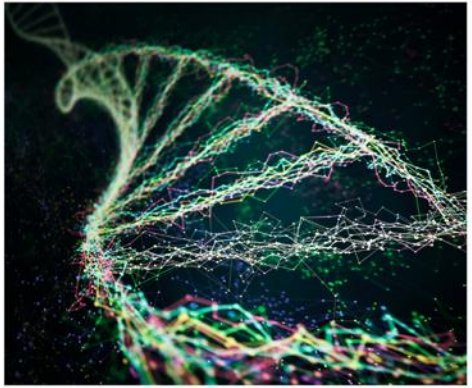


# Farmer insights on genetic technologies

B+LNZ survey

August 2024

# 1. Introduction

# Online survey methodology:

The **target population** for this survey was farmers on the B+LNZ farmer database

The **sample size** for this survey was n=427. For a 50% figure at the 95% confidence level, the **margin of error for this sized sample is plus or minus 4.7%**

This was a **randomly selected and representative sample** of farmers from the B+LNZ farmer database by region

Some of the genetic technology results in this study are compared with findings that were recorded in a Primary Purpose sponsored study among the general public. This survey was conducted in Late May 2024 and consisted of a nationwide representative sample of 1,029 New Zealanders. For a 50% figure at the 95% confidence level, margin of error for this survey is plus or minus 3.1%.

# 2. Overview

# OVERVIEW

## Genetic technologies

- A majority of farmers declare they have limited knowledge about gene editing as it relates to growing food.
- Despite this low knowledge farmers are broadly supportive of this technology with over half supporting its use in New Zealand.
- However, also over half of farmers prefer a cautious approach assessing technologies on a case-by-case basis to ensure they are safe. The remaining farmers are evenly split between either a slightly more aggressive approach to introducing gene technologies or preferring to not have any use of this technology in New Zealand at all.
- Farmers strongest concern with gene technologies is its potential impact on consumer demand in their major markets.
- Farmers most strongly support the use of gene technologies to improve animal welfare and performance by helping to manage things like internal parasitism or facial eczema and control other pest affecting animals like fly-strike or external parasites.

# 3. Genetic Technologies

Note: Some questions in this section have already been asked of the general public where this is the case the data is provided as a comparison

# Knowledge of and support for gene technologies

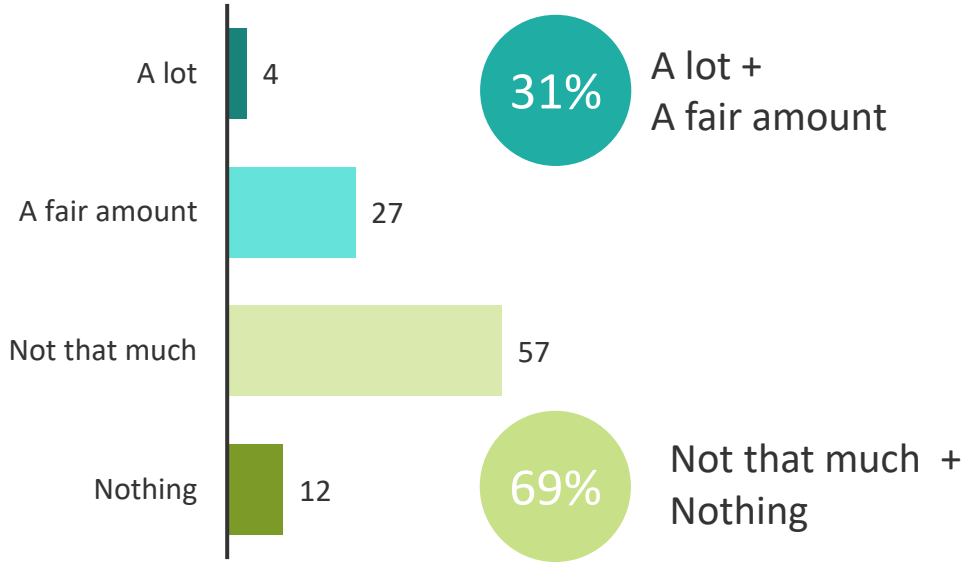
- A majority (69%) of farmers said they knew either ‘not that much’ (57%) or ‘nothing’ (12%) about gene technologies (modification and editing) as it relates to the growing of food. A minority (31%) said they either knew ‘a fair amount’ (27%) or ‘a lot’ (4%) about this topic. The General public declared similar levels of knowledge, with 50% saying they knew ‘not that much’ and 19% saying they knew ‘nothing’. A minority of 30% declared they knew either ‘a fair amount’ (25%) or ‘a lot’ (6%).

