Tailoring Goldfinger for improved market prospects

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Business is no longer usual

Floods and higher grocery prices reveal cost of climate inaction: Economists

Black Summer bushfire season cost farmers up to $5 billion

Cost of living pressures lead to food insecurity and fears of chronic health conditions

Farmers warn vegetable prices will rise even higher after Sydney floods
Management practices are improving

- Clean planting material
- Inter-row ground covers
- Fallow crops
- On-farm biosecurity
- Reduced nematicide use

McCarthy 2016
ABGC 2021
Organic production: where do resistant varieties fit?

- A leaf spot resistant CIRAD hybrid
- TR4 affected Cavendish
- Pointe d’Or
- Yellow Sigatoka affected Cavendish
Goldfinger (FHIA-01)

Goldfinger in TR4 screening trial

Goldfinger bunch
Goldfinger mutagenesis

Seeking to improve the eating characteristics of the fruit while retaining Panama disease resistance

- 2017: Gamma irradiation
- 2018: Planted at South Johnstone
- 2019: Agronomic and post-harvest assessments
- 2020: Replicated trial of top 20 variants
- 2021: Identified top 5
- 2022: Large-scale consumer & sensory evaluation
- Pre-commercialisation trials & TR4 resistance check
The irradiated plants exhibited a wide range of variation in plant and bunch characteristics.
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Top 5 selections

Goldfinger
Consumer & sensory evaluation

Overall Liking

- Cavendish: 6.7a
- 521: 6.6a
- 544: 6.6a
- Lady Finger: 6.5a
- 903: 6.5a
- 144: 6.4ab
- Goldfinger: 5.8bc
- 211: 5.4c
Market prospects

Current Australian Banana Production

Cavendish

Lady Finger + other

Conventional

Organic
Market prospects - $ Price
Market prospects - Quality
Market prospects – Market-end support
Market prospects – Shift in consumer behaviour & demand
Where to from here?
Acknowledgements

Jeff Daniels
Sharon Hamill
Ashley Balsom
Massimo Bianco
Dr Carole Wright
Ishita Pramanik
Simoné Moller
Philippa Lyons
Richard Clayton &

Blenners TRANSPORT

Hort Innovation Strategic levy investment

BANANA FUND