



## Submission from Beyond GM on the Defra Plant Varieties and Seeds Framework for Precision Bred Plant Varieties Consultation

Beyond GM is a UK-based civil society organisation. We engage with and represent perspectives of a wide range of citizens and stakeholders, organisations and individuals – including farmers and growers, consumers, seed producers, artisanal processors and retailers and civil society groups – on genetic engineering technologies in farming and food.

For the purposes of this consultation, therefore, we represent a wide range of businesses who have to or want to maintain a GM-PBO-free supply chain. These include organic farmers, growers and producers - who are still obliged to maintain a GM-PBO-free supply chain under organic legislation – as well as artisanal, craft and Geographical Indication [GI] enterprises.

Our responses follow the format of the consultation document and we are happy for them to be made a matter of public record.

**A note on language:** Legally and scientifically so-called “precision-bred organisms” (PBOs) are genetically modified organisms (GMOs). The Genetic Technology Act defines them as such and then creates a series of regulatory exemptions (deregulation) for these organisms. For accuracy, we will refer to PBOs as “GM-PBOs” throughout this submission

### Concerns about the consultation process

We have multiple concerns about the way this consultation process has been conducted, which we have outlined below:

#### **1. Lack of consideration of all stakeholders**

This consultation is framed as being for seed and plant businesses, but it does not account for other key commercial actors, particularly retailers. Supermarkets and other retailers play a critical role in agricultural supply chains. They increasingly specify plant varieties based on sustainability targets, nutrition goals and quality standards. They need clear traceability for this, as well as to meet their organic and non-GMO commitments.

Retailers – especially those offering own-brand organic products – need assurance that precision-bred ingredients do not enter their supply chains, as these remain regulated as

GMOs under UK organic rules. The lack of engagement with this sector in the consultation is a serious oversight.

In addition, the introduction of GM-PBOs has far-reaching implications beyond commercial interests. The exclusion of home gardeners, allotment holders and smaller-scale growers – who also rely on seed labelling and supply chain transparency – is a significant oversight.

## **2. Lack of clarity of intended outcomes**

On page 4, the consultation document states that Defra is “*exploring non-legislative options such as industry-led plant variety registers.*” However, the consultation only presents a mandatory list and labelling on seed packets as the options for question responses, creating confusion about whether a voluntary or industry-led approach is still under consideration. Additionally, no details are provided on what information an industry-led register would contain, making it impossible for respondents to assess its value or implications. Without clear and transparent communication about potential policy directions, businesses and stakeholders cannot provide fully informed input.

## **3. Inconsistent and unclear terminology**

The consultation does not make clear the distinction between a list and a register. The document refers to the Precision Bred Plant Variety List but also mentions a possible “*industry-led precision breeding plant variety register*” without explanation. It is unclear whether these terms are interchangeable or refer to different regulatory mechanisms with different levels of robustness. This lack of precision makes it difficult for stakeholders to engage meaningfully with the proposals

## **4. Conflicts between patents and plant breeders’ rights (PBRs)**

The consultation states that plant breeders will be able to apply for plant breeders’ rights (PBRs) for precision-bred plant varieties as they do for conventional varieties. It also says that they are outside of the scope of the consultation. However, it fails to address the role of patents and their potential conflict with PBR – a very relevant issue for the consultation.

A GM-PBO variety can be protected by both PBRs and patents. While PBRs include a breeder’s exemption – allowing further breeding – patents do not, meaning they can entirely block access to a variety. Unlike PBRs, patents also lack an automatic exemption for testing, which could create barriers to processes such as Value for Cultivation and Use (VCU) evaluation.

In the EU, the question of patents has been a contentious one as the bloc negotiates its own revised regulatory approach to GM-PBOs. MEPs [want a full ban](#) on patents for all GM-PBOs “*to avoid legal uncertainties, increased costs and new dependencies for farmers and breeders*”. On 14th March 2025 member states’ representatives endorsed the Council’s [negotiating mandate](#), which includes a requirement for GM-PBO developers to submit information on patents for a publicly available database while registering the product. It also includes the creation of a patenting expert group and a requirement to publish a study

on the impact of patenting on innovation and the availability of seeds to farmers. **These discussions highlight a very important issue which has been completely ignored in the UK legislative process.**

The Precision Bred Plant Variety list should require the disclosure of patent status. Transparency on intellectual property rights is essential for breeders to understand potential legal and commercial constraints. The failure to address this issue is a significant gap in the consultation.

