



Dr Stuart Wainwright
Head of GM Policy and Regulation
DEFRA
By email: stuart.wainwright@defra.gov.uk

02 September 2010

Dear Dr Wainwright

Re: Commission proposals on the freedom for member states to decide on the cultivation of GM crops.

Thank you for your letter of 9th August. GeneWatch UK has the following comments to make on the Commission's proposals.

Failure to tackle existing problems with authorisation processes

The Commission's proposal is based on the assumption that existing authorisation processes for GM crops and foods are sufficient to prevent harm to health and the environment. However, there is now considerable evidence of the emergence of herbicide-tolerant weeds as a result of widespread planting of herbicide-tolerant GM crops in North and South America^{1,2,3} and the emergence of pesticide-resistance and pest outbreaks in areas planted with pest-resistant GM crops.^{4,5} Existing health assessments are also inadequate to deal with ongoing doubts about safety data and the increasing use of stacked traits and introduction of new traits such as nutritionally-altered crops or crops designed to produce industrial chemicals or pharmaceuticals.^{6,7,8,9}

These issues point to the need for a more rigorous assessment process for approvals for both marketing and cultivation of GM crops in the EU. Unless and until such issues have been resolved, devolving post-authorisation decision-making will only create confusion and perpetuate existing disagreements between member states.

A further serious omission from the current regulatory regime is the lack of labelling for meat, milk and dairy products fed GM animal feed. Such a measure would be widely supported by the public and would help maintain consumer choice.¹⁰

Liability and co-existence

The decision by an individual farmer to plant a GM crop impacts on neighbouring farms and the wider environment both within and across national borders. Long-term environmental and economic damage (for example, due to the spread of herbicide-tolerant weeds and resistant pests) and loss of markets (due to contamination with GM restricting a farmer's access to GM-free and organic markets) will arise as a result. If the costs are borne by non-GM farmers this is likely to drive out GM-free crops from a given country, as over time, only GM markets will remain accessible to farmers due to contamination.^{11,12} Neighbouring countries and ultimately the whole of the EU will ultimately be affected, due to seed mixing and other processes by which GM crops will spread. This raises important issues about how

60 Lightwood Road ♦ Buxton ♦ Derbyshire ♦ SK17 7BB ♦ UK
Phone: 01298 24300 ♦ E-mail: mail@genewatch.org
Website: www.genewatch.org

GeneWatch UK is a company limited by guarantee. Registered in England (No. 3556885).

the right of consumers to access and farmers to grow GM-free supplies within a given country can be maintained (including the right of farmers to save seed), and how cross-border contamination could be prevented and/or redressed. Without a strict liability regime, the Commission's proposals are unworkable, because there is no incentive to prevent contamination. Substantial costs to non-GM farmers are likely to arise: for example, the lost market for organic oil seed rape (canola), due to the planting of GM oil seed rape in Canada has been estimated as at least C\$100,000 – C\$200,000; Canada also lost access to the EU honey market, at an estimated cost of about C\$5.3 million over a decade;¹³ and its entire C\$320-million flax seed industry was threatened when it was found to be contaminated with an experimental GM variety.¹⁴ Additional difficulties will occur with cross-border contamination in the UK given the role of the devolved administrations.

Given the Government's commitment to introducing a liability regime for GM crops within the UK, GeneWatch recommends that it requires a similar approach across the EU. British farmers could otherwise lose access to lucrative GM-free markets as a result of decisions taken by national governments elsewhere in the EU.

Yours sincerely,

¹ Owen, MDK, & Zelaya, IA. (2005) Herbicide-resistant crops and weed resistance to herbicides. *Pest Management Science* 61:301–311.

² Binimelis R, Pengue W, Monterroso I (2009) 'Transgenic treadmill': Responses to the emergence and spread of glyphosate-resistant johnsongrass in Argentina, *Geoforum*, **40** (4), 623-633.

³ US farmers cope with RoundUp resistant weeds. *New York Times*, 3rd May 2010.

⁴ Tabashnik BE, Gassman AJ, Crowder DW, Carrière Y (2008) Insect resistance to Bt crops: evidence versus theory. *Nature Biotechnology*, **26**, 199 – 202.

⁵ Wang S, Just DR & Pinstrip-Andersen P (2006) Tarnishing Silver bullets: Bt technology adoption, bounded rationality and the outbreak of secondary pest infestations in China. Paper presented at the American Agricultural Economics Association Meeting, Long Beach CA, July 22-26, 2006. http://www.grain.org/research_files/SWang_tarnished.pdf

⁶ Jiao Z, Si X-X, Li G-K, Zhang Z-M, Xu X-P (2010) Unintended Compositional Changes in Transgenic Rice Seeds (*Oryza sativa* L.) studied by spectral and chromatographic analysis coupled with chemometrics Methods. *Journal of Agricultural and Food Chemistry*, **58**, 1746–1754.

⁷ Spök A (2007) Molecular farming on the rise – GMO regulators still walking a tightrope *Trends in Biotechnology*, **25**(2), 74-82.

⁸ Anon (2004) Drugs in crops: The unpalatable truth. [Editorial]. *Nature Biotechnology*, **22**(2), 133.

⁹ Lund P (2008) The science: We have answers but not enough. In: GM foods: the wrong debate? *Food Ethics*, **3**(3), 2-4.

¹⁰ GM Freeze (2010). Two-thirds want GM to be kept off their plates - new opinion poll. Press Release. 15th June 2010. <http://www.gmfreeze.org/page.asp?id=438&iType=1079>

¹¹ Belcher K, Nolan J, Phillips PWB (2005) Genetically modified crops and agricultural landscapes: spatial patterns of contamination. *Ecological Economics*, **53**(3), 387-401.

¹² Munro A (2008) The spatial impact of genetically modified crops. *Ecological Economics*, **67**(4), 658-666.

¹³ Smyth S, Kachatourians GG, Phillips PWB(2002) Liabilities and economics of transgenic crops. *Nature Biotechnology*, **20**, 537-541.

¹⁴ Triffid seed threatens flax industry. *CBC News*. 20th January 2010.

<http://www.cbc.ca/canada/manitoba/story/2010/01/20/mb-flax-triffid-manitoba.html>