

11 July 2022

Field test GMF100001 - Annual Report to the Environmental Protection Authority (EPA)

This report relates to control 13 for the field test approval GMF100001 (ERMA200479), approved 14 December 2010. The report covers the period 1 June 2021 to 31 May 2022. This is the eleventh annual report for the approval.

Purpose of field test

To field test in containment *Pinus radiata* with genetic modifications to alter plant growth/biomass acquisition, reproductive development, herbicide tolerance, biomass utilisation, wood density, and wood dimensional stability.

Field testing activities carried out

On 22/6/2021, 12 trees (in a trial of reproductive development) were felled and placed in the non-mowing area. One other tree in the same trial was felled on 23/6/2021 and placed in the non-mowing area.

The Field Test manual was reviewed and updated, and MPI approved the revised manual on 22/7/2021.

Refresher training of approved users was conducted in August and September 2021.

The Ministry of Primary Industries conducted an audit of Field Test activities on 16/11/2021 and the outcome was acceptable. No areas of non-compliance were identified.

On 17/12/2021, the remaining 20 trees (in a trial of reproductive development) were felled and placed in the non-mowing area.

On 22/12/2021, the last 8 of the control trees (in a trial of biomass utilisation) and 4 trees (in a trial of biomass acquisition) were felled.

The Ministry of Primary Industries conducted an audit of field test activities on 10/5/2022 and the outcome was acceptable. No areas of non-compliance were identified.

Details of inspections for reproductive structures and outcomes are given in Table 1.

Table 1: Identification of immature reproductive structures during scheduled inspections. For transgenic trees, the dates that the immature structures were removed and the trees carrying them were felled, are given. WT indicates wild type (non-transgenic) trees.

Date of identification	Number of trees identified - trait	Date of removal of structures from tree	Date of tree felling
26/8/2021	1 - biomass utilisation	26/08/2021	27/8/2021
7/04/2022	1 - biomass acquisition	7/04/2022	7/04/2022
21/04/2022	2 - biomass acquisition	21/04/2022	21/04/2022
5/05/2022	9 - biomass acquisition	5/05/2022	5/05/2022
19/05/2022	22 - biomass acquisition	19/05/2022	23/05/2022
23/05/2022	1 - biomass acquisition	23/05/2022	23/05/2022

Unforeseen Incidents

No unforeseen incidents have occurred.

Activities relevant to engagement with Māori

None.

Results of the field test research which have been disseminated to third parties

As a result of covid-associated access limitations, there have been limited external visits to Field trial site. Scion's experience in conducting safe and compliant field trials has resulted in third party interest in Scion's activities in this area. This included an invitation to provide information to the Forest Stewardship Council (FSC) on "safeguards and control mechanisms in genetic engineering", supporting the FSC Board of Directors in considering whether FSC should be engaged in a trial project for genetic engineering in forestry outside FSC certification. Discussions have also been held with industry and government stakeholders regarding field trials in New Zealand.

Environmental impact research

No environmental impact research was conducted.