## Section 3: Precision Bred Plant Variety List for England

**9a. Based on the explanation in the supporting information, do you understand the proposed process and requirements for the Precision Bred Plant Variety List for England for agricultural and vegetable plant varieties? (Please select one option only) [Yes / No / Unsure]**

Unsure

**9b. Please explain your answer to the previous question [Free text]**

We feel that the consultation fails to deal with some critical issues. Many of these concerns have been set out above (in 'concerns about the consultation process' p1-3), but additional questions are below:

- On p.11, in relation to the PB Plant Variety List, it says "*Anyone can access these records on request*". It does not say whether the list will be publicly available and in what form. Will it include all the details listed?
- It is unclear how the list will be maintained and enforced.
- We would question the need to request this information. It should be available for anyone without the need for a formal 'request'.

**10a. Do you think the proposed Precision Bred Plant Variety List for England for agricultural and vegetable plant varieties will impact your business? (Please select one option only) [Yes / No / Unsure]**

Yes

**10b. If you answered yes to the previous question, what changes do you anticipate your business will have to make to adhere to the new legislation? (Please select all that apply)**

Other changes

**10c. Please provide further details of any changes your business may have to make to adhere to the new legislation. [Free text]**

The businesses we represent will inevitably have more work to keep their supply chains free of GM-PBOs due to the impacts of the Genetic Technology Act which removes labelling and traceability from GM-PBOs.

The organic and non-GM sectors will have to create systems for ensuring their supply chains are free of these organisms. It is not yet clear how this will happen as there has not yet been enough time and information to put processes in place, but it will likely involve expensive testing.

If the proposed Precision Bred Plant Variety list is mandatory and, if this list is user-friendly, it will help reduce the extra work involved and would also mitigate reputational and legal risks associated with inadvertent contamination or the introduction of GM-PBOs into non-GM supply chains. Having this mandatory list would provide businesses with much-needed clarity, allowing them to maintain their GM-free supply chains more efficiently.

**11a. Do you think the proposed Precision Bred Plant Variety List for England for agricultural and vegetable plant varieties will benefit your business? [Yes / No / Unsure]**

Yes

**11b. If you answered yes to the previous question, what benefit(s) do you think the Precision Bred Plant Variety List for England for agricultural and vegetable plant varieties may have on your business? [Free text]**

The proposed mandatory Precision Bred Plant Variety List is essential for organic and non-PBO farmers and growers to maintain GM-free supply chains. Without it, businesses that must avoid GM-PBOs – whether for legal, market, or ethical reasons – will struggle to ensure compliance.

Defra's Precision Breeding Register and the FSA's Food and Feed Marketing Register will not include variety names as they appear on seed labels, making supply chain traceability impossible. The Precision Bred Plant Variety List is therefore the only tool that can help businesses track these varieties effectively. However, for the list to deliver real benefits, it must meet the following criteria:

**It must be mandatory and have the same legal status as the Plant Varieties List**

- A voluntary list would be ineffective because companies could simply choose not to register their varieties, leaving gaps in traceability and creating uncertainty for businesses that need to avoid GM-PBOs.

- A legally binding list ensures that all precision bred varieties entering the market are recorded, preventing regulatory loopholes.

#### **It must be freely and publicly available**

- While the consultation document states that "*anyone can access these records on request*," this is not sufficient. The list must be online and easily accessible to all without barriers.

#### **It must be user-friendly and fully searchable**

- The list should be structured clearly, allowing businesses to search by variety name, breeding method, traits introduced and genetic modification details.

#### **It must include detailed information about the genetic modification**

- To be useful for businesses, the list should specify the technique used, traits introduced and full details of the genetic modifications.

