

Gene technology has huge potential in the primary industries, but what are the realistic expectations? When could the world see gene-edited products in homes and on dinner plates?

ROYAL SOCIETY  
TE APĀRANGI

# Genetic technologies in primary industries

## What to expect and when?

Currently available	Aotearoa New Zealand*	Overseas
Herbicide- and pesticide-resistant crops	✗	✓
Foods with improved traits (eg pink pineapple; non-bitter salad greens; produce with a longer shelf life)	✗	✓
Vegetarian 'meats'	✓	✓

\*Currently, fresh genetically modified and gene-edited foods are not available in Aotearoa New Zealand, but can be ingredients in imported products.

### What's next? (2 – 10 years away)

- Low-allergy foods (eg low-gluten wheat) and forests
- More desirable foods (eg seedless raspberries; protein-rich fish)
- Disease-resistant crops (eg grapevines; apples)
- Shelf-stable foods (eg non-browning mushrooms)
- Some climate-resilient crops and livestock (eg heat-tolerant cows)

### On the horizon (over 10 years away)

- More climate-resilient crops (eg improved tolerance to drought and other adverse conditions)
- Disease-resistant plants
- Improved yield and crops that are easier to manage
- Crops that keep better, taste better, and have more nutrients
- Domestication of new crops

