

Parallel “science” to serve political agendas*

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* Updated and translated from an article published by the *Association Française pour l'Information Scientifique*, <http://www.pseudo-sciences.org/spip.php?article1404>

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The views expressed in this article do not necessarily represent those of the above mentioned Institutions.

Anti-GMO activism leans on what can be called parallel “science”, which should not be confused with pseudoscience (such as astrology, for example) which is often simply a commercial scam. Parallel “science” is different: it serves a political project. It is used when traditional science is perceived as a threat by the upholders of that political project: when science-based facts can demonstrate its flaws. For example, scientific opinions from the European Food Safety Authority (EFSA) often rebut anti-GMO claims; a parallel “science” has been created to undermine the credibility of EFSA. Without fully eliminating traditional science, parallel “science” aims to spread confusion (« *scientists do not all agree that GMOs are safe* »). Unlike traditional science, parallel “science” carries simple messages, entirely supportive of a partisan view, and is all the more credible in the media as it benefits from the contribution of certain researchers. Parallel “science” is not limited to “green” lobbies, it is also used by some governments.

The parallel “science” of anti-GMO lobbies

The International Assessment of Agricultural Science and Technology for Development (IAASTD) is one example of an international organization hijacked, as far as GMO are concerned, by parallel “science”. This organization mirrored IPCC on climate change and aimed to determine how science and technology can contribute to the fight against hunger and poverty. Dominated by anti-GMO scientists, its discussions minimized the potential contribution of biotechnology (some countries raised reservations; industries associated in CropLife walked out of the process). Now, anti-GMO lobbyists exploit the “findings” of this biased report highlighting « *it is dismissive of GMO...* » (1).

To build up a scientific image, “Congresses” are also organized. Planet Diversity, World Congress on the future of food and agriculture, was held on May 12th-16th 2008 in Bonn. At a first glance, its web site evokes a scientific event. Closer scrutiny is needed to realize it is a one-sided operation.

“Studies” published by Criigen (2) have a similar strategy: seemingly scientific methods are used, a complaisant scientific journal (usually of low rank, but who, apart from specialists, knows the hierarchy of science journals?) is found to publish an article which does not match the (highly selective) validation criteria of scientific publications (3). The aim is not to convince other scientists, which is the goal of all traditional scientific publications, but to perform an operation of communication.

So, in December 2009, a new alarmist publication by Criigen claimed to have found signs of toxicity associated with 3 GM maize. It was not actually a new toxicology study, but a “reassessment” of data already examined by risk assessment agencies. Media success was guaranteed; these claims, like previous claims by Criigen, were then rebutted by other scientists and a number of governmental and European risk assessment agencies (3)... with far less media coverage.

The parallel “science” of some European governments

Some States are not even interested in scientific publications. Austria, which bans GMO cultivation (since its economic strategy is based on GMO-free products), has disseminated in November 2008 a non-peer reviewed “report” allegedly demonstrating a negative impact of a GM maize on mice reproduction. Anti-GMO lobbies immediately denounced a food hazard and asked for withdrawal of all GM plant varieties and all derived products. The conclusions of this “report” were first criticized by recognized experts of the performed toxicological test (including the inventor of this test, which was a bad sign to start with...). Then EFSA and its French counterpart (AFSSA) noted inconsistencies, methodological flaws and even data miscalculations! The maneuver of the Austrian government failed (4). The damage had been done: these claims have been widely disseminated by media.

The German government was also engaged in publishing a parallel “science” report (about risks for non-target insects) in order to justify its ban of maize MON810 in April 2009 (i.e. just before important elections). As we could demonstrate in a scientific publication (a genuine one, with a reviewing board composed of experts in this field) examining each of the German government’s arguments, « *that the suspension is based on an incomplete list of references, ignores the widely admitted case-by-case approach, and confuses potential hazard and proven risk in the scientific procedure of risk assessment* » (5). Furthermore, this government has been contradicted by its own Biosafety Committee (ZKBS) which denies deleterious environmental effects of MON810 and states that its conclusions are in agreement with our own conclusions (6).

In France, in an attempt to convince EFSA of the validity of its safeguard clause, the Ministry of Ecology commissioned in 2008 an anti-GMO scientist for a “report” (one more!). Other scientists who reviewed this report concluded that it was based on an incomplete and biased list of references (7). The opinion of EFSA was just as dismissive (8).

Then, the French government improved its strategy. The tone was given during Mr. Sarkozy's presidency of the EU (July-December 2008): « *reactivate the sensitive debate on environmental impacts of GMOs, on scientific expertise, on seed labeling and on the possibility for a Member-State to ban GMO cultivation on its own territory* » (9). Not all these points will be discussed here. However, it can be noted that the last point illustrates the lack of coherence of some Member-States (10). Regarding the second point (expertise), a French *décret* (N°2008-1273, 5th December 2008) defines the composition of a new risk-assessment Committee called the *Haut Conseil des Biotechnologies* (HCB): it comprises a scientific Committee and an “Economic, Ethical and Social” Committee (CEES). This name could suggest that CEES is composed of economists (there is one), philosophers and sociologists (there is a single one). However, CEES is mainly composed of various lobbyists, whose opinions diverge on ideological grounds, and who are in their majority opposed to GMOs. The man in the street may well have difficulty to discriminate a science-based opinion of *bona fide* scientific panels from the parallel “science” “*recommandations*” of CEES, which, in addition, is notoriously plagued by internal struggles (11).

