DairyBio

Animal Program

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DairyBio | Dairy Australia | GARDINER FOUNDATION

AGRICULTURE VICTORIA

DairyBio Initiative

- **Strategic large scale investment in biosciences**
- **Economic impact excess of $1.75 b over 20 yrs**
  forage program - $800 ha/yr
  animal program - $350 cow/yr
- **Major work at AgriBio, Hamilton and Ellinbank**
- **12 projects**
- **12 science leaders**
- **20 PhD students**
- **Ongoing investment to improve infrastructure and capability**

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Pathway to delivery

Reliability/robustness of genomic breeding values, crossbreds and Red breeds

Breeding value maintenance (improve prediction)

Breeding values for new traits

DataGene
Solutions for Herd Development

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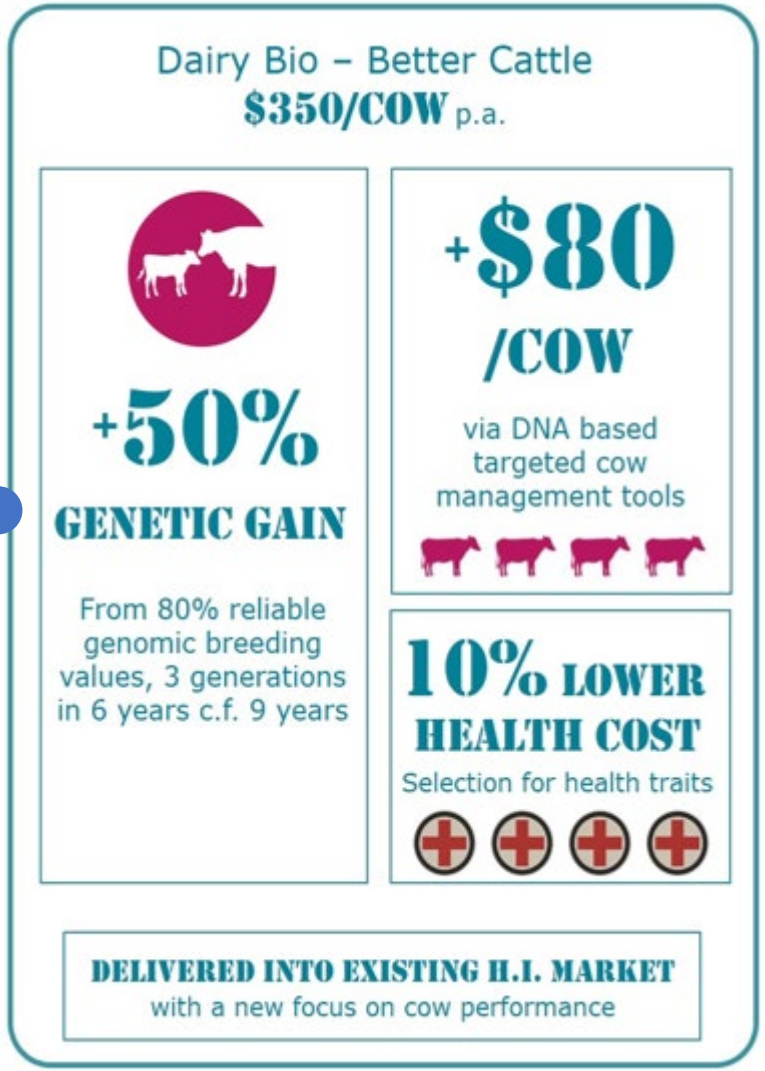

DairyBio

2016-2017

DairyBio starts

2017-18

Heat tolerance ABVs released

Research complete on gestation length and calving ease

Testing multi-trait model to improve type ABV completed

2018-19

Mastitis ABV research finalised

Improving Herds completed (valuing herd improvement)

Design of new XT genotyping tool complete

2019-20

ABVs released for mastitis resistance, gestation length, improved type ABVs, improved calving ease

Key genetic variants affecting many traits of economic importance

MIR prediction of fertility

Red breed & crossbred genomics research complete

MIR prediction of metabolic profiles

Evaluation of value from Joint NZ-AUS Cow populations complete

2020-21

Implementation:

- Updated BPI+HWI including mastitis ABV
- Crossbred and Red genomics
- Prioritised variants implemented
- Updated Feed Saved
- Methane emissions framework
- Field testing of MIR prediction of fertility

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Economic Development,
Jobs, Transport
and Resources

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