

PARLIAMENTARY DEBATES

HOUSE OF COMMONS
OFFICIAL REPORT

Second Delegated Legislation Committee

DRAFT GENETIC TECHNOLOGY (PRECISION
BREEDING) REGULATIONS 2025

Monday 31 March 2025

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The Committee consisted of the following Members:

Chair: WERA HOBHOUSE

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| † Bailey, Mr Calvin (<i>Leyton and Wanstead</i>) (Lab) | † Kyrke-Smith, Laura (<i>Aylesbury</i>) (Lab) |
| † Barker, Paula (<i>Liverpool Wavertree</i>) (Lab) | † Lamb, Peter (<i>Crawley</i>) (Lab) |
| Butler, Dawn (<i>Brent East</i>) (Lab) | † Murrison, Dr Andrew (<i>South West Wiltshire</i>) (Con) |
| † Cooper, Andrew (<i>Mid Cheshire</i>) (Lab) | † Smith, Jeff (<i>Lord Commissioner of His Majesty's Treasury</i>) |
| † Evans, Chris (<i>Caerphilly</i>) (Lab/Co-op) | † Stephenson, Blake (<i>Mid Bedfordshire</i>) (Con) |
| Farron, Tim (<i>Westmorland and Lonsdale</i>) (LD) | † Vince, Chris (<i>Harlow</i>) (Lab/Co-op) |
| † Fox, Sir Ashley (<i>Bridgwater</i>) (Con) | † Young, Claire (<i>Thornbury and Yate</i>) (LD) |
| † Hardy, Emma (<i>Parliamentary Under-Secretary of State for Environment, Food and Rural Affairs</i>) | Beth Goodwin, <i>Committee Clerk</i> |
| † Hudson, Dr Neil (<i>Epping Forest</i>) (Con) | † attended the Committee |
| † Kane, Chris (<i>Stirling and Strathallan</i>) (Lab) | |

Second Delegated Legislation Committee

Monday 31 March 2025

[WERA HOBHOUSE *in the Chair*]

Draft Genetic Technology (Precision Breeding) Regulations 2025

6.43 pm

The Parliamentary Under-Secretary of State for Environment, Food and Rural Affairs (Emma Hardy): I beg to move,

That the Committee has considered the draft Genetic Technology (Precision Breeding) Regulations 2025.

It is a pleasure to serve under your chairmanship, Ms Hobhouse.

The draft regulations, which were laid before the House on 25 February, implement the Genetic Technology (Precision Breeding) Act 2023. For precision-bred plants in England, they provide the practical and technical details to implement a new, science-based and proportionate regulatory system for precision-bred plants as set out in the Act.

The territorial application of the draft regulations is England only, and they cover the environmental release and marketing of precision-bred plants, as well as their use in food and feed in England. That includes a process administered by the Department for Environment, Food and Rural Affairs to confirm that plants are precision-bred and not genetically modified before they can be marketed. Also established is a food and feed marketing authorisation process administered by the Food Standards Agency, which allows products to be placed safely on the market. The regulations also outline details for public registers and enforcement. Today, by passing this secondary legislation, we have the opportunity to transform and modernise our food system to make it fit for the future.

The 21st-century agricultural system faces significant challenges. It must provide enough food to meet the growing demand while becoming more sustainable. It must also survive the threat to productivity posed by climate change. Food security is national security. To help us achieve that, we need innovation in fundamental sectors such as plant breeding. Precision breeding would be transformative for the sector, enabling innovative products to be commercialised in years instead of decades—and we do not have decades.

Through precision breeding, crops can be developed that are more resilient to climate change, resistant to pests and diseases and beneficial to the environment. In turn, that will increase food production, reduce the need for pesticides and fertilisers, lower emissions and reduce costs for farmers. However, to capture those benefits, we need a regulatory framework with a sound science base that encourages innovation. The scientific consensus across key advisory committees and institutes is that precision-bred organisms pose no greater risk to human health or the environment than traditionally bred organisms. The existing legislation carries a significant burden, adding a stifling 74% to the cost of marketing

for businesses. That deters investment and limits the companies that can bring products to market and the traits that we can benefit from.

