



Junk science

By Ronald Doering

Lessons from L'affaire Seralini

I was vacationing in France in September when the main newsmagazine there “broke” the story that a Prof. Seralini at Caen University had proven that GMOs (genetically modified organisms) are “poison.” Posters of the magazine cover with its screaming headline were everywhere on billboards and on subway walls. I was reading the magazine on the train to Caen (en route to visiting Juno Beach where the Canadians landed on D-Day) when the young woman sitting beside me noted proudly that it was a professor from her university that had finally proven what Europeans had long believed: that big bad American biotech companies were producing food products that were unsafe. “This science confirms my conviction,” she said.

This is the story of GM food in Europe. “Science” that supports a belief more deeply entrenches the public conviction. Confirmation bias is always a problem, especially when the science is junk.

Seralini’s study concluded that rats fed corn genetically modified for herbicide resistance with or without Monsanto’s Roundup herbicide developed tumours, contradicting the conclusions of

hundreds of studies that have consistently found no safety issues. Leading scientists from around the world quickly identified more than a dozen serious problems with the study, including the use of tumour-prone rodents, the small sample size, and the selective presentation of data.

The European Food Safety Authority, traditionally no friend to the biotech industry, severely criticized the study, concluding that it was “of insufficient scientific quality to be considered as valid for risk assessment.” In a rare joint statement, even the six leading French academies issued an unequivocal condemnation describing the study as a “scientific non-event...that does not enable any reliable conclusion to be drawn.” Then the French food safety authority ANSES concluded that the study was fundamentally flawed, as did the German, Brazilian, American, New Zealand and Australian authorities. Health Canada and the Canadian Food Inspection Agency reviewed Seralini’s research and concluded that it had “significant shortcomings in the study design, implementation and reporting.”

I’m just an old lawyer with my own biases and not able to fully judge the science, but such unanimity of science criticism is rare. Moreover, Seralini’s tightly orchestrated media offensive that included the simultaneous release of a book and film about his work, combined with his failure to release his basic data for peer review, clearly suggests that he had an ulterior agenda beyond the search for the truth.

Predictably, Canadian media were quick to uncritically report the Seralini results. Dr. Oz featured the rat study on his popular television show. Organic true believers and other anti-GM activists gleefully piled on. The facts did not get in the way of their convictions. Biotech crops have undergone more safety and environmental testing than



any crop varieties in history. They have been proven as safe as the scientific method permits, by every valid method known to science and medicine. There is not a single solitary confirmed case of human or animal disease. After more than a trillion meals containing biotech-derived ingredients, there hasn’t been a single tummy ache, sore throat or rash. This is why Canadian farmers, recognizing their many environmental and economic benefits, confidently choose GM for 95 per cent of the canola they plant, 90 per cent of the corn, and 80 per cent of soybeans.

As long as Europeans are willing to pay the environmental and economic costs of their ideological aversion to GM crops, they will continue to maintain their moratorium on importing GM food (though, hypocritically, accepting our GM animal feed). The saddest part of this sorry tale was to read that because of Seralini, the Kenyan government, against the advice of its own scientists, announced a ban on GM imports, further exacerbating its shortage of corn. Millions of Africans will still go to bed hungry.

L'affaire Seralini is yet another example of what Nietzsche has taught us: “Convictions are more dangerous enemies to truth than lies.” ●

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