

## Letter to the editor of Food and Chemical Toxicology

Prof. Piero Morandini, University of Milano, Italy

Related to the recent paper of Prof. Seralini, Caën, France

Seralini Gilles-Eric, Emilie Clair, Robin Mesnage, Steeve Gress, Nicolas Defarge, Manuela Malatesta, Didier Hennequin, & Joel Spiroux de Vendomois (2012)

Free Preprint: Long term toxicity of a Roundup herbicide and a Roundup-tolerant genetically modified maize preprint. Food and Chemical Toxicology, ---,

--, pp ---

[www.elsevier.com/locate/foodchemtox](http://www.elsevier.com/locate/foodchemtox) AND <http://dx.doi.org/10.1016/j.fct.2012.08.005> AND

<http://www.ask-force.org/web/Seralini/Seralini-Long-Term-Toxicity-RR-2012.pdf> AND

<http://www.ask-force.org/web/Seralini/Seralini-Press-Sustainable-Trust-20120919.pdf>

Dear Prof. Hayes,

I am a plant physiologist working at a public institution. I do act as an external reviewer for several journals (I did it once also for FCT).

I am writing to you suggesting that there might be serious problems with the paper just published by Seralini et al.

First of all, the corresponding author seems unwilling to share the original data

<http://phys.org/news/2012-09-scientist-wont-eu-agency-gm.html>

This is very strange as the original data are important to test, for instance, the statistical analysis and there is no reason whatsoever to prevent them from doing so (they are not a company unwilling to share the data for fear of competition). The lack of release can only mean they are afraid of scientific scrutiny by peers. Second, the paper does not seem to have been reviewed by competent referees since it presents many shortcomings that it should have never been published in its present form. I list the major ones I could identify, but people knowledgeable in rat feeding studies could weight in much more authoritatively:

### **- Control group is too small to be meaningful.**

Just 10 rats for a rat strain very prone to develop tumor is too small: one can get a large variation in the results just by chance (sampling effect)- missing data on dietary intake. This is crucial as tumor development is strongly dependent on feed intake (see for instance: e.g.

<http://www.ncbi.nlm.nih.gov/pubmed/9164252#>). This does not allow readers not knowledgeable to the specific field (let alone journalists or general public) to put study in the context.

### **- Data on feed composition is missing:**

there is no identification of the isogenic maize control nor on mycotoxin contamination. While this may not affect every conclusion in the paper, it is certainly important for consistency of interpretation (what is the real cause...).

**- Seralini claims he has no conflict of interest,**

but several websites do claim that he received 3

M€ from giant food retailers to perform his research, see for instance:

<http://www.ubergizmo.com/2012/09/genetically-modified-food-linked-to-tumors-scientific-study/>

These very same retailers apparently have no-GMO policies and may benefit from the study conclusions. While I have no proof of the funding, I have a personal witness, an Australian scientist attending an event with Seralini, who heard him stating his CRIIGEN had received 3M€ from donors he would not name. If you want I can check with this Australian scientist if he is willing to be identified and provide further details on the matter.

These are the most obvious things coming to mind after first reading of the paper. May I suggest that you check the identity of the reviewers and their credentials in the specific field (rat feeding studies) and check possible conflicts of interests? Please note that I am not not asking to see those names or their comments, of course, but that you explore if there was some fault in the process.

This paper is doing unmeasurable damage to biotechnology and shall probably cause the tightening of an already strict approval process for transgenic crops, from which public research is already excluded for its high costs and timeframes. It is important that this paper is carefully scrutinized and, if appropriate, retracted.

I remain of course at disposal for clarifications. Best regards, Piero Morandini