasia in the GM-fed rats were observed. These results indicate that GM-corn may have an effect on rat stomach mucosa which may have health implications. Keywords Genetically Modified Corn Rat Feeding Study Long-Term Feeding Study Histopathology Stomach

How to cite this paper Zdziarski I.M. Carman J.A. and Edwards J.W. 2018 Histopathological Investigation of the Stomach of Rats Fed a 60 Genetically Modified Corn Diet. Food and Nutrition Sciences 9 763-796. <https://doi.org/10.4236/fns.2018.96058> Received April 28 2018 Accepted June 26 2018 Published June 29 2018

Environ Health. 2015 14 70. Published online 2015 Aug 25. doi 10.1186/s12940-015-0056-1 PMID 26302742

Transcriptome profile analysis reflects rat liver and kidney damage following chronic ultra-low dose Roundup exposure Robin Mesnage Matthew Arno Manuela Costanzo Manuela Malatesta Gilles-Eric S eralini and Michael N. Antoniou

Conclusion

Our results suggest that chronic exposure to a GBH in an established laboratory animal toxicity model system at an ultra-low environmental dose can result in liver and kidney damage with potential significant health implications for animal and human populations.

Wikipedia https://en.wikipedia.org/wiki/MON_810 Fragment MON 810's transgene structure differs from the original plasmid constructed for the safety assessment for Monsanto¹ and has changed compared to the naturally occurring non-active Cry1Ab protein.⁷ Gilles-Eric Seralini and colleagues 2007 2009 re-analyzed Monsanto data for MON 810 which was made available following a demand for public availability of the data and a court case and found that it had caused liver kidney and heart damage in rats.⁸⁹ However the European Food Safety Authority EFSA reviewed this re-analysis and concluded that the differences observed were within a normal range for control rats and deemed the statistical methods used inappropriate.¹⁰

4. Conclusions and recommendations

Whatever you do: don't authorise it again. We are making these complaints jointly on behalf of Stichting Ekopark, Lelystad. There's sufficient evidence of toxicity. Something in the plant is changing. EFSA should investigate.
