

The regulation of genetic technologies

CONFOR RESPONSE TO THE DEFRA CONSULTATION

Introduction

About Confor

Confor (www.confor.org.uk) is the not-for-profit organisation for the UK's sustainable forestry and wood-using businesses. It has 1,500 member companies, representing the whole forestry and wood supply chain.

About this consultation

Defra have called for evidence on the regulation of gene edited (GE) organisms possessing genetic changes which could have been introduced by traditional breeding; and on the wider regulatory framework governing genetically modified organisms (GMOs). GE could be important for breeding improved and resilient trees, and potentially in the control of grey squirrel.

Consultation response

Currently, organisms developed using genetic technologies such as GE are regulated as genetically modified organisms (GMOs) even if their genetic change(s) could have been produced through traditional breeding. Do you agree with this?

No – they should not continue to be regulated as a GMO. Tree breeding is a slow process as trees can take several years to reach seed-bearing maturity. GE offers the possibility to reduce the timescale significantly, enabling tree breeding to keep pace with accelerated environmental challenges, for example Ash trees tolerant to *Chalara* dieback. There is a great difference between an organism which has been modified in ways which could not occur in nature, and one whose DNA has been edited in ways which could arise through natural mutation or controlled crossing. The definition, legislation, and associated public concern, should be appropriate to the risks and ethical concerns in each case.

Do organisms produced by GE or other genetic technologies pose a similar, lesser or greater risk of harm to human health or the environment compared with their traditionally bred counterparts as a result of how they were produced?

Similar. Organisms that have been modified through the introduction of novel DNA may pose a greater threat in that genes could escape to the wider environment; but we are not aware of evidence that suggests the GE process in itself results in a greater risk than traditional cross-breeding. The aim of improving organisms is usually to benefit human health or the environment, for example to increase yield, taking pressure off other land; or to increase disease resistance, reducing the need for chemicals.

Are there any non-safety issues to consider (e.g. impacts on trade, consumer choice, intellectual property, regulatory, animal welfare or others), if organisms produced by GE or other genetic technologies, which could have been produced naturally or through traditional breeding methods, were not regulated as GMOs?

Yes. The same non-safety issues that apply to GMOs should be applied to GE organisms.

What criteria should be used to determine whether an organism produced by gene editing or another genetic technology, could have been produced by traditional breeding or not?

This should be determined by expert stakeholders. There is likely to be a spectrum of organisms, from those which could clearly have been produced by traditional breeding to those which clearly could not, with a grey area in between. Non-GMO organisms which have been modified by human intervention, whether traditional breeding, GE technology, or simply translocation from their original range, should be subject to the same process of risk assessment and appropriate regulation, for example for invasiveness or interbreeding with wild stock.

There are a number of existing, non-GM regulations that control the use of organisms and/or products derived from them. The GMO legislation applies additional controls when the organism or product has been developed using particular technologies. Do you think existing, non-GM legislation is sufficient to deal with all organisms irrespective of the way that they were produced or is additional legislation needed? Please indicate in 11 of 14 the table whether, yes, the existing non-GMO legislation is sufficient, or no, existing non-GMO legislation is insufficient and additional governance measures (regulatory or non-regulatory) are needed

No answer.

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