

## **Summary record of Advisory Committee on Releases to the Environment (ACRE) and ACRE sub-group ad hoc discussions held during 2021**

This note summarises a series of additional ACRE discussions, held virtually, to develop advice to support the consultation on the reform of genetic technologies.

### **February and March 2021**

Attendees and contributors:

Professor Jim Dunwell (Chair)  
Dr Kathy Bamford  
Professor Peter Lund  
Professor Andy Peters  
Professor Alan Raybould  
Dr Ben Raymond  
Dr Andrew Wilcox  
Professor Huw Jones (Co-opted)  
Dr Huw Jones (Co-opted)  
Dr Martin Cannell – Defra Secretariat  
Dr Sean Simpkins – Defra Secretariat

ACRE held a number of ad hoc discussions in order to provide the government with advice regarding Defra's consultation on the regulation of organisms produced by genetic technologies. ACRE was assisted in this process by two co-opted independent experts in plant and animal genetics/biotechnology. ACRE considered a number of issues including certain safety concerns raised in response to the consultation, plus the evidence, scientific context and rationale for comparing precision bred and traditionally bred organisms. Following an iterative drafting process co-ordinated by the ACRE Secretariat, full agreement was reached by all members, with these discussions resulting in the [publication of ACREs advice relating to the consultation](#).

### **August 2021**

Attendees and contributors:

Professor Jim Dunwell (Chair)  
Professor Peter Lund  
Professor Alan Raybould  
Professor Huw Jones (Co-opted)  
Dr Huw Jones (Co-opted)  
Dr Martin Cannell – Defra Secretariat  
Dr Sean Simpkins – Defra Secretariat

A sub-group of ACRE was assembled to develop criteria relating to the practical translation of its advice (see above) into a decision process for enabling the distinction between GMOs and precision bred organisms (that could have been produced by traditional processes). The sub-group comprised members (including those co-opted members referred to above) with specific expertise in the area of precision breeding and its application to plants, animals and micro-organisms. The sub-group discussed a range of example organisms produced using precision breeding, in order to test the criteria. Different types of genetic alterations were present in each of the examples. This allowed the sub-group to consider distinct factors relevant to the application of the criteria for determining whether an organism could have been developed by traditional processes (such as the presence/absence of foreign DNA sequences and the extent of multiple and/or sequential nucleotide edits to generate substantially altered proteins or metabolic pathways). Following full agreement by the members, the outcome of these discussions directly informed the content of ACRE's guidance relating to the operation of The Genetically Modified Organisms (Deliberate Release) (Amendment) (England) Regulations 2022, which came into force on 11 April 2022. Related guidance can be found in [the ACRE guidance on genetic technologies that result in 'qualifying higher plants'](#).

ACRE is currently building on its work to gather evidence to inform advice and guidance supporting legislative developments.