Countries that have kept pace with the science and introduced regulatory reform have seen significant investment. The Americas have attracted over 80% of venture capital investment in the sector, while only 5% comes to Europe. It is paramount that we act now to change that. Through these regulations, we are establishing an approach that is more proportionate to the level of risk. Based on the scientific advice, we are treating precision-bred organisms more like their traditionally bred counterparts. By capitalising on the UK's existing strengths and reputation for scientific excellence, we have the potential to be a leader in this growing sector internationally. The new regulatory framework will place us at the forefront across Europe and allow us to attract innovators to start and grow their businesses here.

We have worked with industry from the outset. Industry are clear on the opportunities that precision breeding presents and confident in the policy direction we are taking. Exciting research is already taking place in anticipation of the new regulatory framework, with the potential for some products to be on the market in the next few years. Tropic, an SME based in Norwich, has developed a non-browning banana that can reduce food waste and improve farm gate revenues by as much as 50%. Another product close to market is Simplot's precision-bred strawberry, which would make one of Britain's favourite fruits available to purchase beyond the summer months—lovely.

We recognise that concerns have been raised in the Secondary Legislation Scrutiny Committee's report, most notably around traceability and labelling, the impact on the organic sector, the UK internal market and trade with the EU. We agree that those issues are important and our work to understand and mitigate implications is ongoing. For example, we are continuing our engagement with devolved Governments and with the relevant sectors, such as the organic industry. We are also exploring ways to further improve transparency and the provision of information about precision-bred plant varieties.

We believe that we have struck the right balance, with an enabling regulatory framework that is proportionate and evidence-based while providing measures for transparency and regulatory oversight. This Government are pro-science and pro-innovation, and we are confident that the provisions in this secondary legislation will translate the benefits of precision breeding into reality.

6.48 pm

Dr Neil Hudson (Epping Forest) (Con): It is a great privilege to serve under your chairmanship, Ms Hobhouse. I thank the Minister for bringing forward this instrument. This SI enacts policy from the groundbreaking Genetic Technology (Precision Breeding) Act brought in by the Conservative Government in 2023. While this instrument specifically introduces measures on precision-bred plants, as it relates to that Act I must declare a strong professional interest as a veterinary surgeon.

I would also like to make it clear that when debating this issue, we are discussing gene editing or precision breeding rather than genetic modification. It is incredibly important that we make that distinction because the methods are very different. Gene editing is different

from genetic modification, in which genetic material from an exogenous, or unrelated, species can be introduced. That does not happen in gene editing, a process in which any changes must be equivalent to those that could have been made using traditional plant or animal breeding methods. Gene editing therefore speeds up the natural process. Does the Minister agree that that distinction is acutely important and we must articulate it, particularly as there are concerns among the public about the use of genetic modification? This enabling legislation, further to the groundbreaking 2023 Act, is a fantastic innovation that we need to welcome and embrace. If we clearly articulate it to the public, they will come on board with us.

To return to the instrument that we are considering today, I very much welcome the Government's decision to follow the Conservatives and lay these regulations. As I said earlier, this instrument implements the Genetic Technology (Precision Breeding) Act 2023, introduced by the last Government. Precision breeding has incredible potential; for example, it could lead to increased resilience to pests, diseases and the adverse impacts of climate change. As this instrument relates to plants, it will help to support food production by introducing desirable traits in plants and crops that could otherwise take many years to develop.

The measure could help to improve the nutritional content of plants, or make them more resistant to the threats that they face, including disease and extreme weather events. All that will be a vital tool in the fight for food security in the UK and around the world, with climate-resilient crops meaning a reliable supply of the food on which those living in certain climates depend. It also has environmental benefits, as it reduces the need for pesticides and fertilisers. In other words, this can be a win-win for producers, consumers and the precious environment alike.

Clearly, the most significant component of the regulatory framework of precision breeding must be safety. I hope the Minister will take a moment to reassure us that DEFRA and the Food Standards Agency will regularly review risk, and ensure that all precision-bred plants and crops are safe to be marketed for use in food and as a feedstuff. Does the Minister agree that precision-bred products should not be authorised if they are in any way a risk to animal or human health?

I am pleased to say that His Majesty's most loyal Opposition are very happy to support these regulations, although I hope that the Government will work at pace to deliver on the other potential benefits for which the previous Government's legislation set the foundation, specifically gene editing for precision breeding of animals and birds, which once again has huge potential to combat diseases.