- Over half (53%) of farmers supported the use of genetic technologies in growing food in New Zealand. Only 18% opposed this, and 29% remained unsure. The general public were more mixed in support with the comparable figures being 34% support, 31% oppose and 34% unsure.

    - Among farmers males were more likely to support its use at 60%, while females were less likely to support its use at 33%.
    - Those farming more animals (5,000 or more stock units) were more likely to support its use at 64%
    - Across the stock types, dairy farmers were most supportive at 74%, while beef farmers were less so at 44%.

# The majority of farmers declare knowing either ‘not that much’ or ‘nothing’ about the use of gene technologies in the growing of food

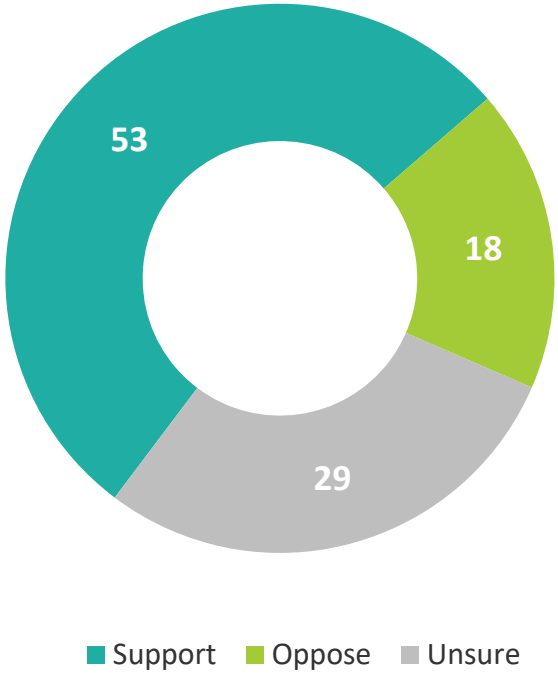
*How much do you know about gene technologies (modification and editing) as it relates to the growing of food? (%)*




*Base: All (n=427)*

# A majority of farmers support the use of gene technologies in growing food in New Zealand

*Regardless of how much you know, generally do you support or oppose the use of gene technologies in growing food in NZ?*



