



28 June 2018

## **Pollination Needs Into the Future – the Horticulturalist’s Perspective: a Partnership Approach for Beekeepers and Growers**

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Strategic partnership initiative

## Horticulture – Setting the Scene

- Some **40-50 categories** of fresh food: fruit, vegetables and nuts
- At least **25 of those categories** are **pollen dependent** (degree ranging).  
*Almonds – 100% dependent*  
*Strawberry – 10-20% dependent*
- Direct economic contribution by honeybee to crop pollination estimated at between **\$1.6 - \$1.7 billion**



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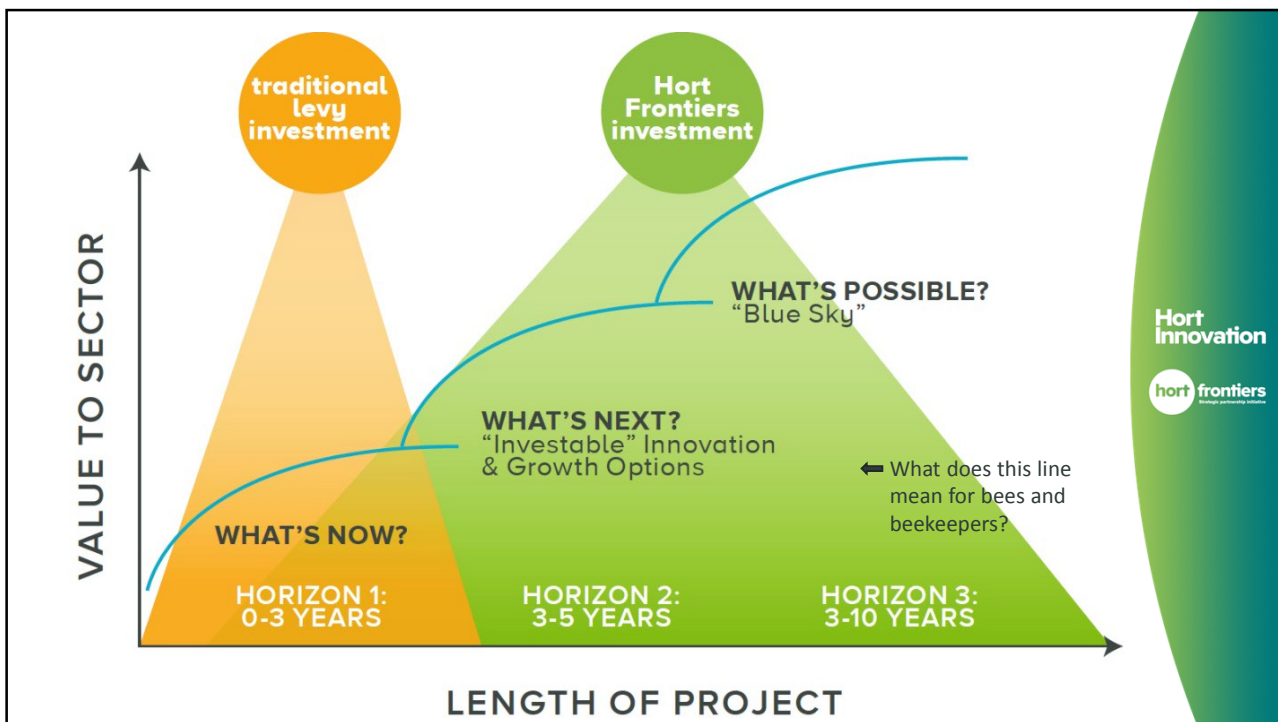
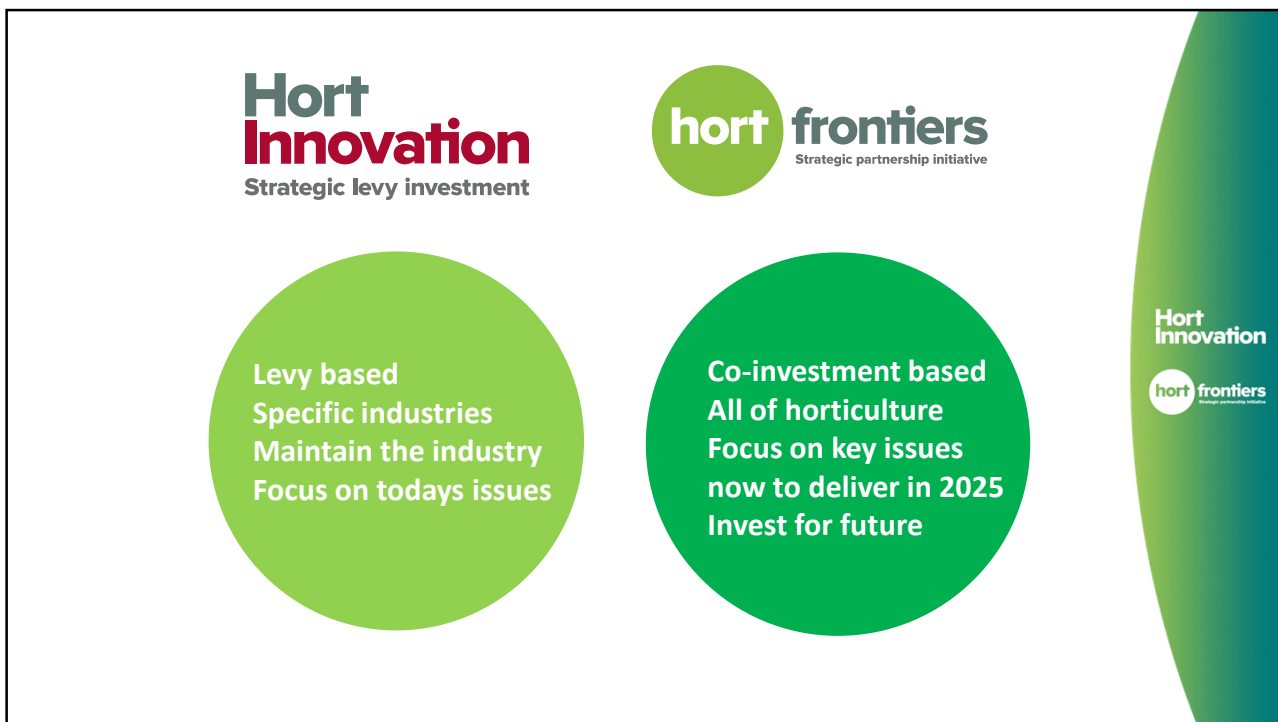
## Horticulture – Setting the Scene