In the light of the extremely concerning developments in Europe in recent weeks, including foot and mouth disease in Germany, Hungary and now Slovakia; African swine fever advancing up the continent of Europe; and diseases already present in the UK, such as avian influenza and bluetongue virus, will the Minister give the sector a timeline for the introduction of further secondary legislation on animal and bird breeding?

As an example, much work is being done to develop resistance to avian influenza in birds, and to develop pigs that are resistant to porcine reproduction and respiratory syndrome, or PRRS. Facilitating the roll-out

of such innovative research and technology will be of huge assistance with that mission. It will also help to reduce the need for certain medicines and to combat antimicrobial resistance, as well as indirectly, and also very directly, helping human public health. I note that the territorial application for this SI is England only. What discussions has the Minister had with the devolved Administrations about ensuring that this technology can benefit all the United Kingdom?

The Minister will be familiar with my repeated calls for action on the Animal and Plant Health Agency in Weybridge. Once again I ask her, as I have asked her colleague many times, to make the case to the Treasury for the £1.4 billion of additional funding urgently needed to redevelop its headquarters. That programme was started under the Conservatives, with £1.2 billion committed in 2020, and I note that the Labour Government have committed an additional £208 million. For the sake of agriculture, animal health, rural mental health, biosecurity and national security, please will the Minister and her DEFRA colleagues continue to press that case with the Treasury?

I conclude by reiterating that we, His Majesty's most loyal Opposition, are pleased to support this statutory instrument, and we look forward to the Government speedily introducing further legislation on animals and birds.

6.55 pm

Dr Andrew Murrison (South West Wiltshire) (Con): It is a pleasure to serve under your chairmanship, Ms Hobhouse. I will not say a great deal, but the Minister is quite correct to introduce this statutory instrument. Plainly, its provenance is in measures taken by the previous Government. Since she mentioned where most of this work is under way, I am interested to know how much she expects the legislation to boost the sector in this country, and whether she has had any discussions with the European Union, which will probably take a dim view of some of this. One of the benefits of leaving the European Union is that we can make such legislation, whereas it was previously extremely difficult to do so.

How does the Minister believe that the legislation will impact growth in the sector, and can she assure us that in applying this basic research, we will be able to capitalise on it? Unfortunately, the story in this country is that we are exceptionally good at doing basic research, but other countries and jurisdictions take on that research and we see very little of the uptick or benefit from it. It seems to me that this is a case in point. It would be unfortunate if we were to carry out such research—it will be expensive—in England, only to find that it was exploited elsewhere, particularly in America. What is the Minister doing to make sure that will not be the case? Does she intend the Government to offer any fiscal or other encouragement to companies that might seek to exploit our basic research?

6.57 pm

Emma Hardy: I thank the most loyal Opposition for their support with this SI, and I thank all hon. Members who have spoken. It is incredibly important that we make clear the distinction between genetic modification

[Emma Hardy]

and what we are talking about here, and that we note how different the two things are. I welcome the Opposition's support with that clarification.

I will take a moment to reflect on the importance of implementing this legislation. Without it, the potential of precision breeding cannot be realised. The existing legislation carries a significant burden, limiting which companies can bring products to market and which crop species' traits we can benefit from. The overwhelming scientific advice is that it is not proportionate to apply existing legislation to plants produced by modern biotechnology when those plants could have resulted—this is the key point that the hon. Member for Epping Forest made—from traditional breeding processes. These regulations provide a science-based approach and are proportionate.

I will cover some of the points that have been raised. On animals and birds, I recognise the professional view and real feelings of the hon. Member for Epping Forest, and he is keen to know more about the Government's plans for implementing the Genetic Technology (Precision Breeding) Act 2023 for animals. While we are continuing the research that supports policy development of the animal welfare declaration, no decision has yet been taken on introducing legislation to implement the 2023 Act in relation to precision-bred animals. I have no further information about that, because only plants are in scope of this SI.

Dr Hudson: I note that no decision has been taken on animals, but I asked about animals and birds. We have the pressing situation of avian influenza, and technology is under development in this country to breed birds that are resistant to that horrific disease. Can I press the Minister to make the case to DEFRA for enabling precision breeding of animals and birds forthwith? Will she write to the Committee with an update on when DEFRA will bring forward that SI?