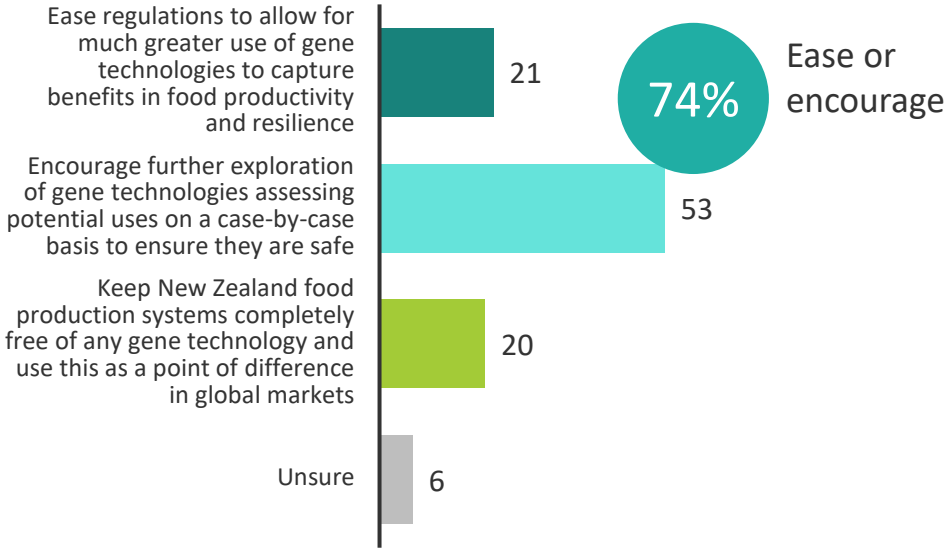

*Base: All (n=427)*

# Most farmers support allowing greater use of gene technologies in food production

*As you may be aware:*

- *Gene technologies can help improve crops and livestock for traits like disease resistance, better nutrition, and to help manage the impacts of climate change*
- *Some people see potential risks, as they feel like its interfering with nature*
- *New Zealand currently maintains strict regulations for the use of gene technologies. The Government intends to introduce changes to allow for greater use of gene technologies for growing food in New Zealand, they propose that any changes will come with strong protections for human health and the environment*

*Considering this, which of the following option aligns closest to your view as to how New Zealand should approach using gene technologies for growing food?*




The comparable general public figures were:

- 14% ease regulations
- 45% encourage further
- 29% keep completely free
- 12% unsure

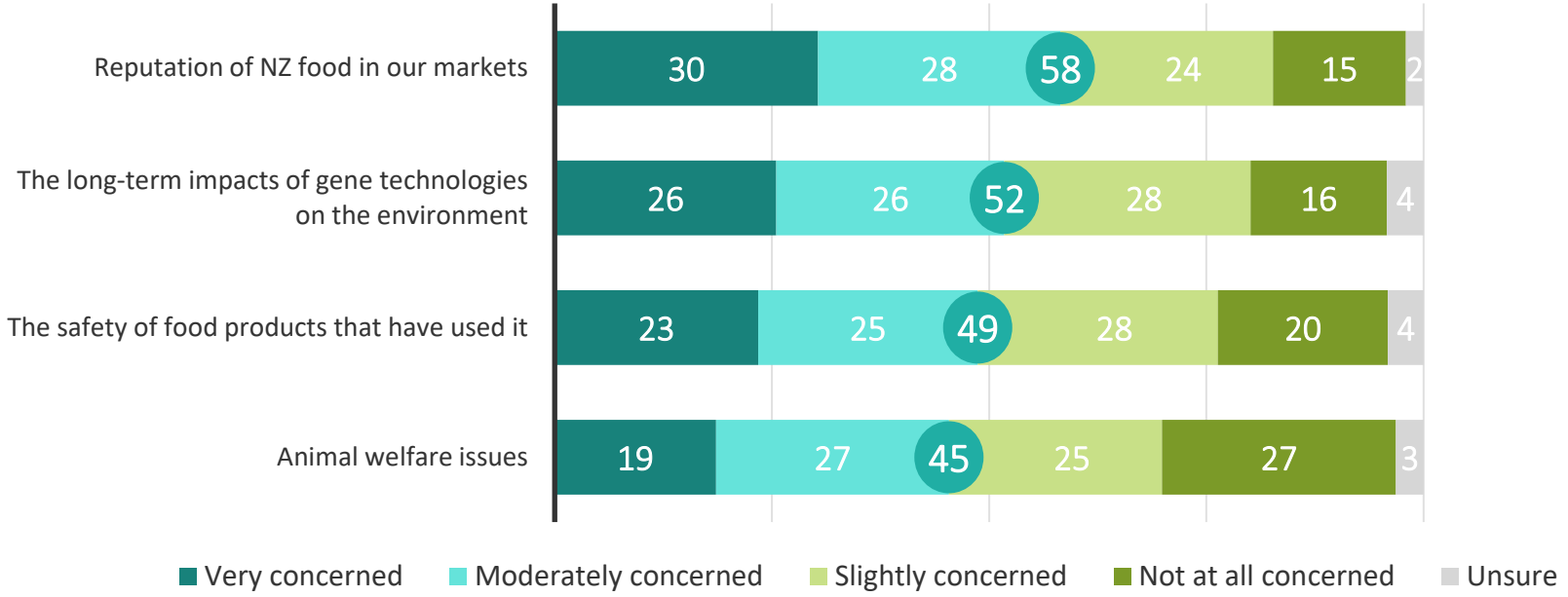
- Base: All (n=427)

