



Summary
Draft Strategic R&D Plan
2012-17

A plan to guide strategic investment
in citrus research and development



Draft Strategic R&D Plan Explained

Why a New Plan?

The current Citrus Industry Strategic Plan *Creating our future: A national strategy for the citrus industry 2006 – 2011* has guided activities over the past four years. With the period of this plan nearing completion and the significance of changes taking place in the Research and Development (R&D) environment, it is an opportune time for the citrus industry to develop a fresh Strategic R&D Plan.

Many challenging issues are facing the Australian citrus industry; and Australian horticulture more generally. There has never been a more important time to actively plan for the future.

What will the New Plan do?

This new plan has been developed to guide strategic investment of R&D levy expenditure managed through HAL over the next 5 years: 2012 - 2017. During this period, Horticulture Australia Limited (HAL) is expected to oversee between \$25-30 million of investment in Citrus R&D. This will be funded through a combination of levy funds, voluntary contributions, and matched funding from the Federal Government.

How has the Plan been developed?

This R&D investment plan has considered the needs of the various citrus production regions and the full breadth of the supply chain. Extensive industry consultation has been undertaken with stakeholders spanning the supply chain in order to ascertain needs and related actions required to move the industry forward.

Regional forums were held in each of the major citrus growing regions followed by a national R&D workshop, enabling participants at each of these events to comment on past, current and proposed R&D activities.

An overview of the plan was prepared and circulated to all industry contacts for comment. Following a second phase of consultation, the plan will be finalised for subsequent endorsement by the Citrus Australia Board and adoption by the Citrus Industry Advisory Committee (IAC).

How will the Plan be implemented?

This plan will be used by the Citrus IAC to guide R&D investment over the next five years. The plan will be reviewed by the IAC at least annually and will be used as the basis for developing Annual Investment Plans.

A detailed investment plan has been developed and will be continually reviewed by the Citrus IAC to further refine the investment program over the life of the plan.

Strategic Planning Framework



Want to Give Feedback?

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Objective 1: Develop and Maintain Market Opportunities

1.1 Market Access

Strategy	Actions
1.1.1 Resolve technical export market access issues	<ul style="list-style-type: none"> > Develop a network of technical experts to drive development of novel systems approaches and disinfection methods for key pests for sensitive markets (eg. Fullers rose weevil, red scale, mealy bugs, light brown apple moth, citrus black spot) > Resolve fruit fly protocol issues: in-transit cold treatment, varietal anomalies, additional fruit fly species
1.1.2 Facilitate new or improved quarantine protocols for key export markets	<ul style="list-style-type: none"> > Annually review export market access priorities based on business case analysis > Submit new protocol priorities and supporting analysis to OHMA > Engage with relevant government authorities on key market access projects, including Biosecurity Australia, the Australian Quarantine Inspection Service (AQIS), the Australian Department of Agriculture, Fisheries and Forestry (DAFF), the Australian Department of Foreign Affairs and Trade (DFAT)
1.1.3 Resolve technical domestic market access issues	<ul style="list-style-type: none"> > Conduct initial stocktake and prioritisation of domestic market access issues > Annually review domestic market access priorities based on business case analysis > Engage with state government authorities on strategies for managing key pests & diseases affecting inter-state fruit movement > Investigate and support research on alternative methods and approaches for fruit fly and citrus black spot

1.2 Market Research & Analysis

Strategy	Actions
1.2.1 Collect & analyse ongoing production and market information to support decision making	<ul style="list-style-type: none"> > Ensure ongoing collection and analysis of information relating to: <ul style="list-style-type: none"> > National plantings database updated every 3 years > Regional and national crop forecasts (seasonal and long-term) > Weekly market dispatch reports generated through InfoCitrus > Export and import data > International competitor performance > Consumption trends and consumer preferences
1.2.2 Identify & develop new market opportunitie	<ul style="list-style-type: none"> > Analyse market intelligence data to highlight trends/opportunities in current and future markets > Determine market development directions and value chain strategies based on ongoing market analysis > Coordinate trade missions to / from priority new and existing markets > Engage with Australian and overseas agencies regarding trade conditions in priority markets > Maintain a watching brief on tariff arrangements and identify information requirements to support respective negotiations > Develop a "one stop shop" for export market information
1.2.3 Drive citrus consumption through targeted consumer research, evaluation and value chain engagement	<ul style="list-style-type: none"> > Ensure consumer and market information drives citrus marketing strategies > Strengthen whole of value chain consultation > Review and implement best practice/innovative fresh produce marketing strategies > Ensure regular evaluation of marketing strategy and programs