Emma Hardy: I am happy to clarify that I was talking about animals and birds. I can attempt to provide further information, but without wanting to appear deliberately vague, no decision has been taken. However, if and when one is, I will make sure that the hon. Gentleman knows.

Dr Hudson: Will the Minister give way on one final point?

Emma Hardy: Only because it is the hon. Gentleman.

Dr Hudson: Can the decision be made quickly?

Emma Hardy: I will take that point back to the Farming Minister.

As for the assurance on risk, the advice is consistent across scientific sources and is supported by the Advisory Committee on Releases to the Environment and the Advisory Committee on Novel Foods and Processes, as well as institutions such as the Royal Society and the European Food Safety Authority. These principles also underpin regulatory approaches adopted abroad, where England is now aligned with countries such as Canada,

Japan and Argentina. I reassure hon. Members that the Advisory Committee on Novel Foods and Processes advised that there is no evidence that precision-bred organisms are intrinsically more hazardous than traditionally bred organisms. I echo the comments made by the hon. Member for Epping Forest: we are not talking about the same things.

Devolved Governments were also mentioned. We recognise that there are concerns about divergence in the UK, and that is why we continue to engage regularly with the devolved Governments. The Farming Minister recently sent letters to his counterparts in the devolved Governments to invite them to discuss these matters further. We recognise the importance of working closely with the devolved nations on these issues and we look forward to those meetings.

On the EU position, which the right hon. Member for South West Wiltshire mentioned, although the final legislation has not yet been agreed among EU legislators, the European Commission has published a proposal for the regulation of plants by new genomic techniques. We are monitoring the EU's position closely and note the recent progress made by the European Council on the draft NGT proposal. The proposal is similar in aim to the Genetic Technology (Precision Breeding) Act 2023, but it will take some time before new legislation is implemented in the EU. However, we do not have time to wait.

Chris Vince (Harlow) (Lab/Co-op): The right hon. Member for South West Wiltshire made the point about the danger of doing research in this country and it being used by other countries. I take his point, but is there not an opportunity to use this technology in developing countries and provide support in relation to famine?

Emma Hardy: I thank my hon. Friend for his contribution, which was thoughtful, as always, and demonstrated our care for other countries around the world. We have talked about resistance to pests and changes owing to climate change, and this is generally a good and innovative technology that can be used to benefit many people. As I said, although the EU seems to be moving in this area, we are diverging and we do not have time to wait.

Dr Murrison: Will the Minister give way?

Emma Hardy: I will try to answer the right hon. Gentleman's question and then he is welcome to intervene. A report by the Breakthrough Institute and Alliance for Science estimates that the EU's current regulations on gene editing could result in an annual economic opportunity cost of \$182 billion to \$356 billion for the EU. That is why we want to act now to place English scientists and breeders at the forefront across Europe to make the most of opportunities presented by precision-breeding technologies.

Dr Murrison: The Minister has pretty much answered the question I was going to put to her, which was: what assessment has she made of the competitive advantage? I am trying to be helpful to the Government. I know that they say they want lots of growth, and this is an

opportunity to get growth, is it not? But to get growth we need competitive advantage, not just with the States, but with the EU. So my question really is: how much does she think we will be advantaged by the legislation? She has given me a figure, which sounds like a lot of money. I encourage her to go further and, as Europe becomes more and more restrictive in the technologies that it appears to be fighting scared of, the UK must be able to be rational in how it positions itself. In this area, that means being encouraging to our science base, of course, as well as our ability to exploit the findings of that research here in the UK.

Emma Hardy: As I said, there is an opportunity of \$182 billion to \$356 billion that we can perhaps not exploit—that is maybe the wrong word—but utilise, or take advantage of.

Dr Hudson: Capitalise.

Emma Hardy: I thank the hon. Gentleman—we can capitalise on the opportunity, because we will be the first country that takes this through. As I have noted, the EU position seems to be moving, but we recognise that that will take some time, whereas I hope we will agree to this SI today. On that note, I thank everybody for their contributions and the Opposition for their support.

Question put and agreed to.

7.5 pm

Committee rose.