- Key categories (almonds, macadamias, avocados) growing exponentially – trade and FTA's (China, etc)
- Some horticultural industries pay serious \$\$\$ for bees, others not so (rely on wild pollination)
- Honey bee industry success or threats = horticulture success or threats



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## Hort Frontiers Investment Funds *relevant to bees*

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Strategic partnership initiative | **ADVANCED PRODUCTION SYSTEMS FUND**

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Strategic partnership initiative | **LEADERSHIP FUND**

**hort frontiers**  
Strategic partnership initiative | **POLLINATION FUND**

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Strategic partnership initiative | **ASIAN MARKETS FUND**

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Strategic partnership initiative | **HEALTHY FOOD FUND**

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Strategic partnership initiative | **GREEN CITIES FUND**

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Strategic partnership initiative | **FRUIT FLY FUND**

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**POLLINATION FUND**

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POLLINATION  
FUND

*'What' – Horticulture's bee investment themes:*

1. Manage European Honey Bee
2. Optimise crop pollination efficiency
3. Identify alternate crop pollinators



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POLLINATION  
FUND

*'Why' – Horticulture's bee investment themes:*

- Improved honey bee management and pollination performance
- Crop pollination requirements understood and optimised
- Alternate pollinators and tool developed
- Improved sustainability – of both honey bee and horticulture industry

**= Alignment – Bee industry and Hort**



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**'How' – currently funded projects**

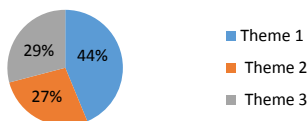


Manage European Honey Bee	Optimise crop pollination efficiency	Identify alternate crop pollinators
PH15000 - <i>Strengthening &amp; enabling effective pollination for Australia</i>	PH16001 - <i>Increasing yield &amp; quality in tropical horticulture with better pollination, fruit retention and nutrient distribution</i>	PH16000 - <i>Stingless bees as effective managed pollinators for Australian horticulture</i>
PH15001 - <i>Healthy bee populations for sustainable pollination in horticulture</i>	PH16004 - <i>Securing pollination for productive agriculture</i>	
MT16005 - <i>National Bee Pest Surveillance Program</i>		

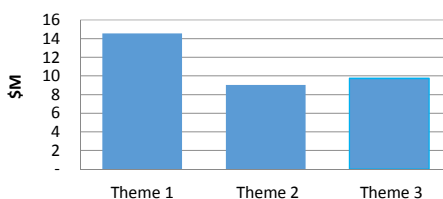
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**Percentage of Contracted Investment**