#### **It must include information on all existing or pending patents**

- Since patents are a significant limiting factor for breeders and farmers alike, the list must include details of them.

A voluntary list would render the entire system ineffective, opaque and unreliable, increasing risks for businesses needing to maintain a GM-free supply chain. Only a mandatory, legally recognised Precision Bred Plant Variety List can provide the certainty and transparency needed to uphold consumer and market trust.

**12a. Do you think the proposed Precision Bred Plant Variety List for England for agricultural and vegetable plant varieties will have a negative impact on your business? [Yes / No / Unsure]**

No

**12b. If you answered yes to the previous question, what negative impact(s) do you think the proposed Precision Bred Plant Variety List for England for agricultural and vegetable plant varieties may have on your business? [Free text]**

**13a. Do you think your business will incur extra costs because of the proposed Precision Bred Plant Variety List for England for agricultural and vegetable plant varieties? [Yes / No / Unsure]**

No

13b. If you answered yes to the previous question, what costs do you think your business will incur because of the proposed Precision Bred Plant Variety List for England for agricultural and vegetable plant varieties? [Free text]

14a. Do you agree to the publishing of notifications of the Precision Bred Plant Variety List for England in the Plant Varieties and Seeds Gazette? [Yes / No / Unsure]

Yes

14b. Please explain your answer to the previous question. [Free text]

We strongly support the publication of Precision Bred Plant Variety List notifications in the Plant Varieties and Seeds Gazette as a way to increase transparency and accessibility for farmers, growers and businesses.

However, this must be in addition to making the full Precision Bred Plant Variety List freely available online and ensuring mandatory labelling of GM-PBO products. The Gazette is not a widely used or easily searchable resource for many in the supply chain. Relying solely on it would not provide adequate access to critical information.

For farmers and growers to make informed choices about what to cultivate and sell, they need clear, easily accessible and up-to-date information on precision bred varieties. A combination of publication in the Gazette, a fully searchable public list and mandatory labelling is necessary to ensure that businesses are able to meet their GM-free obligations.

## Section 5: Labelling of seed and other plant reproductive material produced using precision breeding technologies

15a. What information, if any, on precision bred plant varieties is important to your business? [Free text]

The following information is crucial for our businesses to ensure GM-free compliance:

- **The name of the variety** as it appears on the seed or reproductive material label, to ensure traceability and avoid inadvertent introduction of GM-PBOs into supply chains.
- **Details of the GM event used:** The specific technique employed, the traits introduced and a comprehensive breakdown of the modifications made to the plant variety.
- **Unique identifier**, or another way of cross-referencing to the Defra's Precision Breeding Register and the FSA's Food and Feed Register. This is important for organic certifiers and others needing a full audit trail.

15b. In what format should this information be made available? (For example, an accessible list or register) [Free text]

This information should be made available through multiple channels to ensure accessibility for all stakeholders:

- **On the labels** for seed and other plant reproductive material, providing clear information on whether the material is a GM-PBO or not and detailing the genetic modifications.
- **On marketing materials** accompanying seeds, e.g. catalogues.
- **On a mandatory Precision Bred Plant Variety List**, available online and in a user-friendly format, to give businesses clear guidance on which varieties are considered precision bred. This list should be searchable, easy to navigate and include all relevant details such as the name of the variety, the GM event and modifications introduced.
- **In any relevant trade and regulatory documents** to ensure full traceability at all stages of the supply chain, from seed to sale.

Having this information in multiple accessible formats would ensure that businesses can make well-informed decisions, comply with legal obligations and maintain GM-free supply chains.

16a. Would the mandatory inclusion of precision bred status on labels for seed and other plant reproductive material to identify them as precision bred have a positive impact on your business? [Yes / No / Unsure]

Yes

16b. If you answered yes to the previous question, what positive impact(s) do you think the mandatory inclusion of precision bred status on labels for precision bred seed and other plant reproductive material may have on your business? [Free text]

Mandatory labelling of precision bred status on seed and plant reproductive material would have a significant positive impact on our work and the businesses we represent by ensuring clarity, compliance and supply chain integrity.

