

Animal and Plant Health Agency

APHA Genetic Modification Inspectorate

Growing season field inspection report 2023: consent 21/R54/01 (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 and Part VI of the Environmental Protection Act 1990.

GMO consent details

Consent reference: 21/R54/01 (consent for experimental release).

Consent holder: Cambridge University Crop Science Centre.

Crop type: barley (*Hordeum vulgare*).

Site details: Barkers Top, Duxford.

OS grid reference: TL 470 439

Details of the GMO

The genetically modified organisms are barley (*Hordeum vulgare*) plants, based on the cultivar Golden Promise, that have been gene edited and genetically modified with respect to the symbiosis pathways involved in the perception of arbuscular mycorrhizal fungi.

This 2023 trial used 6 of the 13 GM lines described in the [Cambridge University Crop Science Centre consent application](#).

Purpose of the release

To investigate the impacts of arbuscular mycorrhizal fungi inoculation on biomass and yield of genetically modified barley lines that have been modified with respect to symbiosis pathways, in the field.

Site inspection details

Inspection date: 27 July 2023

Site reference: CSC-21/R54/01-SITE02-2023-INSP_01.

Personnel seen: Trials Coordinator.

Inspection details

The Genetic Modification Inspectorate (GMI) carried out an inspection of this 2023-sown research trial of GM barley at the seed setting stage. The GMI reviewed the:

- methods employed to plant the GMOs
- procedures in place for management and monitoring of the release during the growing season
- Consent Holder's plans for harvest and disposal of plant material

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

In addition, checks were made on the:

- measures in place to restrict human access to the site
- size and layout of the trial
- status of the 20-metre border

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

During the inspection it was noted that the location of the trial was slightly outside the 1km grid square specified in point 3(b) of the letter of consent, and that the pollen barrier surrounding the trial was 20 cm narrower than the minimum width of 3 metres specified under Condition 4(2) of the schedule to the consent. The GMI discussed these findings with the Defra Genetic Resources and GM Policy Team, and it was concluded that, given that there was no barley growing in the surrounding fields, these inconsistencies did not pose any additional risk of pollen-mediated gene flow from the trial.

Conclusions and actions

Report conclusions

The Genetic Modification Inspectorate is content that, other than the location of the trial site and the width of the pollen barrier, 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 taken

The GMI notified the Defra Genetic Resources and GM Policy Team of the inaccurate siting of the trial, and the narrower-than-specified pollen barrier. The Policy Team agreed to remind the Consent Holder of their responsibility to adhere to the conditions and limitations specified in the consent document.

APHA GM Inspectorate

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1 August 2023