

APHA Genetic Modification Inspectorate

Growing season field inspection report 2023: consent 22/R29/01 (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: 22/R29/01 (consent for experimental release).

Consent holder: The Sainsbury Laboratory.

Crop type: potato (*Solanum tuberosum* L.).

Site details: Bawburgh, Norfolk.

OS grid reference: TG 150 087

Details of the GMO

The genetically modified organisms (GMOs) are potatoes (*Solanum tuberosum* L. - including but not limited to cultivars Maris Piper and Charlotte) transformed with one or a combination of the following genes:

- *Rpi-vnt1.1* from *Solanum venturii*
- *Rpi-amr3* from *Solanum Americanum* (both domesticated and non-domesticated)
- *Rpi-amr1* from *Solanum Americanum* (both domesticated and non-domesticated)
- *Rysto* from *Solanum stoloniferum*
- p-*Agp* promoter from *Solanum tuberosum*
- sense and anti-sense fragments of *Ppo* from *Solanum tuberosum*
- sense and anti-sense fragments of *Vlnv* from *Solanum tuberosum*
- spacer sequence between sense and antisense fragments from *Solanum tuberosum*
- p-*Gbss* promoter from *Solanum tuberosum*
- *NRC6* from *Solanum lycopersicum*
- *hero* from *Solanum lycopersicum*
- the *CSR* allele of *ALS* from *Solanum lycopersicum*
- *NptII* and p-*bla* promoter from *Escherichia coli*
- Isopentenyl transferase (*ipt*) gene from *Agrobacterium tumefaciens*
- extra Ti plasmid left border sequence from *Agrobacterium tumefaciens*
- dummy and end-linker sequences of synthetic origin.

Purpose of the release

To test field performance of the novel potato plants.

Site inspection details

Inspection date: 14 July 2023

Site reference: TSL-22/R29/01-SITE01-2023-INSP_01.

Personnel seen: Lead Researcher.

Inspection details

The Genetic Modification Inspectorate (GMI) carried out an inspection of this 2023-planted research trial of GM potatoes at the flowering stage. Checks were made on the:

- location, size and layout of the trial, the
- status of the 20m border, and the
- measures in place to restrict human access to the site.

The GMI also reviewed the:

- methods that had been employed for planting the GMOs
- procedures in place for management and monitoring of the release site 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.

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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