- **Essential for organic growers:** Organic farming is legally required to remain free from GM-PBOs. Without clear labels, organic farmers and growers risk unknowingly planting GM-PBO varieties, putting their certification, market access and customer trust at risk. Mandatory labelling ensures that organic producers can make informed choices and meet their legal obligations.

- **Crucial for businesses in devolved nations:** Scotland, Wales and Northern Ireland have chosen not to deregulate GM-PBOs and are unable to plant GM-PBO seeds without complying with GMO legislation. If PB status is not clearly indicated on labels, businesses could inadvertently use GM-PBO seeds in restricted markets, exposing them to legal and financial risks.
- **Supports non-GM and identity-preserved supply chains:** Many food and farming businesses, including those in the artisan, craft and Geographical Indication (GI) sectors, rely on maintaining GM-free status. Without mandatory labelling, tracking PB varieties becomes impossible, increasing the risk of contamination and making it harder to meet customer expectations.
- **Reduces costs and risks for businesses:** Without clear labelling, businesses wanting to avoid PB varieties would need to invest in expensive testing or create new administrative processes to verify seed sources. Labelling would provide an efficient, low-cost solution to ensure transparency from the start.

In summary, mandatory GM-PBO labelling is not just beneficial – it is essential for businesses that need to maintain non-GM supply chains, comply with legal requirements and operate across different regulatory jurisdictions. Without it, traceability is lost, compliance becomes more difficult and businesses bear unnecessary financial and reputational risks.

**17a. Would the mandatory inclusion of precision bred status on labels for seeds and other plant reproductive material to identify them as precision bred have a negative impact on your business? [Yes / No / Unsure]**

No

**17b. If you answered yes to the previous question, what negative impact(s) do you think the mandatory inclusion of precision bred status on labels for precision bred seed and other plant reproductive material may have on your business? [Free text]**

**18a. Do you think your business will incur extra costs if the mandatory inclusion of precision bred status on labels for seed and other plant reproductive material identifying them as precision bred was introduced? [Yes / No / Unsure]**

No

**18b. If you answered yes to the previous question, what costs do you think your business will incur due to the mandatory inclusion of precision bred status on labels for precision bred seed and other plant reproductive material? [Free text]**



19a. Do you think your business will incur extra costs if no mandatory requirement to include precision bred status on labels for seed and other plant reproductive material is introduced? [Yes / No / Unsure]

Yes

19b. If you answered yes to the previous questions, what costs do you think your business will incur if no mandatory requirement to include precision bred status on labels for seed and other plant reproductive material is introduced? [Free text]

If there is no mandatory labelling requirement, businesses that need or want to avoid PB-GMOs will face significant additional costs to maintain their supply chain integrity and compliance with legal and market requirements. These costs include:

- **Testing costs:** Businesses may need to conduct expensive laboratory tests on seeds and plant reproductive material to determine whether they contain GM-PBOs. This is an unnecessary financial burden that could be easily avoided with clear labelling.
- **Administrative costs:** Companies will need to create new internal tracking and verification systems, increasing bureaucracy.
- **Supply chain audits:** Businesses will have to conduct more frequent audits and implement stricter supplier agreements to ensure they do not inadvertently purchase or use PB varieties, or accidentally buy other GM-PBO inputs into their organic systems, such as straw or manure.
- **Legal and reputational risk costs:** Without labelling, there is a higher risk of unintentional non-compliance, especially for businesses operating in devolved nations where PB varieties remain regulated as GMOs. This could lead to fines, loss of organic certification, or damaged market trust.
- **Undermining of consumer trust and integrity of businesses:** Clear labelling on seed packets is essential to maintain the integrity of organic and non-GM businesses, whose entire business models rely on transparency and traceability. The inability to distinguish between GM-PBO and conventional seeds risks not only undermining the values on which these businesses are built but also eroding consumer confidence in the authenticity of organic and non-GM products.

In summary, the absence of mandatory labelling shifts the financial and operational burden onto businesses that need to avoid GM-PBOs, creating unnecessary costs and risks. Labelling is a simple, cost-effective measure that ensures clarity, transparency and legal certainty for all stakeholders.