



September 2009

GeneWatch UK response to the consultation of the Welsh Assembly Government on Proposals for Managing the Coexistence of GM, Conventional and Organic Crops in Wales

GeneWatch UK is a not-for-profit group that monitors developments in genetic technologies from a public interest, environmental protection and animal welfare perspective. GeneWatch believes people should have a voice in whether or how these technologies are used and campaigns for safeguards for people, animals and the environment. We work on all aspects of genetic technologies - from GM crops and foods to genetic testing of humans. Most of GeneWatch's funding comes from charitable trusts and foundations.

Overview

GeneWatch is fully supportive of the strong precautionary approach the Welsh Assembly Government is taking to GM crops. We recognise the limited power and input the Assembly Government has over decisions on the commercialisation of any specific GM crop within the European Union.

GeneWatch broadly welcomes the proposals for statutory measures for the co-existence of genetically modified, conventional and organic crops in Wales. Whilst the burden of most of the measures suggested here will be on the grower of the GM crop, it is difficult to see the incentive for that grower to implement them voluntarily. Statutory legislation will therefore be necessary.

Without wishing to detract from our supportive position, this response limits itself, in the main, to areas of concern where we believe that the Assembly Government is misinterpreting regulations or scientific data.

Our key concerns are;

These proposals assume the only reason for keeping GM, conventional and organic crops separate is economic. Despite being asserted by the EU Commission on a number of occasions this is not correct. The EU regulations require the full monitoring and traceability of not only GM foods and feeds but all GMOs. This monitoring does enable consumer labelling and choice, but it also

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allows for post market monitoring and for the withdrawal of a GMO should negative environmental or health impacts occur.

Because these proposals only consider the economic justification for co-existence they exclude non-commercial growers and bee-keepers (honey). Both parties maybe affected by long term impacts of GM crops and should be included in within these proposals. Additionally, bee keepers maybe affected economically by GM contamination.

Despite stating that these measures are to "minimise the unwanted mixing of GM and non-GM material" the proposals follow two misconceptions;

- That it would be legal to plan for contamination up to the 0.9% level.
- That is it is possible to carry out such calculations by accurately apportioning contamination at these levels.

GeneWatch is concerned that developing statutory measures from this basis will not give the Welsh Assembly Government the precautionary approach and control of GM crops that it desires.

Specific Comments

As stated above, GeneWatch is in broad agreement with the proposals put forward by the Welsh Assembly Government. This response does not attempt to answer each question in the consultation document. Instead, it covers the main areas where we feel we have a contribution to make.

The basis for co-existence is not purely economic, instead it is an important part of the precautionary approach to GM crop introduction.

In the consultation document the WAG states;

....Coexistence is therefore concerned with the measures that will be needed to minimise unwanted mixing of GM and non-GM material, the economic impact associated with any admixture and consequently any liability implications where economic loss or damage occurs.

GeneWatch is concerned that this justification misinterprets EU legislation and misjudges the motivations of both farmers and consumers who wish to avoid GM products. EU regulations require that careful labelling and full traceability is maintained on all commercialised GMOs. For example, the preamble of EU Directive 2001/18 states;

(42) It is necessary to ensure traceability at all stages of the placing on the market of GMOs as or in products authorised under part C of this Directive.

(43) It is necessary to introduce into this Directive an obligation to implement a monitoring plan in order to trace and identify any direct or indirect, immediate, delayed or unforeseen effects on human health or the environment of GMOs as or in products after they have been placed on the market.

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(44) Member States should be able, in accordance with the Treaty, to take further measures for monitoring and inspection, for example by official services, of the GMOs as or in products placed on the market.

(45) Means should be sought for providing possibilities for facilitating the control of GMOs or their retrieval in the event of severe risk.

In addition to its requirement for full traceability and labelling of GM food and feed products, the preamble to Regulation 1830/2003 states;

(3) Traceability requirements for GMOs should facilitate both the withdrawal of products where unforeseen adverse effects on human health, animal health or the environment, including ecosystems, are established, and the targeting of monitoring to examine potential effects on, in particular, the environment. Traceability should also facilitate the implementation of risk management measures in accordance with the precautionary principle.

Note that the traceability referred to in both sets of Regulations covers all GMOs placed on the market (part C consent) and is not limited to GM food/feed products.

The need for traceability, labelling and monitoring is not just founded in the right of the individual to choose to eat GM or not. It also acts as a safeguard to enable removal of GMOs from the environment if harm should occur. Beyond the specific EU regulations GeneWatch believes that many farmers avoid growing GM crops are doing so because they do not wish to be exposed to the uncertain risks associated with them – rather than simply making an economic choice

Effective co-existence measures are crucial in allowing the full traceability, labelling, monitoring and possible withdrawal from the environment of GMOs. As such, coexistence measures are not driven purely by economics but act as a safeguard for human and animal health and the environment. **GeneWatch believes the precautionary stance of the WAG is entirely justified and supported by EU law. The WAG should not reduce coexistence measures to a purely economic exercise**

Despite stating that co-existence measures should minimise GM contamination the Welsh Assembly Government appears to be planning for some contamination.

Because these proposals limit the necessity of co-existence measures to economic ones, they have become overly focused on the 0.9% threshold for labelling. Yet labelling is only a tool of traceability, monitoring and consumer choice. The focus of these proposals should be the measures necessary to prevent contamination.

