Dear Secretary of State

The British Society of Plant Breeders (BSPB) is the UK trade association representing private sector crop breeding in the UK. The society is writing to you to add its full support to a regulatory proposal, led by the APPG on Science and Technology in Agriculture, to secure an enabling amendment to the UK Agriculture Bill, paving the way to align the UK GMO definition with the Cartagena Protocol on Biosafety 2000, to which the UK is a signatory.

The Cartagena Protocol provides the international definition for genetically modified organisms (GMO) used by most agricultural food producing countries in the world to regulate GMO. To be clear, the enabling amendment would ensure that genetic variation in final plant products would not be covered under the scope of existing GMO regulations if they could also have been obtained through conventional methods or result from spontaneous processes in nature.

It would therefore coincide with the UK Government’s stated view that genome edited products whose DNA changes could have occurred naturally or through traditional breeding methods should not be subject to GMO regulation.

You will be aware of the July 2018 ECJ ruling interpreting EU regulatory definitions of GMO to apply to these techniques purely because they are new and even suggesting that EU member states can regulate plants produced using any mutagenesis methods under GMO rules. This regulation would be without any scientific evidence base that such plants are intrinsically any different to those arising from mutations that occur every day in nature. It effectively ends the use of genome editing methods in crop breeding in Europe because the costs of compliance with GMO regulation are too high to justify a business case for field crop improvement in commodity markets for any company other than possibly the very large multinational players who have sufficient economies of scale.

Why is this a problem? Plant breeding has delivered significant productivity and resource use efficiency gains over history. In the interests of food security and the need for more sustainable crop production plant breeding gains must be accelerated and new targets attained. The breeding technology of targeted mutagenesis (genome editing) using techniques such as CRISPR has potential to increase the speed and focus of plant breeding development. Characteristics that are being studied pre-commercially include productivity, stress tolerance, pathogen resistance, harvest security, quality, reduction of pesticide use and many more. To follow the EU and dismiss these opportunities to respond to climate change and mitigate the impact of agriculture is ethically questionable to say the least.
Commercial plant breeders occupy a pivotal role in translating science to the food system and as such inherently have a significant public good purpose aligned with their business activity. To allow plant breeders to provide a significant part of the solution to secure sustainable agriculture, a circular bio-economy and optimal response to climate change we will need all available technical tools to be at our disposal.

Would such an amendment be a reduction of standards? The Cartagena Protocol definition identifies all organisms where heritable foreign DNA is in the resulting plant and GMO regulations are designed to thoroughly assess risk to the environment and establish stewardship measures in cases where marketing is authorised. We do not suggest changing this, transgenic GMO regulation is well established worldwide.

Mutation breeding on the other hand mimics the mutations that occur in nature, but the mutations are targeted to known functional genes by the breeder. All new plant varieties regardless of breeding methods are subject to rigorous market approval under the Seeds Marketing Regulations. This product-based regulatory framework requires strict standards of identity (DUS), traceability and labelling (Certification) and only approves for marketing varieties offering improved performance compared to varieties already on the market (VCU).

This system provides a robust measure for suitability for marketing and the ‘clear improvement’ criterion for market authorisation is an absolute driver for continuous innovation. Whilst more can be done to focus performance improvement towards the public goods of resource use efficiency and reducing emissions, many of the performance measures used today such as productivity and disease resistance already contribute directly towards improving sustainability. We see no reason to reduce the high standards that are already delivered by the Seeds Marketing Regulations.

If the Government does not adopt a regulatory environment enabling proportionate regulation of genome editing through this proven, outcomes-based system, the UK will in our opinion close itself off from significant potential as a science and research hub for global markets and climate change response and as an attractive country for private sector breeding investment. The UK must diverge from the EU definitions to have a credible position on taking all reasonable steps to minimise the impact of agriculture on the environment and this amendment is a golden opportunity to do so at an appropriate time whilst the technology is young and accessible to UK businesses.
We strongly urge you to support this enabling amendment as the Agriculture Bill enters the House of Lords.

If you need any further information or independent sources of supporting information, please do not hesitate to contact us.

Yours sincerely

Andrew Newby
Chairman
BSPB

BSPB Board Members

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