# Level of farmer concern across a range of potential risks of using gene technology

- Across a range of potential risks of using gene technology in New Zealand's food production, most farmers (58%) were concerned about 'the potential reputation of NZ food in their markets.'
- This was followed by another majority (52%) who expressed concern about 'the long-term impacts of gene technologies on the environment.' The general public were more concerned about this risk at 61%.
- Just under half (49%) of farmers expressed concern about 'the safety of food products that have used gene technology.' Once again, the general public were more concerned about this risk at 62%.
- Slightly fewer farmers, at 45%, expressed concern about 'the potential impact of gene technology on animal welfare issues.' Staying with the theme of New Zealanders in general being more anxious about these risks at 14 points more 59% of the general public were concerned about this risk as well.

# Level of concern about various potential risks of using gene technology

*How concerned are you about the following potential risks of using gene technology?*



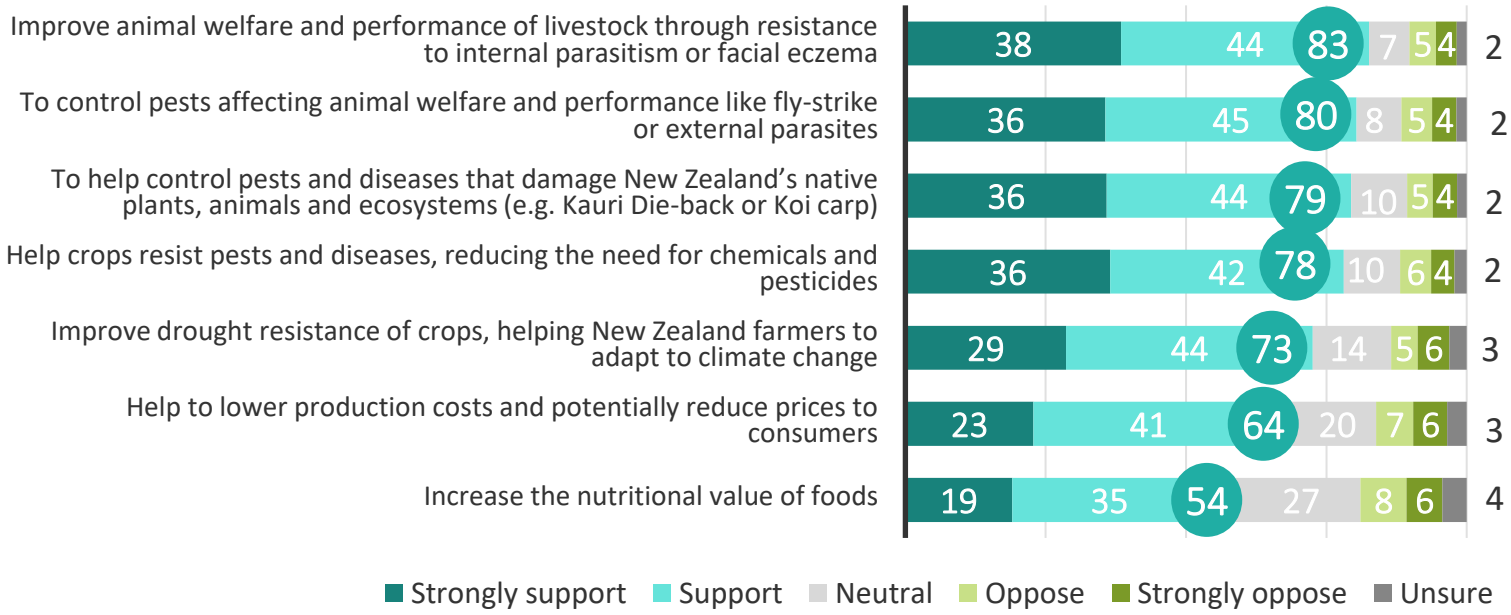

*Base: All (n=427)*

# Levels of support across a range of uses for gene technologies in food production

- Farmers most strongly, at 83%, supported the use of gene technologies for 'improving animal welfare and performance through building resistance to internal parasitism or facial eczema.'
- Following closely, 80% strongly supported the use of this technology 'to help control pests affecting animal welfare and performance, such as fly-strike or external parasites.' The general public was less supportive at 68%.
- A similar strong majority (79%) also supported the use of this technology 'to help control pests and diseases that damage New Zealand's native plants, animals, and ecosystems (e.g., Kauri Die-back or Koi carp).'
- A similar percentage of farmers (78%) also supported the use of gene technologies 'to help crops resist pests and diseases, reducing the need for chemicals and pesticides.' Farmers with more stock (5,000 stock units or more) expressed higher support for this topic at 88%.
- Just under three-quarters of farmers (73%) supported using this technology 'to improve the drought resistance of crops, helping New Zealand farmers adapt to climate change.'
- A bit lower but still almost two-thirds (64%) of farmers supported 'the use of gene technologies to help lower production costs and potentially reduce prices for consumers.' As you would expect the general public was more supportive at 66%.
- Over half of farmers (54%) supported the use of gene technologies 'to help increase the nutritional value of foods.' Male farmers were more likely to support this topic at 60% compared to female farmers at 37%. Once again it is no surprise that the general public was more supportive of this use at 62%.

# Support or opposition to various gene technology uses

*Thinking about the use of gene technology in growing food in NZ, how strongly would you support or oppose its use in each of the following ways? (%)*