KPIs	<ul style="list-style-type: none"> > Export market access: develop the South Korean market to increase export trade from currently negligible volumes to 10,000 tonnes annually with a FOB value of A\$15 million. > Domestic market access: maintain postharvest dimethoate usage for fruit fly control and identify at least one alternate control treatment to ensure ongoing interstate movement of citrus. > Market information: install a market intelligence reporting system which provides: 3-yearly reports of plantings, long-term forecasting & consumer trends; yearly reports of crop forecasts, end of season volumes & marketing campaign evaluation; and weekly reports of market dispatch & harvest rate.
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Objective 2: Increase Product Value

2.1 Product Enhancement

Strategy	Actions
2.1.1 Implement a national quality standards program to improve eating quality	<ul style="list-style-type: none"> > Implement a national quality standards program to improve eating quality > Undertake sensory evaluation research to refine consumer eating quality preferences > Annually review industry quality standards based on consumer preference analysis > Engage full value chain in quality improvement through communication, training and monitoring > Investigate all options for achieving quality standards compliance
2.1.2 Develop new products and practices which enhance eating quality	<ul style="list-style-type: none"> > Ensure that product development activities are focused on eating quality improvement > Investigate and evaluate orchard practices which enhance eating quality > Support research and extension of grading technology to differentiate superior eating quality product
2.1.3 Find ways to retain postharvest freshness and integrity of our products	<ul style="list-style-type: none"> > Continued support and enhancement of a world-class post-harvest program > Continually search for new orchard and postharvest technologies/practices for maintaining product integrity > Investigate fruit waxes and coatings which enhance freshness and shelf-life of packed product
2.1.4 Establish programs to support food safety across the supply chain	<ul style="list-style-type: none"> > Investigate options for establishing a national government-recognised residue testing system customised to suit current export and domestic market requirements > Continually inform industry of residue compliance requirements for export and domestic markets > Undertake a strategic agrichemical review process (SARP) and initiate consequent recommendations to ensure a pro-active approach to agrichemical management

2.2 Product Development

Strategy	Actions
2.2.1 Import best available varieties & rootstocks from around the world	<ul style="list-style-type: none"> > Maintain surveillance of international variety development through overseas study trips and networks > Enable industry access to promising public-domain varieties and rootstocks
2.2.2 Support world-class quarantine services for importation of new varieties	<ul style="list-style-type: none"> > Ongoing engagement with AQIS to ensure that quarantine facilities & methodologies are technically appropriate for citrus budwood & seed importation > Establish communication network with variety importers/commercialisers to ensure smooth passage of material through quarantine
2.2.3 Breed, evaluate & commercialise new, improved varieties and rootstocks specifically suited to Australian conditions	<ul style="list-style-type: none"> > Maintain access to CSIRO breeding material for evaluation > Support ongoing breeding and evaluation programs that are focused on key market preferences (eg. eating quality, early season, late season, seedless easy-peel and pigmented varieties)
2.2.4 Provide independent information on new varieties for growers	<ul style="list-style-type: none"> > Maintain and encourage commercialiser involvement in an impartial, national evaluation program with sites located in each key growing region > Organise regular forums to facilitate communication between growers and commercialisers > Maintain updated variety fact sheets
KPIs	<ul style="list-style-type: none"> > Quality improvement: achieve consistent 95% compliance with national eating quality standards by 2017. > Food safety: establish a national residue testing program that is targeted to specific markets and recognised by relevant governments. > New products: deliver to industry 10 new high-health varieties that have been independently evaluated for production and market potential.



Objective 3: Improve Efficiency and Sustainability

3.1 Production Efficiency & Innovation

Strategy	Actions
3.1.1 Investigate cost effective means for increasing sustainable yields of marketable fruit	<ul style="list-style-type: none"> > Analyse cost benefits of production practices > Conduct gap analysis of citrus production technology research > Research, evaluate and promote production practices that ensure more even cropping and marketable fruit size and quality
3.1.2 Explore, evaluate and promote lower cost or more productive production techniques	<ul style="list-style-type: none"> > Support research into more labour efficient production practices (eg. mechanical harvesting) > Investigate and promote new labour access programs (eg Pacific Seasonal Workers Program)

