Hunger explained?

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Scientific research under the influence of private interests

At hungerexplained.org, we had mentioned this on several occasions, the French National Institute for Agronomic Research (<u>INRA</u>) confirms it on the occasion of a systematic study conducted by three of its researchers: private interests influence results of research conducted by our scientists!

In a study published in <u>PLoS ONE</u>, named "<u>Conflicts of Interest in GM Bt Crop Efficacy</u> and <u>Durability Studies</u>", Thomas Guillemaud, Eric Lombaert and Denis Bourguet analyse the case of conflict of interest for research articles dealing with a specific issue related to GMOs, namely a set of 672 research articles published between 1991 and 2015 on the efficacy and durability of certain GMOs that produce proteins of a bacteria, Bacillus thuringiensis (Bt). The authors note that: "despite the extraordinary financial, political and ideological stakes relating to genetically modified (GM) crops" they were only able to find two studies that dealt with issues of conflict of interest in this domain.



The articles analysed include studies on varieties of GMO maize and cotton produced by Monsanto, Syngenta, Dow AgroSciences and DuPont Pioneer. The cases of conflict of interest considered are professional affiliation (researchers are hired by the private company) or direct funding of the study by the concerned seed industry. Non financial links, intrinsic or intellectual, were not considered). They find that there are no less than 40% of cases of conflict of interest (of which only 7% are declared and 29% result from the funding of the study by the seed company), which is a result intermediary to those found in the two other studies on this subject that had respectively found 25.8 and 47% cases of conflict of interest.

In case of conflict of interest, the authors note that: "COIs were associated with a 49% higher frequency of outcomes favorable to the interests of the GM crop company", which corresponds roughly to results obtained by other studies of the same type on tobacco, biomedical, nuclear, sugar and pharmaceutical research.

The three authors also studied the mechanisms at work and found that, in case of conflict of interest, the study focuses mostly on the efficacy of GMOs and not on their durability. They also tried to find out whether the conflict of interest was a cause or a consequence of the results of the studies reviewed (in this second instance, authors that found a favorable result may be tempted to seek financial support from the relevant seed company), but could not conclude for lack of required information.

Conclusion for hungerexplained.org and its readers: when you read an article or a study, always check **who are the authors** and **who funds them** before taking their conclusions for granted!

We also take this opportunity to emphasise once more the importance of having a sufficiently large public budget for scientific research to ensure its independence.

(As indicated on our home page, "hungerexplained.org is an autonomous and entirely independent Website based on volunteer work".)

To know more:

 Guillemaud T, Lombaert E, Bourguet D (2016) <u>Conflicts of Interest in GM Bt Crop</u> <u>Efficacy and Durability Studies</u>, PLoS ONE 11(12): e0167777. doi:10.1371/ journal.pone.0167777

Earlier articles on hungerexplained.org related to the topic:

- Food, Environment and Health, 2014
- Development of research on a sustainable and accessible agricultural technology, 2013