

## GMOs and The Mark Lynas Conversion: Round Two Roundup

Mark Lynas's "conversion" from activist and strident opponent of genetically modified to GMO advocate is one of the most talked-about events in the environmentalism, green and science journalism communities. For GLP's initial response and a breakdown of Lynas's own speech, see [coverage here](#).

We're following up this week with more perspectives. Initially, the orthodox green and environmentalist movements refrained from commenting, but a few notable responses have been posted more recently.

University of Michigan ecologist John Vandermeer (blogging for the Institute for Food and Development Policy) and the Union of Concerned Scientists' Doug Gurian-Sherman attacked Lynas's understanding of the science.

Vandermeer dismissed Lynas's awakening to science as simplistic and potentially mercenary. "He has discovered high school biology," Vandermeer writes, "Now it's time to go to college." Presumably, no one with a college biology degree would agree with Lynas.

Most of Vandermeer's critiques are vague. He points to the human endocrine system and the potential for chemicals used in pesticides linked to crop GMOs to disrupt it, which he claims can cause birth defects and other serious health problems, although there is no evidence to date that any so-called endocrine disrupting chemical causes serious harm to humans at levels humans normally encounter them, including through the food chain. He does not point out any specific study linking any GM crop or chemical to harmful effects from endocrine disruption in humans.

Vandermeer argues that any small change in our complex genetic "ecosystem" could have terrible unforeseen consequences, although he provides no evidence to support that assertion. He claims that Bt crops engineered to produce natural Bt toxin as protection from insects have not reduced pesticide use and instead have created Bt-resistant insects and hurt poor farmers—an issue [we've addressed at the GLP](#), and found questionable.

He also disputes the idea that GM crops are necessary to feed the world, pointing to a study by an activist scientist linked to the Union of Concerned Scientists that found GM crops do not increase production. GLP's Jon Entine [analyzed that study](#) in his book *Crop Chemophobia: Will Precaution Kill the Green Revolution?* and found it out-of-step with more independent studies produced by the Department of Agriculture and other independent scientists.

Gurian-Sherman, similarly, categorized Lynas's pronouncements as "sophmoric" and covers most of the same bases as Vandermeer, but also takes time to call out what he contends is wide and "uncritical" coverage that Lynas has received from journalists. He challenges the American Association for the Advancement of Science and any other organization or person who supports the "mistaken" idea that science has reached a consensus about GM crops—but provides no scientific or critical refutations.

Lynas himself has responded to this UCS critique on his personal blog:

“Any scientists working for the UCS leave their credentials at the door. It is one of the most ideological of all the green groups, and the fact that the author of this piece takes issue with none other than the AAAS over the safety and efficacy of GMOs shows that it has no respect for scientific consensus in areas where real scientists conflict with its biases. The rest of the piece consists of personal attacks on me and a highly-skewed and selective scattering of references of the sort that any ‘climate denier’ would be proud of.”

In a second round of analysis, environmental journalist Keith Kloor examined the backlash to Lynas. Kloor [equates the GM debate to that over climate change](#), in which “plenty of smart, scientifically literate people don’t accept that climate change [is a problem]” because of cultural biases. Kloor cites [a 2011 study](#) which found, in essence, that the more scientifically literate a person is the more likely they were to be more dismissive of evidence against whichever viewpoint they were cultural predisposed to.

All of this is to support Kloor’s major critique of Lynas’s speech, which is its apparent simplicity. The cultural battle over GMOs will not be settled by the simple discovery of science. Furthermore, the entire framing of “pro- vs anti-GMO” is an unhelpful – it’s forces the discussion into ideological territory.

Calestous Juma, Professor of the Practice of International Development at Harvard Kennedy School, has used Lynas’s speech as a springboard to examine the “persecution” of biotechnology. He [indicts overly restrictive legislation that has hobbled biotechnology](#), calling for a reexamination of the world’s laws and regulation in light of what he sees as a growing consensus on the safety of biotechnology.

Juma singles out the United Nations’ [Convention on Biological Diversity](#) and its support of the “anti-science” [Cartagena Protocol on Biosafety](#). This treaty allows governments to ban biotechnology products without any evidence of harm. “Just political systems,” argues Juma, “should not have punitive laws that persecute new technologies without acting on the basis of evidence of harm.”

The Genetic Literacy Project will continue to watch as the ripples from Lynas’s speech spread. In the meantime, Juma offers this tempered evaluation of the current state of GM technology: it’s not risk free, but this “is a case where the risks were initially overstated and the benefits downplayed.”

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