3.2 Securing our Production Base

Strategy	Actions
3.2.1 Strengthen industry planning and preparedness in relation to biosecurity and other risks, and facilitate awareness of new invasive pests and diseases	<ul style="list-style-type: none"> > Develop and implement a national biosecurity awareness program: <ul style="list-style-type: none"> > Facilitate awareness of new invasive pests and diseases through regular communications such as fact sheets > Ensure biosecurity and other risk management plans are effective and up-to-date, supported by adequate education, training and resourcing: <ul style="list-style-type: none"> > Establish a network of biosecurity contacts in each state/region > Conduct outbreak simulation exercises to test response readiness > Work with Plant Health Australia (PHA) to ensure appropriate arrangements in place for owner reimbursement costs > Provide regular biosecurity training activities, including Emergency Plant Pest Response Deed (EPPRD) training for key industry representatives
3.2.2 Support maintenance of clean planting material and encourage plantings that are based on high-health, genetically superior nursery trees	<ul style="list-style-type: none"> > Provide ongoing support for Auscitrus activities > Promote take-up of Auscitrus seed and budwood through nursery networks and workshops
3.2.3 Support improved pest management strategies	<ul style="list-style-type: none"> > Ensure adequate pathology and entomology resources > Establish a network of pest management technicians & researchers > Engage in national and regional projects for managing fruit flies and other priority orchard pests and diseases > Support development of Integrated Pest Management (IPM) strategies
3.2.4 Investigate sustainable use of water, soils and other natural resources	<ul style="list-style-type: none"> > Assist industry to demonstrate and improve its environmental credentials > Support research and extension projects on water efficiency > Extended lifecycle studies to give reliable carbon and water use data > Explore and report on clean energy opportunities including carbon sequestration and emissions in citrus production & supply chain

KPIs	<ul style="list-style-type: none"> > Crop regulation: deliver a predictive cropping intensity model which allows growers to better regulate cropping cycles to meet market demand. > Biosecurity: develop and implement a national biosecurity program (including a national approach to fruit fly) which increases awareness and capability as demonstrated via an outbreak simulation exercise.
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Objective 4: Provide a Supportive Operating Environment

4.1 Information & Communication

Strategy	Actions
4.1.1 Facilitate effective communication between all industry stakeholders including growers, supply chain members, service providers, government and community	<ul style="list-style-type: none"> > Develop and implement an enhanced communications program incorporating regular surveys to gauge effectiveness and improvement strategies > Encourage information sharing and value chain interaction through a range of activities including: regional and national events, magazine, website, newsletter, workshops, field days > Provide timely industry data and supporting analysis to support decision making across the citrus value chain > Disseminate up-to-date production and market-related information through a variety of media
4.1.2 Undertake and support effective extension activities to support adoption of best practice technologies	<ul style="list-style-type: none"> > Establish and maintain a national extension network and ensure linkage incorporated into future research activities > Transfer of technical information supported by an extension program encompassing field days, workshops, training sessions and electronic access to research reports, extensions publications and fact sheets. > Investigate ways to better facilitate dissemination of research funded by agencies external to HAL

4.2 Capacity & Capability

Strategy	Actions
4.2.1 Enhance capacity to support current & future industry needs, focusing on enhanced leadership capacity and improved skills development across the citrus supply chain	<ul style="list-style-type: none"> > Develop and implement a national leadership program for the Australian citrus industry > Encourage involvement from across the citrus value chain in recognised training courses, international study trips and conferences > Promote external training programs and related initiatives that focus on leadership and skills development
4.2.2 Develop & maintain collaborative partnerships to support citrus industry development	<ul style="list-style-type: none"> > Identify existing and potential strategic partners and where beneficial, develop a plan for enhanced engagement > Engage with research agencies through the National Horticultural Research Network (NHRN) > Enhance collaboration within the citrus industry, across the horticultural industry, broader agricultural sector and international linkages
4.2.3 Ensure effective advisory process that maintains regular and meaningful industry feedback for each key program and region	<ul style="list-style-type: none"> > Regularly review IAC and advisory committee structures and membership, ensuring that skill requirements are met, and responsibilities are aligned to the Strategic R&D Plan > Develop and implement a structured consultation process, incorporating regular regional engagement > Establish and regularly review reference groups to support advisory process for key issue areas
4.2.4 Ensure implementation of the Strategic R&D Plan	<ul style="list-style-type: none"> > Develop and implement effective R&D projects in an integrated program approach that is aligned to the Strategic R&D Plan > Ensure adequate resourcing is available to support implementation of the Strategic R&D Plan including: <ul style="list-style-type: none"> > Appropriate levy structures/rates > Appointment of a Market Access Manager, Biosecurity Manager and Value Chain Co-ordinators in each key region > Development of future RD&E capacity > Annually review implementation of the Strategic R&D Plan

KPIs	<ul style="list-style-type: none"> > R&D investment: demonstrate an increase in satisfaction with levy investment (including industry engagement, priority setting, process governance & outcomes) by surveying levy payers at the start and end of plan. > R&D uptake: demonstrate an increased rate of adoption of R&D outcomes by surveying industry stakeholders at the start and end of plan.
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