

APHA Genetic Modification Inspectorate

Growing season field inspection report: consent 22/R55/01 (2023 release)

A report on the Genetic Modification Inspectorate's field inspection visit to a genetically modified (GM) crop trial to assess compliance with the Genetically Modified Organisms (Deliberate Release) Regulations 2002 (as amended) and Part VI of the Environmental Protection Act 1990 (as amended).

GMO consent details

Consent reference: 22/R55/01 (consent for experimental release).

Consent holder: Wild Bioscience Ltd.

Crop type: Wheat (spring) (*Triticum aestivum*).

Site details: Harpenden, Hertfordshire

OS grid reference: TL 122 133

Details of the GMO

Wheat (*Triticum aestivum*) plants, based on the cultivar Cadenza, that have been genetically modified to:

- enhance leaf-level photosynthetic carbon assimilation
- increase vegetative biomass
- increase numbers and total mass of seeds per plant

This phenotype results from the overexpression of the wheat photoreceptor gene Phytochrome B that has been inserted into the genome under the control of an exogenous promoter, Phosphoenolpyruvate Carboxykinase, from *Zoysia japonica*. The lines planned for release are as detailed in the [consent application from Wild Bioscience Ltd.](#)

Purpose of the release

To investigate the effect of increased expression of a photosynthetic regulator on agronomic endpoints of wheat, with the results informing future efforts to develop high-yielding wheat seed products.

Site inspection details

Inspection date: 3 August 2023

Site reference: WBL-22/R55/01-SITE01-2023-INSP_01.

Personnel seen: Rothamsted Research Head of Farms.

Inspection details

The Genetic Modification Inspectorate (GMI) carried out an inspection of this 2023-sown research trial of GM spring wheat at the dough development growth stage. Checks were made on the:

- location, size and layout of the trial
- measures in place to restrict human access to the site
- dimensions of the non-GM pollen barrier
- status of the 20-metre border

The GMI also reviewed the:

- methods that had been employed for planting the GMOs
- procedures in place for management and monitoring of the release during the growing season
- plans for the harvest and disposal of plant material

All were in accordance with the requirements specified in the consent document.

Conclusions and actions

Report conclusions

The Genetic Modification Inspectorate is content that the release is consistent with the conditions and limitations specified in the consent document. No risks to human health or the environment, posed by the genetically modified organism, were identified.

Action required or taken: None.

APHA GM Inspectorate

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4 August 2023