

STRATEGIC INTENT: ADVANCED PRODUCTION SYSTEMS

PURPOSE OF FUND

Increase productivity & profitability of Australian horticulture through cropping system intensification and innovation programs targeting the whole of horticulture.

SCOPE OF FUND

Strategic, longer-term intensification research programs targeting the whole of horticulture.

VISION FOR FUND

Using innovative practices and technologies, prepare Australian horticulture growers to adopt the “Future Smart Farms” that are more efficient and highly productive.

INVESTMENT OBJECTIVES

To co-invest with partners in production systems research to drive the adoption of “Future Smart Farming” systems.

INVESTMENT THEMES:

1 TOOLS & ADVANCED TECHNOLOGIES

Understand, evaluate, integrate and deploy:

Farm Automation: Significantly reducing the labour component through tools such as robotics, mechanisation, drones, and sensors.

Plant Genetics: Utilization of next generation genomic & other platform technologies that are more precise and efficient.

Data integration: Enhanced decision making through reliable, useable real-time crop data.

2 SYSTEMS DESIGN: PRACTICE & MANAGEMENT

Refined and improved practices to improve productivity:

Farm Inputs: More precise manipulation and optimisation of inputs in intensive production environments.

Intensive Farming: Integrate farm design, practices and plants for ultra-intensive cropping density

New Production Systems: Innovative production systems suitable to row crop, orchard and protected environments.

3 INNOVATION & DISRUPTION

Access to new information & resources:

Crop Architecture: Plant morphology suitable for intensive & productive cropping, automated monitoring & harvesting.

Crop Biology: Better understanding plant biology targeting productivity and other relevant traits that lead to the adoption of more intensification in production.

Genetic Materials: Incorporation of superior genetic materials including rootstocks and cultivars with characteristics that fit “future smart farming systems”.

THEME OUTCOMES:



Robust information & tools available to growers to make improved production decisions.



Adoptable advanced production systems that can be deployed by the growers.



New information and resources generated to assist in greater intensification of production for growers.

INVESTMENT OUTCOME:

Increased farm profitability for horticulture growers through the implementation of “Future Smart Farming” systems.