A pessimistic opinion on the future of scientific risk assessment in the EU

Using “societal” Committees such as the CEES, governments will, therefore, be able to ban GMO cultivation as they wish with no scientific basis. They just need to give the voting majority to the anti-GMO lobby in these committees...

A number of European Member-States (as well as regional governments, down to town councils) do not consider green biotechnologies as a stake in the “green” economic growth - which they wish to come true on the other hand. On the contrary, they often use GMOs as an object of politicking negotiations. They are rarely reluctant to hoist parallel “science” to the rank of major interlocutor, for example in so-called “contradictory debates” (i.e. to let apolitical scientists with carefully weighted assessments, being weakened by media-trained activists, with loudly voiced simplistic and scare-mongering arguments). It should be noted that French Ministers of Ecology have joined in with anti-GMO radical opponents to criticize scientific risk assessment agencies such as EFSA (for an example, see ref.12) which find themselves under constant and ruthless political pressure (13).

Gone is the time when such agencies were implemented by governments and the EU to reassure consumers (after the “mad cow” crisis, for example). On the contrary, unscrupulous attempts to instrument risk assessment committees (for the circumstances that led Mr. Sarkozy's government to ban MON810 cultivation, see ref.14) illustrate a new exploitation of the Precautionary Principle and of risk-aversion of post-modern societies: risk analysis is no longer divided into risk-assessment by scientists and risk-management by public authorities, but is reduced to handling risk communication until the next electoral term...

References and footnotes

1. <http://www.stopgm.org.uk/whats-wrong-with-gm/iaastd-report.html>
2. Criigen, a self-proclaimed “independent” anti-GMO organization, has been founded by Mrs. Corinne Lepage, a successful lawyer specializing in environmental cases and a politician. It was primarily funded by the transnational retailer Carrefour which is selling its own brand of GMO-free products. Critical views (in French) on Criigen can be found on this web site:
<http://imposteurs.over-blog.com/article-dossier-special-tout-ou-presque-sur-le-criigen-63540523.html>
3. Scientific opinions rebutting Criigen publications can be accessed via:
<http://www.marcel-kuntz-ogm.fr/article--science-citoyenne--41024064.html>.
Criticisms concern various points of central importance, relevant to the use of statistics and toxicological interpretation, which shows that the reviewing process before publication of these articles was insufficient.
4. <http://www.efb-central.org/index.php/forums/viewthread/52/>
5. <http://www.springerlink.com/content/r6052757667ng364/fulltext.pdf>
6. http://www.bvl.bund.de/cln_027/nm_494194/EN/06_Genetic_Engineering/ZKBS/01_Allg_Stellungnahmen/05_plants/zkbs_plants_maize_MON810_2009.html_nnn=true
7. http://ddata.over-blog.com/xxxxyy/1/39/38/37/Metaanalyses_Berge-Ricroch-EnglishVersion.pdf
8. http://www.efsa.europa.eu/EFSA/efsa_locale-1178620753812_1211902156394.htm
9. Original text: « *relancer le débat sensible sur l'évaluation des impacts environnementaux des OGM, sur l'expertise scientifique, sur l'étiquetage des semences et sur la possibilité pour un État membre d'interdire la culture d'un OGM sur son territoire* ».
10. National ban of GMO cultivation would necessitate modifying European legislation, namely a 2001 Directive and follow-up regulations. It should be noted that the latter regulations had been requested by several countries, including France, in 1999 and were supposed to reassure European consumers (some sociologists claimed that consumer distrust of GMOs was due to their feeling that they were imposed on them, highlighting the necessity of labeling and traceability). However, lack of support and U-turns in policies of some Member-States caused this approach, supposedly based on the best scientific expertise and consumer information, to fail. A proposition for a national ban of GMO cultivation was proposed in 2010 by EU Commissioner John Dalli. A majority of Member-States rejected this proposal, including France in a new U-turn (who had asked for national ban in 2008; see ref. 9).
11. For a critical view on HCB:
<http://www.marcel-kuntz-ogm.fr/article-hcb-haut-conseil-sur-les-biotechnologies-41053787.html>
12. <http://www.marcel-kuntz-ogm.fr/article-jouanno-46522632.html>
13. For example, claims of conflicts of interest have been raised against EFSA. Although debatable and not involving scientists in charge of risk assessments, but administrative persons, these allegations have retained wide media attention. Illustrating the power of the “green” lobby, it should be noted that potential conflicts of interest of “ecologists” are never debated, such as for example Mrs. Corinne Lepage who co-owns with her husband a law practice specialized in environment lawsuits while being Vice-Chair of the Committee on the Environment, Public Health and Food Safety, as well as being involved in other environmental dossiers, at the European Parliament.

14. Cultivation of MON810 has been banned by the French government as a cynical political deal with the environmentalists before the National debate on the environment ("*Grenelle de l'environnement*", end of 2007). The content of the deal: GMOs will be sacrificed but nuclear energy will not come under attack during the debates.

<http://www.marcel-kuntz-ogm.fr/article-french-ban-45609075.html>

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