*Base: All (n=427)*

# Farmer comments in relation to gene technologies in farming & food production

- Anything you would like to add in relation to gene technologies in farming and food production?(coded)

| | % |
|---|---|
| **Environmental and Ethical Caution:** Strong emphasis on the importance of managing gene technologies responsibly, considering environmental impacts, and preserving natural genetics. | 10% |
| **Global and Corporate Concerns:** Distrust in global agribusiness and concerns about the environmental and health impacts of GMOs, influenced by negative examples like Monsanto and glyphosate toxicity. | 10% |
| **Support for Targeted Use:** Openness to using gene technologies for specific purposes, such as pest control and improving crop resilience, while remaining cautious about broader applications. | 9% |
| **Regulatory and Research Needs:** Calls for comprehensive testing, regulation, and research to ensure the long-term safety and viability of gene technologies. | 7% |
| **Advocacy for Natural Solutions:** Preference for addressing agricultural challenges through natural and management-based solutions rather than genetic modifications. | 7% |
| **Public Perception and Market Impact:** Concern about how gene technologies might affect New Zealand's clean, green image and consumer preferences for non-GMO products. | 7% |
| **Economic Considerations:** Emphasis on the need for gene technologies to improve farm profitability without compromising environmental and health standards. | 6% |
| **Concerns About Proprietary Control:** Worries about corporate control over gene technologies and the legal implications for farmers. | 6% |
| **Unintended Consequences:** Fears about unintended consequences and historical examples of environmental damage caused by well-intentioned but poorly managed interventions. | 5% |
| **Need for Public Consultation:** Emphasis on the importance of involving the wider public in discussions and decisions about the use of gene technologies. | 5% |
| **Call for Balanced Approach:** Recognition that blanket bans are unreasonable, advocating for a balanced, science-based approach to the implementation of gene technologies. | 4% |
| **Technological Advancement and Global Competition:** Recognition that New Zealand needs to keep up with global advancements in gene technology to maintain competitiveness. | 4% |
| **Support for Safe and Tested Technologies:** Preference for gene technologies with a proven track record of safety and effectiveness, while expressing concerns about new, untested methods. | 4% |
| **Safety and Ethical Considerations:** The importance of ensuring that gene technologies are safe for human consumption and do not harm biodiversity. | 3% |
| **Potential for Environmental and Animal Welfare Benefits:** Recognition of the potential benefits of gene technologies in improving environmental sustainability and animal welfare. | 2% |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