Further, GeneWatch is concerned that these proposals assume 0.9% GM contamination is allowed by EU law when it isn't. We recognise that the Welsh Assembly Government is attempting to work within the recommendations of the EU Commission, but the Commission view is not necessarily correct. We refer the Assembly Government to the legal opinion prepared by Paul Lasok QC and Rebecca Haynes in January 2005 (submitted as a separate document alongside this

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response). GeneWatch urges the Welsh Assembly Government to take note of this opinion and make sure it is not 'planning for' contamination.

On a broader point GeneWatch is concerned that by planning for and allowing limited contamination from the outset, overtime the risk of contamination above 0.9% will greatly increase. If GM crops with a wider variety of traits are introduced in future years low levels of contamination will give rise to greater risk of inadvertent gene stacking. The multiple herbicide tolerant OSR volunteers in Canada give a rapid example of the problems that may arise with other crops albeit over a longer time period¹.

Contamination sources and the figures assigned to these

The consultation document asks if the correct sources of contamination have been identified – we are in broad agreement that these are some of the key sources. Missing from this list however is human error. GeneWatch has developed and maintains the GM Contamination Register. Our experience from this leads us to believe most contamination will happen as a result of human error. For example, machinery not being cleaned properly. Even with carefully produced and stored paperwork it can be difficult to identify precisely where, when and how contamination occurred.

Tables 11 and 12 in the consultation document provide figures for potential sources of contamination. These were sourced from a 2001 report by the EU's Scientific Committee on Plants, which in turn gained the figures from a project of the European Commission's JRC and published in 2002². As with much of the literature on this subject they are produced without error margins and treated as fact. If such figures are used it should be with full awareness that;

1. These figures are an average and specific levels of contamination from each source will be highly variable. For example,
 - specific weather conditions may move GM pollen to a non-GM field at a level that 'ordinary weather' conditions would not.
 - normal cleaning practice may ordinarily reduce GM presence to the limit of detection, but human error is likely at times to leave significantly more GM residue behind.
2. The figures are based on simulation models and do not include error margins. It is

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www.gmcontaminationregister.org/index.php?content=re_detail&gw_id=34®=cou.3&inc=0&con=0&cof=0&year=0&handle2_page=

² Anne-Katrin Bock, Karine Lheureux, Monique Libeau-Dulos, Hans Nilsagård, Emilio Rodriguez-Cerezo (2002) Scenarios for co-existence of genetically modified, conventional and organic crops in European agriculture. JRC Report EUR 20394EN

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not clear that adding together such small values of contamination in anyway reflects real life situations.

Page 49 of the consultation document correctly points out that differing interpretations of the published data on this subject are available and that there is a lack of real evidence for how contamination may occur and at what rates in Wales. It is therefore correct to take a precautionary approach. The consultation document then says that it has followed the Danish working group papers, but does not give details of these so it is impossible for GeneWatch to comment on how the measures have been arrived at.

The proposed split between statutory measures and a voluntary code of practice?

GeneWatch welcomes the use of statutory measures in the Welsh coexistence regime. It is clear from our work on the GM Contamination Register that normal agricultural practice will not keep GM and non-GM crops separate. GeneWatch does not believe a voluntary approach to coexistence is practical as there is little or no incentive for the GM farmer to implement the measures fully and diligently.

The removal of volunteers and beet bolters may be of direct benefit to the GM farmer and part of general good agricultural practice. But, not undertaking these tasks diligently is likely to; (i) increase chances of contamination and (ii) increase chances of crosspollination of wild species. The consultation document does not give a reason for making these specific measure voluntary. GeneWatch believes all the measures proposed in the consultation should be statutory.

The precautionary approach to GM oilseed rape cultivation in Wales? (3.5.1)

GeneWatch believes that it is unlikely that GM oilseed rape will be grown commercially in the EU for the foreseeable future and we therefore accept the Assembly Government's position on this. However, the Assembly Government should not be complacent in this matter. If GM OSR were to be grown in Europe it is unlikely that co-existence would be possible. There is a cumulating body of evidence to now support this and GeneWatch would be happy to supply details if requested.

Comments on measures for specific crops

Maize:

Although commercial maize seed production is practiced in Wales, farmers maybe using farm saved seed for the production of their own forage maize. Year on year accumulation of GM contamination could be significant for these farmers and yet they appear to be excluded from these measures.

Sharing of machinery and human error is the most likely source of contamination for maize. We are unclear how, in practice, thorough cleaning of machinery will be ensured and who will bear the cost of this.

Beet and Potatoes

GeneWatch is not convinced that the cultivation intervals between GM and non-GM varieties will necessarily remove the risk of contamination. Much will depend on the treatment of the field in the intervening years. For example, what other crops are grown, whether no-tillage systems are in place or deep ploughing occurs³.

GM Free Zones in Wales.

GeneWatch believes that the establishment of a GM-free zone covering the whole of Wales would enable the Welsh Assembly Government to fulfil its policy on GM crops and promote agriculture in keeping with the Welsh landscape and culture.

GM crops and Environmentally Designated Areas?

GeneWatch supports the exclusion of GM crops from Environmentally designated areas. There is a duty of care to protect these areas for the long term. There are still many unknown long term consequences of developing and using GM crops. Such a policy is in line with the precautionary approach to GM crops.

³ M. Sester, C. Dürr, H. Darmency and N. Colbach (2006) Evolution of weed beet (*Beta vulgaris* L.) seed bank: Quantification of seed survival, dormancy, germination and pre-emergence growth European Journal of Agronomy 24(1) 19-25