**Total Investment by Theme**



**TOTAL INVESTMENT SO FAR = \$34MIL**

Theme 1 - Manage European Honey Bee	Theme 2 - Optimise Crop Pollination Efficiency	Theme 3 - Identify Alternate Crop Pollinators
PH15000 - Strengthening and enabling effective pollination for Australia	PH16001-Increasing yield & quality in tropical horticulture with better pollination, fruit retention & nutrient distribution	PH16000 Stingless bees as effective managed pollinators for Australian horticulture
PH15001 - Healthy bee populations for sustainable pollination in horticulture	PH16004-Securing Pollination for productive agriculture (RIRDC)	
MT16005- National Bee Pest Surveillance Program (NBSPS).		
Theme 1	Theme 2	Theme 3
\$ 14,582,843	\$ 9,046,296	\$ 9,719,405.54

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## Current partnerships

Plant & Food  
**RESEARCH**  
RANGAHAU AHUMĀRA KAI



**WESTERN SYDNEY**  
UNIVERSITY



syngenta



University of the  
Sunshine Coast  
Queensland, Australia



Plant Health  
AUSTRALIA



AgriFutures™  
Securing  
Pollination



GRAIN PRODUCERS AUSTRALIA



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## What's next? issues / future research identified

Improving  
Australian  
genetics

Leadership &  
professional  
development

Flies as  
managed  
pollinators

Hive health  
measurement

Pollination  
in protected  
cropping

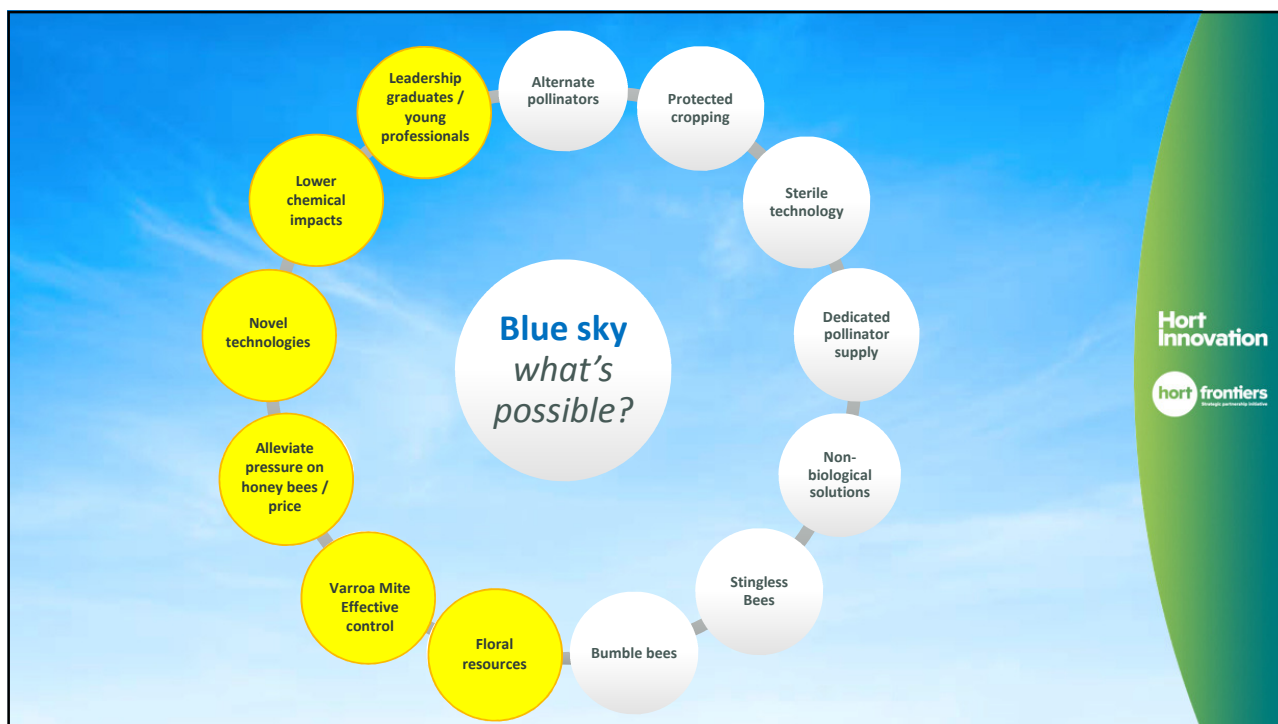
Do you have a project idea?  
Submit a concept at  
[www.horticulture.com.au](http://www.horticulture.com.au)

**Innovation concepts and ideas**  
SUBMIT IDEAS FOR INNOVATING AUSTRALIAN HORTICULTURE



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## Key messages

- Hort Innovation is investing to strengthen and future-proof industry – horticulture AND honey bee industries
- We are aiming to position Australia as world leaders in pollination research
- Need to invest in a strategic future - where will your business be in 5, 10, 15 years ?





*Thank you*

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